

Documents may be obtained, free of charge, in electronic format, from the eTenders website.

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Reference is to be made to Clause F.1.2 of the Tender Data.

Human Settlements

Projects

PROCUREMENT DOCUMENT HOUSING

CONTRACT No.: 1H-46321

TITLE: Provision of Emergency Housing Units at Parkington Informal

Settlement

Issued by: Lawrence Pato Human Settlements Projects

Date of Issue: June 2021 Document Version: 18/02/2020

NAME OF TENDERER:

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PART T1: TENDERING PROCEDURES T1.1: TENDER NOTICE AND INVITATION TO TENDER

Tenders are hereby invited for the works to construct housing at Parkington Emergency Housing Project

The Municipality intends to award One Contractor. ONLY BIDDERS WHO ARE REGISTERED WITH NHBRC AND CIDB GRADING 5GB OR HIGHER ARE ELIGIBLE TO SUBMIT TENDERS FOR THIS CONTRACT. (BIDDERS STATUS SHOULD BE ACTIVE) (F.1.1.1) The Employer is the eThekwini Municipality as represented by Head: It is estimated that tenderers should have a CIDB contractor grading designation of 5GB (or higher). (F.1.2) Tenders must be submitted on official tender documentation issued in electronic format by the eThekwini Municipality. Electronically downloaded documentation, obtainable from the National Treasury's eTenders website, should be printed in its entirety, and suitably bound by the tenderer. (F.2.7) There will be no clarification meeting Bidders are requested to submit email queries related to the bid. All email gueries are to be submitted by 2021-06-25. Email guestions and answers will be consolidated and posted on eTenders/Municipal website for the benefit of all tenderers by 2021-07-01 (F.2.8) Queries relating to these documents may be addressed to the Employer's Agent's Representative whose contact details are: Ntombi Ndaba , 031 311 2486(t) , Ntombi.Ndaba@durban.gov.za (F.2.13) Tender offers shall be delivered to Engineering Unit, 166 K.E. Masinga Road and placed in the tender box located in the ground floor foyer.

(F.2.15) Tender offers shall be delivered on or before 09 July 2021at or before 11:00

Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data

PART T1: TENDERING PROCEDURES T1.2: TENDER DATA

T1.2.1 STANDARD CONDITIONS OF TENDER

The conditions of tender are the Standard Conditions of Tender as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement (July 2015) as published in Government Gazette No 38960, Board Notice 136 of 2015 of 10 July 2015.

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The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

T1.2.2 TENDER DATA

Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

F.1: GENERAL

- **F.1.1** The employer: The Employer for this Contract is the eThekwini Municipality as represented by: Head:
- **F.1.2** Tender documents: The Tender Documents issued by the Employer comprise:
 - 1) This procurement document.
 - 2) Drawings, Bound in Section C3.4 as an Annexure.
 - 3) "General Conditions of Contract for Construction Works 3rd Edition 2015" issued by the South African Institution of Civil Engineering (GCC 2015). This document is obtainable separately, and Tenderers shall obtain their own copies.
 - 4) In addition, Tenderers are advised, in their own interest, to obtain their own copies of the following acts, regulations, and standards referred to in this document as they are essential for the Tenderer to get acquainted with the basics of construction management, the implementation of preferential construction procurement policies, and the participation of targeted enterprise and labour.
 - The Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the Construction Regulations (2014).
 - The Construction Industry Development Board Act No 38 of 2000 and the Regulations issued in terms of the Act (July 2013).
 - The Preferential Procurement Policy Framework Act No 5 of 2000, and the Preferential Procurement Policy Framework Act Regulations (January 2017).
 - SANS 1921:2004 Construction and Management Requirements for Works Contract, Parts 1-3.
 - The Employer's current Supply Chain Management Policy.
 - Model Preamble of trades 2008: Sans 10400: and SANS 10082
 - Any other eThekwini Policy documents referenced in the Tender Documents.

The Tender Documents issued by the Employer comprise the documents as per the INDEX of this Tender Document.

Tenders must be submitted on official tender documentation issued (in electronic format) by the eThekwini Municipality:

Electronically downloaded documentation is obtainable from the National Treasury's eTenders

website. The entire document should be printed and suitably bound by the tenderer.

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- **F.1.4** The employer's agent: The Employer's agent is
 - Ntombi Ndaba
 - Tel: 031 311 2486(t)
 - Email: Ntombi.Ndaba@durban.gov.za
- F.1.6 Procurement procedures: Method 2 (Price and Preference with Functionality).

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F.2: TENDERER'S OBLIGATIONS

- **F.2.1 Eligibility**: A Tenderer <u>will not</u> be eligible to submit a tender if:
 - (a) the Tenderer does not comply with the legal requirements as stated in the Employer's current SCM Policy;
 - (b) the Tenderer cannot provide proof that he is in good standing with respect to duties, taxes, levies and contributions required in terms of legislation applicable to the work in the contract;
 - (c) Show proof that he has familiarize himself with the site.
 - (d) in the case of JV submissions, two or more JV entities have common directors / shareholders or common entities tendering for the same works.
 - (e) at the time of closing of tenders, the Tenderer is not registered on the National Treasury Central Supplier Database (CSD) as a service provider. In the case of a Joint Venture, this requirement will apply individually to each party in the Joint Venture.
- F.2.1.1 **Eligibility**: Only those tenderers who are registered (as "Active") with the CIDB (at time of tender closing), in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for a **5 GB** or higher class of construction work, with NHBRC Registration are eligible to have their tenders evaluated.

Joint ventures are eligible to submit tenders provided that:

- (a) Every member of the joint venture is registered (as "Active") with the CIDB (at time of tender closing);
- (b) The lead partner has a contractor grading designation in the 5 GB or higher class of construction work and has a grading designation of not lower than one level below the required grading designation;
- F.2.6 **Acknowledge addenda:** Add the following paragraphs to the clause:
 - "Addenda will be published, in electronic format, on the National Treasury's eTenders website (see F.2.2.2 above). Tenderers are to ensure that the eTenders website is consulted for any published addenda pertaining to this tender until three days before the tender closing time as stated in the Tender Data."
 - "Acknowledgement of receipt of the addenda will be by the return of the relevant completed, dated and signed portion of the addenda, to the address / fax number / email address as specified on the addenda. Failure of the tenderer to comply with the requirements of the addenda may result in the tender submission being made non-responsive."
- **F.2.7** Clarification meeting: There will be no clarification meeting Bidders are requested to submit email queries related to the bid. All email queries are to be submitted by 2021-06-25. Email questions and answers will be consolidated and posted on eTenders/Municipal website for the benefit of all

tenderers by 2021-07-01

F.2.12 Alternative tender offers: No alternative tender offers will be considered.

F.2.13 Submitting a tender offer: The Employer's address for delivery of tender offers is Engineering Unit, 166 K.E. Masinga Road and placed in the tender box located in the ground floor foyer.

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Parts of each tender offer communicated on paper shall be submitted as an original.

Identification details to be shown on each tender offer package are:

Contract No. : 1H-46321

Contract Title : Provision of Emergency Housing Units at Parkington Informal

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Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.

F.2.15 Closing time: The closing time for delivery of tender offers is:

Date 09 July 2021Time: 11:00

- **F.2.16** Tender offer validity: The Tender Offer validity period is 3 Months (90 Days) from the closing time for submission of tenders.
- **F.2.23 Certificates**: Refer to Part T2.1 for a listing of certificates that must be provided with the tender. All certificates must be valid at the time of tender closing.

CIDB Registration

Tenderers are to include with their submission a printout of their registration with the CIDB, obtained from the CIDB website (https://registers.cidb.org.za/PublicContractors/ContractorSearch).

The Joint Venture Grading Designation Calculator should be used when submitting as a Joint Venture (https://registers.cidb.org.za/PublicContractors/JVGradingDesignationCalc).

The date of obtaining the above printouts is to be indicated on the printout. Registration with the CIDB must be reflected as "Active" at time of tender closing.

Tax Clearance

SARS has introduced a new Tax Compliance Status System. Tenderers can submit a Tax Compliance Status PIN (TCS PIN) instead of an original Tax Clearance Certificate. This TCS PIN can be used by third parties to certify the taxpayer's real-time compliance status.

Separate Tax Clearance Certificates / TCS PINs are required for each entity in a Joint Venture.

B-BBEE Status Level of Contribution

The Amended Construction Sector Code (Government Gazette No.41287) is applicable to the B-BBEE compliance measurement of all entities that fall within the Construction Sector.

The requirements for measurement and verification of entities are contained in the "Amended Code Series CSC000: Framework for Measuring Broad Based Black Economic Empowerment in the Construction Sector", as published in Notice 931 of 2017, Government Gazette No.41287 of 01/12/2017.

The requirements are summarised in the following table:

Enterprise Type Total Annual Revenue (R million) **Ownership and Annual Turnover** May present an affidavit EME: Built Environment Professional < R1.8m OR a certificate issued by the CIPC authorised B-BBEE verification **EME: Contractor** < R3.0m certificate (as below) Reference should be made to Cl.3.6.2.4.1 of the Amended Construction Sector Code regarding the above exceptions. EME: Built Environment Professional < R6m **EME: Contractor** < R10m Must present an authorised B-BBEE QSE: Built Environment Professional > R6.0m and < R25m verification certificate by a SANAS accredited Verification Agency QSE: Contractor ≥ R10.0m and < R50m Large Enterprise >R50m

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The requirements for measurement of Joint Ventures is described in Cl.2.8 of the Amended Construction Sector Code. The compilation of a consolidated verification certificate is required.

Central Supplier Database (CSD)

The entities (full) Registration Report, obtained from the National Treasury Central Supplier Database, is to be included in the tender submission (https://secure.csd.gov.za).

Separate CSD Registration Reports are required for each entity in a Joint Venture.

F.3: THE EMPLOYER'S UNDERTAKINGS

- **F.3.1.1** Respond to requests from the tenderer: Replace the words "five working days" with "three working days".
- **F.3.2 Issue addenda:** Add the following paragraph: "Addenda will be published, in electronic format, on the National Treasury's eTenders website. In the event that the Clarification Meeting is compulsory, Addenda will only be issued to those tendering entities appearing on the Clarification Meeting Register."
- **F.3.4** Opening of Tender Submissions: Tenders will be opened immediately after the closing time for tenders.
- **F.3.11 Evaluation of Tender Offers:** The procedure for evaluation of responsive Tender Offers will be in accordance with the Employer's current SCM Policy, the Preferential Procurement Policy Framework Act (5 of 2000), and the Preferential Procurement Policy Framework Act Regulations (January 2017).

The financial offer will be reduced to a comparative basis using the Tender Assessment Schedule.

The procedure for the evaluation of responsive tenders is **Method 2** (Price and Preference with functionality).

The **80/20** preference points system will be used. The Formula used to calculate the **Price Points**, and the **Preference Points** that will be allocated, will be according to the 2016 PPPFA Regulations.

Should there be a tie in the quotation ranking, the above regulations will be applied to recommend and appoint the successful Contractor.

F.3.11.9 The value of W_2 is 100. The Functionality criteria (and sub criteria if applicable) and maximum score in respect of each of the criteria are as follows:

Functionality Criteria / Sub Criteria	Maximum Points Score					
Tenderer's Experience in building projects involving subst	40					
Project Organogram and Experience of Key Staff	10					
	20					
	Principal Carpenter	15				
Preliminary Programme	5					
Construction Methodology & Quality Control	Construction Methodology & Quality Control					

Maximum possible score for Functionality (M_s)

100

The minimum number of evaluation points for Functionality is 60. Only those tenderers who achieve the minimum number of Functionality evaluation points (or greater) will be eligible to have their tenders further evaluated.

Functionality shall be scored by not less than three evaluators and the scores of each of the evaluators will be averaged, weighted and then totalled to obtain the final score for Functionality. Each evaluation criteria will be assessed in terms of six indicators and scores allocated according to the following table:

Level 0	0 Level 1 Level 2		Level 3	Level 4	Level 5		
0	20	40	60	80	100		

Evaluation criteria will be adjudicated according to submissions made in accordance with the following schedules, which are found in Part T2.2: Returnable Schedules:

Functionality Criteria	Returnable Schedules
Tenderer's Experience	Experience of Tenderer
Project Organogram and Experience of Key Staff	 Proposed Organisation and Staffing Key Personnel CV's with Experience of Key Personnel
Preliminary Programme	Preliminary Programme
Construction Methodology & Quality Control	 Construction Approach, Methodology, and Quality Control Approach to the management and training of local labour and local subcontractors Relocation management approach Plant and Equipment

Unless otherwise stated, evaluation criteria will be adjudicated with respect to the contract specific Scope of Work, as specified in Part C.3. In this regard the following definitions apply to the evaluation criteria prompts for judgement:

- "successfully completed" implies a project has been completed on time and to specification;
- similar nature" implies projects that involved the following activities: bulk earthworks platforms
 for housing developments; concrete house foundations, timber frame structures, roofing,
 double storey units/stairways.
- "experience" means experience on projects of a similar nature;
- "accredited degree / diploma" means a minimum 3 year qualification within the built environment, from a registered University or Institute of Technology.

	Criterion: Tenderer's Experience								
е	Note: For purposes of scoring, a similar project will be regarded as an affordable or low cost project of at least 60 units even if conventional low cost housing materials and construction methods were utilised. Additional points will be awarded for bidders who also have experience in building timber frame structures.								
Level 0	No information provided; OR submission of no substance / irrelevant information provided								
Level 1	To have successfully completed 1 project of a similar nature within the past 10 years.								
Level 2	To have successfully completed <u>2 projects</u> of a similar nature within the past 10 years OR 1 similar project and at least one timber frame structure.								
Level 3	To have successfully completed <u>3 projects</u> of a similar nature within the past 10 years OR 2 similar projects and at least 1 timber frame structure.								
Level 4	To have successfully completed 3 <u>projects</u> of a similar nature AND at least 1 timber frame structure within the past 10 years.								
Level 5	To have successfully completed 4 <u>projects</u> of a similar nature AND 2 or more timber frame structures within the past 10 years.								

<u>MB</u> In the event that a bidder identifies a current project as part of his/her experience, the following conditions shall apply:

- Reference letters to be signed by current employers for each current project that the bidder has listed under the tenderer's experience & appointment letters to be submitted;
- These reference letters are mandatory and failure to include these will result in the respective project being eliminated from the tenderer's experience during the evaluation stage;
- Referee letters must include the most recent contact details of the employer or employer's representative;
- A standard reference letter format has been provided in electronic format on the attached CD.

Criterion: Project Organogram and Experience of Key Staff

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Note: Projects of a similar nature that will be considered shall be one, or a combination of, housing construction, timber frame building works, large carpentry projects and development projects of value larger than R5 0000 000.00

	CONTRACTS MANAGER	FOREMAN/SITE AGENT	PRINCIPAL CARPENTER
Level 0	No information provided OR submission of no substance / irrelevant information provided OR less than 2 year's experience OR Relevant accredited diploma / degree and less than 1 year's experience.	No information provided OR submission of no substance / irrelevant information OR Less than 2 year's experience.	No information provided OR submission of no substance / irrelevant information OR Less than 2 year's experience.
Level 1	Minimum 2 year's experience OR Relevant accredited diploma / degree and minimum 1 year's experience.	Minimum 2 year's experience.	Minimum 2 year's experience.
Level 2	Minimum 3 year's experience OR Relevant accredited diploma / degree and minimum 2 year's experience.	Minimum 3 year's experience.	Minimum 3 year's experience.
Level 3	Minimum 5 year's experience OR Relevant accredited diploma / degree and minimum 4 year's experience.	Minimum 5 year's experience.	Minimum 5 year's experience.
Level 4	Minimum 8 year's experience OR Relevant accredited diploma / degree and minimum 7 year's experience.	Minimum 8 year's experience.	Minimum 8 year's experience.
Level 5	Minimum 10 year's experience OR Relevant accredited diploma / degree and minimum 9 year's experience.	Minimum 10 year's experience.	Minimum 10 year's experience.

	Criterion: Preliminary Programme									
Level 0	No information provided; OR submission of no substance / irrelevant information provided									
Level 1	The tenderer has misunderstood certain aspects of the Scope of Work and does not deal with the critical aspects of the project.									
Level 2	The programme does not adequately deal with the critical characteristics of the project or the plan and manner in which risk is to be managed.									
Level 3	Programme covers all the applicable individual activities which are in an acceptable sequence, with appropriate durations, and is in accordance with generally accepted construction practice, and is in line with Clause 1.1.1.14 of the Conditions of Contract (time for achieving Practical Completion). Programme must show the critical path									
Level 4	In addition to the requirements of level 3, the programme covers all activities, meetings, requirements and is sufficiently flexible to accommodate changes that may be required during execution within project completion time.									
Level 5	In addition to the requirements of level 4, the program covers all activities, meetings, requirements and accommodates changes and details ways to improve the overall project outcome within the completion time.									

l	Criterion: Construction Methodology & Quality Control
Level 0	No information provided; OR submission of no substance / irrelevant information provided
Level 1	The technical approach / methodology, plant and equipment is poor and gives no relevant information in satisfying the projects objectives Quality control statement is poor with no relevant information
Level 2	The technical approach and/or methodology is less than acceptable and unlikely to satisfy project objectives or requirements. Plant and equipment is unsuitable and likely to damage the existing infrastructure and generate slope instability. Quality control statement is generic.
Level 3	Brief overview of a site specific methodology which encompasses all programmed activities in appropriate order and includes staff, plant and equipment resources, including subcontractors if applicable, a brief description of preparatory work, construction processes including finishing works for each activity. Quality control statements are site specific with statements covering required sampling and testing requirements for the programmed activities.
Level 4	The methodology is specifically tailored to address specific project requirements. The methods and approach to managing risk etc. are specifically tailored to the critical characteristics of the project. The plant and equipment are specifically tailored to the project requirements and are sufficiently adaptable to accommodate changes that may be required during execution Quality control statements are site specific covering required sampling and testing for programmed activities including site specific quality control checklist for programed activities
Level 5	Besides meeting the "above Level 4" rating, the important issues are approached in an innovative and efficient way, indicating that the tenderer has excellent knowledge of working in the projects environment and producing the required final product. Plant and equipment proposals and ownership/provision arrangements are most likely to ensure a satisfactory project outcome. Quality control statements are site specific covering required sampling and testing for all programmed activities including site specific quality control checklist for all programmed activities

- **F.3.13** Acceptance of tender offer: In addition to the requirements of Clause F.3.13 of the Standard Conditions of Tender, tender offers will only be accepted if:
 - (a) The tenderer submits an original valid Tax Clearance Certificate issued by the South African Revenue Services or has made arrangements to meet outstanding tax obligations;
 - (b) The tenderer is registered, and "Active", with the Construction Industry Development Board, at time of tender closing, in an appropriate contractor grading designation;
 - (c) The tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;
 - (d) The tenderer has not:
 - Abused the Employer's Supply Chain Management System; or
 - Failed to perform on any previous contract and has been given a written notice to this
 effect;
 - (e) The tenderer has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process;
 - (f) The tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer;
 - (g) The employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2014, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely.
- **F.3.15** Complete adjudicator's contract: Refer to the General Conditions of Contract and the Contract Data.
- **F.3.17** Copies of contract: The number of paper copies of the signed contract to be provided by the Employer is ONE (1).

The additional conditions of tender are:

ACT.1 Appeals

In terms of Regulation 49 of the Municipal Supply Chain Management Regulations persons aggrieved by decisions or actions taken by the Municipality, may lodge an appeal within 14 days of the decision or action, in writing to the Municipality. All appeals (clearly setting out the reasons for the appeal) and queries with regard to the decision of award are to be directed to:

The City Manager Attention Ms S. Pillay

eMail: Simone.Pillay@durban.gov.za

Contract No: 1H-46321

P O Box 1394 DURBAN, 4000

ACT.2 Prohibition on awards to persons in the service of the state

Clause 44 of the Supply Chain Management Regulations states that the Municipality or Municipal Entity may not make any award to a person:

- (a) Who is in the service of the State:
- (b) If that person is not a natural person, of which a director, manager, principal shareholder or stakeholder is a person in the service of the state; or
- (c) Who is an advisor or consultant contracted with the municipality or a municipal entity.

Should a contract be awarded, and it is subsequently established that Clause 44 has been breached, the Employer shall have the right to terminate the contract with immediate effect.

ACT.3 Code of Conduct and Local Labour

The Tenderers shall make themselves familiar with the requirements of the following policies that are available on web address: ftp://ftp.durban.gov.za/cesu/StdContractDocs/:

- Code of Conduct;
- The Use of CLOs and Local Labour.

ACT.5 Subcontracting as Condition of Tender

For contracts above R30m, the 2017 PPPFA Regulations require organs of State to identify tenders, where it is feasible, to subcontract a minimum of 30% of the value of the contract to the following designated groups:

- (a) an EME or QSE;
- (b) an EME or QSE which is at least 51% owned by black people;
- (c) an EME or QSE which is at least 51% owned by black people who are youth;
- (d) an EME or QSE which is at least 51% owned by black people who are women;
- (e) an EME or QSE which is at least 51% owned by black people with disabilities;
- (f) an EME or QSE which is 51% owned by black people living in rural or underdeveloped areas or townships;
- (g) a cooperative which is at least 51% owned by black people;
- (h) an EME or QSE which is at least 51% owned by black people who are military veterans; or
- (i) more than one of the categories referred to in paragraphs (a) to (h).

In addition to the above, the eThekwini Municipal Council has adopted a framework for empowerment strategies for contracts between R5m and R30m.

PART T2: RETURNABLE DOCUMENTS T2.1: LIST OF RETURNABLE DOCUMENTS

T2.1.1 General

The Tender Document must be submitted as a whole. All forms must be properly completed as required, and the document shall not be taken apart or altered in any way whatsoever.

The Tenderer is required to complete each and every Schedule and Form listed below to the best of his ability as the evaluation of tenders and the eventual contract will be based on the information provided by the Tenderer. Failure of a Tenderer to complete the Schedules and Forms to the satisfaction of the Employer will inevitably prejudice the tender and may lead to rejection on the grounds that the tender is not responsive.

T2.1.2 Returnable Schedules, Forms and Certificates

Company Specific	
Declaration of site inspection	14
Certificate of Authority	15
Declaration of Municipal Fees	16
Compulsory Enterprise Questionnaire	17
Tax Compliance Status PIN / Tax Clearance Certificate	19
B-BBEE Status Level of Contribution	20
Verification of CIDB Registration and Status	21
CSD Registration Report	22
Consolidated MBD Documents	23
MBD2: Tax Clearance Certificate Requirements	
MBD4: Declaration of Interest	
MBD5: Declaration for Procurement Above R10 Million (if applicable)	
MBD6.1: Preference Points Claim Form ITO the Preferential Regulations	
MBD6.2: Declaration Certificate for Local Production and Content (if applicable)	
MBD8: Declaration of Bidder's Past SCM Practices	
MBD9: Certificate of Independent Bid Determination	
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Joint Venture Agreements (if applicable)	41
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T2.1.3 Preferential Procurement Schedules and Affidavits

In the event of the Tenderer not being registered with the eThekwini Municipality, the following must be completed and submitted prior to the submission of tenders:

Contract No: 1H-46321

- Application for Registration on the eThekwini Municipality Procurement Database.
- Application for Targeted Enterprise Status.

These documents are available from Room 614, 6th Floor, 166 KE Masinga Road, Durban or on the internet at www.durban.gov.za. Follow the following links: eThekwini Municipality / City Government / Administration / Administrative Clusters / Finance / Supply Chain Management / Application for the City's Accredited Supplier and Contractor's Database / Documents you need.

NOTES

- (a) The information for registration as in the possession of the eThekwini Municipality will apply.
- (b) It is the Tenderer's responsibility to ensure that the details as submitted to the Municipality are correct.
- (c) Tenderers are to submit the above forms prior to the submission of tenders.

T2.2: RETURNABLE SCHEDULES, FORMS, AND CERTIFICATES

The returnable schedules, forms, and certificates as listed in T2.1.2 can be found on the pages 14 to 39.

DECLARATION OF SITE INSPECTION (NOT APPLICABLE)

Advertising: 2021-06-18 Closing: 2021-07-09

"There will be no clarification Meeting. Bidders are requested to submit email queries related to the bid. All email queries are to be submitted by 2021-06-25. E-mail questions and answers will be consolidated and posted on eTenders/Municipal website for the benefit of all tenderers by 2021-07-01

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This is to certify	y that:										
(tenderer name)										
of (address)											
•	was represented by the person(s) named below to inspect the site located at Parkington Informal Settlement, Parkington Grove, Kenville, Durban (latitude: -29.783738 longitude: 31.012855)										
I / We acknowledge that the purpose of the site inspection was to acquaint/familiarize myself / ourselves with the site of the works and / or matters incidental to doing the work specified in the tender documents in order for me / us to take account of everything necessary when compiling our rates and prices included in the tender.											
Particulars of	person(s) that inspected the site:										
Name:		Name:									
Signature:		Signature:									
Capacity:		Capacity:									

CERTIFICATE OF AUTHORITY

Indicate the status of the tenderer by ticking the appropriate box hereunder.

COMPANY	Y CLOSE CORPORATION PARTNERSHIP					2							
Refer to Notes at the bottom of the page													
I / We, the undersigned, being the Chairperson (Company), Member(s) (Close Corporation), Partners (Partnership), Sole Owner (Sole Proprietor), Lead Partner (JV), in the company / business trading as:													
hereby authorise Mr/Mrs/Ms													
acting in the ca	apacity	y of											
to sign all docu from it on our b		s in connection	with th	e tender for C o	ontrac	t No. 1H-4630)3 and	any contract	resulting				
NAME	NAME ADDRESS SIGNATURE DATE												
								1					
						I		<u> </u>					

Contract No: 1H-46321

<u>Notes</u>

The following documents must be attached to the back inside cover to this procurement document:

If a Company

: a "Resolution of the Board" in this regard.

If a Joint Venture : a "Power of Attorney" signed by the legally authorised signatories of all the partners to

the Joint venture.

DECLARATION OF MUNICIPAL FEES

I, the undersigned	, do hereby declare t	hat the	e Mur	nicipa	l fees	of								
	(full name of Company / ed to as the TENDEF concluded with the M	RER) a	are, a	s at tl	he da	te he	reund	der, fu	ılly p	aid o	r an A	 Ackno	wled	 gement
The following acco	ount details relate to	proper	ty of	the sa	aid TE	ENDE	RER	:						
<u>Account</u>			<u>Ac</u>	coun	t Nun	nber:	to be	comp	oleted	d by t	ende	rer.		
Consolida	ated Account No.													
Electricity														
Water]
Rates]
JSB Levie	es]
<u>Other</u>														
<u>Other</u>														
such remedial ac the Contractor b	at should the afore ction as is required, y the Municipality s document, please	includ shall	ding be fir	termii st se	nation	n of agai	any nst s	contra uch a	act, a	and a	any TTAC	paym CHED	ents , to th	due to ne back
eThekwini ı attached (to • Where the	TENDERER'S place municipality, a copy the back inside cove tenderer's Municipa or official letter to the	of the er of that	e acce nis do ounts	ounts cume are	/agre nt). part	emer	nts fro	om th	e rel	evan emen	t mui t, the	nicipa en a	olity m	of the
NAME	:								(Blo	ck Ca	apital	s)		
SIGNATURE	:(of person authorised								DAT	E:				

Contract No: 1H-46321

COMPULSORY ENTERPRISE QUESTIONNAIRE

The following particulars must be furnished. In the case of a joint venture, a separate questionnaire in respect of each partner must be completed and submitted.

Contract No: 1H-46321

	ame of enterprise:					
VA	AT registration number, if an	y:				
CI	DB registration number, if a	ny:				
Particulars of sole proprietors and partners in partnerships						
	Full Name	Identity	number*	Persona	l income t	ax numbe
* C	Complete only if a sole proprietor or pa	artnership and attach se	eparate page if mor	e than 3 partne	ers	
Pa	articulars of companies and	close corporation	าร			
Co	ompany registration number, if	applicable:				
Cl	ose corporation number, if app	olicable:				
Та	ax Reference number, if any:					
	ecord in the service of the st	rato				
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7)

i)

iii)

iv)

v)

of my belief both true and correct.

......

Signed

Name

Enterprise Name

Provision of Emergency Housing Units at Parkington Informal Settlement Contract No: 1H-46321 Record of spouses, children and parents in the service of the state Indicate by marking the relevant boxes with a cross, if any spouse, child or parent of a sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months in the service of any of the following: a member of any municipal council an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, a member of any provincial legislature 1999 (Act 1 of 1999) a member of the National Assembly or the National a member of an accounting authority of any national or Council of Province provincial public entity a member of the board of directors of any municipal an official of any municipality or municipal entity an employee of Parliament or a provincial legislature Name of spouse, child or parent Name of institution, public office, board or Status of service organ of state and position held (tick appropriate column) Within last Current 12 months Insert separate page if necessary The undersigned, who warrant that he/she is duly authorised to do so on behalf of the enterprise: authorizes the Employer to obtain a tax clearance certificate from the South African Revenue Services that my/our tax matters are in order: confirms that neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercise, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004: confirms that no partner, member, director or other person, who wholly of partly exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption; confirms that I/we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the bidders or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; confirms that the contents of this questionnaire are within my personal knowledge and are to the best

Date

Position

TAX COMPLIANCE STATUS PIN / TAX CLEARANCE CERTIFICATE

Reference is made to F.2.23 of the Conditions of Tender.

SARS has introduced a new Tax Compliance Status System. Tenderers can submit a Tax Compliance Status PIN (TCS PIN) instead of an original Tax Clearance Certificate. This TCS PIN can be used by third parties to certify the taxpayer's real-time compliance status.

Contract No: 1H-46321

Separate Tax Clearance Certificates / TCS PINs are required for each entity in a Joint Venture.

Tenderers are to attach to this page a printout of their Tax Compliance Status PIN (TCS PIN) OR an original Tax Clearance Certificate.

NAME	:	(Block Capitals)
SIGNATURE	:(of person authorised to sign on behalf of the Tenderer)	DATE:

B-BBEE STATUS LEVEL OF CONTRIBUTION

Reference is made to F.2.23 of the Conditions of Tender.

The Amended Construction Sector Code (Government Gazette No.41287) is applicable to the B-BBEE compliance measurement of all entities that fall within the Construction Sector.

Contract No: 1H-46321

The requirements for measurement and verification of entities are contained in the "Amended Code Series CSC000: Framework for Measuring Broad Based Black Economic Empowerment in the Construction Sector", as published in Notice 931 of 2017, Government Gazette No.41287 of 01/12/2017.

The requirements are summarised in the following table:

Enterprise Type	Total Annual Revenue (R million)	Ownership and Annual Turnover
EME: Built Environment Professional	< R1.8m	May present an affidavit OR a certificate issued by the CIPC
EME: Contractor	< R3.0m	OR authorised B-BBEE verification certificate (as below)
Reference should be made to Cl.3.6.2.4.1 of the Amended Construction Sector Code regarding the above exception		
EME: Built Environment Professional	< R6m	
EME: Contractor	< R10m	Must present an authorised B-BBEE
QSE: Built Environment Professional	≥ R6.0m and < R25m	verification certificate by a SANAS
QSE: Contractor	≥ R10.0m and < R50m	accredited Verification Agency
arge Enterprise	>R50m	

The requirements for measurement of Joint Ventures is described in Cl.2.8 of the Amended Construction Sector Code. The compilation of a consolidated verification certificate is required.

Tenderers are to attach to this page an affidavit, a certificate issued by the CIPC, or an authorised B-BBEE verification certificate by a SANAS accredited Verification Agency.

NAME	:	(Block Capitals)
SIGNATURE	:	DATE:

VERIFICATION OF CIDB REGISTRATION AND STATUS

Reference is made to F.2.23 of the Conditions of Tender.

Clause F.2.1.1 of the Conditions of Tender – "Eligibility", requires a tenderer to be registered, as "Active", with the CIDB (at time of tender closing), in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for a 5 GBor higher class of construction work.

Contract No: 1H-46321

Tenderers are to attach to this page a printout of their registration with the CIDB, as obtained from the CIDB website https://registers.cidb.org.za/PublicContractors/ContractorSearch. The date of obtaining the printout is to be indicated on the printout.

The following is an example of a printout obtained from the above website.

NAME

SIGNATURE

41+cidb Construction Industry Development Board		
construction industry developing	and housed	
construction modelly develope	rent poard	Tions.
Home		
	Contractor Detail	Print
Contractor Detail		
CRS Number:	Type of Enterprise:	
Contractor Name:	Registration Date:	
Trading Name:	Expiry Date:	
Status:		
Contractor Grades		
Grade:		
Back		(1)
	Copyright ⊚ cidb 2011. All rights reserved	
	Website technical enquires contact	
		01/01/2017

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.

(Block Capitals)

DATE:

CSD REGISTRATION REPORT

Reference is made to F.2.23 of the Conditions of Tender.

Clause F.2.1 of the Conditions of Tender – "Eligibility", requires a tenderer to be registered at the time of tender closing on the National Treasury Central Supplier Database (CSD) as a service provider.

Contract No: 1H-46321

Tenderers are to attach to this page a printout of their CSD Registration Report, as obtained from the National Treasury's CSD website https://secure.csd.gov.za/Account/Login. The date of obtaining the printout is to be indicated on the printout.

The following is an example of the beginning of the printout obtained from the above website.



NAME	:	(Block Capitals)
SIGNATURE		DATE:

CONSOLIDATED MUNICIPAL BIDDING DOCUMENTS

The following SECTIONS are required to be completed as part of this procurement document

Contract No: 1H-46321

<u>Section</u>	<u>Description</u>	Required?
Α	General Enterprise Information	Yes
В	MBD2: Tax Clearance Certificate Requirements	Yes
С	MBD4: Declaration of Interest	Yes
D	MBD5: Declaration for Procurement Above R10 Million	No
E	MBD6.1: Preference Points Claim Form ITO the Preferential Regulations	Yes
F	MBD6.2: Declaration Certificate for Local Production and Content for Designated Sectors	No
G	MBD8: Declaration of Bidder's Past SCM Practices	Yes
н	MBD9: Certificate of Independent Bid Determination	Yes
ı	Confirmations, Authorities, Certifications, Acknowledgements and Signatures	Yes

NOTES

MBD4. MSCM Regulations: "in the service of the state" means to be:

- (a) a member of
 - (i) any municipal council;
 - (ii) any provincial legislature; or
 - (iii) the national Assembly or the national Council of provinces;
- (b) a member of the board of directors of any municipal enterprise;
- (c) an official of any municipality or municipal enterprise;
- (d) an employee of any national or provincial department, national or provincial public enterprise or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);
- (e) a member of the accounting authority of any national or provincial public enterprise; or
- (f) an employee of Parliament or a provincial legislature.

"Shareholder" means a person who owns shares in the company and is actively involved in the management of the company or business and exercises control over the company.

MBD9. Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

Prov	Provision of Emergency Housing Units at Parkington Informal Settlement		
<u>Ref</u>	<u>Description</u>	Complete or Circle Applicable	
SEC	TION A: GENERAL ENTERPRISE INFORMATION		
1.0	Full Name of bidder or his or her representative		
1.1	ID Number of bidder or his or her representative		
1.2	Position occupied in the enterprise		
2.0	Name of enterprise:		
2.1	Tax Reference number, if any:		
2.2	VAT registration number, if any:		
2.3	CIDB registration number, if any:		
2.4	Company registration number, if applicable:		
2 5	Close cornoration number if applicable:		

The names of all directors / trustees / shareholders / members / sole proprietors / partners in partnerships, their individual identity numbers and state employee numbers must be indicated below. In the case of a joint venture, information in respect of each partnering enterprise must be completed and submitted

2.6

2.7

2.8

Supplier reference number (PR), if any:

Status PIN:

registration number

South African Revenue Service Tax Compliance

National Treasury Central Supplier Database

Full Name Identity No. State Employee No. Personal income tax No.				
Use additional pages if necessary				

Pof	Description	Complete or
Ref	<u>Description</u>	Circle Applicable

SECTION B: MBD 2: TAX CLEARANCE CERTIFICATE REQUIREMENTS

It is a condition of bid that the taxes of the successful bidder must be in order, or that satisfactory arrangements have been made with South African Revenue Service (SARS) to meet the bidder's tax obligations.

- 1.0 In order to meet this requirement bidders are required to complete the TCC 001: "Application for a Tax Clearance Certificate" form and submit it to any SARS branch office nationally. The Tax Clearance Certificate Requirements are also applicable to foreign bidders / individuals who wish to submit bids.
- 2.0 SARS will then furnish the bidder with a Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.
- 3.0 The original Tax Clearance Certificate must be submitted together with the bid (attached to the inside back cover of this procurement document). Failure to submit the original and valid Tax Clearance Certificate will result in the invalidation of the bid. Certified copies of the Tax Clearance Certificate will not be acceptable.
- 4.0 In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate.
- 5.0 Copies of the TCC 001: "Application for a Tax Clearance Certificate" form are available from any SARS branch office nationally or on the website www.sars.gov.za.
- 6.0 Applications for the Tax Clearance Certificates may also be made via eFiling. In order to use this provision, taxpayers will need to register with SARS as eFilers through the website www.sars.gov.za.
- 7.0 Notwithstanding Clauses 1.0 to 6.0 above: Since 18 April 2016, SARS has introduced a new Tax Compliance Status System (TCS). As part of this enhanced system, tenderers can now submit a Tax Compliance Status PIN instead of an original Tax Clearance Certificate (TCC). This TCS PIN can be used by third parties to certify the taxpayer's real-time compliance status. This number, if available, is to be entered in Item 2.7 of Section A of these consolidated Municipal Bidding Documents.
 - For further particulars please contact your nearest SARS branch, or call the SARS Contact Centre on 0800 00 7277, or log onto SARS eFiling.

SECTION C: MBD 4: DECLARATION OF INTEREST

No bid will be accepted from persons "in the service of the state1". Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority and/or take an oath declaring his/her interest. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

1.0	Are you presently in the service of the state?	YES	NO
	If yes, furnish particulars:	ILS	NO
2.0	Have you been in the service of the state for the past twelve months? If yes, furnish particulars:	YES	NO
3.0	Do you have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid? If yes, furnish particulars:	YES	NO
4.0	Are you, aware of any relationship (family, friend, other) between any other bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid? If yes, furnish particulars:	YES	NO
5.0	Are any of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state? If yes, furnish particulars:	YES	NO
6.0	Are any spouse, child or parent of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state? If yes, furnish particulars:	YES	NO
7.0	Do you or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract ?	YES	NO
	If yes, furnish particulars:		

8.0 The names of all directors / trustees / shareholders / members / sole proprietors / partners in partnerships, their individual identity numbers and state employee numbers are indicated in **SECTION A of these Consolidated Municipal Bidding documents**.

Ref	<u>Description</u>		olete or pplicable
SECT	TION D: MBD 5: DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (ALL APPLICABLE TAXES INCI	LUDED)	
For all	procurement expected to exceed R10 million (all applicable taxes included), bidders must complete the following ques	tionnaire.	
1.0	Are you by law required to prepare annual financial statements for auditing? If YES, you will be required to submit audited annual financial statements (on request during the tender evaluation period) for the past three years or since the date of establishment if established during the past three years.	YES	NO
2.0	Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than three months or any other service provider in respect of which payment is overdue for more than 30 days? If NO, this serves to certify that the bidder has no undisputed commitments for municipal services towards any municipality for more than three months or other service provider in respect of which payment is overdue for more than 30 days. If YES, provide particulars on a letterhead. (Attach this letter to the back inside cover of this procurement document).	YES	NO
3.0	Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract? If YES, provide particulars on a letterhead. (Attach this letter to the back inside cover of this procurement document).	YES	NO
4.0	Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality / municipal entity is expected to be transferred out of the Republic? If YES, provide particulars on a letterhead. (Attach this letter to the back inside cover of this procurement document).	YES	NO

SECTION E: MBD 6.1: PREFERENCE POINTS CLAIM ITO THE PREFERENTIAL REGULATIONS

Preference points for this tender shall be awarded as per the Tender Data and the Preferential Procurement Regulations (January 2017).

Failure on the part of a tenderer to submit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS) or a Registered Auditor approved by the Independent Regulatory Board of Auditors (IRBA) or an Accounting Officer as contemplated in the Close Corporation Act (CCA) together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

The Employer reserves the right to require of a tenderer, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the Employer.

1.0	B-BE	BEE Status Level of Contribution claimed:						
	Will any portion of the contract be sub-contracted?							
	If YES, indicate:							
	(i)	what percentage of the contract will be subcontracted?						
	(ii)	the name of the sub-contractor?						
	(iii)	the B-BBEE status level of the sub-contractor?						
2.0	(iv)	whether the sub-contractor is an EME?	YES	NO				

The undersigned, certify that the B-BBEE status level of contribution indicated in paragraph 1.0 above qualifies the company / firm for preference points and acknowledges that the remedies as per Clause 14 of the Preferential Procurement Regulations (2017) shall apply.

SECTION F: MBD 6.2: DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

This Municipal Bidding Document (MBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017 and the South African Bureau of Standards (SANS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

- 1.0 General Conditions
- 1.1 Preferential Procurement Regulations, 2017 (Regulation 8) makes provision for the promotion of local production and content.
- 1.2 Regulation 8.(1) prescribes that in the case of designated sectors, where in the award of bids local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3 Where necessary, for bids referred to in paragraph 1.2 above, a two-stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4 A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.

Prov	rision of Emergency Housing Units at Parkington Informal Settlement C	ontract No: 1H-46321
<u>Ref</u>	<u>Description</u>	Complete or Circle Applicable
1.5	The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the specification number SATS 1286: 2011 as follows: LC = [1- x/y] *100 Where: x is the imported content in Rand y is the bid price in Rand excluding value added tax (VAT). Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate publist Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as required in paragraph 4.1 below. The SANS approved technical specification number SATS 1286:2011 is accessible on http://www.thedti.gov.za/indu at no cost.	ned by the South Africar
1.6	A bid may be disqualified if — (a) this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submodocumentation; and (b) the bidder fails to declare that the Local Content Declaration Templates (Annex C, D and E) have been audited.	•
2.0	Definitions	
2.1	"bid" includes written price quotations, advertised competitive bids or proposals;	
2.2	"bid price" price offered by the bidder, excluding value added tax (VAT);	
2.3	"contract" means the agreement that results from the acceptance of a bid by an organ of state;	
2.4	"designated sector" means a sector, sub-sector or industry that has been designated by the Department of Trade national development and industrial policies for local production, where only locally produced services, we manufactured goods meet the stipulated minimum threshold for local production and content;	•
2.5	"duly sign" means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or person nominated in writing by the Chief Executive, or senior member / person with management respons partnership or individual).	
2.6	"imported content" means that portion of the bid price represented by the cost of components, parts or materials still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad intellectual property costs), plus freight and other direct importation costs, such as landing costs, dock duties, imports similar tax or duty at the South African port of entry;	(this includes labour and
2.7	"local content" means that portion of the bid price which is not included in the imported content, provided that loc place;	al manufacture does take
2.8	"stipulated minimum threshold" means that portion of local production and content as determined by the Department and	ent of Trade and Industry
2.9	"sub-contract" means the primary contractor's assigning, leasing, making out work to, or employing another persor contractor in the execution of part of a project in terms of the contract.	to support such primary
3.0	The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this	
		ed minimum threshold
		%
		%
4.0	December of the coming works are said offered have any imported control?	%
4.0	Does any portion of the services, works or goods offered have any imported content?	YES NO
4.1	If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 must be the rate(s) published by the SARB for the specific currency at 12:00 on the date of advertisement of the bid The relevant rates of exchange information is accessible on www.reservebank.co.za. Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286).	
	US Dollar: Pound Sterling: Euro: Yen:	Other:
	NB: Bidders must submit proof of the SARB rate (s) of exchange used.	
5.0	Were the Local Content Declaration Templates (Annex C, D and E) audited and certified as correct?	YES NO
5.1	If yes, provide the following particulars:	
	(a) Full name of auditor:	

Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be 6.0 informed accordingly in order for the dti to verify and in consultation with the Accounting Officer / Accounting Authority provide directives in this regard.

(Documentary proof regarding the declaration will, when required, be submitted to the satisfaction of the Accounting Officer / Accounting

(b) Practice number:

(d) Email address:

Telephone number:

Cell number:

LOCAL CONTENT DECLARATION

(REFER TO ANNEX B OF SATS 1286:2011)

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (Close Corporation, Partnership or Individual)

IN RESPECT OF BID No:	ISSUED BY: (Procurement Authority / Name of Municipality / Municipal Entity)

Contract No: 1H-46321

- NB 1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
- NB 2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on http://www.thedti.gov.za/industrial development/ip.jsp. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below. Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned in Section H of these Consolidated MBD returnable questionnaires (comprising 8 pages), do hereby declare the following:

- (a) The facts contained herein fall within my own personal knowledge.
- (b) I have satisfied myself that:
 - (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
 - (ii) the declaration templates have been audited and certified to be correct.
- (c) The local content percentages (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C:

•	Bid price, excluding VAT (y)	R
•	Imported content (x), as calculated in terms of SATS 1286:2011	R
•	Stipulated minimum threshold for local content (paragraph 3 above)	%
•	Local content %, as calculated in terms of SATS 1286:2011	%

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

- (d) I accept that the Procurement Authority / Municipality /Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.
- (e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Municipal / Municipal Entity imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement Regulations, 2017 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SECTION G: MBD8: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

This Municipal Bidding Document must form part of all bids invited. It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.

The bid of any bidder may be rejected if that bidder, or any of its directors have:

- a) abused the municipal entity's supply chain management system or committed any improper conduct in relation to such system;
- b) been convicted for fraud or corruption during the past five years;
- c) wilfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
- d) been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004). In order to give effect to the above, the following questions must be answered.

1.0	Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer / Authority of the institution that imposed the restriction after the audi alteram partem rule was applied. The Database of Restricted Suppliers now resides on the National Treasury's website (www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page. If yes, furnish particulars:	YES	NO
2.0	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page. If yes, furnish particulars:	YES	NO
3.0	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of		
	South Africa) for fraud or corruption during the past five years? If yes, furnish particulars:	YES	NO

4.0	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months? If yes, furnish particulars:	YES	NO
5.0	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	YES	NO
	If yes, furnish particulars:		

SECTION H: MBD9: CERTIFICATE OF INDEPENDENT BID DETERMINATION

Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging). Collusive bidding is a pe se prohibition meaning that it cannot be justified under any grounds.

Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:

- (a) take all reasonable steps to prevent such abuse;
- (b) reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
- (c) cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.

The following MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.

In order to give effect to the above, the following Certificate of Bid Determination must be completed and submitted with the bid. The undersigned, in submitting the accompanying bid, in response to the invitation for the bid do hereby make the following statements that I certify to be true and complete in every respect:

- 1.0 I have read and I understand the contents of this Certificate;
- 2.0 I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
- 3.0 I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
- 4.0 Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;
- 5.0 For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - has been requested to submit a bid in response to this bid invitation;
 - b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder.
- 6.0 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium³ will not be construed as collusive bidding. (Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.
- 7.0 In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - a) prices
 - b) geographical area where product or service will be rendered (market allocation);
 - c) methods, factors or formulas used to calculate prices;
 - d) the intention or decision to submit or not to submit, a bid;
 - e) the submission of a bid which does not meet the specifications and conditions of the bid;
 - f) bidding with the intention not to win the bid.
- 8.0 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 9.0 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 10.0 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No. 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No. 12 of 2004 or any other applicable legislation.

SECTION I: CONFIRMATIONS, AUTHORITIES, CERTIFICATIONS, ACKNOWLEDGEMENTS and SIGNATURES

The undersigned, who warrants that he/she is duly authorised to do so on behalf of the enterprise:

Contract No: 1H-46321

- 1.0 Confirms that the contents of these Consolidated MBD returnable questionnaires (comprising 8 pages) fall within my personal knowledge and are to the best of my Knowledge and belief, both true and correct;
- 2.0 Confirms that neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercise, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
- 3.0 Confirms that no partner, member, director or other person, who wholly or partly exercise control over the enterprise, has within the last five years been convicted of fraud or corruption;
- 4.0 Confirms that I/we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the bidders or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;
- 5.0 Certify that the B-BBEE status level of contribution indicated in Section E.1: Item 1.0 qualifies the enterprise for preference points and acknowledges that the remedies as per Clause 14 of the Preferential Procurement Regulations (2017) shall apply. In the event of a contract being awarded as a result of points claimed, the enterprise may be required to furnish documentary proof to the satisfaction of the employer that the claims are correct;
- 6.0 Accept that, in addition to cancellation of a contract, action may be taken against me should these declarations prove to be false.

Signed	 Date	
Name	 Position	

Refer to Clause F3.11.9 for Functionality Points evaluation prompts

EXPERIENCE OF TENDERER

The following is a statement of works <u>of similar nature</u> (in relation to the scope of works) recently (within the past 5 years) executed by myself / ourselves.

Tenderers are to submit copies of signed completion certificates for all projects submitted.

EMPLOYER: CONTACT PERSON AND TELEPHONE NUMBER CONSULTING ENGINEER: CONTACT PERSON AND TELEPHONE NUMBER		NATURE OF WORK	VALUE OF WORK (inclusive of VAT)	DATE COMPLETED	
	s if more space is require		(Block Capit	als)	

(of person authorised to sign on behalf of the Tenderer)

PROPOSED ORGANISATION and STAFFING

The tenderer should propose the structure and composition of their team i.e. the main disciplines involved, the key staff member / expert responsible for each discipline, and the proposed technical and support staff and site staff.

Contract No: 1H-46321

The roles and responsibilities of each key staff member / expert should be set out as job descriptions. In the case of an association / joint venture / consortium, it should, indicate how the duties and responsibilities are to be shared.

The tenderer must <u>attach</u> his / her organization and staffing proposals to this page. (this is to include both the on-site and off-site staffing resources used for this project)

In addition to any lists, this information should also be shown in an organogram format (flow chart) clearly indicating the staff hierarchy and reporting lines, again for on- and off-site resources.

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

NAME	:	(Block Capitals)
SIGNATURE	:	DATE:

(Block Capitals)

DATE:

KEY PERSONNEL

NAME

SIGNATURE

Refer to Clause F3.11.9 for Functionality Points evaluation prompts

The Tenderer shall list below the personnel which he intends to utilize on the Works, including key personnel (Contract's Manager, Site Agent, and Foremen) which may have to be brought in from outside if not available locally.

	NUMBER OF PERSONS							
CATEGORY OF EMPLOYEE	KEY PERSONNEL, PART OF THE CONTRACTOR'S ORGANISATION	KEY PERSONNEL TO BE IMPORTED IF NOT AVAILABLE LOCALLY						
Site Agent, Project Managers								
Foremen, Quality Control and Safety Personnel								
Technicians, Surveyors, etc								
Artisans and other Skilled workers								
Plant Operators								
Unskilled Workers								
Others:								
Note: CVs of key personnel may be rec	usested during the contract perion	nd						
itolo. Ovo or key personner may be rec	accide during the contract pent							

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(of person authorised to sign on behalf of the Tenderer)

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EXPERIENCE OF KEY PERSONNEL

Refer to Clause F3.11.9 for Functionality Points evaluation prompts

The experience of assigned staff member in relation to the Scope of Work will be evaluated from three different points of view:

Contract No: 1H-46321

- 1) General experience (total duration of professional activity), level of education and training and positions held of each discipline specific team leader.
- 2) The education, training, skills and experience of the Assigned Staff in the specific sector, field, subject, etc which is directly linked to the scope of work.
- 3) The key staff members' / experts' knowledge of issues which the tenderer considers pertinent to the project e.g. local conditions, affected communities, legislation, techniques etc.

A CV of the contract manager, site foreman and lead carpenter of not more than 2 pages should be attached to this schedule:

Each CV should be structured under the following headings:

NAME

SIGNATURE

a)	Personal particulars - name - date and place of birth - place (s) of tertiary education and dates associated therewith - professional awards
b)	Qualifications (degrees, diplomas, grades of membership of professional societies and professional registrations)
c)	Skills
d)	Name of current employer and position in enterprise
e)	Overview of post graduate / diploma experience (year, organization and position)
f)	Outline of recent assignments / experience that has a bearing on the scope of work

(Block Capitals)

DATE:

.

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(of person authorised to sign on behalf of the Tenderer)

PRELIMINARY PROGRAMME

Refer to Clause F3.11.9 for Functionality Points evaluation prompts

The Tenderer shall detail below or attach a preliminary programme reflecting the proposed sequence and tempo of execution of the various activities comprising the work for this Contract. The programme shall be in accordance with the information supplied in the Contract, requirements of the Project Specifications and with all other aspects of his Tender.

Contract No: 1H-46321

PROGRAMME													
ACTIVITY	ACTIVITY WEEKS / MONTHS												

Note:

The programme must be based on the completion time as specified in the Contract Data. No other completion time that may be indicated on this programme will be regarded as an alternative offer, unless it is listed in Table (b) of Form "Amendments, Qualifications, and Alternatives" hereafter and supported by a detailed statement to that effect, all as specified in the Tender Data.

NAME	:	(Block Capitals)
SIGNATURE	:	DATE:

CONSTRUCTION APPROACH, METHODOLOGY, AND QUALITY CONTROL

Refer to Clause F3.11.9 for Functionality Points evaluation prompts

Construction Approach and Methodology

The construction approach and methodology must respond to the Scope of Work and outline the proposed approach to undertake the work showing a detailed programme including health and safety aspects, the use of plant and resources for this Project.

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Quality Control

The quality control statement must discuss what tests and control measures are to be employed on site to attain the specified results and is to cover the program associated activities.

The tenderer must attach his / her Construction Methodology and Quality Control information to this page.

NAME	:	(Block Capitals)
SIGNATURE	:(of person authorised to sign on behalf of the Tenderer)	DATE:

SCHEDULE OF PROPOSED SUBCONTRACTORS

The following firms have been identified as possible subcontractors for work in this contract.

	ADDRESSES OF PROPOSED BCONTRACTORS	NATURE AND EXTENT OF WORK TO BE SUBCONTRACTED	PREVIOUS EXPERIENCE WITH SUBCONTRACTOR
Attach additiona	I pages if more space is requi	red	
NAME	:	(Block Capitals)
SIGNATURE	:(of person authorised to sign on b		DATE:

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PLANT and EQUIPMENT

The following are lists of major items of relevant equipment that I / we presently own or lease and will have available for this contract if my / our tender is accepted.

(a) De	tails of major	equipment that is	owned by me	/ us and immediately	y available 1	for this contract.
--------	----------------	-------------------	-------------	----------------------	---------------	--------------------

DESCRIPTION (type, size, capacity etc)	QUANTITY	YEAR OF MANUFACTURE

Attach additional pages if more space is required

(b) Details of major equipment that will be hired, or acquired for this contract if my / our tender is accepted

	QUANTITY	HOW ACQUIRED		
DESCRIPTION (type, size, capacity etc)		HIRE/ BUY	SOURCE	

Attach additional pages if more space is required

The Tenderer undertakes to bring onto site without additional cost to the Employer any additional plant not listed but which may be necessary to complete the contract within the specified contract period.

NAME	·	(Block Capitals)
SIGNATURE	:	DATE:

CONTRACTOR'S HEALTH AND SAFETY DECLARATION

Refer to Clause F3.11.9 for Functionality Points evaluation prompts (if applicable).

In terms of Clause 5(1)(h) of the OHSA 1993 Construction Regulations 2014 (referred to as "the Regulations" hereafter), a Principal Contractor may only be appointed to perform construction work if the Client is satisfied that the Principal Contractor has the necessary competencies and resources to carry out the work safely in accordance with the Occupational Health and Safety Act No 85 of 1993 and the OHSA 1993 Construction Regulations 2014.

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To that effect a person duly authorised by the tenderer must complete and sign the declaration hereafter in detail.

Declaration by Tenderer

- I the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act No 85 of 1993 (as amended by the Occupational Health and Safety Amendment Act No 181 of 1993), and the OHSA 1993 Construction Regulations 2014.
- 2. I hereby declare that my company has the competence and the necessary resources to safely carry out the construction work under this contract in compliance with the Construction Regulations and the Employer's Health and Safety Specifications.
- 3. I propose to achieve compliance with the Regulations by one of the following:

 Tenderers are to Circle Applicable

 (a) From my own competent resources as detailed in 4(a) hereafter:

 YES NO

 (b) From my own resources still to be appointed or trained until competency is achieved, as detailed in 4(b) hereafter:

 YES NO

 (c) From outside sources by appointment of competent specialist Subcontractors as detailed in 4(c) hereafter:

 YES NO
- 4. Details of resources I propose:

(Note: Competent resources shall include safety personnel such as a construction supervisor and construction safety officer as defined in Regulation 8, and competent persons as defined in Regulations 9, 10, 11, 12, 13, 14, 16, 17, 20, 21, 22, 23(1), 24, 25, 26, 27, 28 and 29, as applicable).

(a) Details of the competent and qualified key persons from my company's own resources, who will form part of the contract team:

NAMES OF COMPETENT PERSONS	POSITIONS TO BE FILLED BY COMPETENT PERSONS

Provision of Emergency Housing Units at Parkington Informal Settlement

5.

6.

7.

8.

(of person authorised to sign on behalf of the Tenderer)

JOINT VENTURES AGREEMENTS

Joint Venture agreement and Power of Attorney Agreements to be attached here (if applicable).

RECORD OF ADDENDA TO TENDER DOCUMENTS

I / We confirm that the following communications received from the Employer or his representative before the date of submission of this tender offer, amending the tender documents, have been taken into account in this tender offer.

ADD.No	DATE	TITLE OR DETAILS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

NAME	:	(Block Capitals)
SIGNATURE	(of person authorised to sign on hehalf of the Tenderer)	DATE:

AMENDMENTS, QUALIFICATIONS AND ALTERNATIVES

(This is not an invitation for amendments, deviations or alternatives but should the Tenderer desire to make any departures from the provisions of this contract he shall set out his proposals clearly hereunder. The Employer will not consider any amendment, alternative offers or discounts unless forms (a), (b) and (c) have been completed to the satisfaction of the Employer).

Contract No: 1H-46321

I / We herewith propose the amendments, alternatives and discounts as set out in the tables below:

	NTS			
PAGE, CLAUSE ITEM NO	OR	PROPOSED AMENDMENT		
Amendments (2)	The Tende	d Special Conditions of Contract are not acceptable; erer must give full details of all the financial implications of the amendments ons in a covering letter attached to his tender.		
) ALTERNAT	IVES			
PROPOSED ALTERNATIV		DESCRIPTION OF ALTERNATIVE		
l - di d d - d - l - l -				
be listed here. In the case of statement sett Alternative ter	a major alternati	ve to any part of the work, a separate Bill of Quantities, programme, etc, and a deta at features of the proposed alternatives must accompany the tender. Exchnical modifications to the design of the works and methods of construction sha		
be listed here. In the case of statement sett Alternative ter treated separa	a major alternati ting out the salien nders involving to tely from the mai	ve to any part of the work, a separate Bill of Quantities, programme, etc, and a deta at features of the proposed alternatives must accompany the tender. Exchnical modifications to the design of the works and methods of construction sha		
be listed here. In the case of statement sett Alternative ter treated separa DISCOUNTS ITEM ON WHIC DISCOUNT IS	a major alternati ting out the salien nders involving to tely from the mai	ve to any part of the work, a separate Bill of Quantities, programme, etc, and a deta tf teatures of the proposed alternatives must accompany the tender. echnical modifications to the design of the works and methods of construction sha n tender offer.		
be listed here. In the case of statement sett Alternative ter treated separa) DISCOUNT: ITEM ON WHIC DISCOUNT IS OFFERED	a major alternati ing out the salien iders involving te itely from the mai S	ve to any part of the work, a separate Bill of Quantities, programme, etc, and a deta to features of the proposed alternatives must accompany the tender. Sechnical modifications to the design of the works and methods of construction shann tender offer. DESCRIPTION OF DISCOUNT OFFERED		
be listed here. In the case of statement sett Alternative ter treated separa DISCOUNT: ITEM ON WHIC DISCOUNT IS OFFERED	a major alternati ing out the salien ders involving te itely from the mai S H	ve to any part of the work, a separate Bill of Quantities, programme, etc, and a deta of features of the proposed alternatives must accompany the tender. Sechnical modifications to the design of the works and methods of construction shain tender offer. DESCRIPTION OF DISCOUNT OFFERED		
be listed here. In the case of statement sett Alternative ter treated separa DISCOUNT: ITEM ON WHIC DISCOUNT IS OFFERED The Tenderer	a major alternatifing out the salienders involving to telly from the mains H must give full deterjudiced.	echnical modifications to the design of the works and methods of construction shaln tender offer.		

PART C1: AGREEMENT AND CONTRACT DATA C1.1: FORM OF OFFER AND ACCEPTANCE

Contract No: 1H-46321

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C1.1.1: OFFER

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract in respect of the following works:

Contract No: 1H-46321

Contract Title: Provision of Emergency Housing Units at Parkington Informal Settlement

The Tenderer, identified in the Offer signature block below, has examined the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the Tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance, the Tenderer offers to perform all of the obligations and liabilities of the Contractor under the Contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the Conditions of Contract identified in the Contract Data.

* The offered total of	the prices inclusive of Value A	dded Tax is:
R	(In words	
)
Acceptance and return stated in the Tender	ning one copy of this document to	ning the Acceptance part of this Form of Offer and the Tenderer before the end of the period of validity becomes the party named as the Contractor in the
For the Tenderer:		
* Name of Tenderer (organisation)	:
* Signature (of person authorized to sign the tender)		:
* Name (of signatory ir	n capitals)	:
Capacity (of Signatory	<i>(</i>)	:
Address	:	
<u>Witness:</u>	:	
Signature	:	Date :
Name(in capitals) :	:	
Notes		

Notes:

Failure to complete the mandatory information and sign this form will invalidate the tender.

^{*} Indicates what information is mandatory.

C1.1: FORM OF OFFER AND ACCEPTANCE C1.1.2: FORM OF ACCEPTANCE

By signing this part of the Form of Offer and Acceptance, the Employer identified below accepts the Tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the Conditions of Contract identified in the Contract Data. Acceptance of the Tenderer's Offer shall form an agreement between the Employer and the Tenderer upon the terms and conditions contained in this Agreement and in the Contract that is the subject of this Agreement.

The terms of the contract are contained in:

Part C1 : Agreement and Contract Data, (which includes this Agreement)

• Part C2 : Pricing Data, including the Bill of Quantities

Part C3 : Scope of WorkPart C4 : Site Information

and the schedules, forms, drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C4 above.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules as well as any changes to the terms of the Offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be duly signed by the authorised representatives of both parties.

The Tenderer shall within two weeks after receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data at, or just after, the date this Agreement comes into effect. Failure to fulfill any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

Notwithstanding anything contained herein, this Agreement comes into effect on the date when the Tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the Tenderer (now Contractor) within five days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this Agreement, this Agreement shall constitute a binding contract between the parties.

signature (person authorized to sign the acceptance)		:	
Name (of signatory in capitals)		:	
Capacity (of Signatory)		:	
Name of Employer (organ	isation)	:	
Address	:		
<u>Witness:</u>	:		
Signature	:	Date) :
Name(in capitals) :	:		

This form will be completed by THE EMPLOYER and ONLY THE SUCCESSFUL TENDERER

C1.1: FORM OF OFFER AND ACCEPTANCE C1.1.3: SCHEDULE OF DEVIATIONS

1.	Subject	:		
	Details	:		
		:		
2.	Subject	:		
	Details	:		
		:		
3.	Subject	:		
	Details	:		
		:		
agree docur confir	to and accept to nents listed in t mation, clarifica	the foregoing Sch he Tender Data a	edule of Deviations as the only or and addenda thereto as listed in	ations, the Employer and the Tenderer deviations from and amendments to the the Tender Schedules, as well as any the Tenderer and the Employer during
	FOR THE T	ENDERER		FOR THE EMPLOYER
		ENDERER	Signature	FOR THE EMPLOYER
			Signature Name <i>(in capitals)</i>	
			Name (in capitals)	
			Name (in capitals) Capacity	
			Name (in capitals) Capacity Name and Address of	
			Name (in capitals) Capacity Name and Address of	
			Name (in capitals) Capacity Name and Address of	
			Name (in capitals) Capacity Name and Address of Organisation	

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C1.2: CONTRACT DATA

C1.2.1 CONDITIONS OF CONTRACT

C1.2.1.1 GENERAL CONDITIONS OF CONTRACT

The Conditions of Contract are the General Conditions of Contract for Construction Works (2015 3rd Edition), (GCC 2015) published by the South African Institution of Civil Engineering. Copies of these conditions of contract may be obtained from the South African Institution of Civil Engineering (Tel: 011-805-5947, Fax: 011-805-5971, E-mail: civilinfo@saice.org.za).

The Contract Data (including variations and additions) shall amplify, modify or supersede, as the case may be, the GCC 2015 to the extent specified below, and shall take precedence and shall govern.

Each item of data given below is cross-referenced to the clause in the GCC 2015 to which it mainly applies.

C1.2.2 CONTRACT DATA

C1.2.2.1 DATA TO BE PROVIDED BY THE EMPLOYER

- 1.1.1.13 The **Defects Liability Period**, from the date of the Certificate of Completion, is **1 Year**.
- 1.1.1.14 The **time for achieving Practical Completion**, from the Commencement Date is **12 Months**. The period as stated in 5.3.2, and the 7 days referred to in 5.3.3, are included in the above time for achieving Practical Completion. The special non-working days as stated in 5.8.1 are excluded from the above time for achieving Practical Completion.
- 1.1.1.15 The Employer is the eThekwini Municipality as represented by:

Human Settlements: Head:.

1.2.1.2 The address of the Employer is:

Physical: 221 ANTON LEMBEDE STREET, DURBAN, 4001

Postal: Human Settlement Units, P O Box 3858, DURBAN, 4000

Telephone: 031-311-3489(t) Fax: 031-311-3493 (f)

E-Mail: Lawrence.Pato@durban.gov.za

1.1.1.16 The name of the Employer's Agent is Ntombi Ndaba

1.2.1.2 The address of the Employer' Agent is:

Physical: 17 Doveside Place: Phoenix

Postal: Engineering Unit, P O Box 680, DURBAN, 4000

Telephone: 031 311 2486(t)

Fax: N/A (f)

E-Mail: Ntombi.Ndaba@durban.gov.za

1.1.1.26 The **Pricing Strategy** is by **Re-measurement Contract**.

- 3.2.3 The Employer's Agent shall obtain the **specific approval of the Employer** before executing any of his functions or duties according to the following Clauses of the General Conditions of Contract:
 - 6.3: Council approval in order to authorise any expenditure in excess of the Tender Sum plus **10**% contingencies.
- 5.3.1 The **documentation required** before commencement with Works execution are:

- Health and Safety Plan (refer to Clause 4.3)
- Initial programme (refer to Clause 5.6)
- Security (refer to Clause 6.2)
- Insurance (refer to Clause 8.6)
- Cashflow
- Quality Management Plan (refer to section C.3.5.1.4.8 and SANS 1921: Clause 4.4)
- 5.3.2 The time to submit the documentation required before commencement with Works is 14 Days
- 5.3.3 Add the following paragraph:

"If a construction work permit, in terms of Clause 3(1) of the Construction Regulations (2014), is applicable, the instruction to commence carrying out of the works may only be issued once the construction work permit has been obtained by the Employer's Agent. If a construction work permit is applicable, the contractor shall allow for a minimum period of 37 days, after the submission (or re-submission) of the documentation referred to in Clause 5.3.1., for the issuing of the construction work permit."

- 5.8.1 The **non-working days** are Sundays.
- (5.1.1) The **special non-working** days are:
 - All statutory holidays as declared by National or Regional Government.
 - The year-end break:
 - Commencing on the first working day after 15 December.
 - Work resumes on the first working day after 5 January of the next year.
- 5.8.1 Delete the words "sunset and sunrise" and replace with "17:00 and 07:00".
- 5.12.2.2 **Abnormal Climatic Conditions (Rain Delays)** The numbers of days per month, on which work is expected not to be possible as a result of rainfall, for which the Contractor shall make provision, is given in the table below. During the execution of the Works, the Employer's Agent's Representative will certify a day lost due to rainfall only if at least 75% of the work force and plant on site could not work during that specific working day.

Extension of time as a result of rainfall shall be calculated monthly being equal to the number days certified by the Employer's Agent's Representative as lost due to rainfall, less the number of days allowed for as in table below, which could result in a negative figure for certain months. The total extension of time for which the Contractor may apply, shall be the cumulative algebraic sum of the monthly extensions. Should the sum thus obtained be negative, the extension of time shall be taken as NIL.

Month	Days Lost	<u>Average</u> <u>Rainfall</u>	<u>Month</u>	Days Lost	<u>Average</u> <u>Rainfall</u>
January	4*	134	July	1	39
February	3	113	August	2	62
March	3	120	September	2	73
April	2	73	October	3	98
May	2	59	November	3	108
June	1	28	December	1*	102
			* = The number	of working days lo	st allows for the
TOTAL	27	1009mm	annual statut	•	,
			December and J	anuary of each ye	ar.

5.13.1 The **penalty for delay** in failing to complete the Works is **R0.01/R100 x Project Value** (per Day).

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- 5.14.1 The **requirements for achieving Practical Completion** will be determined by the Employer's Agent (in consultation with the Contractor) and recorded in the minutes of the first Site Meeting / Handover Meeting. (Refer to 1.1.1.24 for a generic definition.) The requirements are to be regularly reviewed with respect to any variations to the Contract.
- 5.16.3 The **latent defect liability** period is **10 Years**.
- 6.2.1 **Security (Performance Guarantee)**: Delete the word "selected" and replace it with "stated".

The liability of the Performance Guarantee shall be as per the following table:

Value of Contract (incl. VAT)	Performance Guarantee Required
Less than or equal to R 1m	Nil
Greater than R 1m and less than or equal to R 10m	5% of the Contract Sum
Greater than R 10m	10% of the Contract Sum

- 6.5.1.2.3 The **percentage allowance** to cover overhead charges for daywork are as follows:
 - 80% of the gross remuneration of workmen and foremen actually engaged in the daywork;
 - 20% on the net cost of materials actually used in the completed work.

No allowance will be made for work done, or for materials and equipment for which daywork rates have been quoted at tender stage.

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6.8.2 Contract Price Adjustment:

The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule (GCC 2015 - page 86) with the following Indices / Descriptions / Coefficients:

- The proportion not subject to adjustment: **x = 0.10**.
- The base month will be the month prior to the month in which tenders close.
- The Index shall be based on December 2016 = 100.

	STATS SA Statistical Release	Table	Description	Coefficient
• "L" is the "Labour Index"	P0141	Table A	Geographic Indices; CPI per Province; Kwa-Zulu Natal	a = 0.28
 "P" is the "Contractor's Equipment Index"	P0151.1	Table 4	Plant and Equipment	b = 0.28
"M" is the "Materials Index"	P0151.1	Table 6	Civil Engineering Material (excluding bitumen)	c = 0.38
• "F" is the "Fuel Index"	P0142.1	Table 1	Coke, petroleum, chemical, rubber and plastic products; Coal and petroleum products; Diesel	d = 0.06

6.8.2.1 Contract Price Adjustment Factor for Super-Structures:

- 1) The contract value of the super-structures will be negotiated with the local sub-contractors in keeping with the prevailing DOHS Subsidy for this project.
- 2) The contract value for the top structures will be fixed for the duration of the project ie. Not subject to any escalation.
- In the event of re-alignment of the DOHS top structure subsidy, the employer may at his sole discretion elect to adjust the contract value of the top structures still to be constructed under the contract.
- 6.10.1.5 The **percentage advance** on materials not yet built into the Permanent Works is 80%.
- 6.10.3 **Retention Money:** Delete the word "selected".

The percentage retention on the amounts due to the Contractor is 10%.

The limit of "retention money" is 5% of the Contract Sum.

Should the Contract Price exceed the Contract Sum then the limit of "retention money" is 5% of the Contract Price.

Interest will not be paid on retention withheld by the Employer.

- 8.6.1.1.2 The **value of Plant and materials** supplied by the Employer to be included in the insurance sum: **Not Required.**
- 8.6.1.1.3 The **amount to cover professional fees** for repairing damage and loss to be included in the insurance sum: **Not Required**
- 8.6.1.2 **SASRIA Coupon Policy** for Special Risks to be issued in joint names of Council and Contractor for the full value of the works (including VAT).
- 8.6.1.3 The limit of indemnity for **liability insurance**: **R 10 000 000.00**

8.6.1.4 **Ground Support Insurance**:

Minimum amount for any one occurrence, unlimited as to the number of occurrences, against
any claim for damages or loss caused by vibration and / or removal of lateral support: R
2 000 000.00.

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- Maximum first excess: R 10 000.00.
- 8.6.1.5 Furthermore, the insurance cover effected by the Contractor shall meet the following requirements:

Third Party Insurance (Public Liability)

- Minimum amount for any one occurrence, unlimited as to the number of occurrences, for the period of the contract, inclusive of the maintenance period: **R 1 000 000.00**.
- Consequential loss to be covered by policy: Yes
- Liability section of policy to be extended to cover blasting: R 500 000.00.
- Maximum excess per claim or series of claims arising out of any one occurrence: R 20 000.00.

Principal's own surrounding Property Insurance

- Minimum amount for any one occurrence unlimited as to the number of occurrences against any claim for damage which may occur to the Council's own surrounding property: R 500 000.00.
- Maximum first excess: R 20 000.00.

Insurance of Works

- Minimum amount for additional removal of debris (no damage): Nil.
- Minimum amount for temporary storage of materials off site, excluding Contractor's own premises: Nil.
- Minimum amount for transit of materials to site: Nil.
- 8.6.5 **Approval by Employer**: At the end of the sub-clause, add the following paragraph:

"Except where otherwise provided in the Special Conditions of Contract, the insurance cover effected by the Contractor in terms of this clause shall not carry a first loss amount greater than those set out below:

Contract Price	First Loss
Less than R 100,000	R 5,000
R 100,000 to R 500,000	R 10,000
R 500,000 to R 1,000,000	R 20,000
R 1,000,000 to R 2,000,000	R 30,000
R 2,000,000 to R 4,000,000	R 40,000
Greater than R 4,000,000	R 50,000

The insurance policy shall contain a specific provision whereby cancellation of the policy prior to the end of the period referred to in Cause 8.2.1 cannot take place without the prior written approval of the Employer."

- 10.5.1 **Dispute resolution** shall be by standing adjudication.
- 10.5.3 The **number of members** of the Adjudication Board to be appointed: **3**.
- 10.7.1 Failing ad-hoc adjudication, the determination of disputes shall be by arbitration.
- 10.8.1 Failing ad-hoc adjudication, the determination of disputes shall be by court proceedings.

C1.2.2.2 DATA TO BE PROVIDED BY CONTRACTOR

1.1.1.9	The legal name of Contractor is:
1.2.1.2	The Physical address of the Contractor is:
	The Postal address of the Contractor is:
	The contact numbers of the Contractor are:
	Telephone:
	Fax:
	The E-Mail address of the Contractor is:
6.5.1.2.3	The percentage allowance to cover overhead charges for daywork are as follows:
	% of the gross remuneration of workmen and foremen actually engaged
	% on the net cost of materials actually used in the completed work

C1.2.3 ADDITIONAL CONDITIONS OF CONTRACT

C1.2.3.1 COMMUNITY LIAISON OFFICER

The Ward Councillor in whose ward(s) work is to be done will, in consultation with the local Development Committee, identify a community liaison officer (CLO) from within the Parkington Settlement for the project and make the person known to the Contractor within two days of being requested to do so. The Contractor will be required to enter a written contract with the CLO that specifies:

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- The hours of work and the wage rate of the CLO (200% of the Civil Engineering Industry minimum wage).
- The duration of the appointment.
- The duties to be undertaken by the CLO which could include:
 - Assisting in all respects relating to the recruitment of local labour.
 - Acting as a source of information for the community and councillors on issues related to the contract.
 - Keeping the Contractor advised on community issues and issues pertaining to local security.
 - · Assisting in setting up any meetings or negotiations with affected parties.
 - Keeping a written record of any labour or community issue that may arise.
 - Any other duties that may be required by the Contractor.

Responsibility for the identification of a pool of suitable labour shall rest with the CLO, although the Contractor shall have the right to choose from that pool. The Contractor shall have the right to determine the total number labourers required at any one time and this may vary during the contract.

The Contractor shall have the right to replace labour that is not performing adequately. Should such occasion arise, it must be done in conjunction with the CLO.

Payment: The CLO will be reimbursed from the PC Sum item in the Preliminary & General Section of the Bill of Quantities.

C1.2.3.2 EMPLOYMENT OF LOCAL LABOUR

It is a condition of contract that the contractor will be required to employ local labour as specified in eThekwini Council Policy "The use of CLOs and Local Labour". The contractor will be required to ensure that a minimum of **50** % of the total person days worked for which the principal contractor and subcontractors are persons who reside within the boundaries of the Parkington Informal Settlement as indicated in Annexure 1. The contractor will be required to provide proof of authenticity of local labour. Signed confirmation by the appointed CLO will suffice for this.

No additional costs will be entertained due to this Particular Specification. The contractor will remain responsible for providing proper supervision of all labour, and will be responsible for the quality of work produced.

C1.2.3.3 CONTRACTOR PARTICIPATION GOAL (CPG)

It is a condition of contract that the contractor must allow for a minimum of **30%** of the contract value (excluding Prov. Sum items and Fixed Cost allowances) to be subcontracted to contractors who are >76% PPG (Priority Population Group) owned. Proof of payment to the subcontractors will be required to verify that the minimum has been achieved.

The penalty for not achieving the specified CPG will be 0.5% of the contract value (excluding PC Sum items and Fixed Cost allowances) for every 1% of CPG not achieved.

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C1.2.3.4 FTE (Full Time Equivalent) EMPLOYMENT INFORMATION

It is a condition of contract that the Contractor supplies the Employer's Agent's Representative with information in respect of the employment of all foremen, artisans and labour (skilled and unskilled) employed to work on this contract. The information required is:

- Initials (per ID doc)
- Last Name (per ID doc)
- ID Number
- Disability (y / n)
- Education Level

Level 1	Level 2	Level 3	Level 4	Level 5
Unknown	No Schooling	Grade 1-3	Grade 4	Grade 5-6
Level 6	Level 7	Level 8	Level 9	Level 10
Grade 7-8	Grade 9	Grade 10-11	Grade 12	Post Matric

Category of Employment

Category A: Employed as Local Labour for this contract only

Category B: Temporarily employed by the Contractor

Category C: Permanently employed by the Contractor

In addition, the following information is required in respect of each person listed above, on a monthly basis:

- Number of days worked during the month;
- · Daily wage rate;
- · Number of training days during the month.

The information is to be forwarded in a format acceptable to the Employer's Agent's Representative, but preferably in the form of an emailed EXCEL file (an original file, to be used as a template, will be issued to the Contractor). Contractors without computer facilities will be required to submit a hard copy of the information in a format as agreed to between the Contractor and the Employer's Agent's Representative.

In addition to the tax invoice, to be submitted by the Contractor with his monthly statement, mentioned in Clause 6.10.4 of GCC 2015, the Employer reserves the right to withhold payment until the monthly FTE information has been forwarded to the Employer's Agent's Representative. No additional payment for complying with the above will be made and the Contractor is to make allowance for complying through the time related P & G items (sum) under Part AA: Preliminaries, of the Bill of Quantities.

C1.2.3.5 PERFORMANCE MONITORING OF SERVICE PROVIDERS

The Contractor shall be subjected to "Performance Monitoring" assessments in terms of the applicable Section of the Employer's Supply Chain Management Policy.

Key Performance Indicators (KPIs) are specified in the Part C3: Scope of Works, or will be discussed and agreed with the Contractor before commencement of the contract.

C1.2.3.6 EMPOWERMENT STRATEGIES

For contracts above R30m, the 2017 PPPFA Regulations require organs of State to identify tenders, where it is feasible, to subcontract a minimum of 30% of the value of the contract to the following designated groups:

(a) an EME or QSE;

- (b) an EME or QSE which is at least 51% owned by black people;
- (c) an EME or QSE which is at least 51% owned by black people who are youth;
- (d) an EME or QSE which is at least 51% owned by black people who are women;
- (e) an EME or QSE which is at least 51% owned by black people with disabilities;
- (f) an EME or QSE which is 51% owned by black people living in rural or underdeveloped areas or townships;

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- (g) a cooperative which is at least 51% owned by black people;
- (h) an EME or QSE which is at least 51% owned by black people who are military veterans; or
- (i) more than one of the categories referred to in paragraphs (a) to (h).

In addition to the above, the eThekwini Municipal Council has adopted a framework for empowerment strategies for contracts between R5m and R30m.

C1.2.3.7 EXCEPTED RISKS (Clause 8.3)

Pursuant to Clause 8.3 of the Conditions of Contract (GCC 2015), the Employer shall not be liable for the payment of standing time costs as a result of the occurrence of any of the "Excepted Risks" as defined under Clause 8.3.

However, the Employer shall reimburse the Contractor in respect of plant de-establishment and re-establishment costs as a result of "Excepted risks" when a written instruction to de-establish is issued to the Contractor.

C2.1: PRICING ASSUMPTIONS / INSTRUCTIONS

C2.1.1 GENERAL

The Bill of Quantities forms part of the Contract Documents and must be read and priced in conjunction with all the other documents comprising the Contract Documents (refer to F.1.2 of the Tender Data).

C2.1.2 PRICING INSTRUCTIONS AND DESCRIPTION OF ITEMS IN THE SCHEDULE

Measurement and payment shall be in accordance with the relevant provisions of Clause 8 of each of the Standard Engineering Specifications referred to in the Scope of Work. The Preliminary and General items shall be measured in accordance with the provisions of C2.1.8.

The descriptions of the items in the Bill of Quantities are for identification purposes only and comply generally with those in the Standard Engineering Specification.

Clause 8 of each Standard Engineering Specification, read together with the relevant clauses of the Scope of the works, set out what ancillary or associated work and activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standard Engineering Specification, or the Scope of the works, conflict with the Bill of Quantities, the requirements of the Standard Engineering Specification or Scope of the work, as applicable, shall prevail.

C2.1.3 QUANTITIES REFLECTED IN THE SCHEDULE

The quantities given in the Bill of Quantities are estimates only, and subject to re-measuring during the execution of the work. The Contractor shall obtain the Employer's Agent's detailed instructions for all work before ordering any materials or executing work or making arrangements for it.

The Works as finally completed in accordance with the Contract shall be measured and paid for as specified in the Bill of Quantities and in accordance with the General and Special Conditions of Contract, the Specifications and Project Specifications and the Drawings. Unless otherwise stated, items are measured

net in accordance with the Drawings, and no allowance has been made for waste.

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The validity of the contract will in no way be affected by differences between the quantities in the Bill of Quantities and the quantities finally certified for payment.

C2.1.5 MONTHLY PAYMENTS

Unless otherwise specified in the Specifications and Project Specifications, progress payments in Interim Certificates, referred to in Clause 6.10.1 of the General Conditions of Contract, in respect of "sum" items in the Bill of Quantities shall be by means of interim progress instalments assessed by the Employer's Agent and based on the measure in which the work actually carried out relates to the extent of the work to be done by the Contractor.

C2.1.4 PROVISIONAL SUMS / PRIME COST SUMS

Where Provisional Sums or Prime Cost sums (PC Sum) are provided for items in the Bill of Quantities, payment for the work done under such items will be made in accordance with Clause 6.6 of the General Conditions of Contract. The Employer reserves the right, during the execution of the works, to adjust the stated amounts upwards or downwards according to the work actually done under the item, or the item may be omitted altogether, without affecting the validity of the Contract.

The Tenderer shall not under any circumstances whatsoever delete or amend any of the sums inserted in the "Amount" column of the Bill of Quantities and in the Summary of the Bill of Quantities unless ordered or authorized in writing by the Employer before closure of tenders. Any unauthorized changes made by the Tenderer to provisional items in the schedule, or to the provisional percentages and sums in the Summary of the Bill of Quantities, will be treated as arithmetical errors.

C2.1.6 PRICING OF THE BILL OF QUANTITIES

The prices and rates to be inserted by the Tenderer in the Bill of Quantities shall be the full inclusive prices to be paid by the Employer for the work described under the several items, and shall include full compensation for all costs and expenses that may be required in and for the completion and maintenance during the defects liability period of all the work described and as shown on the drawings as well as all overheads, profits, incidentals and the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Tender is based.

Each item shall be priced and extended to the "Total" column by the Tenderer, with the exception of the items for which only rates are required (Rate Only), or items which already have Prime Cost or Provisional Sums affixed thereto. If the Contractor omits to price any items in the Bill of Quantities, then these items will be considered to have a nil rate or price.

All items for which terminology such as "inclusive" or "not applicable" have been added by the Tenderer will be regarded as having a nil rate which shall be valid irrespective of any change in quantities during the execution of the Contract.

All rates and amounts quoted in the Bill of Quantities shall be in Rands and Cents and shall include all levies and taxes (other than VAT). VAT will be added in the Summary of the Bill of Quantities.

C2.1.7 "RATE ONLY" ITEMS

The Tenderer shall fill in rates for all items where the words "Rate Only" appear in the "Total" column. "Rate Only" items have been included where:

- (a) an alternative item or material is contemplated;
- (b) variations of specified components in the make-up of a pay item may be expected; and
- (c) no work under the item is foreseen at tender stage but the possibility that such work may be required is not excluded.

For "Rate Only" items no quantities are given in the "Quantity" column but the quoted rate shall apply in the event of work under this item being required. The

Tenderer shall however note that in terms of the Tender Data the Tenderer may be asked to reconsider any such rates which the Employer may regard as unbalanced.

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C2.1.8 PRELIMINARY AND GENERAL

The Preliminary and General Section is provided to cover the Contractor's expenses incurred in complying with the requirements of the tender documents and consists of the following parts:

Part AA: Preliminaries

Part AB: General Specifications

• Part AH: Occupational Health and Safety

Fixed Charge Items: Each item should be priced separately and, subject to the Engineer certifying in terms of Clause 6.7 of the General Conditions of Contract that the work has been done, payment will be made as follows:

- the total amount due when the certified value fixed charge items in this section is less than 5% of the net contract price;
- (ii) when the certified value of fixed charge items in this section is greater than 5% of the net contract price, payment will be limited to 5% of the net contract price. The remainder will be paid when the value of the work done under the contract, excluding the value of fixed charge items in this section, is greater than 50% of the net contract price, excluding the value of fixed charge items in this section.

Time Related Items: Any Time Related items not priced shall be deemed to be covered by the prices of other items in the section.

Payment of Time Related items in this section will be made throughout the contract period, the amount per month being the value of the item divided by the completion in months or, if specified in weeks, the equivalent number of months, in terms of Clause 5.5 of the General Conditions of Contract. The final monthly increment will only be paid upon the issue of a completion certificate.

C2.2: BILL OF QUANTITIES

The Bill of Quantities follows and comprises of 77 pages. The pages are numbered 59 to 135 (Fixed rates, No escalation -12 month contract)

Vat @15%

TOTAL: BILL OF QUANTITIES **POST TOTAL TO FORM OF OFFER**

Provision of Em	ergency Housing Units at Parkington Informal Settlement	Contract No: 1H-46321
Contract No.	: 1H – 46321	
Client	: ETHEKWINI MUNICIPALITY - HUMAN SETTLEMENT	
Project Name	: PARKINGTON EMERGENCY HOUSING PILOT PROGRAMME	
Description	: Provision of Emergency Housing Units at Parkington	Informal Settlement
	SUMMARY OF SECTIONS	
CECTION	DESCRIPTION DESCRIPTION	AMOUNT
SECTION		AMOUNT
1	PRELIMINARY AND GENERAL	
2	ALTERNATIVE DWELLING UNIT TYPE A 30M ² (DOUBLE STOREY DSIS)	
3	ALTERNATIVE DWELLING UNIT TYPE D 15.0M ² (SINGLE STOREY SSIS)	
4	ALTERNATIVE DWELLING UNIT TYPE E 34.5M ² (DOUBLE STOREY (DSIS)	
5	ALTERNATIVE DWELLING UNIT TYPE G 44.0M ² (DOUBLE STOREY DSIS)	
6	TYPE H ABLUTION UNIT 15.0M2 AND WATER COLLECTION /WASH AREA 4.2M2	
7	WASTE COLLECTION YARD /FACILITIY TYPE J (25M2)	
8	FENCING	
9	RELOCATION SUPPORT MANAGEMENT	
SUB-TOTAL		
Section 10: Secur	ty Requirements	
SUB-TOTAL: BII	L OF QUANTITIES	

Item	Payment Ref	Description	Unit	Quantity	Rate	Amount
1	SANS 1200	SECTION 1: PRELIMINARY AND GENERAL FIXED CHARGE ITEMS				
1.1	8.3.1	Any Contractual requirements	Sum	1		_
1.1	0.0.1	for duration of contract	Cum	'		
2	8.3.2	Establishment of facilities of site				
2.1	8.3.2.1	Facilities for engineer (not	Sum	0		
2.1	0.3.2.1	required)	Suiii	0		-
		a) Rain Gauge	No	1		-
2.2	8.3.2.2	Facilities for contractor				
2.2.1		a) offices and sheds	Sum	1		_
2.2.1		a) offices and sneus	Suili			-
2.2.2		b) Ablution and latrine facilities	Sum	1		-
2.2.3		c) Tools and equipment	Sum	1		-
2.2.4		d) Water supplied , electricity and communications	Sum	1		-
2.2.6	8.3.3	Any Other Fixed Obligations : Specify Below				
2.2.7		Socurity of the works	Sum	1		_
2.2.1		Security of the works	Sum	1		-
2.3		Initial Health and safety obligations	Sum	1		-
2.3.1		Submission of Health and	Sum	1		-
2.0.1		safety file	00			
2.4	8.3.4	Removal of site Establishment at end of contract	Sum	1		-
2.4.1		Provisional Allowance for	Sum	1	4,500.00	
2.4.1		Provisional Allowance for Project Name Board	Sum	1	4,500.00	
		SECTION 2: PRELIMINARY				
		AND GENERAL TIME RELATED ITEMS				
2.5.1	8.4.1	Contractual requirements	Sum	1		_
	J	2				
				İ		

2.5.2	8.4.2	Management and supervision	Months	6		_
2.0.2	0.1.2	of the works	Welland			
0.0	0.4.0					
2.6	8.4.3	Facilities for engineer (not				-
		required)				
2.6.1		a) Rain Gauge	No	1		-
0.00					00.000.00	
2.6.2		b) Provisional Allowance	Sum	1	30,000.00	
		Surveyor/Engineer setting out position of individual units				
		position of individual units				
2.6.3		Contractors markup and profit	Sum	1		-
		on item above				
			Carried Forward			-
	1	I		I	ĺ	

	1		Brought Forward		1	I -
			Dioagniti orward			
2.7	8.4.5	Facilities for contractor				
2.1	0.4.0					
2.7.1		Offices and sheds	Months	6		-
2.7.2		Ablution and latrine facilities	Months	6		-
2.7.3		Tools and equipment	Months	6		-
2.7.4		Water supplied , electricity and communications	Months	6		-
2.7.5		Dealing with water	Months	6		-
2.9		Health and safety time related obligations	Months	6		-
3.3	8.5	Provisional Allowance for Civil/Structural Engineer nominated by Employer to provide testing, reporting and issuing necessary compliance certification and carrying out site visit (minimum two visits a month)	Sum	1	45,000.00	
0.4.0						
3.4.2		Contractors attendance and mark up on item above	Sum	1		-
3.3	8.5	Provisional allowance for Land Surveyor/Engineer to carry out	Sum	1	63,000.00	
		cadastral survey of individual plots to SG compliance. Refer to Contract Data for servies to be performed.				
3.4.2		Contractors attendance and mark up on item above	Sum	1		-
3.4.1	8.7	Provisional Allowance for Community Liaison Officer (hours of work and wage rate in accordance with Civil Engineering Industry Wages).	Sum	1	50,000.00	
3.4.2		Contractors attendance and mark up on item above	Sum	1		-
3.4.5		Provisional Allowance for Cost Control and Certification of progress payments (to be undertaken by PQS selected by Employer) based on one day a month attendance	Sum	1	20,000.00	

	1				
3.4.6	Contractors attendance and mark up on item above	Sum	1		-
3.4.7	Provisional Allowance for	Sum	1	22,500.00	
	Design Monitoring and Guidance during the works (to be undertaken by selected Architect) - Refer to Contract Data for services to be performed				
3.4.8	Contractors attendance and mark up on item above	Sum	1		-
		Carried Forward			-
		Brought Forward			-
0.40				47.500.00	
3.4.9	Provisional Allowance for Geotechnical Engineer services during the works	Sum	1	17,500.00	
3.4.10	Contractors attendance and mark up on item above	Sum	1		-
					-
		TOTAL CARRIED TO SUMMARY PAGE			-

Item	Payment Ref	Description	Unit	Quantity	Rate	Amount
1		Provision of labour to assist with the transportation of all household effects from shack to be demolished into the new dwelling	No	61		-
2		Dismantling of vacated shack	No	61		-
3		Transportation of salvaged material to designated storage area	No	61		-
4		Transportation of waste shack material to land fill site	No	61		-
5		Training of all new dwelling occupants in basic dwelling maintenance requirements, procedures and techniques using material compiled by the Employer - 4 hours per dwelling unit	No	61		-
6		Clearance of the land vacated by the shack demolition and demarcation of the vacated area by stakes and danger tape	No	61		-
			TOTAL CARRIED TO SUMMARY PAGE			-

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Item No	Description	Unit	Quantity	Rate	Amount
	PREAMBLES				
	ALTERNATIVE DWELLING UNIT TYPE A 30M2 (DOUBLE STOREY DSIS)				
1	Dwelling Unit A. These Bills of Quantities				-
	are for all material, labour, plant and				
	inputs for the erection of Double Storey Units each being 30sq.m				
	TOTAL NO OF UNITS	32			
2	Construction Information. Each				
	structure/unit to be erected as detailed on				
	DesigncoLab DrwgP19004				
	A101 RevB (Page 1 of 12) Foundation				
	A102 RevB (Page 2 of 12) Ground Floor				
	Substructure				
	A103 RevB (Page 3 of 12) Ground Floor				
	A104 RevB (Page 4 of 12) Roof				
	A105 RevB (Page 5 of 12) Section A-A				
	A106 RevB (Page 6 of 12) Section B-B				
	A107 RevB (Page 7 of 13) Section A-A				
	A108 RevB (Page 8 of 13) Section B-B				
	A109 RevB (Page 9 of 13) Front Sub-				
	structure				
	A110 RevB (Page 10 of 13) Side				
	Substructure				
	A111 RevB (Page 11 of 13) Back Substructure				
	A112 RevB (Page 12 of 13) Elevations				+
	A113 RevB (Page 13 of 13) Elevations				-
	401 RevB (Page 1 of 1) Stud frame details				-
	402 RevB (Page 1 of 4) Stair details				
	403 RevB (Page 2 of 4) Stair details				-
	404 RevB (Page 3 of 4) Stair details				
	405 RevB (Page 4 of 4) Stair details				
	601 RevA (Page 1 of 2) Window Type A				
	602 RevA (Page 2 of 2) Window Type A				
	701 RevA (Page 1 of 1) Door Type D1				
1	Each structure will be erected on a				
	prepared site. The contractor shall bring to				
	the attention of the Employers Agent any				
	site considered to require removal of trees,				
	structure and any other obstacles to the				
	construction of a unit.				
2	Workmanship. All carpentry and joinery to				
	be undertaken a competent person with				
	experience in erection of timber and sheet				
	metal. The Employer will not be				
	responsible for making good any carpentry				
	and sheet metal construction that is				
	considered unsatisfactory after inspection				
	by the selected architect.				
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				Carried Forward		-
				Brought Forward		-
		BILL NO. 1 EARTHWORKS				
		Site Clearance, Etc.				
		Site clearance				
1		Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth	m2	rate only		
		Excavations, Etc.				
		Excavation in earth by hand not exceeding 2.00m deep				
		Hand augured gumpole foundation				
2		350mm diameter augered hole min 800mm deep, with 75mm thick bearing layer - compacted 13mm diameter stone. Hole lined with geo-fabric and back-filled with no-fines concrete to engineer's spec	No	192		-
		MICRO PILE FOUNDATIONS (PROVISIONAL)				
		Reinforced Concrete Cast Against Excavated Surfaces				
		20Mpa/19mm concrete				
	1	Micro-piles	m3	35		-
		Concrete Sundries				
		Anchor bolts				
	2	M32 Ø Galvanised mild steel threaded rod with one end drilled and epoxied (two part epoxy) 400mm into concrete pile and pile cap and other end drilled and epoxied (two part epoxy) 225mm into underside of 125-150mm Ø CCA treated gumpole including 80mm x 80mm x 8mm square washer and M32 Ø levelling nut with minimum spacing of 50mm above concrete pile	No	192		-
		or Sommi above concrete pile				
				Carried Forward		-
				Brought		
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	I		Forward	<u> </u>
			Forward	-
	Rough Formwork			
	Rough formwork to sides			
_				
3	Square pile caps 300mm long x 300mm	No	192	
	wide not exceeding 300mm high			-
	Reinforcement (Provisional)			
	High tensile steel reinforcement			
4	Y16 Reinforcing bars 1200mm long	kgs	1456	
				-
			Carried	
			Forward	_
			. J. Walu	
			Brought	
			Forward	_
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BILL NO. 2 ROOF COVERINGS				
Profiled Metal Sheeting and Accessories				
0.47mm GMS Z275 corrugated sheeting				
Roof covering pitch not exceeding 25 degrees, fixed with 65mm TEK screws (sharp point for timber) and 19mm bonded washers to purlins	m2	571		-
Stitched apex trim flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding	m	134		-
Stitched barge trim flashing 300mm girth (150mm x 150mm), fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding	m	272		-
Galvanised corrugated galvanised side wall cladding sheet steel				
External cladding, fixed horizontally with 50mm TEK screws (sharp point for timber) and 19mm bonded washers and rubber grommet seal to stud wall framing	m2	2528		-
Top closer trim flashing 150mm girth (50mm x 25mm x 75mm) with Sondor polycloser and fixed with 16mm TEK screws and bonded washers to stud wall framing	m	234		-
Corner flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding	m	682		-
Door and window trim flashing 150mm girth (50mm x 90mm x 10mm), fixed with 30mm TEK screws to stud wall framing	m	406		-
Roof and Wall Insulation				
Mineral wool insulation				
75mm Insulation fixed in cavity between external and internal wall cladding	m2	1954		-
		Carried Forward		_
		Torward		
	Profiled Metal Sheeting and Accessories 0.47mm GMS Z275 corrugated sheeting Roof covering pitch not exceeding 25 degrees, fixed with 65mm TEK screws (sharp point for timber) and 19mm bonded washers to purlins Stitched apex trim flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding Stitched barge trim flashing 300mm girth (150mm x 150mm), fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding Galvanised corrugated galvanised side wall cladding sheet steel External cladding, fixed horizontally with 50mm TEK screws (sharp point for timber) and 19mm bonded washers and rubber grommet seal to stud wall framing Top closer trim flashing 150mm girth (50mm x 25mm x 75mm) with Sondor polycloser and fixed with 16mm TEK screws and bonded washers to stud wall framing Corner flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding Door and window trim flashing 150mm girth (50mm x 90mm x 10mm), fixed with 30mm TEK screws to stud wall framing Roof and Wall Insulation Mineral wool insulation Mineral wool insulation	Profiled Metal Sheeting and Accessories 0.47mm GMS Z275 corrugated sheeting Roof covering pitch not exceeding 25 degrees, fixed with 65mm TEK screws (sharp point for timber) and 19mm bonded washers to purlins Stitched apex trim flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding Galvanised corrugated galvanised side wall cladding sheet steel External cladding, fixed horizontally with 50mm TEK screws (sharp point for timber) and 19mm bonded washers and rubber grommet seal to stud wall framing Top closer trim flashing 150mm girth (50mm x 25mm x 75mm) with Sondor polycloser and fixed with 16mm TEK screws and bonded washers to stud wall framing Corner flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding Door and window trim flashing 150mm girth (50mm x 90mm x 10mm), fixed with 30mm TEK screws to stud wall framing Roof and Wall Insulation Mineral wool insulation 75mm Insulation fixed in cavity between m2	Profiled Metal Sheeting and Accessories 0.47mm GMS 2275 corrugated sheeting Roof covering pitch not exceeding 25 degrees, fixed with 65mm TEK screws (sharp point for timber) and 19mm bonded washers to purlins Stitched apex trim flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding Galvanised corrugated galvanised side wall cladding sheet steel External cladding, fixed horizontally with 50mm TEK screws (sharp point for timber) and 19mm bonded washers and rubber grommet seal to stud wall framing Top closer trim flashing 150mm girth (50mm x 25mm x 75mm) with Sondor polycloser and fixed with 16mm TEK screws and bonded washers to stud wall framing Corner flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding Door and window trim flashing 150mm girth (50mm x 90mm x 10mm), fixed with 30mm TEK screws to stud wall framing Roof and Wall Insulation Mineral wool insulation Mineral wool insulation 75mm Insulation fixed in cavity between external and internal wall cladding	Profiled Metal Sheeting and Accessories 0.47mm GMS 2275 corrugated sheeting Roof covering pitch not exceeding 25 degrees, fixed with 65mm TEK screws (sharp point for timber) and 19mm bonded washers to purlins Stitched apex trim flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding Galvanised corrugated galvanised side wall cladding sheet steel External cladding, fixed horizontally with 50mm TEK screws (sharp point for timber) and 19mm bonded washers and rubber grommet seal to stud wall framing Top closer trim flashing 150mm girth (50mm x 25mm x 75mm) with 50ndor polycloser and fixed with 16mm TEK screws and bonded washers to stud wall framing Corner flashing 300mm girth (150mm x 150mm) including 50ndor polyclosure, fixed with 16mm TEK screws and bonded washers to side cladding Door and window trim flashing 150mm m 406 girth (50mm x 90mm x 10mm), fixed with 30mm TEK screws to stud wall framing Roof and Wall Insulation Mineral wool insulation Mineral wool insulation 75mm Insulation fixed in cavity between external and internal wall cladding

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	Rainwater installation				
	uPVC				
	ur VC				
8	80mm dia including brackets and couplings	m	134		-
9	Stop ends	No	64		-
10	80mm dia downpipe outlet	No	32		-
11	80mm dia Downpipe including fixing brackets	m	154		-
12	80mm dia Shoe	No	32		-
13	80mm dia offset bends	No	64		-
	C. Harris I. C.				
	Gutter rainwater run off management				
	Provisional Allowance for works direct water from downpipe into stormwater channels	No	32	800.00	
			Carried Forward		-
			Brought		
			Forward		-

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	BILL NO. 3 CARPENTRY AND JOINERY				
	Churchural Timbou				
	Structural Timber				
	CCA (H2) treated support poles				
	135 150mm (6 Cum nole no columns	NI-	06		
1	125-150mm Ø Gum pole as columns 3600mm long set in post hole minimum 700mm deep	No	96		-
2	125-150mm Ø Gum pole as columns 4200mm long set in post hole minimum 700mm deep	No	96		-
	Wrought CCA (H2) treated SAP timber				
3	38x228mm Floor beams bolted to 125- 150mm Ø CCA treated gumpole columns with M16 carriage bolts (carriage bolts, nut and washer measure elsewhere)	m	996		-
4	38x228mm Floor joists fixed to floor bearers/beams with MiTek eCo or other approved truss hangers (truss hangers measured elsewhere)	m	1340		-
	Sundries				
	Wrought CCA (H2) treated SAP timber				
6	38x228mm Timber spacer blocks 150mm long fitted between gumpole columns and beam, including holes for M16 carriage bolts (2 per column) (carriage bolts, nut and washer measure elsewhere)	No	256		-
7	38x228mm Timber spacer blocks 228mm long fitted between gumpole columns and beam, including holes for M16 carriage bolts (2 per column) (carriage bolts, nut and washer measure elsewhere)	No	384		-
	+				
			Carried Forward		-
			Brought Forward		-
	Galvanised mild steel sundries				
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8	M16 galvanised mild steel carriage bolts 260mm long with round head and square neck including nut and square washer	No	768		-
9	Mitek or other approved GMS truss hanger (90 deg 38x1.2mm with 2Nr M10 carriage bolts with nuts & bolts & 4Nr 35mm x 3mm thick eCo premfix blue nails per hanger measured elsewhere)	No	896		-
10	50x50x5mm thick GMS angle 1800mm long bolted to gumpole and treated timber floor beam with 12mm threaded bar with nuts and washers to suit	No	96		-
	Roofs, Etc.				
	Wrought CCA (H2) treated SAP timber				
11	38x150mm Rafters fixed to wall plate and stud wall framing with Mitek roof strapping (roof strapping measured elsewhere)	m	672		-
12	50x76mm Wall plate screw fixed to stud frame	m	503		-
13	50x76mm purlins skew nailed rafters with wire nails and purlin (purlin clips measured elsewhere)	m	672		-
	Sundries				
14	Mitek roof tie 1200mm long fixed to rafters, wall plate and stud wall framing with permfix nails every 100mm	No	160		-
15	Mitek roof tie 1800mm long fixed to rafters, wall plate and stud wall framing with permfix nails every 100mm	No	160		-
16	Mitek purlin clips fixed to rafters and purlins with MiTek eCo Permfix 3.15mm Ø x 35mm blue collar nails	No	800		-
			Carried Forward		-
			Brought Forward		-
	Floors, Landings, Etc.				

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	18mm Shutter board			
17	In Floors fixed to floor beams and floor joists with 4.5mm Ø x 60mm decking cut screws at 300mm centres	m2	887	-
18	Extra over flooring panels for cutting holes to accommodate 125-150mm Ø CCA treated gum pole columns	No	384	-
	Stud Wall Framing			
	Wrought CCA (H2) treated SAP timber			
20	Timber stud wall frame (measured through openings) of 76x50mm timber horizontal top, bottom and intermediate cross support rails, vertical struts and diagonal cross bracing including additional reinforcing rails, struts and cleats at openings and corners, fixed with 6mm Ø x 100mm cut screws	m2	1954	-
21	100x30mm Window sub-frame fixed to stud frame, comprised of two horizontal rails 560mm long, with bottom rail chamfered to form sill and two vertical struts 840mm long to fit around 500x840mm single small pane side hung casement window	No	128	-
22	32x94mm PAR Frame fixed to stud frame, comprising of two horizontal rails 1060mm long, with bottom rail chamfered to form sill and two vertical struts 840mm long to fit around 1000x850mm double small pane side hung casement window	No	64	-
	Cladding			
	Ciddaniy			
	18mm Shutter board			
23	18mm shutter board external cladding fixed to and including closer frames of 50x76mm treated SAP timber with 6mm Ø x 100mm cut screws	m2	not applicable	-
		1		1
			Carried Forward	-
			Brought Forward	_
	Doors and Door Frames			

	Wrought hardwood				
25	90x45mm Rebated hardwood single door frame to suit 813x2032mm door	No	32		-
26	813x2032mm Hard wood framed, ledged and braced single door	No	32		-
	Windows				
	Wrought hardwood				
	Cashbuild or other approved				
27	500x840mm Selected pine cottage pane window complete with glass held in place with glazing beads, hinges and stays fixed to 30x100mm CCA treated window subframe with 65mm cut screws including necessary sealing (W2)	No	64		-
28	2x500x840mm Selected pine cottage pane window fixed together with 65mm cut screws, complete with glass held in place with glazing beads, hinges and stays, fixed to 30x100mm CCA treated window subframe with 65mm cut screws including necessary sealing (W1)	No	64		-
	Arcitrave, skirting, etc				
	Wrought SAP timber				
33	20x30mm Skirting fixed to drywall	m	832		-
	a				
	Staircase				
	Wassakt CCA (U2) treated CAR finites				
	Wrought CCA (H3) treated SAP timber				
29	L-shaped staircase, comprised of necessary framework, stringers, cleats, risers and treads as per detail	No	32		-
		-		-	
		-		-	
 				 	
 				 	
				 	
				 	
			Carried Forward		-
			Brought		
	Balustrade		Forward		-
	Wrought CCA (H3) treated SAP timber				

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30	Horizontal balustrades comprising of balusters, handrail, bottom rail and closers as per detail	m	94	-
31	Raking balustrades comprising of balusters, handrail, bottom rail and closers as per detail	m	86	-
	Handrail			
	Wrought CCA (H3) treated SAP timber			
32	Raking handrail as per detail	m	86	_
			Carried Forward	-
			Brought Forward	-
	BILL NO. 4 CEILINGS, PARTITIONS AND			
	ACCESS FLOORING			

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		Wall Cladding			
		5			
		15mm Gypsum fire-stop board			
1		Internal wall cladding including additional 38 x 50mm CCA (H2) treated wrought SAP supports (where necessary), with 10 x 45mm SAP cover strips at joints and along top of boards, fixed to timber stud wall framing with 32mm drywall screws at 200mm centres	m2	2083	-
		Sundries			
		Sundines			
2		20mm SAP quarter round beading strip fixed along edges of door and windows internally	m	782	-
	1				
	-				
				Constant	
				Carried Forward	-
				Brought Forward	-
		BILL NO. 5 IRONMONGERY			
		Hinges, Bolts, Etc.			

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	"Brass"			
1	100x76 Brass ball bearing butt hinge	Pair	32	
				-
	Lockset and handles			
	"Approved"			
2	Two lever mortice lockset with pair	of No	32	
	handles			-
			Carried	
			Forward Brought	-
			Forward	-
	BILL NO. 6 PAINTWORK			
	Gypsum Plasterboard Surfaces			

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	Prepare and apply one				
	undercoat and two coats P	VA paint			
1	On internal wall cladding	m2			
					-
	Wood Surfaces				
	wood Surfaces				
	Prepare and apply one				
	undercoat and two coat	s polyurethane			
	non-drip enamel paint				
2	On external wall cladding	m2			
_	On external wan cladding	1112			_
					-
3	On skirtings	m			
					-
	Prepare and apply three co	ats varnish			
	- Apart and apply and de			1	
4	On doors (internal and and				
4	On doors (internal and ext	ernal) m2			
					-
5	On door frames	m2			
					-
6	On windows (internal and	external) m2			
0	On windows (internal and	external) m2			
					-
				1	
			1	+	
			Carried		
			Forward		-
				1	1
			Brought		
			Brought		
			Brought Forward		-
					-
					-
	BILL NO. 7 EXTERNAL WO	RKS			-
	BILL NO. 7 EXTERNAL WO	RKS			-
	BILL NO. 7 EXTERNAL WOI	RKS			-

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	Wood and sheet metal				
1	Awning 1000mm long x 720mm wide	No	32		
-	formed of 50x76mm CCA treated SAP	NO	32		
					-
	framework fixed to stud framing with wire				
	nails and covered with 0.50mm galvanised				
	corrugated sheeting fixed to stud wall				
	frame (refer to detail)				
	UNIT TOTAL CARRIED TO SUMMARY PAGE				
					_
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Item No	Description	Unit	Quantity	Rate	Amount
	PREAMBLES				

	ALTERNATIVE DWELLING UNIT TYPE D 15.0M ² (SINGLE STOREY SSIS)			
1	Dwelling Unit D. These Bills of Quantities are for all material, labour, plant and inputs for the erection of Single Storey Units each being 15.4sq.m			
	TOTAL NO OF UNITS	15		
2	Construction Information. Each structure/unit to be erected as detailed on DesigncoLab DrwgP19004			
	D101 RevB (Page 1 of 10) Foundation D102 RevB (Page 3 of 10) Ground Floor Substructure			
	D103 RevB (Page 3 of 10) Ground Floor D104 RevB (Page 4 of 10) Roof			
	D105 RevB (Page 5 of 10) Section A-A D106 RevB (Page 6 of 10) Section B-B			
	D107 RevB (Page 7 of 10) Front Substructure D108 RevB (Page 8 of 10) Side Sub-structure			
	D109 RevB (Page 9 of 10) Back Substructure			
	D110 Revb (Page 10 of 10) Elevations 401 RevB (Page 1 of 1) Stud frame details 701 RevA (Page 1 of 1) Door Type D1			
	601 RevA (Page 1 of 1) Window Type B 602 RevA (Page 2 of 2) Window Type B			
1	Each structure will be erected on a prepared site. The contractor shall bring to the attention of the Employers Agent any site considered to require removal of trees, structure and any other obstacles to the construction of a unit.			
2	Workmanship. All carpentry and joinery to be undertaken a competent person with experience in erection of timber and sheet metal. The Employer will not be responsible for making good any carpentry and sheet metal construction that is considered unsatisfactory after inspection by the selected architect.			

		Carried F	orward	R	-
		Brought F		R	_
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	-				
	BILL 1 EARTHWORKS				
					$\overline{}$
	Site Clearance, Etc.				$\overline{}$
	One Oreananice, Etc.				
	Site clearance				
	<u> </u>				

1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth	m²	rate only			
	Excavations, Etc.					
	Excavation in earth by hand not exceeding 2.00m deep					
	Hand augured gumpole foundation					
1	- 350mm diameter augered hole min 800mm deep, with 75mm thick bearing layer - compacted 13mm diameter stone. Hole lined with geo-fabric and back-filled with no-fines concrete to engineer's spec	No	90	-	-	
	3 1					
			Carried F		R	-
	BILL NO 2 POOF COVERINGS		Brought F	orward	R	-
	BILL NO. 2 ROOF COVERINGS					
	Profiled Metal Sheeting and Accessories					
	0.47mm GMS Z275 corrugated sheeting					
					_]	

1	Roof covering pitch not exceeding 25 degrees, fixed with 65mm TEK screws (sharp point for timber) and 19mm bonded washers to purlins	m ²	276	-	-
2	Stitched apex trim flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding	M	63	-	-
3	Stitched barge trim flashing 300mm girth (150mm x 150mm), fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding	M	131	-	-
	Galvanised corrugated galvanised side wall cladding sheet steel				
4	External cladding, fixed horizontally with 50mm TEK screws (sharp point for timber) and 19mm bonded washers and rubber grommet seal to stud wall framing	m ²	670	-	-
	Top closer trim flashing 150mm girth (50mm x 25mm x 75mm) with Sondor polycloser and fixed with 16mm TEK screws and bonded washers to stud wall framing	M	110	R -	-
5	Corner flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding	M	130	-	-
6	Door and window trim flashing 150mm girth (50mm x 90mm x 10mm), fixed with 30mm TEK screws to stud wall framing	M	153	-	-
			Carried F		R -
			Di Ougrit i	Jiwalu	-
	Roof and Wall Insulation				
	Mineral wool insulation				

7	75mm Insulation fixed in cavity between external and internal wall cladding	m ²	414	-	-
	Rainwater installation				
	<u>uPVC</u>				
	80mm dia	М	63		
				_	-
	Stop ends	No	30		
	•			_	_
	80mm dia downpipe outlet	No	15		
	comm and downpipe dated	110	'0	_	_
	80mm dia Downpipe including fixing brackets	M	36		
	oomin dia bowiipipe including lixing brackets	IVI	30		
				-	-
	00 11 01	N. 1	45		
	80mm dia Shoe	No	15		
				-	-
	80mm dia offset bends	No	30		
				-	-
	Gutter rainwater run off management				
	Provisional Allowance for works direct water	No	15		
	from downpipe into stormwater channels			800.00	
			Carried F	orward	R -
			Brought F		R -
			2.349.11		
	BILL NO. 3 CARPENTRY AND JOINERY				
	BILL NO. 3 CARPENIRT AND JUINERT				
	-				
	Structural Timber				

	CCA (H2) treated support poles				
1	125-150mm Ø Gum pole as columns 3600mm long set in post hole minimum 700mm deep	No	45	-	-
2	125-150mm Ø Gum pole as columns 4200mm long set in post hole minimum 700mm deep	No	45	-	-
	Wrought CCA (H2) treated SAP timber				
3	38x228mm Floor beams bolted to treated gumpole columns with 4 x M16 carriage bolts (2 per column) (carriage bolts, nut and washer measure elsewhere)	M	233	-	-
4	38x228mm Floor joists fixed to floor bearers/ beams with MiTek eCo or other approved truss hangers (truss hangers measured elsewhere)	M	322	-	-
	<u>Sundries</u>				
	<u>Sananos</u>				
	Wrought CCA (H2) treated SAP timber				
6	38x228mm Timber spacer blocks 150mm long fitted between 125-150mm Ø CCA treated gumpole columns and 228 x 38mm thick beams, including holes for M16 carriage bolts (2 per column) (carriage bolts, nut and washer measure elsewhere)	No	60	-	-
				_	
7	38x228mm Timber spacer blocks 228mm long fitted between 125-150mm Ø CCA treated gumpole columns and 228 x 38mm thick beams, including holes for M16 carriage bolts (2 per column) (carriage bolts, nut and washer measure elsewhere)	No	90	-	-
			Carried F		R -
			Brought F	orward	R -
	Galvanised mild steel sundries				

8	M16 galvanised mild steel carriage bolts 260mm long with round head and square neck including nut and square washer	No	150	-	-	
9	Mitek or other approved GMS truss hanger (90 deg 38x1.2mm with 2Nr M10 carriage bolts with nuts & bolts & 4Nr 35mm x 3mm thick eCo premfix blue nails per hanger measured elsewhere)	No	180	-	-	
	50x50x5mm thick GMS angle 1800mm long bolted to gumpole and treated timber floor beam with 12mm threaded bar with nuts and washers to suit	No	45	-	-	
	Roofs, Etc.					
	Wrought CCA (H2) treated SAP timber					
10	38x150mm Rafters fixed to wall plate and stud wall framing with Mitek roof strapping (roof strapping measured elsewhere)	M	315	-	-	
11	50x76mm Wall plate screw fixed to stud frame	M	236	-	-	
12	50x76mm purlins skew nailed rafters with wire nails and purlin (purlin clips measured elsewhere)	M	315	-	-	
	<u>Sundries</u>					
13	- Mitek roof tie 1200mm long fixed to rafters, wall plate and stud wall framing with permfix nails every 100mm	No	75	-	-	
14	Mitek roof tie 1800mm long fixed to rafters, wall plate and stud wall framing with permfix nails every 100mm	No	75	-	-	
15	Mitek purlin clips fixed to rafters and purlins with MiTek eCo Permfix 3.15mm Ø x 35mm blue collar nails	No	375	-	-	
			Carried F		R	-
	Floors, Landings, Etc.		Brought	roiwaid	R	-
	18mm Shutter board					

16	18mm shutter board floors fixed to floor bearers and floor joists with 4.5mm Ø x 60mm decking cut screws at 300mm centres	m ²	231	-	-
17	Extra over flooring panels for cutting holes to accommodate 125-150mm Ø CCA treated gum pole columns	No	90	-	-
	Stud Wall Framing				
	Wrought CCA (U2) trooted SAD timber				
	Wrought CCA (H2) treated SAP timber				
19	External framed timber stud wall (measured through openings) comprised of 50x76mm horizontal top, bottom and intermediate cross support rails as well as vertical struts and diagonal cross bracing including additional reinforcing rails, struts and cleats at openings and corners, fixed with 6mm Ø x 100mm cut screws	m²	414	-	-
20	100x30mm Window sub-frame fixed to stud	No	15		
	frame, comprised of two horizontal rails 560mm long, with bottom rail chamfered to form sill and two vertical struts 840mm long to fit around 500 x 840mm single small pane side hung casement window	110	10	-	-
04	04v20vvv DAD France fixed to stud france	NIa	45		
21	94x32mm PAR Frame fixed to stud frame, comprising of two horizontal rails 1060mm long, with bottom rail chamfered to form sill and two vertical struts 840mm long to fit around 1 000 x 850mm double small pane side hung casement window	No	15	-	-
	Oladdian				
	Cladding 18mm Shutter board				
22	18mm shutter board external cladding fixed	m ²	0		
	to and including closer frames of 50x76mm treated SAP timber with 6mm Ø x 100mm cut screws	111		-	-
			Carried F		R -
			Brought I	orward	R -
	Doors and Door Frames				

	Wrought hardwood					
24	90 x 45mm Rebated hardwood single door frame to suit 813 x 2032mm door	No	15	-	-	
25	- 813 x 2032mm Hard wood framed, ledged and braced single door	No	15	-	-	
	Windows					
	Cashbuild or other approved					
	Wrought hardwood (glazing measured elsewhere)					
26	F00v940mm Colosted nine setters nane	No	20			
26	500x840mm Selected pine cottage pane window complete with glass held in place with glazing beads, hinges and stays as supplied by Cashbuild or equal approved fixed to 30x100mm CCA treated window sub-frame with 65mm cut screws including necessary sealing (W2)		30	-	-	
27	2x500x840mm Selected pine cottage pane	No	15			
	window fixed together with 65mm cut screws, complete with glass held in place with glazing beads, hinges and stays as supplied by Cashbuild or equal approved, fixed to 30 x 100mm CCA treated window sub-frame with 65mm cut screws including necessary sealing (W1)		10	-	-	
	Objections					
	Skirting					
	Wrought SAP timber	+				
28	20x30mm Skirting fixed to drywall	M	215	-	-	
			Carried	Forward	R	
				Forward	R	-
	BILL NO. 4 CEILINGS, PARTITIONS AND ACCESS FLOORING					

		1			
	Mall Oladdin o				
	Wall Cladding				
	15mm Gypsum fire-stop board				
1	Internal wall cladding including additional	m ²	446		
	38x50mm CCA (H2) treated wrought SAP			-	-
	supports (where necessary), with 10x45mm				
	SAP cover strips at joints and along top of				
	boards, fixed to timber stud wall framing with				
	32mm drywall screws at 200mm centres				
	,				
	O				
	Sundries				
2	20mm SAP quarter round beading strip fixed	М	174		
	along edges of door and windows internally			-	-
	-				
			Carried F	orward	R -
			Brought F	orward	R -
	BILL NO. 5 IRONMONGERY				
			1	1	

	Hinges, Bolts, Etc.				
	"Brass"				
1	100x76 Brass ball bearing butt hinge	Pair	15		
				-	-
	Lockset and handles				
	"Approved"				
2	Two lever mortice lockset with pair of handles	No	15		
				-	-
	-				
			Carried F		R -
			Brought F	orward	R -
	BILL NO. 6 PAINTWORK				

	Gypsum Plasterboard Surfaces				
	Prepare and apply one coat universal				
	undercoat and two coats PVA paint				
1	On internal wall cladding	m ²			
				-	-
	W 10.6				
	Wood Surfaces				
	Prepare and apply one coat universal				
	undercoat and two coats polyurethane non-				
	drip enamel paint				
		2			
2	On external wall cladding	m ²			
				-	
0	On all the sec				
3	On skirtings	М			
				-	-
	Prepare and apply three coats varnish				
	riepare and apply timee coats variish				
4	On doors internal and external	m ²			
4	On doors internal and external	111-		_	_
				-	-
5	On door frames	m ²			
	On door frames	'''		_	_
6	On windows internal and external	m ²			
				_	_
			Carried F	orward	R -
			Brought F		R -
			Drought 1	Jiwaiu	-
	RILL NO 7 EYTEDNAL WODKS				
	BILL NO. 7 EXTERNAL WORKS				

Wood and sheet metal Awning 1000mm long x 720mm wide formed of 50 x 76mm CCA treated SAP framework fixed to stud framing with wire nails and covered with 0.50mm galvanised corrugated sheeting fixed to stud wall frame (refer to detail)		-				
Awning 1000mm long x 720mm wide formed of 50 x 76mm CCA treated SAP framework fixed to stud framing with wire nails and covered with 0.50mm galvanised corrugated sheeting fixed to stud wall frame (refer to detail)		Awning				
Awning 1000mm long x 720mm wide formed of 50 x 76mm CCA treated SAP framework fixed to stud framing with wire nails and covered with 0.50mm galvanised corrugated sheeting fixed to stud wall frame (refer to detail)						
of 50 x 76mm CCA treated SAP framework fixed to stud framing with wire nails and covered with 0.50mm galvanised corrugated sheeting fixed to stud wall frame (refer to detail)		Wood and sheet metal				
of 50 x 76mm CCA treated SAP framework fixed to stud framing with wire nails and covered with 0.50mm galvanised corrugated sheeting fixed to stud wall frame (refer to detail)						
UNIT TOTAL CARRIED TO SUMMARY R -	1	of 50 x 76mm CCA treated SAP framework fixed to stud framing with wire nails and covered with 0.50mm galvanised corrugated sheeting fixed to stud wall frame (refer to	No	15	-	-
UNIT TOTAL CARRIED TO SUMMARY R -						
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Item No	Description	Unit	Quantity	Rate	Amount

Contract	No. 1	1H-46321	1
CONTRACT	MO.	1 H-4h37	ı

	PREAMBLES	
	ALTERNATIVE DWELLING UNIT TYPE E 34.5M ² (DOUBLE STOREY (DSIS)	
1	Dwelling Unit E. These Bills of Quantities are for all material, labour, plant and inputs for the erection of Double Storey Units each being 34.5sq.m	
	TOTAL NO OF UNITS	8
2	Construction Information. Each structure/unit to be erected as detailed on DesigncoLab DrwgP19004	
	E101 RevB (Page 1 of 12) Foundation E102 RevB (Page 2 of 12) Ground Floor Substructure	
	E103 RevB (Page 3 of 12) Ground Floor E104 RevB (Page 4 of 12) Roof E105 RevB (Page 5 of 12) Section A-A	
	E106 RevB (Page 6 of 12) Section B-B E107 RevB (Page 7 of 12) Section A-A E108 RevB (Page 8 of 12) Section B-B	
	E109 RevB (Page 9 of 12) Front Sub-structure E110 RevB (Page 10 of 12) Side Substructure	
	E111 RevB (Page 11 of 12) Back Substructure E112 RevB (Page 12 of 12) Elevations 401 RevB (Page 1 of 1) Stud frame details	
	402 RevB (Page 1 of 4) Stair details 403 RevB (Page 2 of 4) Stair details 404 RevB (Page 3 of 4) Stair details	
	405 RevB (Page 4 of 4) Stair details 601 RevA (Page 1 of 2) Window Type A 602 RevA (Page 2 of 2) Window Type B	
	701 RevA (Page 1 of 1) Door Type D1	
3	Each structure will be erected on a prepared site. The contractor shall bring to the attention of the Employers Agent any site considered to require removal of trees, structure and any other obstacles to the construction of a unit.	

experie metal. ⁻ making constru	aken a competent person with nce in erection of timber and sheet The Employer will not be responsible for good any carpentry and sheet metal ction that is considered unsatisfactory spection by the selected architect.	Carried Forward	
			-

Contract No: 3	1H-46321
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			Brought Forwar	d]_
	BILL NO. 1 EARTHWORKS (PROVISIONAL)				
	Site Clearance, Etc.				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth	m²	rate only		
	Excavations, Etc.				
	Excavation in earth by hand not exceeding 2.00m deep				
	Hand augured gumpole foundation				
3	350mm diameter augered hole min 800mm deep, with 75mm thick bearing layer - compacted 13mm diameter stone. Hole lined with geo-fabric and back-filled with no-fines concrete to engineer's spec	No	48	-	-
			Carried		
			Forward		-

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			Brought Forward		
			FUIWAIU		-
	BILL NO. 2 ROOF COVERINGS				
	Profiled Metal Sheeting and Accessories				
	0.47 Galvanised corrugated galvanised roof				
	sheet steel				
1	Roof covering with pitch not exceeding 25	m ²	168		
	degrees, fixed with 65mm TEK screws (sharp			-	-
	point for timber) and 19mm bonded washers				
	to purlins				
2	Thick stitched apex trim flashing 300mm girth (150mm x 150mm) including Sondor	M	38		
	polyclosure, fixed with 16mm TEK screws and				-
	bonded washers to roof sheeting and 30mm				
	TEK screws and bonded washers to side				
	cladding				
2	This least take and because their affects in a 200 and a single		70		
3	Thick stitched barge trim flashing 300mm girth (150mm x 150mm), fixed with 16mm TEK	M	70		
	screws and bonded washers to roof sheeting				
	and 30mm TEK screws and bonded washers to				
	side cladding				
	0.47 Galvanised corrugated galvanised side				
	wall cladding sheet steel				
4	Side cladding, fixed horizontally with 50mm	m ²	684		
-	TEK screws (sharp point for timber) and 19mm	'''	004	-	_
	bonded washers and rubber grommet seal to				
	stud wall framing				
	<u> </u>				
5	Top closer trim flashing 150mm girth (50mm x	М	59		
	25mm x 75mm) with Sondor polycloser and			-	-
	fixed with 16mm TEK screws and bonded				
	washers to stud wall framing				
_					
6	Corner trim flashing 300mm girth (150mm x	M	168		
	150mm) with Sondor polycloser and fixed with 16mm TEK screws and bonded washers to side				_
	cladding				
7	Door and window trim flashing 150mm girth	M	82		
	(50mm x 90mm x 10mm), fixed with 30mm TEK			-	-
	screws to stud wall framing				
I	ı	I	T	I	II

	Roof and Wall Insulation				
8	Mineral wool insulation 75mm Insulation fixed in cavity between external and internal wall cladding	m ²	490	-	-
			Carried Forward		_
			Brought Forward		-
	Rainwater installation				
	<u>uPVC</u>				
	80mm dia	М	34	_	_
	Stop ends	No	16	-	-
	80mm dia downpipe outlet	No	8	_	-
	80mm dia Downpipe including fixing brackets	M	38	-	-
	80mm dia Shoe	No	8	-	-
	80mm dia offset bends	No	16	-	-
	Gutter rainwater run off management				
	Provisional Allowance for works direct water from downpipe into stormwater channels	No	8	6,400.00	
			Carried Forward		-

			Forward		_
	BILL NO. 3 CARPENTRY AND JOINERY				
	Structural Timber				
	CCA (H2) treated support poles				
1	125-150mm Ø Gum pole as columns 3600mm long set in post hole minimum 700mm deep	No	24	-	-
2	125-150mm Ø Gum pole as columns 4200mm long set in post hole minimum 700mm deep	No	24	-	-
	Wrought CCA (H2) treated SAP timber				
3	38x228mm Floor beams bolted to 125-150mm treated gumpole columns with 4 x M16 carriage bolts (2 per column) (carriage bolts, nut and washer measure elsewhere)	M	268	-	-
15	38x228mm Floor joists fixed to floor bearers/ beams with MiTek eCo or other approved truss hangers (truss hangers measured elsewhere)	M	388	-	-
	<u>Sundries</u>				
	Wrought CCA (H2) treated SAP timber				
5	228x38mm thick treated SAP timber spacer blocks 150mm long fitted between gumpole columns and timber beams, including holes for M16 carriage bolts (2 per column) (carriage bolts, nut and washer measure elsewhere)	No	64	-	-
6	228x38mm thick treated SAP timber spacer blocks 228mm long fitted between gumpole columns and timber beams, including holes for M16 carriage bolts (2 per column) (carriage bolts, nut and washer measure elsewhere)	No	96	-	-
			Carried		
			Forward Brought		-
			Forward		

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	Galvanised mild steel sundries				
7	M16 galvanised mild steel carriage bolts 260mm long with round head and square neck including nut and square washer	No	192	-	-
8	Mitek or other approved GMS truss hanger (90 deg 38x1.2mm with 2Nr M10 carriage bolts with nuts & bolts & 4Nr 35mm x 3mm thick eCo premfix blue nails per hanger measured elsewhere)	No	240	-	-
	50x50x5mm thick GMS angle 1800mm long bolted to gumpole and treated timber floor beam with 12mm threaded bar with nuts and washers to suit	No	24	-	-
	Roofs, Etc.				
	Wrought CCA (H2) treated SAP timber				
9	38x150mm Rafters fixed to wall plate and stud wall framing with Mitek roof strapping (roof strapping measured elsewhere)	M	168	-	-
10	50x76mm Wall plate screw fixed to stud frame	М	135	-	-
11	50x76mm purlins skew nailed rafters with wire nails and purlin (purlin clips measured elsewhere)	M	192	-	-
	<u>Sundries</u>				
12	Mitek roof tie 1200mm long fixed to rafters, wall plate and stud wall framing with permfix nails every 100mm	No	40	-	-
13	Mitek roof tie 1800mm long fixed to rafters, wall plate and stud wall framing with permfix nails every 100mm	No	40	-	-
14	Mitek purlin clips fixed to rafters and purlins with MiTek eCo Permfix 3.15mm Ø x 35mm blue collar nails	No	200	-	-
			Carried		
			Forward		-
			Brought		
	Floore Londings Fto		Forward		-
	Floors, Landings, Etc.				

1 1		ſ	I	I	II
	Shutter board				
16	18mm shutter board floors fixed to floor bearers and floor joists with 4.5mm \emptyset x 60mm decking cut screws at 300mm centres	m²	257	-	-
17	Extra over flooring panels for cutting holes to accommodate 125-150mm Ø CCA treated gum pole columns	No	96	-	-
	Stud Wall Framing				
	Wrought CCA (H2) treated SAP timber				
19	External framed timber stud wall (measured through openings) comprised of 76x50mm horizontal top, bottom and intermediate cross support rails as well as vertical struts and diagonal cross bracing including additional reinforcing rails, struts and cleats at openings and corners, fixed with 6mm Ø x 100mm cut screws	m²	490	-	-
20	100x30mm Window sub-frame fixed to stud frame, comprised of two horizontal rails 560mm long, with bottom rail chamfered to form sill and two vertical struts 840mm long to fit around 500 x 840mm single small pane side hung casement window	No	16	-	-
21	94x32mm PAR Frame fixed to stud frame, comprising of two horizontal rails 1060mm long, with bottom rail chamfered to form sill and two vertical struts 840mm long to fit around 1 000 x 850mm double small pane side hung casement window	No	16	-	-
	Cladding Shutter board				
22	18mm shutter board external cladding fixed to and including closer frames of 50x76mm treated SAP timber with 6mm Ø x 100mm cut screws	m²	O	-	-
			Carried Forward		-
			Brought Forward		-

	Doors and Door Frames				
	Wrought hardwood				
24	90x45mm Rebated hardwood single door frame to suit 813 x 2032mm door	No	8	-	-
25	- 813 x 2032mm Hard wood framed, ledged and braced single door	No	8	-	-
	Windows				
	Cashbuild or other approved				
	Wrought hardwood (glazing measured elsewhere)				
26	500 x 840mm Selected pine cottage pane window complete with glass held in place with glazing beads, hinges and stays as supplied by Cashbuild or equal approved fixed to 30 x 100mm CCA treated window sub-frame with 65mm cut screws including necessary sealing (W2)	No	16	-	-
27	2 x 500 x 840mm Selected pine cottage pane window fixed together with 65mm cut screws, complete with glass held in place with glazing beads, hinges and stays as supplied by Cashbuild or equal approved, fixed to 30 x 100mm CCA treated window sub-frame with 65mm cut screws including necessary sealing (W1)	No	16	-	-
29	L-shaped staircase, comprised of necessary framework, stringers, cleats, risers and treads	No	8	-	-
	as per detail				
	Balustrade				
	Wrought CCA (H3) treated SAP timber				

	0 7 0				
30	Horizontal balustrades comprising of balusters, handrail, bottom rail and closers as per detail	m	24	_	_
31	Raking balustrades comprising of balusters, handrail, bottom rail and closers as per detail	m	22	-	_
			Carried Forward		_
			Brought Forward		-
	Handrail				
	Wrought CCA (H3) treated SAP timber				
32	Raking handrail as per detail	m	22	-	-
	Skirting				
	Wrought SAP timber				
28	20x30mm Skirting fixed to drywall	m	255		-
			Carried Forward		-
			Brought Forward		-
		1			

Contract	No. 11	1 46221
Contract	INO. IF	1-463ノー

	BILL NO. 4 CEILINGS, PARTITIONS AND ACCESS FLOORING				
	Wall Cladding				
	15mm Gypsum fire-stop board				
1	Internal wall cladding including additional 38 x 50mm CCA (H2) treated wrought SAP supports (where necessary), with 10 x 45mm SAP cover strips at joints and along top of boards, fixed to timber stud wall framing with 32mm drywall screws at 200mm centres	m²	490	-	-
	<u>Sundries</u>				
2	20mm SAP quarter round beading strip fixed along edges of door and windows internally	m	145	-	-
			Cont. I		
			Carried Forward		_
			Brought		
			Forward		-

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	BILL NO. 5 IRONMONGERY				
	- Hinges, Bolts, Etc.				
	"Brass"				
1	100x76 Brass ball bearing butt hinge	Pair	8	-	-
	Lockset and handles				
	"Approved"				
2	Two lever mortice lockset with pair of handles	No	8	_	_
	_				
			Carried		
			Forward Brought Forward		-

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	BILL NO. 6 PAINTWORK				
	Gypsum Plasterboard Surfaces				
	Prepare and apply one coat universal undercoat and two coats PVA paint				
1	On internal wall cladding	m ²		-	-
	Wood Surfaces				
	Prepare and apply one coat universal undercoat and two coats polyurethane non-drip enamel paint				
2	On external wall cladding	m ²		-	-
3	On skirtings	m		-	-
	Prepare and apply three coats varnish				
4	On doors (internal & external)	m²		-	-
5	On door frames	m ²		_	-
6	On windows (internal & external)	m ²		_	-
			Carried Forward Brought		-
			Forward		-
	BILL NO. 7 EXTERNAL WORKS				

	Awning				
	Wood and sheet metal				
1	Awning 1000mm long x 720mm wide formed of 50 x 76mm CCA treated SAP framework fixed to stud framing with wire nails and covered with 0.50mm galvanised corrugated sheeting fixed to stud wall frame (refer to detail)	No	8	-	-
	-				
	-				
	-				
	 - -				
	- - -				

UNIT TOTAL CARRIED TO SUMMARY PAGE

Item No	Description	Unit	Quantity	Rate	Amount
	PREAMBLES				

~	-n+		No.	1 🗆	46321
	าทา	ract	INO.	IH-	-4h - 7 1

1 Dr fo er 44	DOUBLE STOREY DSIS) Welling Unit G. These Bills of Quantities are or all material, labour, plant and inputs for the rection of Double Storey Units each being 4.0sq.m OTAL NO OF UNITS Construction Information. Each structure/unit to be erected as detailed on DesigncoLab (101 RevB (Page 1 of 12) Foundation 1102 RevB (Page 2 of 12) Ground Floor	4	
2 Ca to Di Gi	or all material, labour, plant and inputs for the rection of Double Storey Units each being 4.0sq.m OTAL NO OF UNITS Construction Information. Each structure/unit to be erected as detailed on DesigncoLab (101 RevB (Page 1 of 12) Foundation	4	
2	construction Information. Each structure/unit to be erected as detailed on DesigncoLab brwgP19004	4	
to Di Gi Gi Gi Gi Gi Gi Gi	o be erected as detailed on DesigncoLab prwgP19004 G101 RevB (Page 1 of 12) Foundation		
G: G: G: G: G: G: G: G: 40 40 40 40 60 60	101 RevB (Page 1 of 12) Foundation		
G: G: G: G: G: G: G: G: G: 40 40 40 40 60 60			
G: G: G: G: G: G: G: G: 40 40 40 40 60 60	ubstructure		
G: G: G: G: G: G: G: 40 40 40 40 40 60 60	103 RevB (Page 3 of 12) Ground Floor		
G: G: G: G: G: G: 40 40 40 40 60 60	104 RevB (Page 4 of 12) Roof		
G: G: G: G: G: G: 40 40 40 40 60 60	i105 RevB (Page 5 of 12) Section A-A		
G: G: G: G: G: 40 40 40 40 60 60	i 106 RevB (Page 6 of 12) Section B-B		
G: G: G: G: 40 40 40 40 60 60	i107 RevB (Page 7 of 13) Section A-A		
G: G: G: 40 40 40 40 40 60 60	i108 RevB (Page 8 of 13) Section B-B		
G: G: 40 40 40 40 60 60	i109 RevB (Page 9 of 13) Front Sub-structure		
G: 40 40 40 40 40 60 60	110 RevB (Page 10 of 13) Side Substructure		
40 40 40 40 60 60	111 RevB (Page 11 of 13) Back Substructure		
40 40 40 40 40 60 60	112 RevB (Page 12 of 13) Elevations		
40 40 40 60 60	113 RevB (Page 13 of 13) Elevations		
40 40 40 60	01 RevB (Page 1 of 1) Stud frame details		
40 40 60 60	02 RevB (Page 1 of 4) Stair details		
40 60 60	03 RevB (Page 2 of 4) Stair details		
60	04 RevB (Page 3 of 4) Stair details		
60	05 RevB (Page 4 of 4) Stair details		
	01 RevA (Page 1 of 2) Window Type A		
70	02 RevA (Page 2 of 2) Window Type A		
1 1	01 RevA (Page 1 of 1) Door Type D1		
1 Ea	, ,		
	ach structure will be erected on a prepared		
	ach structure will be erected on a prepared ite. The contractor shall bring to the attention		
re	ach structure will be erected on a prepared		

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				undertaken a competent person with experience in erection of timber and sheet metal. The Employer will not be responsible for making good any carpentry and sheet metal construction that is considered unsatisfactory after inspection by the selected architect.	Carried	
Carried	Carried	Carried	Carried		Forward	-
					Carried	
				arter inspection by the selected architect.		
				making good any carpentry and sheet metal		
making good any carpentry and sheet metal construction that is considered unsatisfactory	making good any carpentry and sheet metal construction that is considered unsatisfactory	making good any carpentry and sheet metal construction that is considered unsatisfactory	making good any carpentry and sheet metal construction that is considered unsatisfactory	experience in erection of timber and sheet		
metal. The Employer will not be responsible for making good any carpentry and sheet metal construction that is considered unsatisfactory	metal. The Employer will not be responsible for making good any carpentry and sheet metal construction that is considered unsatisfactory	metal. The Employer will not be responsible for making good any carpentry and sheet metal construction that is considered unsatisfactory	metal. The Employer will not be responsible for making good any carpentry and sheet metal construction that is considered unsatisfactory	undertaken a competent person with		

		Brought Forward		_
BILL NO. 1 EARTHWORKS (PROVISIONAL)				
Site Clearance, Etc.				
Site clearance				
Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth	m²	rate only		
Excavations, Etc.				
Excavation in earth by hand not exceeding 2.00m deep				
Hand augured gumpole foundation				
350mm diameter augered hole min 800mm deep, with 75mm thick bearing layer - compacted 13mm diameter stone. Hole lined with geo-fabric and back-filled with no-fines concrete to engineer's spec	No	24	-	-

			Brought Forward		-
	BILL NO. 2 ROOF COVERINGS				
	- Profiled Metal Sheeting and Accessories				
	0.47mm GMS Z275 corrugated sheeting				
1	Roof covering pitch not exceeding 25 degrees, fixed with 65mm TEK screws (sharp point for timber) and 19mm bonded washers to purlins	m²	102	-	-
2	Stitched apex trim flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding	m	24	-	-
3	Stitched barge trim flashing 300mm girth (150mm x 150mm), fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding	m	34	-	-
	Galvanised corrugated galvanised side wall cladding sheet steel				
4	External cladding, fixed horizontally with 50mm TEK screws (sharp point for timber) and 19mm bonded washers and rubber grommet seal to stud wall framing	m²	387	-	-
	Top closer trim flashing 150mm girth (50mm x 25mm x 75mm) with Sondor polycloser and fixed with 16mm TEK screws and bonded washers to stud wall framing	m	29	-	-
5	Corner flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding	m	85	-	-
6	Door and window trim flashing 150mm girth (50mm x 90mm x 10mm), fixed with 30mm TEK screws to stud wall framing	m	75	-	-
	Roof and Wall Insulation				

rovision c	f Emergency Housing Units at Parkington Informal Settle	ement	ı	Contract No: 1H-4	6321
7	Mineral wool insulation 75mm Insulation fixed in cavity between external and internal wall cladding -	m²	284	-	-
	-		Carried Forward		-
			Brought Forward		-
	- Rainwater installation				
	<u>uPVC</u>				
8	80mm dia	m	24	-	-
9	Stop ends	No	8	-	-
10	80mm dia downpipe outlet	No	4	-	-
11	80mm dia Downpipe including fixing brackets	m	19	-	-
12	80mm dia Shoe	No	4	_	_
13	80mm dia offset bends	No	8	_	-
	Gutter rainwater run off management				
	Provisional Allowance for works direct water from downpipe into stormwater channels	No	4	800.00	

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			Brought Forward		-
	BILL NO. 3 CARPENTRY AND JOINERY				
	- Structural Timber				
	CCA (H2) treated support poles				
1	125-150mm Ø Gum pole as columns 3600mm long set in post hole minimum 700mm deep	No	12	-	-
2	125-150mm Ø Gum pole as columns 4200mm long set in post hole minimum 700mm deep	No	12	-	-
	Wrought CCA (H2) treated SAP timber				
3	38x228mm Floor beams bolted to 125-150mm Ø CCA treated gumpole columns with M16 carriage bolts (carriage bolts, nut and washer measure elsewhere)	m	248	-	-
4	38x228mm Floor joist fixed to floor bearers/beams with MiTek eCo or other approved truss hangers (truss hangers measured elsewhere)	m	253	-	-
	<u>Sundries</u>				
	- Wrought CCA (H2) treated SAP timber				
6	- 38x228mm Timber spacer blocks 150mm long fitted between gumpole columns and beam, including holes for M16 carriage bolts (2 per column) (carriage bolts, nut and washer measure elsewhere)	No	16	-	-
7	38x228mm Timber spacer blocks 228mm long fitted between gumpole columns and beam, including holes for M16 carriage bolts (2 per column) (carriage bolts, nut and washer measure elsewhere)	No	16	-	-
8	M16 galvanised mild steel carriage bolts 260mm long with round head and square neck including nut and square washer	No	96	-	-

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			Brought Forward		
	2 (5:		Torward		-
	Roofs, Etc.				
	Wrought CCA (H2) treated SAP timber				
11	38x150mm Rafters fixed to wall plate and stud wall framing with Mitek roof strapping (roof strapping measured elsewhere)	m	101	-	-
12	50x76mm Wall plate screw fixed to stud frame	m	77	-	-
13	50x76mm purlins skew nailed rafters with wire nails and purlin (purlin clips measured elsewhere)	m	120	-	-
	<u>Sundries</u>				
14	Mitek roof tie 1200mm long fixed to rafters, wall plate and stud wall framing with permfix nails every 100mm	No	24	-	-
15	Mitek roof tie 1800mm long fixed to rafters, wall plate and stud wall framing with permfix nails every 100mm	No	24	-	-
16	Mitek purlin clips fixed to rafters and purlins with MiTek eCo Permfix 3.15mm \emptyset x 35mm blue collar nails	No	120	-	-
	Floors, Landings, Etc.				
	18mm Shutter board				
17	In Floors fixed to floor beams and floor joists with 4.5mm Ø x 60mm decking cut screws at 300mm centres	m ²	164	-	-
18	Extra over flooring panels for cutting holes to accommodate 125-150mm Ø CCA treated gum pole columns	No	48	-	-
			Carried		
			Forward		-

	Stud Wall Framing				
	Wrought CCA (H2) treated SAP timber				
20	Timber stud wall frame (measured through openings) of 76x50mm timber horizontal top, bottom and intermediate cross support rails, vertical struts and diagonal cross bracing including additional reinforcing rails, struts and cleats at openings and corners, fixed with 6mm Ø x 100mm cut screws	m²	284	-	-
21	100x30mm Window sub-frame fixed to stud frame, comprised of two horizontal rails 560mm long, with bottom rail chamfered to form sill and two vertical struts 840mm long to fit around 500x840mm single small pane side hung casement window	No	16	-	-
22	32x94mm PAR Frame fixed to stud frame, comprising of two horizontal rails 1060mm long, with bottom rail chamfered to form sill and two vertical struts 840mm long to fit around 1000x850mm double small pane side hung casement window	No	8	-	-
	Cladding				
	18mm Shutter board				
23	18mm shutter board external cladding fixed to and including closer frames of 50x76mm treated SAP timber with 6mm Ø x 100mm cut screws	m²	0		
	Doors and Door Frames				
	Wrought hardwood				
25	90x45mm Rebated hardwood single door frame to suit 813x2032mm door	No	4	-	-
26	- 813x2032mm Hard wood framed, ledged and braced single door	No	4	-	-
			Carried		
			Forward		-

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	Windows				
	Wrought hardwood (glazing measured elsewhere)				
	Cashbuild or other approved				
27	500x840mm Selected pine cottage pane window complete with glass held in place with glazing beads, hinges and stays fixed to 30x100mm CCA treated window sub-frame with 65mm cut screws including necessary sealing (W2)	No	16	-	-
28	2x500x840mm Selected pine cottage pane window fixed together with 65mm cut screws, complete with glass held in place with glazing beads, hinges and stays, fixed to 30x100mm CCA treated window sub-frame with 65mm cut screws including necessary sealing (W1)	No	8	-	-
	Staircase				
	Wrought CCA (H3) treated SAP timber				
29	L-shaped staircase, comprised of necessary framework, stringers, cleats, risers and treads as per detail	No	4	-	-
	Balustrade				
	Wrought CCA (H3) treated SAP timber				
30	Horizontal balustrades comprising of balusters, handrail, bottom rail and closers as per detail	m	12	-	-
31	Raking balustrades comprising of balusters, handrail, bottom rail and closers as per detail	m	11	-	-
	Handrail				
	Wrought CCA (H3) treated SAP timber				
32	- Raking handrail as per detail	m	11	-	-
	Arcitrave, skirting, etc				

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	Wrought SAP timber				
33	20x30mm Skirting fixed to drywall	m	141	-	-
			Carried Forward		-

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				roiwaiu		_
		BILL NO. 4 CEILINGS, PARTITIONS AND ACCESS FLOORING				
	-	- Wall Cladding				
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Wall cladding comprising 15mm Gypsum fire- stop board with 38x50mm CCA (H2) treated wrought SAP supports (where necessary), 10x45mm SAP cover strips at joints and along top of boards, fixed to timber stud wall framing with 32mm drywall screws at 200mm centres				
1	ı	Internal wall cladding	m²	328	-	-
	3	<u>Sundries</u>				
2		20mm SAP quarter round beading strip fixed along edges of door and windows internally	m	98	-	-
				Carried Forward		-

vision o	of Emergency Housing Units at Parkington Informal Settle	ement	С	ontract No: 1H-4	6321
			Brought Forward		-
	BILL NO. 5 IRONMONGERY				
	Hinges, Bolts, Etc.				
	"Brass"				
	100x76 Brass ball bearing butt hinge	Pair	4	_	_
	Lockset and handles				
	"Approved"				
	Two lever mortice lockset with pair of handles	No	4	_	
					_

Contract	No. 11	1 46221
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			Brought		
			Forward		-
	BILL NO. 6 PAINTWORK				
	Gypsum Plasterboard Surfaces				
	Prepare and apply one coat universal undercoat and two coats PVA paint				
1	On internal wall cladding	m²		-	-
	Wood Surfaces				
	Prepare and apply one coat universal undercoat and two coats polyurethane non-drip enamel paint				
2	On external wall cladding	m²		_	_
3	On skirtings	m		-	-
	Prepare and apply three coats varnish				
4	On doors (internal and external)	m ²		-	-
5	On door frames	m ²		-	-
6	On windows (internal and external)	m²		-	-
			Carried Forward		-

Contract	No.	1H-46321
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			Brought Forward		_	
	BILL NO. 7 EXTERNAL WORKS					
	- Awning					
	Wood and sheet metal					
1	Awning 1000mm long x 720mm wide formed of 50x76mm CCA treated SAP framework fixed to stud framing with wire nails and covered with 0.50mm galvanised corrugated sheeting fixed to stud wall frame (refer to detail)	No	4	-	-	
	-					
	LINIT TOTAL CADDIED TO SUMMADY DACE				_	
	UNIT TOTAL CARRIED TO SUMMARY PAGE				-	

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Cont	ract No: 1H-46321
Rate	Amount

14	Description		1 11-4	0	D-4-	A
Item No	Description		Unit	Quantity	Rate	Amount
	PREAMBLES					
		ION UNIT 15.0M ² AND WATER				
	COLLECTION /WA	SH AREA 4.2M ²				
1	Those Pills of Ouer	ntities are for all material, labour, plant				
'		erection of 3Nr Ablution Units each				
		associated Water Collection /Wash				
	Area					
1		e erected as detailed on DesigncoLab				
	DrwgP19004					
	H101 RevB (Page	1 of 11) Foundation				
	H102 RevB (Page 2	2 of 11) Ground Floor Substructure				
	H103 RevB (Page 3	3 of 11) Ground Floor				
	H104 RevB (Page	4 of 11) Roof				
	H105 RevB (Page S	5 of 11) Section A-A				
		6 of 11) Front Substructure				
		7 of 11) Side Substructure				
		3 of 11) Back Substructure				
	H109 RevB (Page 9					
		10 of 11) Wash Area - 3.6m2				
	, -	11 of 11) Wash Area - 4.2m2				
	401 RevB (Page 1	of 1) Ablution details				
2		I be erected on a prepared site. The				
		ng to the attention of the Employers nsidered to require removal of trees,				
	• •	ther obstacles to the construction of a				
	unit.					
3		carpentry and joinery to be undertaken				
	· ·	with experience in erection of timber				
		ne Employer will not be responsible for arpentry and sheet metal construction				
		unsatisfactory after inspection by the				
	selected architect.					
				Carried Forward		
						<u> </u>

			Brought Forward		_
	THE WORKS				
	Site Clearance, Etc.				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation,	m ²	56	rate only	
'	hedges, shrubs and trees not exceeding 200mm girth	'''	30	Tate only	
	Excavations, Etc.				
	Excavation in earth by hand not exceeding 2.00m deep				
	Hand augured gumpole foundation				
	-				
2	350mm diameter augered hole min 800mm deep, with	No	12		
	75mm thick bearing layer - compacted 13mm diameter				-
	stone. Hole lined with geo-fabric and back-filled with no- fines concrete to engineer's spec				
	illes condete to engineers spec				
	EXCAVATION, FILLING, ETC				
	EXCAVATION, FILLING, ETC				
	Excavation in earth by hand not exceeding 2.00m deep				
3	Reduce level for floor slab	m ³	3		
					-
	Extra over all excavations for spreading around				
	surface bed				
4	Surplus material from excavations	m ³	1		
					-
	Earth filling obtained from the excavations				
_	compacted to 98% ASHTOO	2			
5	Under floors	m ³	2		_
	Compaction of surfaces				
6	Stripping existing road, reduce levels by 150mm, breaking	sq.m	56	rate only	
	down oversize material, adding suitable material where	'		,	
	necessary to prescribed levels, including scarifying and				
	re-compact to 93% Mod AASHTO density				
	Soil insecticide				
7	Under floors	m ²	13		
					-

Contract	No:	1H-46321
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			Carried Forward	-
			Brought Forward	-
	-			
	- REINFORCED CONCRETE CAST AGAINST			
	EXCAVATED SURFACES AND FORMWORK			
	-			
	25MPa/19mm concrete			1
8	- Surface beds on waterproofing	m ³	20	
0	Surface news on waterproofing	111.	20	-
	TEST BLOCKS			
9	- Making and testing 150 x 150 x 150mm concrete strength test cube	No	3	-
	ACMODETE CUMPRIES			
	CONCRETE SUNDRIES			
	- Finishing top surfaces of concrete smooth with a			
	wood float			
	-			
10	Surface beds, slabs, etc	m ²	13	-
	ROUGH FORMWORK (DEGREE OF ACCURACY III)			
	-			
	Rough formwork to sides			
11	Edges, risers, ends and reveals not exceeding 300mm	m	26	
	high or wide			-
	Fabric reinforcement			
	- abrie i dimercoment			
12	Type 193 fabric reinforcement in concrete surface beds, slabs, etc	m ²	13	-
	Sidbo, Cio			
	- BLOCKWORK			
	<u> </u>			
	Blockwork in M190 (390x190x190mm) 7Mpa concrete block in cement sand mortar			
13	190mm Block wall	m ²	7	 -
14	380mm Block wall	m ²	4	-
	Blockwork sundries			

Bagwash

15

Contr	ract No: 1H-46321	
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	_	
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	-	
	-	
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-	-	

- Under surface beds m² Cement screed Screed laid to falls into surface drain min 25mm thick m² 25mm screed on blockwork m² Cement plaster on blockwork On blockwork walls m² - Profiled Metal Sheeting and Accessories 0.47mm GMS Z275 corrugated sheeting Roof covering pitch not exceeding 25 degrees, fixed with 65mm TEK screws (sharp point for timber) and 19mm bonded washers to purlins Stitched apex trim flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding	Carried Forward Brought Forward 14 5 12		-
Cement screed Screed laid to falls into surface drain min 25mm thick m² 25mm screed on blockwork m² Cement plaster on blockwork On blockwork walls m² - Profiled Metal Sheeting and Accessories 0.47mm GMS Z275 corrugated sheeting Roof covering pitch not exceeding 25 degrees, fixed with 65mm TEK screws (sharp point for timber) and 19mm bonded washers to purlins Stitched apex trim flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and	Brought Forward 14 5		-
Cement screed Screed laid to falls into surface drain min 25mm thick m² 25mm screed on blockwork m² Cement plaster on blockwork On blockwork walls m² - Profiled Metal Sheeting and Accessories 0.47mm GMS Z275 corrugated sheeting Roof covering pitch not exceeding 25 degrees, fixed with 65mm TEK screws (sharp point for timber) and 19mm bonded washers to purlins Stitched apex trim flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and	5		-
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Cement screed Screed laid to falls into surface drain min 25mm thick m² 25mm screed on blockwork m² Cement plaster on blockwork On blockwork walls m² - Profiled Metal Sheeting and Accessories 0.47mm GMS Z275 corrugated sheeting Roof covering pitch not exceeding 25 degrees, fixed with 65mm TEK screws (sharp point for timber) and 19mm bonded washers to purlins Stitched apex trim flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and	5		-
Screed laid to falls into surface drain min 25mm thick m² 25mm screed on blockwork m² Cement plaster on blockwork On blockwork walls m² - Profiled Metal Sheeting and Accessories 0.47mm GMS Z275 corrugated sheeting Roof covering pitch not exceeding 25 degrees, fixed with 65mm TEK screws (sharp point for timber) and 19mm bonded washers to purlins Stitched apex trim flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and	5		
Screed laid to falls into surface drain min 25mm thick m² 25mm screed on blockwork m² Cement plaster on blockwork On blockwork walls m² - Profiled Metal Sheeting and Accessories 0.47mm GMS Z275 corrugated sheeting Roof covering pitch not exceeding 25 degrees, fixed with 65mm TEK screws (sharp point for timber) and 19mm bonded washers to purlins Stitched apex trim flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and	5		
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Roof covering pitch not exceeding 25 degrees, fixed with 65mm TEK screws (sharp point for timber) and 19mm bonded washers to purlins Stitched apex trim flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and			
Roof covering pitch not exceeding 25 degrees, fixed with 65mm TEK screws (sharp point for timber) and 19mm bonded washers to purlins Stitched apex trim flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and			
65mm TEK screws (sharp point for timber) and 19mm bonded washers to purlins Stitched apex trim flashing 300mm girth (150mm x m 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and	1		
65mm TEK screws (sharp point for timber) and 19mm bonded washers to purlins Stitched apex trim flashing 300mm girth (150mm x m 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and			
150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and	51		-
150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and			
	14	-	-
Stitched barge trim flashing 300mm girth (150mm x m 150mm), fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws and bonded washers to side cladding	21	-	-
Galvanised corrugated galvanised side wall cladding sheet steel			
External cladding, fixed horizontally with 50mm TEK m ² screws (sharp point for timber) and 19mm bonded washers and rubber grommet seal to stud wall framing	76	-	-
_			+
1 1-		1	

13

m²

Contract	No. 11	1 46221
Contract	INO. IF	1-463ノー

				,	
24	Corner flashing 300mm girth (150mm x 150mm) including Sondor polyclosure, fixed with 16mm TEK screws and bonded washers to roof sheeting and 30mm TEK screws	m	35	-	-
	and bonded washers to side cladding				
			Carried Forward		
			Brought Forward		-
			Brought Forward		-
	-				
	Roof and Wall Insulation				
	Mineral wool insulation				
0.5		2			
25	75mm Insulation fixed in cavity between external and internal wall cladding	m ²	86	-	-
	Rainwater installation				
	DVC				
	<u>uPVC</u>				
26	80mm dia	m	14	-	-
				_	
27	Stop ends	No	6	-	-
				-	
28	80mm dia downpipe outlet	No	3	-	-
				-	
29	80mm dia Downpipe including fixing brackets	m	7	-	-
				-	
30	80mm dia Shoe	No	3	-	-
				_	
31	80mm dia offset bends	No	6		
				-	
	Gutter rainwater run off management				
32	Provisional Allowance for works direct water from downpipe into stormwater channels	Item	1	2,400.00	
	-				
	Structural Timber				
	CCA (H2) treated support poles				
33	125-150mm Ø Gum pole as columns 3600mm long set in post hole minimum 700mm deep	No	9	-	
	<u> </u>	1	1	1	l

				-	
34	125-150mm Ø Gum pole as columns 4200mm long set in post hole minimum 700mm deep	No	9	-	-
	Wrought CCA (H2) treated SAP timber				
35	38x228mm Floor beams bolted to treated gumpole columns with 4 x M16 carriage bolts (2 per column) (carriage bolts, nut and washer measure elsewhere)	m	47	-	-
36	38x228mm Floor joists fixed to floor bearers/beams with MiTek eCo or other approved truss hangers (truss hangers measured elsewhere)	m	77	-	-
			Carried Forward		_
			Brought Forward		_
					-
	Sundries				
	-				
	Wrought CCA (H2) treated SAP timber				
	-				
37	38x228mm Timber spacer blocks 150mm long fitted between 125-150mm Ø CCA treated gumpole columns and 228 x 38mm thick beams, including holes for M16 carriage bolts (2 per column) (carriage bolts, nut and washer measure elsewhere)	No	12	-	-
38	38x228mm Timber spacer blocks 228mm long fitted between 125-150mm Ø CCA treated gumpole columns and 228 x 38mm thick beams, including holes for M16 carriage bolts (2 per column) (carriage bolts, nut and washer measure elsewhere)	No	18	-	-
39	M16 galvanised mild steel carriage bolts 260mm long with round head and square neck including nut and square washer	No	72	-	-
40	Mitek or other approved GMS truss hanger (90 deg 38x1.2mm with 2Nr M10 carriage bolts with nuts & bolts & 4Nr 35mm x 3mm thick eCo premfix blue nails per hanger measured elsewhere)	No	96	-	-

41	50x50x5mm thick GMS angle 1800mm long bolted to gumpole and treated timber floor beam with 12mm threaded bar with nuts and washers to suit	No	9	-	-
	Roofs, Etc.				
	Wrought CCA (H2) treated SAP timber				
42	38x150mm Rafters fixed to wall plate and stud wall framing with Mitek roof strapping (roof strapping measured elsewhere)	m	54	-	-
43	50x76mm Wall plate screw fixed to stud frame	m	47	-	-
44	50x76mm purlins skew nailed rafters with wire nails and purlin (purlin clips measured elsewhere)	m	58	-	-
			Carried Forward		-
			Brought Forward		-
	<u>Sundries</u>				
	-				
45	Mitek roof tie 1200mm long fixed to rafters, wall plate and stud wall framing with permfix nails every 100mm	No	15	-	-
46	Mitek roof tie 1800mm long fixed to rafters, wall plate and stud wall framing with permfix nails every 100mm	No	15	-	-
47	Mitek purlin clips fixed to rafters and purlins with MiTek eCo Permfix 3.15mm Ø x 35mm blue collar nails	No	75		-
	Floors, Landings, Etc.				
	21mm thick WISA-Hexa grip plywood or other proved				
48	In Floors fixed to floor bearers and floor joists with 4.5mm \varnothing x 60mm rust resistant decking cut screws at 300mm centres	m ²	44		-

49	Extra over flooring panels for cutting holes to accommodate 125-150mm Ø CCA treated gum pole columns	No	18	-
	Stud Wall Framing			
	Wrought CCA (H2) treated SAP timber			
	THOUGHT CONTINUE TO BELLEVIE TO THE TOTAL CONTINUE TO THE TOTAL CO			
50	Timber stud wall frame (measured through openings) of 76x50mm timber horizontal top, bottom and intermediate cross support rails, vertical struts and diagonal cross bracing including additional reinforcing rails, struts and cleats at openings and corners, fixed with 6mm Ø x 100mm cut screws	m ²	86	-
			Carried Forward	
				-
			Brought Forward	-
	Cladding			
	12mm Wisa-Multiwall board			
51	Internal cladding fixed to and including frames of 50x76mm treated SAP timber with 4.5mm \varnothing x 60mm cut screws	m ²	177	-
	20ud00uus Dallatuusad aasada			
	22x100mm Pallet wood panels			
52	External screen nailed to timber substructure with 75mm gaps between panels	m	82	-
	Timber shelving			
	18mm Shutter board			
53	Shelf of 1000x300mm Shutter board fixed to 250x300mm shelf bracket screwed to stud frame with 6mm Ø x 100mm cut screws	No	12	-
	Sundries			
54	Drilling 20mm Ø ventilation holes in closer frame	No	none	
	9			-

Wrought hardwood

Contract No: 1	H-46321
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				I
55	90x45mm Rebated hardwood single door frame to suit 813 x 2032mm door (Provisional)	No	12	-
	_			
56	813x2032mm Hard wood framed, ledged and braced	No	12	
30	single door (Provisional)	NO	12	-
	Arcitrave, skirting, etc			
	Wrought SAP timber			
57	20x30mm Skirting fixed to drywall	m	none	
	20x00xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx			-
58	20mm Quandrant beading to door & window internally	m	none	
			0 : 15	
			Carried Forward	_
			Brought Forward	-
			2.ought ontain	-
	-			
	Wall Cladding			
	Wall cladding comprising 15mm Gypsum fire-stop board			
	with 38x50mm CCA (H2) treated wrought SAP supports (where necessary). 10x45mm SAP cover strips at joints and along top of boards, fixed to timber stud wall framing			
	with 32mm drywall screws at 200mm centres			
59	Internal wall cladding	m ²	90	
	, and the second			-
	<u>Sundries</u>			
60	20mm SAP quarter round beading strip fixed along edges of door and windows internally	m	35	-
	Hinges, Bolts, Etc.			
	IID II			
	"Brass"			
61	100x76 Brass ball bearing butt hinge	Pair	3	-
	Lockset and handles			
	"Approved"	-		
	"Approved"			
62	Two lever mortice lockset with pair of handles	No	3	
				-

		1	T	1	I
	Soil drainage /sewer				
	Soil Drainage				
	3011 Drainage				
	Sanitary fittings and appliances				
	Atlas Plastic or other approved				
	-				
63	416x690x768mm Close couple toilet with with seat and cover - ref (SA PAT 2015/06505)	No	12		-
64	460×360×240mm Plastic Cindy basin from atlas plastics and pillar taps	No	12		-
	-				
65	490x600x363 60litre PVC Wash trough	No	12		
					-
			Carried Forward		
			Brought Forward		-
			Brought Forward		_
	Pro-Close or other approved				
	110 Glose of Other approved				
66	15mm dia garden tap	No	24		
					-
	Polypropylene multi layer pipes				
67	15mm	m	72		
					-
	Extra over multi layer pipes				
68	15mm fittings	No	60		
	Tomin mungs	100	00		_
	UPVC				
	0.70				
69	100mm dia Gully with grate and trap cast into floor salb	No	12		
					-
	Gypsum Plasterboard Surfaces				
		-			
	Prepare and apply one coat universal undercoat and two				
	coats PVA paint				
69	On internal wall cladding	m ²	90		
	On internal wall clauding	'''			_

Contract	No:	1H-46321
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	Wood Surfaces				
	Prepare and apply one coat universal undercoat and two				
	coats polyurethane non-drip enamel paint				
70	On external wall cladding	m ²	76		_
	Prepare and apply three coats varnish				
71	On doors (internal and external)	m ²	41		_
72	On door frames	m ²	11	-	
				-	-
73	WC shelves	m2	4	-	_
	TOTAL CARRIED TO SUMMARY PAGE				_
		<u> </u>			-

	T				
Ref	Description	Unit	Quantity	Rate	Amount
	PREAMBLES				
	WASTE COLLECTION YARD /FACILITIY TYPE J (25M²)				
1	These Bills of Quantities are for all material, labour, plant and inputs for the erection of:				
	a) 1Nr 25.0sq.m Waste Collection Yard				
2	Each structure to be erected as detailed on DesigncoLab DrwgP19004				
	J101 RevA (Page 1 of 3) Plan				
	J102 RevA (Page 2 of 3) Plan				
	J103 RevA (Page 3 of 3) Plan				
3	Each structure will be erected on a prepared site. The contractor shall bring to the attention of the Employers Agent any site considered to require removal of trees, structure and any other obstacles to the construction of a unit.				

	,					
4		Workmanship. All carpentry and joinery to be undertaken a				
		competent person with experience in erection of timber and				
		sheet metal. The Employer will not be responsible for making				
		good any carpentry and sheet metal construction that is				
		considered unsatisfactory after inspection by the selected				
		architect.				
		architect.				
	<u> </u>					
					-	
	1					
			Carried	Forward		R -
			Brought	Forward		R -
				ı		
1						
		THE WORKS				
		THE WORKS				
		THE WORKS				
		THE WORKS Site Clearance				
		Site Clearance	2			
1		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges,	m ²	rate only		
1		Site Clearance	m ²	rate only		
1		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges,	m ²	rate only		
1		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges,	m ²	rate only		
1		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges,	m²	rate only		
1		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth	m ²	rate only		
1		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges,	m ²	rate only		
1		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth	m ²	rate only		
1		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth	m ²	rate only		
1		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC	m ²	rate only		
1		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth	m²	rate only		
1		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC	m²	rate only		
1		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC Excavation in earth by hand not exceeding 2.00m deep	m²	rate only		
		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC Excavation in earth by hand not exceeding 2.00m deep -				
1		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC Excavation in earth by hand not exceeding 2.00m deep	m ²	rate only		
		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC Excavation in earth by hand not exceeding 2.00m deep -				-
		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC Excavation in earth by hand not exceeding 2.00m deep -				-
2		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC Excavation in earth by hand not exceeding 2.00m deep - Excavation to reduce level	m ³	8		-
		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC Excavation in earth by hand not exceeding 2.00m deep -				-
2		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC Excavation in earth by hand not exceeding 2.00m deep - Excavation to reduce level	m ³	8		-
2		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC Excavation in earth by hand not exceeding 2.00m deep - Excavation to reduce level	m ³	8		
2		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC Excavation in earth by hand not exceeding 2.00m deep - Excavation to reduce level	m ³	8		
2		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC Excavation in earth by hand not exceeding 2.00m deep - Excavation to reduce level	m ³	8		
2		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC Excavation in earth by hand not exceeding 2.00m deep - Excavation to reduce level Post bases 350 dia Extra over all excavations for carting away	m ³	8		
2		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC Excavation in earth by hand not exceeding 2.00m deep - Excavation to reduce level	m ³	8		-
2		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC Excavation in earth by hand not exceeding 2.00m deep - Excavation to reduce level Post bases 350 dia Extra over all excavations for carting away	m ³	8		
2		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC Excavation in earth by hand not exceeding 2.00m deep - Excavation to reduce level Post bases 350 dia Extra over all excavations for carting away	m ³	8		-
2		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC Excavation in earth by hand not exceeding 2.00m deep - Excavation to reduce level Post bases 350 dia Extra over all excavations for carting away Surplus material from excavations	m ³	8		-
3		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC Excavation in earth by hand not exceeding 2.00m deep - Excavation to reduce level Post bases 350 dia Extra over all excavations for carting away Surplus material from excavations Earth filling obtained from the excavations	m ³	8 1 5		-
2		Site Clearance Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth EXCAVATION, FILLING, ETC Excavation in earth by hand not exceeding 2.00m deep - Excavation to reduce level Post bases 350 dia Extra over all excavations for carting away Surplus material from excavations	m ³	8		-

Contract No: 1H-46321

Contract No:	1H-46321
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	1	T	ı		1	
					-	
		Compaction of surfaces				
		Stripping existing road, reduce levels by 150mm, breaking				
		down oversize material, adding suitable material where necessary to prescribed levels, including scarifying and re-				
		compact to 93% Mod AASHTO density				
		Compact to 35 % Wood AAOI IT O density				
		Soil insecticide				
6		Under floors	m ²	33		
					-	
		REINFORCED CONCRETE CAST AGAINST EXCAVATED				
		SURFACES AND FORMWORK				
		_				
		25MPa/19mm concrete				
		Long & John Concrete				
		-				
7		Surface beds on waterproofing	m ³	5		
					-	
		TEST BLOCKS				
_						
8		Making and testing 150 x 150 x 150mm concrete strength test	No	2		
		cube			-	
		CONCRETE SUNDRIES				
		CONCRETE SUNDRIES				
		-				
		Finishing top surfaces of concrete smooth with a wood				
		float				
		-				
9		Surface beds, slabs, etc	m ²	29		
					-	
			Carried	Forward	R	-
			Brough	t Forward	R	-
		ROUGH FORMWORK (DEGREE OF ACCURACY III)				
		-				
		Rough formwork to sides				
		-				
10		Edges, risers, ends and reveals not exceeding 300mm high	m	45		
		or wide			-	
		Fabric reinforcement				
		- usto remote ment				
		-				

11	Type 193 fabric reinforcement in concrete surface beds, slabs, etc	m ²	29		_
	Siaus, etc			1	-
	One layer of 250 micron "Consol Plastics Gunplas USB				
	Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"				
	rressure Sensitive Tape				
	-				
12	Under surface beds	m ²	35		
					-
	Structural timber				
	CCA (H2) treated support poles			+	
12	405 450	NI-			
13	125-150mm Ø Gum pole as columns 3600mm long set in post hole minimum 700mm deep	No	9		_
	post tole minimum 700mm deep				
	Extra over structural gumpoles for				
14	No fines concrete fill around post at base to 800 deep	No	9	-	
14	No lines concrete till around post at base to 800 deep	INO	9		_
15	Geo fabric lining to post hole to 800	No	9		
					-
16	50mm sand blinding to base of post	No	9		
				1	-
	Wrought CCA (H2) treated SAP timber				
17	38x228mm Perimeter beam bolted to top and bottom of	m	40		
	treated gumpole coach bolts (bolts, nut and washer measure				-
	elsewhere)				
18	50x76mm Secondary structure screw fixed vertically to	m	74		
	perimeter beams at 500 centres				-
		Carrie	d Forward		R -
		Brougl	ht Forward	+	R -
	Sundring			1	
	Sundries				
19	M16 galvanised mild steel carriage bolts 260mm long with	No	72		
	round head and square neck including nut and square washer				-
	Reclaimed pallet timber			1	
	Treordinated panet diriper				
20	Screen comprising 22x100mm pallet planks fixed horizontally	m ²	31		
	to secondary structure with 50mm gap between rows				-

04	0.1	L 1.1	1 4	1	
21	Gate comprising 20x100mm pallet plants fixed to and	No	1		
	including 50x76mm treated SAP frame and bracing				-
	<u>Sundries</u>				
22	Chicken mesh as vermin proof creen	m ²	0		
					-
	"Approved"				
			+		
23	Galvanised gate hinge	No	2		
					-
			+		
24	Heavy duty barrel bolt	No	1		
					-
	<u>Sundries</u>				
			+		
25	Chicken mesh as vermin proof creen	m ²	31		
					-
	Cement screed				
26	Screed laid to falls into surface drain min 25mm thick	m ²	29		
					-
	Cement plaster on concrete				
27	25mm thick to sides and top of upstand 300mm girth	m	23		
					-
		Carried	Forward		R -
		Brough	t Forward		R -
		Dioug.	it i oi wai a		1.
	SANITARY FITTINGS		+		
	<u>SAINTIAIXTTTTIINUS</u>				
	D Ol		1		
	Pro-Close or other approved				
			1		
			1		
28	15mm dia garden tap	No	1		
				-	-
				_	
	Polypropylene multi layer pipes		+		
	- erprepress man aper propo			-	
			+	-	
			1	-	
29	15mm	m	3		
				-	-
				_	
 	Extra over multi layer pipes		+		
				_	
			+	-	
			İ	İ	
			1	-	

UNIT TOTAL TO SUMMARY PAGE

	mergency Housing Units at Parkington Informal Se				
30	15mm fittings	No	3	-	-
	<u>UPVC</u>			-	
				-	
31	100mm dia Gully with grate and trap cast into floor salb	No	1	-	-
	<u>Approved</u>				
32	450x450x50mm thick precast concrete pavers on scarified, evelled and compacted base	m ²	13		-
	evelled and compacted base				-
				-	
	-				

Ref	Description	Unit	Qty	Rate	Amount
	EXTERNAL WORKS				
	FENCING				
3	Weld mesh fencing				

1.8m high above ground level over flat or sloping terrain complete with all necessary posts, standards, supports, etc	m	91	R -
-			
-			
		TO SUBARA	

TOTAL TO SUMMARY PAGE

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	PS.11	Community Liaison Officer	
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Programme, Method of Work, and Accommodation of Traffic

C3.6 ANNEXURES 161

C3.1: PROJECT DESCRIPTION AND SCOPE OF CONTRACT

Contract No: 1H-46321

C3.1.1 Description of Works

The contractor is required to take responsibility for the construction 59 alternative housing typology units on the identified site as well as the construction of a refuse collection facility, 3 Communal Ablution blocks and the related 3 Wash areas. The housing units are lightweight, timber frame structures which can function effectively on steep slopes and will consist of a mix of 4 different sub-types, as per the design drawings (Annexure 3.6.7). Unit sizes range from 15.4sqm single storey to the 44 sqm double story).

The structures have been designed so that they can be built using labour based construction methods using hand tools and maximise the use of labour drawn from the adjacent Parkington informal settlement. To make this happen effectively, the Contractor needs to be able to build in an appropriate fashion, working closely with the community and local workers/artisans and maximising local work content and skills transfer.

Civil engineering infrastructure in the form of footpaths, storm water measures, and water and sewerage reticulation to supply the Communal Ablution Blocks and wash areas will have been completed on site immediately prior to the commencement of this contract. The Contractor will be required to protect this infrastructure during construction of the topstructures.

Relocations into the completed dwellings. The Employer shall notify the Contractor regarding which household/ unit from the adjacent informal settlement is to occupy which newly constructed dwelling unit on the relocation site. The contractor shall be responsible for: (i) ensuring the relocation of the <u>all</u> occupants of the shack to be demolished, (ii) assisting with the transportation of all households goods from the relocated dwelling into the replacement unit; (iii) the immediate and careful dismantling of the vacated shack; (iv) the transportation and disposal of the shack materials as directed by the Employer. Furthermore the contractor shall be responsible for ensuring that the vacated site is cleared of all debris and clearly demarcated by means of wooden stakes and danger tape (to help managing the prevention of re-occupation of the vacated site).

C3.1.2 Description of the Site and Access

The site is located within the Kenville suburb immediately below the Greenhill Park Sports Ground. Coordinates- 29.782383°S 31.011605°E. Access to the site is off Workington Road. The Parkington Emergency Housing site forms part of the broader upgrading of the Parkington informal settlement which is immediately to the south of the greenfield site across a minor water course.

The site is located within Ward 34.

The site is extremely steep with grades ranging up to 1:3 in places. The steep slopes together with the geotechnical conditions described in C3.1.3 below mean that great care needs to be taken in the management of construction during the unit assembly process, and that disturbance to the natural ground conditions and coverage in the construction process is minimised.

The infrastructural services, including the construction of the main access road to the site, pedestrian access ways, the storm water management system and sewers and water supply for the Communal ablution blocks and wash areas will have been completed immediately prior to the commencement of this contract. The contractor will be expected to protect this infrastructure during the course of construction and will be required to rectify at its own cost any damage to the services incurred during the top structure building process. In

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order to achieve this, building materials will need to be delivered to the edge of the site and thereafter transported by hand to the individual building sites.(The compactness of the site however, means that the maximum carry distance will not exceed 75m). Similarly the excavation of the foundation footings will need to be underatke with tools that can be carried to site by hand. The layout and design of this infrastructure is indicated in Annexure 3.6.3.

The Contractor shall provide reasonable access to other services authorities as and when required, and as the Contractor in possession of the site, he shall induct all other contractor's staff and labourers regarding health and safety risks on site.

Parts of the site are environmentally sensitive and the provisions of the Construction Method Statement attached as Annexure 3.6.8 will need to be strictly adhered to.

C3.1.3 Nature of Ground and Subsoil Conditions

The geotechnical conditions are described in the ADDITIONAL PRELIMINARY GEOTECHNICAL ASSESSMENT REPORT conducted by Drennan Maude and Partners and attached as Annexure 3.6.4. The Contactor is expected to familiarise themselves thoroughly with the construction requirements contained in this report. Supplementary geotechnical investigations will take place prior to , and during the course of the contract and provision for this (as a Provisional Sum) has been made in the BoQ.

C3.1.4 Scope of Work

Title

Parkington-Construction of 59 Emergency Housing Units and Three Mini Communal Ablution Blocks Three Water Collection Wash Area and a Waste Collection Facility

TOPIC	COMMENTARY
	The provision of 59 Alternative Emergency Housing Units, Three Communal Ablution Blocks, Three Water Collection Wash Area and a Waste Collection Facility.
Client's / employer's objectives	The relocation of the occupants of 59 shacks located on infrastructure routes within the Parkington settlement into the completed Emergency Housing Units, the clearance of the vacated shacks and the rehabilitation of area they occupied.
	Equipping the 59 relocatee households with the knowledge needed to maintain and improve the Emergency Housing Units that have moved into.

The works to be constructed consists 59 dwellings of 4 types, three Mini Communal Ablution Blocks, three Water Collection Wash Area, a Waste Collection Facility, and the connection of the Ablution blocks and Wash areas to the water and sewer network.

The project scope will be done in a single phase. The Contractor is required to programme construction activities such that are constructed in such a manner as not to cause any contractual claims and delays.

As the main Contractor in possession of the Site, he shall induct all other subcontractors' staff and labourers regarding health and safety risks on site.

The contractor will be required to complete the following:

Dwelling Type D 15.4m2 n=15
Dwelling Type A 30 m2 n=32
Dwelling Type E 34.5m2 n=8
Dwelling Type G 44m2 n=4
Communal Ablution Blocks n=3
Water collection and wash areas n=3
Refuse Collection Facility n=1

- Connection of the Communial Ablution Blocks and wash areas to the water reticulation and sewers installed under the previous services contract.
- Execution of the process of relocating Employer nominated relocatee households from their existing shack into the completed relocation units and the removal of the shack with the clearance of the voated site.

Description of the works

The Architect will provide the Contractor with all setting out information and relevant data for the contractor to accurately set out and construct the works. The Contractor will appoint a Surveyor to set out the units positions in accordance with the design which will be inspected and approved by the Architect prior to the commencement of construction. (this may be done in Phases). Such allowances have been made for in the Bill of Quantities.

The contractor is to note that the construction shall require decanting the selected unit residents in the adjacent settlement into the completed dwellings. In this respect the Employer shall notify the Contractor regarding which household/ unit from the adjacent informal settlement is to occupy which newly constructed unit on the relocation site. The contractor shall be responsible for: (i) ensuring the relocation of the all occupants of the shack to be demolished, (ii) assisting with the transportation of all households goods from the relocated dwelling into the replacement unit; (iii) the immediate and careful dismantling of the vacated shack; (iv) the transportation and disposal of the shack materials as directed by the Employer. Furthermore the contractor shall be responsible for ensuring that the vacated site is cleared of all debris and clearly demarcated by means of wooden stakes and danger tape (to help managing the prevention of re-occupation of the vacated site).

Provision for these activities has been made in the Bill of Quantities.

The 59 households taking occupation of the Alternative Emergency Housing Units are each to be provided with the knowledge needed to maintain and improve the units they have been allocated. To this purpose the Employer will provide the Contractor with an instructional booklet (in English) , but the Contractor shall be responsible for the distribution of this material to each occupant and the associated verbal instruction and demonstrations needed to imbed this knowledge. Provision for these activities has been made in the Bill of Quantities.

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TOPIC	COMMENTARY
Use of reasonable skill and care	The contractor is required to exercise reasonable skill and care at all times. Furthermore, special conditions and regulations relating to the Environmental Authorisation, Water Use Licence(WULA), Health & Safety(Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1994) needs to be adhered to throughout the duration of the contract.
Co-operation with other services providers	All interaction with various departments such as Water and Sanitation, Electricity, Telkom and Neotel are to run parallel to construction works should any existing services be affected.
Brief	As outlined in this tender document; Time for achieving practical completion on the scope of works is 6 months; The contractor is required to submit monthly progress reports, inclusive of photographs and up-to-date detailed programme.
Reference data	C 3.6.1 Map indicating area from which local labour should be sourced C3.6.2 Locality Plan C3.6.3 Infrastructure to be constructed in the Preceeding Civil Construction contract C3.6.4 Additional Preliminary Geotechnical Investigation Report and Data C3.6.5 Site Layout Plan C3.6.6 Access routes to be preserved during construction C3.6.7 Book of Drawings C 3.6.8 Construction Method Statement C3.6.9 eThekwini Municipality COVID-19 Health and Safety Specifications
Applicable national and international standards	 SAICE GCC 2015 Conditions Of Contract CIDB Conditions of Tender (2015) eThekwini Standard Engineering Specifications
Particular/Generic specifications	 The Contractor's attention is drawn to section C.3.2 (Project Specifications) The Contractor's attention is drawn to section C.3.3.2 (Amendments to Particular Specifications) The Contractor's attention is drawn to section 3.4 of this tender document.
Approvals	The Contractor is to obtain approval in writing from the Architect prior to commencing any works that deviate from drawings and/or specifications. Such Approvals are to be appropriately documented in a Site Instruction Book issued by the Employer's Agent; The Contractor is to take note that all as-built records shall be maintained and reviewed on a monthly basis by the Architect. The Architect shall then provide his acceptance/declination of the as-built results in order to permit payment for such works constructed. In the event of the declination of test results by the Structural Engineer, the Contractor shall be paid out 50% of the monetary value of the failed works until such time corrective measures are completed. This shall apply to all works. No alternative arrangement shall be entertained from the contractor.

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TOPIC	COMMENTARY
Access to land / buildings / sites	The Parkington greenfield site is located within the Kenville suburb immediately below the Greenhill Park Sports Ground. Coordinates- 29.782383°S 31.011605°E. Access to the site is off Workington Road. The greenfields site forms part of the broader upgrading of the Parkington informal settlement which is immediately to the south of the greenfield site across a minor water course. Annexure 2 Site Location Map. The main access road gives access to both the top and bottom of the site, but access within the site is on a pedestrian basis only. Access to the site of works for external parties shall be discussed with the Employer and Employer's Agent before any decision is taken.
Planning and programming	i) Preliminary Programme With reference to Clause 3.11.9 (Quality Criteria) and returnable form "Preliminary Programme", the tenderer is required to submit a basic preliminary programme in a gantt chart format. This programme shall take cognisance of the scope of works and shall be based on the specified time for achieving practical completion as outlined in clause 1.1.1.14 of the Contractual Data. Alternative completion times will only be considered if the tenderer duly indicates the details thereof on returnable form "Amendments, Qualifications and Alternatives".
	ii) Construction Programme The successful tenderer shall submit a construction programme, for approval, in terms of the requirements outlined in Clause 5.6 of GCC 2015 within the timeframe specified in Clause 5.3.2 of the Contract Data. Regarding the contents of the programme, specific reference shall be made to Clause 5.3.2 and the contractor shall be responsible for indicating sufficient detail which reflects the sequence and extent of works, specific inspections, all milestones, the critical path and other pertinent requirements of the scope of work. The construction programme shall be subject to review on a monthly basis or at the discretion of the Architect and Employer.
Software application for programming	For ease of submission and uniformity, it is a requirement that the construction programme be prepared by the successful tenderer using Microsoft Project or the like. Additionally, the final programme shall be provided in a .pdf format to the Employer's representative.
Quality management	The contractor shall implement specific quality control measures to ensure that the works are constructed as per the standard specifications, project specifications and construction drawings. The Quality Control Statement shall be attached to returnable form "Construction Approach, Methodology and Quality Control" and reference shall be made to site control testing, construction supervision, structured monitoring mechanisms such as checklists and other measures/processes that the tenderer deems to be significant. The Architect and Structural Engineer will continually assess the quality of works on site and instructions will be provided for non-compliance accordingly.

any impacts thereof, including costs.

Format of

communications

•	Each instruction, certificate, submission, proposal, record, acceptance, notification, reply and other communication which this contract requires is to be communicated in a form which can be read, copied and recorded. Writing is to be in the language of this contract, i.e. English.
	e contractor is to only receive instructions from the Employers Architect or Employers Representative. Should the contractor undertake any works from

an instruction given to him/her by a third party, he will be solely responsible for

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TOPIC	COMMENTARY
Key personnel	The format for key personnel as illustrated under Section T2 (Returnable) is to be followed and carried through to the bidders format for Key Personnel. This is to be looked at in conjunction with section F3.11.9 (Quality Criteria for Key Personnel). It is noted at this juncture that at the commencement of construction, the key personnel will change for unforeseen reasons. In this case, the contractor shall provide a suitable replacement which will have similar experience for respective projects as the originally proposed individual at time of tender. Further discussions are to be held with the Employer and Employer's agent as this is situation specific.
Management meetings	There will be a minimum of one (1) progress meeting and one (1) technical meeting per month. The contractor is to ensure that the Contracts Manager and Site Agent/Foreman are present during both meetings. The CLOs will be required to attend all progress meetings will be required to be present when works are being discussed. This is over and above all meetings that the Contractor may deem necessary for the execution of the works.
Forms for contract administration	The contractor will be provided with suitable reporting formats by the consultant at the commencement of construction. These reports detail the contractors progress, all subcontractor's on site, Health and Safety audit findings, Environmental Audit findings, plant and machinery on site and an organogram specific for the site of works.
	These reports will have to be presented at the monthly progress meeting. Minutes of all meetings, however, will be drafted by the Resident Engineer.
Electronic payments	Arrangements for electronic payment of payment certificates will be made between the Contractor and Employer during the Site Handover Meeting.
Daily records	It is a requirement that a site diary with all relevant details be maintained on site. This diary must be signed off and agreed to by both the Engineer and Contractor, on a daily basis. These site diaries must accompany the Contractor's monthly payment certificates and payment shall not be processed should this not be complied with. A suitable format of the site diary will be made available to the successful
Professional indemnity	tenderer, by the Client. Not applicable.
insurances	

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Payment certificates	Payment certificates are to reach the Client by the 25th of each month. The following items are to accompany each payment certificate, but shall not be limited to the list below: Tax Invoice – Tax invoice number, Contract number, Project Description, correctly dated, to include both the Client's and contractor's Tax numbers, physical and postal addresses and to be addressed to Deputy Head, Development Engineering. Fully completed FTE's (Client to provide format). Summary of supporting measurements for period of claim – to be signed off by both the Contractor and Engineer.	
Use of documents by the employer	As-built drawings: The client will employ the as-built drawings in order to carry out any necessary maintenance to the reticulation systems being installed under this contract. In addition, this as-built data may be used to determine future connection points should further development around the site occur. It is imperative that the surveyor provides accurate positions, invert and cover levels so that the Engineer is able to accurately reproduce the installed reticulation systems.	

TOPIC	COMMENTARY		
Property provided for the Consultant's use	The Contractor shall provide one meeting room large enough to be furnished with a large table and chairs to seat 10 people. The meeting room shall also be furnished with pin boards suitable to pin up three A0 drawings and a white board of about 1,5m² and markers. The contractor's attention is drawn to the COVID-19 Health and Safety Regulations in respect of the meeting venues.		
Proof of compliance with the law	 Valid Tax Clearance Certificate at Tender Closing Proof of Company/CC/Partnership Registration Proof of JV agreement and registration (if applicable) Identity Documents of Directors/Members/Partners Municipal Fees for Proof of Address CIDB Registration 		
Annexures	C3.6.1 Map indicating area from which local labour should be sourced C3.6.2 Locality Plan C3.6.3 Infrastructure to be constructed in the Preceeding Civil Construction contract C3.6.4 Additional Preliminary Geotechnical Investigation Report and Data C3.6.5 Site Layout Plan C3.6.6 Access routes to be preserved during construction C3.6.7 Book of Drawings C 3.6.8 Construction Method Statement C3.6.9 eThekwini Municipality COVID-19 Health and Safety Specifications C3.6.10 Notice Board		

C3.2: PROJECT SPECIFICATION

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PREAMBLE

In the event of any discrepancy between a part or parts of the Standard or Particular Specifications and the Project Specification, the Project Specification shall take precedence. In the event of a discrepancy between the Specifications, (including the Project Specifications) and the drawings and / or the Bill of Quantities, the discrepancy shall be resolved by the Employer's Agent before the execution of the work under the relevant item.

C3.2.1 GENERAL

PS.1 PROGRAMME, METHOD OF WORK, AND ACCOMMODATION OF TRAFFIC

This Clause is to be read in conjunction with the provisions and obligations as contained in SANS 1921-1 and SANS 1921-2.

PS.1.1 Preliminary Programme

The Contractor shall include with his tender a preliminary programme on the prescribed form (see Part T2.2: Preliminary Programme) to be completed by all Tenderers. The programme shall be in the form of a simplified bar chart with sufficient details to show clearly how the works will be performed within the time for completion as stated in the Contract Data.

Tenderers may submit tenders for an alternative Time for Completion in addition to a tender based on the specified Time for Completion. Each such alternative tender shall include a preliminary programme similar to the programme above for the execution of the works, and shall motivate his proposal clearly by stating all the financial implications of the alternative completion time.

The Contractor shall be deemed to have allowed fully in his tendered rates and prices as well as in his programme for all possible delays due to normal adverse weather conditions (refer to Clause 5.12.2.2) and special non-working days (refer to Clause 5.1.1.1) as specified in the in the Contract Data.

PS.1.2 Programme in Terms of Clause 5.6 of the General Conditions of Contract

It is essential that the construction programme, which shall conform in all respects to Clause 5.6 of the General Conditions of Contract, be furnished within the time stated in the Contract Data (refer to Clause 5.3.1/2).

The preliminary programme to be submitted with the tender shall be used as basis for this programme.

The Tenderer's attention is drawn to the fact that a number of factors will affect the programming of and method of carrying out the works. The more important of these are:

- (1)
- (2) Time allowances to be made for the ordering of special items.
- (3) Notification required by service organisations.
- (4)
- (5)

- (6)
- (7)
- (8) The time to obtain the work permit for construction (may only commence at time of awarding the contract).

Those services which will have been installed on the site prior to the commencement of this contract are be depicted on the contract drawings. r

PS.1.3 Requirements for Accommodation of Traffic

PS.1.3.1 General

Accommodation of traffic, where applicable, shall comply with SANS 1921-2: 2004: Construction and Management Requirements for Works Contracts, Part 2: Accommodation of Traffic on Public Roads occupied by the Contractor. The Contractor shall obtain this specification from Standards South Africa if accommodation of traffic will be involved on any part of the construction works.

Clause 4.10.4 of SANS 1921-2: 2004 shall be replaced with the following:

"Road signs and markings shall comply with the requirements of "The South African Road Traffic Signs Manual - Volume 2: Roadworks Signing".

PS.1.3.2 Basic Requirements

The Contractor shall ensure that pedestrian movement along the routes indicated in Annexure xx is possible at all times. In addition the Contractor shall ensure that motor vehicles are able to traverse along the route indicated in Fig 1 Annexure 7 at all times during the construction period.

PS.1.3.3 Traffic Safety Officer

Where warranted by traffic conditions on or near the site, the Contractor shall nominate a suitable member of his staff as traffic safety officer to be responsible for the arrangement and maintenance of all the measures for the accommodation of traffic for the duration of the project. Duties of the traffic safety officer shall be in compliance with the Occupational Health and Safety Act 1993 and the Construction Regulations 2014.

PS.1.3.4 Payment

The Contractor's tendered rates for the relevant items in the Bill of Quantities shall include full compensation for all possible additional costs which may arise from this, and no claims for extra payment due to inconvenience as a result of the modus operandi will be considered.

PS.1.3.5 Pedestrian movement

The Contractor shall make provision for accommodating the pedestrian movements referred to in PS1.2.2 above in the area of the works.

PS.1.3.6 Temporary Reinstatement

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PS.2 SERVICES

This Clause is to be read in conjunction with the provisions and obligations as contained in SANS 1921-1 and SANS 1921-2.

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PS.2.1 Existing Services

The Tenderer's attention is drawn to the fact that numerous services will have been installed in the area. The Contractor will be provided with as built drawings indicating the positions of these services .Although every effort will be made to depict these services accurately the positions shown must be regarded as approximate.

PS.2.2 Proving Underground Services

It is stressed that all services in a particular area must be proven before commencing work in that area.

When a service is not located in its expected position the Contractor shall immediately report such circumstances to the Employer's Agent who will decide what further searching or other necessary action is to be carried out and shall instruct the Contractor accordingly. The cost of this additional searching shall be to the Council's cost and shall be paid for under DB.8.19 - Proving Existing Services.

Should any service be damaged by the Contractor in carrying out the works and should it be found that the procedure as laid down in this clause has not been followed then all costs in connection with the repair of the service will be to the Contractor's account.

The requirements of this clause do not relieve the Contractor of any obligations as detailed in the Conditions of Contract or under Clause 4.17 of SANS 1921-1.

PS.5.1 Blockage Stormwater System

The Contractor shall be responsible for ensuring that cementitious sludge, sand and rubble from the works do not enter the stormwater reticulation system. The Contractor shall be liable for any costs incurred by the Council or others as a result of blockages in the reticulation system attributed to failure to comply with the above requirement.

PS.9 MANAGEMENT OF THE ENVIRONMENT

The Contractor shall pay special attention to the following:

PS.9.1 Natural Vegetation

The Contractor shall confine his operation to as small an area of the site as may be practical for the purpose of constructing the works.

Only those trees and shrubs directly affected by the works and such others as the Employer's Agent may direct in writing shall be cut down and treated to prevent regrowth. The natural vegetation, grassing and other plants shall not be disturbed other than in areas where it is essential for the execution of the work or where directed by the Engineer.

PS.9.2 Fires

The Contractor shall comply with the statutory and local fire regulations. He shall also take all necessary precautions to prevent any fires. In the event of fire the Contractor shall take active steps to limit and extinguish the fire and shall accept full responsibility for damages and claims resulting from such fires which may have been caused by him or his employees.

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PS.9.3 Environmental Management Plan

In addition to the above, all requirements according to the Construction Method Statement as detailed in C3.4: Particular Specifications, will be adhered to.

PS.10 OCCUPATIONAL HEALTH AND SAFETY

PS.10.1 General Statement

When considering the safety on site the Contractor's attention is drawn to the following:

It is a requirement of this contract that the Contractor shall provide a safe and healthy working environment and to direct all his activities in such a manner that his employees and any other persons, who may be directly affected by his activities, are not exposed to hazards to their health and safety. To this end the Contractor shall assume full responsibility to conform to all the provisions of the Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the OHSA 1993 Construction Regulations 2014 issued on 7 February 2014 by the Department of Labour.

For the purpose of this contract the Contractor is required to confirm his status as mandatory and employer in his own right for the execution of the contract by entering into an agreement with the Employer in terms of Section 37(2) of the Occupational Health and Safety Act.

PS.10.2 Health and Safety Specifications and Plans to be submitted at tender stage

PS.10.2.1 Employer's Health and Safety Specification

The Employer's Health and Safety Specification is included in Part C3.4: Particular Specifications.

PS.10.2.2 Tenderer's Health and Safety Plan

At tender stage only a brief overview of the tenderers perception on the safety requirements for this contract will be adequate. This will be attached to Part T2.2: Contractor's Health and Safety Plan.

Only the successful Tenderer shall submit a separate Health and Safety Plan as required in terms of Regulation 7 of the Occupational Health and Safety Act 1993 Construction Regulations 2014, and referred to in Part T2.2: Contractor's Health and Safety Plan.

The detailed safety plan will take into consideration the site specific risks as mentioned under PS.10.1 and must cover at least the following:

(i) A proper risk assessment of the works, risk items, work methods and procedures in terms

- of Regulations 9 to 29;
- (ii) Pro-active identification of potential hazards and unsafe working conditions;
- (iii) Provision of a safe working environment and equipment;
- (iv) Statements of methods to ensure the health and safety of subcontractors, employees and visitors to the site, including safety training in hazards and risk areas (*Regulation 7*);

- Monitoring health and safety on the site of works on a regular basis, and keeping of records and registers as provided for in the Construction Regulations;
- (vi) Details of the Construction Supervisor, the Construction Safety Officers and other competent persons he intends to appoint for the construction works in terms of Regulation 8 and other applicable regulations; and
- (vii) Details of methods to ensure that his Health and Safety Plan is carried out effectively in accordance with the Construction Regulations 2014.

The Contractor's Health and Safety Plan will be subject to approval by the Employer, or amendment if necessary, before commencement of construction work. The Contractor will not be allowed to commence work, or his work will be suspended if he had already commenced work, before he has obtained the Employer's written approval of his Health and Safety Plan.

Time lost due to delayed commencement or suspension of the work as a result of the Contractor's failure to obtain approval for his safety plan, shall not be used as a reason to claim for extension of time or standing time and related costs

A generic plan will not be acceptable.

PS.10.3 Cost of compliance with the OHSA Construction Regulations

The rates and prices tendered by the Contractor shall be deemed to include all costs for conforming to the requirements of the Act, the Construction Regulations and the Employer's Health and Safety Specification as applicable to this contract. Should the Contractor fail to comply with the provisions of the Construction Regulations, he will be liable for penalties as provided in the Construction Regulations and in the Employer's Health and Safety Specification.

Items that may qualify for remuneration will be specified in the Employer's Health and Safety Specification.

PS.11 COMMUNITY LIAISON OFFICER

The Ward Councillor in whose ward(s) work is to be done will, in consultation with the local Development Committee, identify a community liaison officer (CLO) from within the Parkington Settlement for the project and make the person known to the Contractor within two days of being requested to do so. The Contractor will be required to enter a written contract with the CLO's that specifies:

- The hours of work and the wage rate of the CLO (200% of the Civil Engineering Industry minimum wage).
- The duration of the appointment.
- The duties to be undertaken by the CLO which could include:
- · Assisting in all respects relating to the recruitment of local labour.
- Acting as a source of information for the community and councillors on issues related to the contract.
- · Keeping the Contractor advised on community issues and issues pertaining to local security.
- Assisting in setting up any meetings or negotiations with affected parties.

- Keeping a written record of any labour or community issue that may arise.
- Any other duties that may be required by the Contractor.

Responsibility for the identification of a pool of suitable labour shall rest with the CLO, although the Contractor shall have the right to choose from that pool. The Contractor shall have the right to determine the total number labourers required at any one time and this may vary during the contract.

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The Contractor shall have the right to replace labour that is not performing adequately. Should such occasion arise, it must be done in conjunction with the CLO.

Payment for item AA.3 shall be made upon receipt of proof of payment to the CLO which is to include the contractor's tendered mark-up as per item AA.4. Payments under items AA.3 and AA.4 shall cover all costs related to CLO's. No additional costs shall be payable.

PS.12 SITE SECURITY

The Contractor shall, for the duration of the contract, provide sufficient security and watchmen to adequately ensure the safety and protection of the works, the Contractor's staff, including local labour and subcontractors, and all site plant and construction equipment required for the works.

Site Security, in conjunction with the SAPS (where necessary), shall be responsible for removal of disruptive elements, that may interrupt the progress of the contract through acts such as, but not limited to, intimidation, threats of disruption, violent disruption, or criminal and illegal activity by the local community or independent organisations or entities that may result in slowing down or partial or total stoppage of the works.

Payment for this item shall be made under Section 1, Part AB of the Bill of Quantities.

PS 13 SURVEY

PS 13.1 SURVEY FOR, AND PREPARATION OF, 'AS BUILT' DRAWING

The *Contractor* shall submit the following ""For Record" data to the Architect to complete the required "For Record" Drawings before a Certificate of Completion will be issued:-

Top Structures

Co-ordinates of the corner positions of all structures constructed during the contract.

General:

- Notwithstanding the above, the Contractor is to supply to the Architect all other information necessary, to clearly indicate changes/modifications to the construction drawings during the contract period that will be required by the Design Consultant so that they can produce the "For Record" drawings.
- Each surveyed point shall be suitably coded and identifiable by the Design Consultant and shall supplied on a CD/DVD, in an Ascii file with the following format:-
- Code[SPACE]XCo-ordinate[SPACE]YCordinate[SPACE]Level[SPACE]Description
- The above information is to be given to an accuracy of three decimal places and is to be surveyed by a suitably qualified person.

In addition to the above, all 'For Record' information must be provided on a drawing in Autocad

and DXF format together with a hard (paper) copy format showing the modifications undertaken during the contract period.

Suitable checks on the accuracy of the information provided may be carried out by the Architect and should any of the information provided be found to be inaccurate or untrue, the Employer reserves the right to withhold payment or to employ the services of an engineering surveyor to resurvey all the works listed above, at the Contractor's expense. The Employer shall request a minimum of three quotations from three independent engineering surveyors of his choice, and the lowest quotation will be appointed and the cost thereof will be deducted from monies owing to the Contractor.

The 'For Record' Data shall be the responsibility of the Contractor and shall be paid for under the item 'For Record' Data in the Contractors Preliminary and General Costs.

The unit of measurement shall be the "SUM"

The Contractor must also forward to the Engineer, a materials "as built" spreadsheet in a format that is acceptable by the Client.

The completion certificate shall not be issued unless the above information in totality, has been forwarded to the Engineer.

PS 13.2

PS 13.3 Additional Site Survey

The Architect may instruct the contractor to conduct a survey during the course of the contract in order to facilitate re-design due to immovable obstructions or to facilitate the design of new structures. The contractor will be required to submit all survey files in an Ascii format and drawings in a DXF/DWG format.

The unit of measurement shall be (sum) and the rate shall include for the survey as directed by the Engineer and the submission of all hardcopy and electronic files required by the Engineer.

PS.14 Progress Photographs

The tenderer shall provide the Engineer and Employer with progress photographs on CD and as hardcopy documents throughout the duration of the contract. This information shall be compiled on a monthly basis and submitted as part of the payment certificate claim submission. Each monthly submission shall include two CD's and one hardcopy where photographs are to be collated in an A4 document.

The unit of measurement shall be (PC Sum) and the rate shall include for the requirements as set out in this clause.

PS.15 Appointment of a Geotechnical Engineering Service

The contractor is to appoint a Professionally Registered Geotechnical Engineer, nominated by the client to provide such services as may be requested at the Structural Engineers discretion.

PS.16

PS.16.3 Employment of Local Labour

in eThekwini Council Policy "The use of CLOs and Local Labour". The contractor will be required to ensure that a minimum of **50** % of the total person days worked for which the principal contractor and subcontractors are persons who reside within the boundaries of the Parkington Informal Settlement as indicated in Annexure **C 3.6.1**. The contractor will be required to provide proof of authenticity of local labour. Signed confirmation by the appointed CLO will suffice for this.

No additional costs will be entertained due to this Particular Specification. The contractor will remain responsible for providing proper supervision of all labour, and will be responsible for the quality of work produced.

PS.17 Application and Approval of Works Permit

No work permit approval will be required as the project will be completed less than 12 months and the estimated value of the project is below the threshold value required for work permit. The contractor shall notify the Department of Labour of commencement of work.

PS.18 Construct Sample Unit To Be As Control Sample

The architect will identify a unit for the contractor is to construct ahead of constructing other units. The unit constructed in advance will serve as a sample of the standard of construction required on all units. The contractor shall ensure the sample unit is secure and maintained in good order. The sample unit shall not be used for any purpose other than to show the Employer, the employers agent and the contractors operatives the quality expected on every unit.

PS 19 Survey And Pegging

The contractor's attention is drawn to the setting out of the erfs upon completion of the contract. The contractor shall employ the services of a professionally registered land surveyor to set out the erfs as per the final layout plan . A three quote system is be to used, with the cheapest, most responsive tenderer being appointed. The contractor is to provide at a two week lead time to the Engineer from requisition to provision of quotes.

The above setting out shall incorporate the use of survey pegs as per Surveyor General requirements. Temporary timber poles shall be placed at each survey peg to identify their location and prevent damage to the pegs.

The unit of measure for this item shall be **Provisional Sum (PR Sum)**. The Contractor shall be allowed a handling charge which shall be measured in **Percentage (%)**.

PS.20 Performance Monitoring Of Service Providers

The performance of service providers that have been selected to provide assistance in the provision of a municipal service, otherwise than in circumstances where Chapter 8 of the Municipal Systems Act applies, is required, by Section 116 of the Municipal Finance Management Act, to be monitored and reported on (see CI.53 of the SCM Policy).

Appropriate key performance indicators (KPIs) for the contract must be set by the Municipality as a yardstick for measuring performance.

The following KPIs will be applicable to this contract:

- (a) Adherence to Construction Programme (max points = 40)
- (b) Quality Control (max points = 40)

(c) Health and Safety (max points = 20)

PS.21 Extra Over Definition

Extra over items refer to items that to a certain extent have already been measured, but have not been priced at the full value of all their <u>labour</u> and <u>materials</u>.

PS.22 Relocation Of Existing Residents To Newly Constructed Housing Units

Regarding relocations into the completed dwellings, the Employer shall notify the Contractor regarding which household/ unit from the adjacent informal settlement is to occupy which newly constructed unit on the relocation site. The contractor shall be responsible for: (i) ensuring the relocation of the <u>all</u> occupants of the shack to be demolished, (ii) assisting with the transportation of all households goods from the relocated dwelling into the replacement unit; (iii) the immediate and careful dismantling of the vacated shack; (iv) the transportation and disposal of the shack materials as directed by the Employer. Furthermore the contractor shall be responsible for ensuring that the vacated site is cleared of all debris and clearly demarcated by means of wooden stakes and danger tape (to help managing the prevention of re-occupation of the vacated site).

The unit of measurement shall be as per the Bill of Quantities.

C3.3: STANDARD SPECIFICATIONS

C3.3.1 The Specifications on which this contract is based are the eThekiwini Municipality's (City of Durban) Standard Engineering Specifications (hereafter referred to as the Standard Engineering Specifications). This document is obtainable separately, and Tenderers shall obtain their own copies of the applicable Sections.

Part	Description	Date of Issue)
AB	General Specifications	July 199	92

C3.3.2 AMENDMENTS TO THE STANDARD SPECIFICATIONS

INTRODUCTION

PS AB GENERAL SPECIFICATIONS

PS AH OCCUPATIONAL HEALTH AND SAFETY

PS.AH.14.1 Contractor's Initial Obligations In Respect Of The Occupational Health And Safety Act And Construction Regulations

Add to Clause AH.14.1:

The contractor shall also include costs for adherence to the eThekwini Municipality's COVID-19 Health and Safety Specification (as provided on the attached CD).

PS.AH.14.2 Contractor's Time Related Obligations In Respect Of The Occupational Health And Safety Act And Construction Regulations

Add to Clause AH.14.2:

The contractor shall allow in the rates for monthly health and safety audits to be undertaken by an externally appointed service provider who has been appointed by the Employer's Agent. The cost shall include for all reporting to be submitted to the Employer's Agent. When pricing this item, the contractor's attention is drawn to the baseline risk assessment, Health and Safety specification compiled for this project and eThekwini Municipality's COVID-19 Health and Safety Specification (as provided on the attached CD).

The unit of measure shall be months.

PS.AH.14.3 Submission Of The Health And Safety File

Add to Clause AH.14.3:

The costs associated with this item shall also extend into the requirements outlined in eThekwini Municipality's COVID-19 Health and Safety Specification (as provided on the attached CD).

PS B

C3.4: PARTICULAR SPECIFICATIONS

In addition to the Standardized and Project Specifications the following Particular Specifications / Policies shall apply to this contract and are available on web address: ttp://ftp.durban.gov.za/cesu/StdContractDocs/:

- C3.4.1 Part AH OHSA 1993 Safety Specification (26 Pages)
- C3.4.2 Standard Environmental Management Plan for Civil Engineering Construction Works (24 Pages)

C3.5: CONTRACT AND STANDARD DRAWINGS

C3.5.1 CONTRACT DRAWINGS / DETAILS

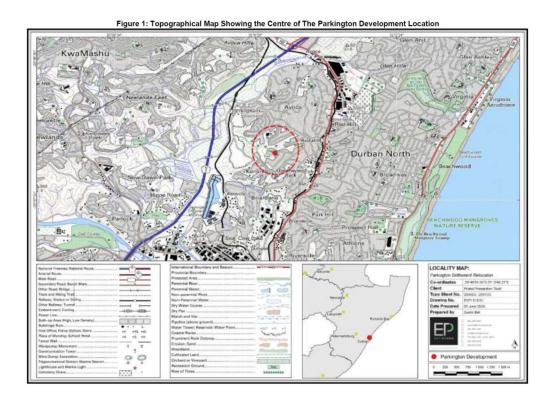
DRAWING NO.	DESCRIPTION	NO. OF SHEETS

C3.6: ANNEXURES

C3.6.1	Map indicating area from which local labour should be sourced	
C3.6.2	Locality Plan	
C3.6.3	Infrastructure to be constructed in the Preceeding Civil Construction contract	
C3.6.4	Additional Preliminary Geotechnical Investigation Report and Data	
C3.6.5	Site Layout Plan	
C3.6.6	Access routes to be preserved during construction	
C3.6.7	Book of Drawings	
C 3.6.8 Con	struction Method Statement	
C3.6.9	eThekwini Municipality COVID-19 Health and Safety Specifications	
C3.6.10 Notice Board		

PART C4: SITE INFORMATION

C4.1 LOCALITY PLAN



C4.2 CONDITIONS ON SITE

The available geotechnical investigation information is contained the ADDITIONAL PRELIMINARY GEOTECHNICAL ASSESSMENT REPORT conducted by Drennan Maude and Partners which has been attached as Annexure 3.

C4.3 TEST RESULTS

The available test results from the DCP tests conducted thus far are contained in the ADDITIONAL PRELIMINARY GEOTECHNICAL ASSESSMENT REPORT conducted by Drennan Maude and Partners which has been attached as Annexure 3.



ETHEKWINI MUNICIPALITY Occupational Health & Safety Unit

BASELINE RISK ASSESSMENT

Document Title	Baseline Risk Assessment
Client	EThekwini Municipality – Human settlements
Project	Construction of 59Nr dwelling units, 3Nr ablution units with water connection/ wash area and waste collection facility
Contract Number	1H-46321
Internal reference	BRA208/01/2021
Compiled by (Safety officer)	Name and surname: Siya Nkosi Signature: Date: 18/01/2021
Reviewed by (Manager: Safety& Risk)	Name and surname: Arty Zondi Signature:
	Date: 18/01/2021

BASELINE RISK ASSESSMENT

- **1. INTRODUCTION:** In accordance with the Occupational Health and Safety Act, (Act 85 of 1993) the Legislator places specific requirements on an Employer. One of these is prescribed in Section 8(i) of the Act where it requires the Employer to ascertain the risks and dangers which may occur within the workplace or section of the workplace and then goes on to establish working procedures or practices.
- **2. PURPOSE:** This is conducted to create a benchmark of the potential risks that apply to the whole project or business operation.
- **3. SCOPE:** This assessment could be approached on a site, regional or national level concerning any facet of the business operation or process or activity.

4. REVIEW AND MONITORING PLAN

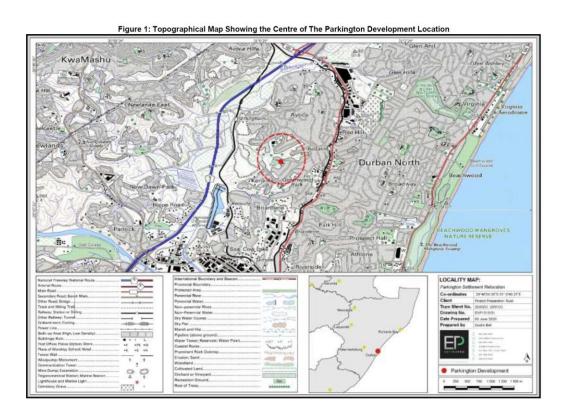
The risk assessment form part of the health and safety plan to be applied on the site and must include the following:

- (a) The identification of the risk and hazards to which persons may be exposed.
- (b) An analysis and evaluation of the risk and hazards identified based on a documented method,
- (c) A documented plan and applicable safe work procedures to mitigate, reduce or control the risks and hazards that have been identified;
- (d) A monitoring plan; and
- (e) A review plan

5. REFERENCES

- (a) Tender document number 1H 46321
- (b) Occupational Health & Safety Act and its Regulation

6. LOCALITY PLAN



SCOPE OF WORK

Site establishment
Site clearing
Structures
Temporary work
Roof work
Construction vehicle and mobile plants
Working in a fall risk position
Electrical work
Excavation work
Plumbing works
Corona virus
Site security
Working in township/ public safety
Use of hand-tools and electrical tools

1. RISK ESTIMATION AND EVALUATION

RISK CLASSIFICATION USING A RISK SCORE TECHNIQUE

10 6 3 2 1 Risk level 10 6 3 1 0.5
3 2 1 Risk level 10 6 3 1 0.5
2 1 Risk level 10 6 3 1 0.5
1 Risk level 10 6 3 1 0.5
Risk level 10 6 3 1 0.5
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6 3 1 0.5 Risk level
6 3 1 0.5 Risk level
1 0.5 Risk level 100
0.5 Risk level
Risk level
100
40
7
3
1
coperation or activity ction needed needed eded
e า

BASELINE RISK ASSESSMENT WORKSHEET: IDENTIFYING EXISTING & POTENTIAL RISKS

	Activity	Hazard	Risk		Risk		Risk	Risk
				Ev	aluati	on	Score	level
				Е	Р	S		
1	Site establishment							
2	Manual and mechanical clearing of the land. Off-loading and positioning of containers by mobile crane. Fencing. Installation of temporary water supply, electricity, ablution facilities Site clearing	 Incompetent construction mobile plant operator. Manual Handling of equipment and materials. Uneven surfaces. Driving on dangerous and undulating terrain. Reckless driving. Electrocution. Incorrect/poor connection of temporary services 	Body injuries/ Accidents. Destruction of services. Burns/ death	6	6	7	252	4

	Clearing of the site using construction mobile plant and hand tools	 Incompetent driver/ operator; Unsafe construction mobile plant/ hand tools; Petrol and oil spillages; Existing services; Noise 	Accident; property damage; machinery running out of control; Injury to body; Environmental contamination; Noise induced hearing loss	3	6	7	126	3
3	Structures	T	T			1		
	 Construction of structures 	 Collapsing of structures. Lack of supervision 	Body injuries/ death	6	6	7	252	4
4	Temporary works	·	1		•	1	•	
		Collapsing of temporary structure. Unsafe erection of temporary structure. Incompetent supervision or planning	Death/ injury to employees	6	6	7	252	4
5	Roof work					1		
	 Construction of 	 Working on 	 Falling from; 	6	6	7	252	4

	roof	fall risk position; Unsafe roof access; Untrained roof erectors; No/ poor roof work planning; Collapsing of the roof; Falling objects	Falling into; broken borne; death; disablement; Head injuries					
6	Electrical installation	Incompetent personnel. Unsafe hand-tools/electrical tools. Unsafe ladder. Electrocution	• Improper installation of electricity/ non-compliance with safety standards. Injury to hands. Burns; electric shock	3	3	7	63	2
7	Excavation work	L				1		
	Manual and mechanical excavation	 Unsafe hand tools; Unsafe construction mobile plants; Uneven surface/ ground condition; Incompetent construction 	 Broken borne; dislocation; Accidents; injuries to hands; Falling into excavation; Ground contamination 	3	3	3	27	2

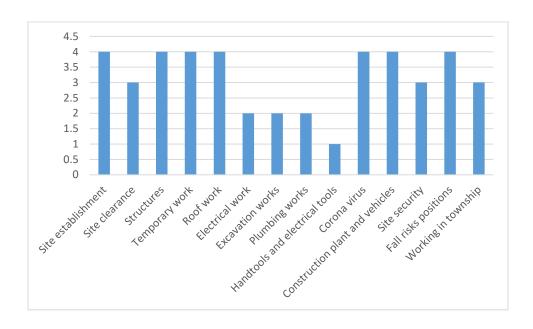
		mobile plant operator; Oil leak; Unforeseen underground services						
8	Plumbing works	Unsafe hand	 Injury to hands. 	3	3	3	27	2
		tools. Falling into excavation. Unprotected excavations	Broken borne/ dislocation. Fall risks					
9	Use of hand-tools and elec	trical tools					_	_
	 Conducting activities using hand-tools and electrical tools 	 Unsafe hand- tools/ electrical tools. Possible of pinch 	 Injury to hands 	6	3	1	18	1
10	COVID19			•	•	•		
	Transportation of employees. Use of site facilities and hand-tools. Preforming construction work. Employee screening. Meeting/ toolbox talks	 Overloaded construction/public vehicles. Noncomplianc e with transport use guidelines. Sharing of facilities and hand tools. Failure to use/ 	 Employees or public could be infected with COVID19 virus/ Contracting COVID19 virus or death/ COVID19 could spread. Could be arrested or fined 	6	6	7	252	4

		provide disinfectants. Virus contaminated facilities and tool. Noncomplianc e with stipulated workplace guidelines. Being in an enclosed place. Lack of protective gear. Failure to apply						
11	Construction mobile plants	distancing and vehicles						
11	Use of	Unsafe	Accidents; injury	6	6	7	252	4
	construction vehicles and mobile plants and equipment	construction plants and equipment. Incompetent drivers or operators. Oil leaks	to employees and public; death; disablement; damage to property. Environmental contamination	6	6	,	232	4
12	Site security							
		Unguarded site camp	 Loss of material and equipment/ 	6	6	3	108	3

13	Working in a fall risk positions		financial risks/ theft/ unlawful invasion or damage new of houses					
		Falling intoFalling fromMedical unfitUntrained person	Broken borne/ disablement/ death	6	6	7	252	4
14	Working in a township							
		 Public exposure to construction activities; community unrest; fighting over resources 	 Injury to body; work stoppage; Legal claims 	6	6	3	108	3

RISK PROFILE:

Construction of 59Nr dwelling units, 3Nr ablution units with water connection/ wash area and waste collection facility 1H-46321



ETHEKWINI MUNICIPALITY Occupational Health & Safety Unit



COVID19 HEALTH AND SAFETY SPECIFICATION

Document Title	COVID19 Health & Safety Specification
Client	eThekwini Municipality – Human settlements
Project Name	Construction of 59Nr dwelling units, 3Nr ablution units with water connection/ wash area and waste collection facility
Contract Number	1H-46321
Internal Reference no.	05/01/2021
Compiled by (Safety officer)	Name and surname: Siya Nkosi Signature: Date: 18/01/2021
Reviewed by (Manager: Safety& Risk)	Name and surname: Arty Zondi Signature: Date: 18/01/2021



COVID 19 HEALTH AND SAFETY SPECIFICATION

Background:

Corona viruses are a large family of viruses that are found both in humans and animals. Some of these viruses are known to cause illnesses ranging from common cold to severe respiratory diseases. Corona virus (COVID-19) was identified in December 2019 in China. COVID-19 infections have spread to other countries in the world. Exposure to Covid-19 may cause flue like symptoms such as coughing, sneezing, headaches, fever, sore throat and at times affect the lungs and airways of employees. Symptoms can be mild, moderate, severe or fatal.

Coronavirus Disease 2019 (COVID-19) is a respiratory disease caused by the SARS-CoV-2 virus. To reduce the impact of COVID-19 outbreak conditions on businesses, workers, customers, and the public, it is important for all employers to plan now for COVID-19. For employers who have already planned for influenza outbreaks involving many staff members, planning for COVID-19 may involve updating plans to address the specific sources of exposure, routes of transmission, and other unique characteristics of SARS-CoV-2 (i.e. compared to influenza virus outbreaks).

Introduction

The legislation governing workplaces in relation to COVID-19 is the Occupational Health and Safety Act, Act 85 of 1993, as amended, read with the Hazardous Biological Agents Regulations. Section 8 (1) of the Occupational Health and Safety (OHS) Act, Act 85 of 1993, as amended, requires the employer to provide and maintain as far as is reasonably practicable a working environment that is safe and without risks to the health of employees. Specifically, section 8(2)(b) requires steps such as may be reasonably practicable to eliminate or mitigate any hazard or potential hazard before resorting to Personal Protective Equipment (PPE). However, in the case of COVID-19, a combination of controls is required, although the main principle is to follow the hierarchy of controls.

While engineering and administrative controls are considered more effective in minimizing exposure to SARS-cov-2, PPE may also be needed to prevent certain exposures. While correctly using PPE can help prevent some exposures, it should not take the place of other prevention strategies

This is a risk assessment for dealing with the current COVID-19 situation in the construction site. It may not likely to cover all scenarios therefore Construction Management should develop Standard Operating Procedures as there may be unique circumstances and make a necessary call in the interest of the health and safety of employees

This is a risk assessment for dealing with the current COVID-19 situation in the construction site. It may not likely to cover all scenarios therefore management should develop SOP's as there may be unique circumstances and make a necessary call in the interest of the health and safety of Contractor employees

Definitions

"BCEA" means the Basic Conditions of Employment Act, 1997 (Act No.75 of 1997)

"COVID-19" means Coronavirus Disease 2019

"Disaster Management Act" means the Disaster Management Act, 2002 (Act No.57 of 2002)

"OHSA" means the Occupational Health and Safety Act, 1993 (Act No.85 of 1993)

"PPE" means personal protective equipment

"virus" means SARS-Cov-2 virus

"Worker" means any person who works in an employer's workplace including an employee of the employer or contractor, a self-employed person or volunteer

"workplace" means any premises or place where a person performs work

"NICD" means National Institute for Communicable Diseases

"OMP" means Occupational Medical Practitioner

COVID 19 Risk Assessment:

➤ The Contractor must ensure that COVID 19 Risk Assessment (COVID 19 Health and Safety Plan) is conducted and submitted to the Client prior to the commencement of

- the construction work, it must be in line with the Client COVID 19 Health and Safety Specification.
- ➤ The Contractor must appoint COVID 19 Compliance Manager to ensure that all necessary COVID 19 safety precautions are implemented to prevent the spread.

Training and awareness:

- ➤ The Contractor must ensure that all employees are inducted on COVID19 contractor risk assessment to prevent the spread.
- > The Contractor must ensure that the employees are trained on COVID 19 to prevent the spread of the virus, training records must be kept in the Safety File.
- ➤ COVID-19 Direction on Health and Safety in the Workplace Government Gazette dated 29 April 2020, must be used as guideline and be customized to specific construction site.
- The Contractor must provide workers with information that raises awareness in any form or manner, including where reasonably practicable leaflets and notices placed in conspicuous places in the workplace informing workers of the dangers of the virus, the manner of its transmission, the measures to prevent transmission such as personal hygiene, social distancing, use of cloth masks, cough etiquette and where to go for screening or testing if presenting with symptoms.

Hand Hygiene:

- > The Contractor must provide adequate facilities for the washing of hands with soap and clean water on each construction site.
- ➤ The Contractor must provide 70% alcohol-based hand sanitizers at strategic points of the construction site.
- The Contractor must paper towels to dry hands after hand washing.

Cleaning and Disinfecting surfaces:

- ➤ The Contractor must take measures to ensure that all work surfaces and equipment are disinfected before work begins, regular during the working period and upon completion the work.
- ➤ The Contractor must ensure frequently cleaning and disinfecting objects and surfaces that are touched regularly particularly in areas of high use such as shared tools, taps, ablution facilities, hand rails light switches, eating and changeroom areas, shared construction vehicles, etc. using appropriate disinfecting solutions such clean water, soap and bleach

Social Distancing:

- The Contractor must arrange the construction site to ensure minimal contact between workers and as far as practicable that there is a minimum of 1,5meter distance between workers while they are working. employees are aware to maintain social distance when working.
- > The Contractor must ensure that social distancing measures are implemented through supervision of both the construction site and in the common areas outside the workplace, through queue control or within the workplace, these measures may

- include dividing the workers into groups or staggering break times to avoid the concentration of workers in common areas.
- The Contractor must ensure that where the minimum distance is impossible employees must always be instructed to wear cloth mask/FFP1/2 mask or reducing the number of workers present in the construction site at any time to achieve the required social distancing.
- ➤ The Contractor must ensure that employees working in offices are provided with physical barriers placed between work their workstations

Personal Protective Equipment (PPE)

- ➤ The Contractor must ensure that every worker is provided with two cloth masks to be worn when in workplace or public which comply with the requirement set out in the guideline issued by Department of Trade, Industry and Competition.
- ➤ The main benefit of everyone wearing a cloth mask is to reduce the amount of virus droplets being coughed up by those with infection and transmitted to others and to surface that others may touch.
- > Every Contractor must ensure that workers are informed, instructed, trained and informed as to the correct use of cloth mask.
- ➤ The Contractor must ensure to issue face shield/visors where applicable as double protection

Point of entry screening

- ➤ The Contractor must identify the screening area for each construction site.
- ➤ The Contractor must ensure that the daily point of entry screening is conducted when entering construction site by a person nominated by the Contractor.
- ➤ The Contractor must ensure that all employees and visitors are screened and only those with all clear will be given clearance to carry on with construction work.
- The Contractor must ensure that during the screening a 1.5 m distance is maintained and FFP1/2 mask to be worn by a nominated person.
- ➤ The Contractor must ensure that the screening person is trained.
- ➤ The Contractor must ensure that a bottle of sanitiser is available at the screening area.
- ➤ The Contractor must ensure that the thermal device are provided during the screening process.
- ➤ The Contractor must ensure that all employees complete a COVID 19 Questionnaire which will be used to screen potential risk personnel entering the construction site.

Symptomatic employees

- The Contractor must ensure that any person who ticks YES to one or more symptoms will be sent home and be advised to seek testing by a healthcare provider.
- > The Contractor must ensure that employees who are sick with continuous cough, sore throat, difficulty breathing, or a high temperature in the workplace will be encouraged to stay home.

- ➤ The Contractor must ensure that the positive tested COVID 19 case, the employee is on paid sick leave in terms of section 22 of BCEA or if the employee's sick leave is exhausted, the Contractor shall apply for an illness benefit.
- ➤ The Contractor must ensure that employees confirmed to have COVID 19 will be managed in line with National Department of Health COVID 19 guidelines.
- ➤ The Contractor must isolate the worker with confirmed COVID case and issued him/her with FFP2 or surgical mask, arrange for the worker to be transported for further medical examination or testing, in a manner that does not place other workers or members of the public at risk
- ➤ The Contractor must ensure that the driver who is transporting the Person Under Investigation is provided with surgical mask or FFP2 mask.
- ➤ The Contractor must assess the risk of transmission, disinfect the work area and refer those workers who may be at risk for screening to prevent possible transmission.
- ➤ The Contractor must advise the Communicable Disease Centre (CDC) so that other contacts be identified and be investigated
- ➤ The Contractor must ensure that tested positive for COVID 19 is not discriminated in terms of Employment Equity Act no. 55 of 1998.
- ➤ The Contractor must ensure0 that if there is evidence that the worker contracted COVID 19 as a result of occupational exposure, lodge a claim for compensation in terms of the Compensation for Occupational Injuries and Diseases Act no. 130 of 1993.
- ➤ The Contractor must ensure that if a worker has been diagnosed with COVID 19 and isolated in accordance with the National Department of Health Guidelines, a Contractor may only allow a worker to return to work on the following conditions, the worker has undergone a medical evaluation confirming that the worker has been tested negative for COVID 19.

Emergency Numbers

- Corona virus (COVID-19) 24-Hour Hotline number:0800 029 999
- Corona virus (COVID-19) WhatsApp Number: 0600 12 3456
- COVID-19 National Crisis Helpline 0861 322 322
- NICD (National Institute of Communicable Diseases) 24-Hour toll-free hotline number: 0800 029 999 or 0800 111 132
- > SAPS gender-based violence service complaints (SAPS) 0800 333 177
- ➤ GBV (Gender Based Violence) Command Centre -0800 428 428/ *120*7867# (free from any cell phone)/ SMS Line: 32312
- Women Abuse Helpline 0800 150 150
- ➤ People Opposing Women Abuse (POWA) Tel: 011 642 4345/ Afterhours cellphone: 0837651235
- > Child Line 0800 055 555
- Lifeline South Africa 0800 012 322 (free on mobile networks including landlines)
- FAMSA Advice on family relationships 011 975 7107
- ➤ Human trafficking Report cases of human trafficking hotline operated by the Salvation Army and Be Heard 08007 37283 (0 8000-rescue)
- National Human Trafficking Helpline 0800 222 777
- Persons with Disabilities SMS 'help' to 31531

- National AIDS Helpline 0800 012 322
- Suicide Helpline 0800 567 567
- ➤ Stop Gender Violence Anonymous, confidential and accessible telephonic information, counselling and referrals, in all 11 official languages 0800 150 15
- Substance Abuse Helpline 0800 12 13 14

Recommended Best Practice

- The Contractor must ensure that vulnerable and 60 years old workers are identified and received a special measure for their protection.
- ➤ The Contractor must ensure that for communication strategy Microsoft Team, ZOOM or Skype or cell phones are used to prevent the spread of COVID 19 virus.
- ➤ The Contractor must ensure to keep the workplace well ventilated by natural or mechanical means to reduce the SARS CoV 2 viral loads.

Returnable:

When submitting your safety file for approval, please ensure that the following documents are attached:

- COVID19 Health Risk Management Plan signed by 16(1) or 16(2) Chief executive officer or assistant Chief executive officer
- ➤ COVID19 Policy signed by 16(1) Chief executive officer
- ➤ COVID19 Manager appointed in writing preferable any person who is conversant and with influence on site.
- COVID19 Risk assessment, outlining all the processes as detailed on your COVID19 Health Risk Management Plan

References

- COVID-19 Disaster Management Act
- Occupational Health & Safety Act 85 of 1993
- The Department of Employment and Labour: Workplace Preparedness: COVID-19 (SARS-CoV-19 virus)
- COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2020
- Hazardous Biological Agents Regulations
- National Institute for Occupational Health (NIOH)

N.B. This Specification must be read in conjunction with the OHS Directive issued by Department of Employment and Labour.

COMPANY LOGO

Covid-19 access into construction site, point of entry screening questionaire

Co No:	Company / Construction Site:		-
Question: 1. Have you had flu or symptoms of flu in the last few weeks? 2. Do you have a persistent cough that has started in the last few days? 3. Do you have symptoms of fever? (red, tearing or burning eyes, sweats, clammy hands)? 4. Do you have any signs of a respiratory infection, shortness of breath, difficulty breathing? (Self-test: Hold in your breath for 10 seconds) 5. In the last 14 to 21 days, have you travelled outside the borders of South Africa? 6. In the last 14 to 21 days, have had contact with anybody that has travelled outside the Provincial or South African borders? 7. Have you been near or in contact with anyone who has symptoms or tested positive for COVID-19? If you have answered yes to any of the above questions, please inform your supervisor immediately. Brief description of events (When, where and who else were you with: Personal Commitment I further undertake to immediately report any change in my medical condition to my supervisor/manage I will always maintain excellent personal and company hygiene standards! I will maintain and keep the minimum social distance of 1m between myself and other employees! I will ensure all equipment / materials handed over to another person has been cleaned and sanitizer I will ensure all equipment / materials handed over to another person has been cleaned and sanitizer I will ensure all equipment / materials handed over to another person has been cleaned and sanitizer I will ensure all equipment / materials handed over to another person has been cleaned and sanitizer I will ensure all equipment / materials handed over to another person has been cleaned and sanitizer I will ensure all equipment / materials handed over to another person has been cleaned and sanitizer I will ensure all equipment / materials handed over to another person has been cleaned and sanitizer I will ensure all equipment / materials handed over to another person has been cleaned and sanitizer I will ensure all equipment / materials handed over to another person has been	Name and Surname:0	Co No:	
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ETHEKWINI MUNICIPALITY Occupational Health & Safety Unit



Site Specific Health and Safety Specification in terms of 2014 Construction Regulations 5.1(b)

Document Title	Site Specific Health and Safety Specification
Client	EThekwini Municipality Human Settlements Unit
Project Name	Construction of 59Nr dwelling units, 3Nr ablution units with water connection/ wash area and waste collection facility
Contract Number	1H-46321
Internal Reference no.	SSHSS208/01/2021
Compiled by (Safety officer)	Name and surname: Siya Nkosi Signature: Date: 18/01/2021
Reviewed by (Manager: Safety& Risk)	Name and surname: Arty Zondi Signature: Date: 18/01/2021

PROJECT LOCALITY

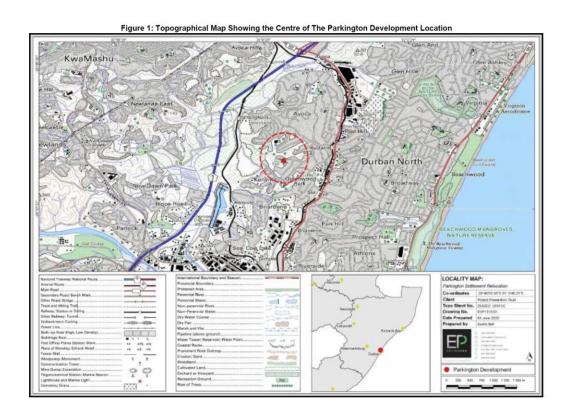


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1. PROJECT DESCRIPTION (Works) AND SITE ACCESS

The works to be constructed consists 59 dwellings of 4 types, three Mini Communal Ablution Blocks, three Water Collection Wash Area, a Waste Collection Facility, and the connection of the Ablution blocks and Wash areas to the water and sewer network.

The project scope will be done in a single phase. The Contractor is required to programme construction activities such that are constructed in such a manner as not to cause any contractual claims and delays.

As the main Contractor in possession of the Site, he shall induct all other sub-contractors' staff and labourers regarding health and safety risks on site.

The contractor will be required to complete the following:

- Dwelling Type D 15.4m2 n=15
 Dwelling Type A 30 m2 n=32
 Dwelling Type E 34.5m2 n=8
 Dwelling Type G 44m2 n =4
 Communal Ablution Blocks n=3
- Water collection and wash areas n=3
- Refuse Collection Facility n=1
- Connection of the Communal Ablution Blocks and wash areas to the water reticulation and sewers installed under the previous services contract.
- Execution of the process of relocating Employer nominated relocatee households from their existing shack into the completed relocation units and the removal of the shack with the clearance of the vacated site.

The Architect will provide the Contractor with all setting out information and relevant data for the contractor to accurately set out and construct the works. The Contractor will appoint a Surveyor to set out the units positions in accordance with the design which will be inspected and approved by the Architect prior to the commencement of construction. (this may be done in Phases). Such allowances have been made for in the Bill of Quantities.

The contractor is to note that the construction shall require decanting the selected unit residents in the adjacent settlement into the completed dwellings. In this respect the Employer shall notify the Contractor regarding which household/ unit from the adjacent informal settlement is to occupy which newly constructed unit on the relocation site. The contractor shall be responsible for: (i) ensuring the relocation of the all occupants of the shack to be demolished, (ii) assisting with the transportation of all households goods from the relocated dwelling into the replacement unit; (iii) the immediate and careful dismantling of the vacated shack; (iv) the transportation and disposal of the shack materials as directed by the Employer.

Furthermore, the contractor shall be responsible for ensuring that the vacated site is cleared of all debris and clearly demarcated by means of wooden stakes and danger tape (to help managing the prevention of re-occupation of the vacated site). Provision for these activities has been made in the Bill of Quantities.

The 59 households taking occupation of the Alternative Emergency Housing Units are each to be provided with the knowledge needed to maintain and improve the units they have been allocated. To this purpose the Employer will provide the Contractor with an instructional booklet (in English) but the Contractor shall be responsible for the distribution of this material to each occupant and the associated verbal instruction and demonstrations needed to imbed this knowledge. Provision for these activities has been made in the Bill of Quantities.

2. LIMITATIONS OF LIABILITY

The Principal Contractor shall enter into a Mandatory Agreement with the Client, as defined in Section 37(2) of the Occupational Health and Safety ACT.

The Principal Contractor shall ensure that each contractor appointed by the Principal Contractor and each sub-contractor appointed by a contractor also into a Mandatory Agreement with the Principal Contractor, as defined in Section 37(2) of the Occupational Health and Safety ACT. These agreements shall be included in the Principal Contractor's H&S File on site and be valid for the duration of the contractors' work on the construction site.

3. PURPOSE OF THE CONSTRUCTION H&S SPECIFICATION

This document defines the minimum management requirement that is to be implemented by the Principal Contractor/ Contractor for the management of Health and Safety on any eThekwini Municipality project. The aim of this document is to present the health and safety aspects that need to be controlled and managed on the project. This Health and Safety specification identifies and encompasses the working behaviours and safe work practices that are expected of all employees, Vendors and Contractors, Sub-Contractors and Visitors, engaged on construction site. Providing a guideline to comply with best Health & Safety practices and the Occupational Health and Safety Act85/1993 as amended, including reference to applicable legislative requirement.

4. PROJECT HEALTH AND SAFETY COST

The Client must ensure that potential Principal Contractor submitting tenders have made adequate provision for the cost of health and safety measures.

The Principal Contractor shall allow in their cost provision for complying with the requirements of this Construction Health and Safety Specification; resources for the following Health and Safety controls shall be in place.

NO.	H&S cost item	Description		
1.	Construction Health and Safety Officer	A Construction health and safety officer with an experience of at least 2 years is required to ensure that the health and safety plan is implemented on site.		
2	Medical certificate of fitness	Medical examination of all employees and certification of fitness by an Occupational Medicine Practitioner		
3	Personal Protective Equipment	Personal Protective Equipment to be provided as per risk exposure, including but not limited to: respiratory protection, hearing protection, hand protection, eye and face protection and fall protection		
4	Public protection	To reduce risk exposure to the employees and members of the public		
5	Employee facilities	Drinking water, ablution toilets ect.		
6	Trainings and competency	Risk assessor, Working at height, Fall protection Planner, Incident Investigator and Fire fighter, First aider, Scaffolding, temporary works, excavations		
7	Safety file	Full completed with all supporting documents		
8	Health and safety signage	All construction necessary signage that may be required		
9	Environmental management	Protection of ground/ soil, water, air ect.		
10	COVID19	All requirement for prevention of COVID19 (Training and awareness, PPE, testing and screening ect.)		
11	Electrical installation	Electrical controller; electrical safety measures ect.		
12	Other	Items not indicated in the Specification		

5. SCOPE OF WORK

The works/ risk assessments must broadly include but not limited to:

Site establishment

Site clearing

Structures

Temporary work

Roof work

Construction vehicle and mobile plants

Working in a fall risk position

Electrical work

Excavation work

Plumbing works

Corona virus

Site security

Working in township/public safety

Use of hand-tools and electrical tools

6. COMPENSATION FOR OCCUPATIONAL INJURIES AND DISEASES ACT

The Principal Contractor, each contractor and each sub-contractor shall submit proof of Good Standing with COIDA Commissioner or a Mutual Association licensed in terms of Section 30 of COIDA, prior to starting any work on site. A copy of the Letter of Good Standing with COIDA Commissioner must be included in the H&S Plan of each contractor working on the site and must remain updated for the duration of the construction work.

7. NOTIFICATION OF CONSTRUCTION WORK

The Principal Contractor must at least 7 days before that work is to be carried out notify the provincial director in writing in a form similar to Annexure 2 if the intended construction work

will-

Include excavation work;

Include working at a height where there is risk of falling;

Include the demolition of a structure; or

Include the use of explosives to perform construction work.

A contractor who intends to carry out construction work that involves construction of a single storey dwelling for a client who is going to reside in such dwelling upon completion, must at least 7 days before that work is to be carried out notify the provincial director in writing in a form similar to Annexure 2.

8. MANAGEMENT AND SUPERVISION OF CONSTRUCTION WORK

For the approval of the safety file, please ensure that the following appointments are submitted with the file:

- Construction manager CR8(1)
- Construction work supervisor CR8(7)
- Construction health and safety officer CR8(5)
- Risk assessor CR9(1)
- Incident investigator GAR9(2)
- Fall Protection Planner CR10(1)
- Electrical installation controller EIR5(4)
- COVID19 Manager
- Temporary work supervisor
- Structures supervisor
- Excavation supervisor

8.1 Construction Manager

The Principal Contractor shall appoint in writing a full time competent person as the construction manager with the duty of managing all construction on the site including the duty of ensuring occupational health and safety compliance. The Construction Manager must demonstrate competency in relation to work being performed and the ability to manage construction work, which may include making all statutory appointments in terms of health and safety.

8.2 Construction health and safety officer

The Principal Contractor shall appoint a competent Construction Health and Safety Officer for the construction work, with at least 2 years of experience in the construction industry as a construction health and safety officer.

8.3 Construction supervisor

A Construction Manager must in writing appoint construction supervisors responsible for construction activities and ensuring occupational health and safety compliance on the construction site. A contractor must, upon having considered the size of the project, in writing appoint one or more competent employees for different sections thereof to assist the construction supervisor contemplated in sub regulation (7), and every such employee has, to the extent clearly defined by the contractor in the letter of appointment, the same duties as the construction supervisor: Provided that the designation of any such employee does not relieve the construction supervisor of any personal accountability for failing in his or her supervisory duties in terms of this Regulation.

9. PRINCIPAL CONTRACTOR'S HEALTH AND SAFETY PLAN

The Principal Contractor shall submit a suitable, sufficiently documented and coherent specific health and safety plan based on the Client documented Health and Safety Specification. The health and safety plan shall include but not limited to the following:

- Objectives
- Scope of work
- Management of construction and supervision
- Monitoring and review plan
- Sub-contractor management
- COIDA
- Risk Assessment &safe working procedures
- Incident management
- First aid
- Fall protection plan
- Emergency procedures
- Fire prevention & protection
- PPE provision
- Health & safety signage
- Construction vehicles and mobile plants
- Hand tools management
- Electrical tool management
- Electrical installation on construction site
- Construction employee's facilities
- Health & safety policies
- Health and safety training & competencies
- Housekeeping
- Hazardous chemicals
- Inductions
- Medicals
- Stacking and storage
- Internal and external audit
- Inspection registers
- Toolbox talks
- Site establishment
- Structures
- Temporary work

- Working in township
- Roof work
- Corona virus
- Site security

10. HAZARD IDENTIFICATION AND RISK ASSESSMENT

The Principal Contractor shall before commencement of any construction and during such construction works have risk assessments performed by appointed competent person in writing which forms part of the health and safety plan to be applied.

The provisions of Regulation 9 of the Construction Regulations shall be followed in every detail.

11. HEALTH AND SAFETY FILE

The Client must discuss and negotiate with a Principal Contractor the content of the Health and Safety Plan and thereafter finally approve the Health and Safety plan for implementation. The recommended Health and Safety file shall include the following:

- SHE policy
- PPE policy
- COVID19 Policy
- Notification of Construction work
- Client health & safety specification and Baseline
- Principal contractor health & safety plan
- COVID19 Health Risk Management Plan
- Letter of good standing
- Section 37.2 Mandatory Agreement
- Contractor appointment letter in terms of CR 5.1(k)
- Legal appointments and competencies
- Risk Assessments as per scope of work
- COVID19 Risk assessment
- Safe working procedures as per risk assessment
- Incident/Accident management procedures
- LOA from SCM
- Organogram as per appointments
- Copy of OHS Act, Construction Regulations 2014 ect.
- Environmental management procedures
- Induction programme
- Emergency procedures
- Medical certificate of fitness

- Tool box talks programme/ Plan
- Fall protection plan
- Roof work methodology (MUST be done by Construction manager NOT safety officer)
- Proof of registration with Department of Employment and Labour as an electrical contractor

12. CLOSE- OUT CONSOLIDATED HEALTH AND SAFETY FILE

The Principal Contractor shall compile a consolidated H&S file and hand over to EThekwini municipality, Human settlements Unit (Project manager). OHS Unit will conduct a project close out using the appropriate checklist before the completion of the project. The closeout file forms part of the project completion requirements for the retention payment.

13. HEALTH AND SAFETY TRAINING

The Principal Contractor shall ensure that employees are trained on health and safety measures this shall include but not limited to:

- Written safe working procedures
- Risk assessments
- Health and safety plan and other policies
- COVID19 awareness
- Emergency procedures/ Plan
- Incident management procedures
- Environmental management procedures
- Fall protection plan
- Induction
- Toolbox talks
- MSDSs
- Roof work methodology

14. INCIDENTS MANAGEMENT & FIRST AID

All incidents and accidents as per Section of the Act must be reported, recorded and investigated as per General Administration Regulation 8 & 9. Where a fatality or permanent disabling injury or incident occurs on the Construction site, the Client must ensure that the Principal Contractor provides the Provincial Director with a report contemplated in Section 24 of the Act and the report includes the measures that the Principal Contractor intends to implement to ensure a safe construction site.

15. HEALTH AND SAFETY AUDITS

The Client must ensure that periodic health and safety audits are conducted at intervals mutually agreed upon between the Principal Contractor and the Client at least every 30 days, the copy of the health and safety audit report must be provided to the Principal Contractor within seven days after the audit.

16. FIRE PRECAUTIONS ON CONSTRUCTION SITE

The Principal Contractor shall provide suitable fire extinguishers which shall be serviced regularly in accordance with the manufactures recommendations. Safety signage shall be prominently displayed in all areas where fire extinguishers are located. The Principal Contractor shall arrange for training of the relevant personnel, in the use of fire extinguishers.

The provisions of Regulation 29 of the Construction Regulations as well as Regulation 9 of Environmental Regulation for Workplaces shall be followed in every detail.

17. ELECTRICAL INSTALLATIONS AND MACHINERY ON CONSTRUCTION SITE.

The Principal Contractor shall designate a competent electrician in writing who shall control all electrical installations. All temporary electrical installations used by the contractor are inspected at least once a week by a competent person and the inspection findings are recorded in a register kept on the construction site. All Electrical machinery is inspected by the authorized operator or user on daily basis using a relevant checklist prior to use and the inspection findings are recorded in a register kept on the construction site.

The provisions of Regulation 5, 6 & 9 of the Electrical Installation Regulations shall be followed in every detail.

18. PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

The Principal Contractor shall ensure that every employee is issued with, and wears SANS-approved P.P.E. as per the conducted risk assessment. Failure to use protective equipment as per the risk assessment shall require disciplinary intervention and this process shall be documented in the induction. No employer shall in respect of anything which he is in terms of this Act required to provide or to do in the interest of health or safety of an employee make any deductions from any employee's remuneration or require or permit any employee to make any payment to him or to any other person.

The provisions of Regulation 2 of the General Safety Regulations shall be followed in every detail.

19. OCCUPATIONAL HEALTH AND SAFETY SIGNAGE

The Principal Contractor shall erect and maintain quality safety signage. The signage shall include but is not limited to:

- The construction work permit number displayed at the entrance
- Access restrictions
- A sign indicating that all visitors must report to the site office and must be accompanied by the Principal Contractor when accessing the site
- The name and telephone number of the responsible person(s)
- Emergency telephone number(s)
- PPE to be worn at the particular site
- When falling objects may occur, relevant barricading and warning signs must be erected
- Excavations, heights structures, temporary structures and all risk areas must be indicated as per the specific methods defined in the H&S Plan.

20. DUTIES OF PRINCIPAL CONTRACTORS AND CONTRACTORS

Contractors and sub-contractors must be given a copy of the H&S specification and any additional specification issued by the Client and shall comply with these specifications integrally. All employers working on the site shall conform to the standard in the CHSS. All the duties of the Principal Contractor in this CHSS equally apply, in full, to contractors of such Principal Contractor and to sub-contractors of such contractors. The Principal Contractor shall ensure that the comprehensive and updated list of all the contractors and sub-contractors on site includes:

- A reference to the agreements between the parties, including all contractors Section 37(2) agreements with the Principal Contractor
- The type of work being done
- The date of the approval of the H&S Plan
- The date of expiry of the COIDA certificate of good standing
- The date of the last monthly audit

The provisions of Regulation 7 of the Construction Regulations shall be followed in every detail.

21. FALL PROTECTION PLANNING

The Principal Contractor shall ensure that the fall protection plan include a risk assessment for all work carried out from the fall risk position and the safe work procedures. All employees working from fall risk position are subject to medical examination. The Training Program must be in place for employees working from a fall risk position. The procedures addressing the inspection, testing and maintenance of all fall risk protection equipment. The rescue plan detailing procedure, personnel and suitable equipment to be used to rescue a person. The Principal Contractor must that a competent person is designated to be responsible for the preparation of the fall protection plan.

The provisions of Regulation 10 of the Construction Regulations shall be followed in every detail.

22. STRUCTURES

A contractor must ensure that all reasonably practicable steps are taken to prevent the uncontrolled collapse of any new or existing structure or any part thereof, which may become unstable or is in a temporary state of weakness or instability due to the carrying out of construction work; No structure or part of a structure is loaded in a manner which would render it unsafe; All drawings pertaining to the design of the relevant structure are kept on site and are available on request to an inspector, other contractors, the client and the client's agent or employee.

23. SCAFFOLDING AND WORKING IN A FALL RISK POSITIONS

The Principal Contractor must appoint a competent person in writing who must ensure that all scaffolding work operations are carried out under his or her supervision and that all scaffold erectors, team leaders and inspectors are competent to carry out their work.

Scaffold erectors and inspectors must be formally trained and certified competent such training must conform to the requirements of SANS 10085. Scaffolds must be clearly tagged with safe access signage, scaffolds must be inspected daily prior to use and weekly by the scaffold inspector. All scaffolds on site must be individually identified and display a safe / not safe sign. Inspections by the scaffold inspector must be documented on the scaffold tag and in a register; a template of the tag and of the register shall be included in the H&S Plan. All scaffolds must be accessed with a ladder only. Ladders must be inside the scaffolds and hatches must be close ladder — openings in decks. All scaffold decks must be fully covered and barricaded so as to prevent persons working there from falling off. Scaffold erectors must attach a fall prevention harness at all times; the double lanyards must be fitted with scaffold hooks only. Where a Principal Contractor is using access trestles must be in compliance with General Safety Regulation 6

The provisions of Regulation 16 of the Construction Regulations shall be followed in every detail.

24. CONSTRUCTION EMPLOYEES FACILITIES

The Principal Contractor shall provide at or within reasonable access of every construction site, the following clean, hygienic and maintained facilities:

- (a) Shower facilities after consultation with the employees or employees representatives, or at least one shower facility for every 15 persons;
- (b) at least one sanitary facility for each sex and for every 30 workers;
- (c) changing facilities for each sex; and
- (d) sheltered eating areas.

The provisions of Regulation 2, 3, 4, 6, 7, 9 of the Facilities Regulations shall be followed in every detail.

25. STORAGE AND USE OF FLAMMABLE LIQUIDS

No flammable substances must be stored on site unless these are stored in a flammable store or cabinet approved by the Municipal Chief Fire Officer, no other materials shall be stored in the flammable store or cabinet. Where required the H&S Plan shall include a method statement detailing the safe use, storage, decanting and spill controls for all flammable liquids used and stored on site.

The provisions of Regulation 25 of the Construction Regulations shall be followed in every detail.

26. HAZARDOUS CHEMICAL SUBSTANCE

With respect to hazardous chemical substances used, the contractor shall ensure that:

- All MSDS are included in the H&S File
- A HCS risk assessment is included in the H&S Plan
- The safe use, storage, emergency procedures and safe disposal of hazardous substances are addressed in a method statement(s) included in the H&S Plan.
- Proof of competency and signed letters of appointment of the person responsible for chemical handling is included in the H&S File.

Any hazardous chemical substance intended to be applied on site during the project (i.e. after approval of the H&S Plan) shall be subject to an issue-based risk assessment and method statement which must be presented to the Client Agent prior to the substance being introduced on site.

The provisions of Regulation 3, 5, 7, 8, 9, 9A, 10, 11, 14, 15 of the Hazardous Chemical Substances Regulations shall be followed in every detail.

27. HOUSEKEEPING AND GENERAL SAFE GUARDING ON CONSTRUCTION SITE

The Principal Contractor shall appoint a person responsible for general housekeeping and stacking and storage of materials and equipment on the entire site.

The provisions of Regulation 27 of the Construction Regulations shall be followed in every detail.

28. CONSTRUCTION MEDICALS

A Principal Contractor must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an Occupational Health Practitioner in the form of Annexure 3.

29. HEALTH AND SAFETY REPRESENTATIVE AND SHE COMMITTEE

Health and Safety Representatives

- The Principal Contractor shall ensure that Health and Safety Representatives are appointed in writing and exercise their functions as defined in OHSA.
- The Principal Contractor shall elect and appoint a health and safety representative regardless of the number of employees on the site.
- The H&S representative shall at all times be on site and report to the Health and Safety Officer and Construction Manager.

Health and Safety Committee

- The Principal Contractor shall ensure that the H&S committee meets on a monthly basis
- The Principal Contractor's management and each contractor shall be represented at the H&S committee meeting; contractors with more than 20 employees shall have an H&S representative at each committee meeting and each contractor shall have a management member attending each H&S committee meeting.

30. STACKING AND STORAGE ON CONSTRUCTION SITE

A Principal Contractor must, in addition to compliance with the provisions for the stacking of articles in the General Safety Regulations, 2003, ensure that—

A competent person is appointed in writing with the duty of supervising all stacking and storage on a construction site;

Adequate storage areas are provided;

There are demarcated storage areas; and storage areas are kept neat and under control.

31. EMERGENCY PROCEDURES/ PLAN

Principal contractor shall submit a detailed Emergency Procedures/ Plan for approval by the client prior to commencement of work on site. The procedures shall detail the response plan including the following:

List of key competent personnel
Details of emergency services
Action or steps to be taken in the event of emergencies
Information on hazardous material
Site specific emergency events

32. INDUCTION AND TOOLBOX PROGRAMME

No contractor may allow or permit any employee or person to enter any site, unless that employee or person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.

A contractor must ensure that all visitors to a construction site undergo health and safety induction pertaining to the hazards prevalent on the site and must ensure that such visitors have the necessary personal protective equipment.

A contractor must at all times keep on his or her construction site records of the health and safety induction training contemplated in sub-regulation (6) and such records must be made available on request to an inspector, the client, the client's agent or the principal contractor; The Principal Contractor must ensure that the toolbox talks are conducted on weekly basis and the training records kept on the safety file.

33. CONSTRUCTION VEHICLES AND MOBILE PLANTS

For any use of construction vehicle and mobile plant in the construction site, contractor must comply with all the provisions of Construction Regulation 23.

34. ORGANOGRAM

Contractor shall submit an organogram outlining the site safety, health and environmental management structure as per appointment. The organogram must reflect the project and the company name and must have legal references

35. SITE ESTABLISHMENT

The contractor is required to do the site establishment as per agreement with the client. The contractor must indicate on his health and safety plan as to how he is going to deal with the all health and safety site establishment requirements

36. ENVIRONMENTAL MANAGEMENT PLAN

To ensure compliance with all the applicable environmental management regulations and applicable specifications of this project, please ensure that the minimum below topics are covered:

- Water provision,
- Ablution,
- Waste management,
- Concrete works,
- Refuelling and spillage management,
- Hazardous chemicals storage and disposal,
- Environmental awareness training,
- No Go Areas,
- Site demarcation ect.

37. CORONA VIRUS

The Novel Coronavirus (2019-nCoV) is a new coronavirus strain identified in China, which has caused cases of severe pneumonia in China. Coronavirus is a family of viruses known to cause illnesses ranging from common cold to pneumonia. Cases of 2019nCoV have been exported to other cities and countries. The contractor is required to provide a Health Risk Management Plan detailing preventive measures that will be put in place to ensure protection of employees and supporting those who have been infected with the virus. The Health Risk Management Plan must be accompanied by COVID19 Risk assessment. Furthermore, the contractor must comply with all requirements of COVID19 Specification issued by the client.

38. TEMPORARY WORKS

Temporary works Supervisor

The Principal Contractor shall submit the proof of competency and appointment letter of the competent person(s) appointed as temporary works supervisor in the Health &Safety Plan. The temporary works supervisor shall supervise all temporary works operations and shall ensure that all equipment used in temporary works structure are carefully examined and checked for suitability before being used.

The provisions of Regulation 12 of the Construction Regulations shall be followed in every detail

39. WORKING IN A TOWNSHIP/ PUBLIC SAFETY

As indicated in the scope of work that the project is located in a township, therefore, the contractor must explain how he intended to conduct his construction work without affecting the health or safety of the community and ensuring that there is no destruction of the services and local businesses.

The site shall at all times be secured to prevent the unauthorized access of persons to construction risk areas. Appropriate health and safety signage shall be posted and access control to site must be exercised via a single access point. All members entering the site must indicate in what capacity them visiting the site. The access point must be designed and constructed to allow for temporary parking, entry of construction vehicles, entry of personnel transport vehicles and entry of individual workers and other persons. The principal Contractor shall ensure that each person visiting the site shall be inducted to the site and such abridged induction shall outline the hazards from on-site activities and the precautions to be observed to avoid or minimize those risks. Visitors must only enter when accompanied by a responsible person designated by the Principal Contractor.

FIRE SAFETY DESIGN REPORT

PERTAINING TO

IQHAZA LETHU TEMPORARY DWELLING UNIT TYPE A 30m² DOUBLE STOREY

FOR

PROJECT PREPARATION TRUST

PROJECT REF : D292

DATE : 30 SEPTEMBER 2020

ISSUE : FIRST ISSUE

COMPILED BY: D KNIGHT Pr Tech Eng

ECSA REG NO : 86 702 08

Prepared by:

Albrecht
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D292- IQHAZA LETHU FIRE SAFETY DESIGN REPORT

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INTRODUCTION

The subject of this Fire Safety Design Report is the construction of a proposed Temporary Dwelling Unit, being project IQhaza Lethu for the Project Preparation Trust.

The following Fire Safety Design Report is intended to identify the rational design approach to achieve compliance with the requirements of the National Building Regulations as applied in **SANS 10400: 2020 Ed 4**.

This report is based on information forming part of the Architectural drawings:

P19004 AR SD 100 A – General Arrangement (Dated September 2020)

Changes to the aforementioned Architectural Plan may invalidate the following observations.

APPLICABLE LEGISLATION

The following legislation will be applied with respect to this project;

The National Building Regulations

SANS Code of Practice SANS 10400: 2016 Edition 3.1.- PART A: General Principles and requirements

SANS Code of Practice SANS 10400: 2020 Edition 4.- PART T: Fire Protection

BUILDING DESIGN

The proposed facility comprises a temporary dwelling unit of two (2) storeys in height, with internal staircase.

In terms of SANS 10400: Part A 2010 Ed. 3, Table 1, the occupancy classification of the building is **H4 - Dwelling House.**

The building is constructed almost entirely of treated timber members, comprising a main structure of four (4), 150mm diameter gum poles with 228mm x 38mm treated Grade 5 SA pine ring beams at each floor level, supporting the facades. These consist of internal 15mm non-combustible Gypsum plasterboard, having a 30 minute fire rating, fixed to a timber studding with mineral wool insulation clad externally with galvanised corrugated iron sheet. The flooring consists of shutterply supported on treated timber joists with the roof comprising galvanised corrugated iron sheet supported on treated timber rafters and purlins.

SAFETY DISTANCES – RULE 4.2

The maximum distance required in terms of this regulation between a building and its boundaries and/or between two buildings on the same site is related to the area of openings in each elevation relating to a single fire division and the fire load of the building concerned.

Based on the area of openings applicable for the elevation of the building, the maximum safety distances required and actually provided are given below:

The façade walls of the dwelling can be classified as Type FR as they have a fire resistance of 30 minutes in accordance with the requirements of Table 1 (Fire resistance of external walls), for the occupancy applicable.

REQUIREMENTS IN TERMS OF TABLE 2						
FACADE	FIRE DIVISION	FAÇADE TYPE	AREA OF OPENINGS M ²)	BOUNDARY TYPE	MAX. SAFETY DISTANCE REQUIRED (METRES)	ACTUAL DISTANCE PROVIDED (METRES)
FRONT	H4	FR	<2m²	NOTIONAL	1.0	*
BACK	H4	FR	<1m²	NOTIONAL	1.0	*
RIGHT SIDE	H4	FR	0	NOTIONAL	0	*
LEFT SIDE	H4	FR	0	NOTIONAL	0	*

^{*}Note: the maximum safety distance given above is to the Notional boundary between two dwellings. Hence two such buildings would need to have a separating safety distance of 2 metres between them depending on which facades are facing.

DIFFERENT OCCUPANCIES IN A BUILDING - RULE 4.3

The building is of single occupancy H4 and therefore no separating elements are required.

DIVISION AREA - RULE 4.4

The building is a single Division fire compartment the size of which does not exceed the division area limitations given in Table 3 of the regulations. Not applicable

FIRE PERFORMANCE - RULE 4.5

All components, materials and methods applied to the construction of the facility which are required to have a particular fire resistance shall satisfy the requirements for testing in accordance with the relevant parts of SANS 10177 and classified in terms of SANS 428 protocol.

FIRE RESISTANCE OF OCCUPANCY AND DIVISION SEPARATING ELEMENTS - RULE 4.6

There are no occupancy or division separating element requirements. Not applicable

FIRE STABILITY OF STRUCTURAL ELEMENTS OR COMPONENTS - RULE 4.7

The structural stability requirements of the structural elements associated with the facility, in terms of Table 5 of the regulations is **30 minutes**, (based on the building classification of **H4** – Detached dwelling house, being two (2) storeys).

TENANCY SEPARATING ELEMENTS - RULE 4.8

There are no tenancy separating elements required. Not applicable.

PARTITION WALLS AND PARTITIONS - RULE 4.9

There are no partition walls. Not applicable.

PROTECTION OF OPENINGS - RULE 4.10

Not applicable as there is a single fire division.

RAISED ACCESS AND SUSPENDED FLOORS-RULE 4.11

Not applicable. In this context, the ground floor is suspended above external natural ground, but not within the building

ROOF ASSEMBLIES AND COVERINGS - RULE 4.12

The single roof assembly of the building is treated timber joists and purlins supporting un insulated galvanised corrugated iron sheeting, and in terms of 4.12.3, is required to have a stability requirement of **30 minutes** (Table 5).

Given that the walls of the dwelling unit, supporting the roof assembly area, covering 15m², have a fire resistance of 30 minutes, and that the roof assembly is intended to provide stability during safe evacuation time over an eleven (11) metre escape route travel distance, before collapse, we submit that the roof assembly, size, construction and materials will, together with the wall supports, provide sufficient time for the safe evacuation of the occupants of the dwelling unit in the event of fire.

CEILINGS - RULE 4.13

There is no ceiling or void below roof. Not applicable.

FLOOR COVERINGS - RULE 4.14

There are no floor coverings. Not applicable.

INTERNAL FINISHES - RULE 4.15

There are no internal finishes. Not applicable

PROVISION OF ESCAPE ROUTES - RULE 4.16

The dwelling unit facility is a single room having two (2) storeys connected by a staircase, (refer 4.21).

The occupancy of the dwelling unit is five (5) persons (refer 4.21).

A single escape route is provided, of eleven (11) metres travel distance to the escape door located at ground level, in full compliance with this regulation

Note: In terms of **SANS 10400: 2011-Part S, S1 (1) (a)**, there is no requirement to cater for persons with disabilities within a **H4** occupancy classification. Therefore, none has been provided.

EXIT DOORS - RULE 4.17

Not applicable.

FEEDER ROUTES -RULE 4.18

Not applicable.

EMERGENCY ROUTES - RULE 4.19

An emergency route is not a requirement.

DIMENSIONS OF ESCAPE ROUTES - RULE 4.20

The dwelling unit has a single (escape) door at ground level with access from the second storey of the single room via an 'exit' staircase which is fully compliant with SANS 10400 Part M, having a width of 840mm including balustrade. This exceeds the minimum width stipulated of 750mm for the clear width of an exit door or escape door.

WIDTH OF ESCAPE ROUTE - RULE 4.21

The dwelling unit has a total floor area of 30m² and based on SANS 10400 Part A – A21, Table 2 "Design Population", has a calculated occupancy of five (5) persons. Reference is made to regulation 4.16.15 which states that the width of an escape route within a H4 dwelling house is not critical because of the small population and their familiarity with their surroundings.

Given that Table 9 of this regulation has been written and promulgated to cater for up to 100 persons in a single escape route, of a minimum width, it is considered inappropriate that this regulation apply to this dwelling unit having a small population with a travel distance to the single escape door of 11 metres.

BASEMENTS - RULE 4.22

There is no basement. Not applicable

STAIRWAYS AND OTHER CHANGES OF LEVEL ALONG ESCAPE ROUTE - RULE 4.23

There are no deviations from this rule and is therefore complied with.

VENTILATION OF STAIRWAYS IN AN EMERGENCY ROUTE - RULE 4.24

Not applicable

PRESSURIZATION OF EMERGENCY ROUTES AND COMPONENTS - RULE 4.25

Not applicable

OPENING IN FLOOR - RULE 4.26

Compliant, no more than two floors are connected.

EXTERNAL STAIRWAYS AND PASSAGES - RULE 4.27

No external stairway. Not applicable.

LOBBIES, FOYERS AND VESTIBULES - RULE 4.28

Not applicable.

MARKINGS AND SIGNPOSTING - RULE 4.29

Not applicable.

PROVISION OF EMERGENCY LIGHTING - RULE 4.30

Emergency lighting, in terms of this regulation, is not a requirement for an occupancy classified H4 Dwelling Unit.

FIRE DETECTION & ALARM SYSTEMS - RULE 4.31

In terms of **SANS 10400**, there is no requirement for a Fire Detection and Alarm System to be installed in an occupancy H4 dwelling unit. Not applicable.

PROVISION & MAINTENANCE OF FIRE FIGHTING EQUIPMENT - RULE 4.32

No fire appliances are required to be installed at this building. Not applicable.

WATER RETICULATION FOR FIRE FIGHTING PURPOSES-RULE 4.33

There is no requirement for fire fighting equipment necessitating water supplies. Not applicable.

FIRE HOSE REELS - RULE 4.34

Occupancy classification H4 Dwelling unit is excluded from this regulation.

HYDRANTS - RULE 4.35

Occupancy classification H4 Dwelling unit is excluded from this regulation. However, this should be reviewed in terms of regulation 4.35.4, where the unit under review forms part of cluster housing development.

FIXED FIRE EXTINGUISHING AND FIRE SUPPRESSION SYSTEMS - RULE 4.36

Not applicable.

PORTABLE FIRE EXTINGUISHERS - RULE 4.37

In terms of this regulation, there is no requirement for the provision of portable fire extinguishers for an H4 dwelling unit. Not applicable.

MOBILE FIRE EXTINGUISHERS - RULE 4.38

Mobile fire extinguishers are not a requirement. Not applicable.

FIRE -STOPPING OF INACCESSIBLE CONCEALED SPACES - RULE 4.39

There will be no inaccessible concealed spaces in the buildings that exceed the limitations. Not applicable.

PROTECTION IN SERVICE SHAFTS - RULE 4.40

There will be no service shafts containing combustible services. This regulation is not applicable.

SERVICES IN STRUCTURAL OR SEPARATING ELEMENTS - RULE 4.41

None envisaged – not applicable.

SMOKE CONTROL - RULE 4.42

The dwelling unit does not exceed the 500m² floor area limitation. Therefore provision of smoke control is not applicable.

AIR CONDITIONING SYSTEMS AND ARTIFICIAL VENTILATION SYSTEMS - RULE 4.43

Air conditioning and artificial ventilations systems are not provided, therefore this regulation is not applicable.

LIFT SHAFTS - RULE 4.44

Not applicable.

LIFTS - RULE 4.45

Not applicable.

FIREMEN'S LIFT - RULE 4.46

Not applicable.

STRETCHER LIFT - RULE 4.47

Not applicable.

STAGE AND BACKSTAGE AREAS - RULE 4.48

Not applicable.

SEATING ARRANGEMENTS IN AUDITORIA/HALLS/GRANDSTANDS - RULE 4.49

Not applicable.

PARKING GARAGES - RULE 4.50

Not applicable.

OPERATING THEATRES AND INTENSIVE CARES UNITS - RULE 4.51

Not applicable.

INSTALLATION OF LIQUID FUEL DISPENSING PUMPS - RULE 4.52

Not applicable.

INSTALLATION OF OTHER TANKS - RULE 4.53

Not applicable.

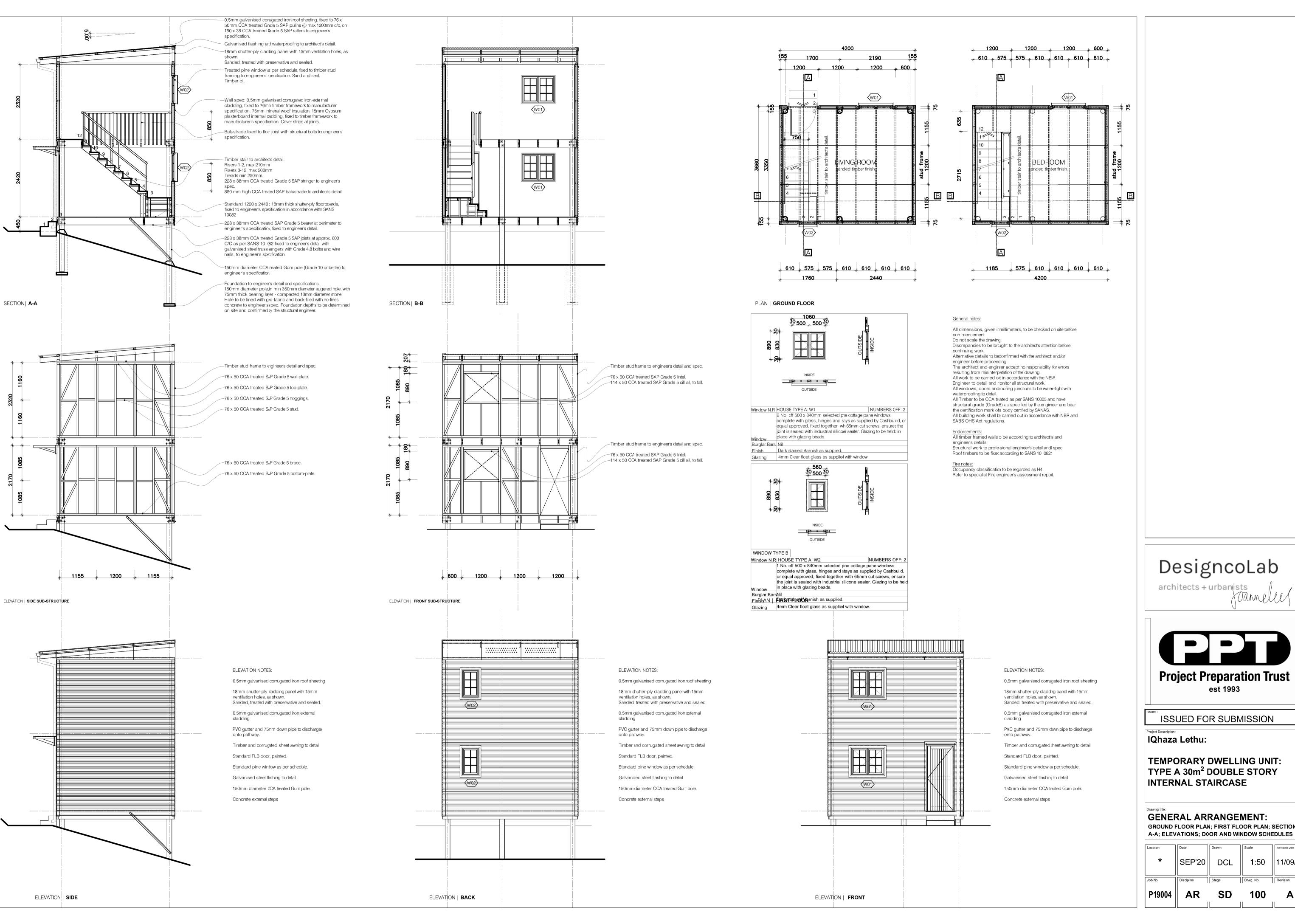
ACCESS FOR FIRE-FIGHTING AND RESCUE PURPOSES - RULE 4.54

Access for fire-fighting purposes to the site, and the building shall be in compliance with SANS 10400 T 4.54.

CONCLUSION

We are of the opinion that the construction of the dwelling unit for the IQhaza Lethu Project will be fully compliant with the intent of SANS 10400:2020 Ed.4. – Part T – Fire Protection.

ALBRECHT KNIGHT & ASSOCIATES CC D KNIGHT - ECSA 8670208 CONSULTING FIRE ENGINEERS







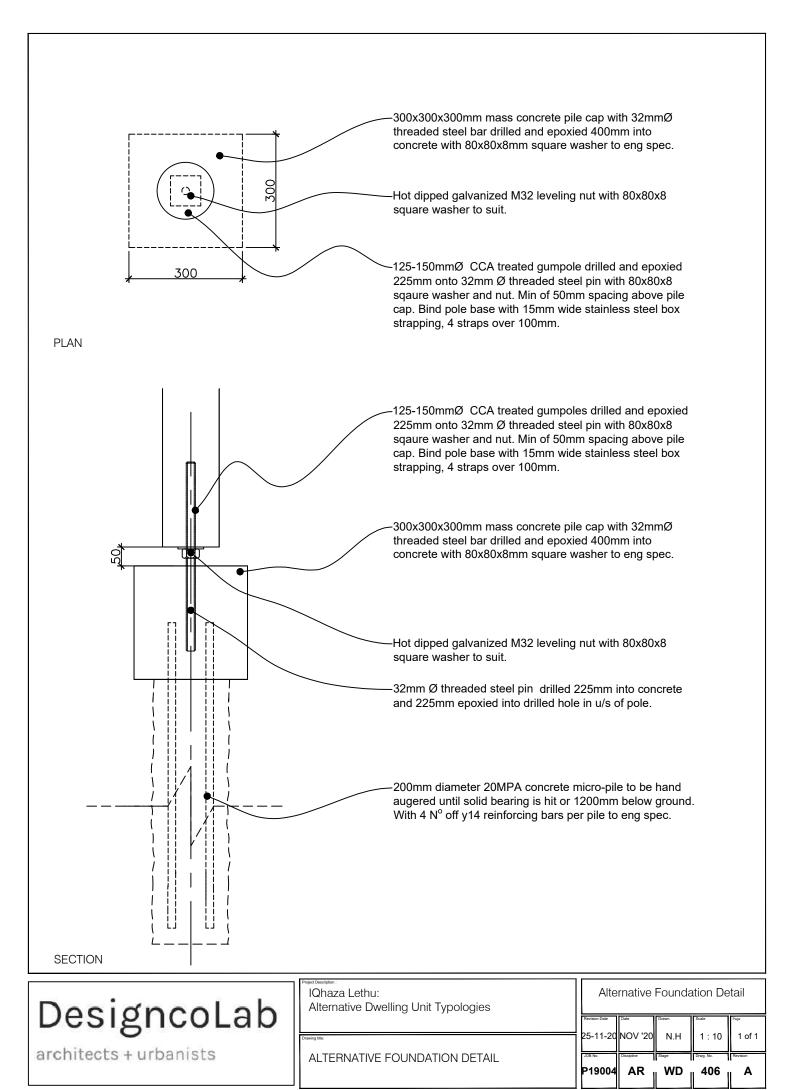
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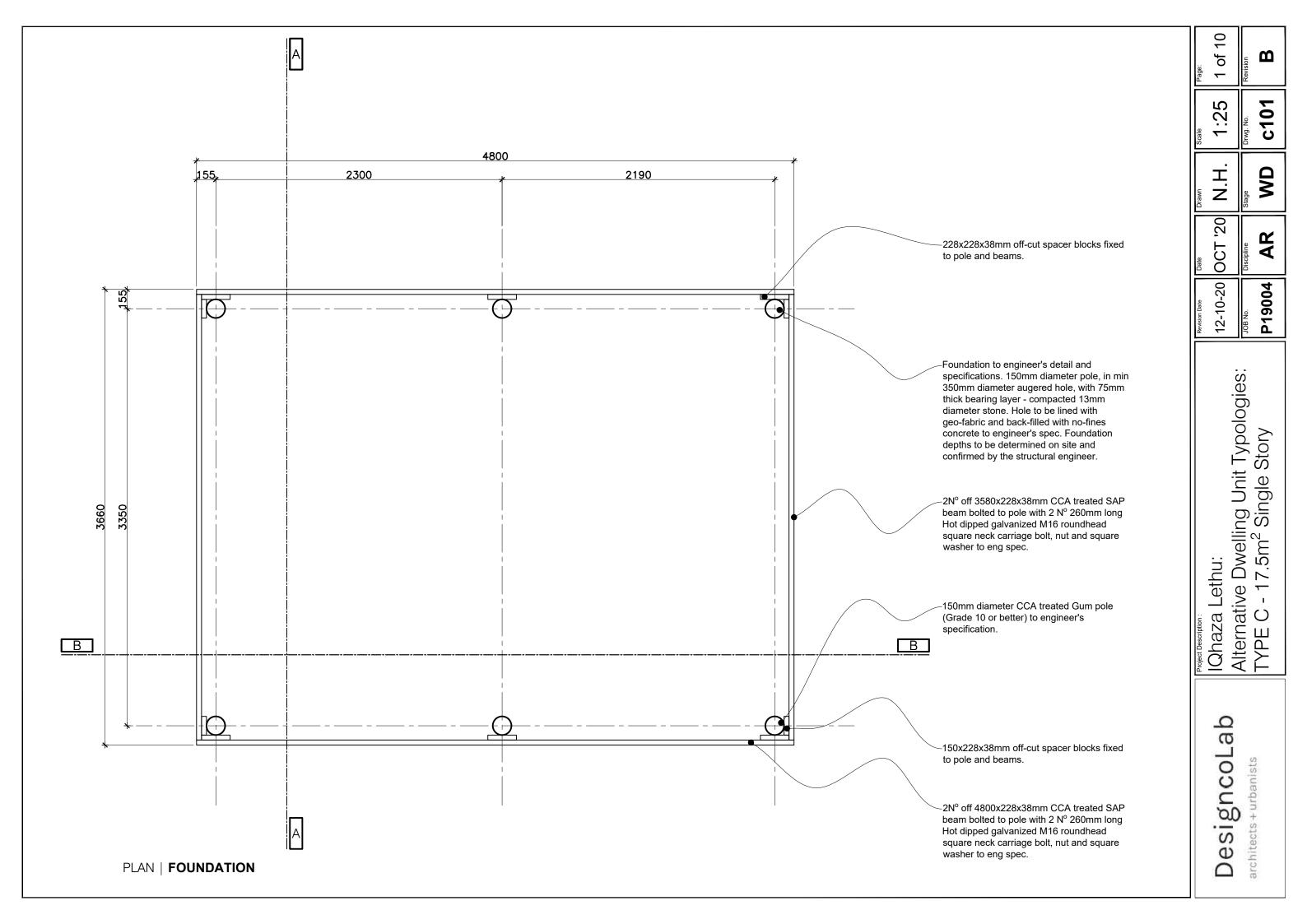
IQhaza Lethu:

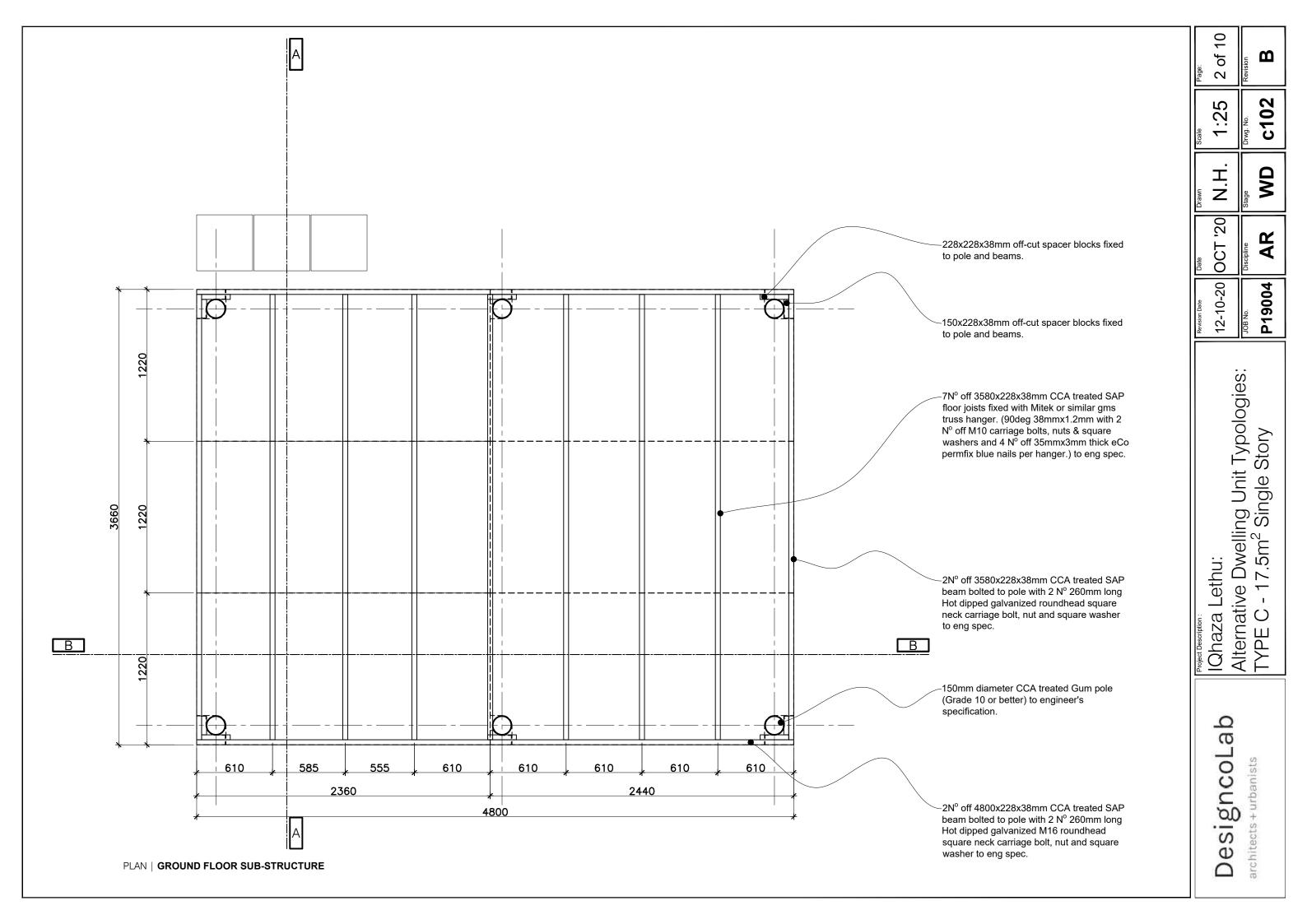
TEMPORARY DWELLING UNIT: TYPE A 30m² DOUBLE STORY INTERNAL STAIRCASE

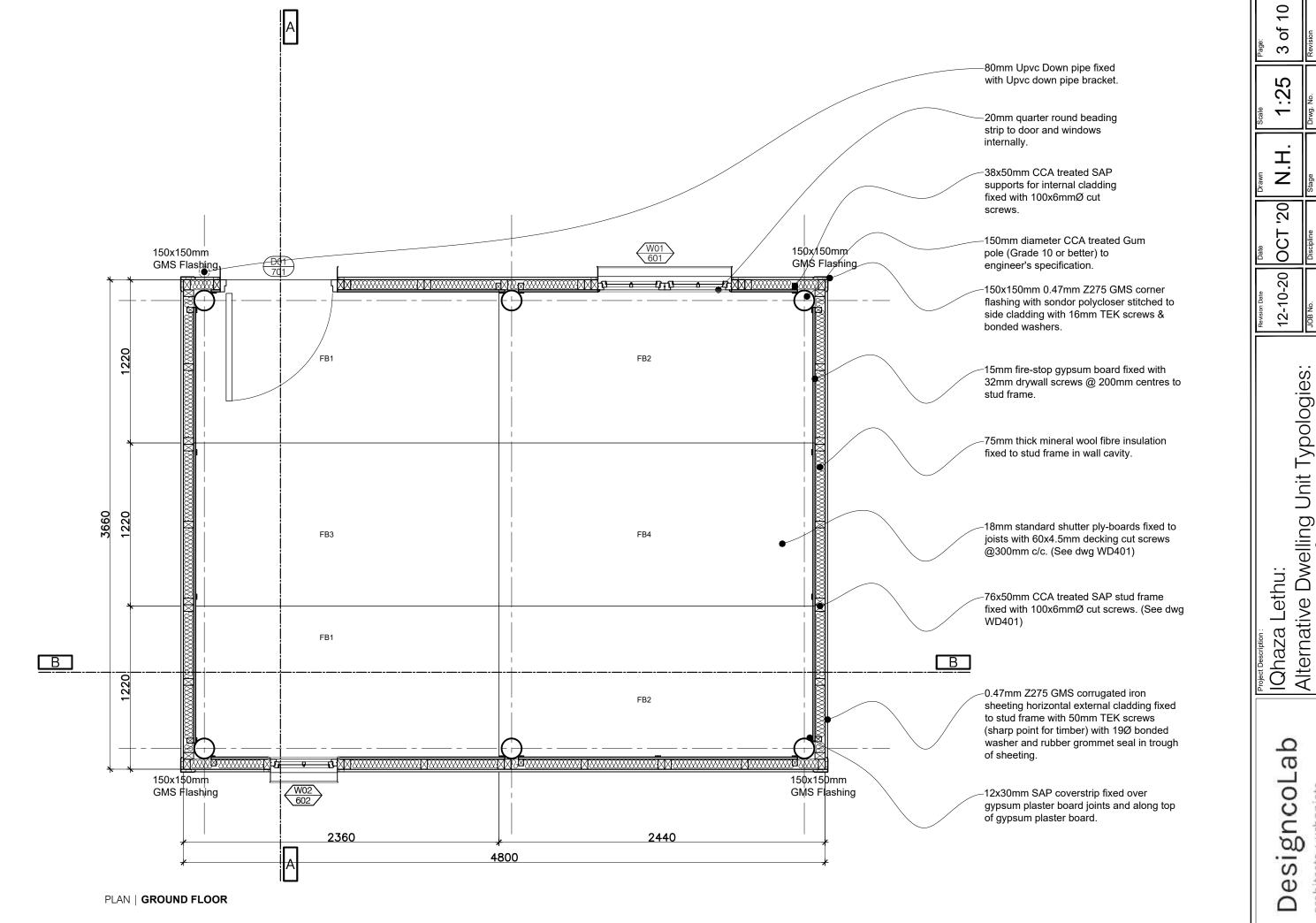
GENERAL ARRANGEMENT: **GROUND FLOOR PLAN; FIRST FLOOR PLAN; SECTION**

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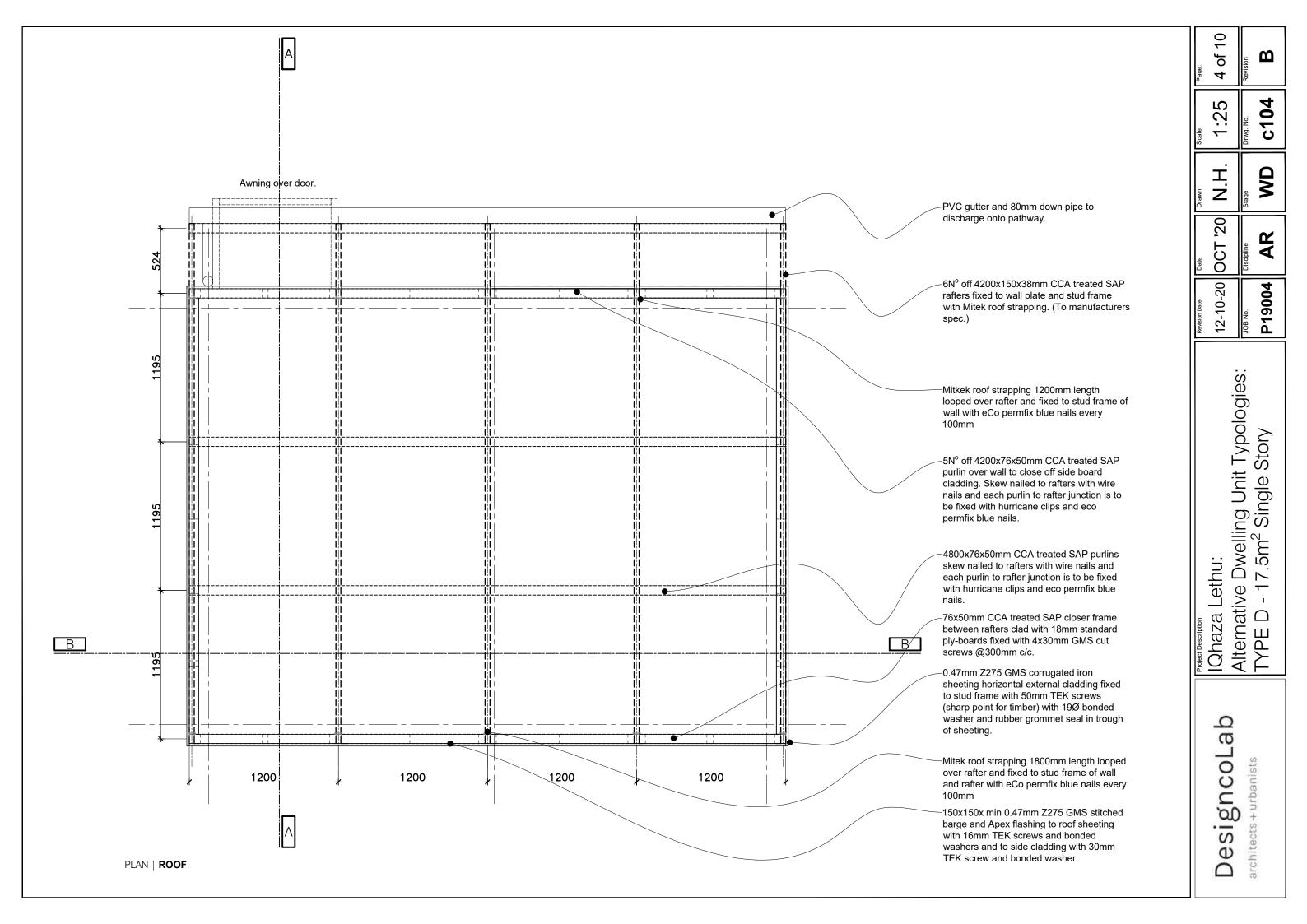


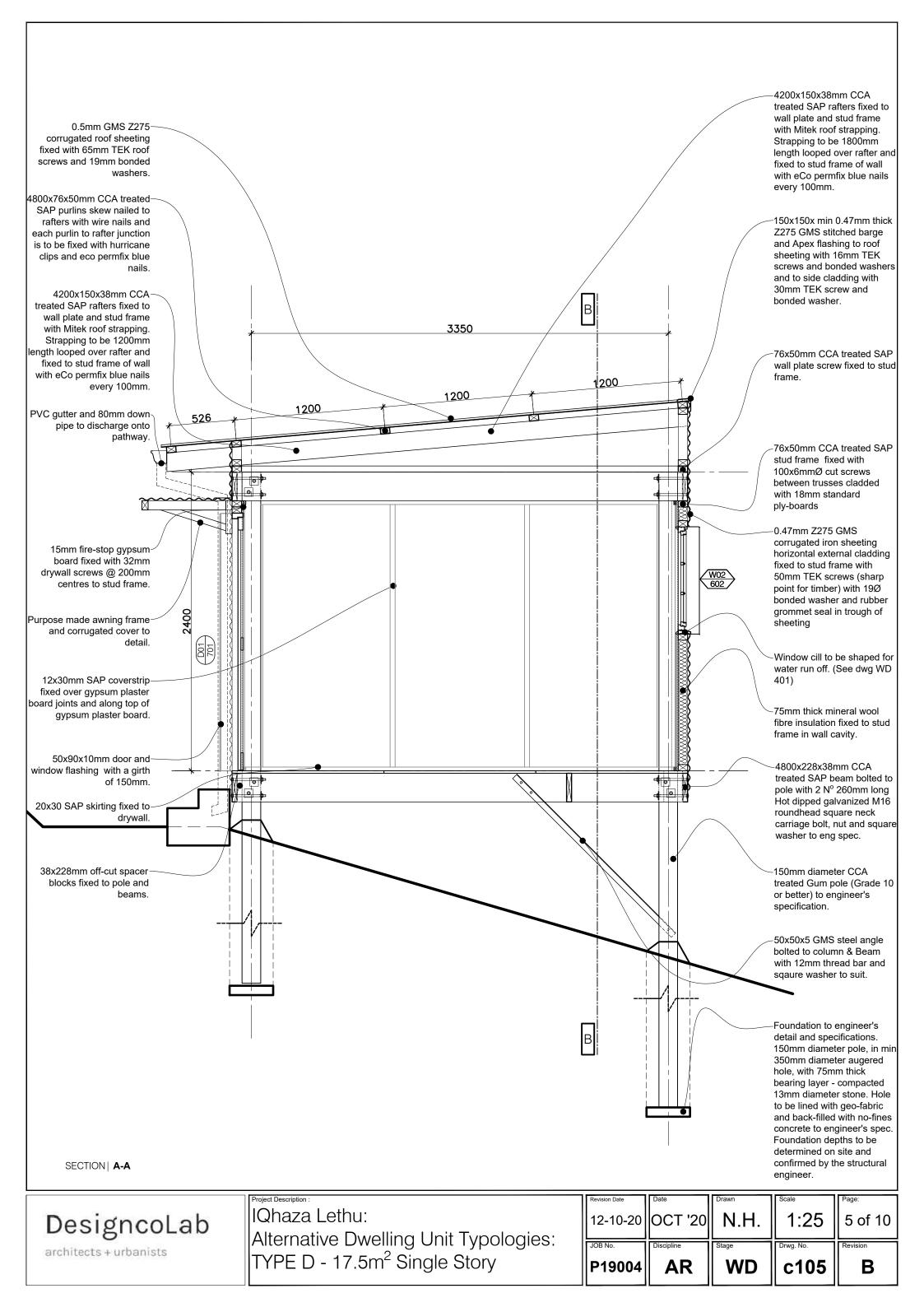


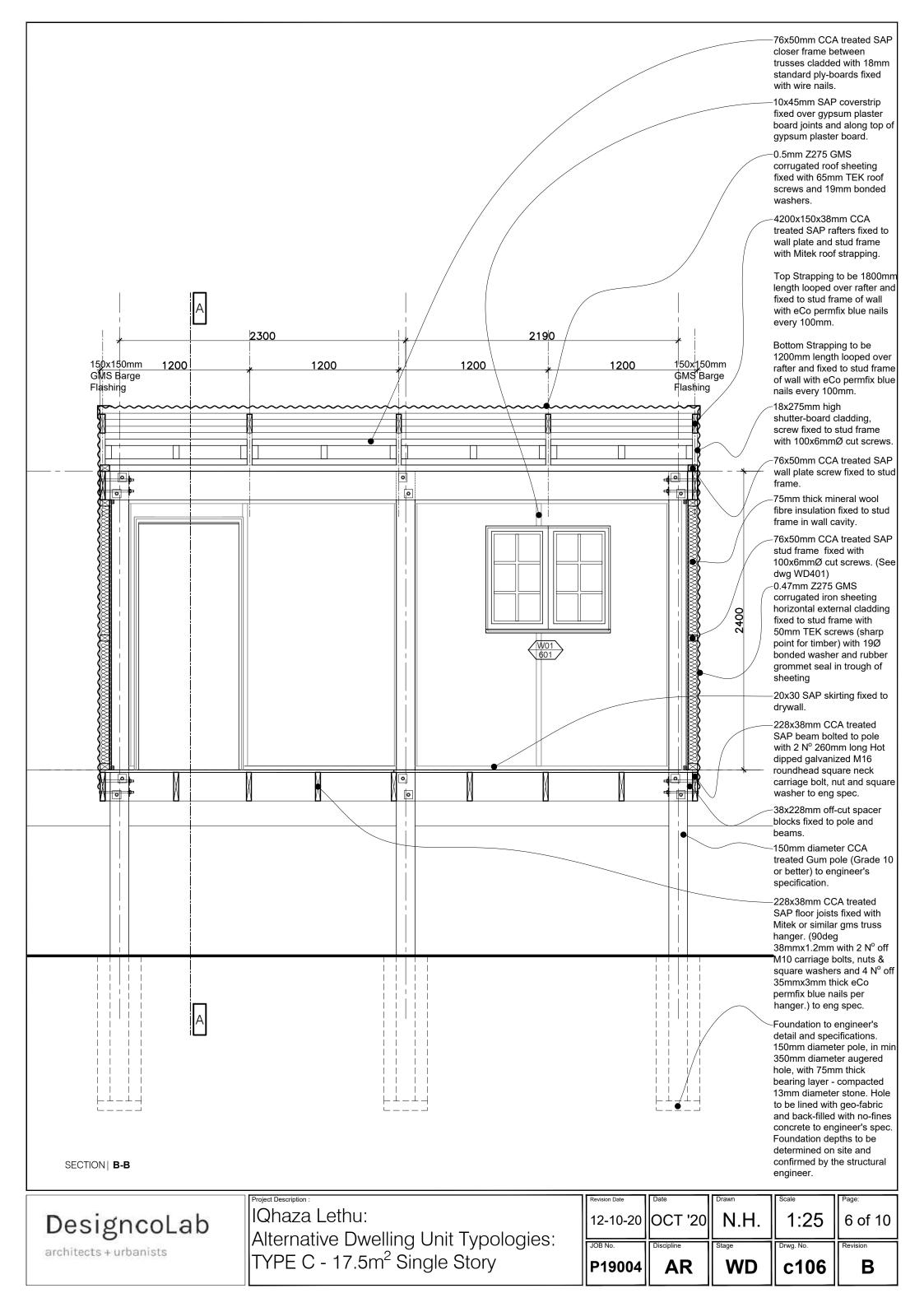
P19004 Dwelling Unit Typologies: 7.5m² Single Story Alternative [TYPE C - 17

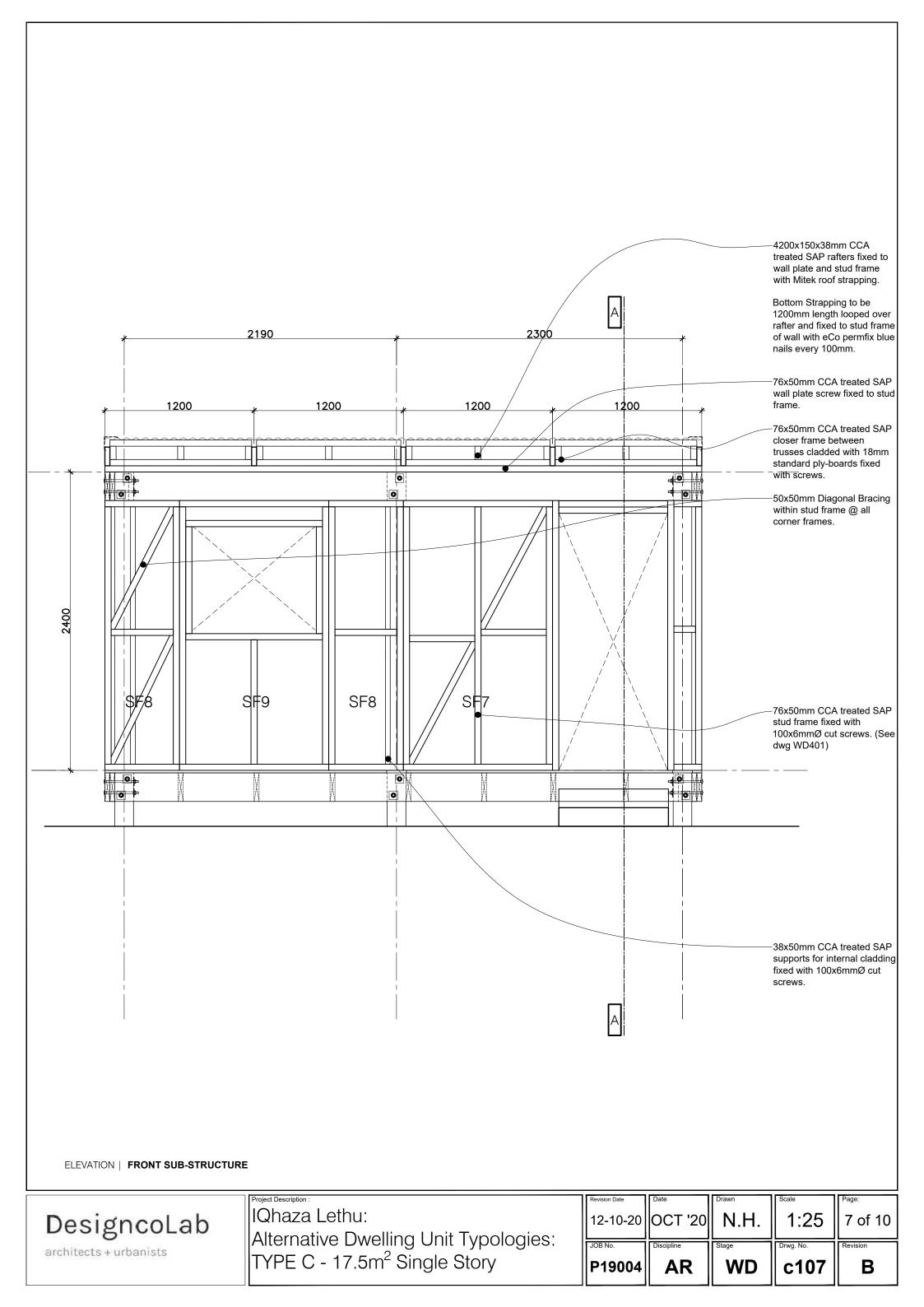
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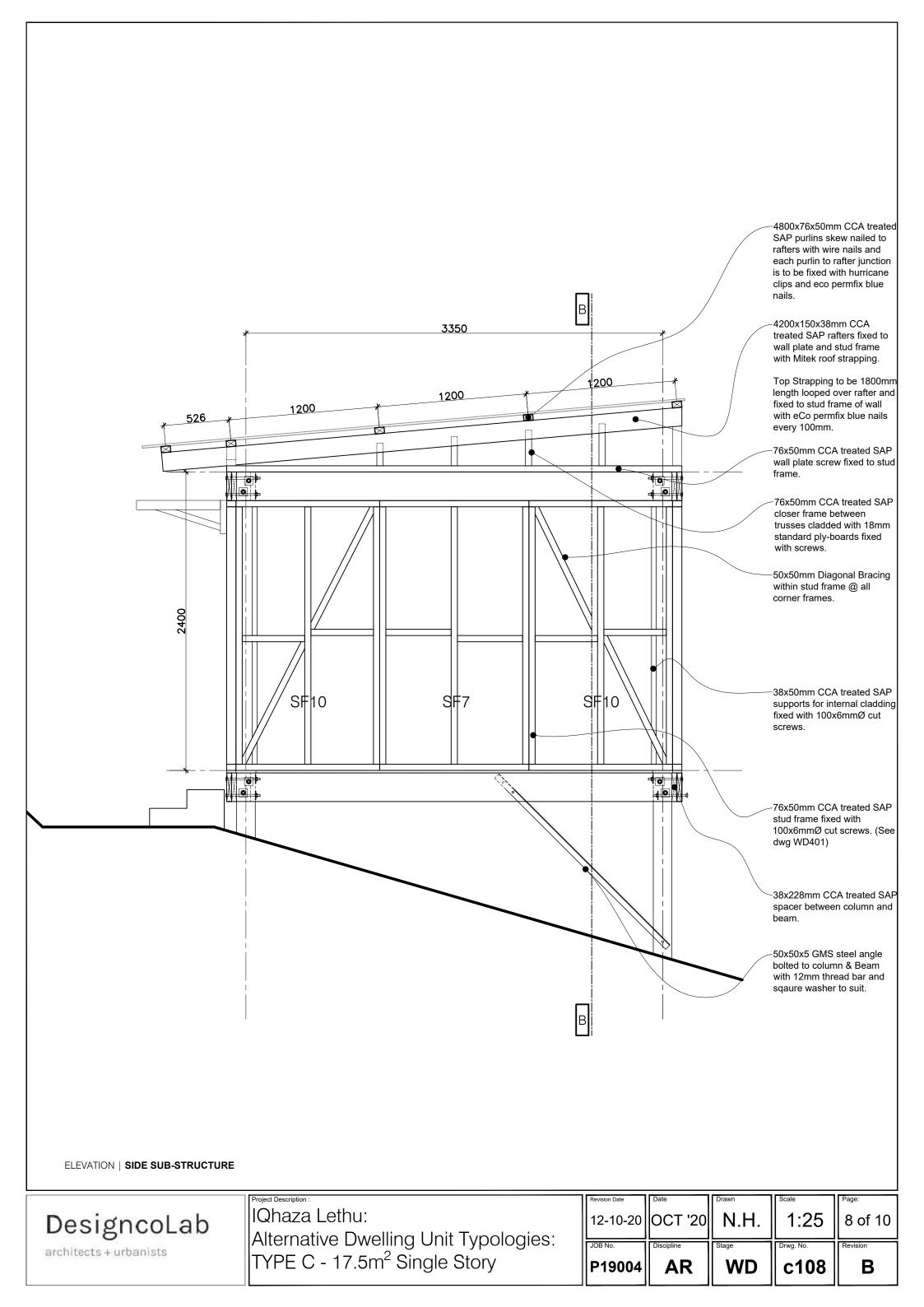
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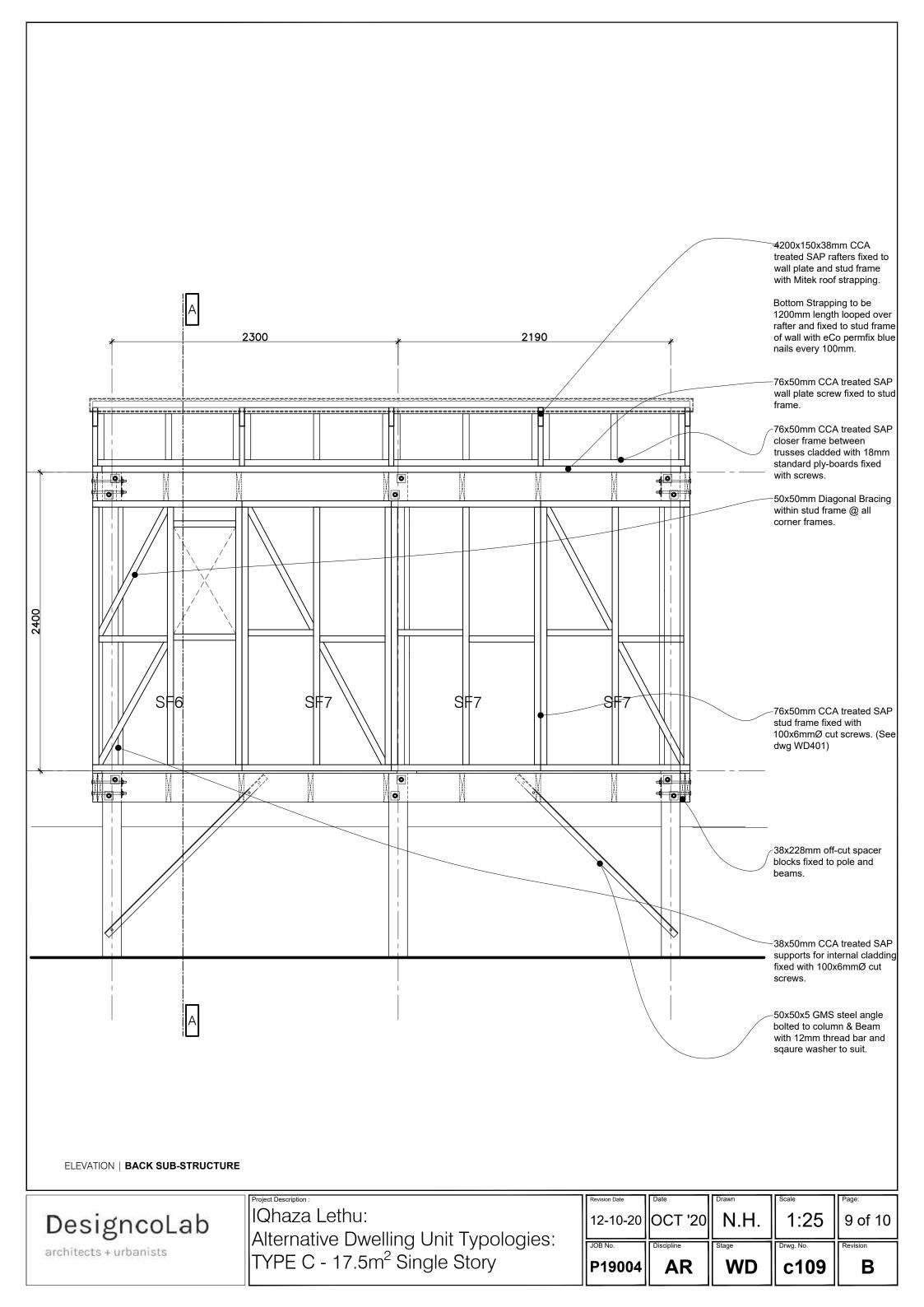


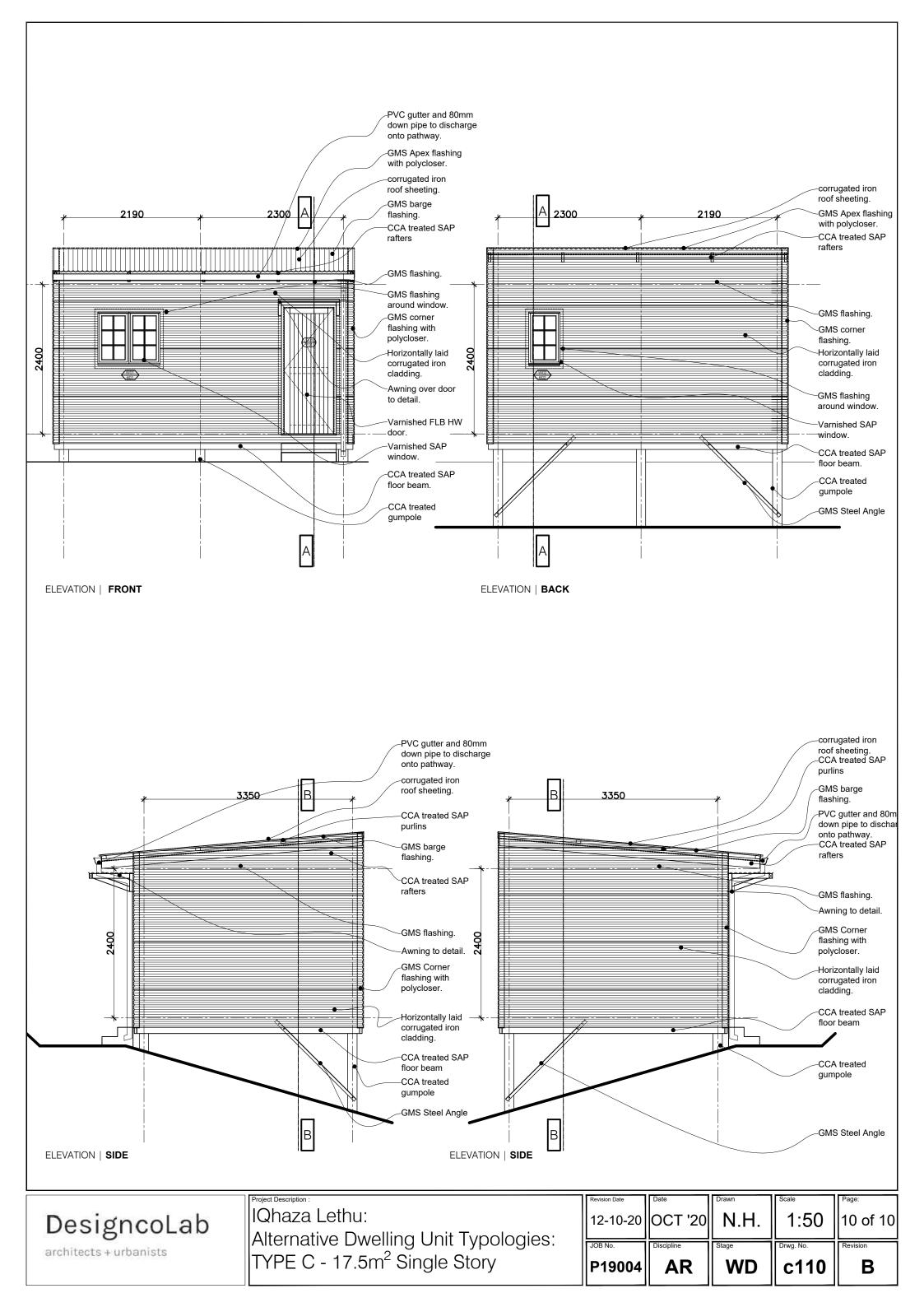


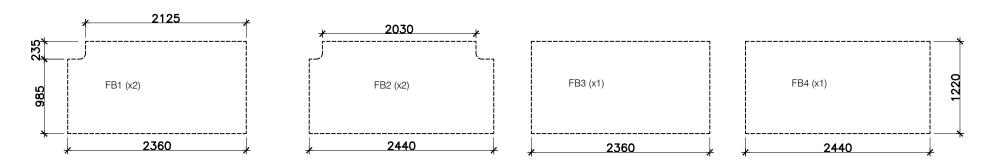




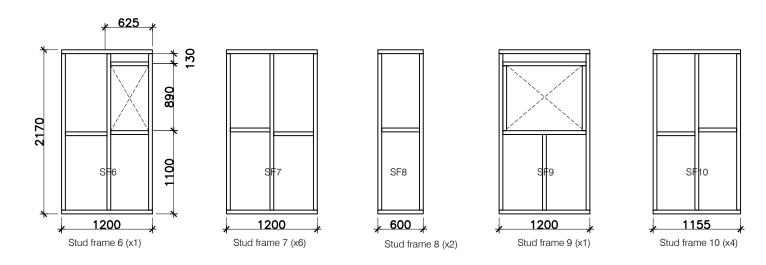








GROUND FLOOR FLOOR BOARDS (18mm SHUTTERPLY BOARDS)



GROUND FLOOR STUD FRAMES (76x50 CCA TREATED SAP)

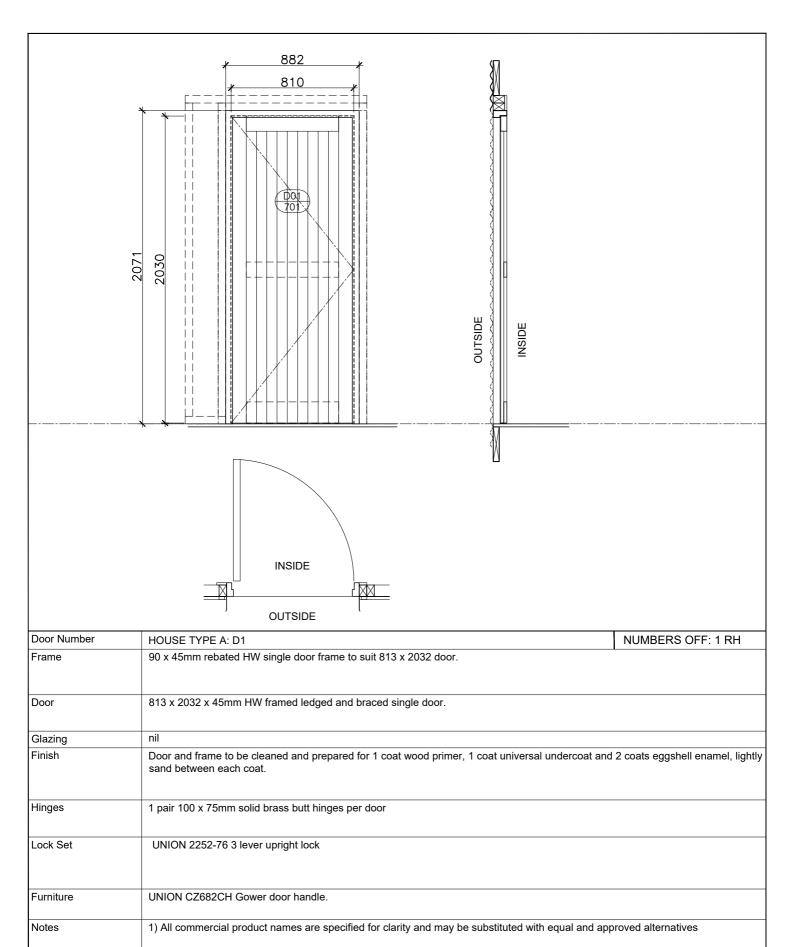
DETAILS

DesigncoLab architects + urbanists

IQhaza Lethu:	
Alternative Dwelling Unit	
TYPE C - 17.5m ² Single S	Story

Project Description :

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19-05-20	MAY '20	N.H.	1:50	1 of 1
JOB No.	Discipline	Stage	Drwg. No.	Revision
P19004	AR	WD	401	В

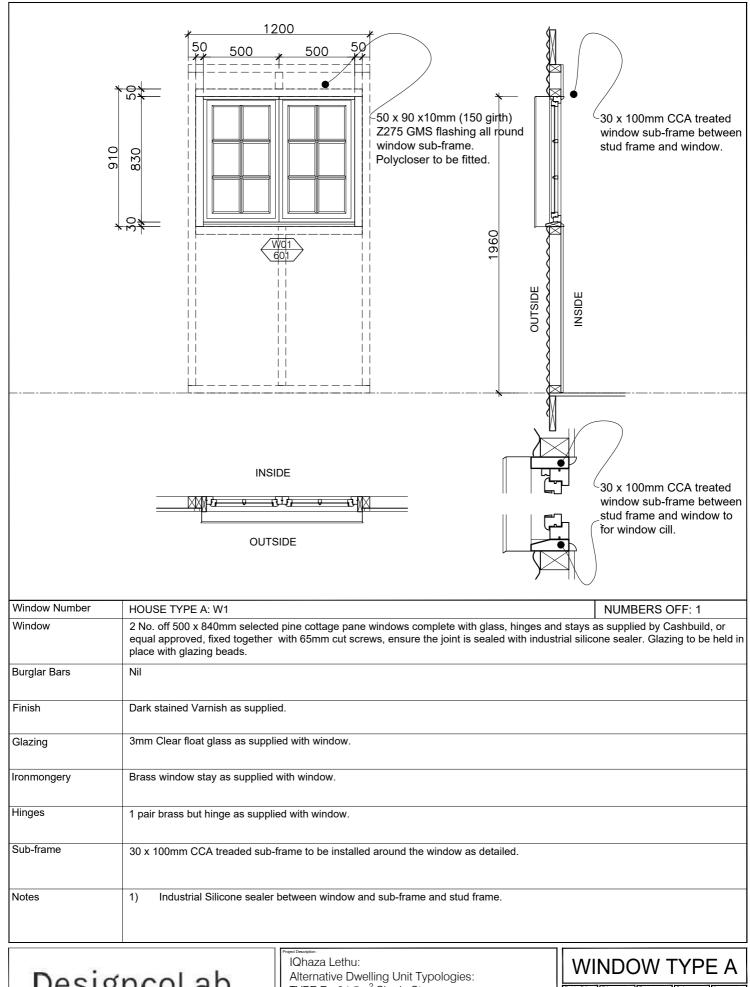


architects + urbanists

IQhaza Lethu: Alternative Dwelling Unit Typologies: TYPE E - 34.5m² Single Story

DOOR SCHEDULE: UNIT TYPE E - DOOR TYPE D1

DOOR TYPE A				
Revision Date 20-08-20	Aug '20	LSAA	1:25	1 of 1
^{ЈОВ No.} P19004		WD	701	Revision

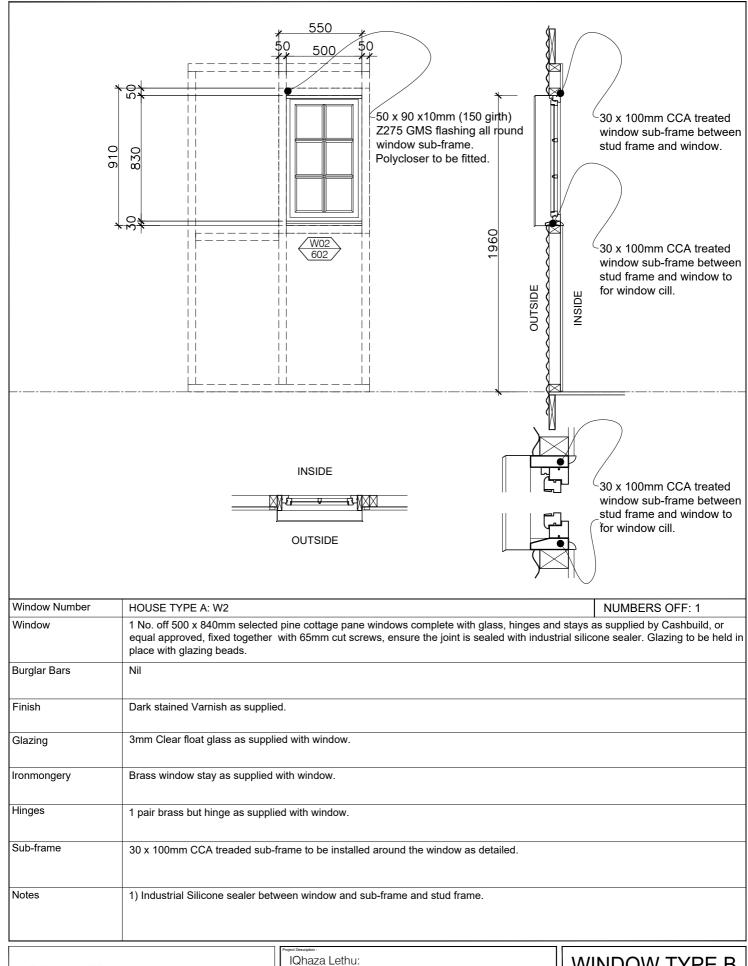


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TYPE E - 34.5m² Single Story

WINDOW SCHEDULE: UNIT TYPE E - WINDOW TYPE A

WINDOW TYPE A				
Revision Date 20-08-20	Aug '20	LSAA	1 : 25	1 of 2
^{ЈОВ No.} P19004		WD	601	Revision

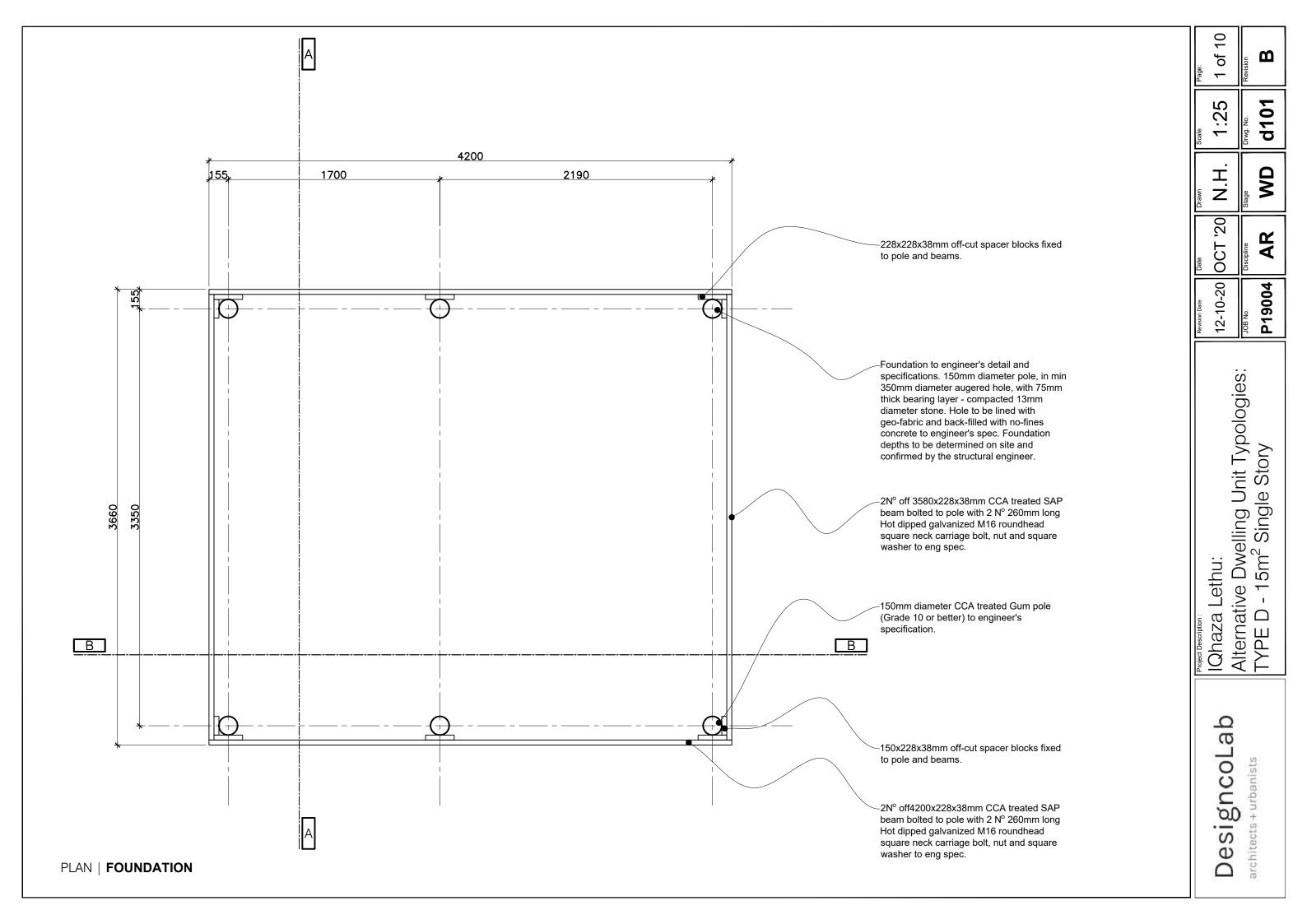


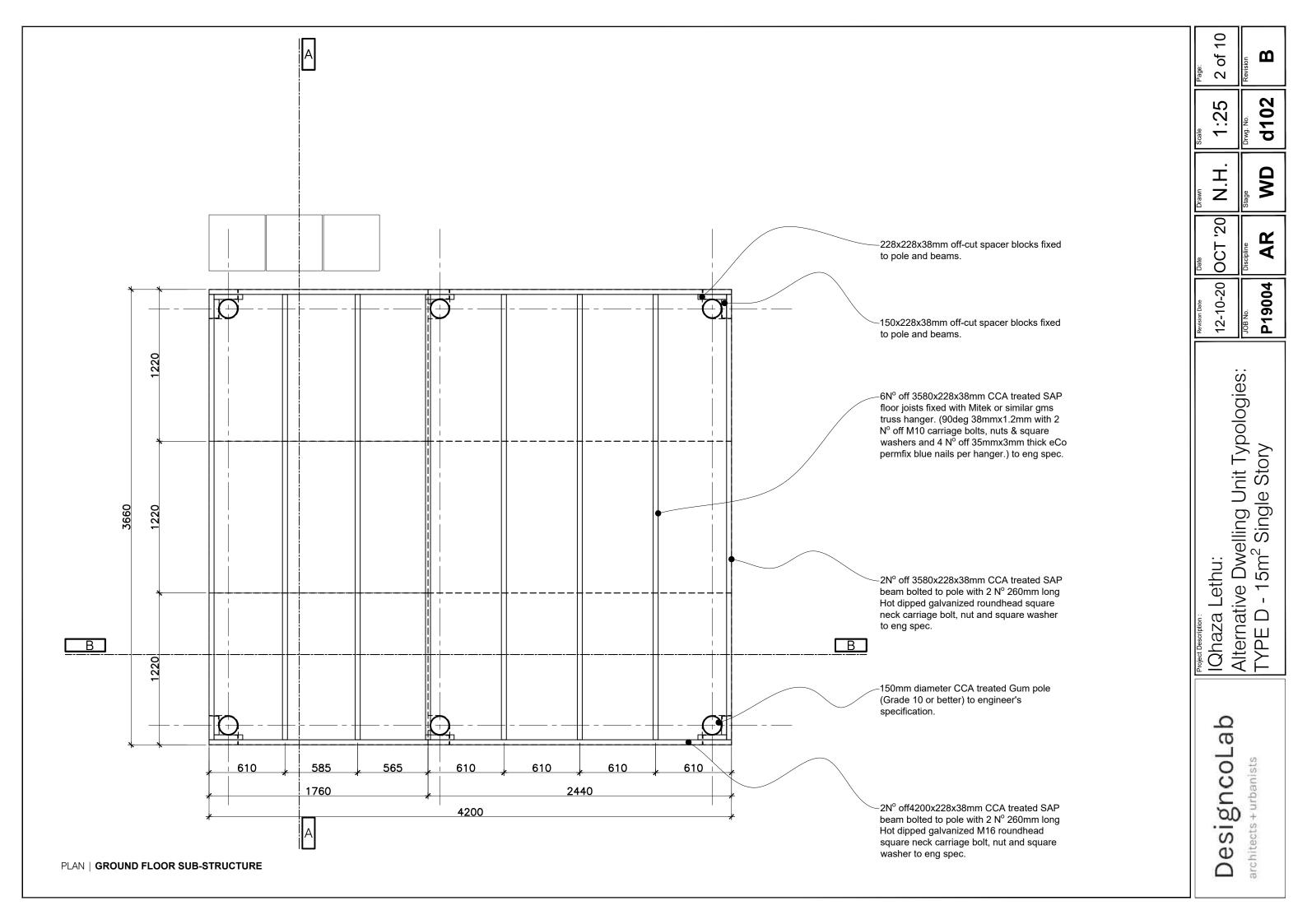
architects + urbanists

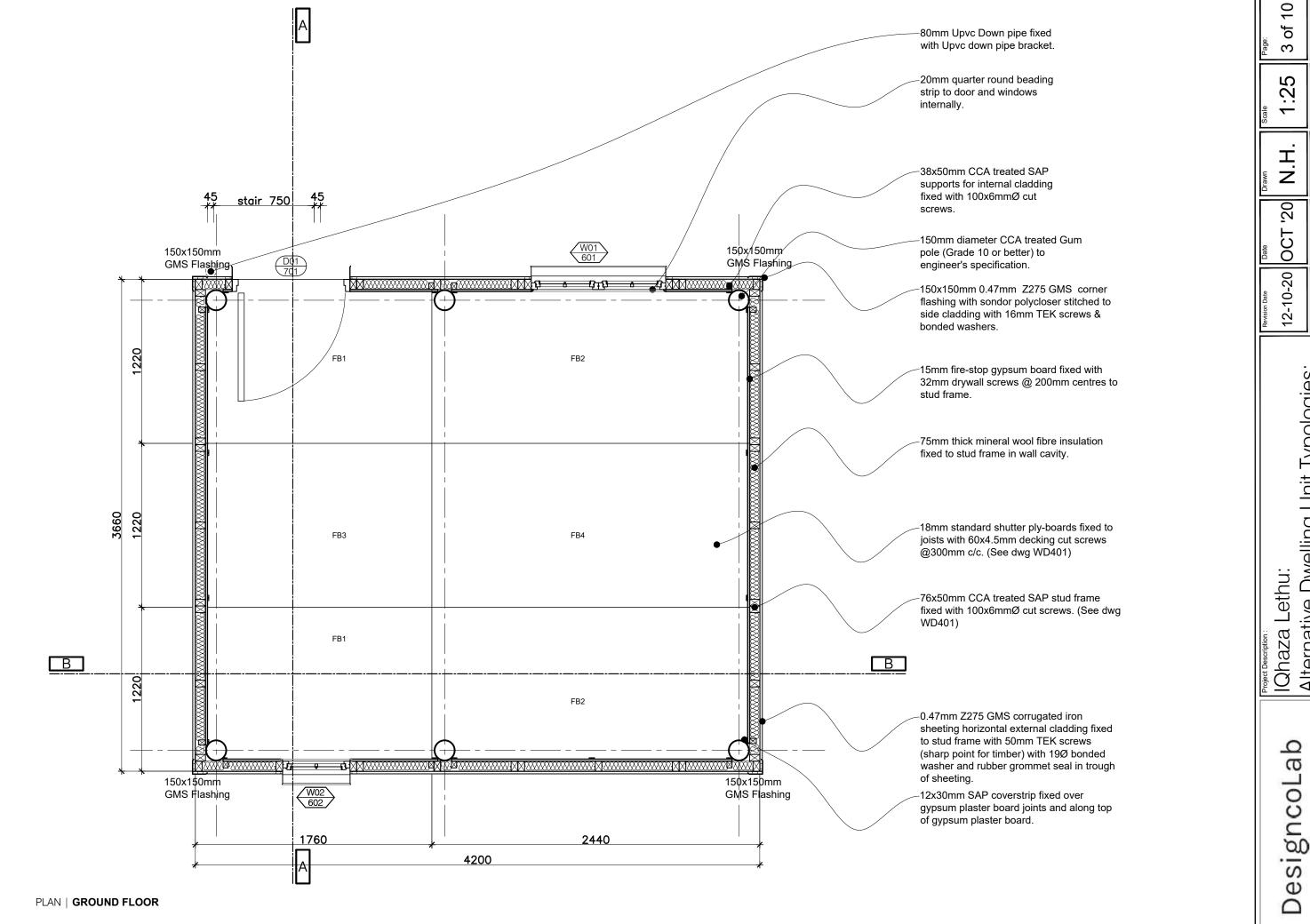
Alternative Dwelling Unit Typologies: TYPE E - 34.5m² Single Story

WINDOW SCHEDULE: UNIT TYPE E - WINDOW TYPE B

WINDOW TYPE B				
Revision Date	Aug '20	LSAA	1:25	2 of 2
^{108 No.} P19004	AR	WD	602	Revision



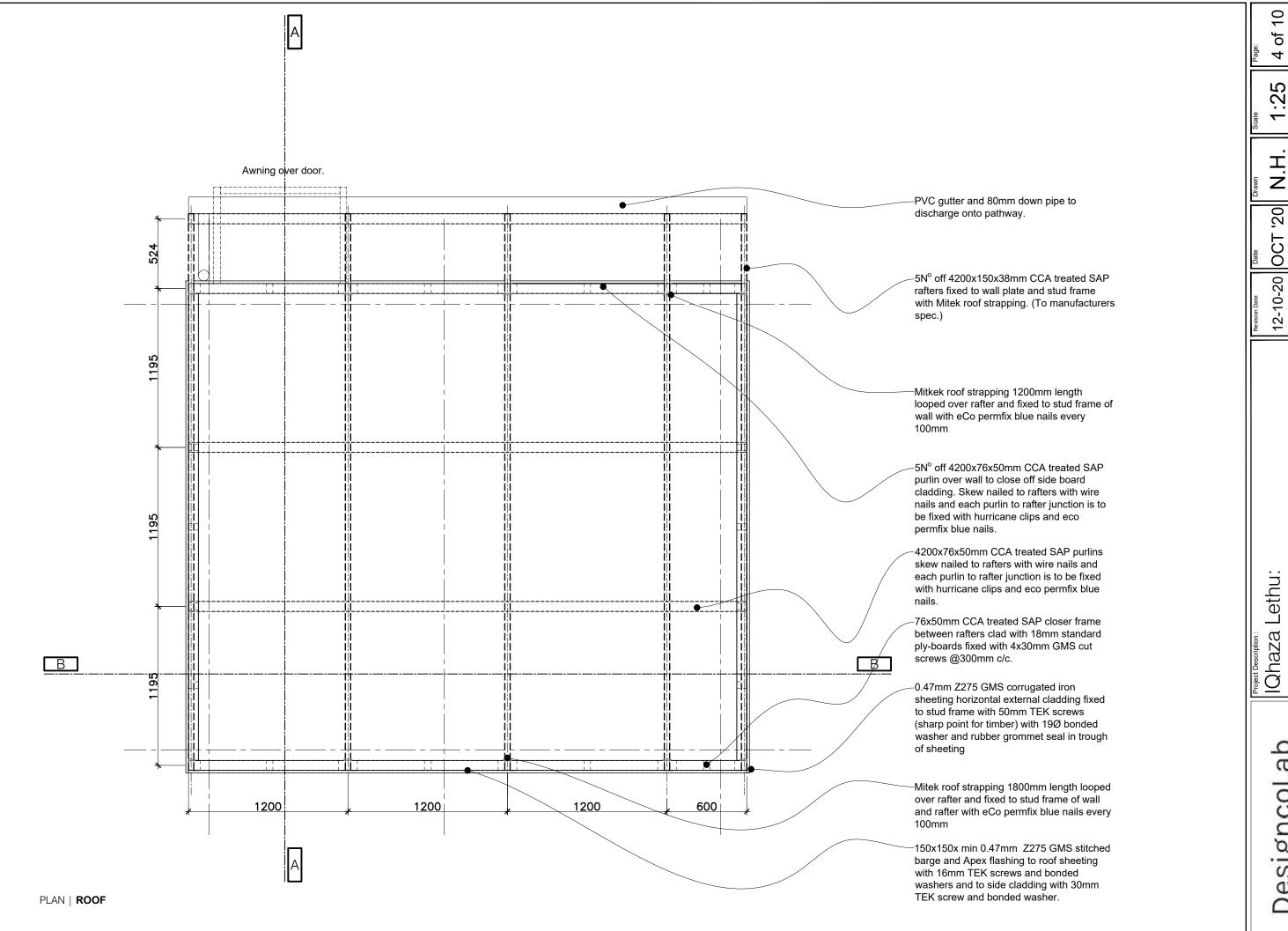




P19004 Dwelling Unit Typologies: 5m² Single Story Single Story Alternative ГУРЕ

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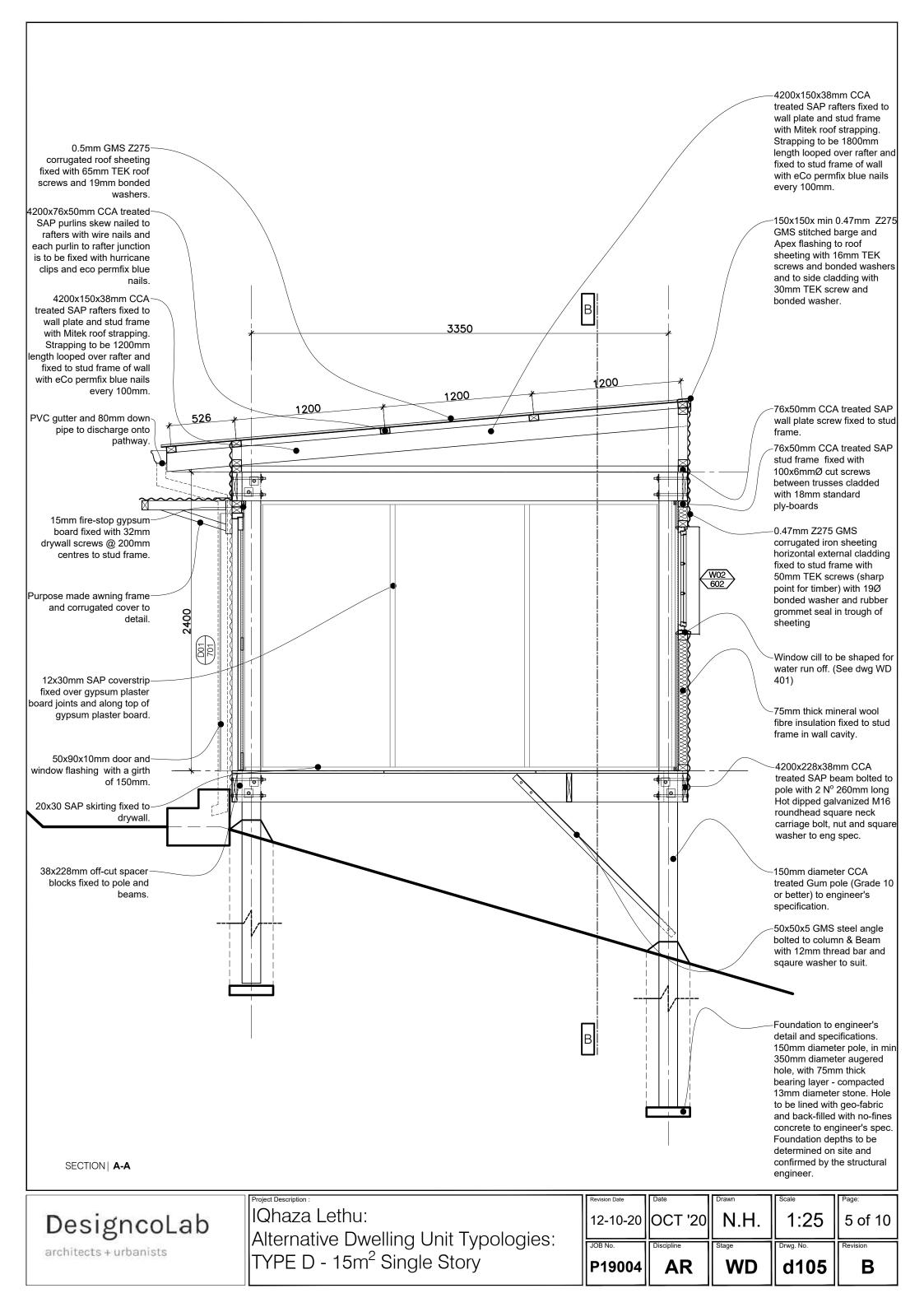
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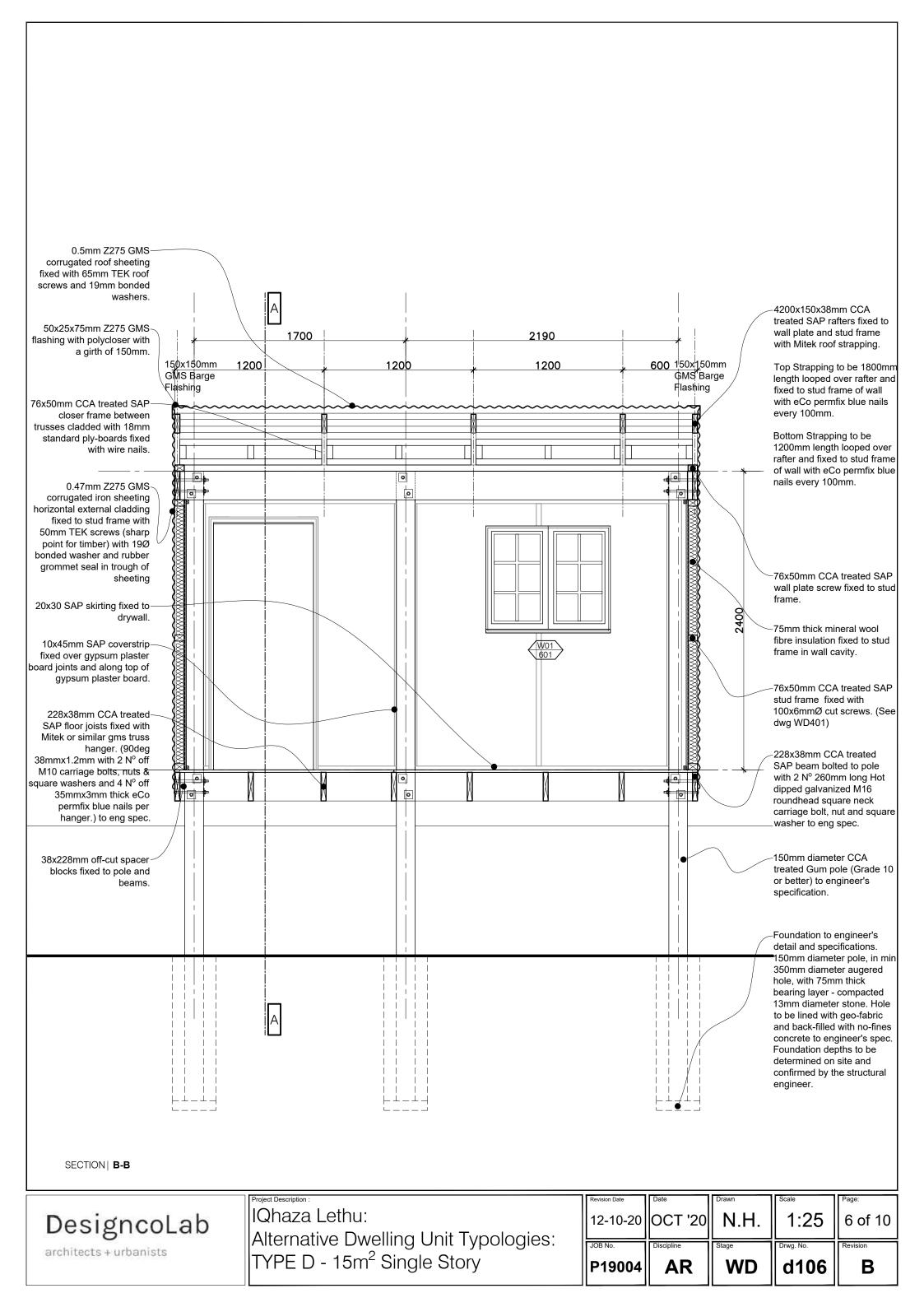


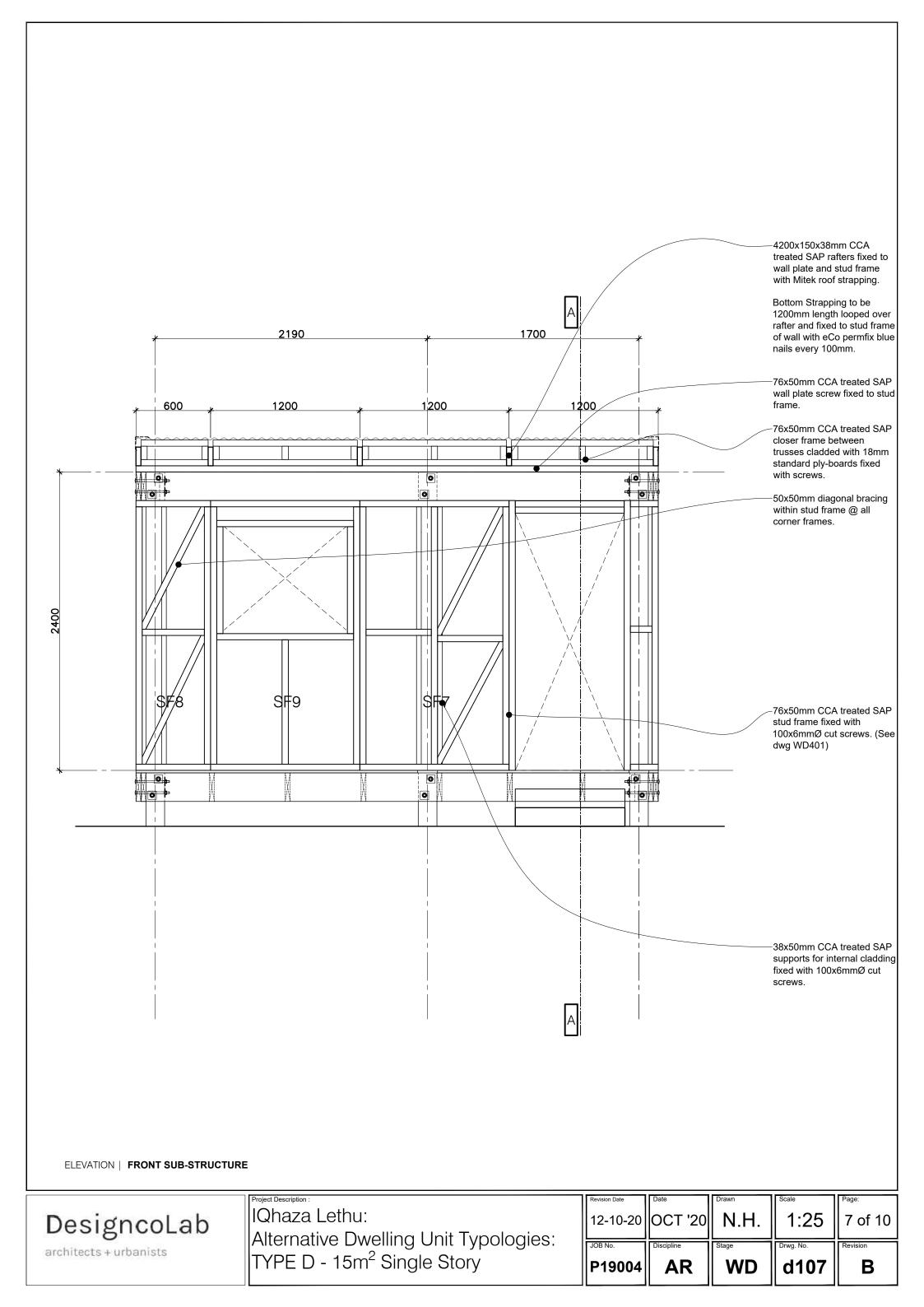
d104 :25 Ξ Ż 20 OCT 12-10-20 P19004 Dwelling Unit Typologies: 5m² Single Story Single Story IQhaza Lethu: Alternative [TYPE D - 15

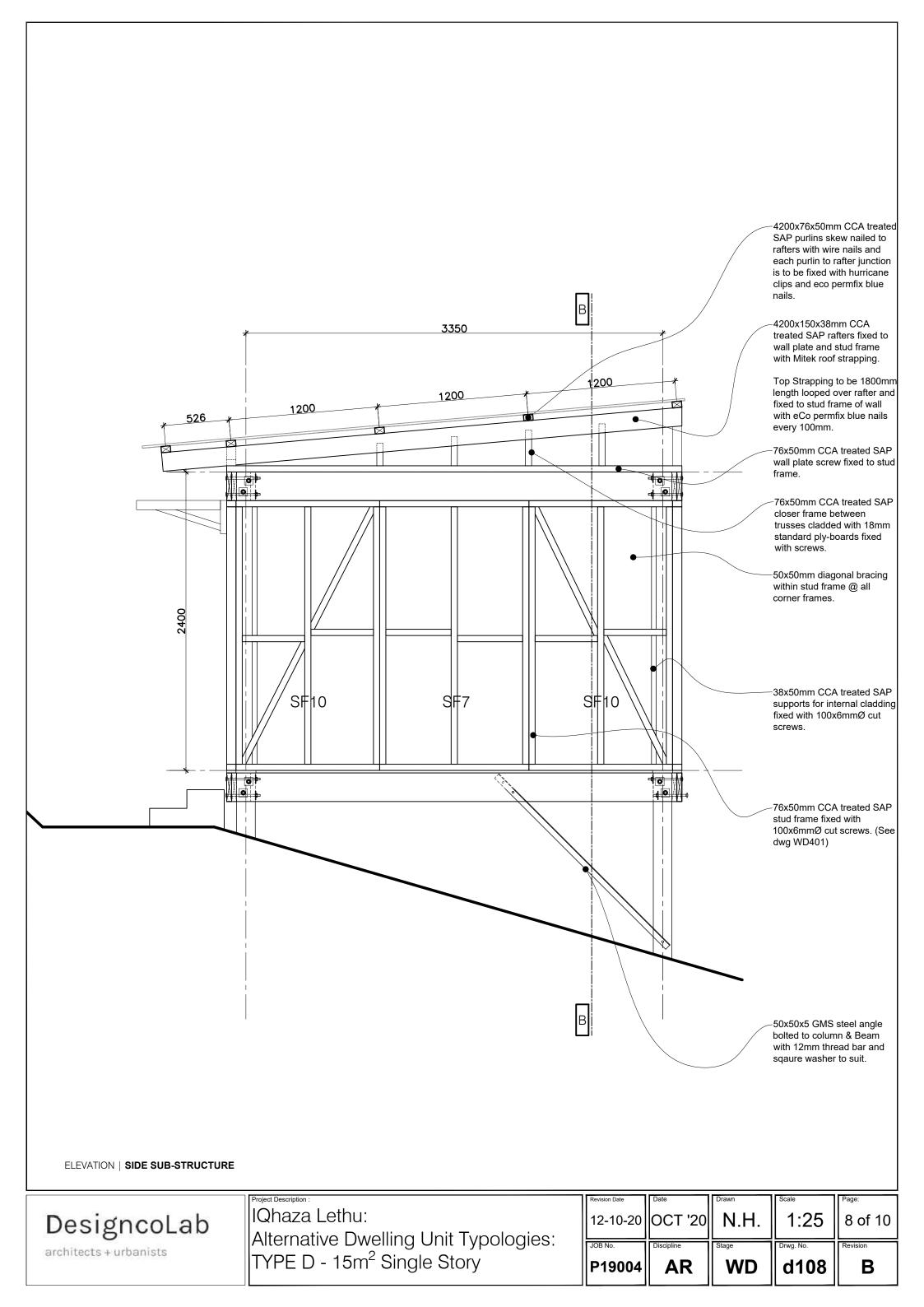
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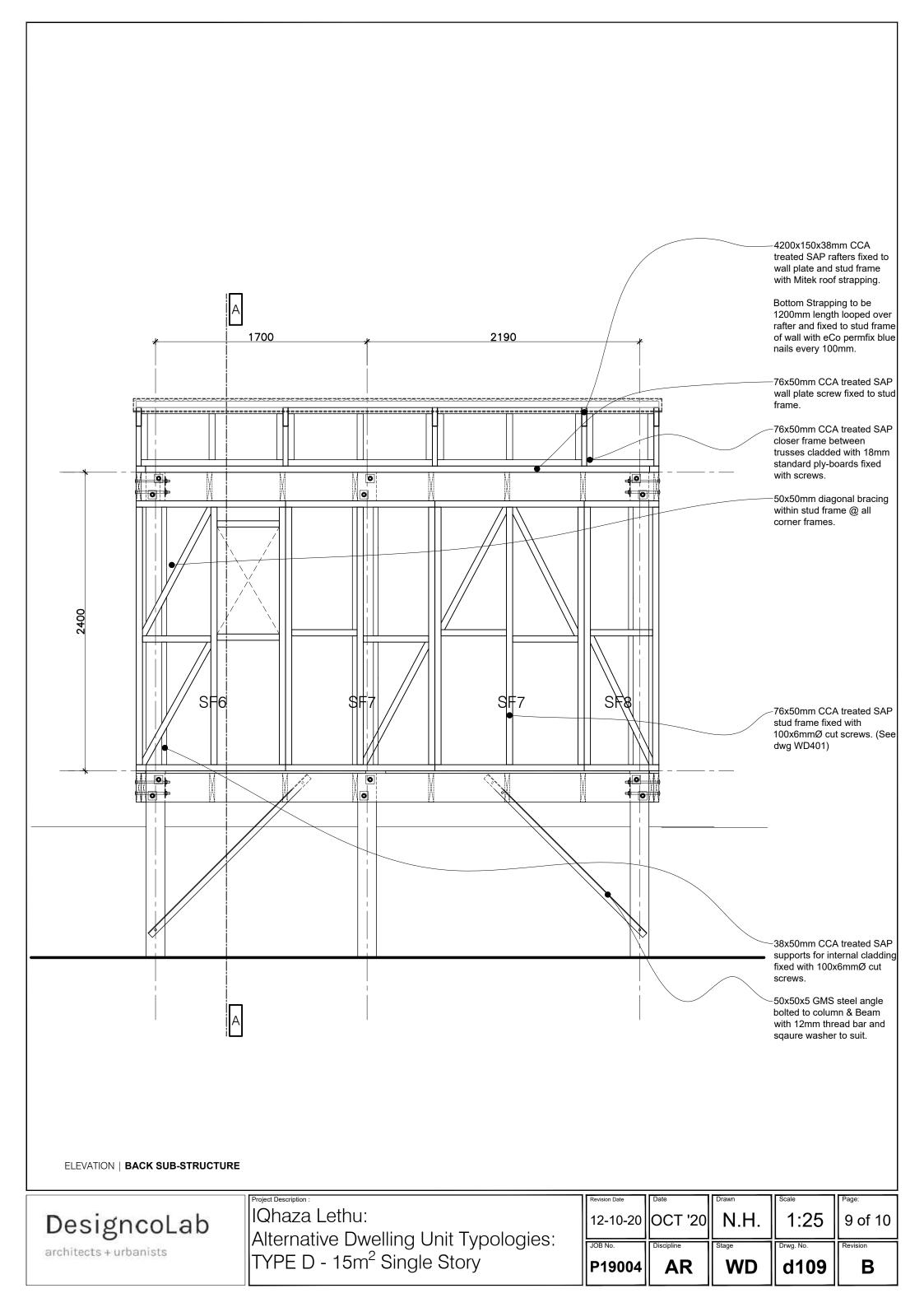
DesigncoLab

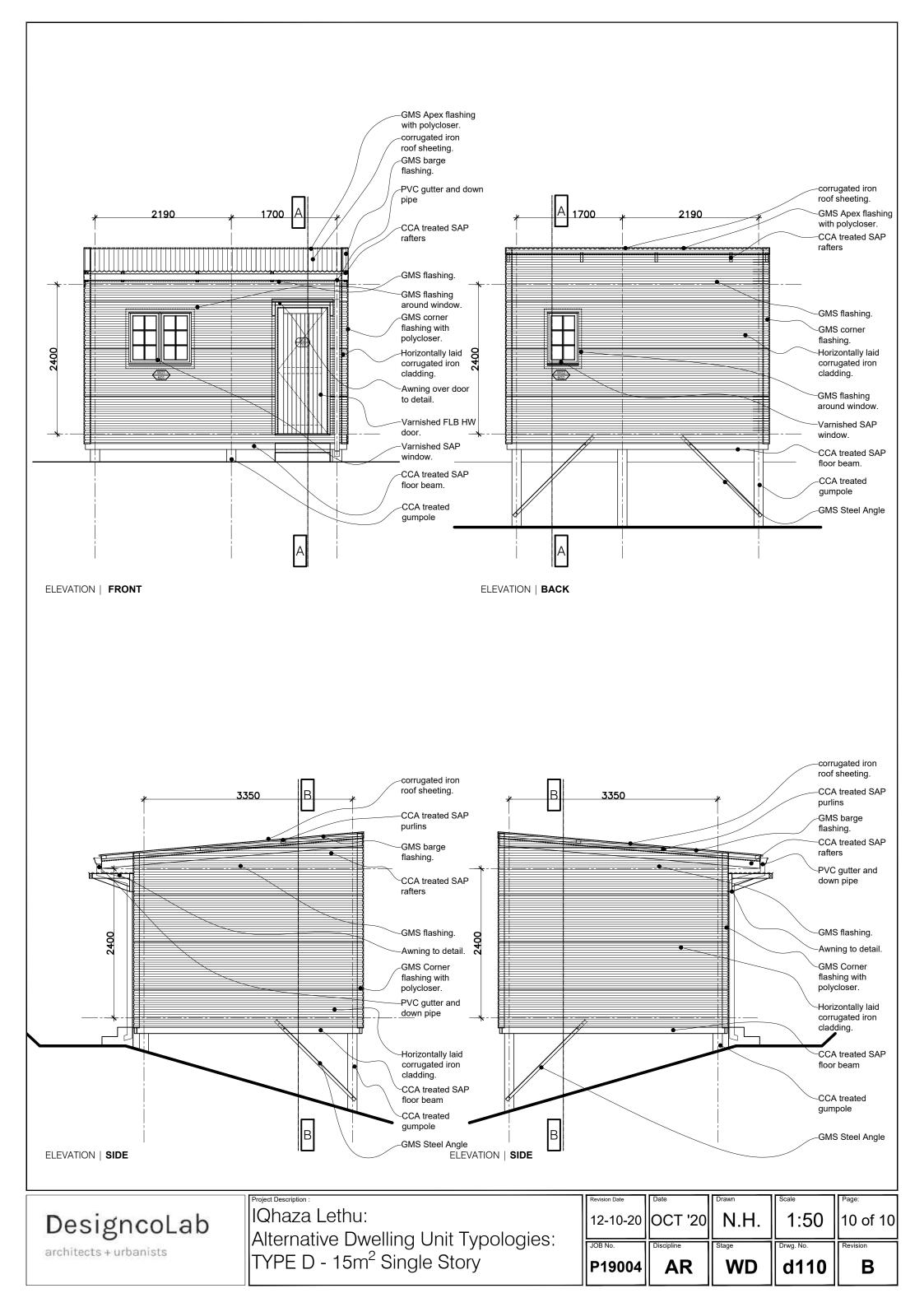


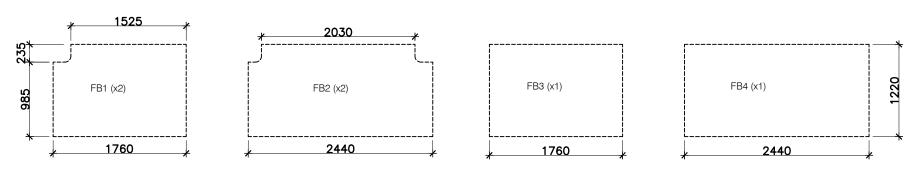




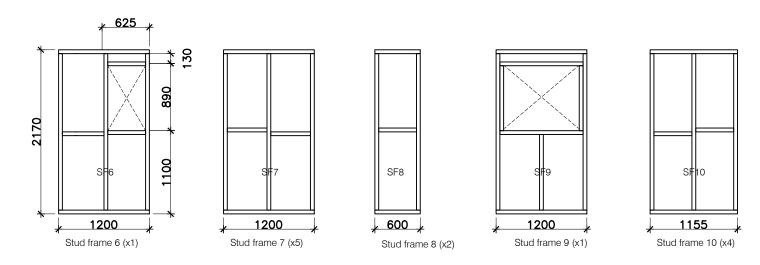








GROUND FLOOR FLOOR BOARDS (18mm SHUTTERPLY BOARDS)



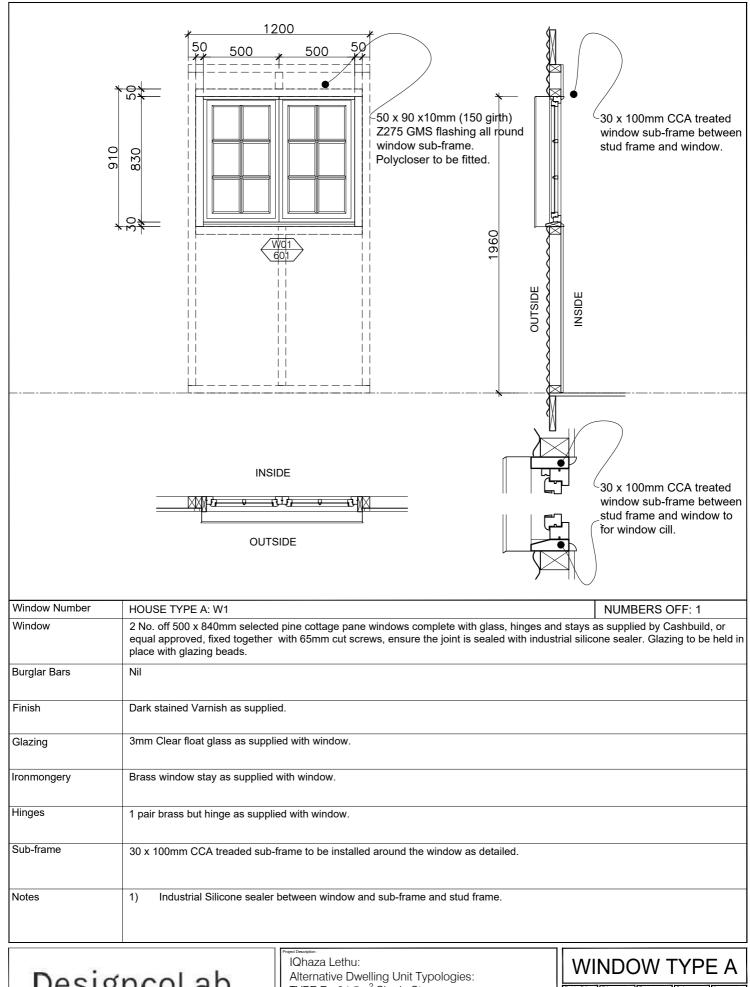
GROUND FLOOR STUD FRAMES (76x50 CCA TREATED SAP)

DETAILS

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٦	Project Description :
	IQhaza Lethu:
	Alternative Dwelling Unit Typologies:
	IQhaza Lethu: Alternative Dwelling Unit Typologies: TYPE D - 15m ² Single Story

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JOB No.	Discipline	Stage	Drwg. No.	Revision
P19004	AR	WD	401	В

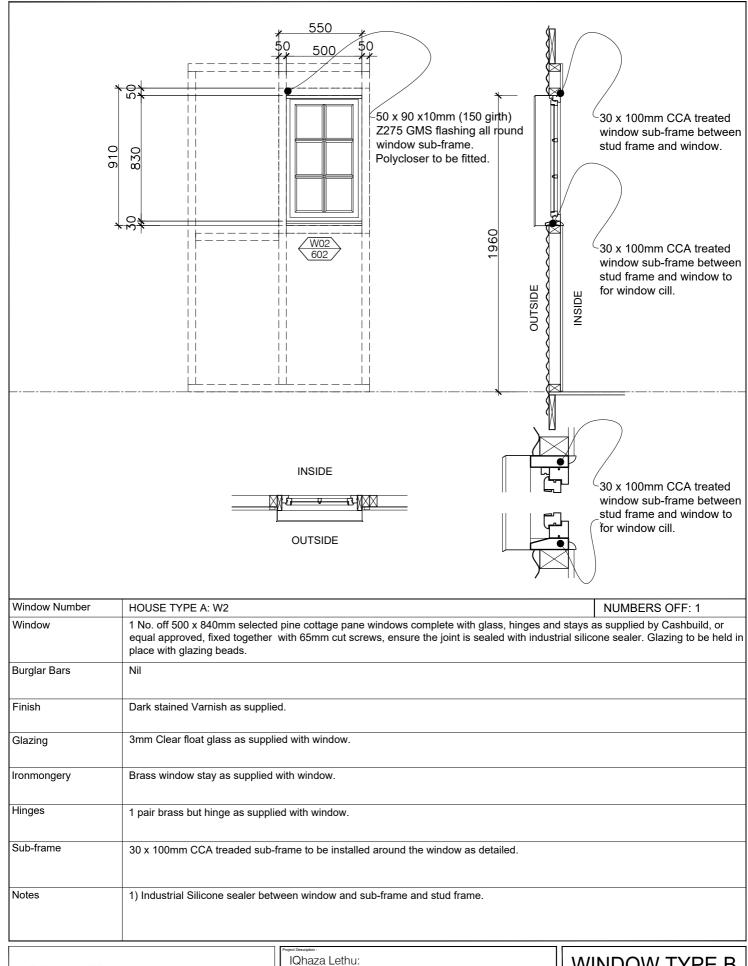


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TYPE E - 34.5m² Single Story

WINDOW SCHEDULE: UNIT TYPE E - WINDOW TYPE A

WINDOW TYPE A				
Revision Date 20-08-20	Aug '20	LSAA	1 : 25	1 of 2
^{ЈОВ No.} P19004		WD	601	Revision

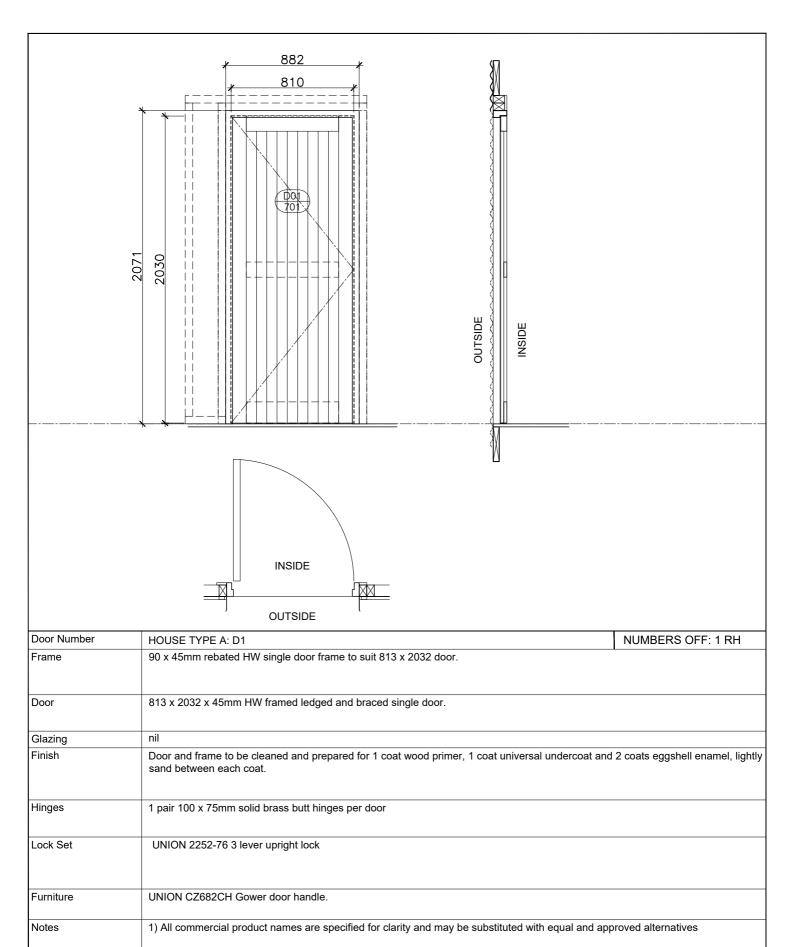


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Alternative Dwelling Unit Typologies: TYPE E - 34.5m² Single Story

WINDOW SCHEDULE: UNIT TYPE E - WINDOW TYPE B

WINDOW TYPE B				
Revision Date	Aug '20	LSAA	1:25	2 of 2
^{108 No.} P19004	AR	WD	602	Revision

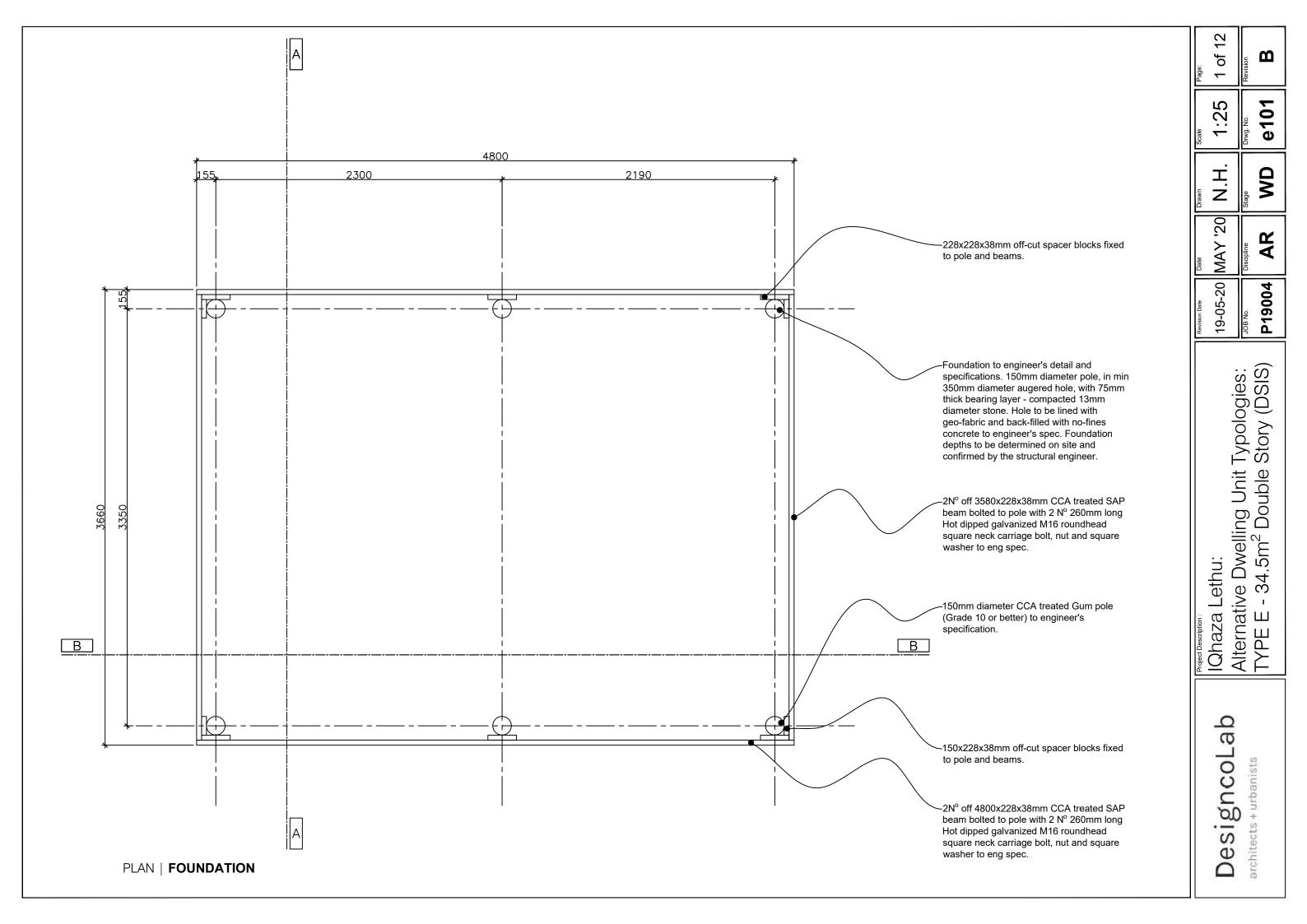


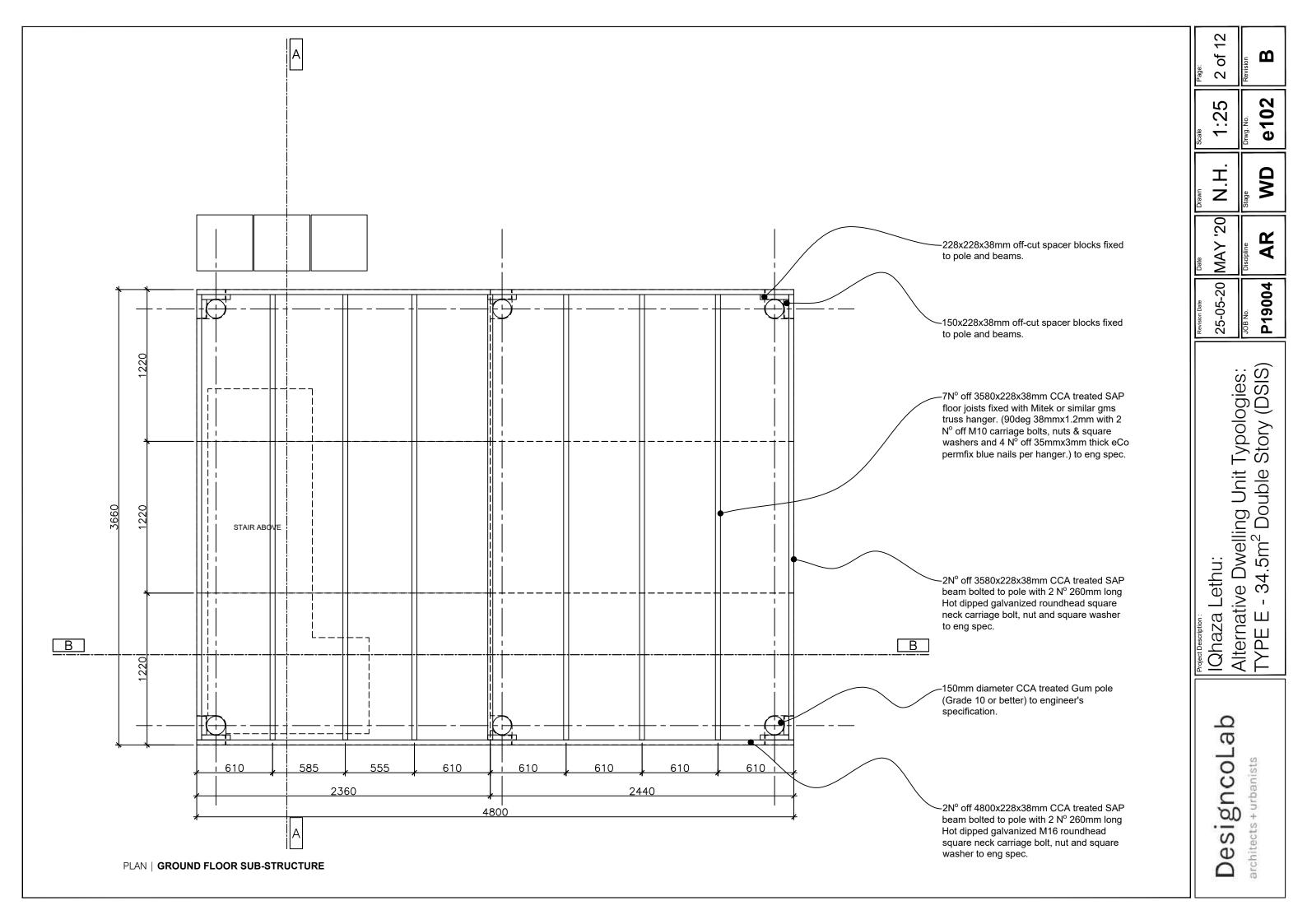
architects + urbanists

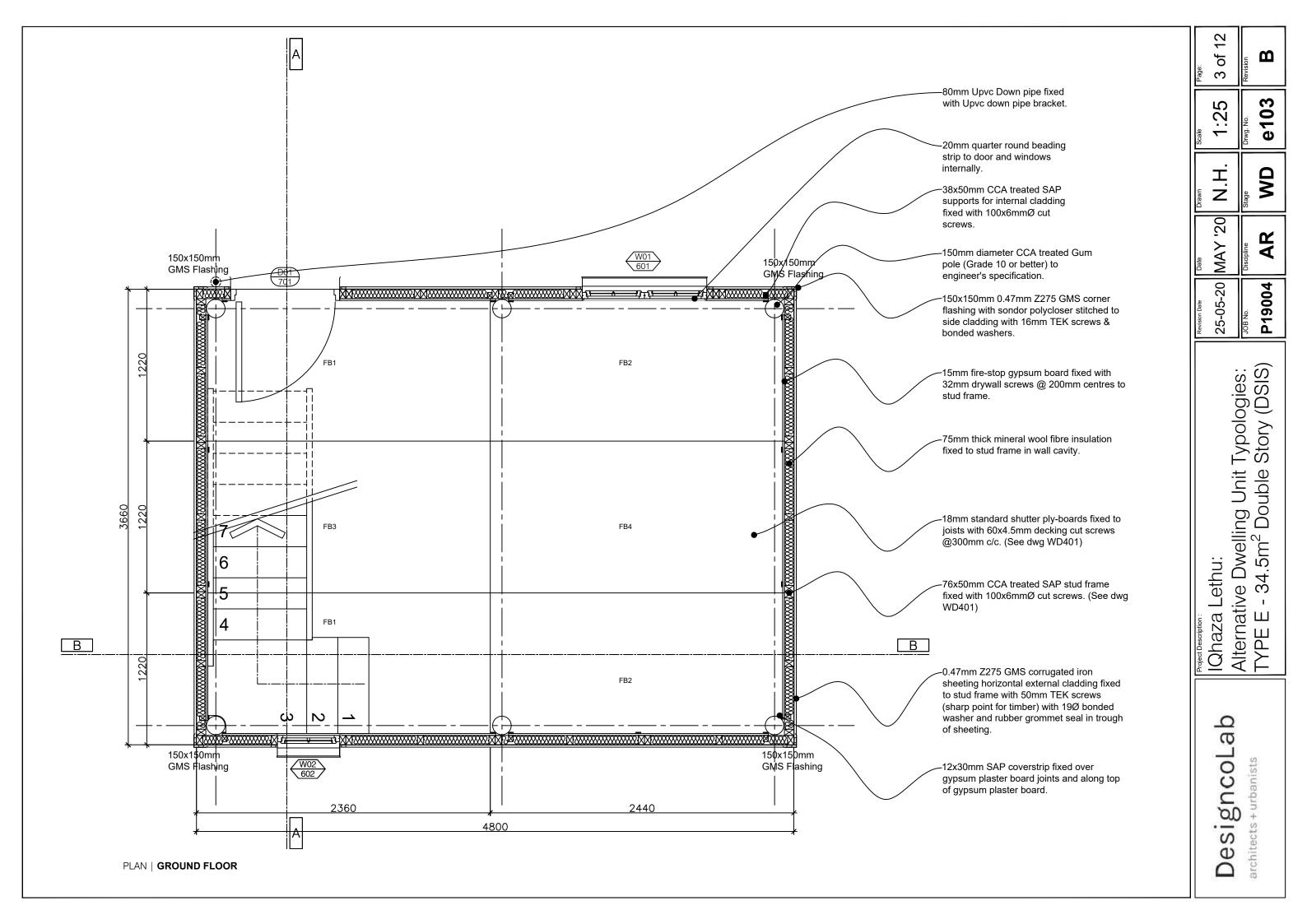
IQhaza Lethu: Alternative Dwelling Unit Typologies: TYPE E - 34.5m² Single Story

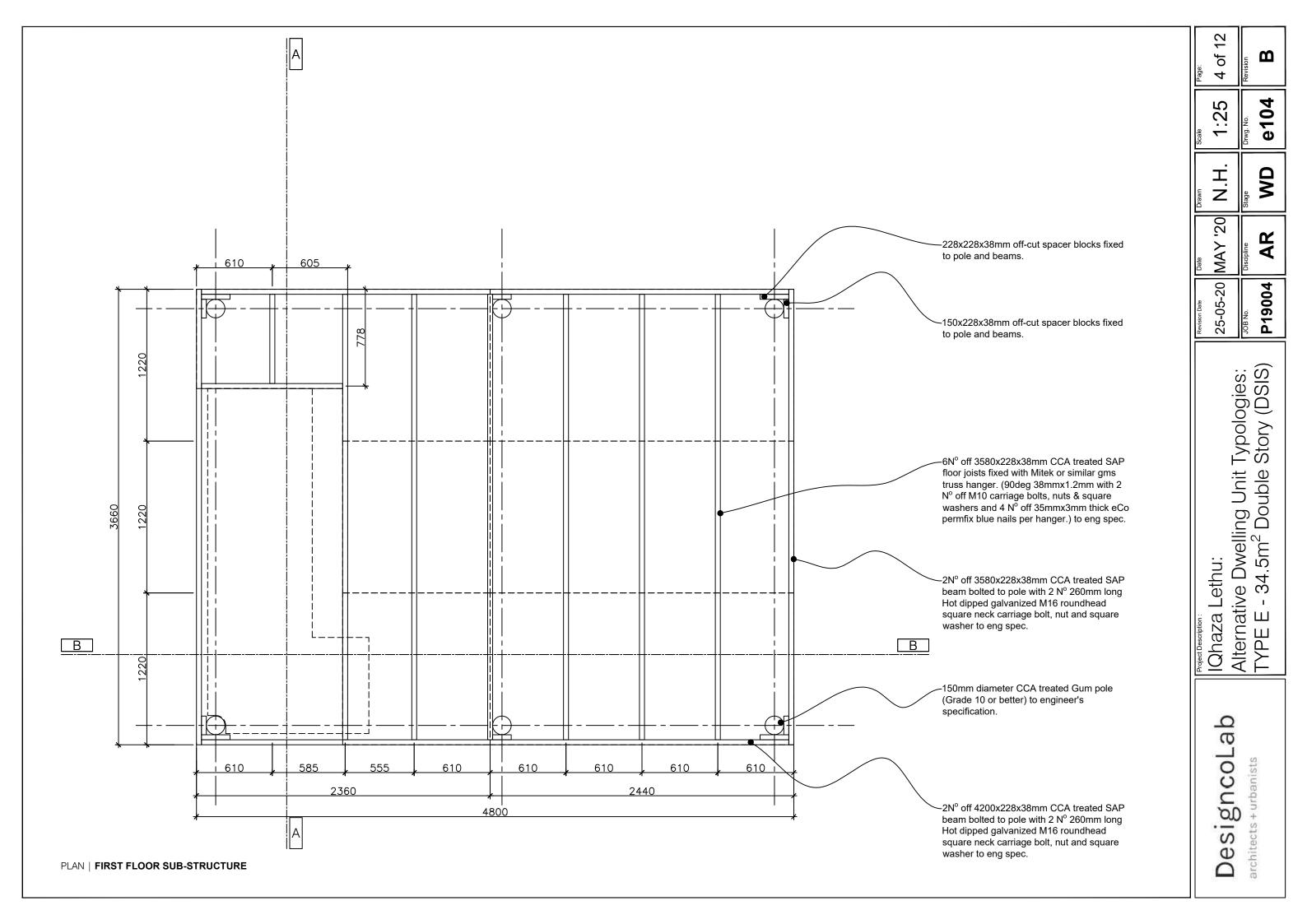
DOOR SCHEDULE: UNIT TYPE E - DOOR TYPE D1

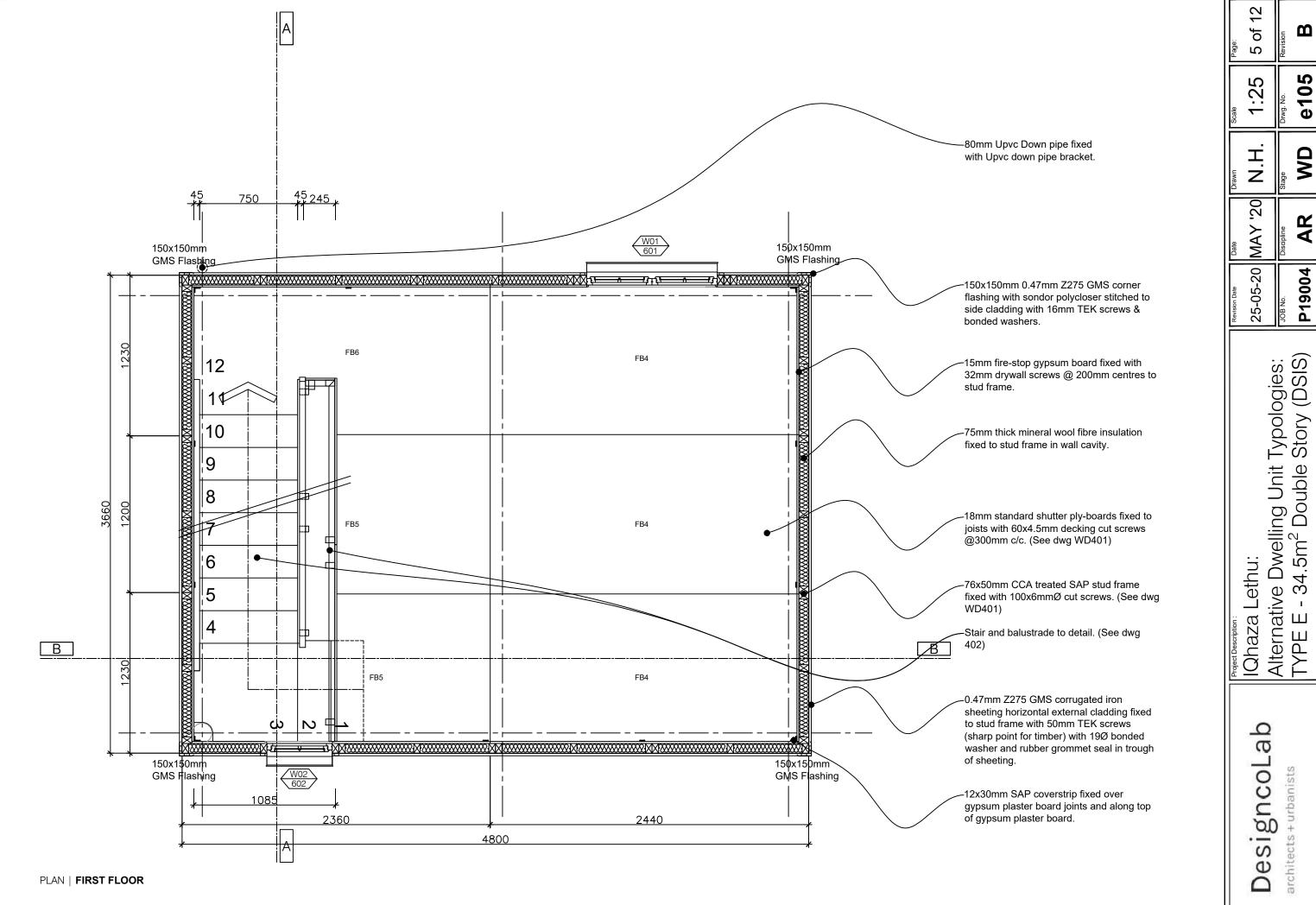
DOOR TYPE A				
Revision Date 20-08-20	Aug '20	LSAA	1:25	1 of 1
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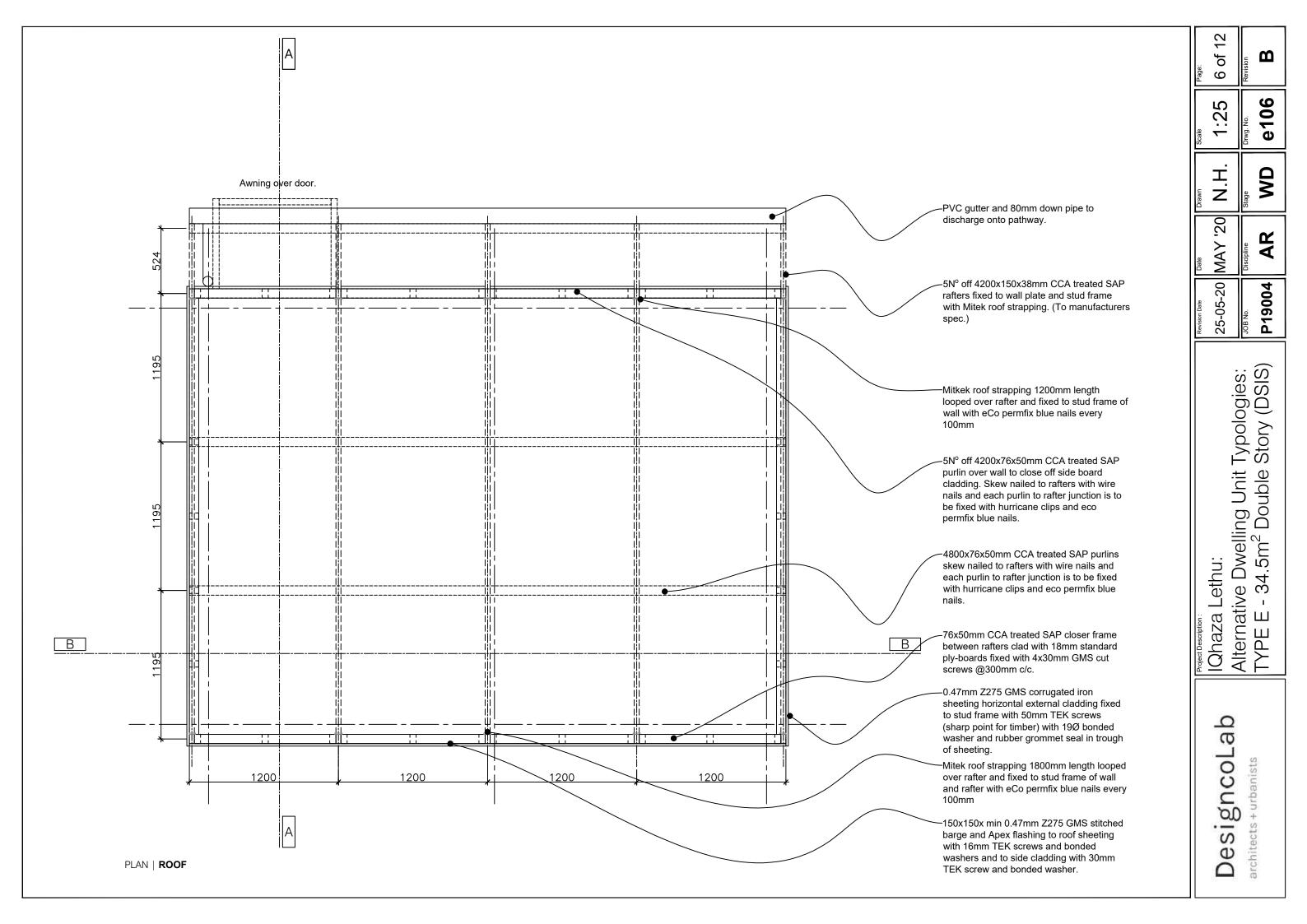


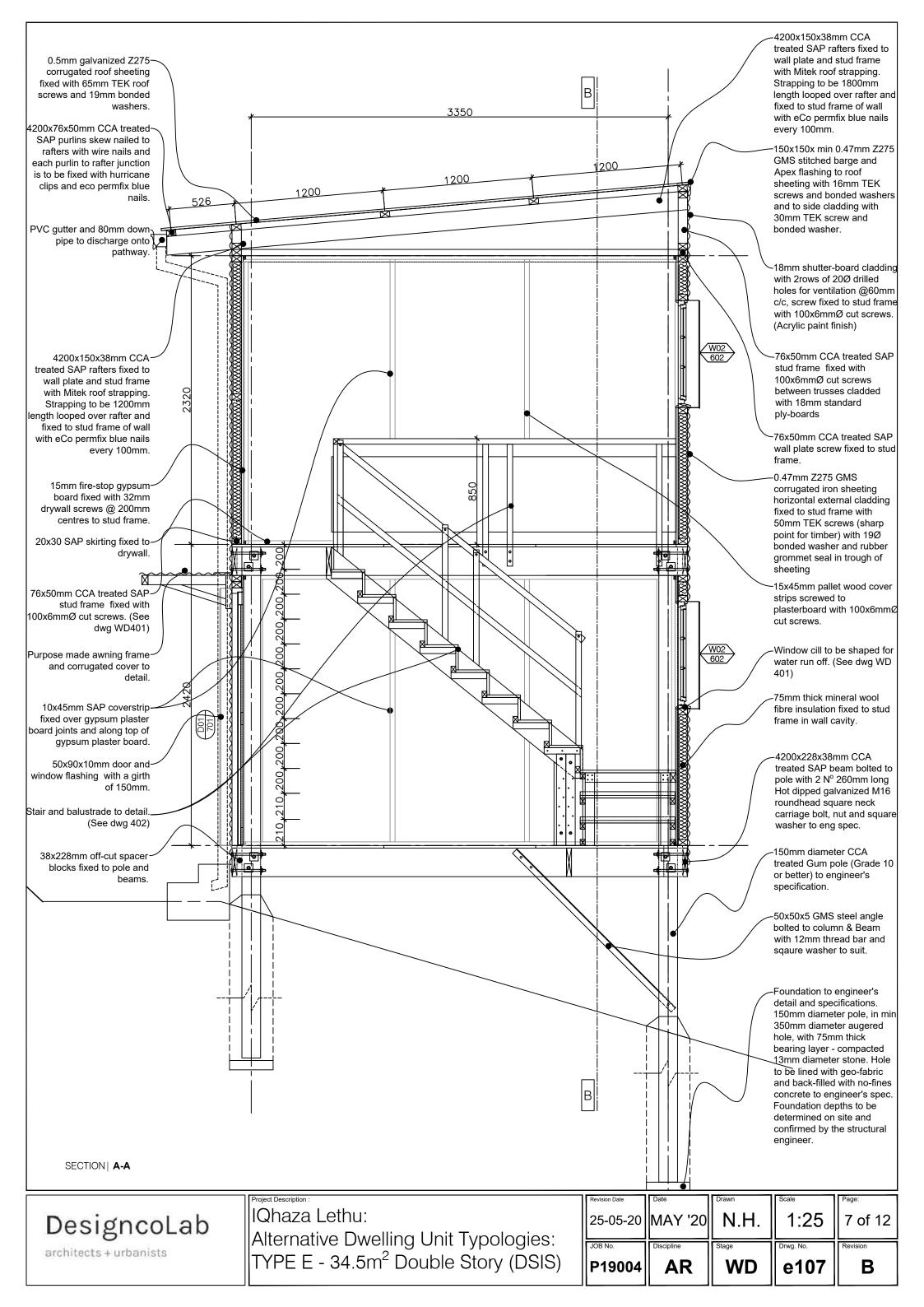


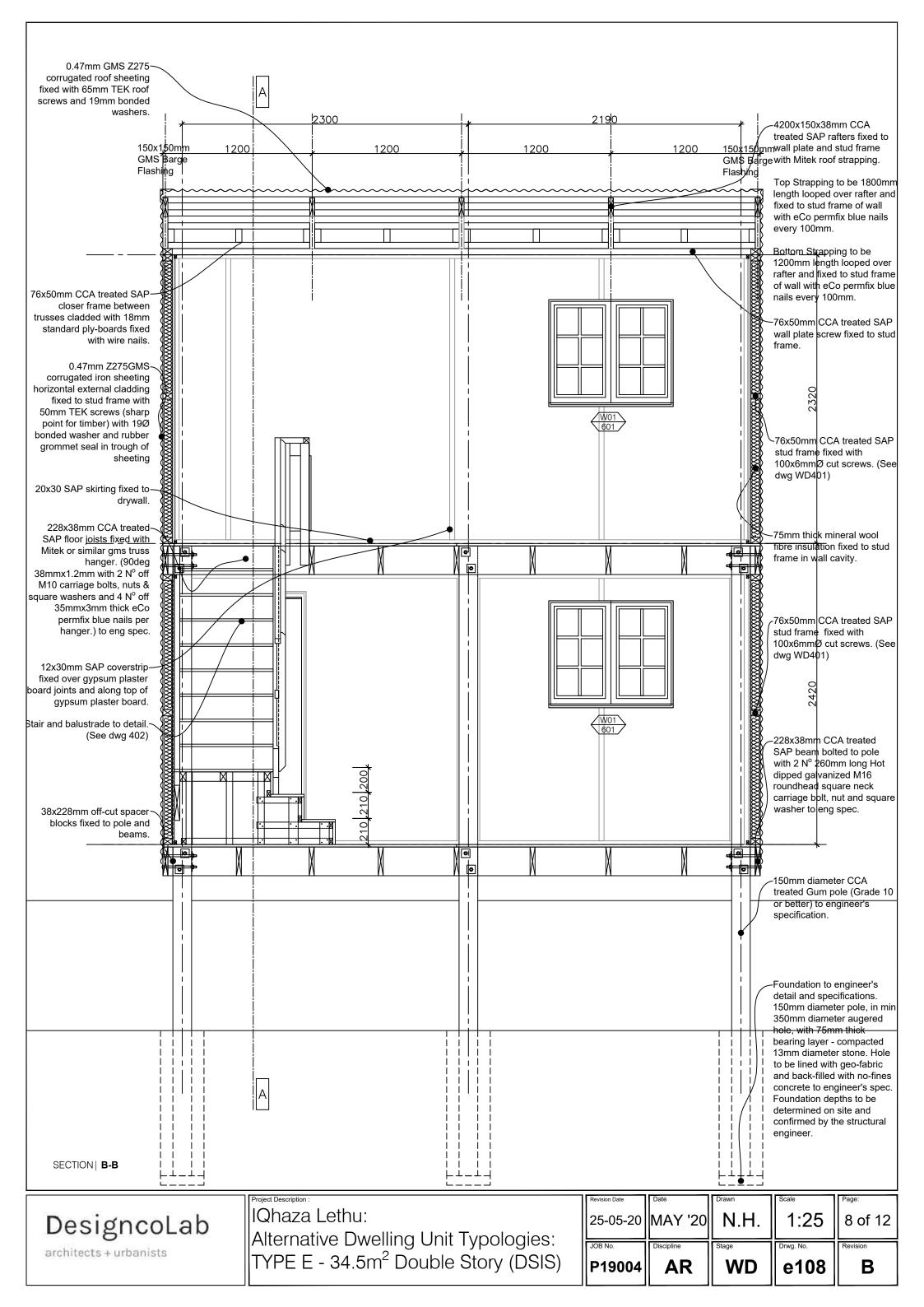


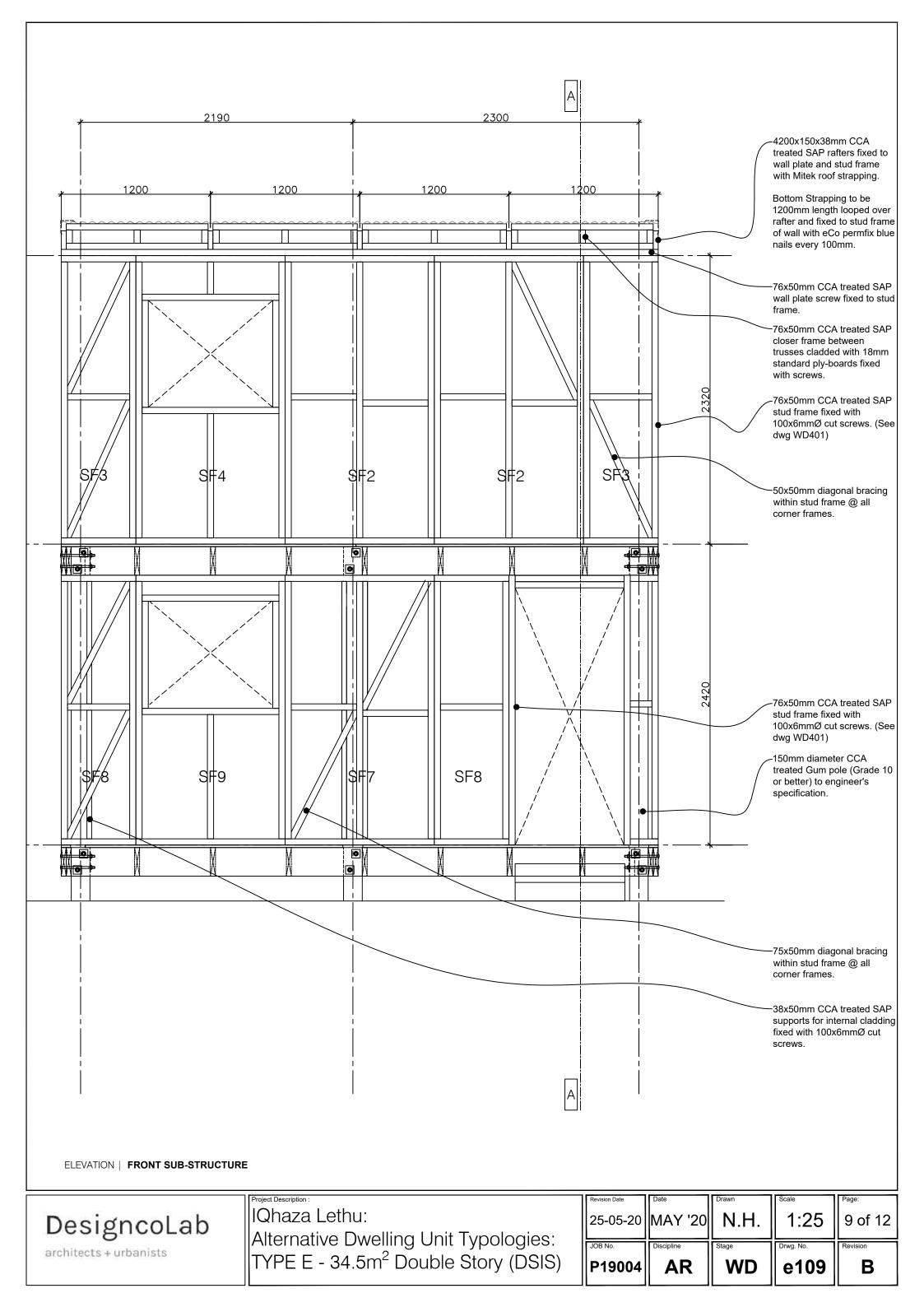


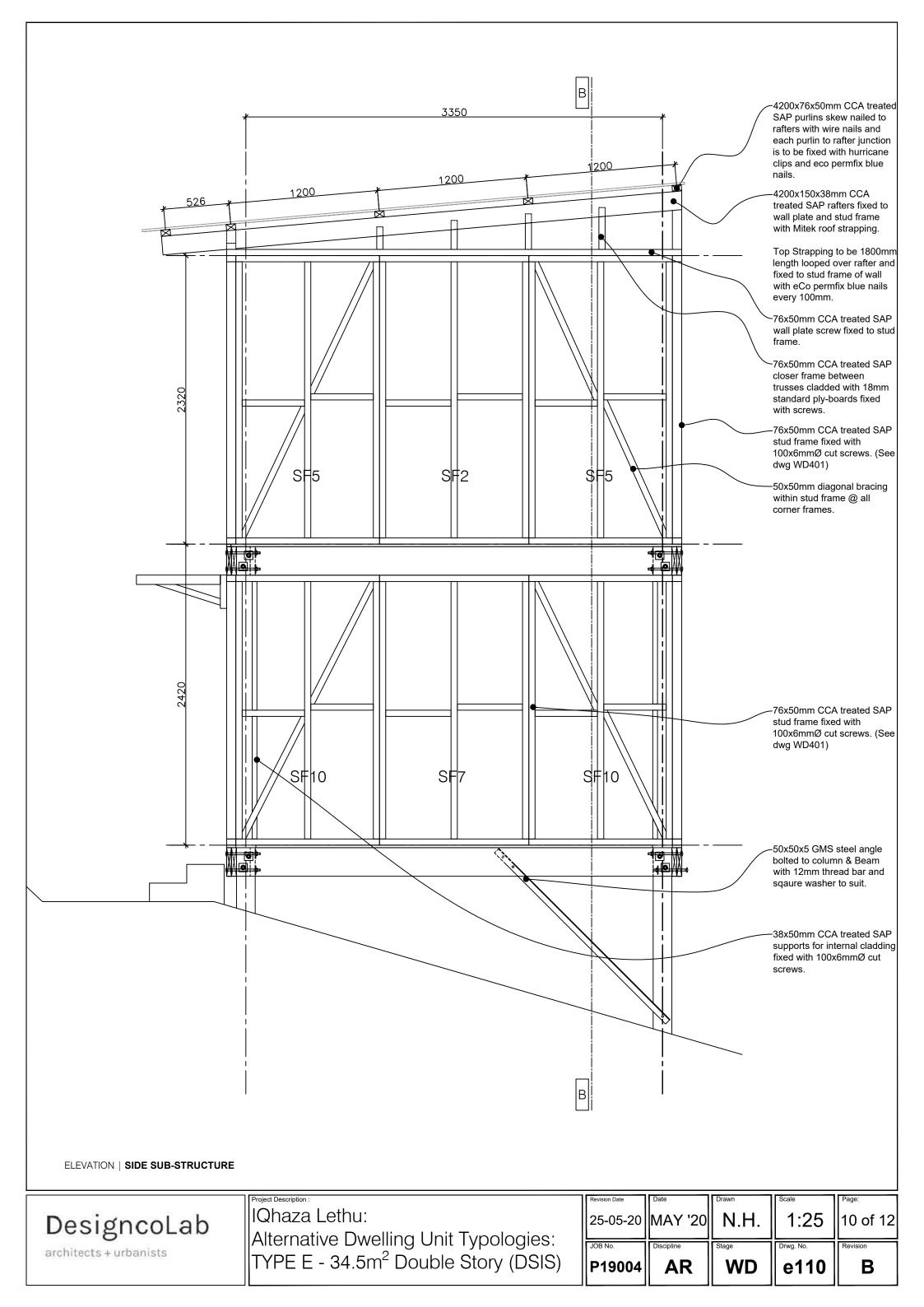
P19004 Alternative Dwelling Unit Typologies: TYPE E - 34.5m² Double Story (DSIS)

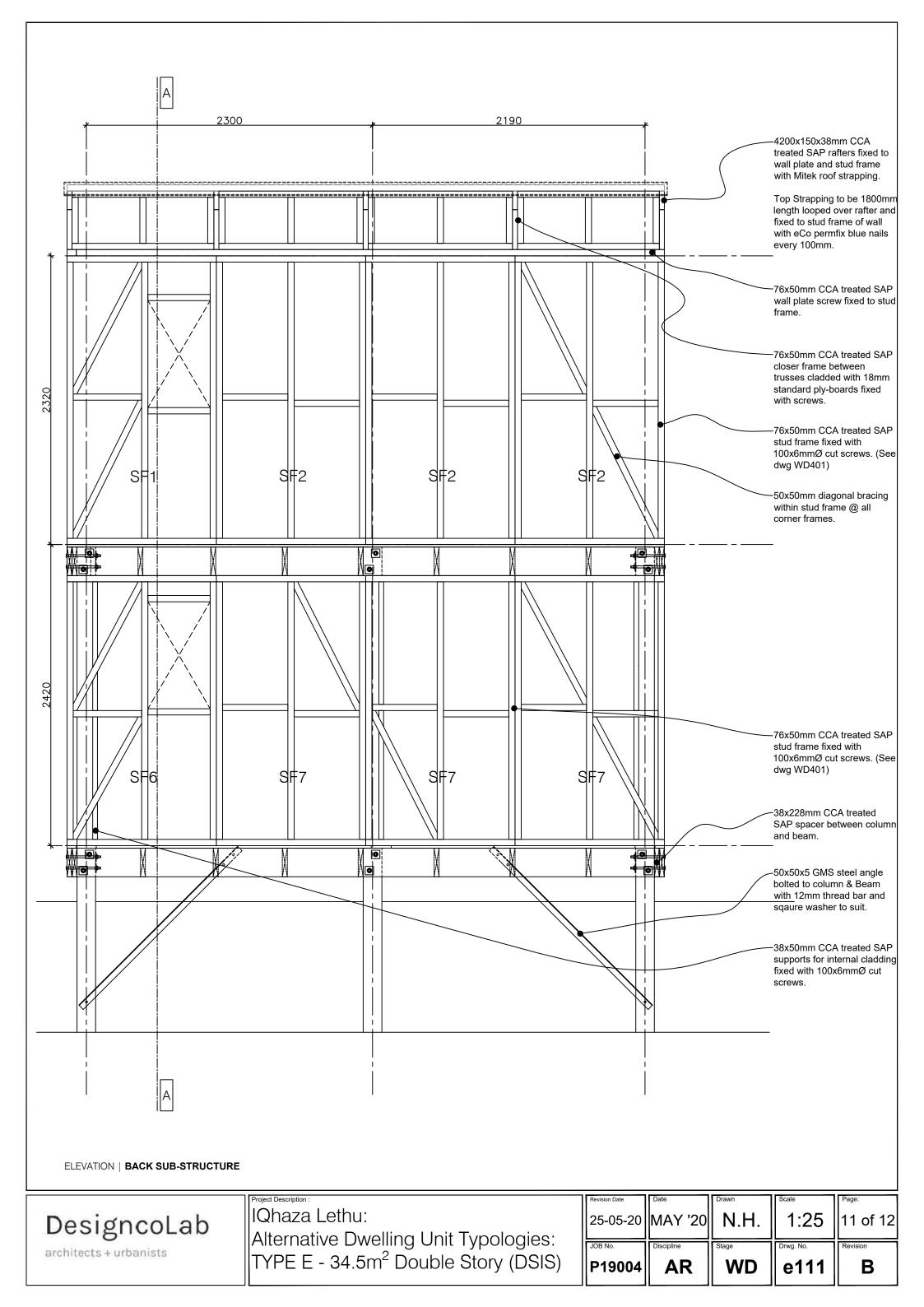


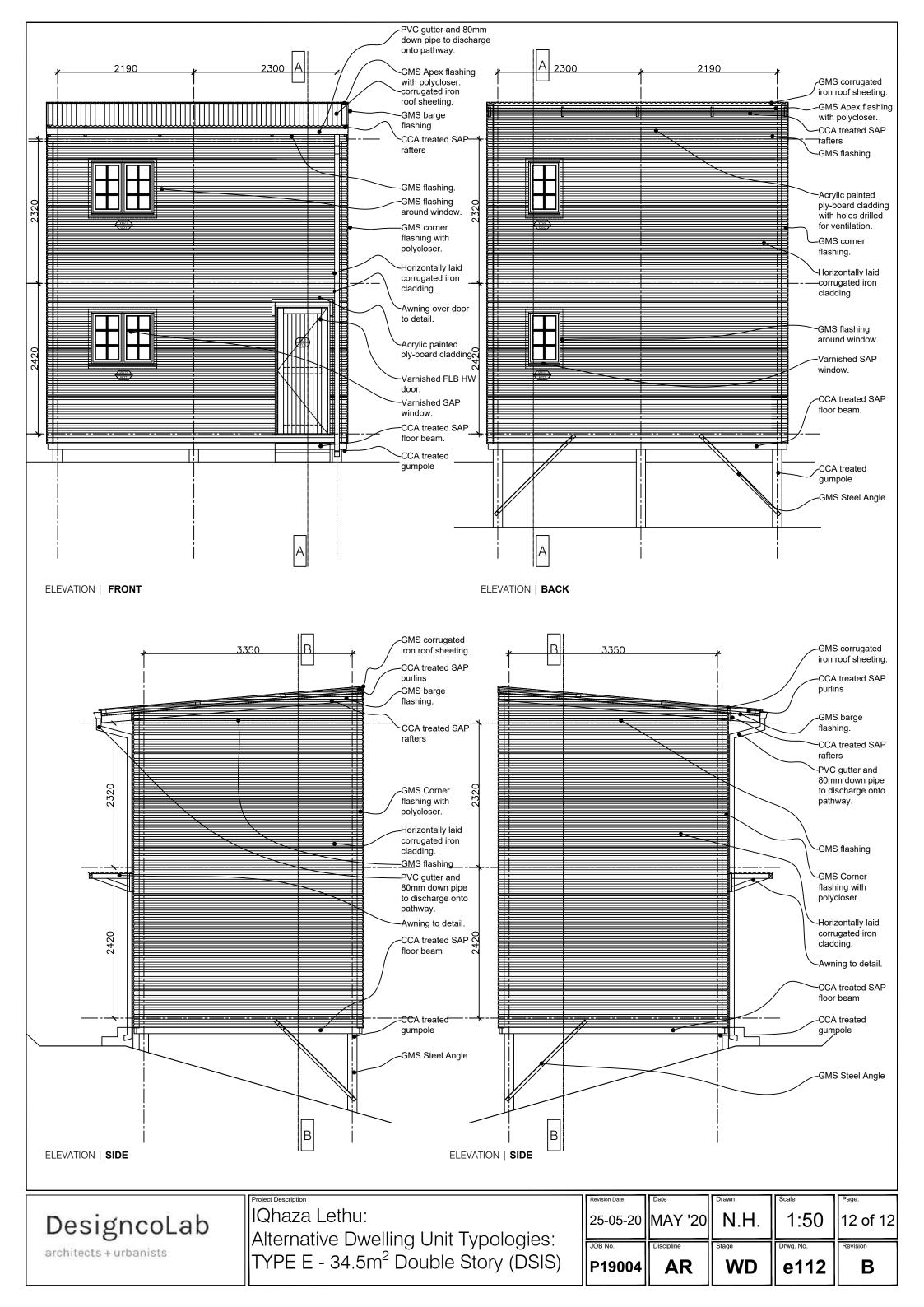


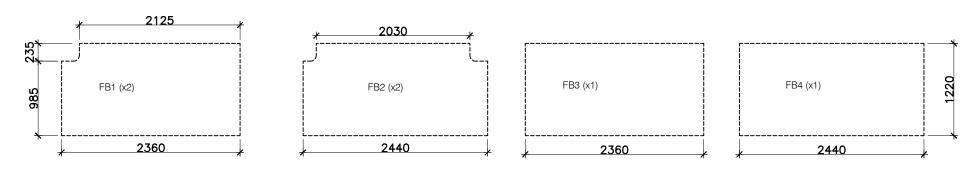




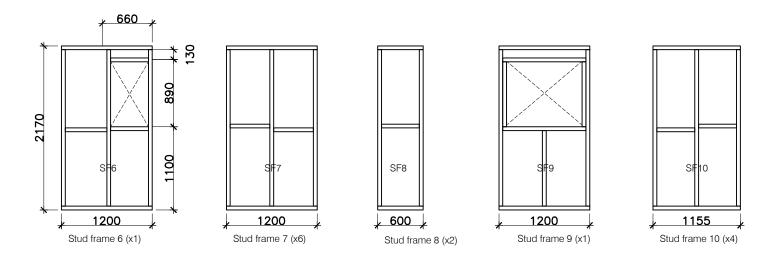




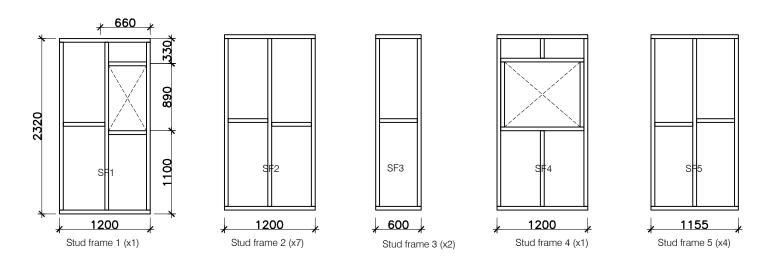




GROUND FLOOR FLOOR BOARDS (18mm SHUTTERPLY BOARDS)



GROUND FLOOR STUD FRAMES (76x50 CCA TREATED SAP)



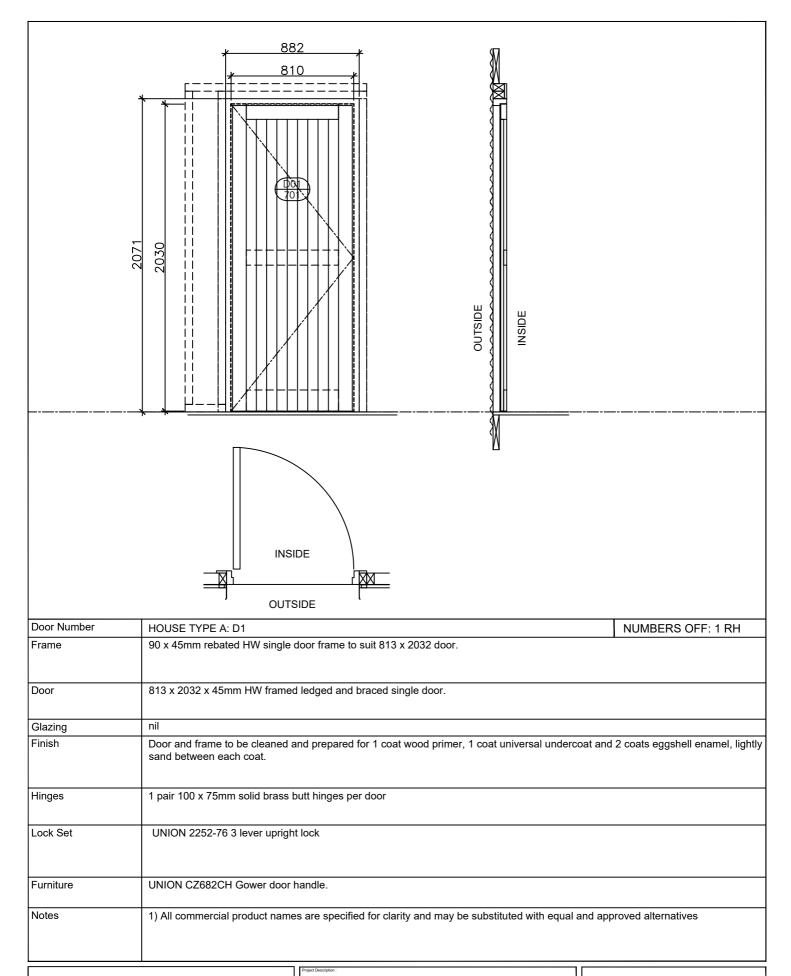
FIRST FLOOR STUD FRAMES (76x50 CCA TREATED SAP)

DETAILS

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IQhaza Lethu: Alternative Dwelling Unit Typologies: TYPE E - 34.5m² Double Story (DSIS)

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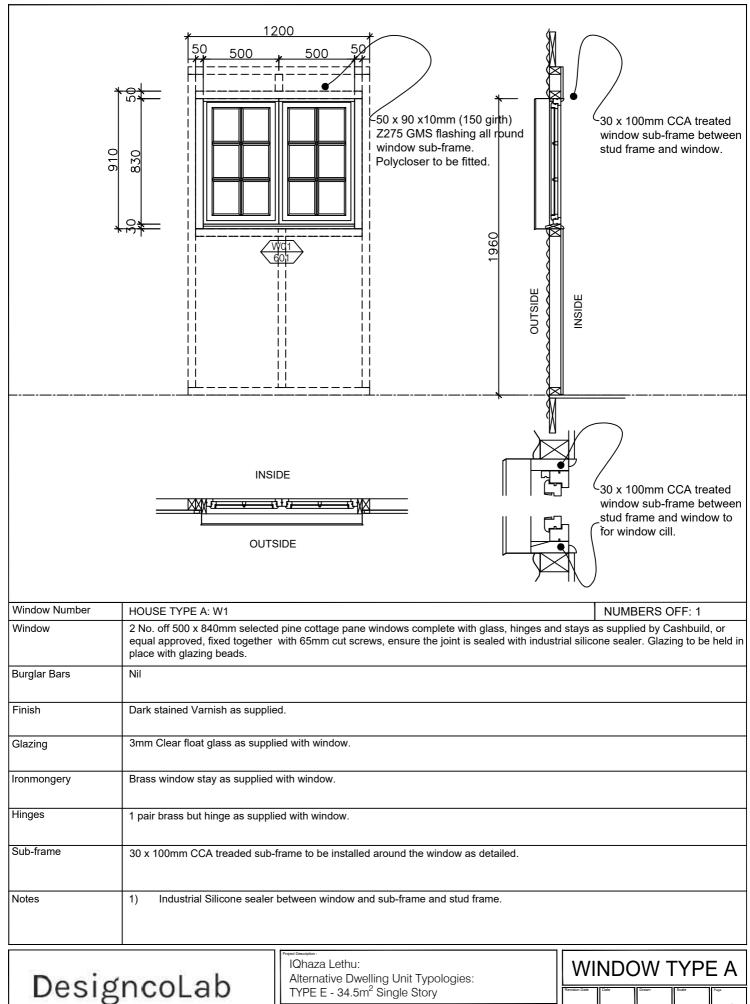
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IQhaza Lethu: Alternative Dwelling Unit Typologies: TYPE E - 34.5m² Single Story

DOOR SCHEDULE: UNIT TYPE E - DOOR TYPE D1

DOOR TYPE A					
Revision Date 20-08-20	Aug '20	LSAA	1 : 25	1 of 1	
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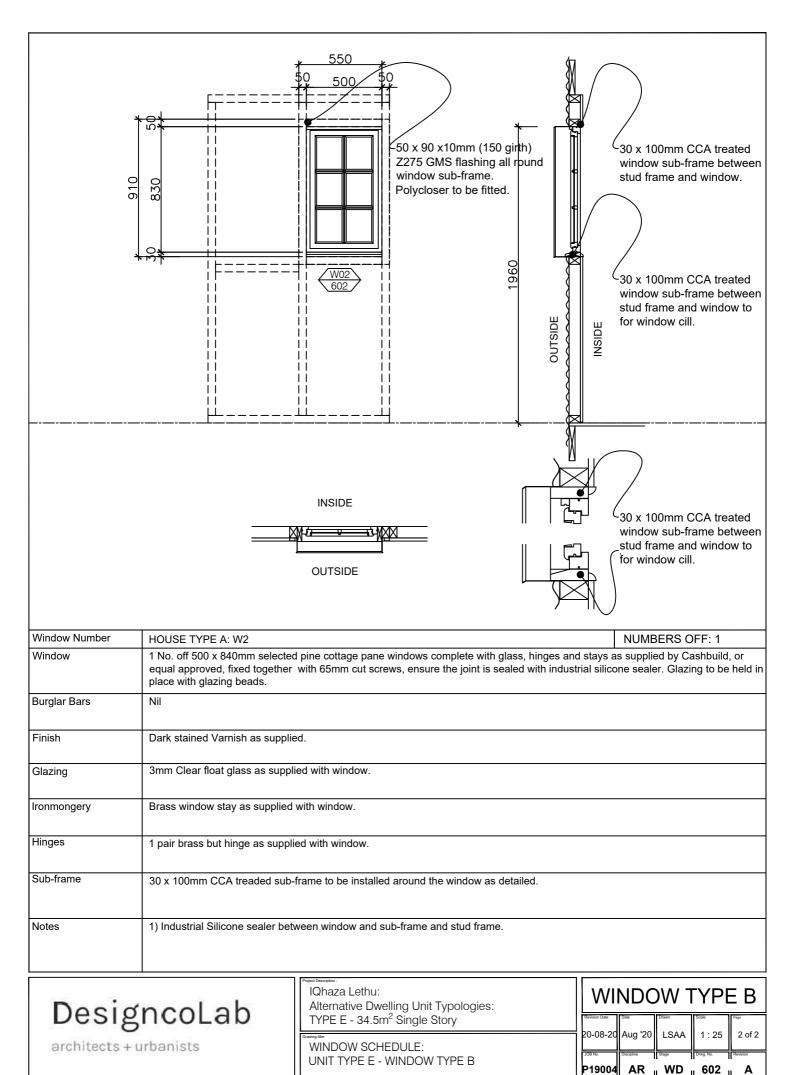


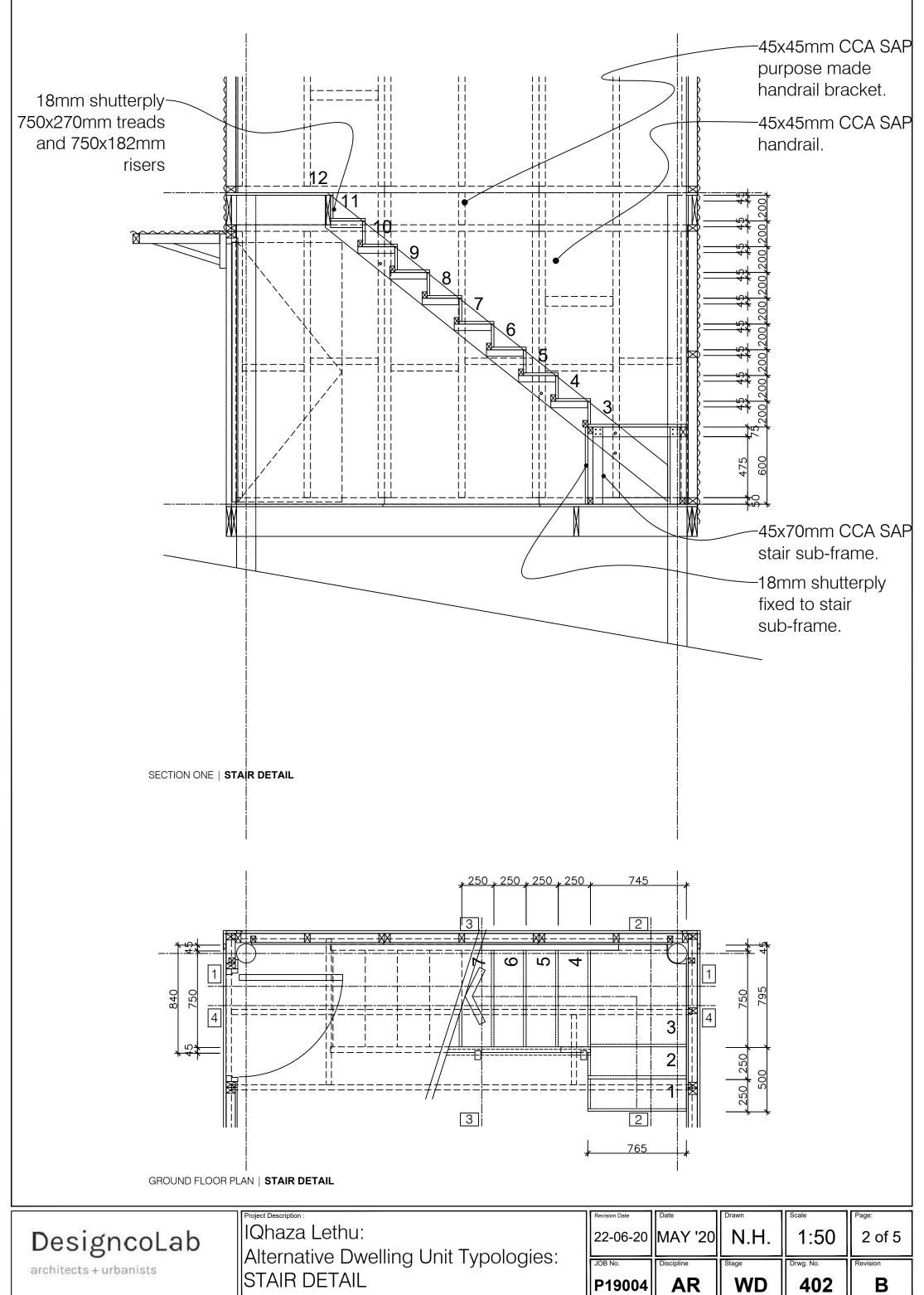
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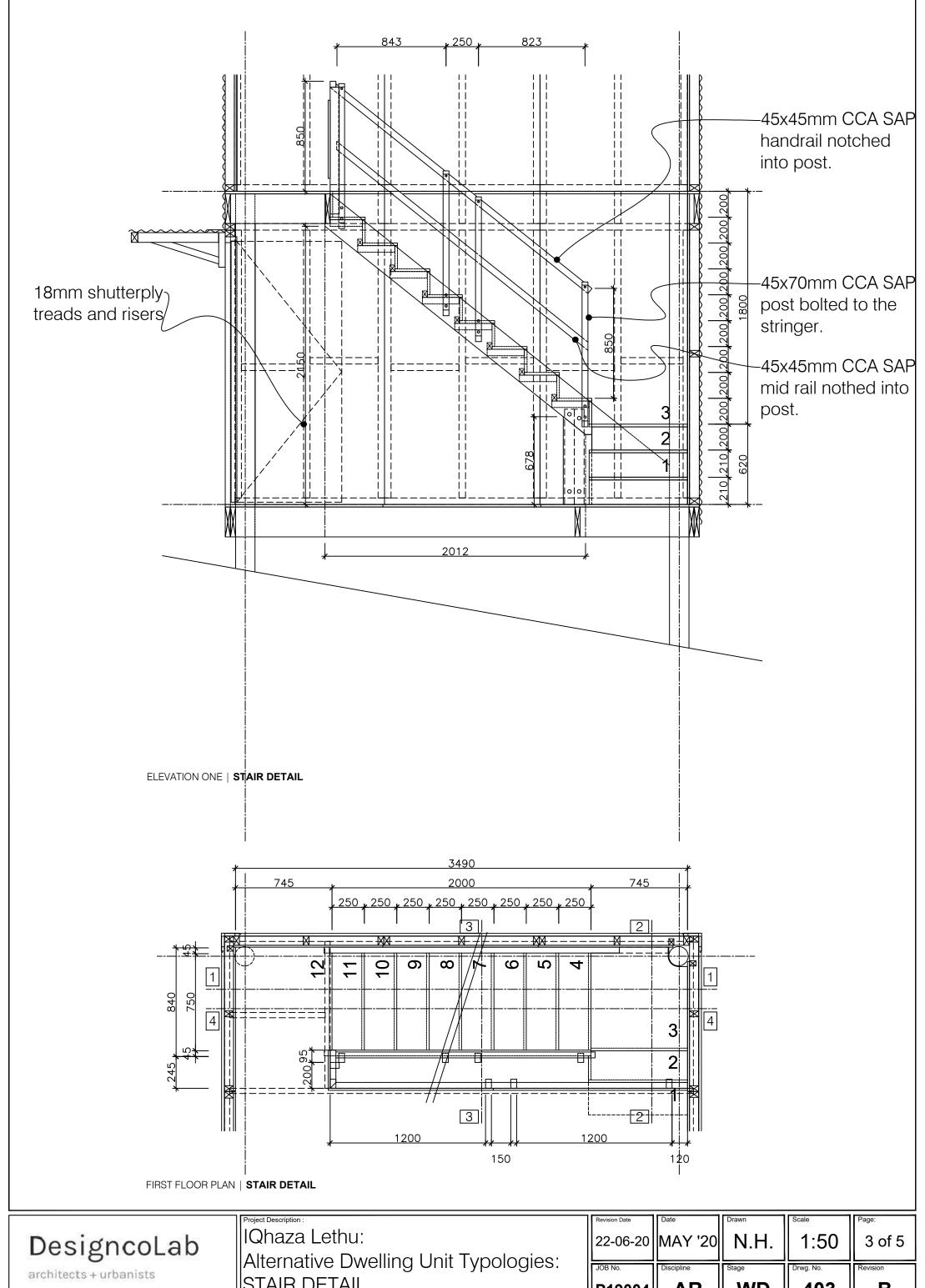
WINDOW SCHEDULE: UNIT TYPE E - WINDOW TYPE A

WINDOW TYPE A					
Revision Date 20-08-20	Aug '20	LSAA	1 : 25	1 of 2	
^{ЈОВ No.} Р19004	AR	WD	601	Revision	

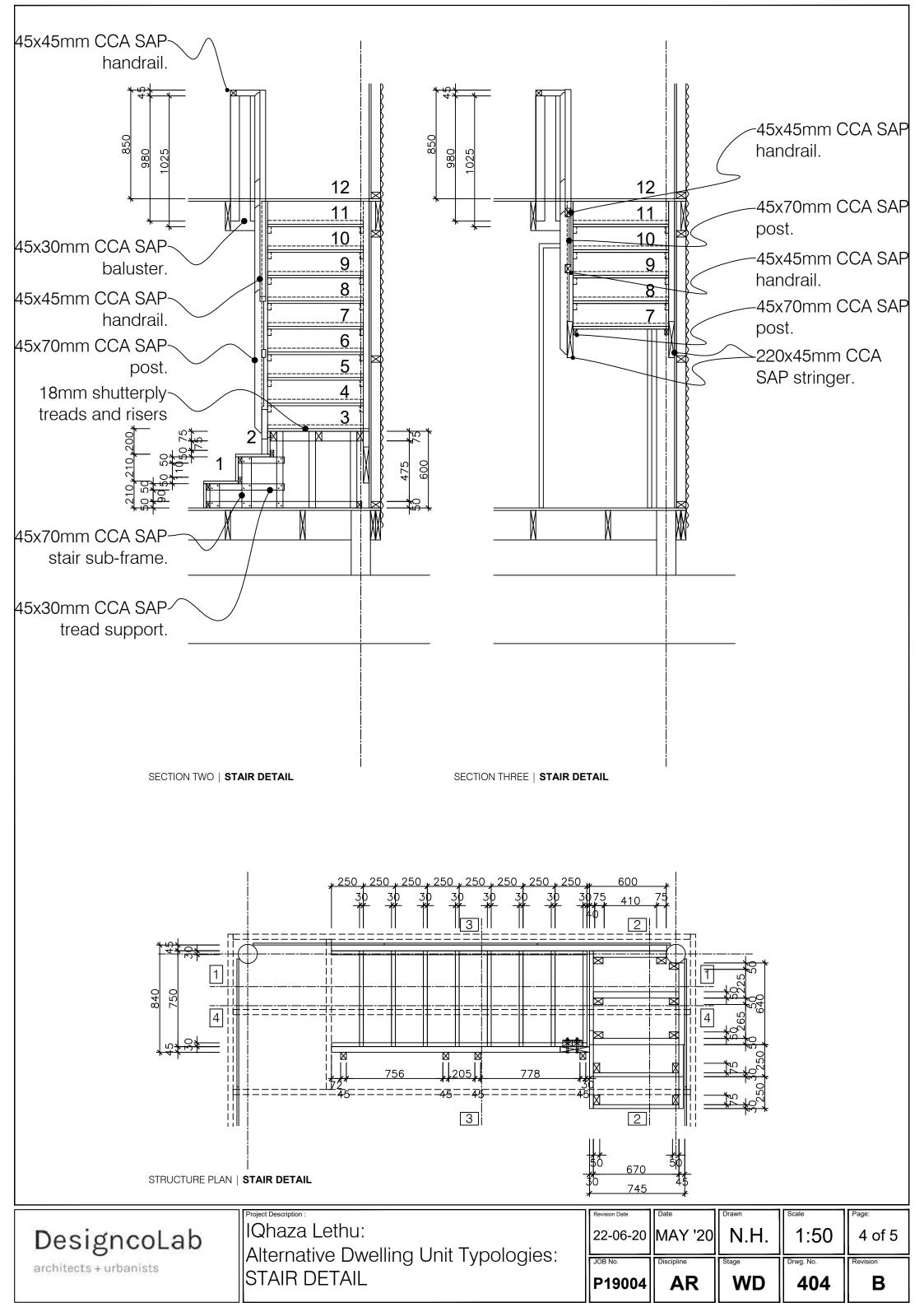


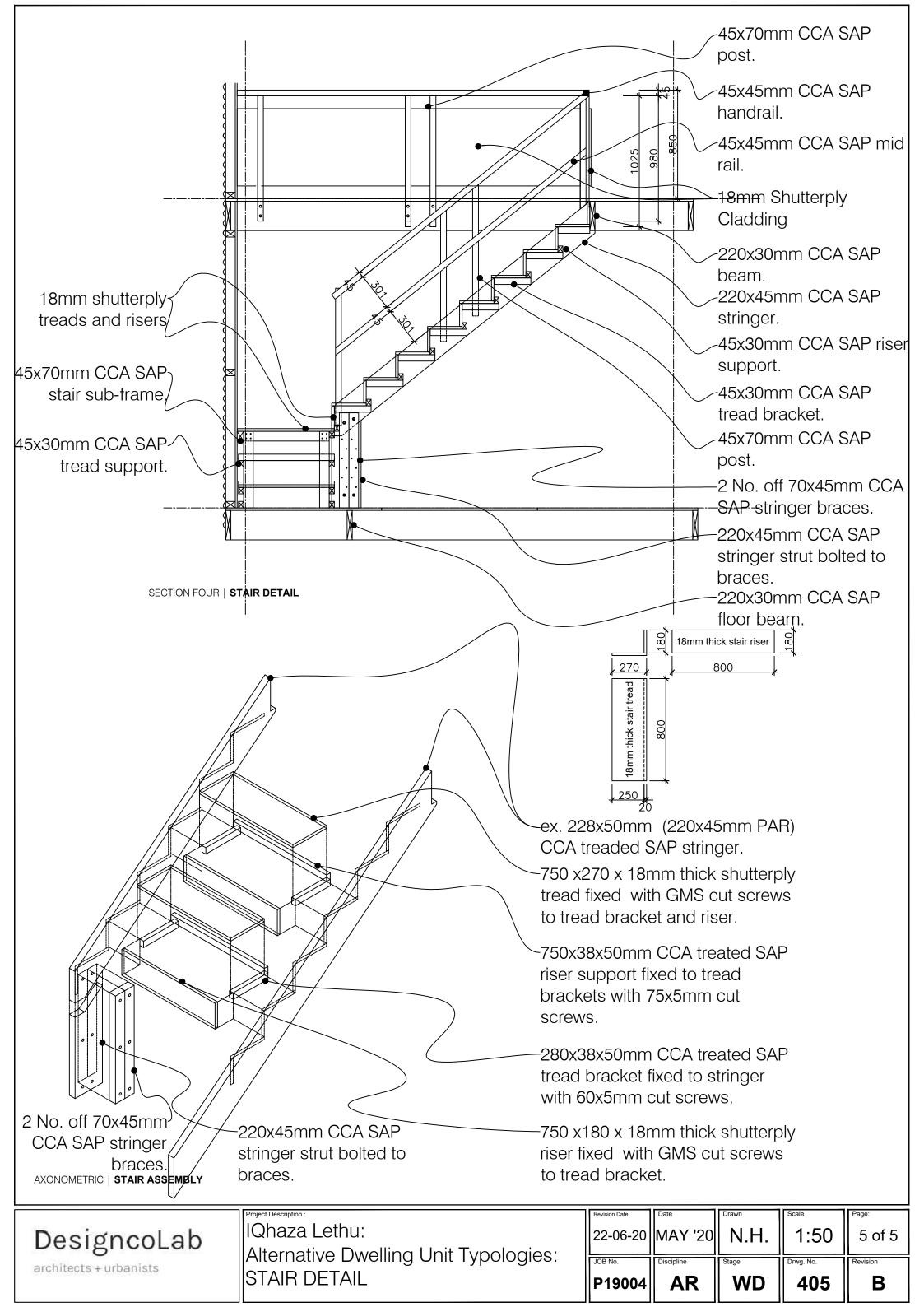


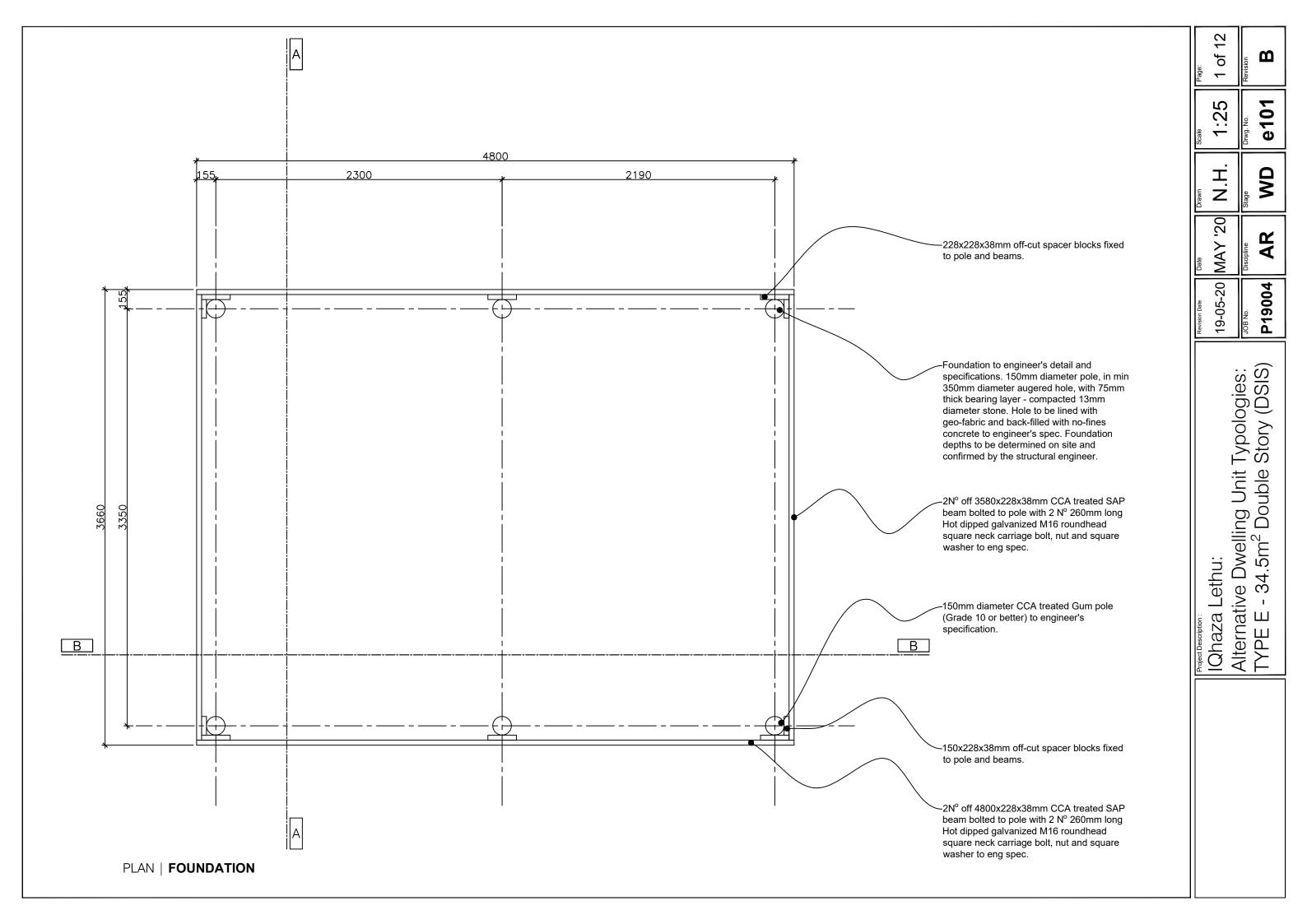
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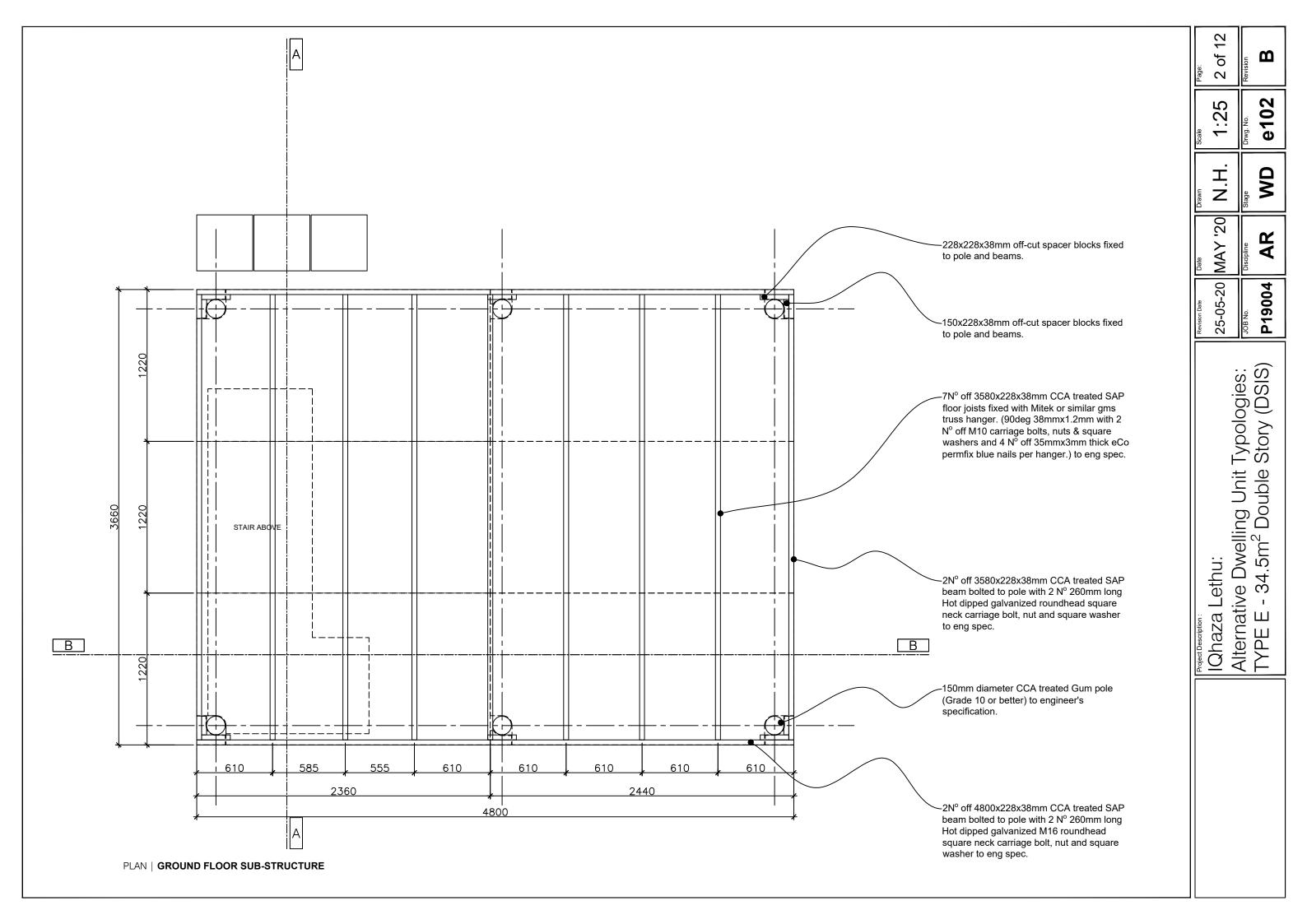


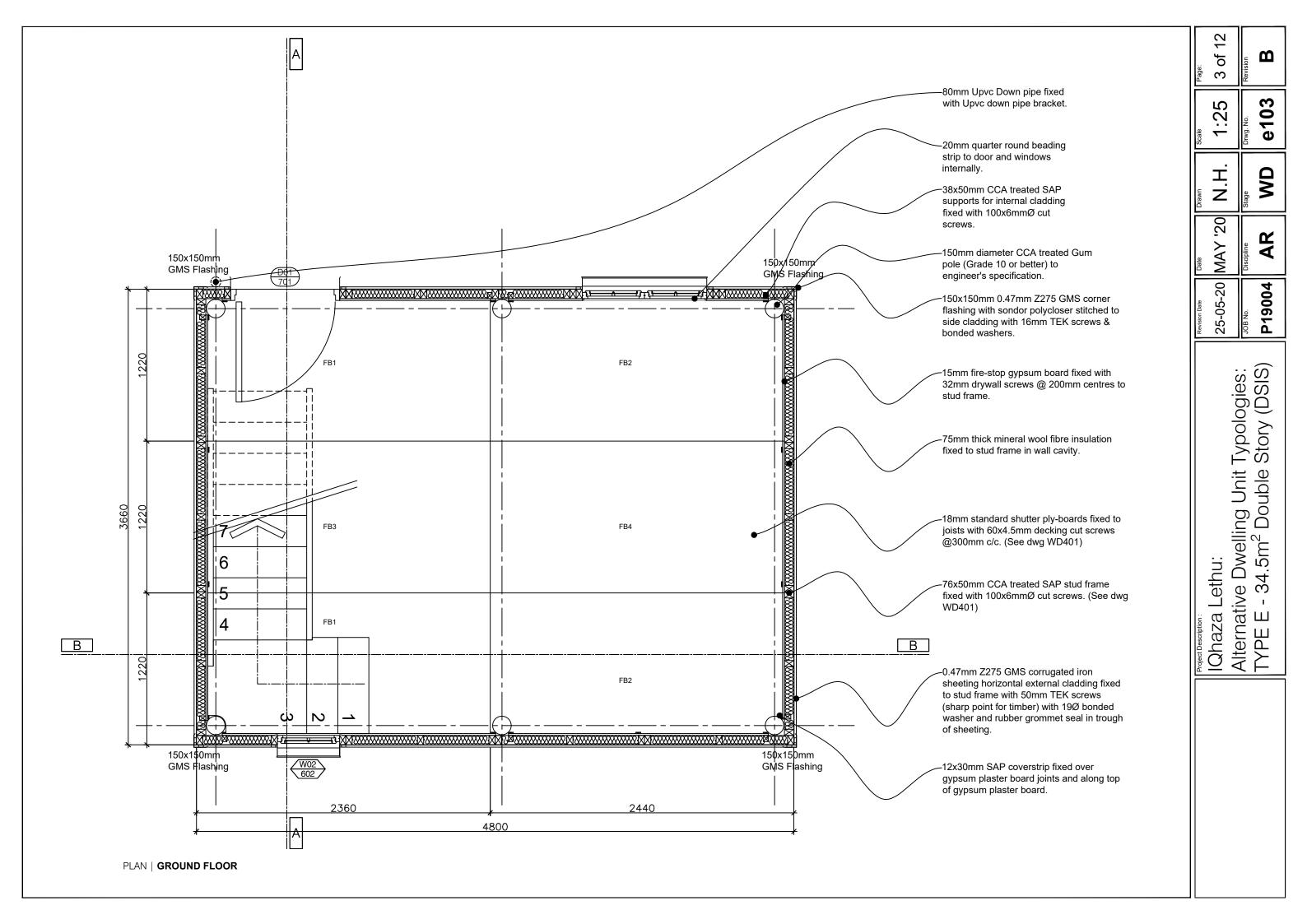
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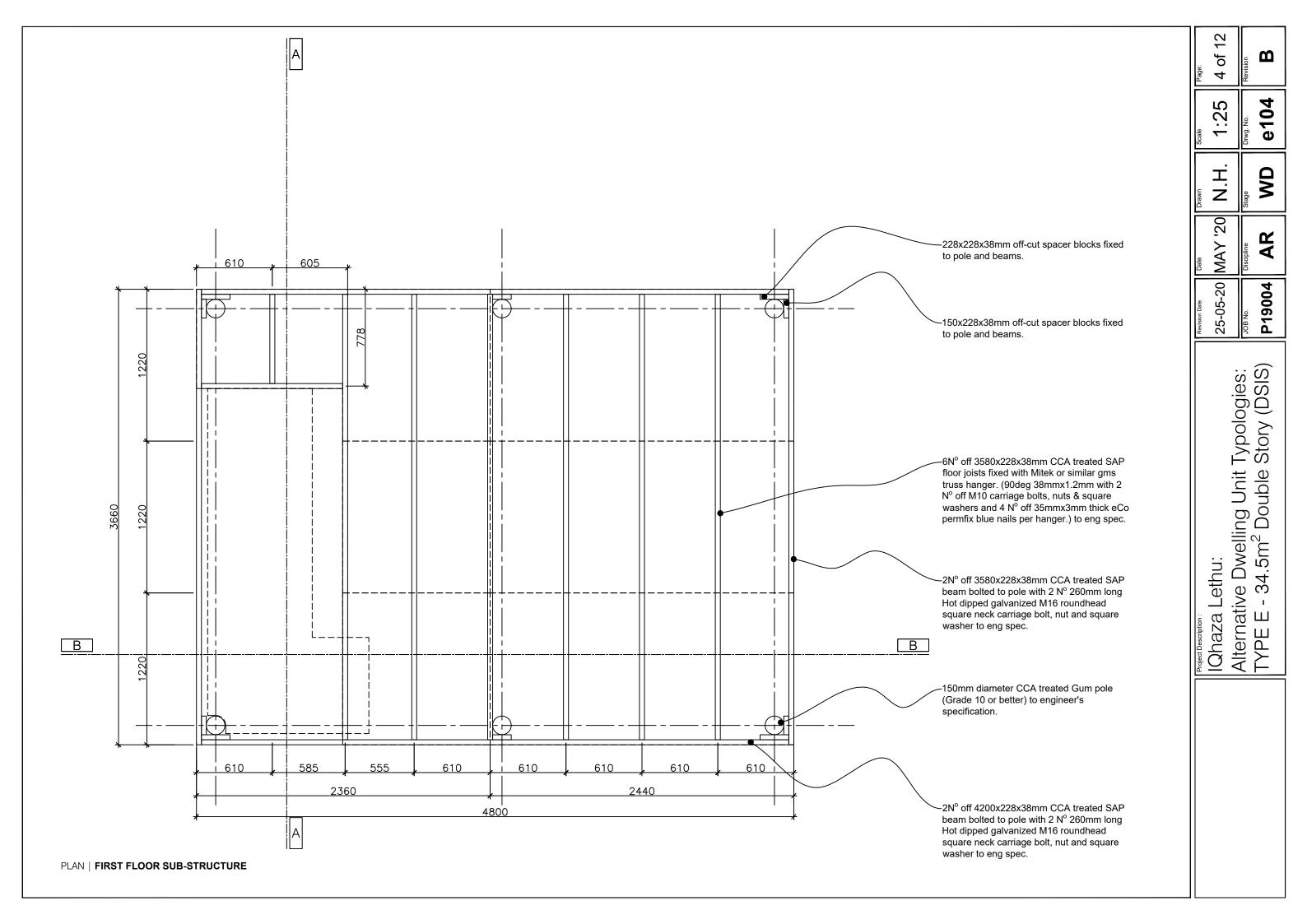


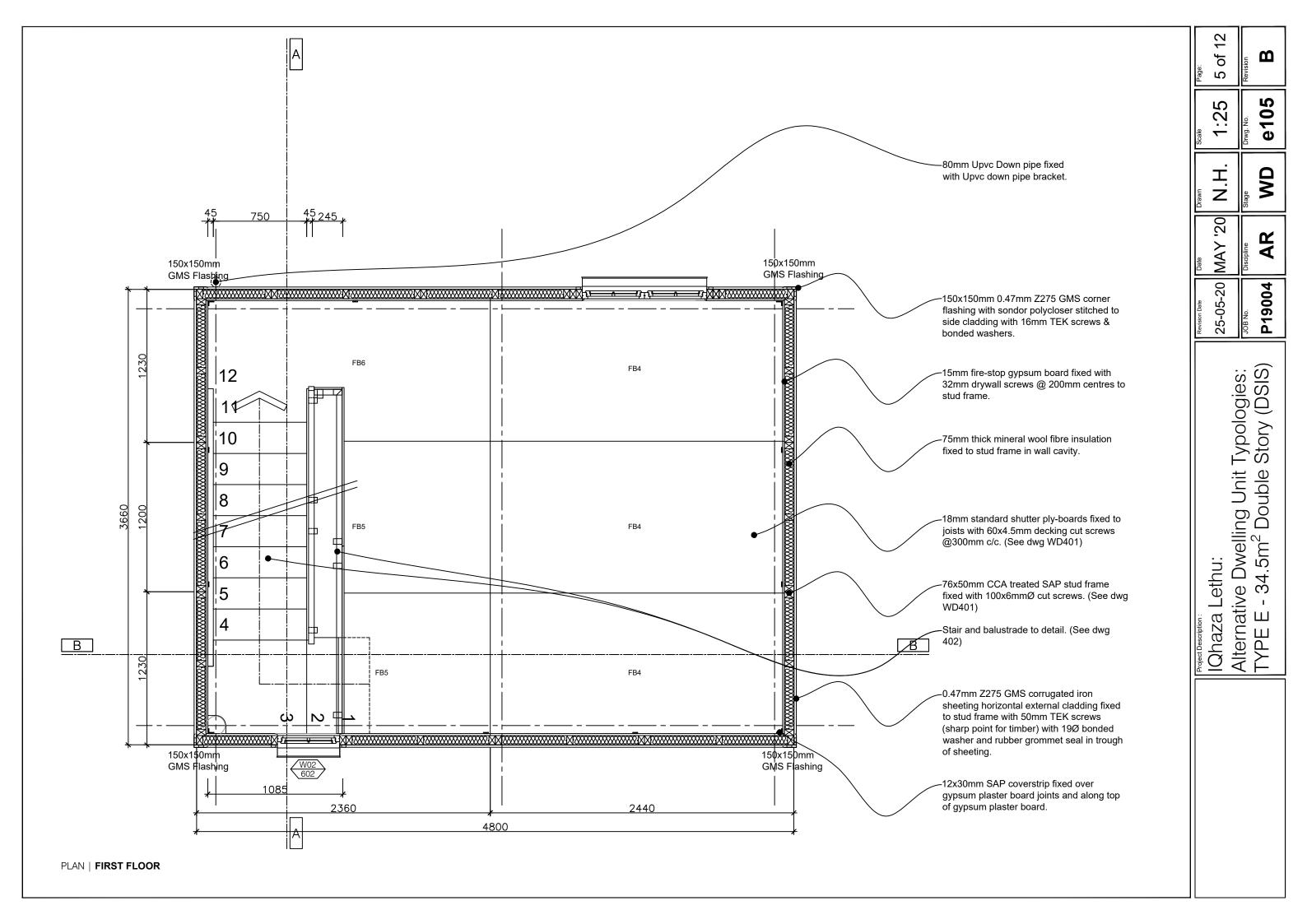


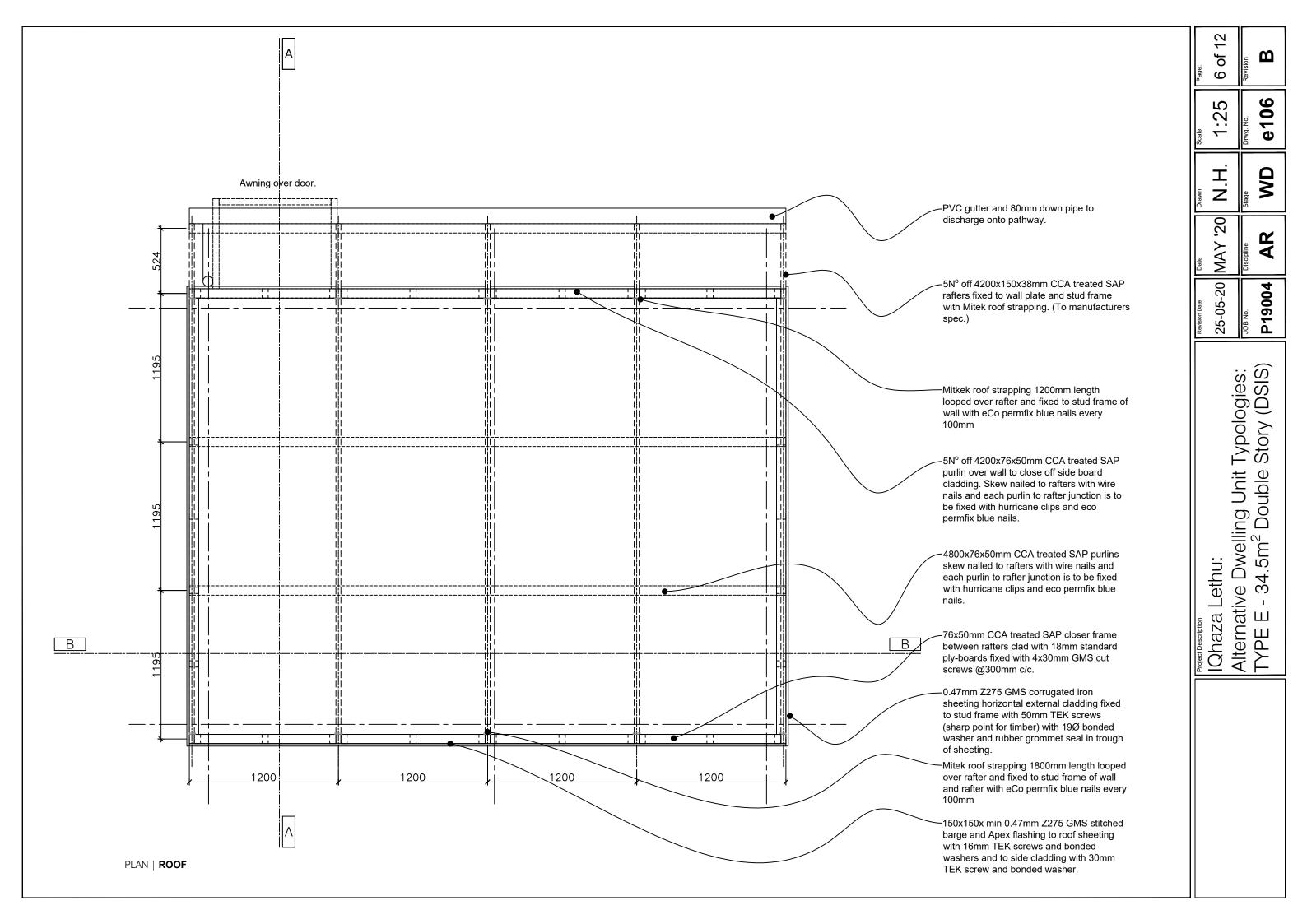


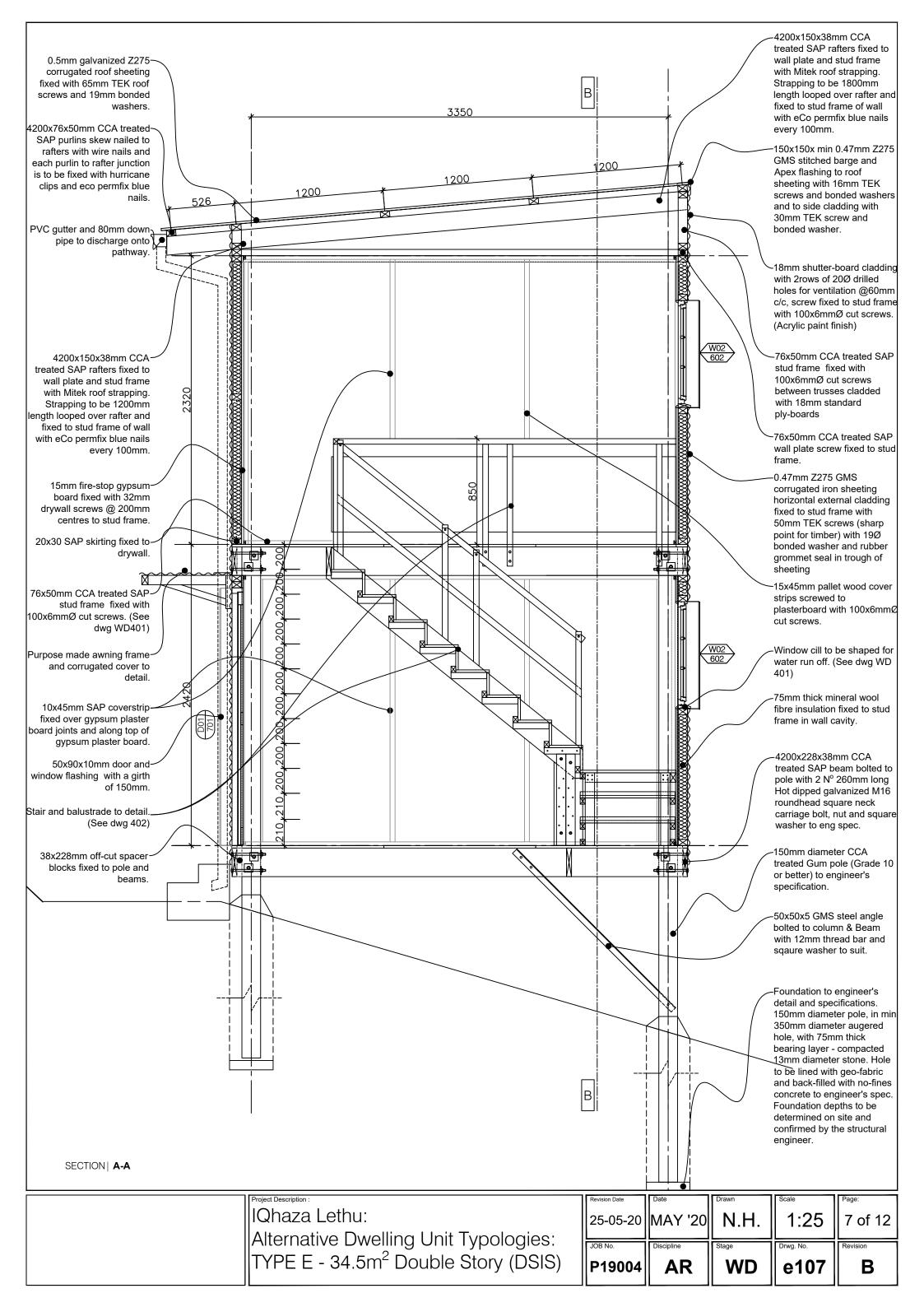


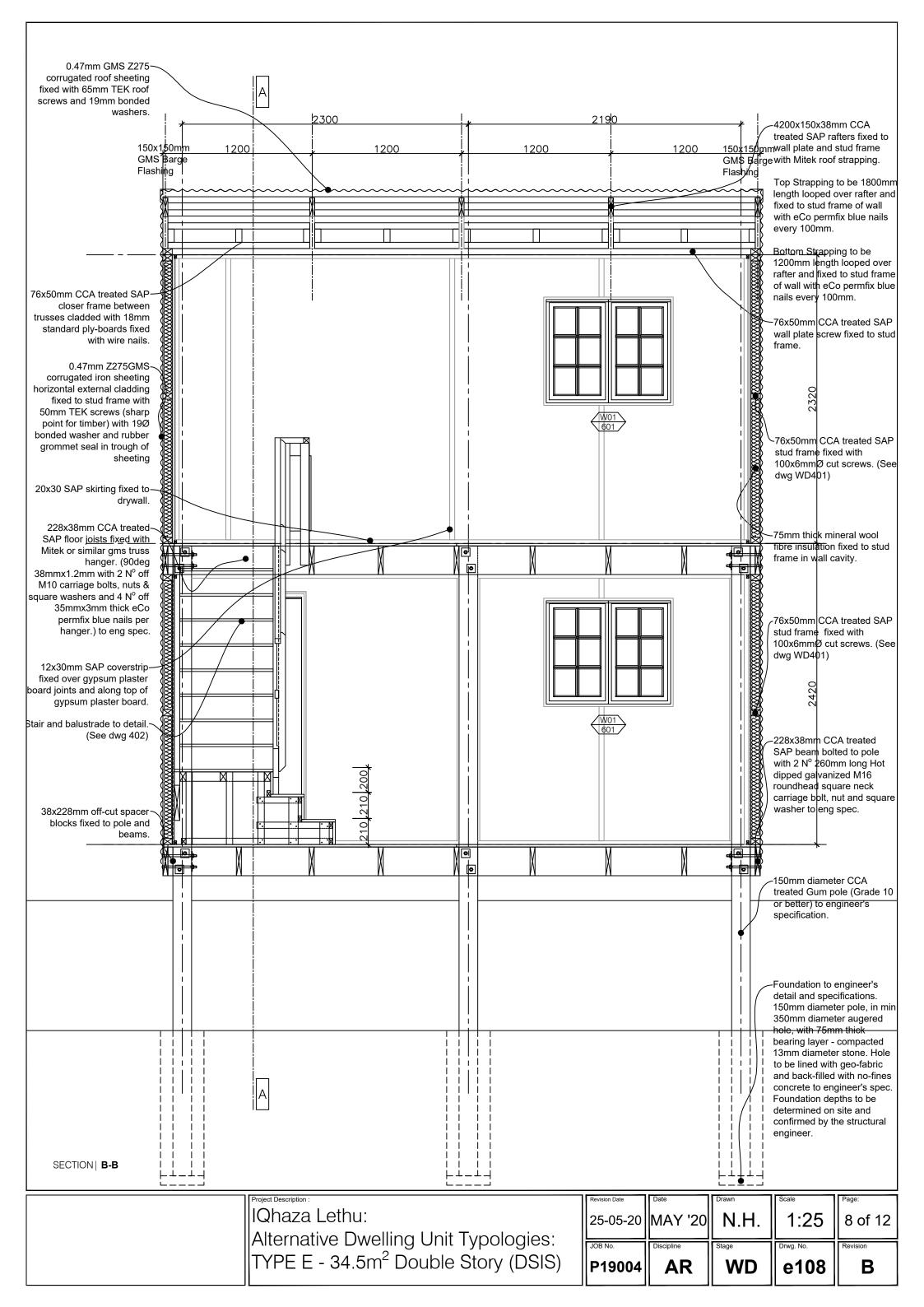


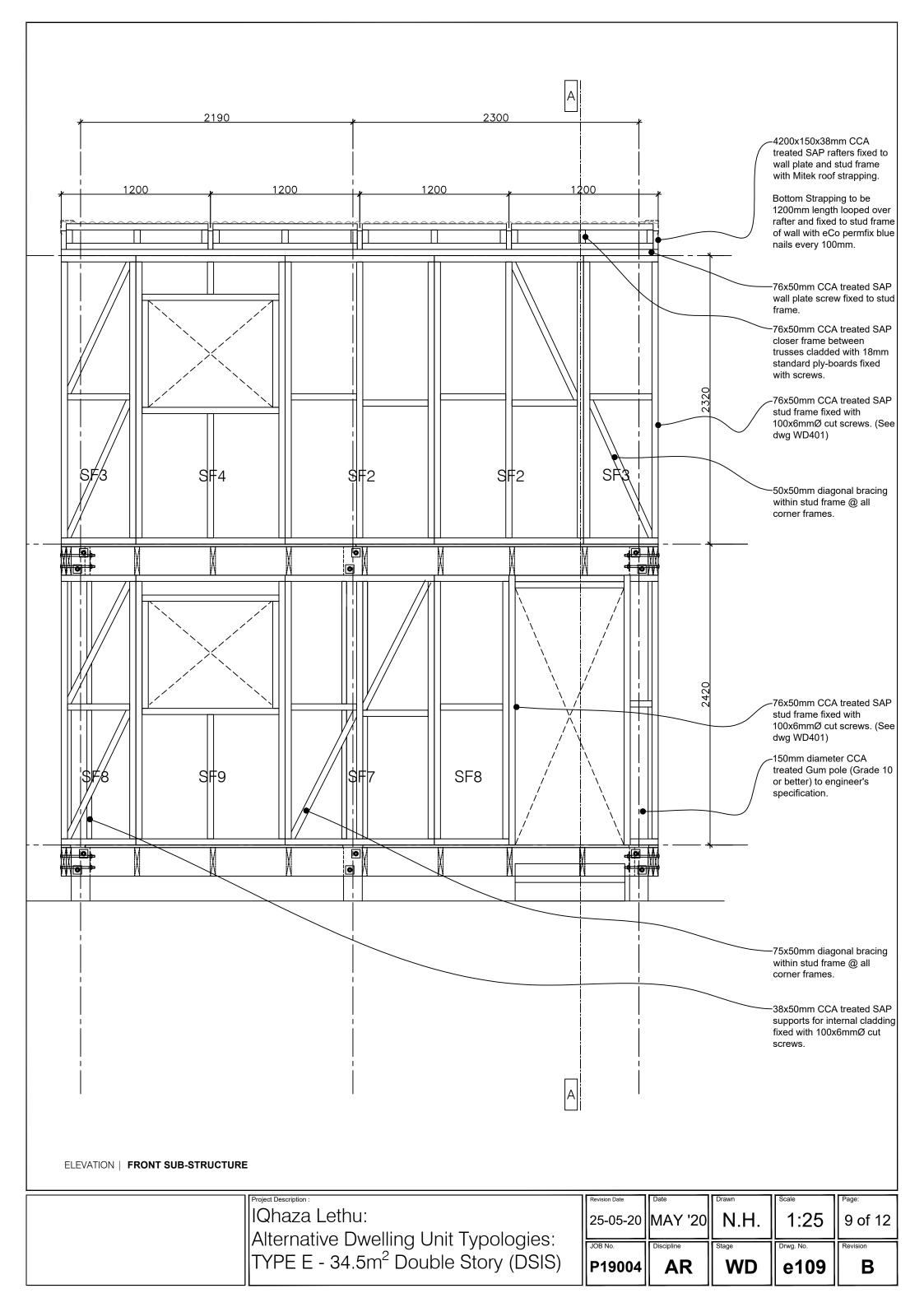


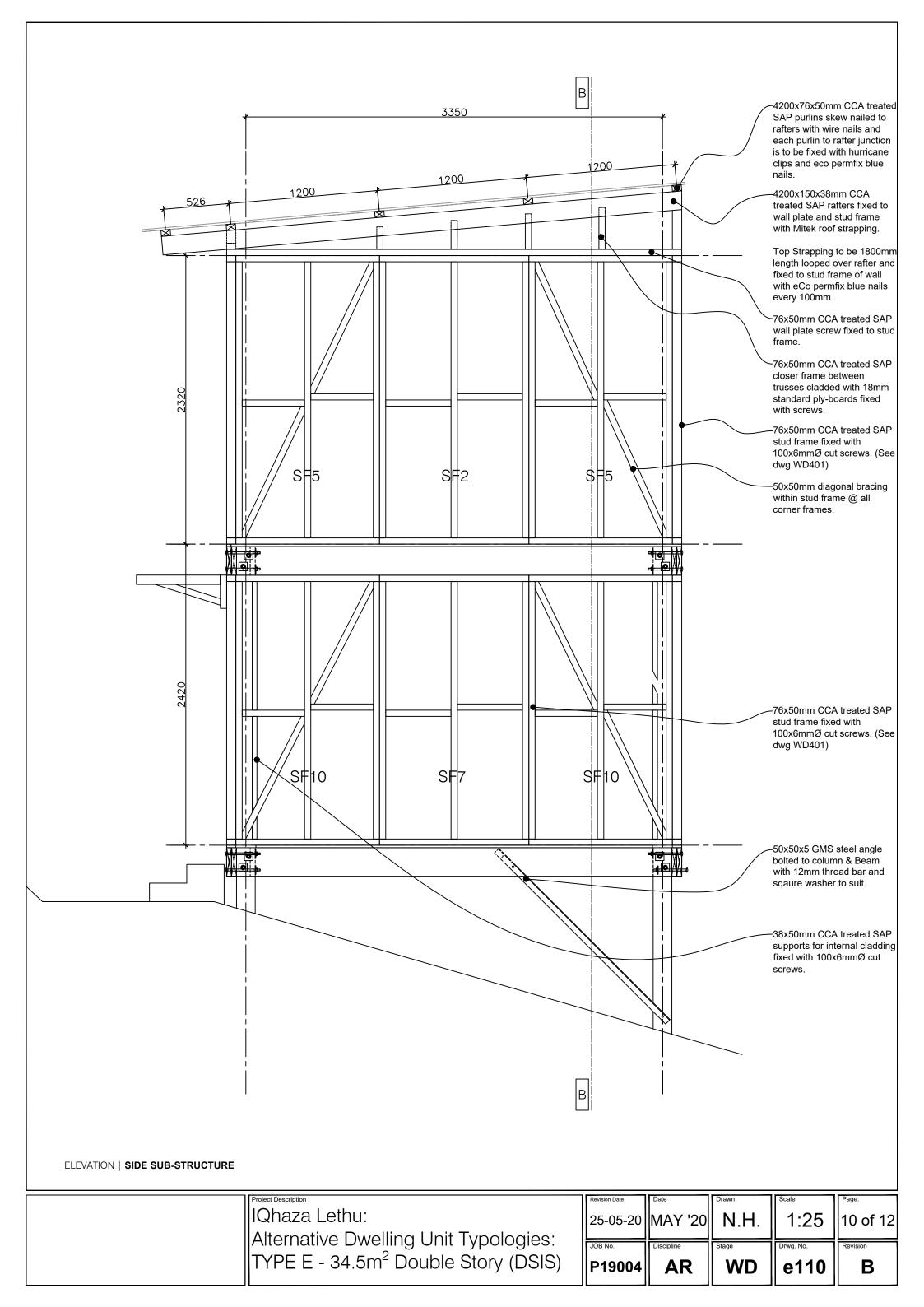


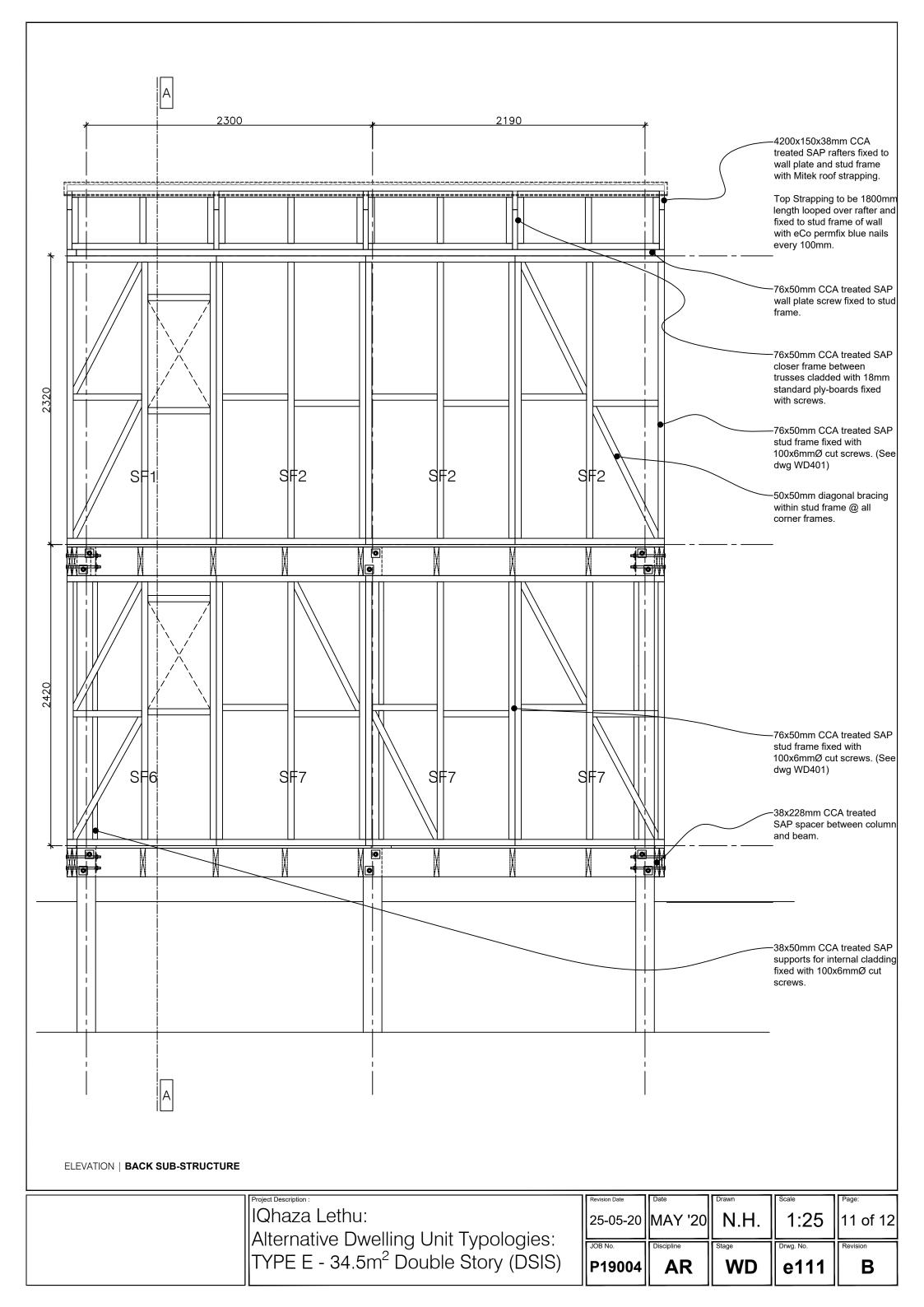


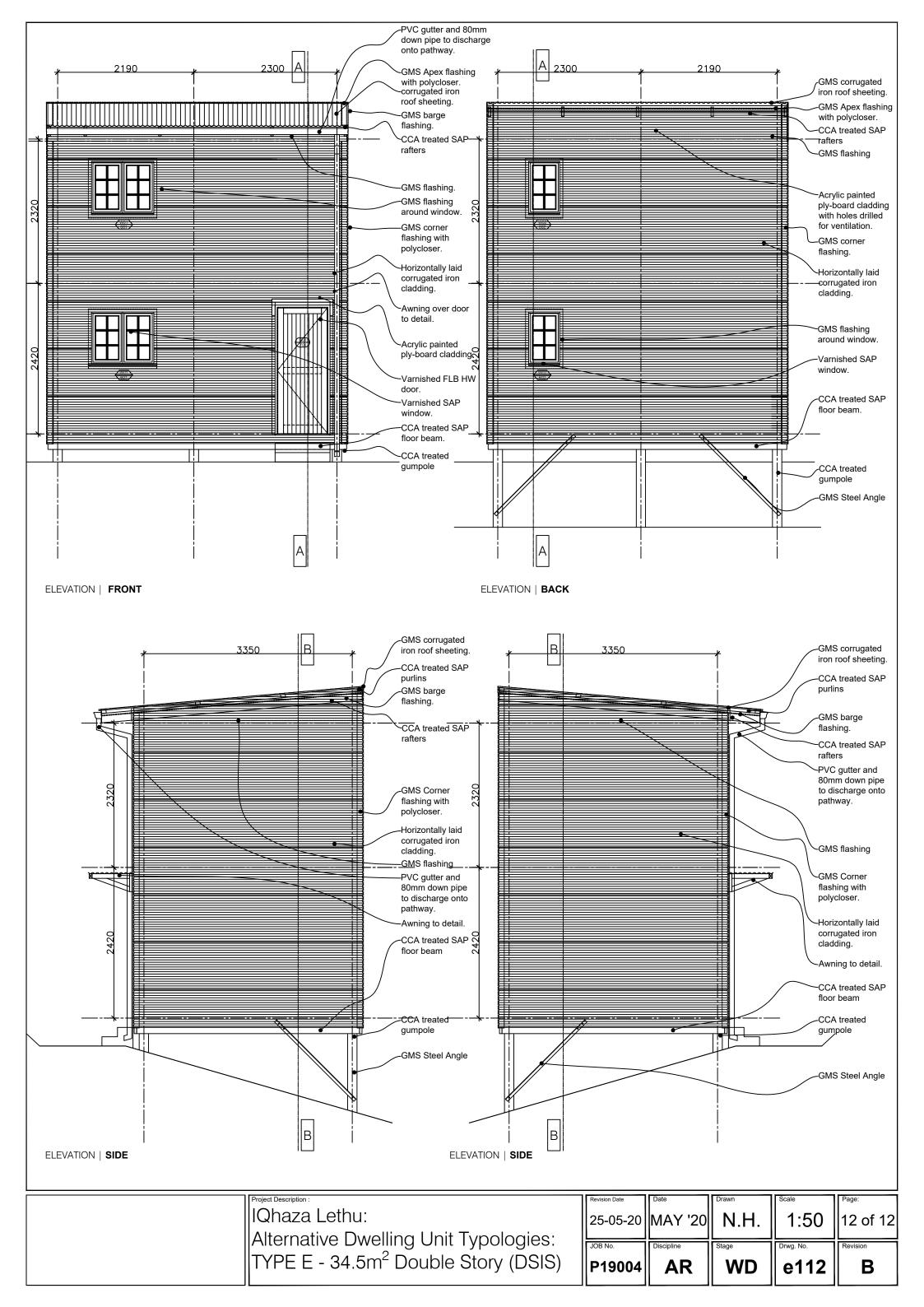


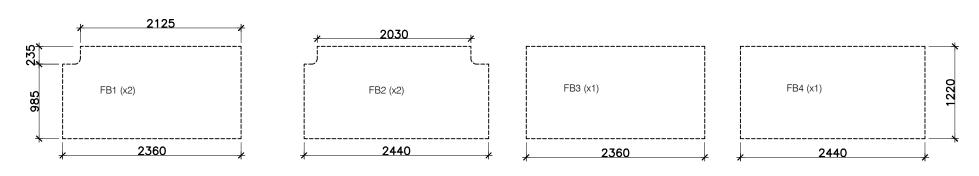




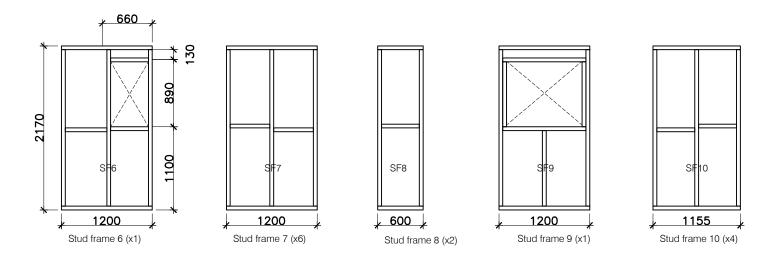




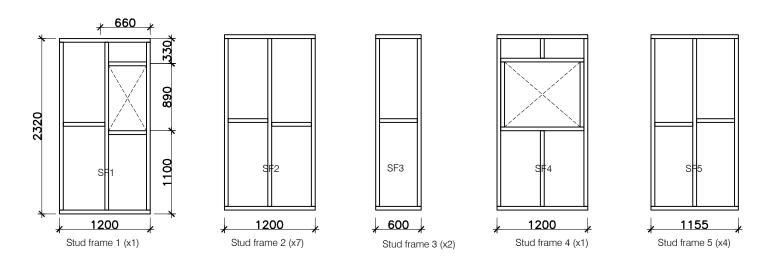




GROUND FLOOR FLOOR BOARDS (18mm SHUTTERPLY BOARDS)



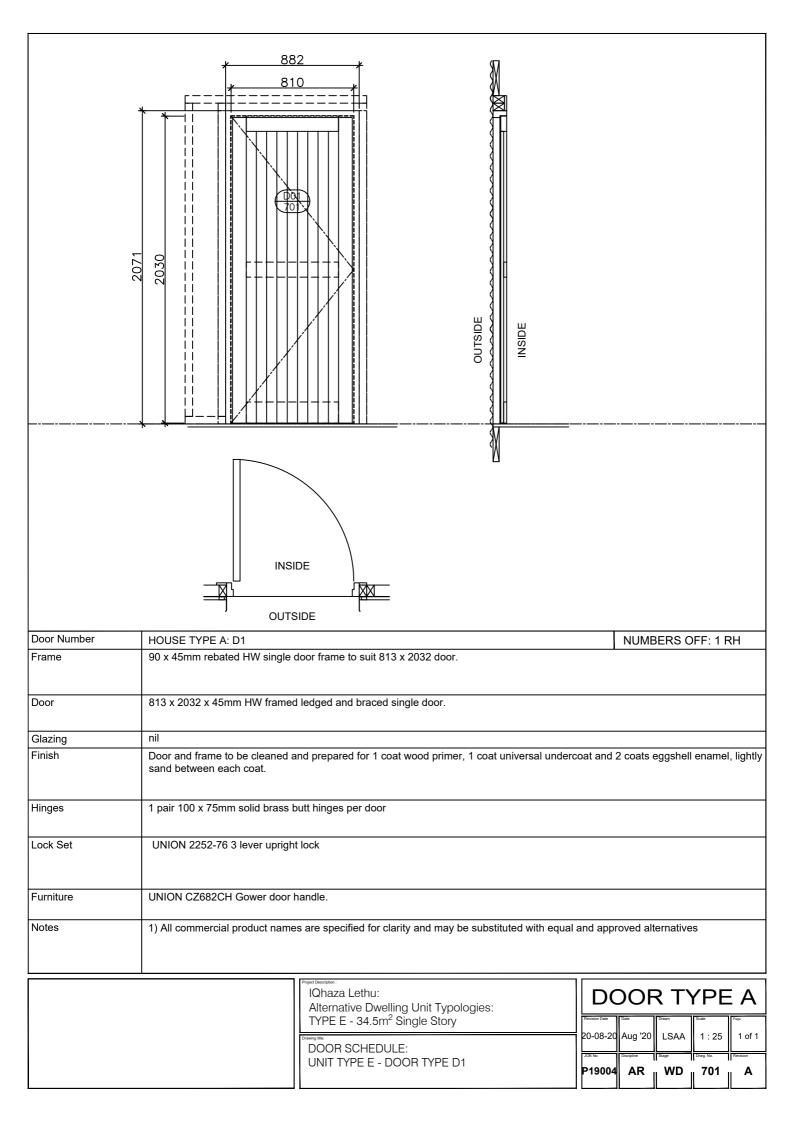
GROUND FLOOR STUD FRAMES (76x50 CCA TREATED SAP)

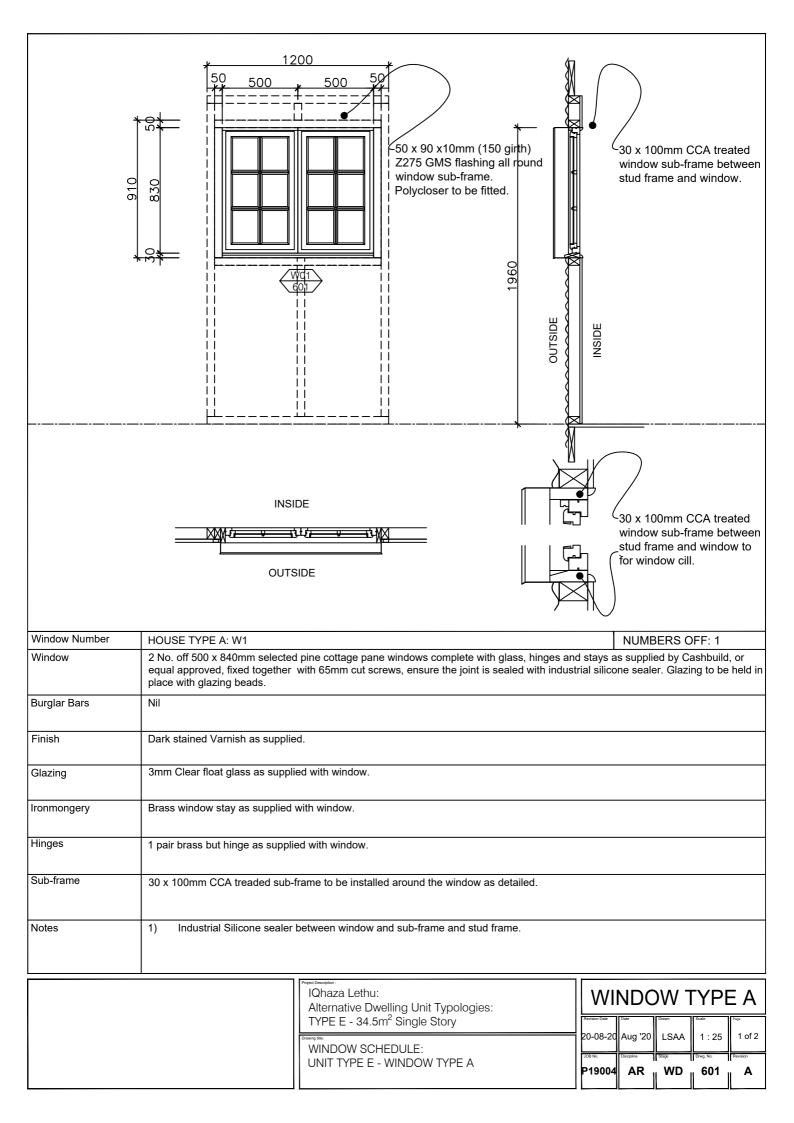


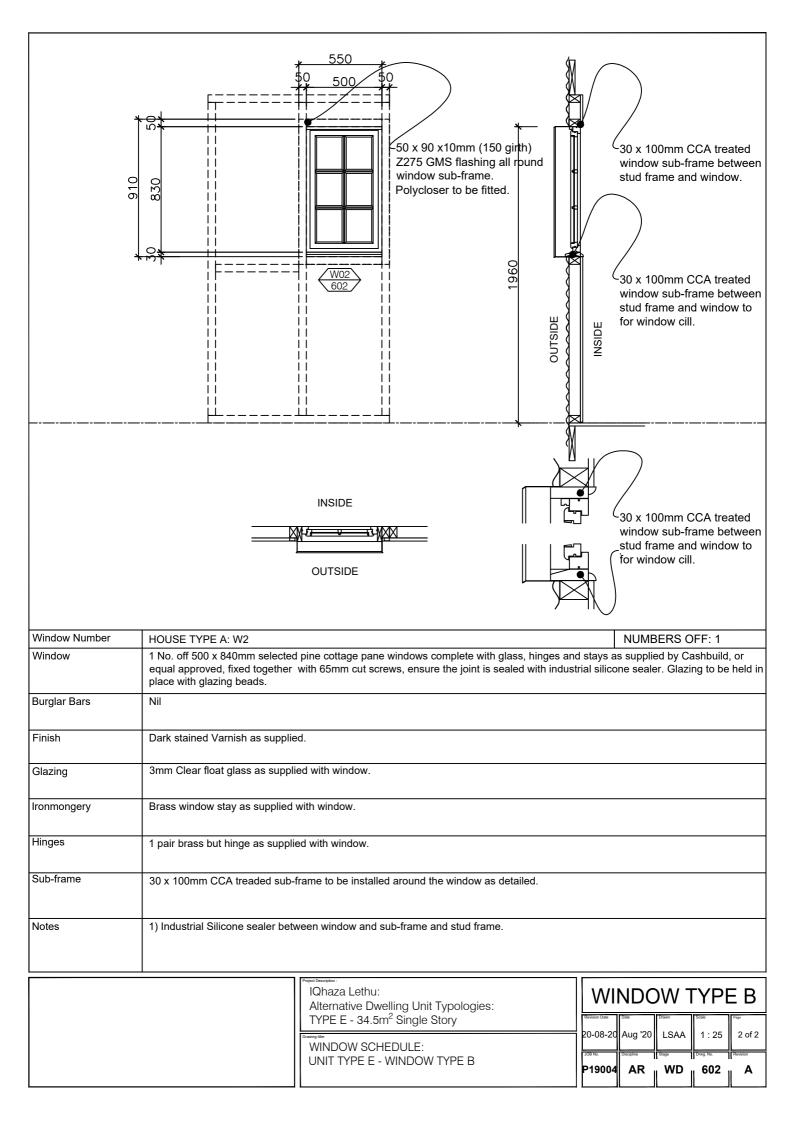
FIRST FLOOR STUD FRAMES (76x50 CCA TREATED SAP)

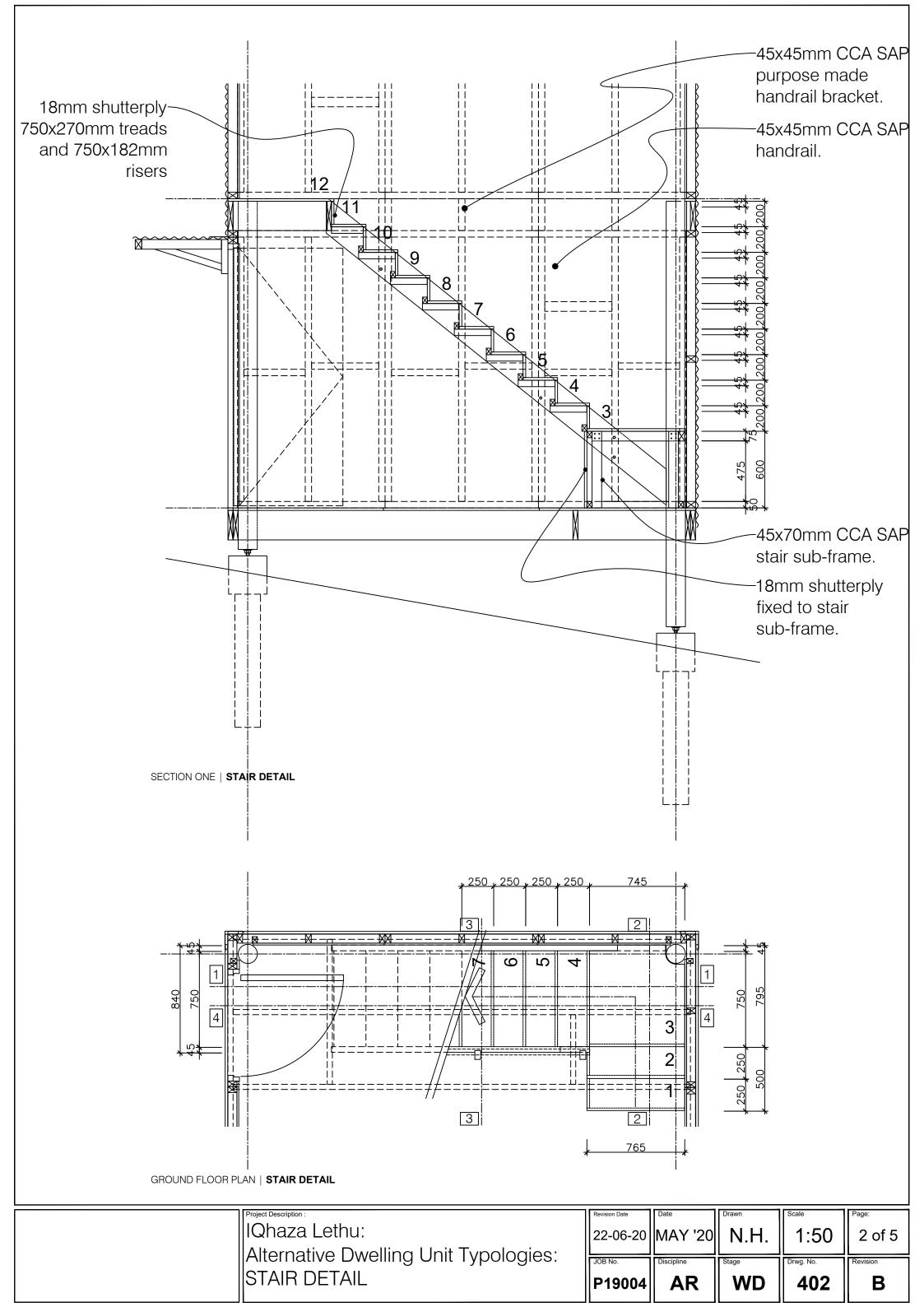
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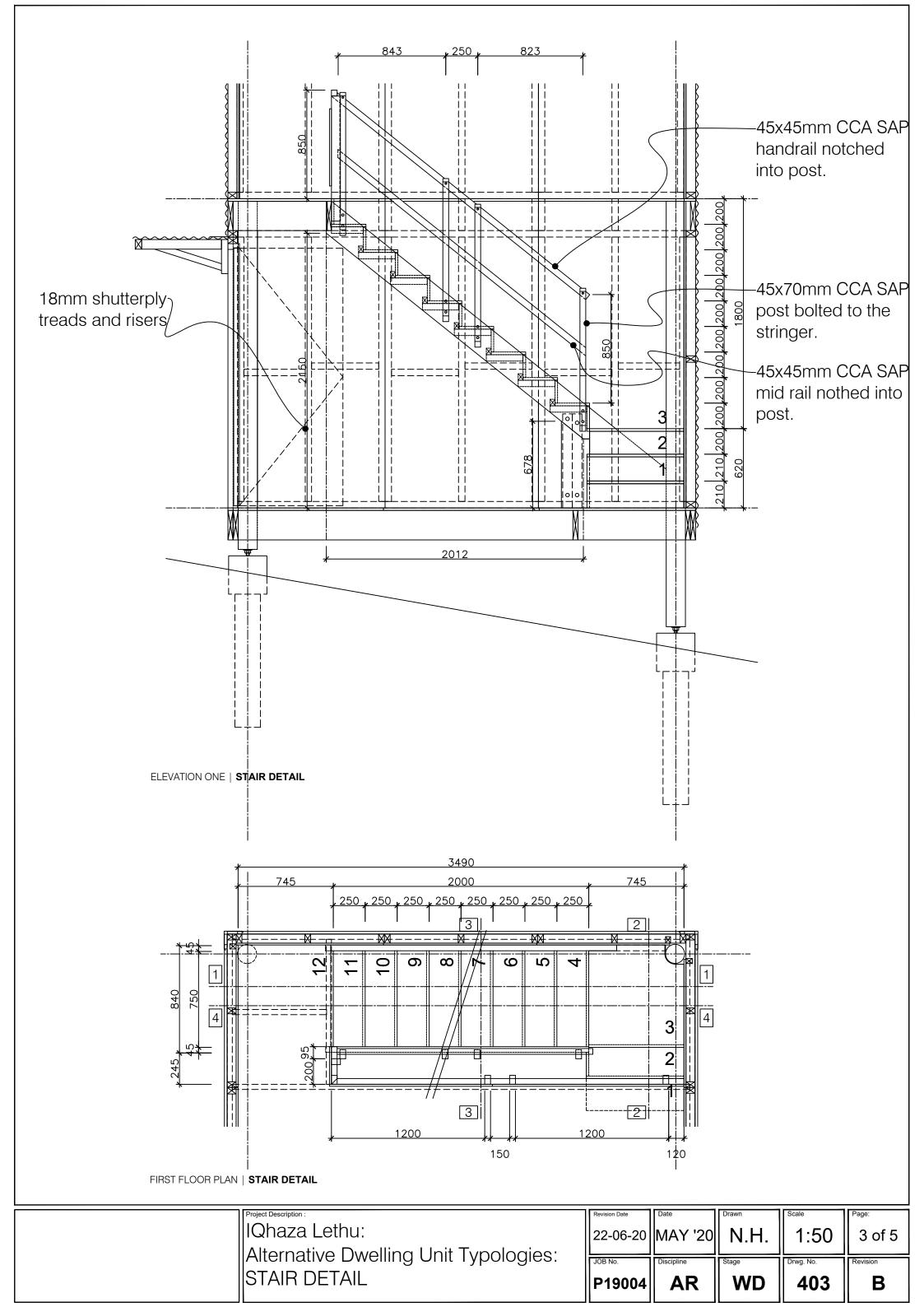
Project Description :	Revision Date	Date	Drawn	Scale	Page:
IQhaza Lethu:	19-05-20	MAY '20	N.H.	1:50	1 of 5
Alternative Dwelling Unit Typologies:					
	JOB No.	Discipline	Stage	Drwg. No.	Revision
TYPE E - 34.5m ² Double Story (DSIS)	P19004	AD	WD	401	
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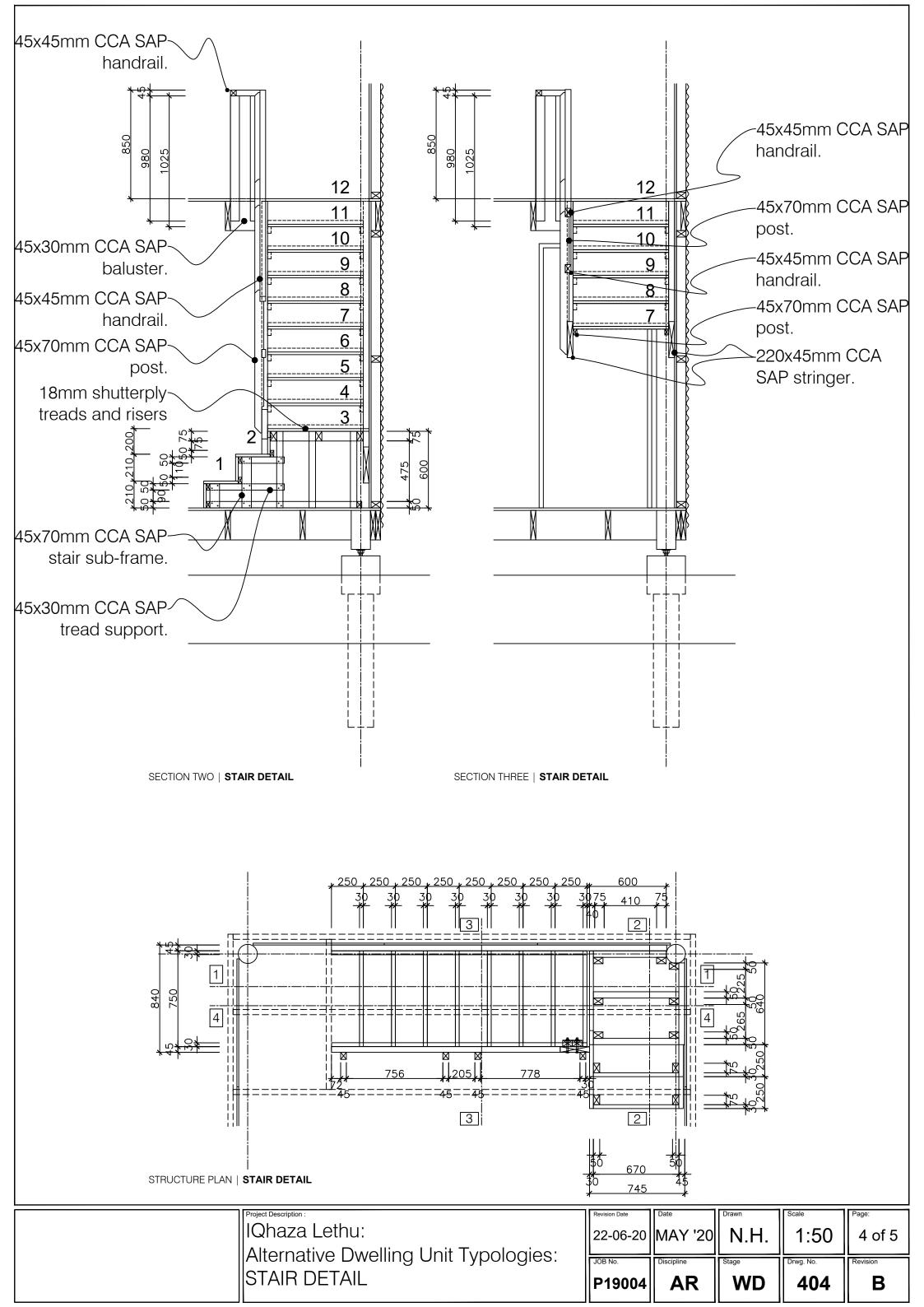


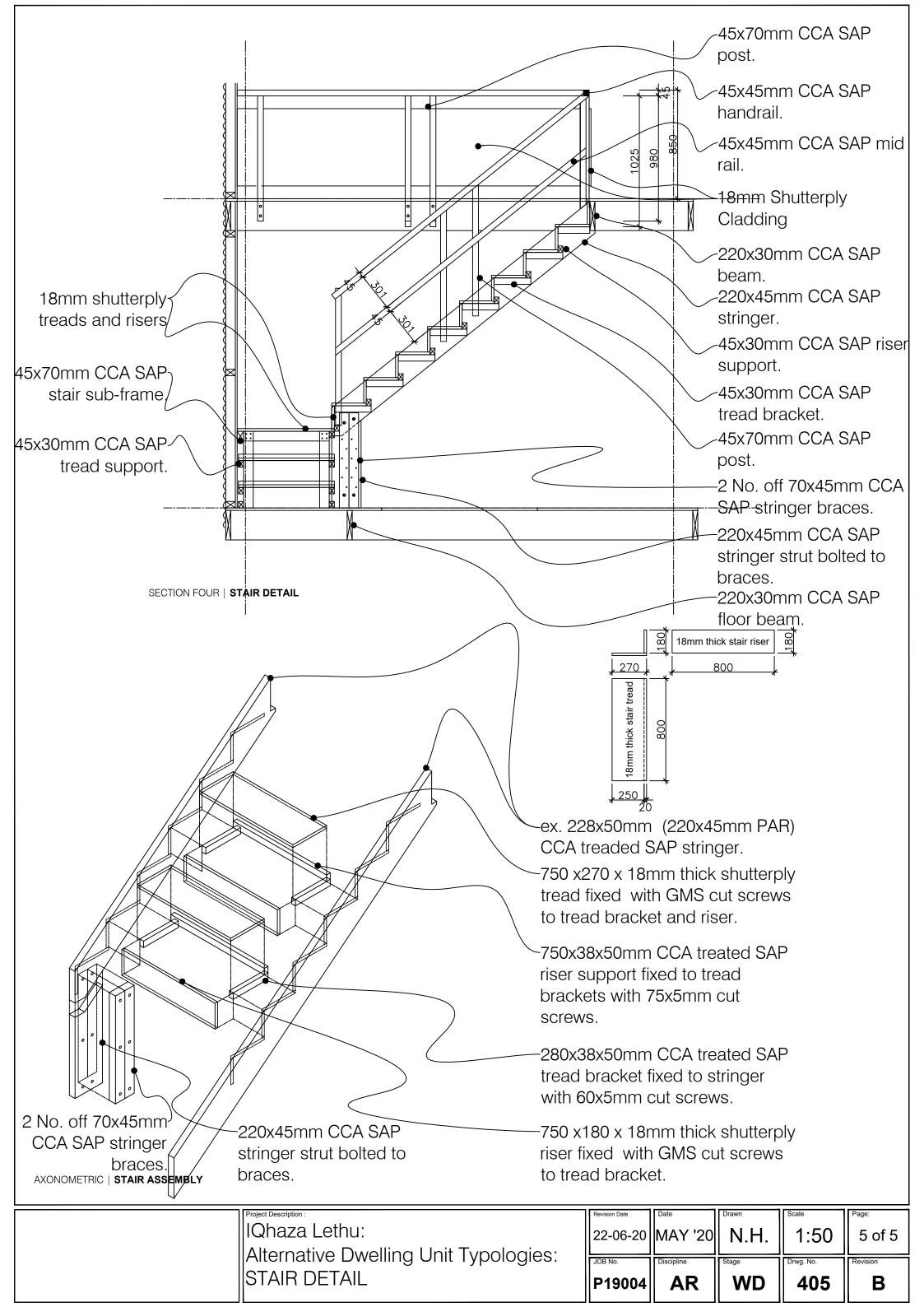


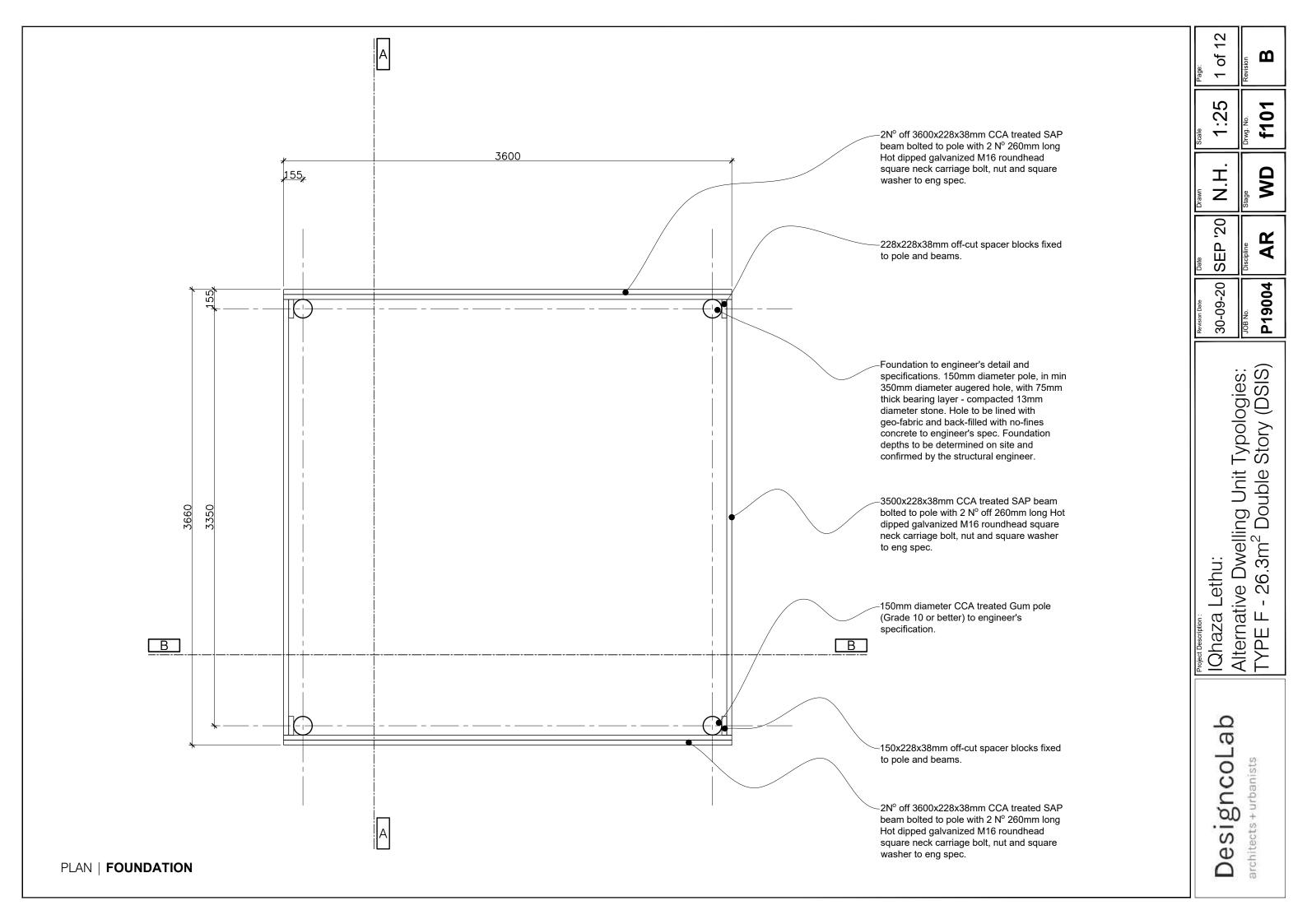


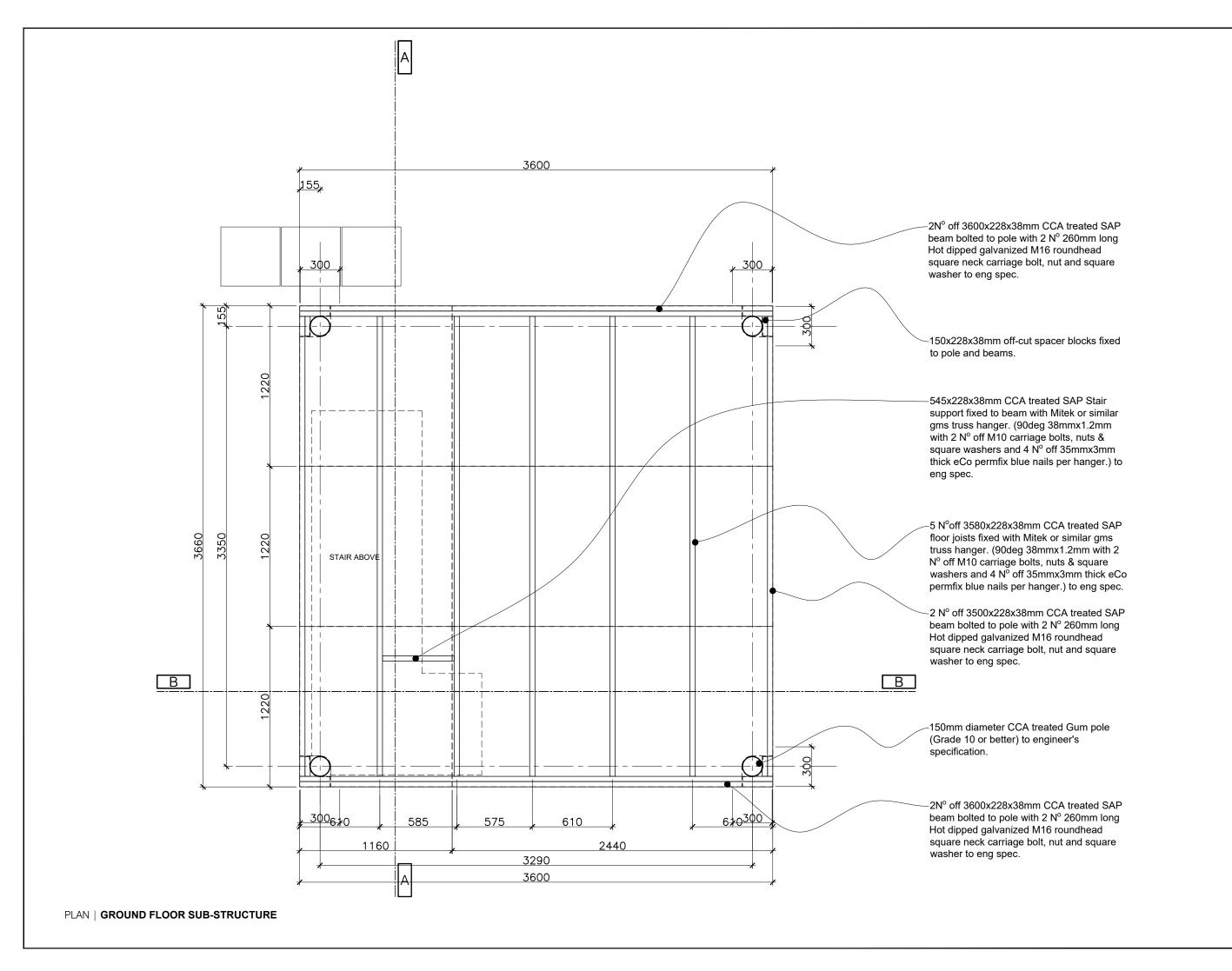












 $\mathbf{\alpha}$ SEP 30-09-20 P19004 Typologies: Story (DSIS) Alternative Dwelling Unit TYPE F - 26.3m² Double IQhaza Lethu: esigncoLab

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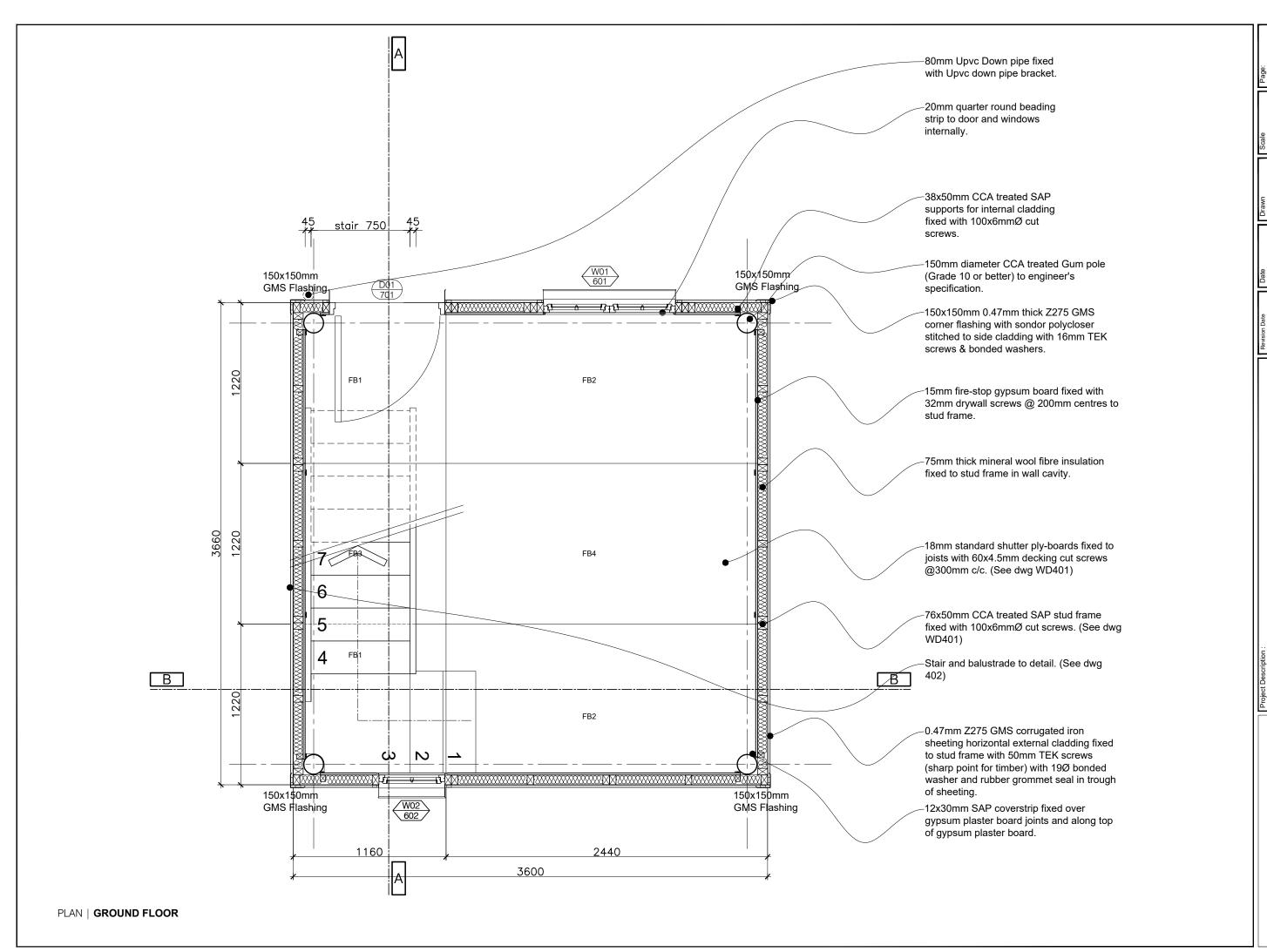
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20 Y SEP 30-09-20 P19004 Typologies: Story (DSIS) Alternative Dwelling Unit TYPE F - 26.3m² Double IQhaza Lethu: esigncoLab

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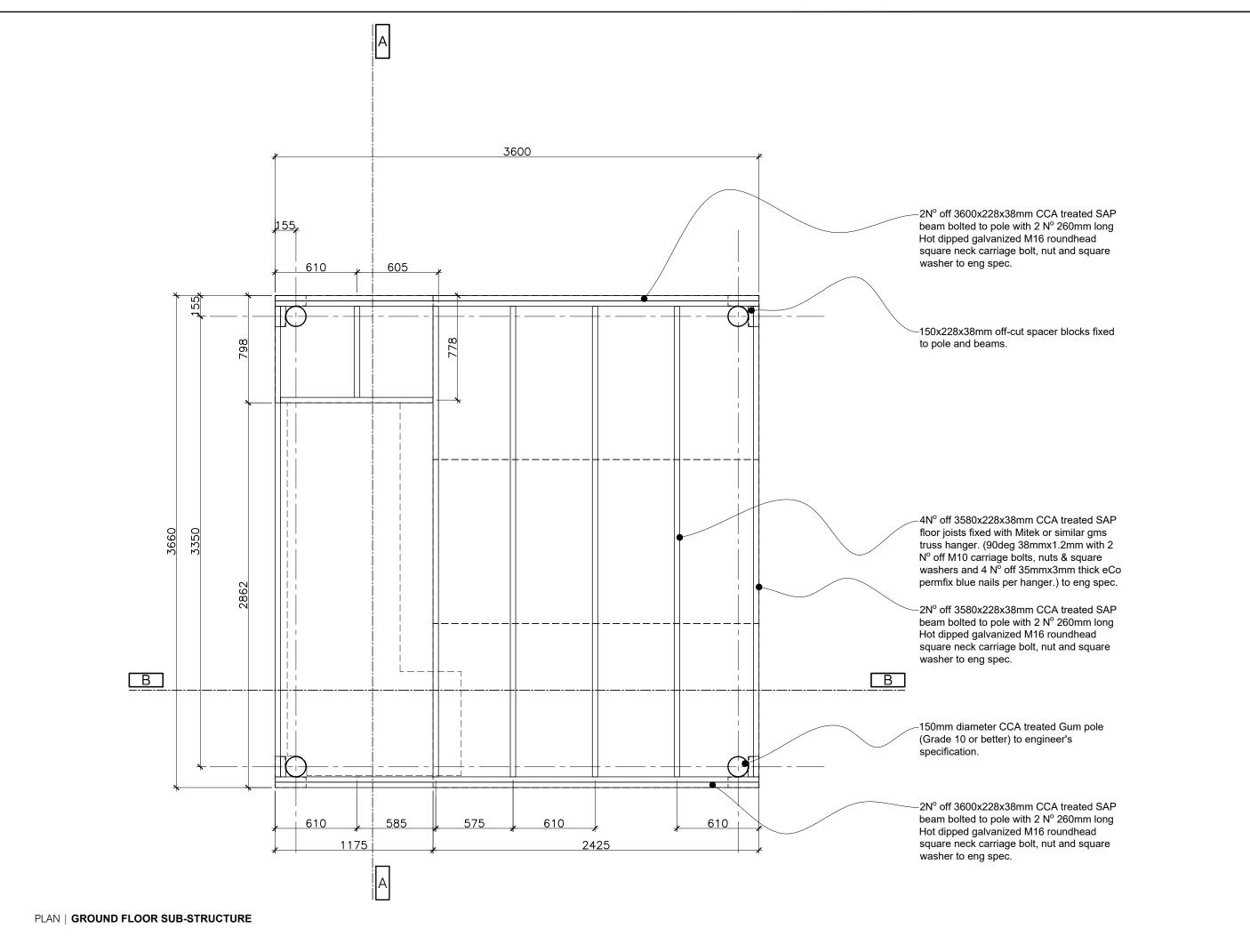
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IJ.

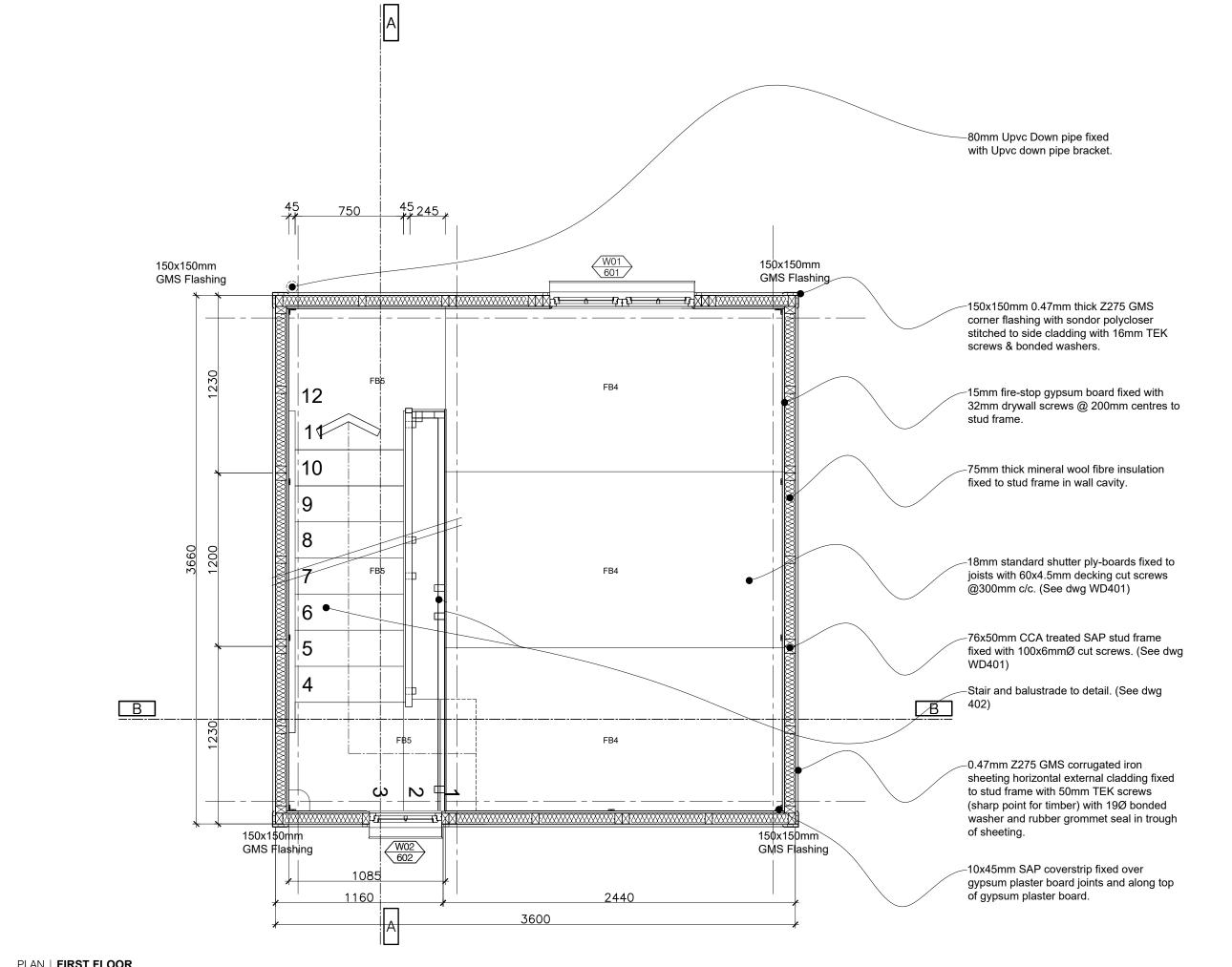


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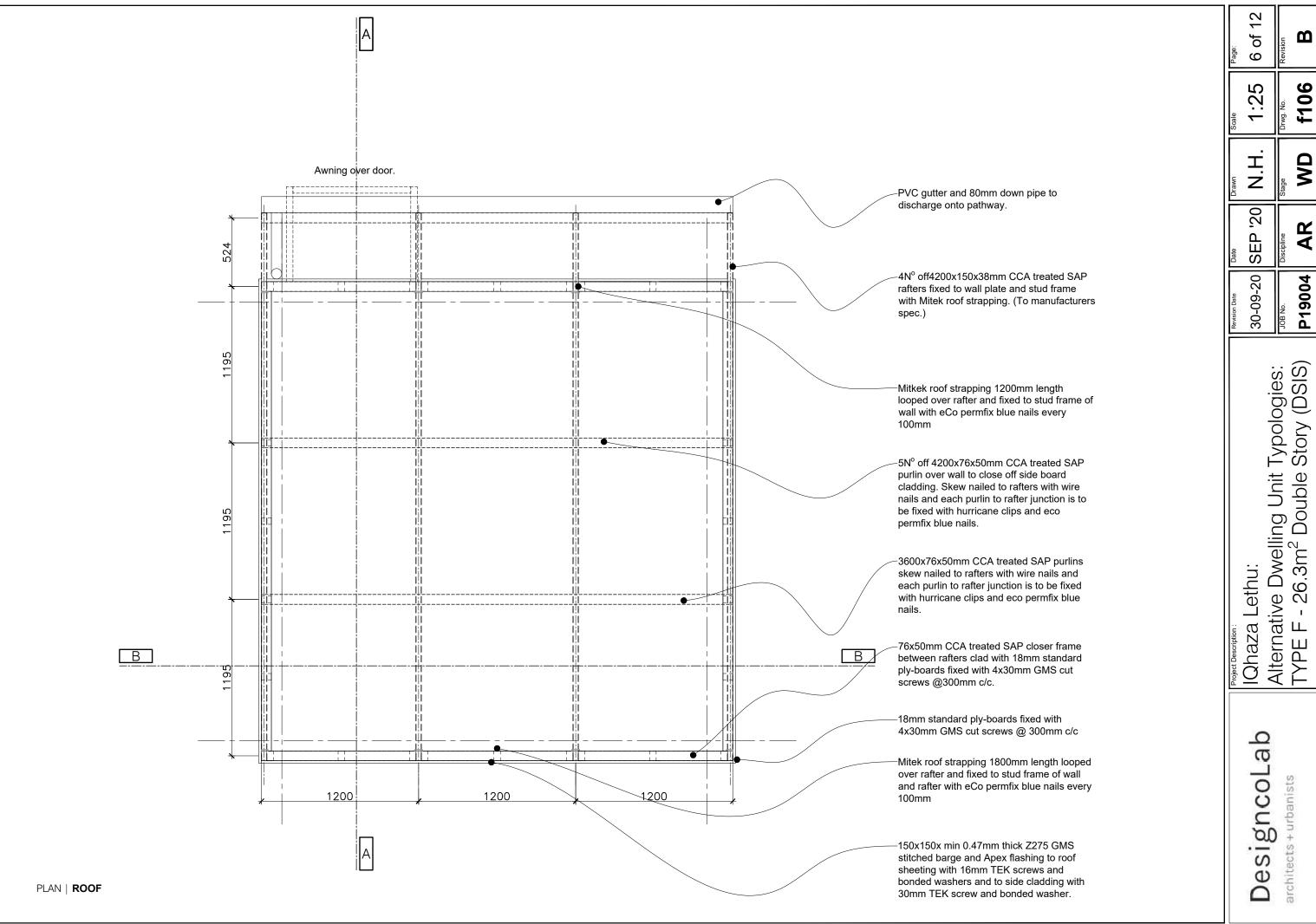
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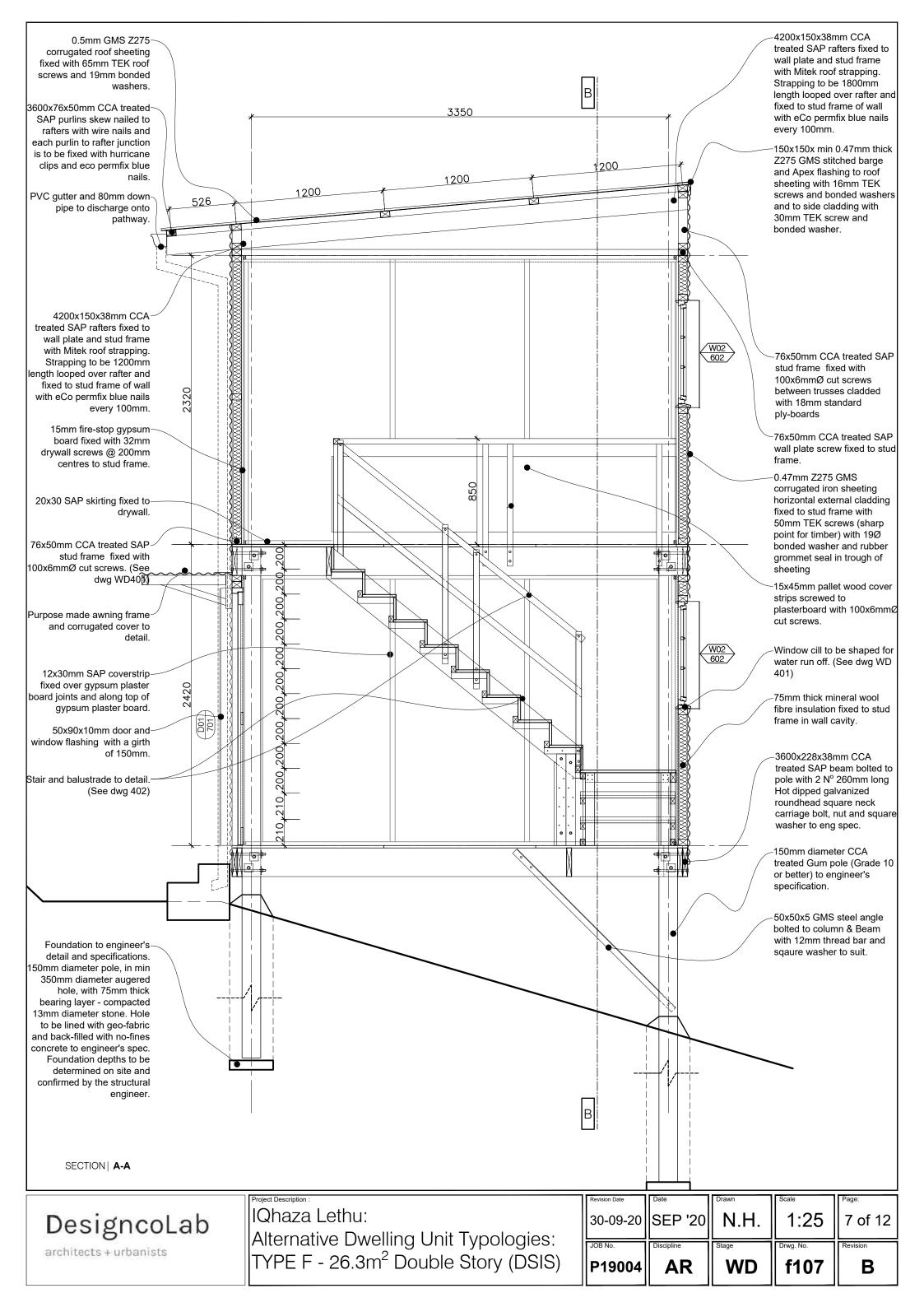
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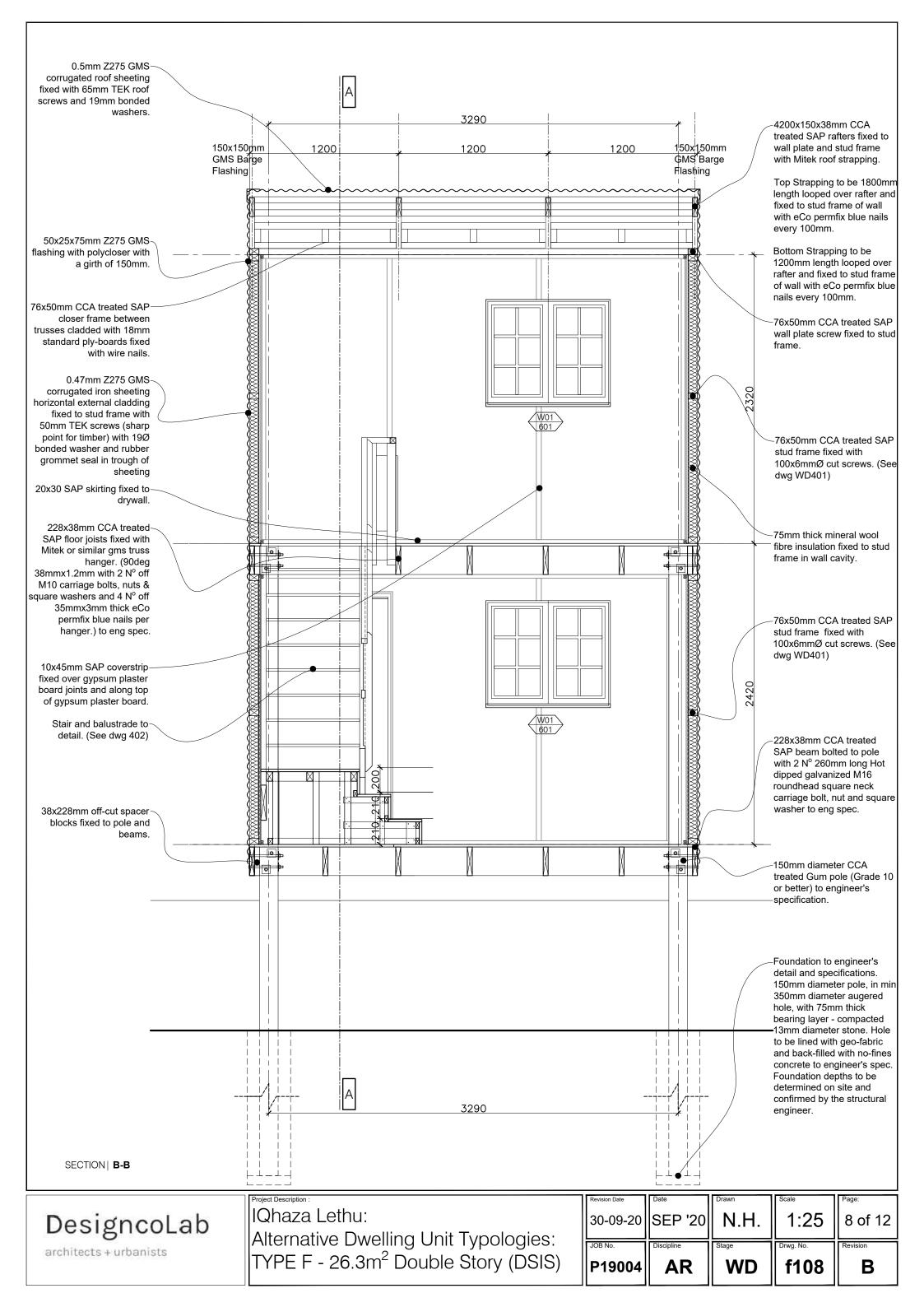
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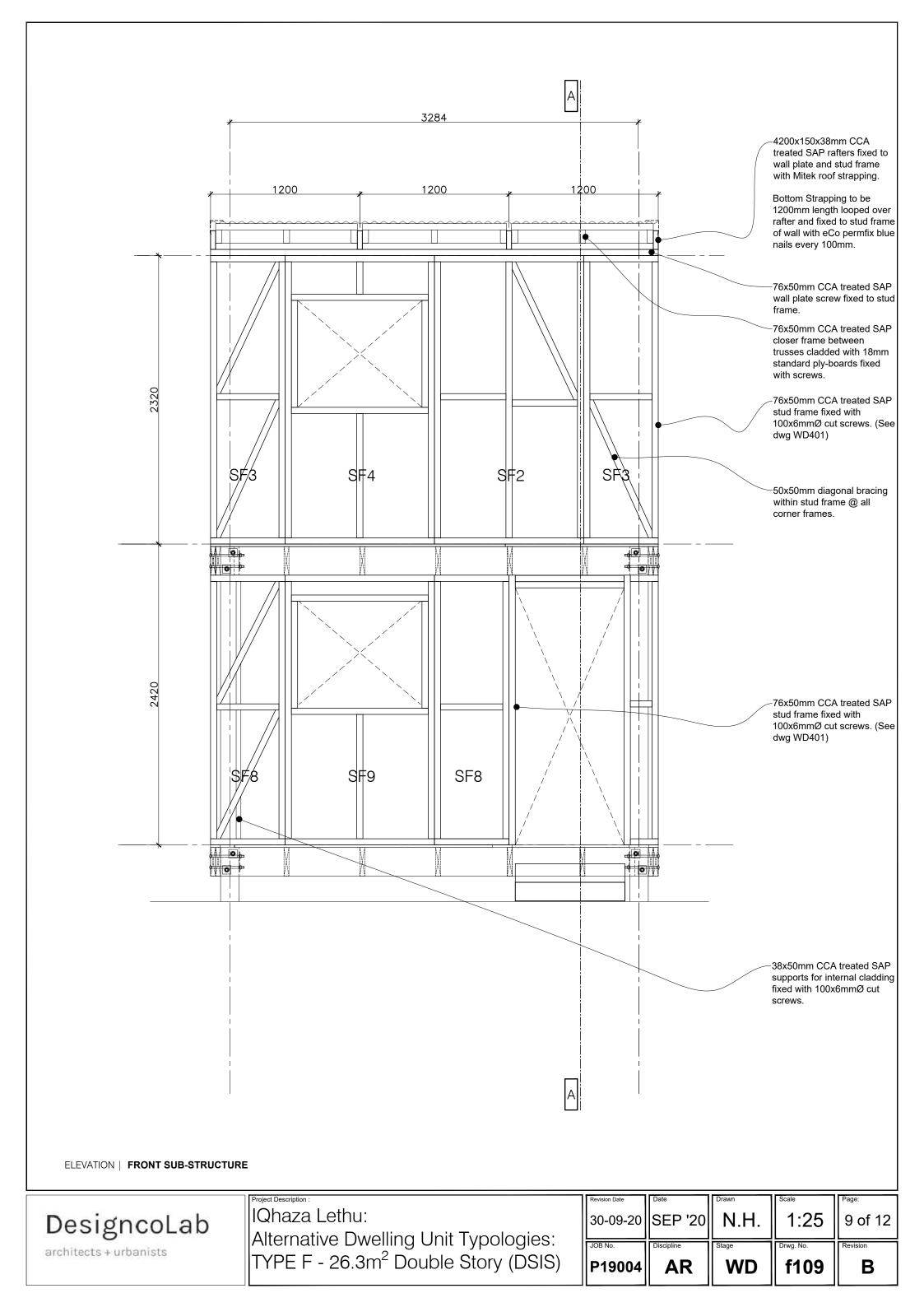
PLAN | FIRST FLOOR

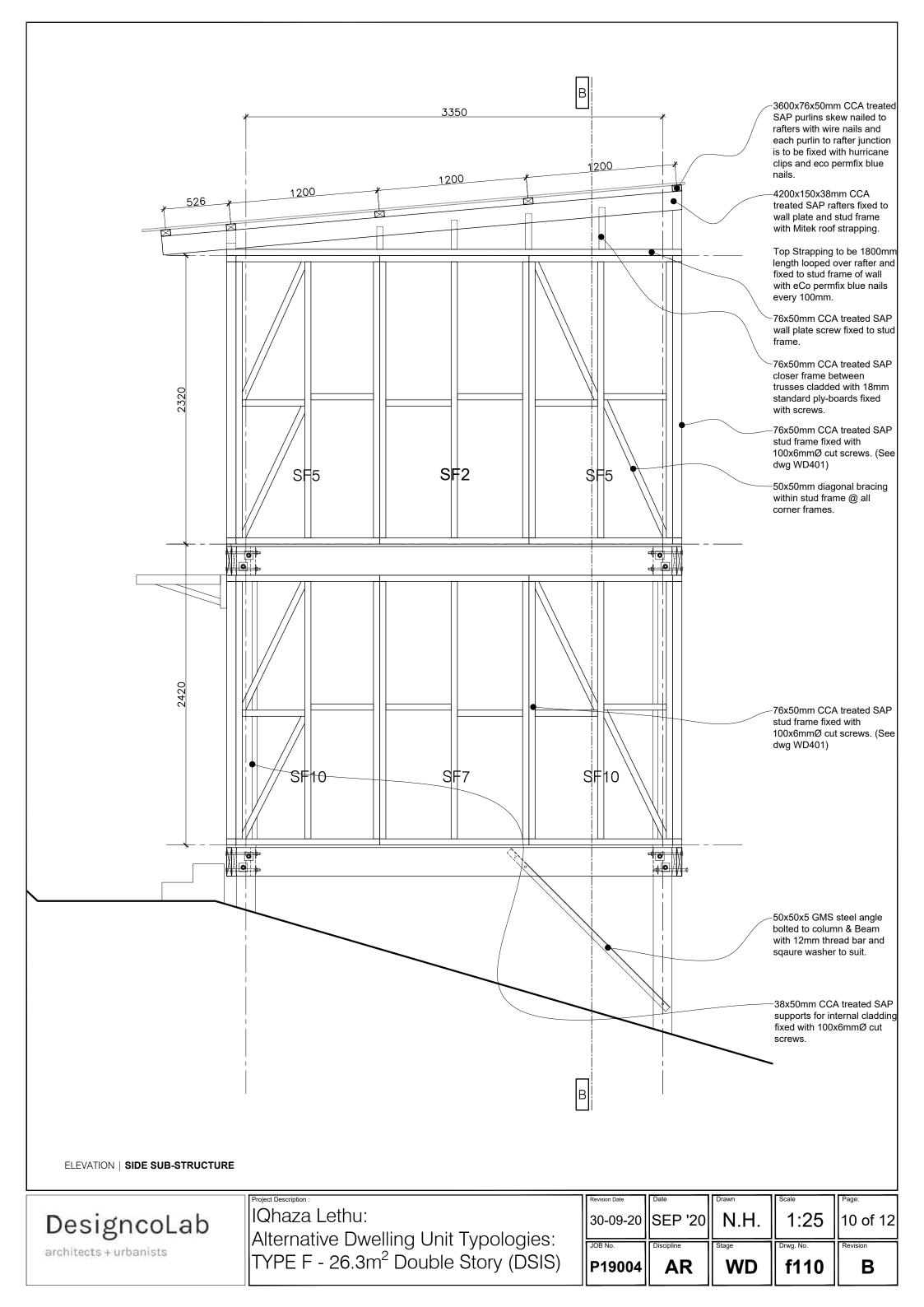


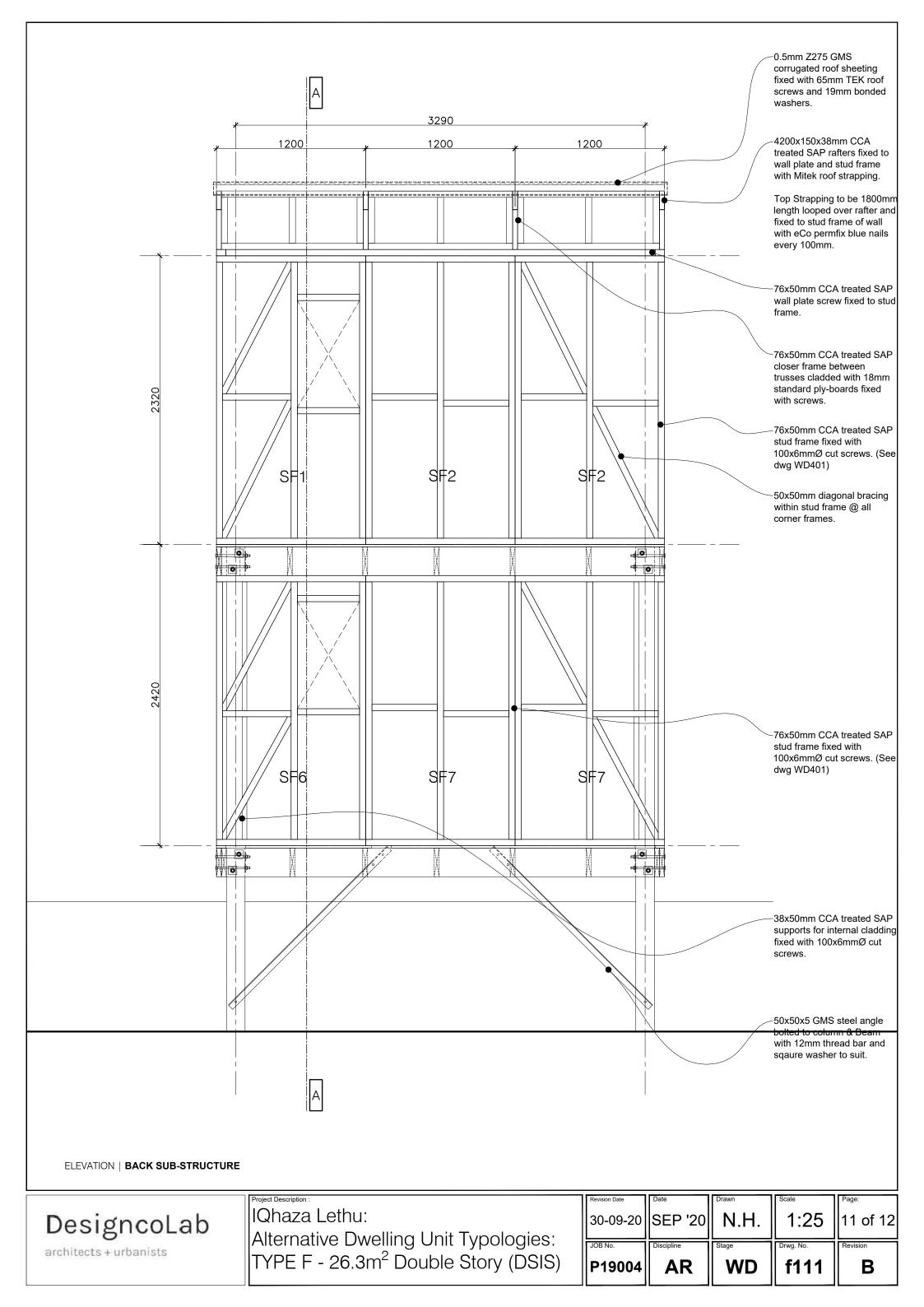
f106 P19004 Typologies: Story (DSIS) Alternative Dwelling Unit TYPE F - 26.3m² Double

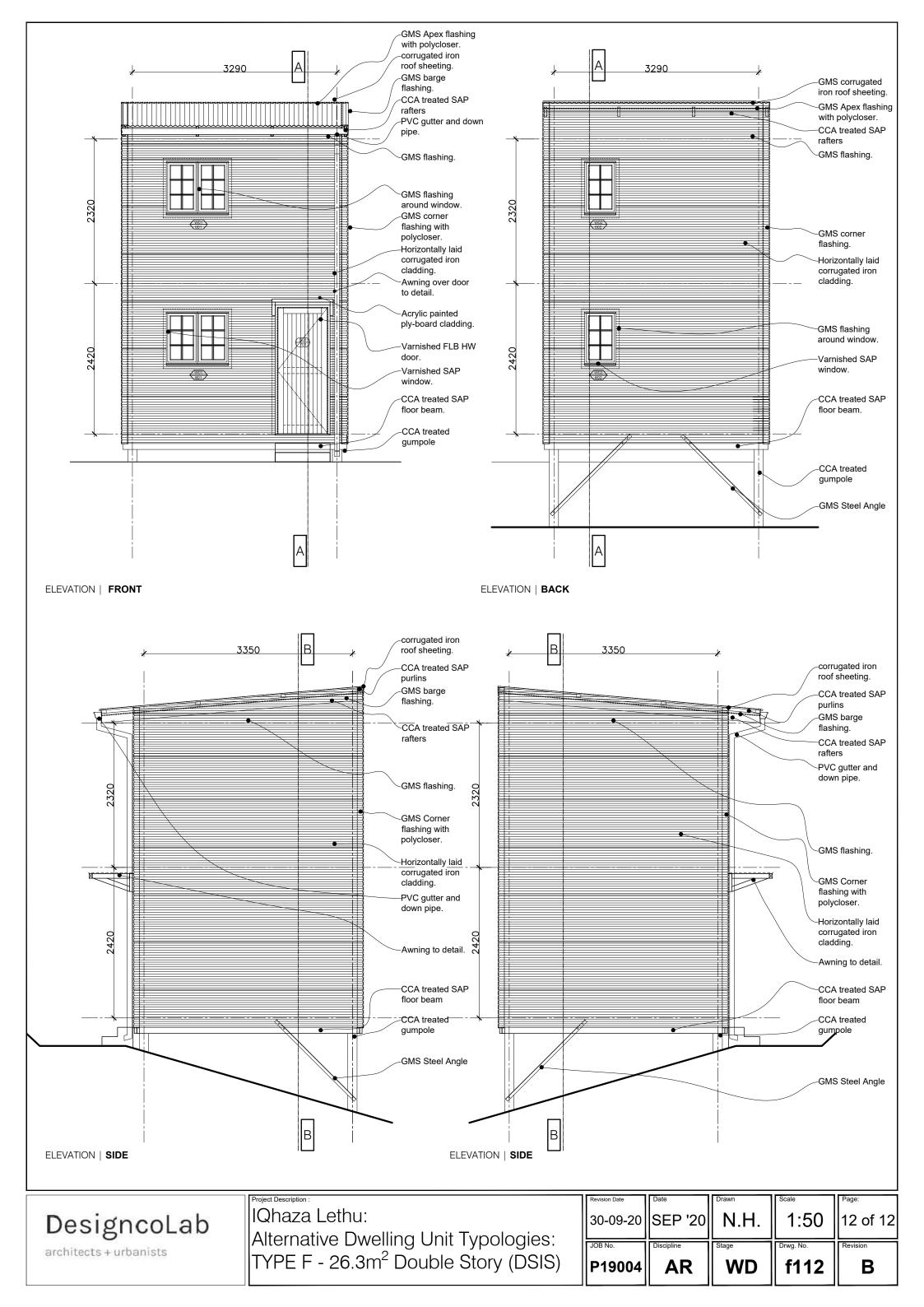


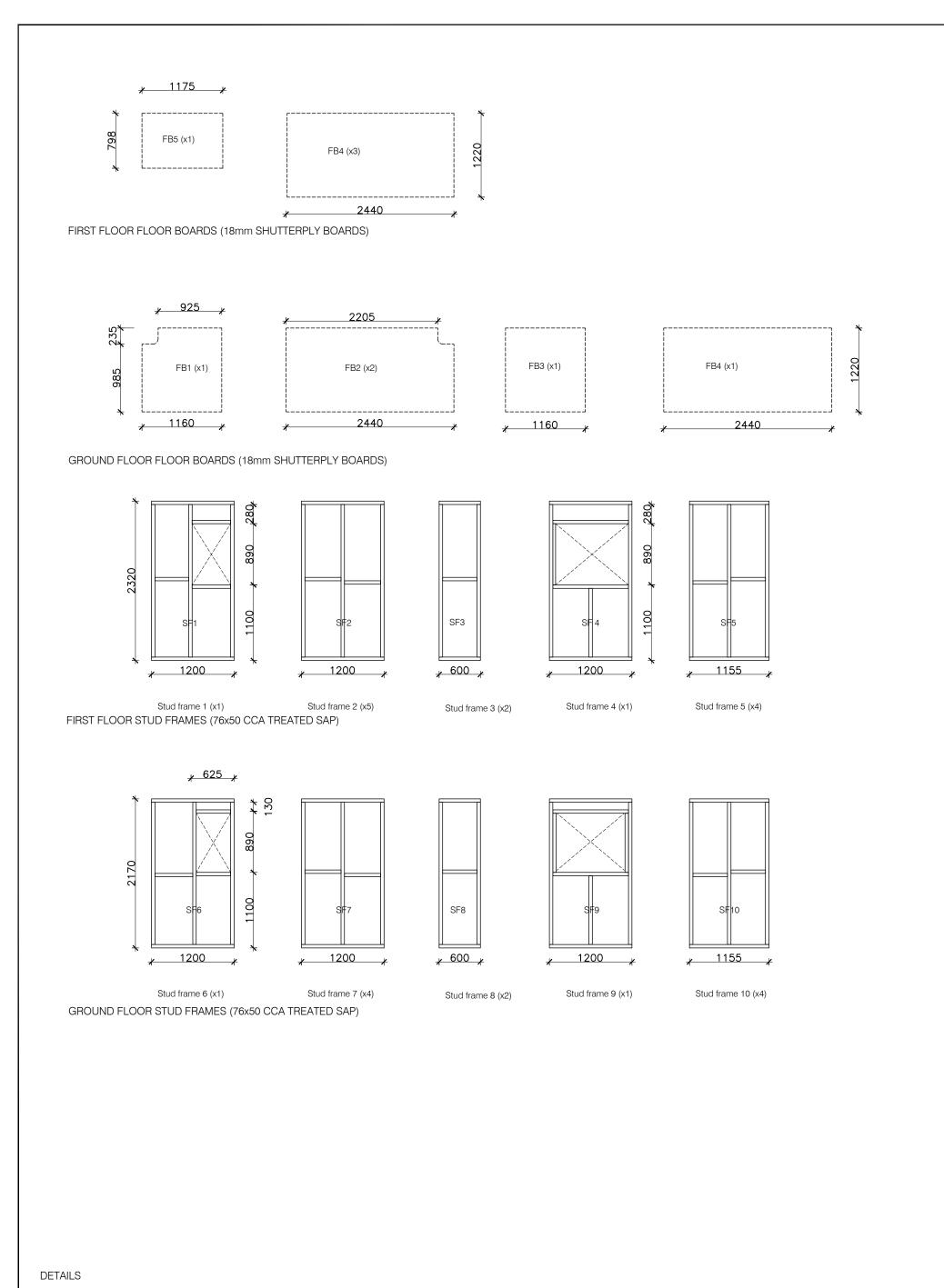












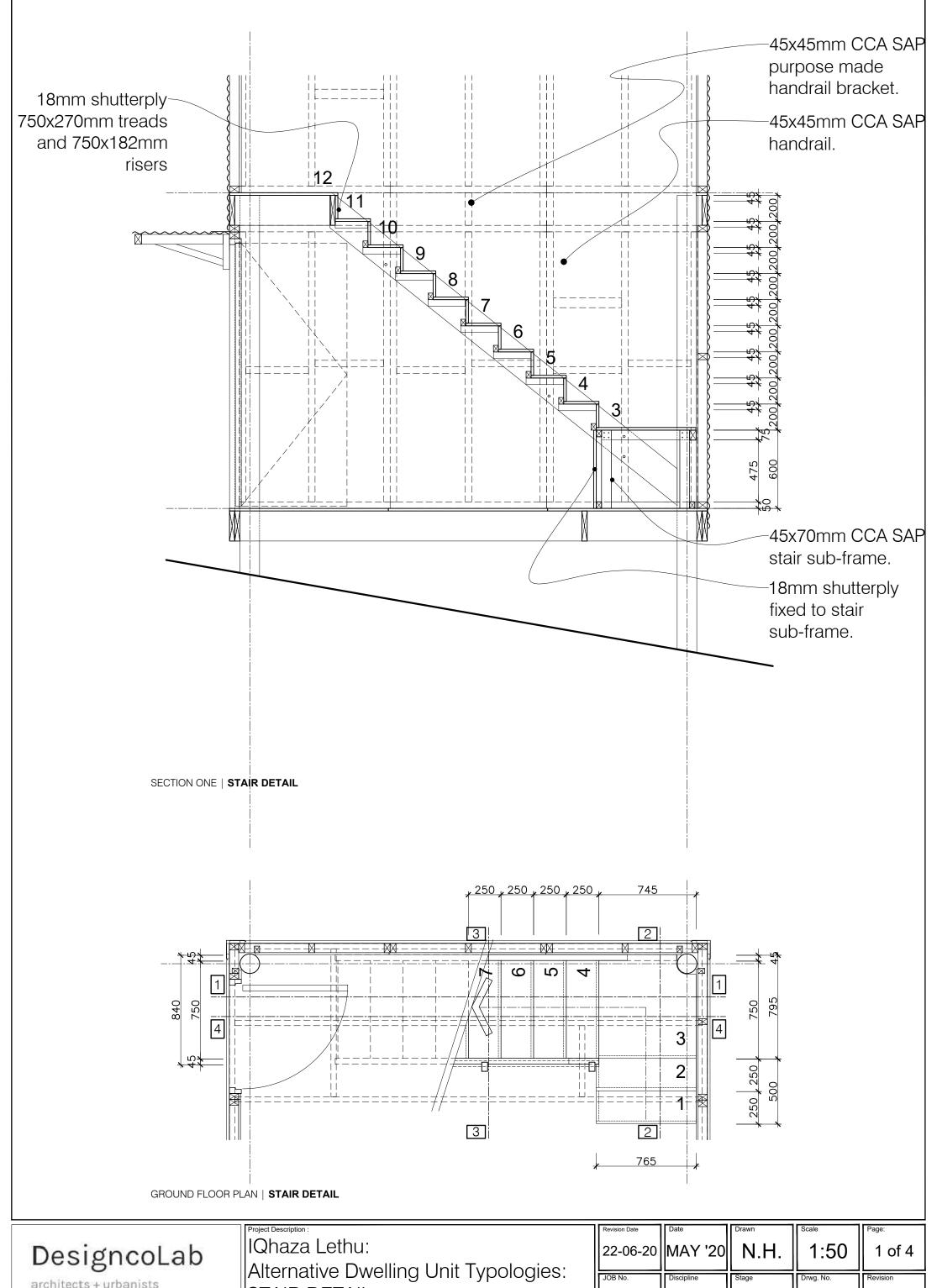
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IQhaza Lethu:
Alternative Dwelling Unit Typologies:
TYPE F - 26.3m ² Double Story (DSIS)

Project Description :

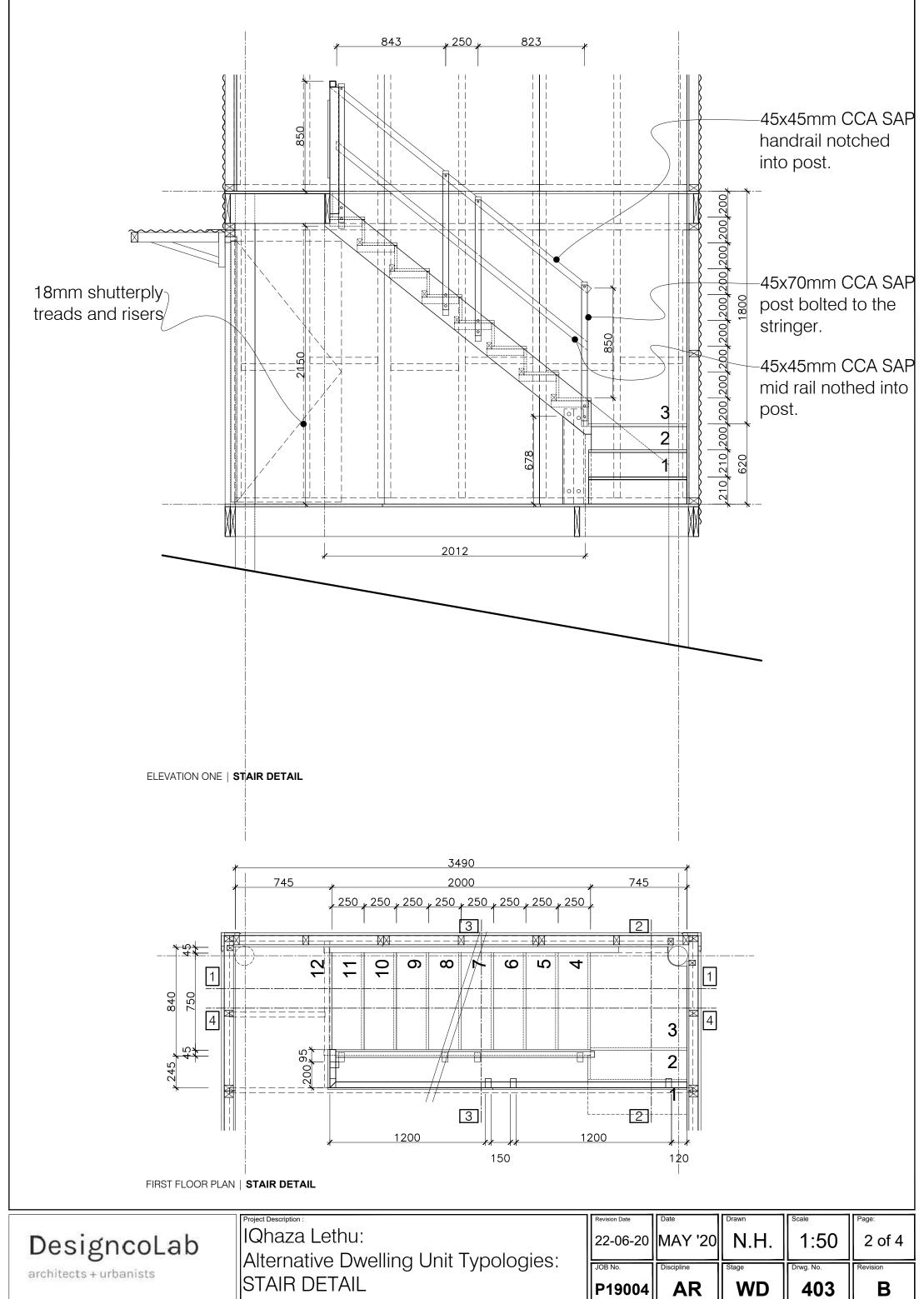
P19004	Discipline AR	WD Stage	Drwg. No. 401	Revision
30-09-20	SEP '20	N.H.	1:50	Page:



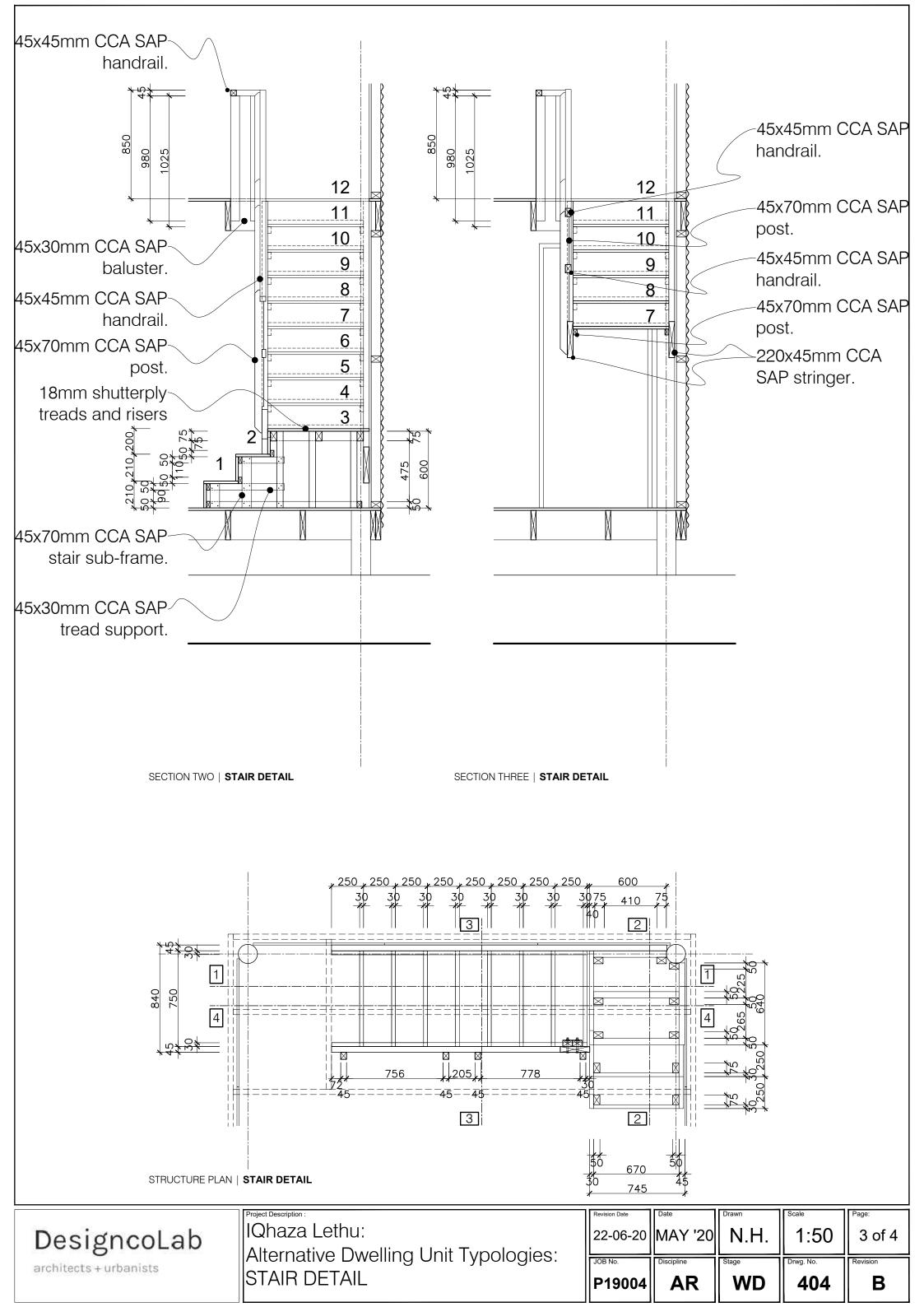
architects + urbanists

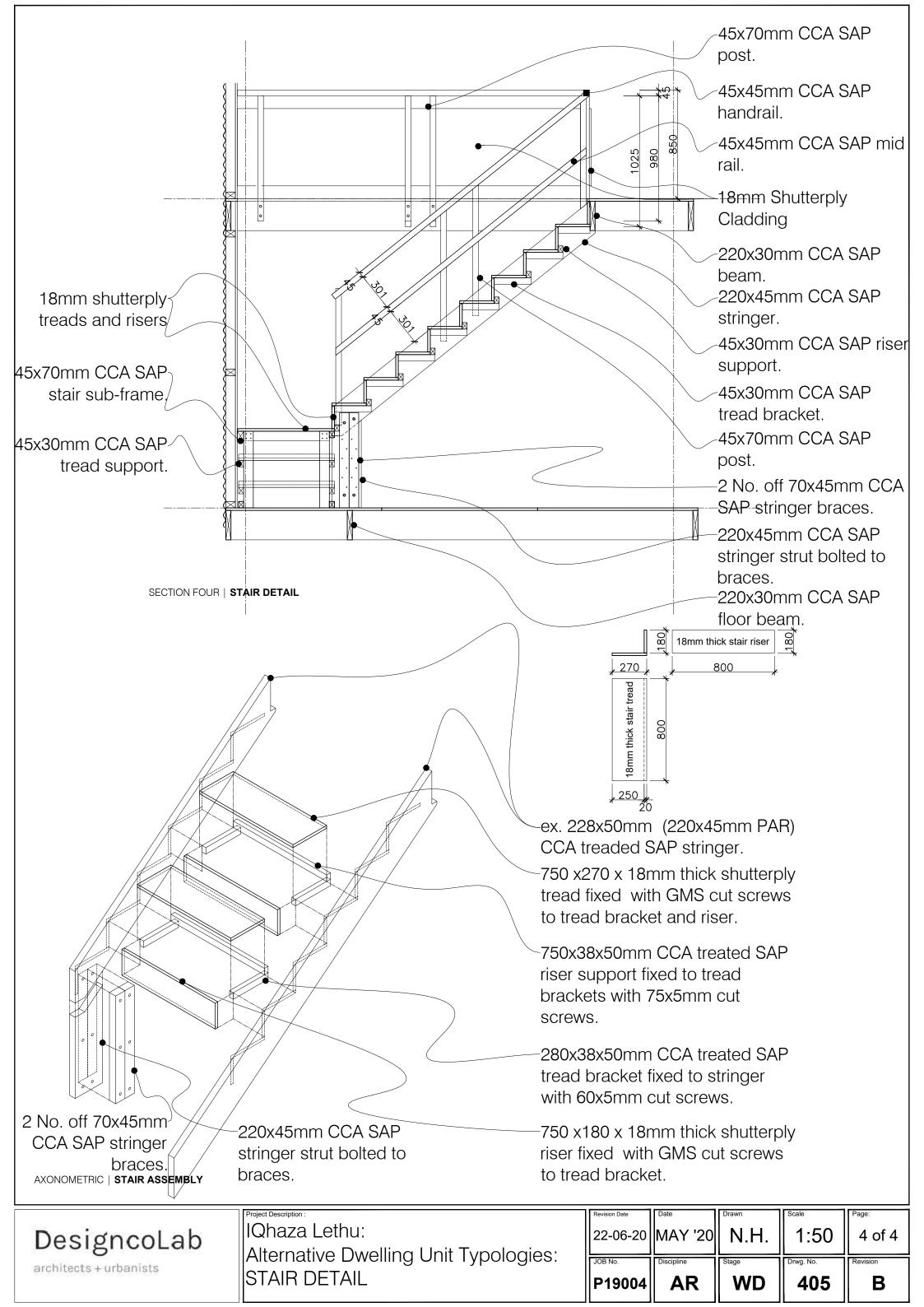
STAIR DETAIL

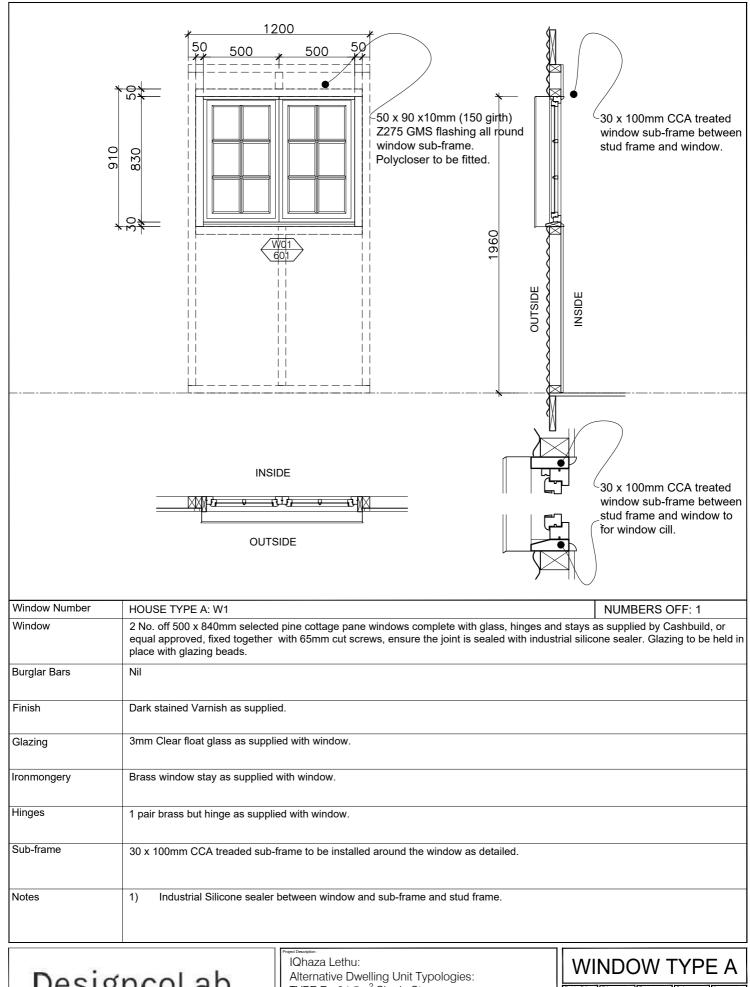
ARWD **402** P19004 В



STAIR DETAIL WD AR P19004







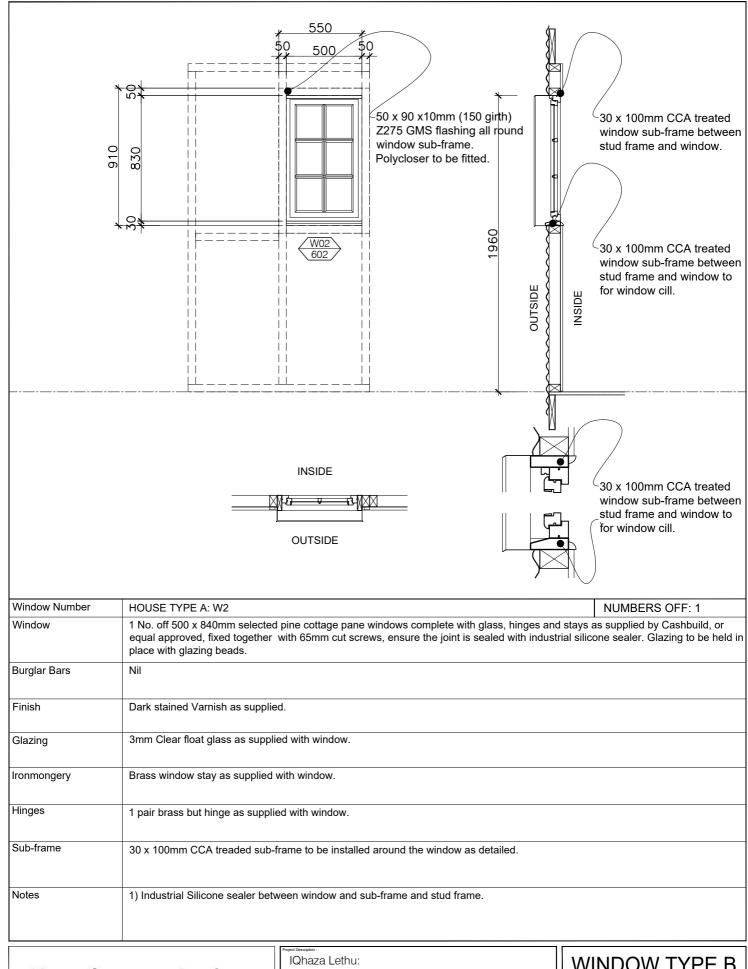
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TYPE E - 34.5m² Single Story

WINDOW SCHEDULE: UNIT TYPE E - WINDOW TYPE A

WINDOW TYPE A							
Revision Date 20-08-20	Aug '20	LSAA	1 : 25	1 of 2			
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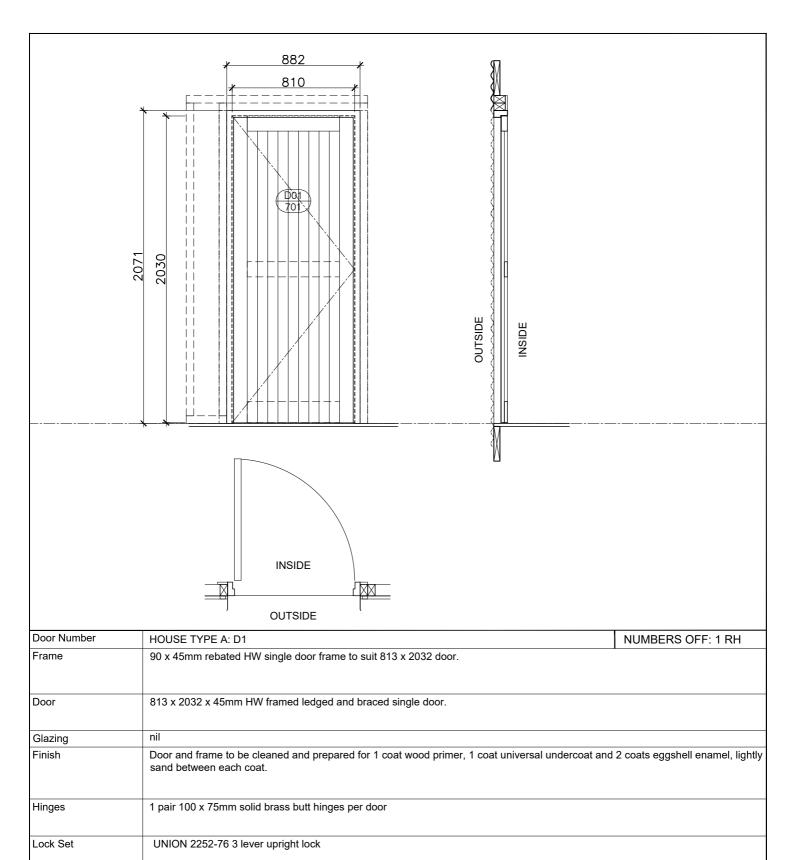
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Alternative Dwelling Unit Typologies: TYPE E - 34.5m² Single Story

WINDOW SCHEDULE: UNIT TYPE E - WINDOW TYPE B

WINDOW TYPE B							
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^{JOB No.} P19004		Stage	Drwg. No.	Revision			



Notes	1) All commercial product name	es are specified for clarity and may be substituted w	rith equal and approved alternatives
Desig	ncoLab	Project Description: IQhaza Lethu: Alternative Dwelling Unit Typologies: TYPE E - 34.5m ² Single Story	DOOR TYI

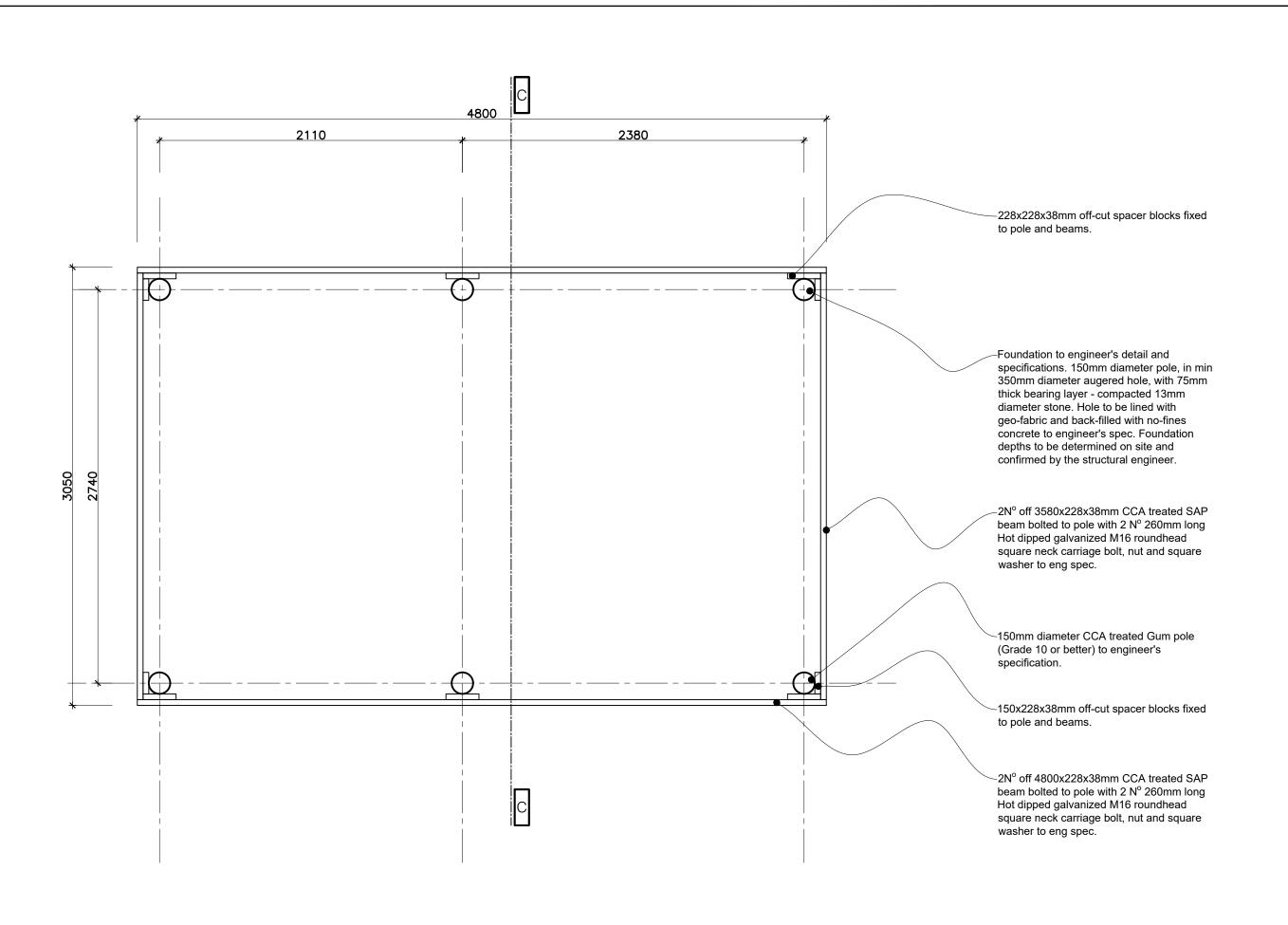
UNION CZ682CH Gower door handle.

architects + urbanists

Furniture

DOOR SCHEDULE:
UNIT TYPE E - DOOR TYPE D1

DOOR TYPE A						
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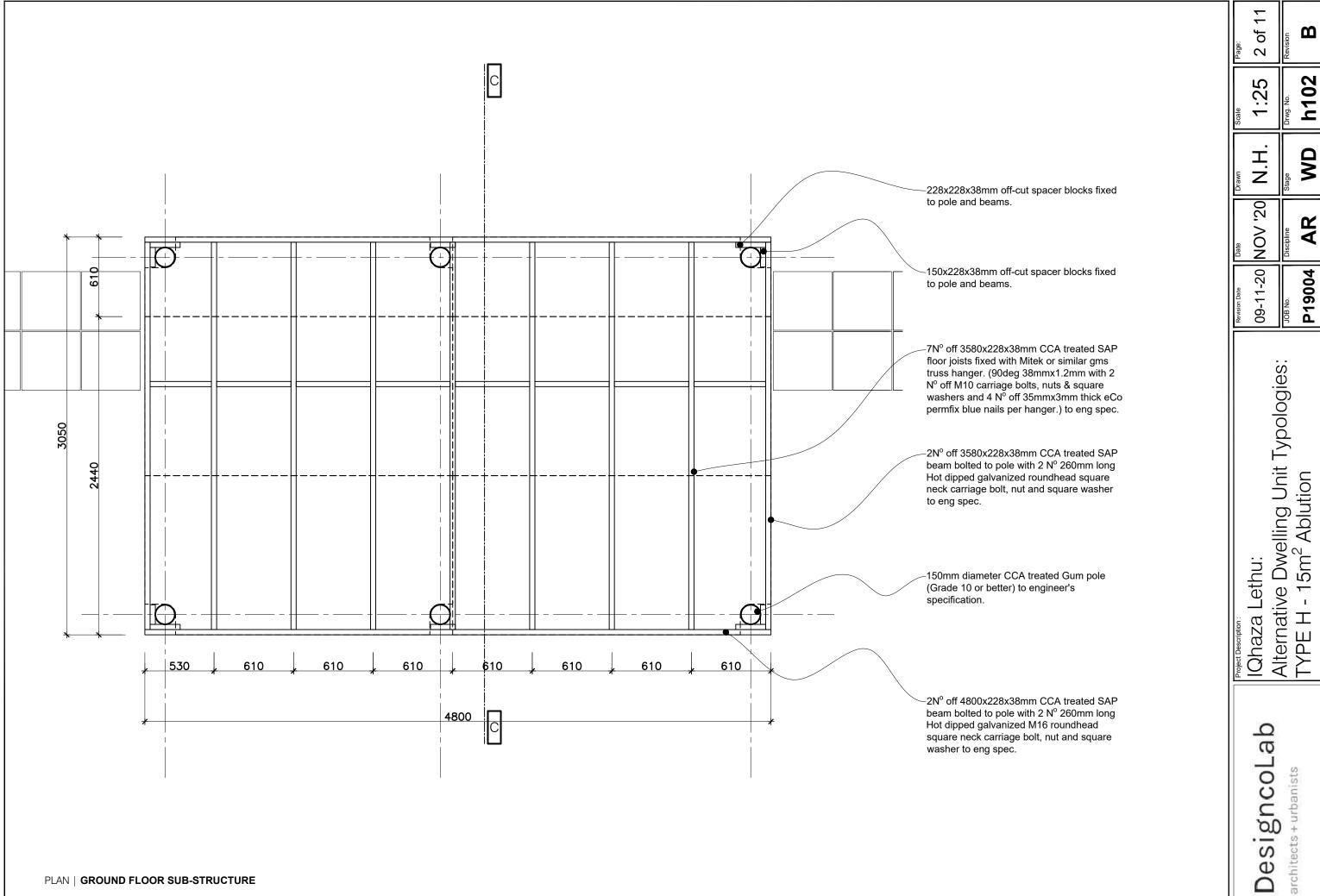
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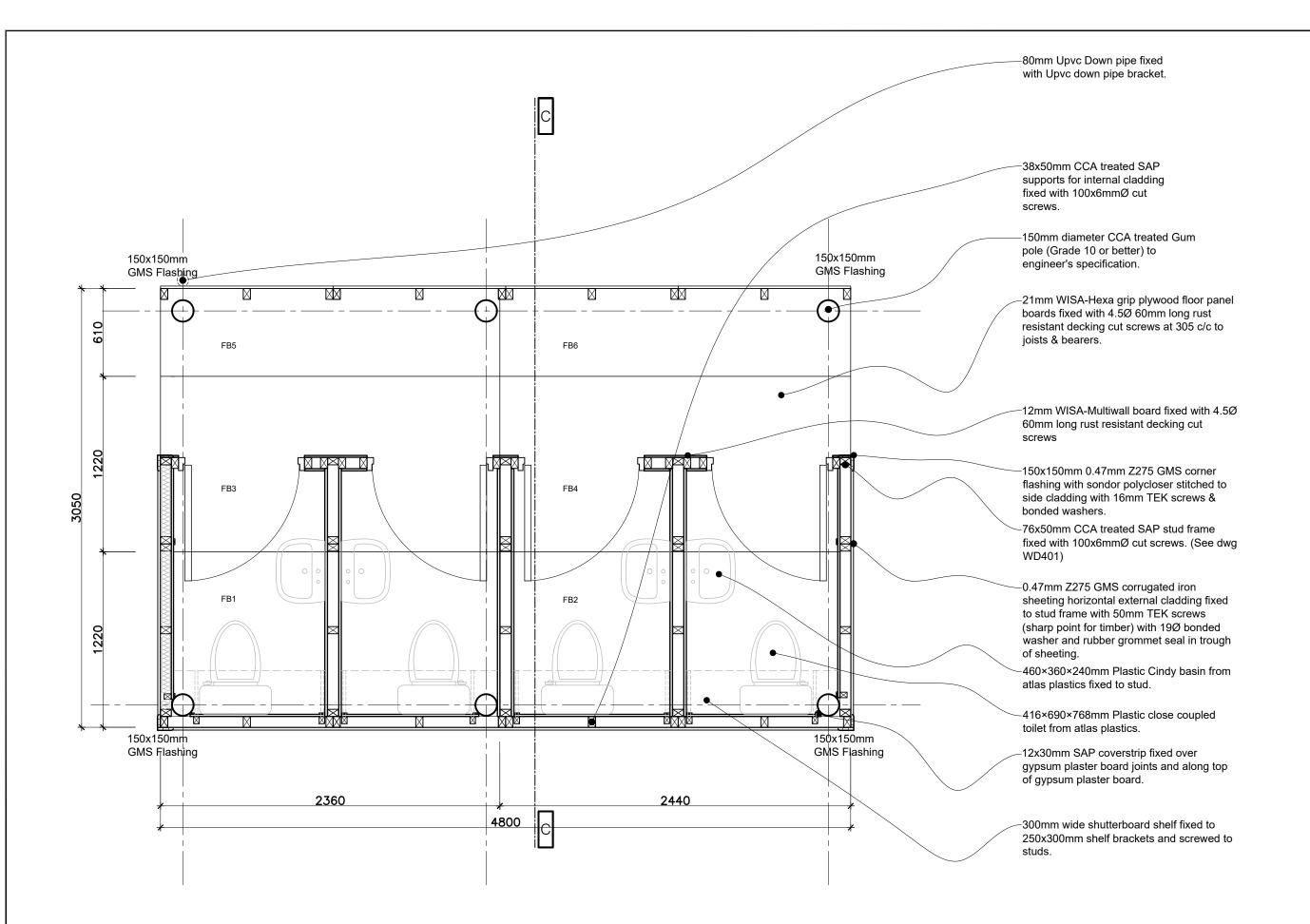
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AR P19004 Alternative Dwelling Unit Typologies: TYPE H - 15m² Ablution

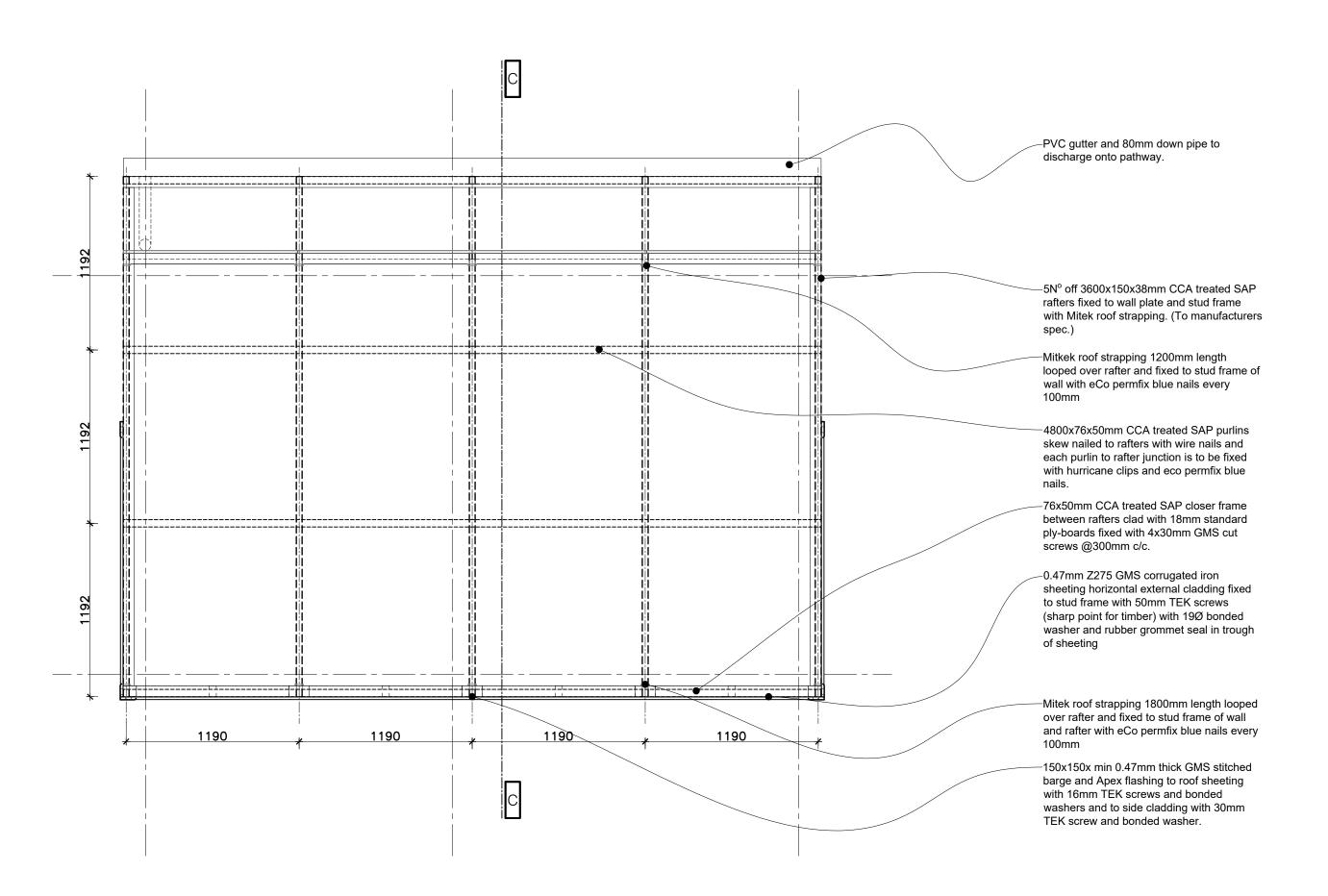


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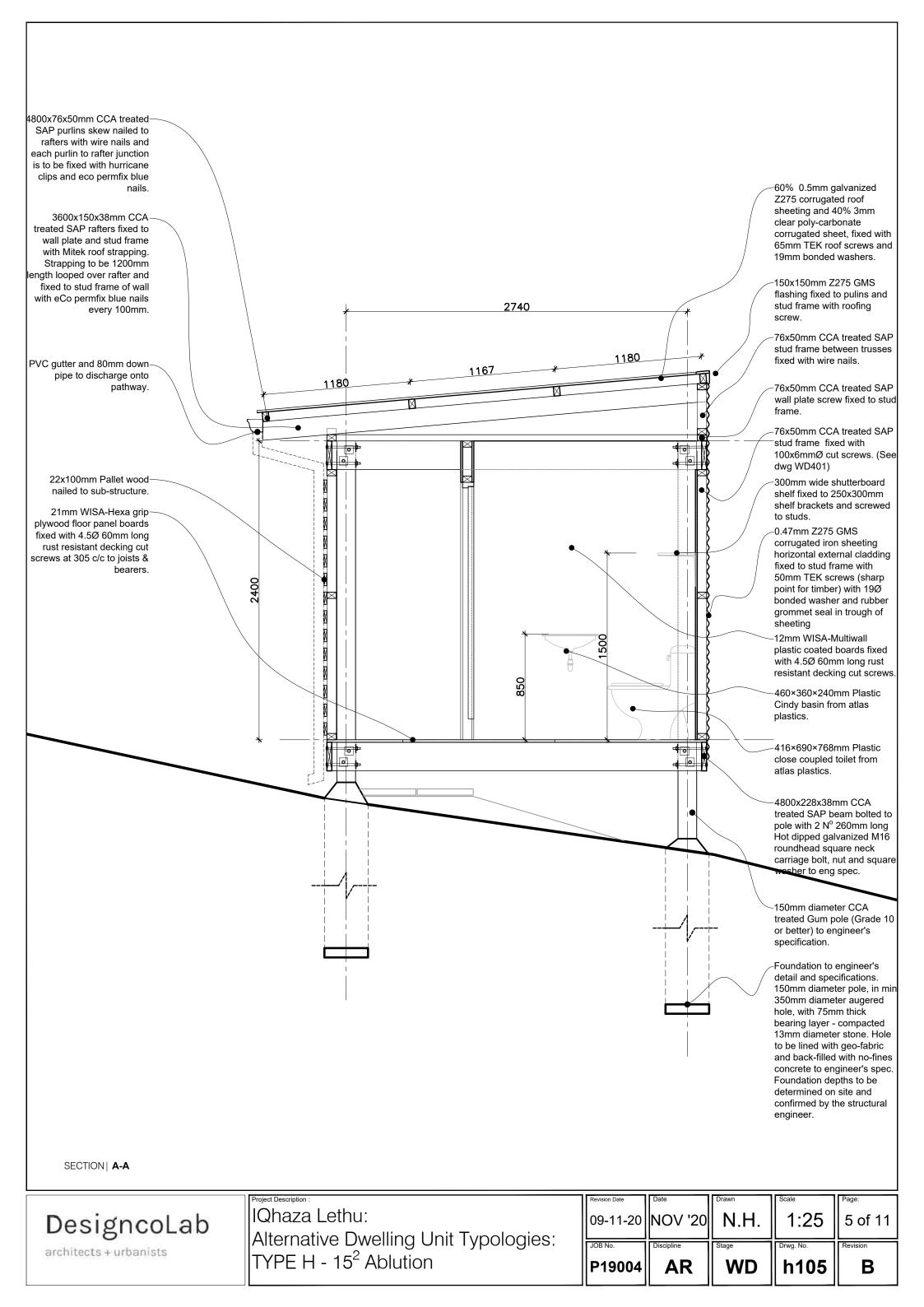
DesigncoLab

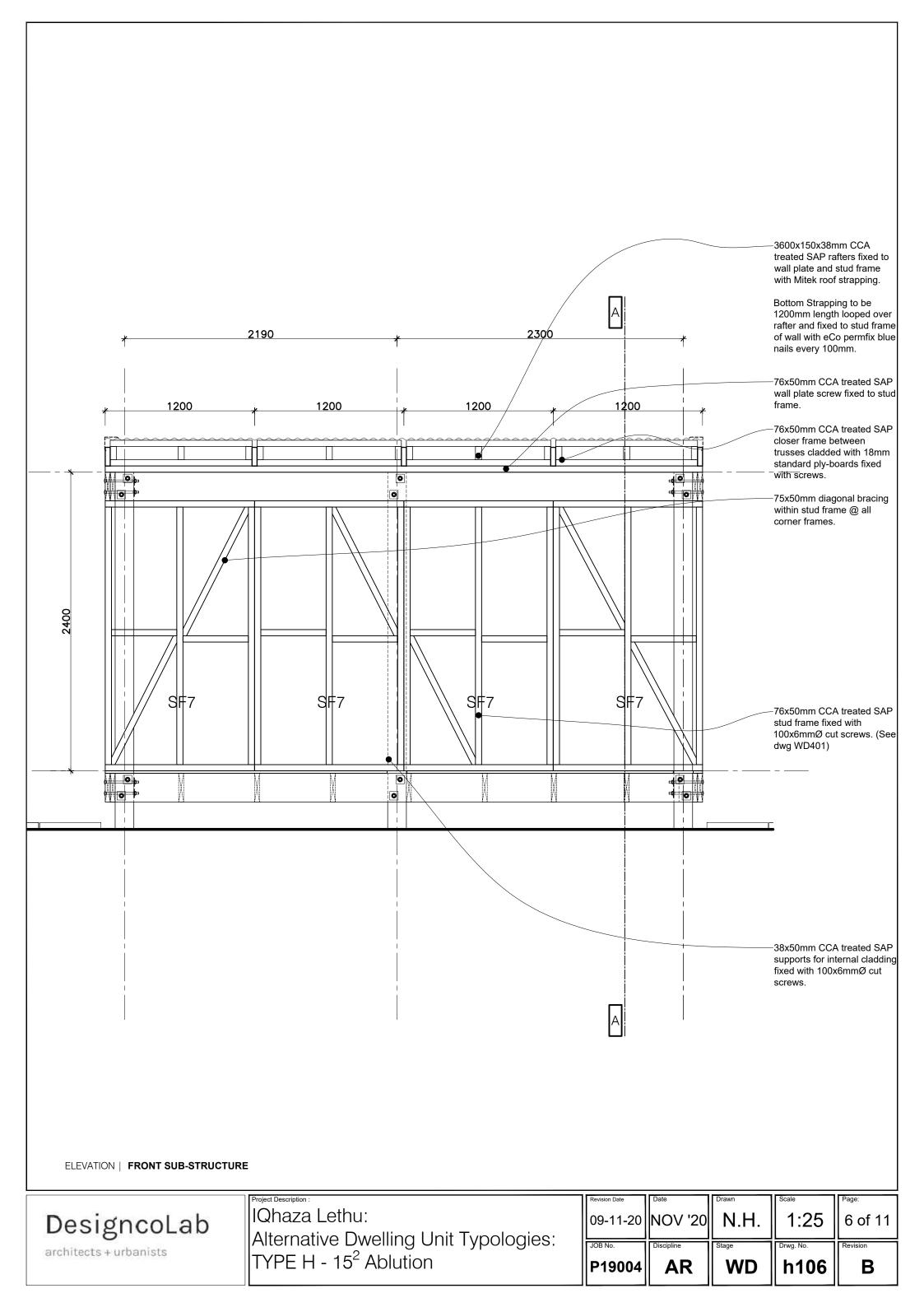


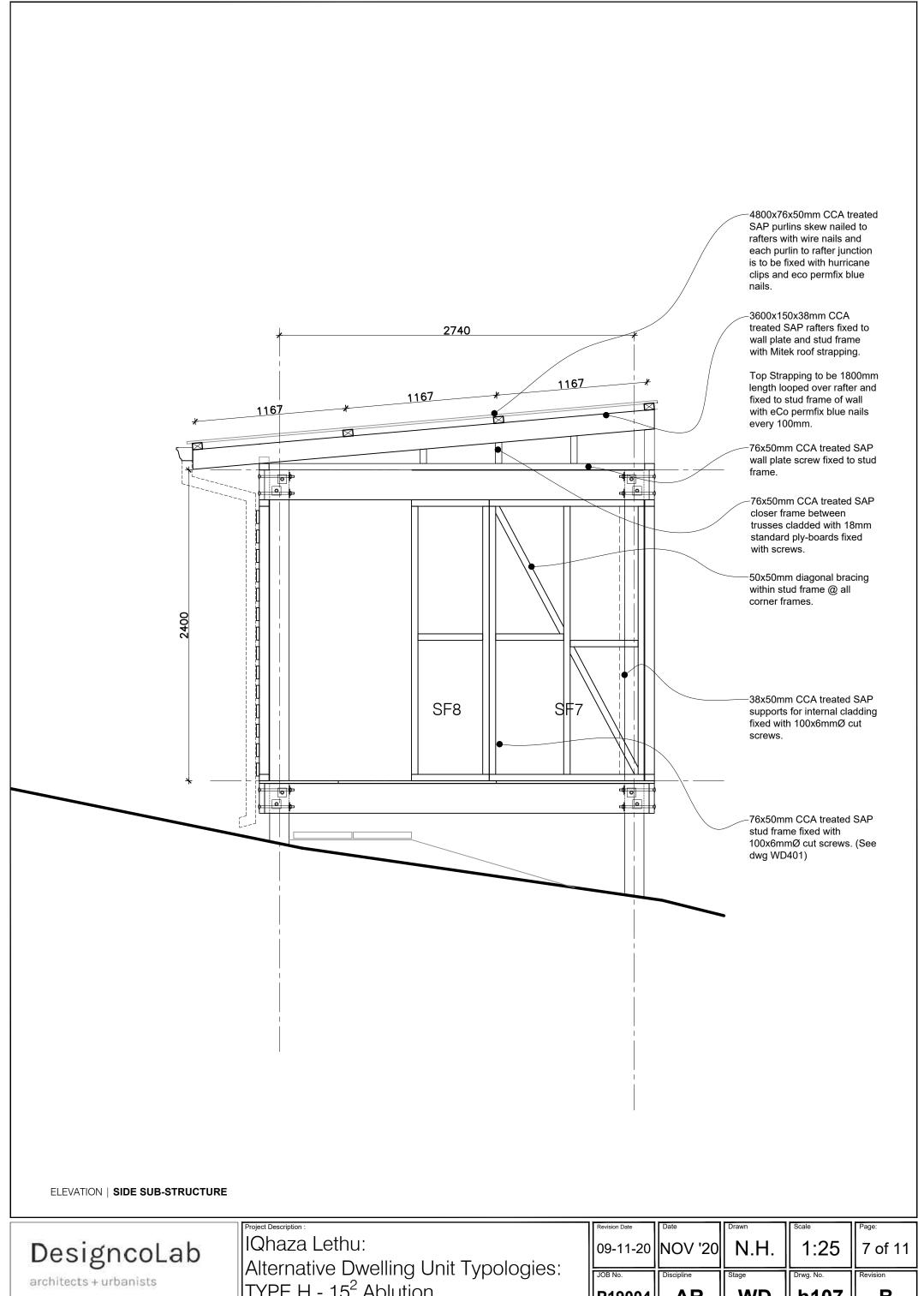
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esigncoLab

PLAN | ROOF

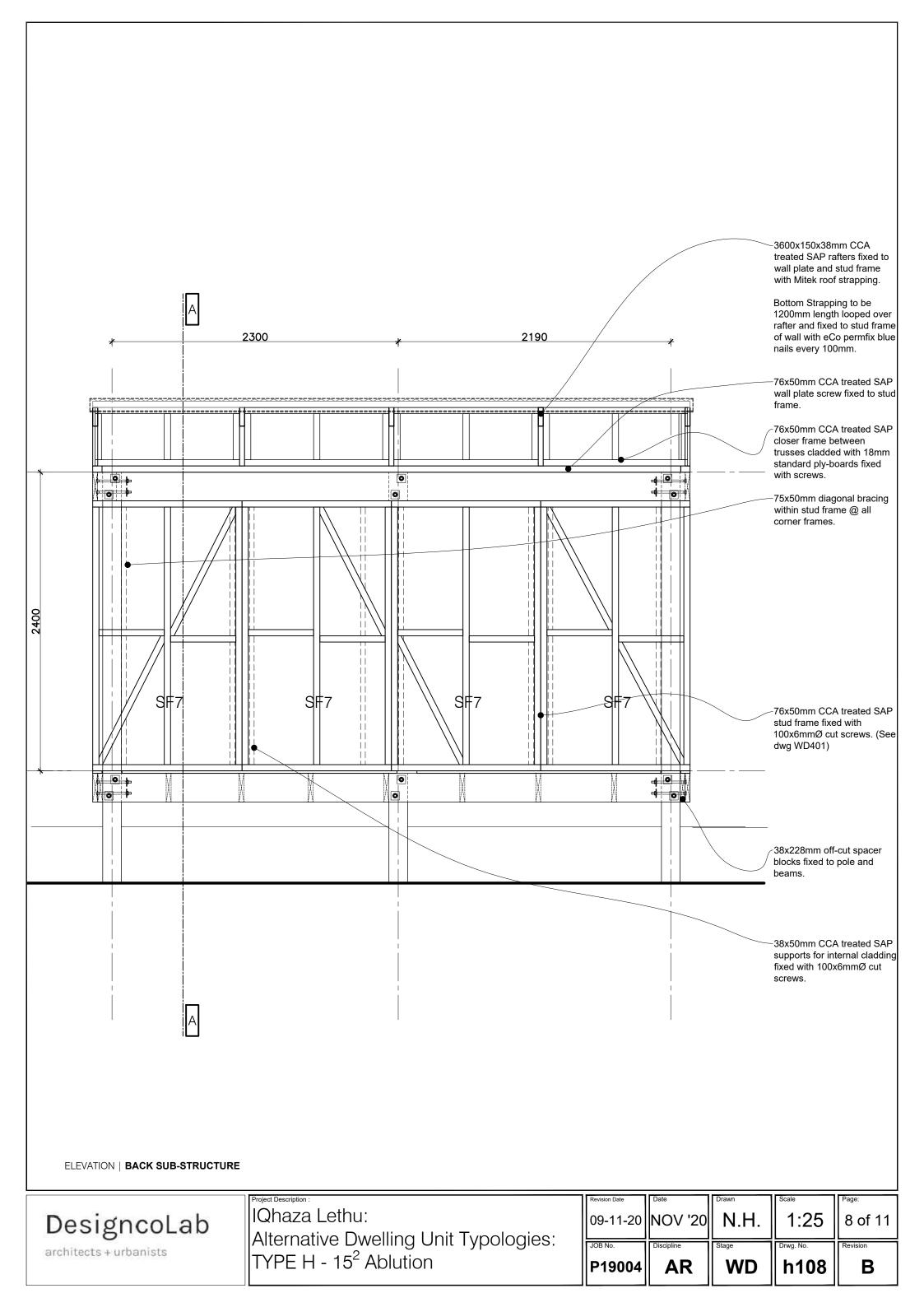


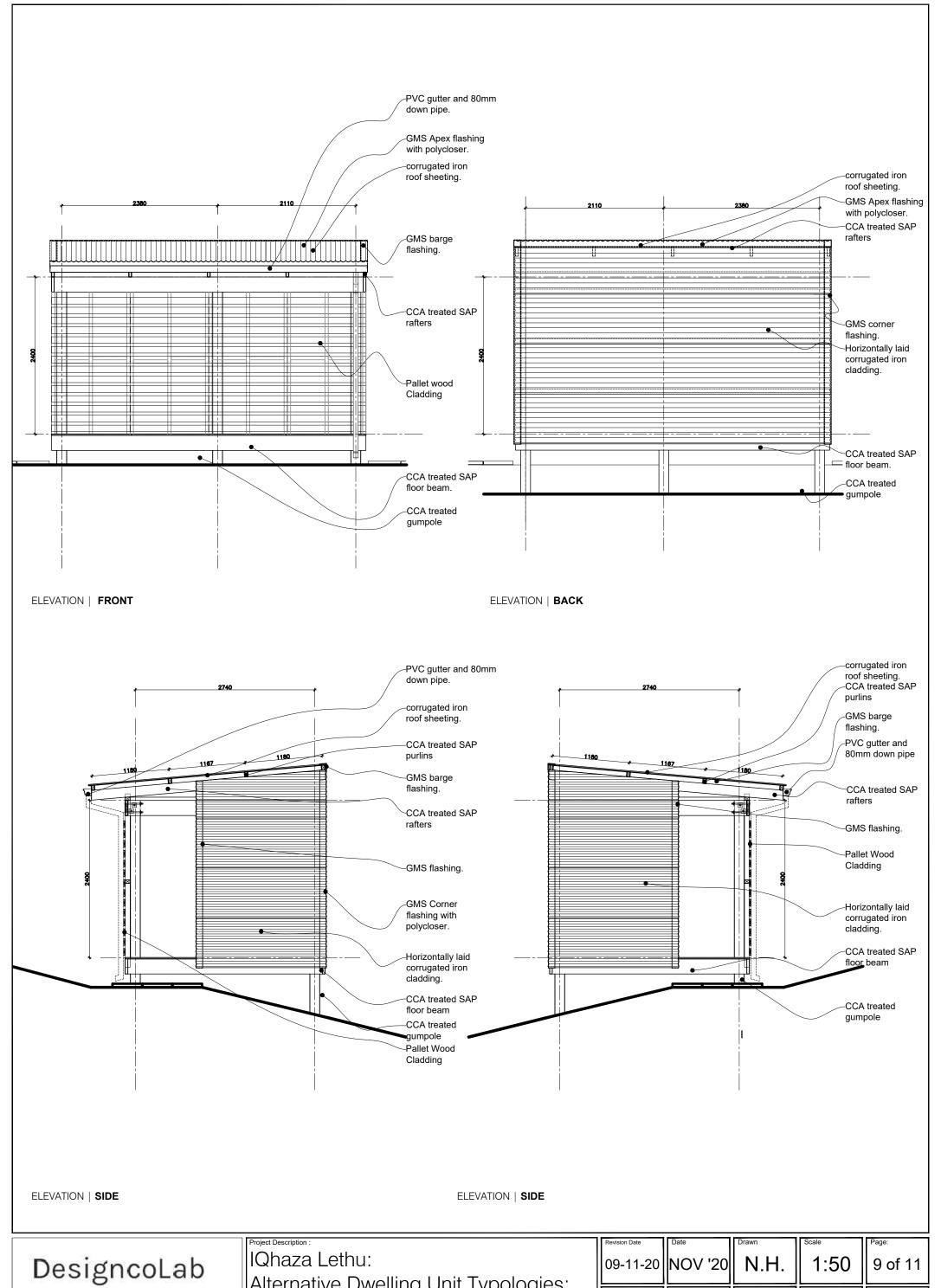




Alternative Dwelling Unit Typologies: TYPE H - 15² Ablution

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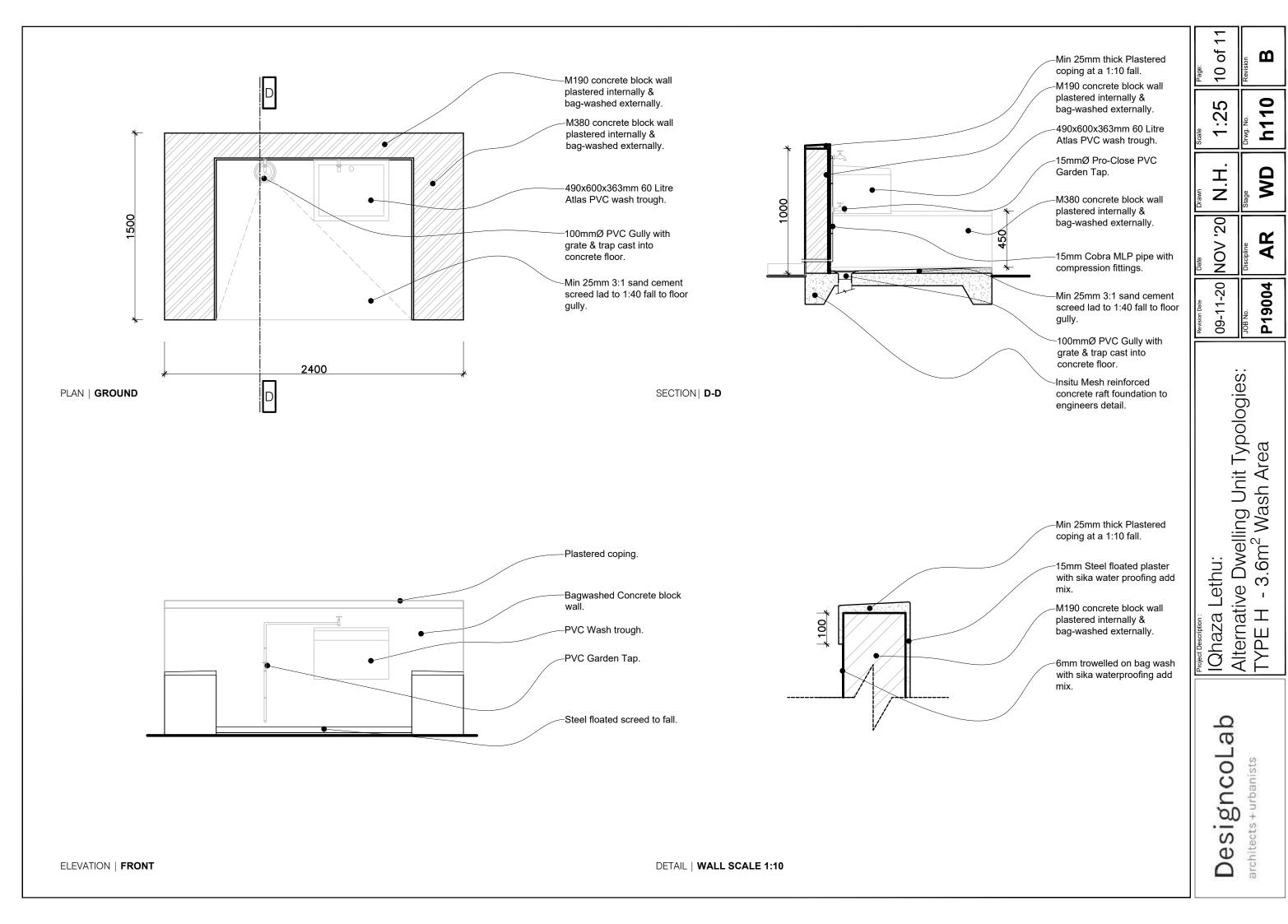


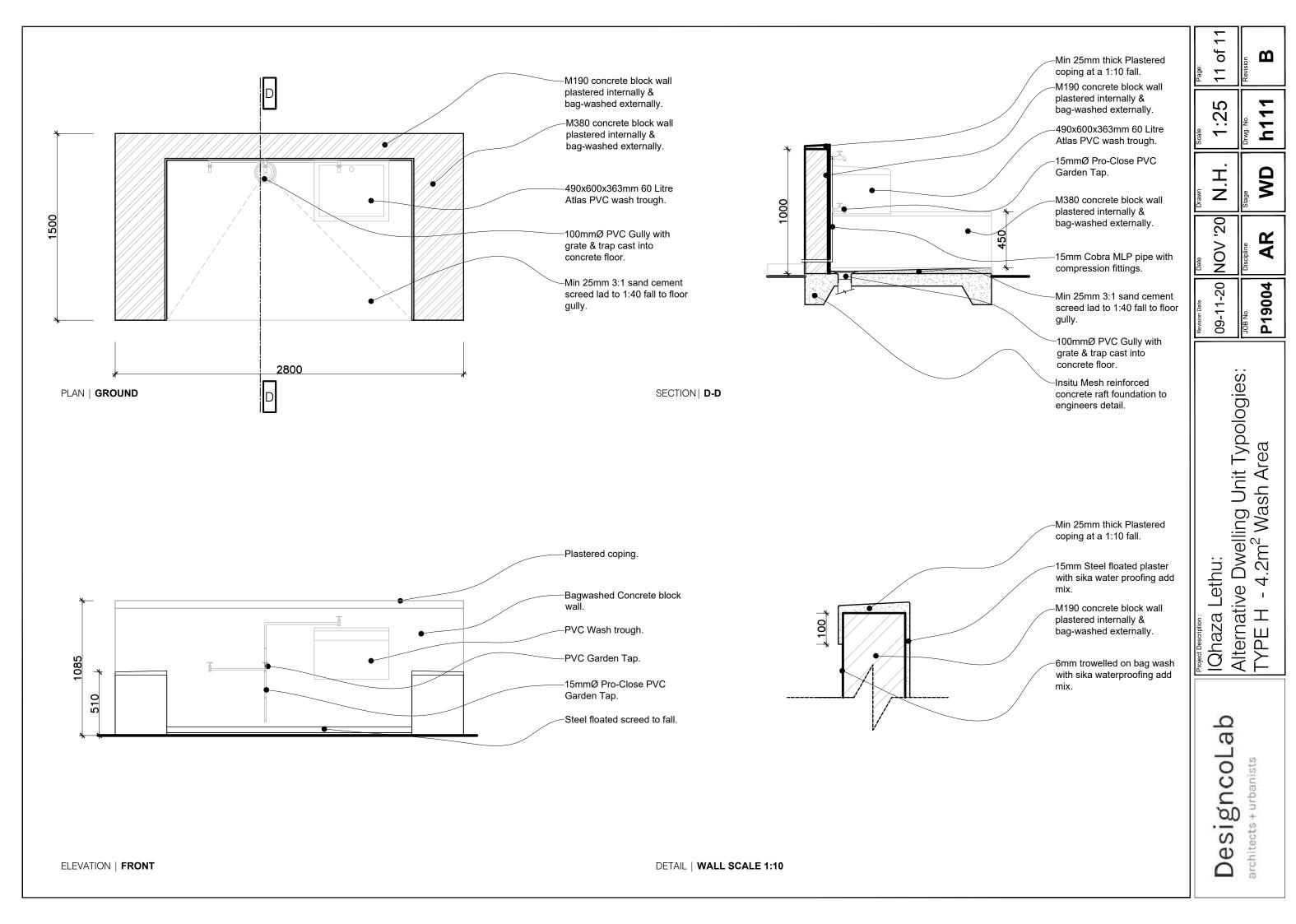


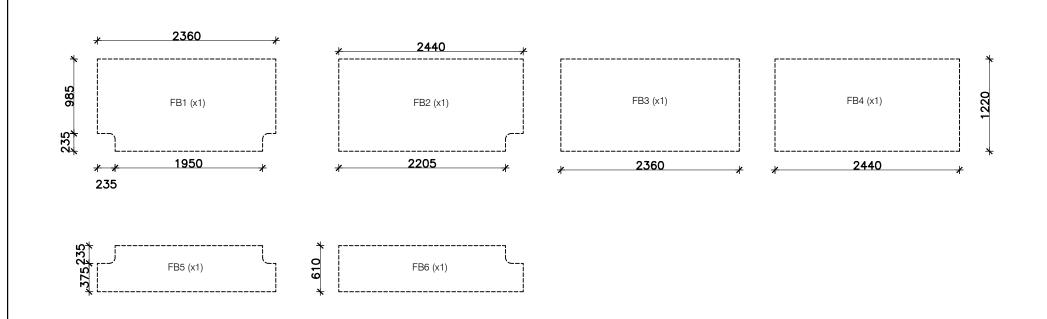
architects + urbanists

Alternative Dwelling Unit Typologies: TYPE H - 15m² Ablution

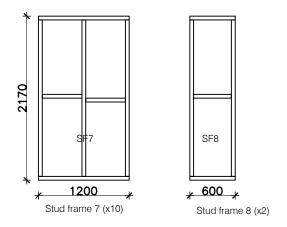
P19004	Discipline AR	WD Stage	h109	Revision B
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GROUND FLOOR FLOOR BOARDS (18mm SHUTTERPLY BOARDS)



GROUND FLOOR STUD FRAMES (76x50 CCA TREATED SAP)

DETAILS

DesigncoLab	IQhaza Lethu:
architects + urbanists	Alternative Dwellin
	ILLEH - 15 ADIU

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