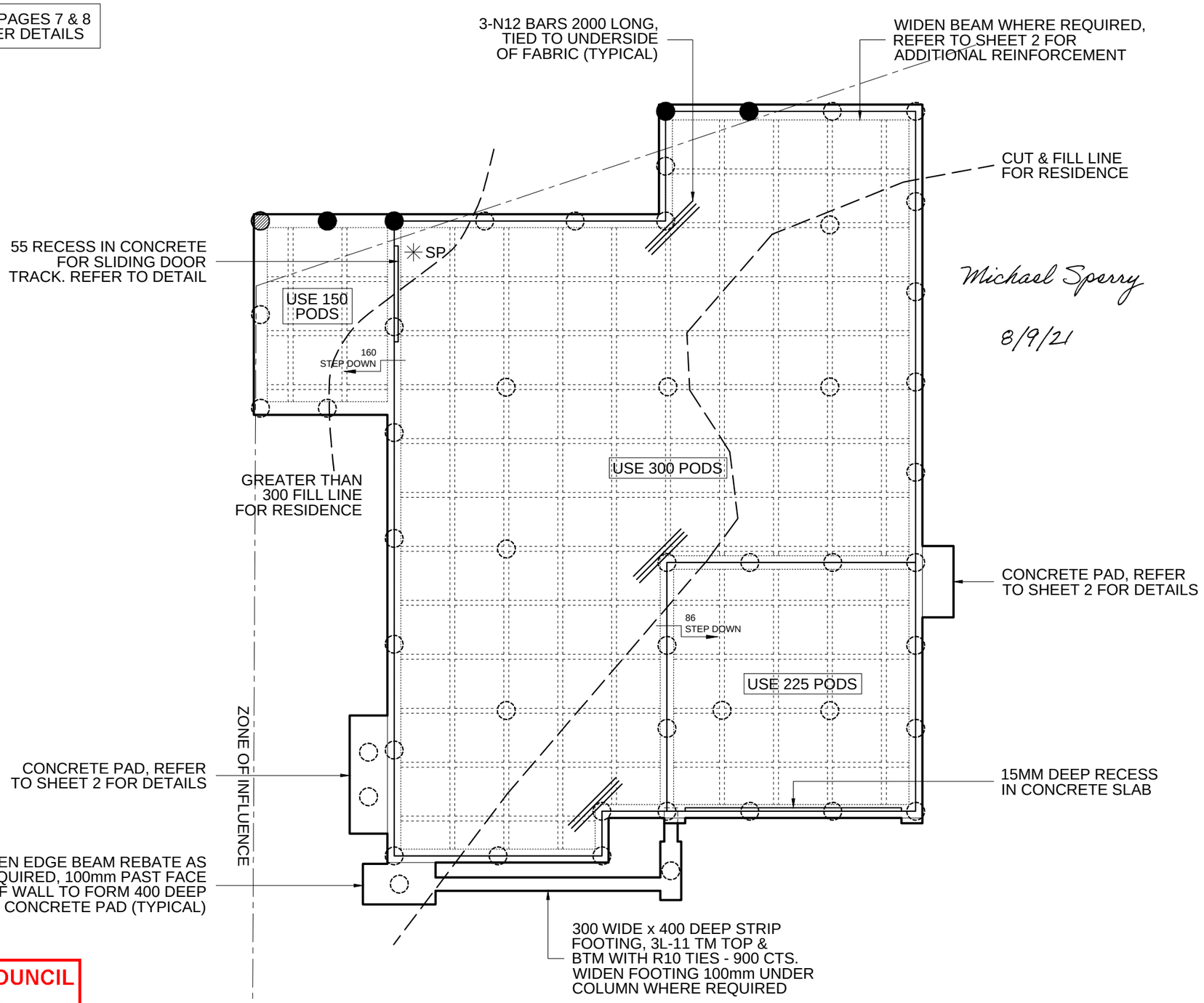
DENOTES 400mm DIAMETER REINFORCED CONCRETE PIERS, 4-N12 WITH R10 TIES AT 500 CTS.

REFER TO PAGES 7 & 8 FOR SEWER DETAILS




Michael Sperry

8/9/21

## GENERAL CONSTRUCTION NOTES

- THE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER WORKING DRAWINGS AND SPECIFICATIONS AND ANY OTHER WRITTEN INSTRUCTIONS ISSUED DURING CONSTRUCTION. ALL DISCREPANCIES AND VARIATIONS SHALL BE REFERRED TO THE ENGINEER, BEFORE PROCEEDING WITH THE WORK

- DURING CONSTRUCTION THE STRUCTURE AND ANY ADJACENT STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED

- DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS ALL LEVELS AND SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF THE WORKS

- THE CONTRACTOR IS RESPONSIBLE TO ESTABLISH THE LOCATION, SIZE AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORKS

- ALL SITE SAFETY MEASURES AND WORK METHOD STATEMENTS PREPARED BY BUILDER/SUB-CONTRACTORS ARE TO BE IMPLEMENTED DURING CONSTRUCTION. NO WORK IS TO COMMENCE UNTIL SUPERVISOR/BUILDER HAS IDENTIFIED AND APPROPRIATELY ACTED ON ANY POTENTIAL HAZARDS

- BUILDER TO ADHEAR TO ANY GEOTECHNICAL REPORT RECOMMENDATIONS PREPARED FOR THE SITE

- ALL WORKMANSHIP AND MATERIALS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF RELEVANT AUSTRALIAN STANDARD CODES AND THE REGULATIONS OF THE RELEVANT BUILDING AUTHORITY

- UNLESS REQUESTED AND PRODUCED ON THE PLANS, THE BUILDER IS TO ENSURE THAT ARTICULATION JOINTS ARE SHOWN ON THEIR ARCHITECTURAL DRAWINGS AND BE SATISFIED THAT THEY ARE IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS AND BUILDING CODES

- REFER TO THE ARCHITECTURAL PLANS FOR LOCATIONS OF ANY CONCRETE PADS REQUIRED

- FOUNDATION MATERIAL SHALL BE APPROVED PRIOR TO CONSTRUCTION

- A 1.0 METRE WIDE APRON, WITH 25 CROSS FALL AWAY FROM SLAB EDGE IS TO BE FORMED ALL AROUND THE RAFT SLAB WHERE APPLICABLE

- ADDITIONAL CONCRETE PIERS MAY BE REQUIRED UNDER SLAB TO EVEN BEARING IN SOIL AS RECOMMENDED BY AUSTRALIAN STANDARD AS 2870.

- ALL SITE FILLING PLACED BENEATH SLAB TO BE TREATED IN ACCORDANCE WITH CLAUSE 6.4. OF AS 2870.2 - 2011.

- NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS ARE TO BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR ENGINEER'S APPROVAL

- IF THE LOCATION OF THE SLAB IS NEXT TO AN ABOVE OR BELOW ON SITE DETENTION SYSTEM OR BELOW GROUND RAINWATER TANK, THE BUILDER IS TO ADVISE ENGINEER IN ORDER TO ENSURE THAT CONCRETE PIERS ARE TAKEN 500mm BELOW THE INVERT OF TANK OR THE FOOTING OF THE SUPPORTING WALL FOR AN ABOVE GROUND DETENTION SYSTEM PREPARED FOR THE SITE

- FOOTINGS ARE DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 100kPa.

- REINFORCEMENT SYMBOLS ARE FOLLOWS:
(N) - HOT ROLLED DEFORMED BARS (400 n)
(SL) - HARD -DRAWN WIRE REINFORCING FABRIC (450 sl)
(S) - STRUCTURAL GRADE DEFORMED BARS

- CONSTRUCTION JOINTS THAT ARE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER

- ALL REINFORCEMENT TO BE ADEQUATELY SUPPORTED IN ITS REQUIRED POSITION AND COVER DURING PLACEMENT OF CONCRETE

- PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE CONCRETE COVER TO REINFORCEMENT WITHOUT THE APPROVAL OF THE ENGINEER

- ALL CONCRETE TO BE MECHANICALLY VIBRATED AND SHALL BE CAREFULLY WORKED AROUND THE REINFORCEMENT AND INTO THE CORNERS OF FORMWORK

- PIER HOLES ARE DESIGNED FOR ALLOWABLE BEARING PRESSURE OF 200kPa.

- CONCRETE SPECIFICATION (F'c 28 DAYS) TO BE AS FOLLOWS: ADOPT TYPE 'A' CEMENT WITH MAX AGGREGATE SIZE OF 20mm AND 80mm SLUMP

| LOCATION | NORMAL F'c |
|---|---|
| PIERS | 20 MPa |
| SLAB | 20 MPa |
| STRIP FOOTING | 20 MPa |

- CLEAR COVER TO REINFORCEMENT TO BE AS FOLLOW:

| LOCATION | FORMED & SHELTERED | FORMED & EXPOSED | POURED ON GROUND |
|---|---|---|---|
| SLABS & WALLS | 20 | 30 | 65 |
| BEAMS | 25 | 40 | 65 |
| COLUMNS | 40 | 50 | - |
| STRIP FOOTING | - | - | 65 |

CONCRETE PIERS
SEWER AFFECTED PIERS
REINFORCED CONCRETE PIERS
SCREW PIERS
ARTICULATION JOINT
STARTING POINT

**BUILDER / HOME OWNER IS TO ADHERE TO CSIRO BROCHURE, "FOUNDATION MAINTENANCE AND FOOTING PERFORMANCE: A HOMEOWNER'S GUIDE".**

**THESE STRUCTURAL ENGINEERING DETAILS ARE IN ACCORDANCE WITH**
**- AS2870-2011 RESIDENTIAL SLAB & FOOTING CODE**
**- AS4100 STEEL STRUCTURE CODE**
**- AS1170.1 & AS1170.2 WIND, DEAD & LIVE LOAD CODE**
**- BUILDING CODE OF AUSTRALIA: SECTION B STRUCTURES**

**REFERENCE HAS BEEN MADE TO RAFELETOS ZANUTTINI'S BOREHOLE & SOIL CLASSIFICATION REPORT UNDERTAKEN FOR THE PROPERTY**

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## STRUCTURAL SLAB PLAN

CLIENT MR. A. K. M. IBRAHIM
LOCATION LOT 9 (NO.17) AMAROO AVENUE, STRATHFIELD

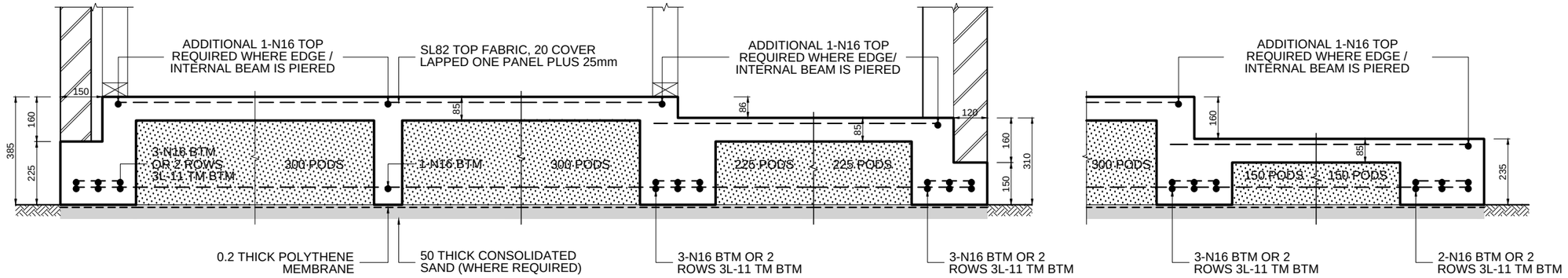
B.E. M.I.E. AUST.

| | | | | | |
|---|---|---|---|---|---|
| CLASSIFICATION | H2 | SHEET SIZE | A3 | SHEET No. | 1 |
| REFERENCE | 25909 | SCALE | 1 : 100 | JOB No. | 90486EB |

eden brae homes

## REVISION SCHEDULE

| | | | |
|---|---|---|---|
| A | ORIGINAL ISSUE | JOY | 20/08/21 |




## EXTERNAL EDGE BEAM

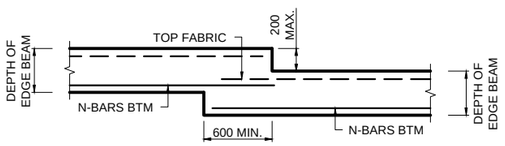
## INTERNAL RIB

## STEP DOWN

## GARAGE EDGE BEAM

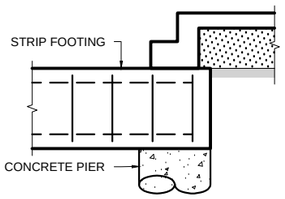
## ALFRESCO STEP DOWN

## ALFRESCO EDGE

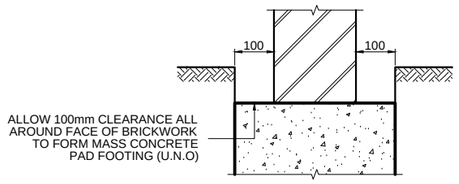



### EXTERNAL BEAM STEP DOWN DETAIL

NOTE: STEP TO OCCUR ON TOP OF PIER




### STRIP FOOTING CONNECTION




### TYPICAL MASS CONCRETE PAD CONSTRUCTION

AT ALL EXTERNAL BEAM CORNER LOCATIONS TOP & BTM

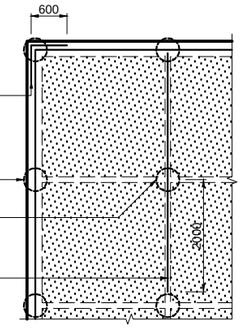
PROVIDE ADDITIONAL 3-N12 'L' BARS 1200 LONG BENT AROUND CORNERS TO LAP 600 MINIMUM WHERE BOTTOM N16 EDGE BEAM REINFORCEMENT IS DISCONTINUOUS

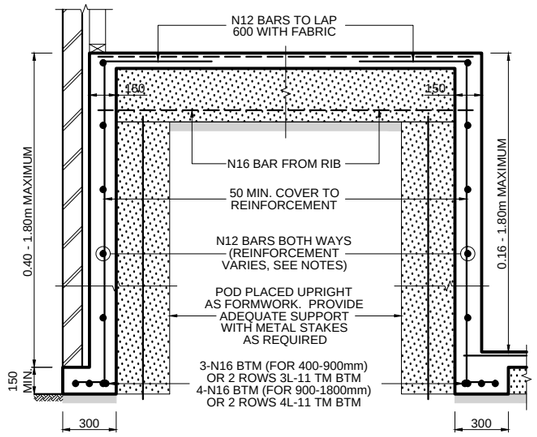
NOTE: NO 'L' BARS REQUIRED IF USING TRENCH MESH

EXTERNAL LOAD BEARING BEAM & PIER

INTERNAL RIB BEAM PIERS

WHERE INTERNAL RIB BEAMS OR CONCRETE PADS ARE PIERED, THEN ADDITIONAL 1-N16 TOP BAR ALONG THE RIB IS REQUIRED IN ONE DIRECTION ONLY & IS TO BEGIN FROM THE EXTERNAL EDGE BEAM & EXTEND 2000 BEYOND LAST PIER

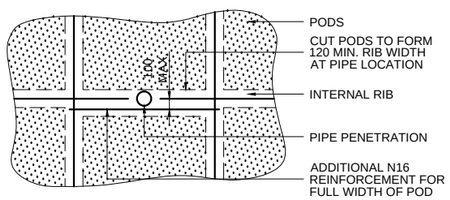


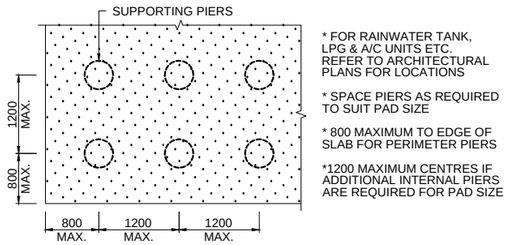

### EXTERNAL DEEP BEAM

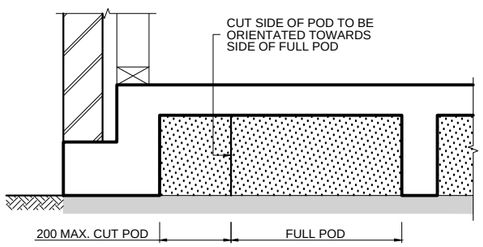
### INTERNAL DEEP BEAM

| DEEP BEAM DEPTH | BEAM REINFORCEMENT |
|---|---|
| 160 - 400MM | N12 BARS AT 1200 CENTRES & 1-N12 HORIZONTAL |
| 400 - 900MM | N12 BARS AT 600 CENTRES & 1-N12 CENTRALLY |
| 900 - 1500MM | N12 BARS AT 300 CENTRES BOTH WAYS |
| 1500 - 1800MM | N12 BARS AT 200 CENTRES BOTH WAYS |

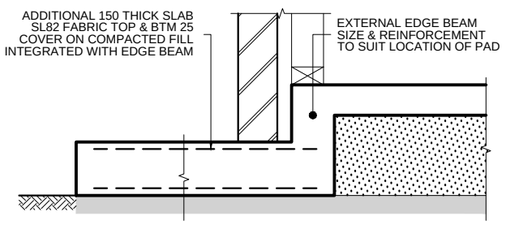



### PIPE PENETRATION THROUGH RIB




### POD EXTENTION DETAIL




### CONCRETE PAD DETAIL

PROVIDE 400 DIA. CONCRETE PIERS TO CLAY & SAND, OR 300 DIA. TO ROCK OR SHALE

SPACE PIERS AT 2400 CTS. AS SHOWN ALONG EXTERNAL EDGE BEAM, UNLESS NOTED OTHERWISE

PIERS REQUIRED UNDER INTERNAL RIB BEAMS WHEN CONSTRUCTED ON MORE THAN 300mm OF UNCONTROLLED / NON-COMPACTED MATERIAL OR AS SHOWN

N12 BARS CAN BE REPLACE WITH 10.65mm HDW (450MPa STRESS GRADE)

### REINFORCEMENT FOR RIBS & BEAMS

| WIDTH | TOP STEEL | BTM STEEL |
|---|---|---|
| 301 - 330 | 1-N16 | 3-N16 |
| 331 - 440 | 2-N16 | 4-N16 |
| 441 -550 | 3-N16 | 5-N16 |
| 551 - 660 | 4-N16 | 6-N16 |

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## STRUCTURAL SLAB DETAILS

CLIENT MR. A. K. M. IBRAHIM

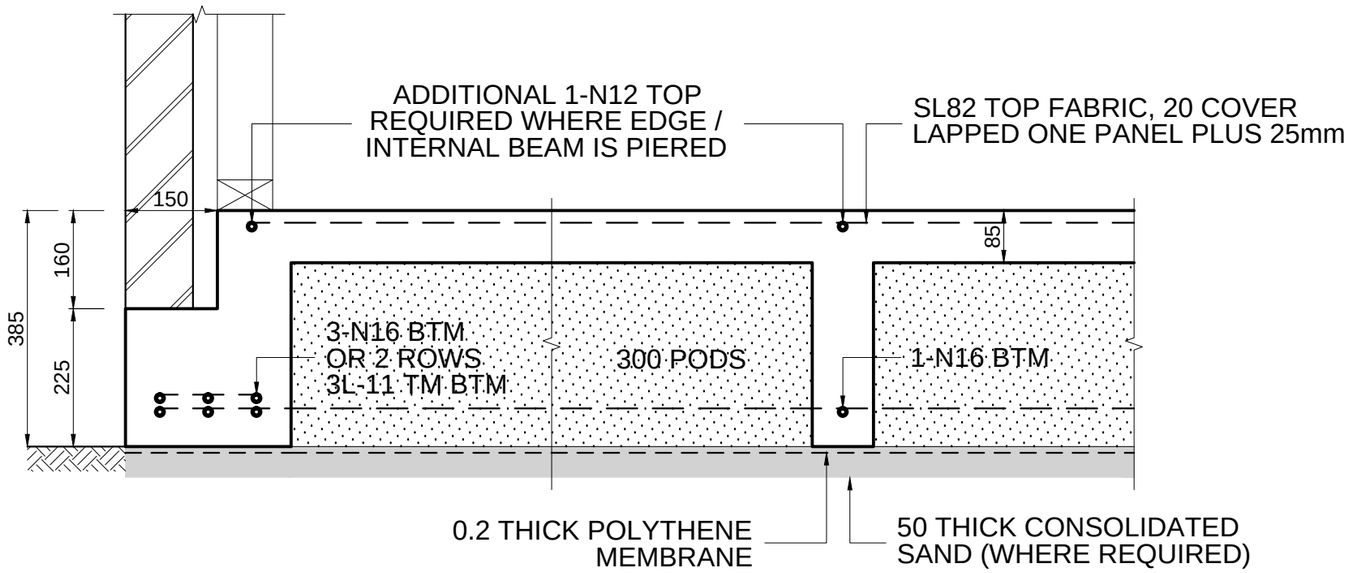
LOCATION LOT 9 (NO.17) AMAROO AVENUE, STRATHFIELD

eden brae homes

| | | | |
|---|---|---|---|
| 300.82. 3.N 300.225. 86. 3 300.150160. 3 | CLASSFICATION H2 | SHEET No. | 2 |
| | SCALE NTS | JOB No. | 90486EB |

### REVISION SCHEDULE

| | | | |
|---|---|---|---|
| A | ORIGINAL ISSUE | JOY | 20/08/21 |




EXTERNAL EDGE BEAM

INTERNAL RIB

# ALTERNATIVE 2 CR'S EDGE BEAM

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STRUCTURAL SLAB DETAILS

CLIENT MR. A. K. M. IBRAHIM

LOCATION LOT 9 (NO.17) AMAROO AVENUE, STRATHFIELD

| | | | | | |
|---|---|---|---|---|---|
| | | SHEET SIZE | A3 | SHEET No. | 3 |
| REFERENCE | 25909 | SCALE | 1 : 10 | JOB No. | 90486EB |

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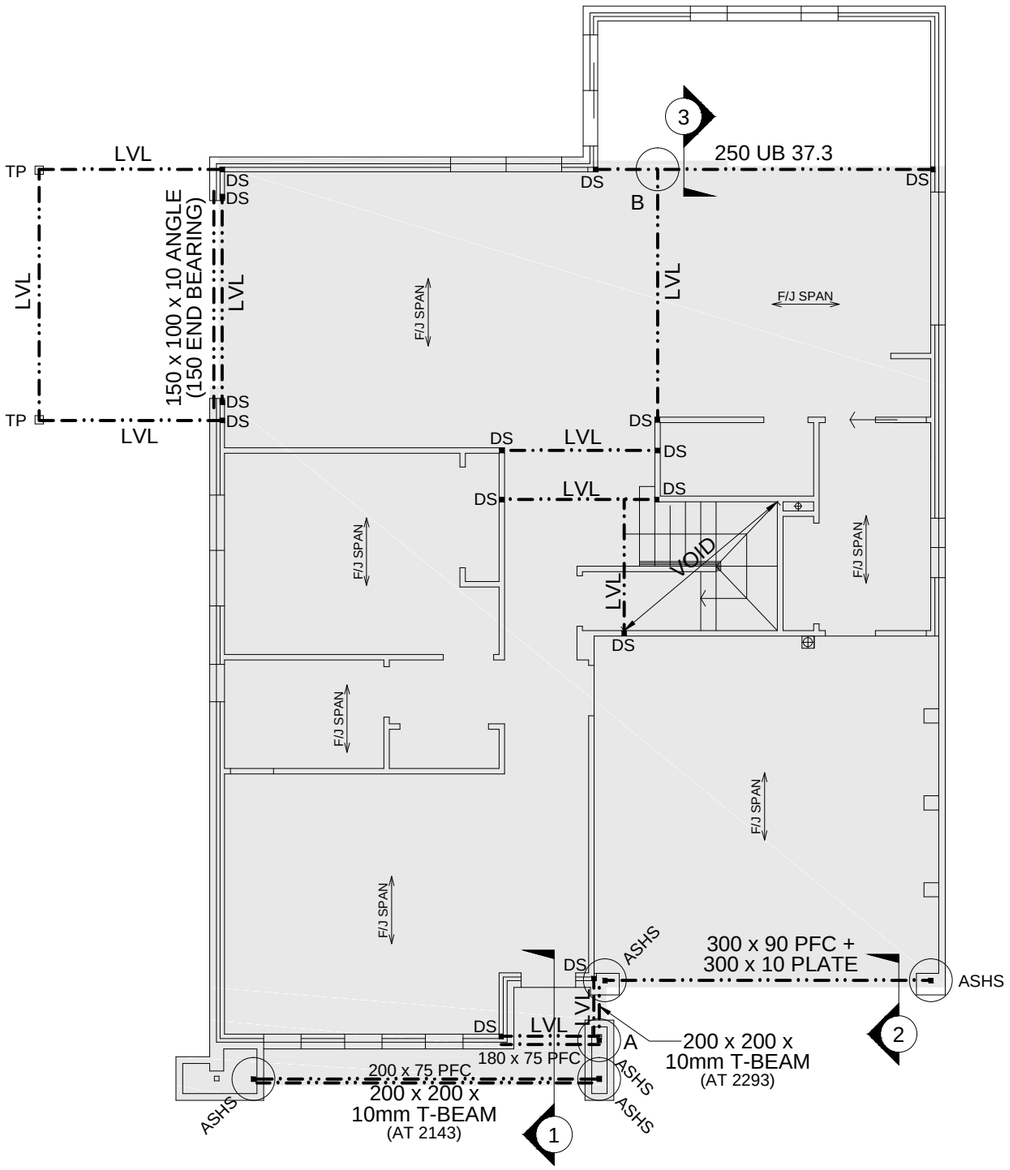
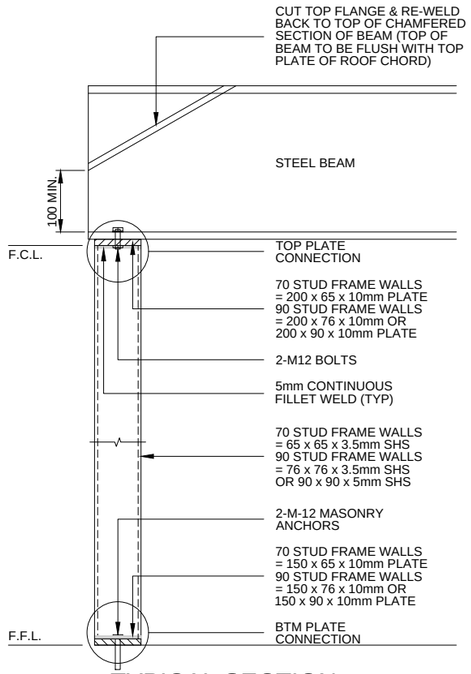
REVISION SCHEDULE

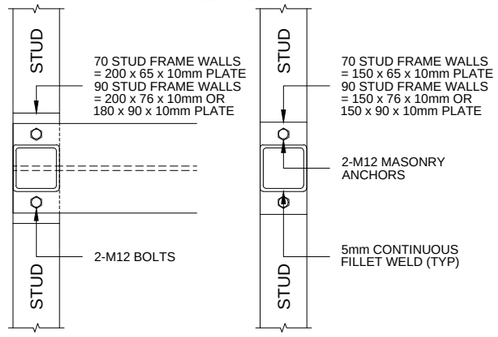
| | | |
|---|---|---|
| A | ORIGINAL ISSUE | JOY 20/08/21 |




# STEEL DETAIL NOTES




## TYPICAL SECTION




TOP PLATE CONNECTION

BOTTOM PLATE CONNECTION

| POST SUPPORT NOTES (UNLESS NOTED OTHERWISE) | | |
|---|---|---|
| **MEMBER** | **BEARING LOCATION** | **END SUPPORT** |
| **LVL OR EQUIVALENT** | STUDFRAME | DS OR EQUIVALENT |
| | BRICKWORK | ASHS OR 150 END BEARING MIN. |
| | TIMBER POST | BY BUILDER |
| **GALINTEL** | STUDFRAME | STEEL POST |
| | BRICKWORK | 150 END BEARING MIN. |
| **ANGLE** | STUDFRAME | STEEL POST |
| | BRICKWORK | 150 END BEARING MIN. |
| **T-BEAM** | STUDFRAME | STEEL POST |
| | BRICKWORK | 150 END BEARING MIN. |
| **STEEL BEAM** | STUDFRAME | AS NOTED |
| | BRICKWORK | 230 END BEARING MIN. |

## NOTE:

- ALL STEELWORK TO BE PAINTED WITH AN APPROVED CORROSIVE RESISTANT PRIMMER

- NOTE: IF BUILDING IS LOCATED WITHIN 1.0 KM OF SEVERE MARINE CONDITIONS, ENGINEER IS BE NOTIFIED, AND STEEL BEAMS ARE TO BE GALVANISED & ALL BRICKWORK COMPONENTS TO BE IN ACCORDANCE WITH AS3700-2011 MASONRY CODE - SECTION 5

- SHS: DENOTES SQUARE HOLLOW SECTION OR STEEL POST, BUILD POST INTO STUD FRAMEWORK

- ASHS: DENOTES ADJUSTABLE SQUARE HOLLOW SECTION STEEL POSTS, REFER TO "TYPICAL ADJUSTABLE STEEL POST DETAIL" WHERE APPLICABLE

- AP: DENOTES ADAPTER POST

- 70 STUD FRAME WALLS
DS: DENOTES 1/70 x 70 OR 2/70 x 35 HARDWOOD STUDS
OR STRUCTURAL LVL POST
TS: DENOTES 3/70 x 45 HARDWOOD STUDS

- 90 STUD FRAME WALLS
DS: DENOTES 1/90 x 90 OR 2/90 x 45 HARDWOOD STUDS
OR STRUCTURAL LVL POST
TS: DENOTES 3/90 x 45 HARDWOOD STUDS

SHADING DENOTES FIRST FLOOR ABOVE

F/J SPAN — FLOOR JOIST TO MANUFACTURERS SPECIFICATIONS

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# STRUCTURAL STEEL PLAN

CLIENT MR. A. K. M. IBRAHIM

LOCATION LOT 9 (NO.17) AMAROO AVENUE, STRATHFIELD

eden brae homes

| | | | | | |
|---|---|---|---|---|---|
| | | SHEET SIZE | A3 | SHEET No. | 4 |
| REFERENCE | 25909 | SCALE | 1 : 100 | JOB No. | 90486EB |

## REVISION SCHEDULE

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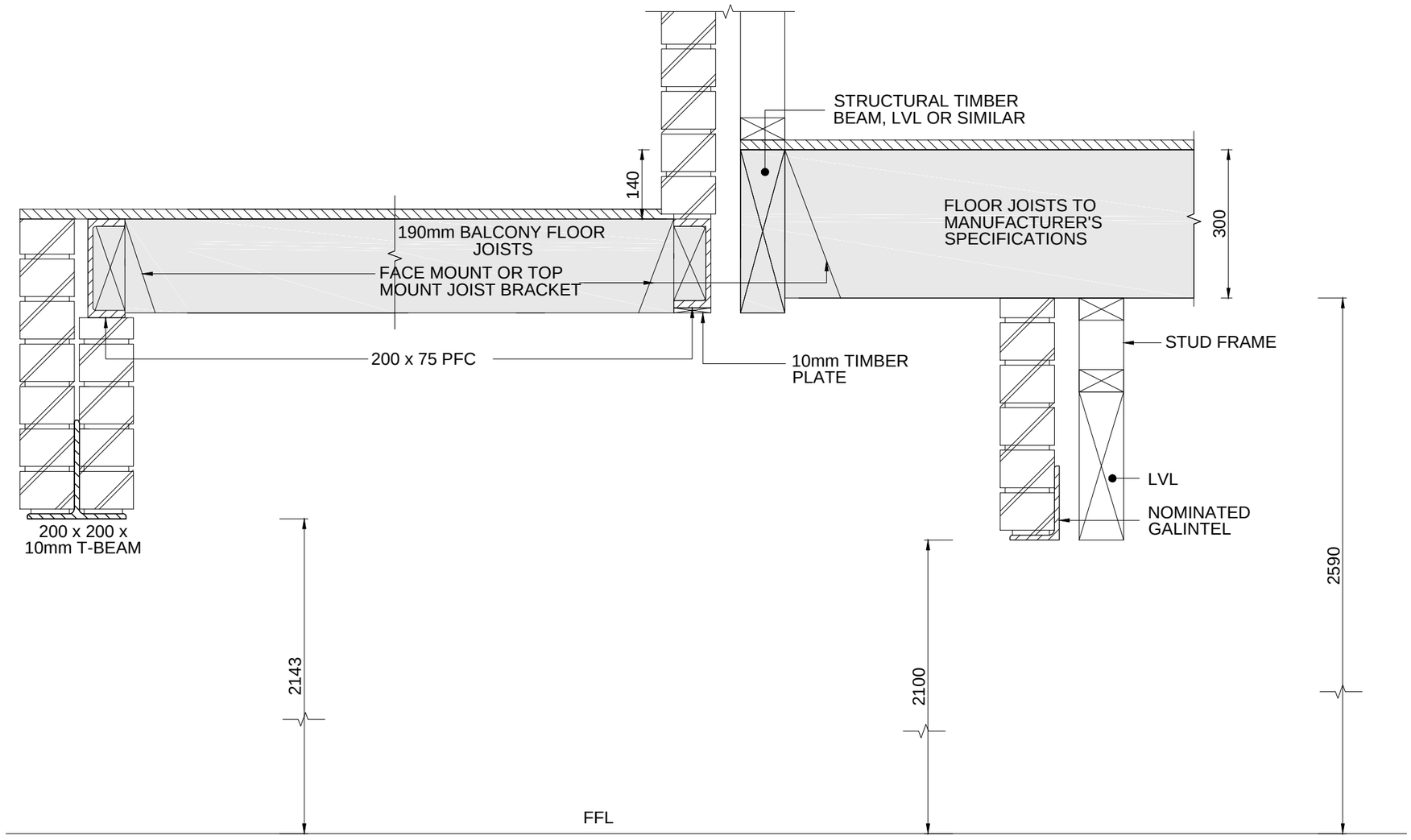
|---|---|---|---|
| A | ORIGINAL ISSUE | JOY | 20/08/21 |




# SECTION 1-1

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STRUCTURAL STEEL DETAILS

CLIENT MR. A. K. M. IBRAHIM

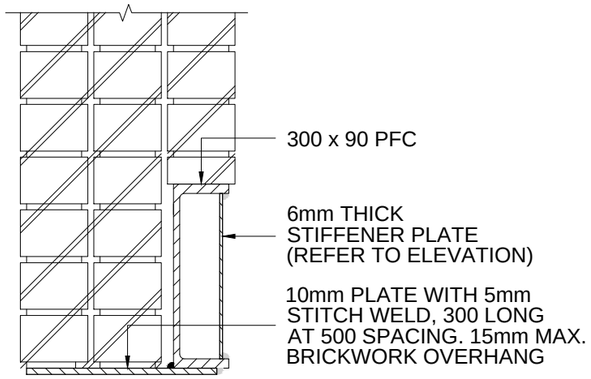
LOCATION LOT 9 (NO.17) AMAROO AVENUE, STRATHFIELD

eden brae homes

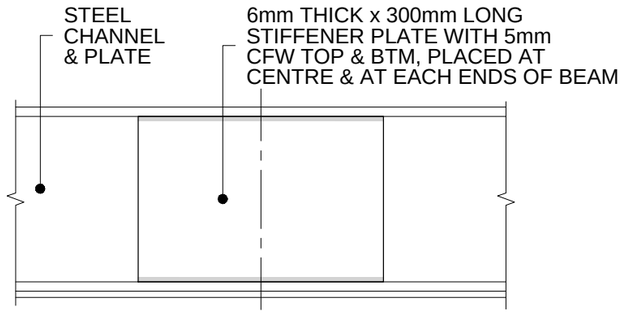
| | | | | | |
|---|---|---|---|---|---|
| | | SHEET SIZE | A3 | SHEET No. | 5 |
| REFERENCE | 25909 | SCALE | NTS | JOB No. | 90486EB |

REVISION SCHEDULE

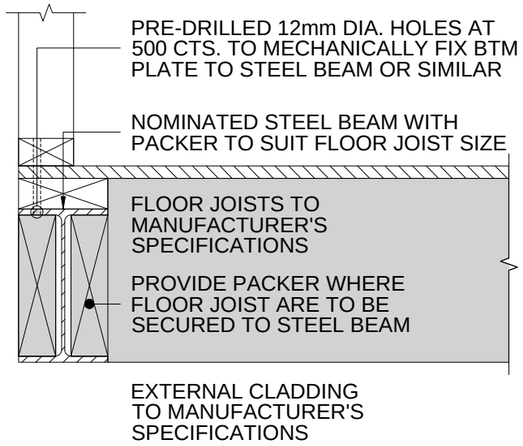
| | | | |
|---|---|---|---|
| A | ORIGINAL ISSUE | JOY | 20/08/21 |



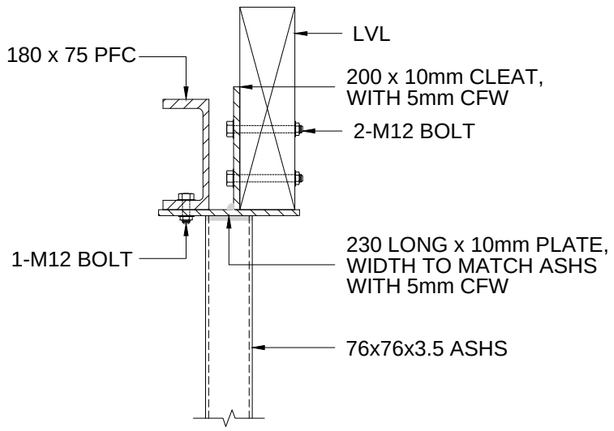

ELEVATION



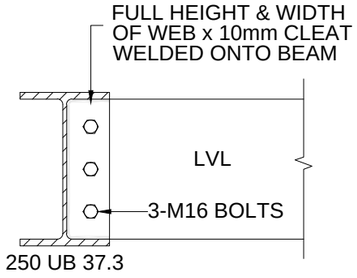

SECTION 2-2




SECTION 3-3




DETAIL A




DETAIL B

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# STRUCTURAL STEEL DETAILS

CLIENT MR. A. K. M. IBRAHIM

LOCATION LOT 9 (NO.17) AMAROO AVENUE, STRATHFIELD

B.E. M.I.E. AUST.

| | | | | | |
|---|---|---|---|---|---|
| | | SHEET SIZE | A3 | SHEET No. | 6 |
| REFERENCE | 25909 | SCALE | NTS | JOB No. | 90486EB |

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REVISION SCHEDULE

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|---|---|---|---|
| A | ORIGINAL ISSUE | JOY | 20/08/21 |

SEWER NOTES:

- POSITION OF SEWER IS ONLY APPROXIMATE
- POSITION OF SEWER IS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF WORK
- PIER DEPTHS AS SHOWN ARE FOR ZONE OF INFLUENCE REQUIREMENTS
- PIERS ARE TO BE FOUNDED ON NATURAL EVEN BEARING AS PER ENGINEERING REQUIREMENTS WHERE NECESSARY

- ALL PIER DEPTHS SHOWN ARE FROM PLATFORM LEVEL. IF DROP EDGE BEAM ENCOUNTERED, DEPTH OF PIERS ARE TO BE CALCULATED FROM NATURAL GROUND LEVEL OR UNDERSIDE OF DROP EDGE BEAM

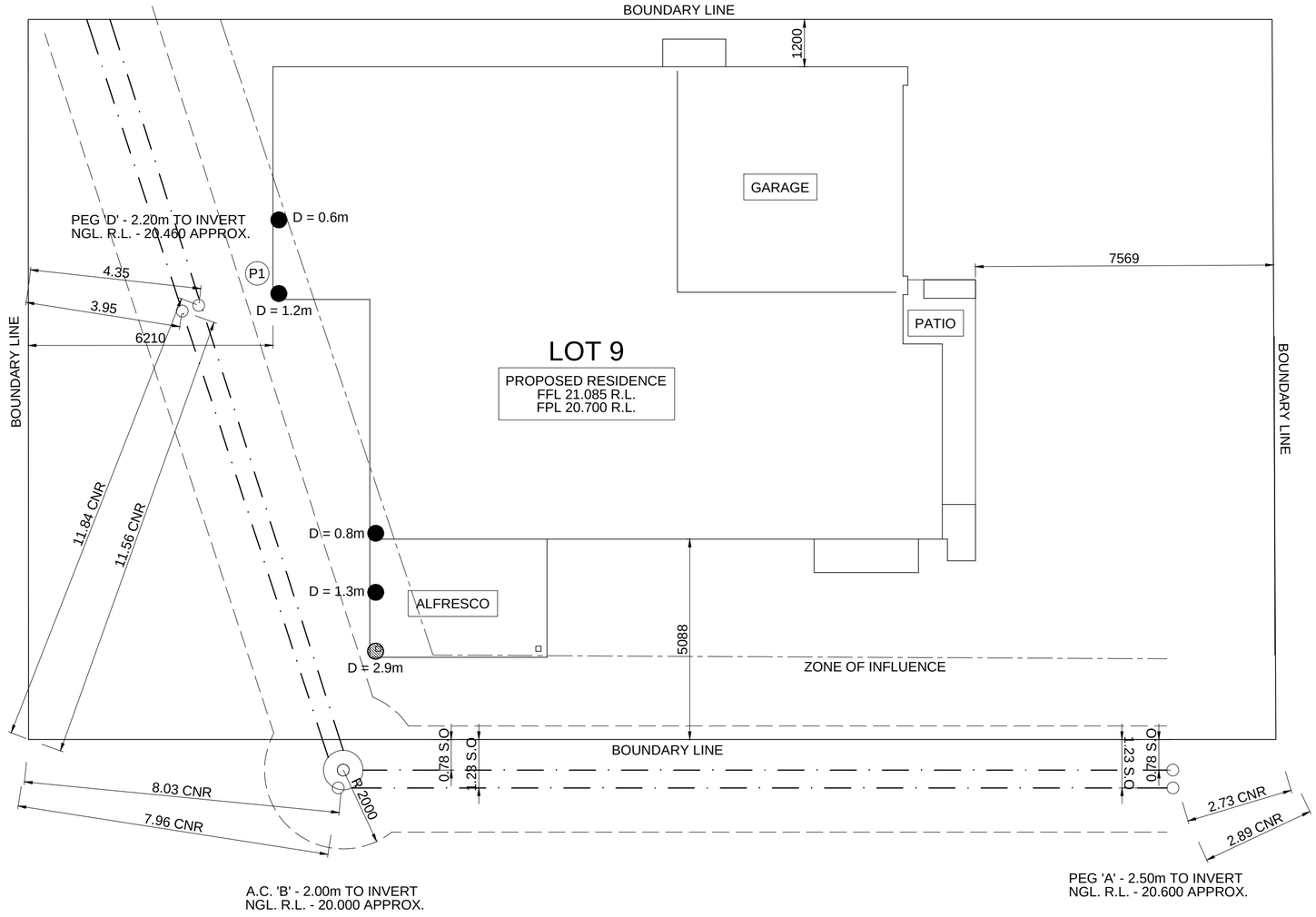
BOUNDARY LINE

ZONE OF INFLUENCE

CLEARANCE LINE

SEWER LINE 1125 1125

CLEARANCE LINE

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Consulting Engineers

ABN: 35 04 047 466
PO BOX 91 KINGSGROVE NSW 2208
Level 2, 103 VANESSA ST KINGSGROVE NSW 2208

PTY LTD
PH: 9554 9311 FAX: 9554 9764
EMAIL: admin@rafzan.com.au

B.E. M.I.E. AUST.


# SITE & B.A.S / B.O.S PLAN

CLIENT MR. A. K. M. IBRAHIM

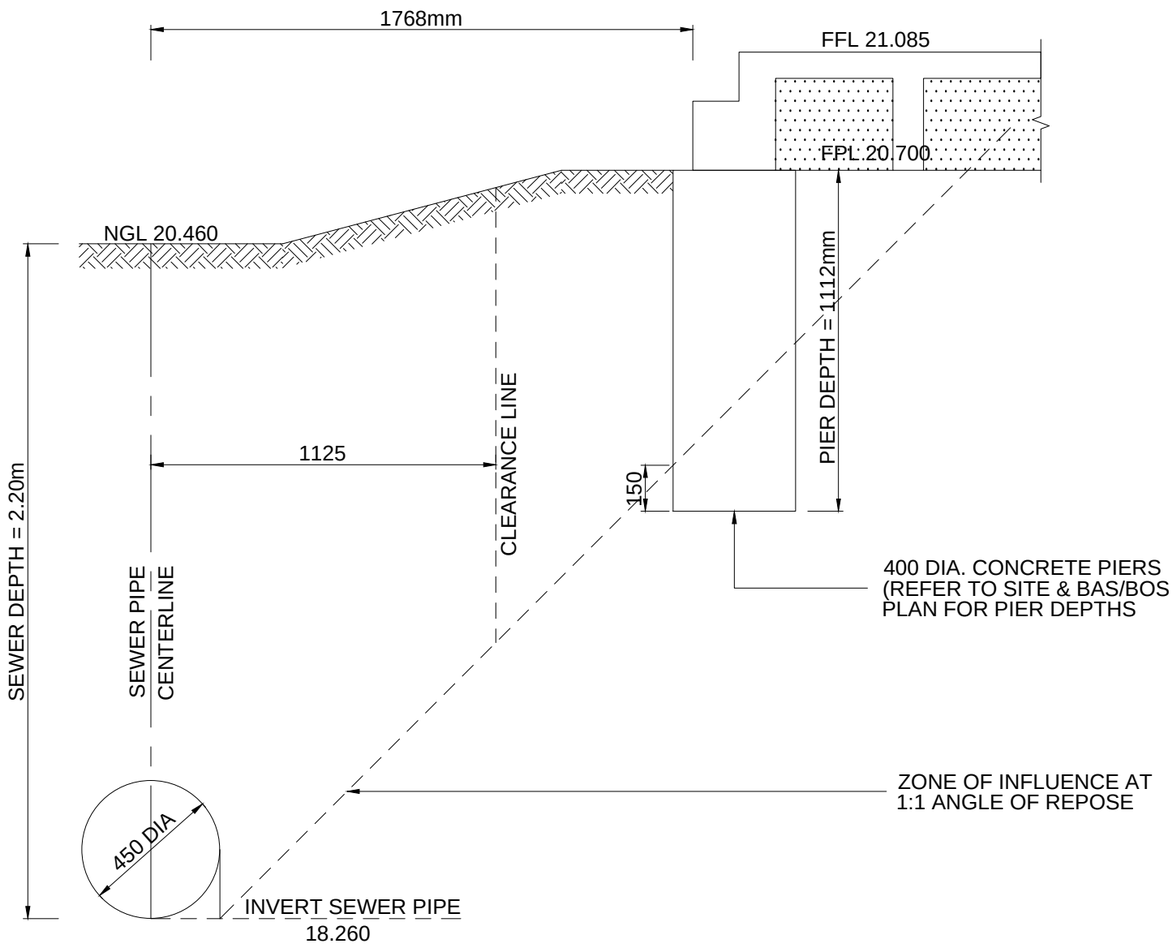
LOCATION LOT 9 (NO.17) AMAROO AVENUE, STRATHFIELD

| | | | | | |
|---|---|---|---|---|---|
| | | SHEET SIZE | A2 | SHEET No. | 7 |
| REFERENCE | 25909 | SCALE | 1 : 100 | JOB No. | 90486EB |

eden brae homes

## REVISION SCHEDULE

| | | | |
|---|---|---|---|
| A | ORIGINAL ISSUE | JOY | 20/08/21 |




# SEWER DETAIL

P1

STRATHFIELD COUNCIL
RECEIVED

DA2021.288

DATE 17 November 2021

RAFFELETOS ZANUTTINI
Consulting Engineers

ABN: 35 04 047 466
PO BOX 91 KINGSGROVE NSW 2208
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B.A.S / B.O.S DETAILS

CLIENT MR. A. K. M. IBRAHIM

LOCATION LOT 9 (NO.17) AMAROO AVENUE, STRATHFIELD

| | | | | | |
|---|---|---|---|---|---|
| | | SHEET SIZE | A3 | SHEET No. | 8 |
| REFERENCE | 25909 | SCALE | 1 : 20 | JOB No. | 90486EB |

eden brae homes

REVISION SCHEDULE

| | | |
|---|---|---|
| A | ORIGINAL ISSUE | JOY 20/08/21 |