REVISED

SITE PARTICULARS

LOT 546 :#41 GRAHAM ROAD,
QUINNS ROCKS, WA 6030.
LOCAL AUTH : CITY OF WANNEROO.
OWNER : STUART COX

GENERAL

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL & OTHER CONSULTANTS DRAWING & SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT ANY DISCREPANCIES SHALL BE REFERRED TO THE ARCHITECT BEFORE PROCEEDING WITH WORK.
2. ALL DIMENSIONS RELEVANT TO SETTING OUT & OFF SITE WORK SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION AND FABRICATION IS COMMENCED REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT NOTED ON ENGINEERING DRAWINGS–DO NOT SCALE ENGINEERING DRAWINGS.
3. WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT RELEVANT CODES AND STATUTORY REQUIREMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
4. NO SUBSTITUTIONS ARE TO BE MADE FOR MATERIALS NOMINATED ON THE STRUCTURAL DRAWINGS.
5. DURING CONSTRUCTION THE CONTRACTOR/BUILDER SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURE IN A STABLE CONDITION AND ENSURING THAT NO PART IS OVER–STRESSED DURING CONSTRUCTION ACTIVITIES.
6. THE BUILDER SHALL PROVIDE ALL TEMPORARY BRACING AS REQUIRED AND ALL TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL ALL PERMANENT BRACING AND SUPPORTS ARE PLACED AND ANCHORED.
7. NO RESPONSIBILITY IS ACCEPTED FOR THE WORKS AS CONSTRUCTED UNLESS THE WORKS ARE INSPECTED AND APPROVED BY THE ENGINEER DURING CONSTRUCTION ALL REQUIRED INSPECTIONS SHALL BE CONFIRMED 48 HOURS IN ADVANCE OF THE TIME REQUIRED. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS STATED OTHERWISE.
8. THE STRUCTURAL WORK SHOWN ON THESE DRAWING HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS.

AREA	LIVE LOADS	SUPERIMPOSED DEAD LOADS
–	– kPa	– kPa
–	– kPa	– kPa

9. ALL PROPS AND FORMWORK FOR BEAMS AND SLABS SHALL BE REMOVED BEFORE ANY MASONRY WALLS OR PARTITIONS ARE CONSTRUCTED ON THE BEAM OR SLAB.

   ALL NON LOAD BEARING WALLS SHALL BE KEPT CLEAR OF THE UNDERSIDE OF THE SLABS AND BEAMS BY 20MM UNLESS OTHERWISE SHOWN.
10. THE DESIGN WIND CRITERIA TO AS1170 2 IS AS FOLLOWS

REGION	**A1**
REGIONAL WIND SPEED	**41 m/s**
TERRAIN CATEGORY	**2**
WIND SITE CLASSIFICATION	**N2**

FOUNDATIONS

1. FOUNDATION MATERIAL SHALL APPROVED BEFORE POURING CONCRETE OR PLACING REINFORCEMENT FOR AN ALLOWABLE BEARING PRESSURE OF 150 kPa UNLESS OTHERWISE NOTED
2. FOUNDING MATERIAL IS TO BE CHECKED AND APPROVED BY THE ENGINEER AND/OR BUILDING SURVEYOR PRIOR TO POURING CONCRETED FOR SLABS FOR OR FOOTINGS
3. STRIP AND PAD FOOTING ARE TO BE FOUNDED IN ORIGINAL UNDISTURBED GROUND WITH AN ALLOWABLE BEARING PRESSURE OF **150** kPa **(SAND)**
4. FOOTING AND GROUND SLAB HAVE BEEN DESIGNED FOR CLASS A CLASSIFICATION. IF SOIL CONDITION DIFFER FROM THIS THE ENGINEER MUST BE CONSULTED PROIR TO CONSTRUCTION.
5. STRIP AND PAD FOOTINGS TO HAVE MINIMUM 150MM COMPACTED SAND FILL BENEATH THEM.

SITE PREPARATION

1. REMOVE ALL TOPSOIL INCLUDING ANY ORGANIC, LOOSE OR SOFT MATERIAL AND ROOTS.
2. FOUNDING SOILS, BOTH UNDER SLABS & FOOTINGS, TO BE COMPACTED TO A MINIMUM OF 7 BLOWS/300MM USING A STANDARD PERTH PENETROMETER. ALTERNATIVELY, COMPACTION IS TO ACHIEVE A MINIMUM OF 95% M.D.D. RATIO.
3. SAND PAD SHALL BE CLEAN, WELL GRADED YELLOW SAND COMPACTED IN LAYERS NO THICKER THAN 300MM, COMPACTION TO COMPLY WITH NOTE 2.
4. FOOTING SHALL BE LOCATED CENTRALLY BENEATH WALLS AND COLUMNS UNLESS NOTED OTHERWISE ON PROJECT DRAWINGS.
5. ALL ROOF & SURFACE WATER TO BE DRAINED AWAY FROM STRUCTURE.
6. ALL LOCATIONS WHERE PLUMBING PIPES PENETRATE FOOTING & GROUND SLABS, HAUNCHING REQUIRED TO ENSURE MINIMUM DEPTHS ARE MAINTAINED.

CONCRETE

1. ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS3600 ALL CONCRETE SHALL COMPLY WITH AS3600 AND SHALL HAVE A CHARACTERISTIC STRENGTH AS FOLLOWS.
2. | | | | |
   |---|---|---|---|
   | FOOTING AND GROUND SLAB | f'c = | 25 | MPa |
   | SLAB–ON–GROUND | f'c = | 25 | MPa |
   | MASS CONCRETE | f'c = | 20 | MPa |
   | PIER FOOTING | f'c = | 25 | MPa |
3. SLUMP TO BE 75mm + 15mm ADMIXTURES ARE NOT TO BE USED UNLESS APPROVED BY THE ENGINEER. ALL CONCRETE TO BE VIBRATED THEN MOIST CURED FOR 7 DAYS AFTER POUR.
4. CONCRETE SHALL NOT BE LESS THAN 25 MPa GRADE. WITH 20mm NOMINAL MAXIMUM AGGREGATE SIZE AND 80mm SLUMP. ALL CONCRETE SHALL BE COMPACTED USING VIBRATION.
5. CONCRETE SIZES SHOWN DO NOT INCLUDE FINISH AND MUST NOT BE REDUCED OR HOLLOWED IN ANY WAY WITHOUT THE ENGINEER'S APPROVAL..
6. CONCRETE SECTIONS SHOWN ARE MINIMUM SIZES AND DO NOT INCLUDE FINISHES SIZES MUST NOT BE REDUCED IN ANYWAY FOR DUCT, PIPES, CONDUITS, CHASES ETC WITHOUT THE APPROVAL OF THE ENGINEER DEPTH OF BEAMS GIVEN FIRST AND INCLUDE SLAB THICKNESS.
7. MINIMUM COVER (mm) TO ALL REINFORCEMENT SHALL BE AS FOLLOWS UNLESS SHOWN OTHERWISE :

ELEMENT	SURFACES IN CONTACT WITH GROUND	SURFACES IN INTERIOR ENVIRONMENT	ABOVE GROUND EXTERIOR ENVIRONMENT
FOOTINGS	75	–	–
SLABS ON GROUND	50 (40)	25	45
SUSPENDED SLABS	–	20	45

8. CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE APPROVED BY THE ENGINEER.
9. ALL FORMWORK (INCLUDING STRIPPING OF FORMWORK) SHALL CONFIRM TO AS1509
10. CONCRETE MUST BE SEPARATED FROM SUPPORTING BRICK WORK BY TWO LAYERS OF A SUITABLE MEMBRANE (MALTHOID OR ALCOR) AND VERTICAL FACES SEPARATED FROM WALLS AND COLUMNS BY 12mm THICK BITUMINOUS CANE–ITE OR SIMILAR.
11. SYMBOLS ON THE DRAWING FOR REINFORCEMENT ARE AS FOLLOWS :

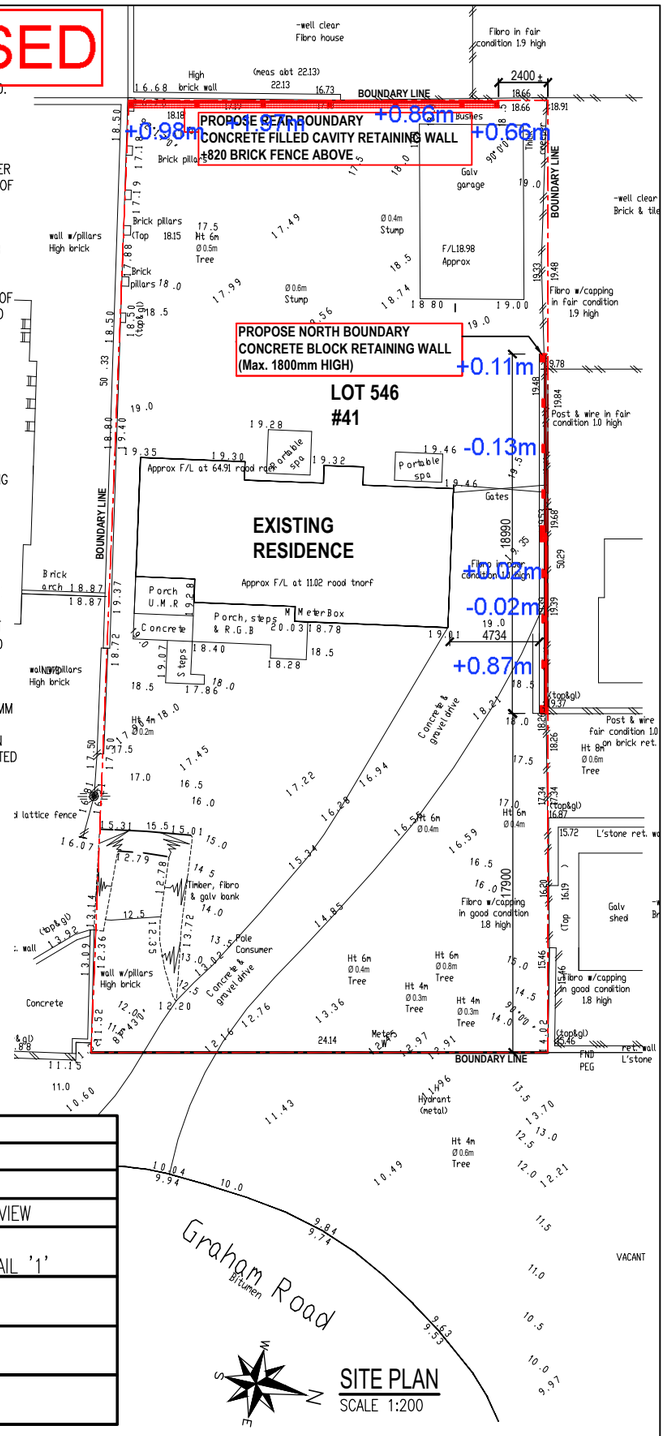
    N– HOT ROLLED DEFORMED REBAR (500 PLUS REBAR)
    R– HOT ROLLED PLAIN ROUND REBAR
    S– HOT ROLLED DEFORMED REBAR
    RW– COLD ROLLED RIBBED WIRE
    W– COLD DRAWN ROUND WIRE
12. THE NUMBER FOLLOWING THE BAR SYMBOL IS THE NOMINAL BAR DIAMETER IN MILLIMETRES THE NUMBER FOLLOWING THE FABRIC SYMBOL F IS THE REFERENCE NUMBER FOR THE BAR DIAMETER AND SPACING TO AS1304.
13. ALL REINFORCEMENT SHALL BE SUPPORTED BY APPROVED CHAIRS. SPACERS OR TIES AS REQUIRED TO PROVIDE ADEQUATE SUPPORT DURING CONCRETING.
14. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.
15. WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED WITHOUT THE APPROVAL OF THE ENGINEER.

SLABS–ON–GROUND AND FOOTINGS

1. SLABS–ON–GROUND AND FOOTINGS SHALL BE IN ACCORDANCE WITH AS2870.
2. THE SLAB SITE SHALL BE STRIPPED OF TOPSOIL CONTAINING SIGNIFICANT ORGANIC MATTER PRIOR TO BE BEAM EXCAVATION.
3. A VAPOUR BARRIER OF 0.2MM MINIMUM THICKNESS SHALL BE PLACED UNDER THE SLAB AS SHOWN THE VAPOUR BARRIER SHALL BE LAPPED A MINIMUM OF 200MM AT JOINTS AND SHALL BE TAPED AROUND PIPES WHICH PENETRATE THE SLAB.
4. CLEAN GRANULAR FILLING UP TO 600MM MAY BE PLACED UNDER THE SLAB FILLING SHALL BE COMPACTED IN 150MM THICK LAYERS.
5. BEAM AND STRIP FOOTING REINFORCEMENT SHALL HAVE A NOMINAL COVER OF 50MM TRENCH MESH SHALL BE LAID CONTINUOUSLY AND SHALL BE SPLICED WHERE NECESSARY BY A LAP OF 500MM THE TRENCH MESH SHALL BE OVERLAPPED BY THE WIDTH OF FABRIC AT T– AND L–JUNCTIONS.
6. SLAB REINFORCING FABRIC SHALL BE PLACED NEAR THE TOP OF SLAB AND SHALL HAVE A NOMINAL COVER OF 25MM, UNLESS SHOWN OTHERWISE REINFORCING FABRIC SHALL BE LAPPED A MINIMUM OF TWO WIRES PLUS 25MM AND SHALL BE SET OUT SUCH THAT NO MORE THAN THREE THICKNESSES OF FABRIC OCCUR AT ANY LOCATION.
7. ALL RELEVANT CODES AND REGULATIONS MUST BE COMPLIED WITH INCLUDING AS 2870 AND AS 3600.
8. ALL GRASS ROOTS, VEGETATION AND COMPRESSIBLE TOPSOIL MUST BE REMOVED FROM THE AREA OF THE SLAB PRIOR TO PROOF ROLLING AND FILLING.

   A. PRIOR TO ANY COMPACTED FILLING BEING PLACED THE GROUND BELOW THE SLAB SHALL BE PROOF ROLLED IN ACCORDANCE WITH AS 2870 WITH A 3 TONNE VIBRATING ROLLER OR SOIL REPORT RECOMMENDATIONS. ANY "SOFT SPOTS" ENCOUNTERED SHALL BE DUG OUT AND REPLACED WITH COMPACTED CRUSHED ROCK IN ACCORDANCE WITH AS 2870.

   B. REFER AS 2780 CL. 6. 4. 2 AND 6. 4. 3 FOR FILLING REQUIREMENTS GENERALLY CONTROLLED FILL BELOW SLAB PANELS MUST NOT EXCEED 800MM FOR SAND & 400MM FOR NON–SAND MATERIAL FILL TO BE COMPACTED TO ENSURE A MINIMUM 98% AUSTRALIAN STANDARD COMPACTION AS DEFINED IN AS 1289 5. 1. 1. SAND FILL UP TO 800MM DEEP MUST BE WELL COMPACTED IN LAYERS NOT MORE THAN 300MM THICK BY A VIBRATING PLATE OR VIBRATING ROLLER. NON SAND MATERIAL MUST BE WELL COMPACTED IN LAYERS NOT MORE THAN 150MM THICK BY A MECHANICAL ROLLER.
9. THE GROUND SURROUNDING THE SLAB SHALL HAVE ITS SURFACE AT LEAST 150MM BELOW THE SLAB SURFACE AND BE SLOPED AWAY FROM THE SLAB EDGE SO THAT SURFACE WATER WILL BE DRAINED VIA IMPERMEABLE SPOON DRAINS TO LEGAL POINT OF DISCHARGE.



DRAWING SCHEDULE

NO.	DRAWING TITLE
A/01	STRUCTURE NOTE & SITE PLAN
A/02	ENLARGED SITE PLAN; STREET VIEW & ARIEL VIEW
A/03	REAR BOUNDARY RETAINING WALL PART GROUND PLAN, SECTION A–A & DETAIL '1'
A/04	REAR BOUNDARY RETAINING WALL WEST & EAST ELEVATION
A/05	NORTH BOUNDARY RETAINING FENCE WALL PART GROUND PLAN, SECTION C–C
A/06	NORTH BOUNDARY RETAINING FENCE WALL SOUTH & NORTH ELEVATION

DRAWING TITLE: **STRUCTURE NOTE & SITE PLAN**

DRAWN:	JOB NO:
VERN	**98153**
SCALE:	DATE:
AS–SHOWN	**18/03/21**

DESCRIPTION OF WORK:

PROPOSED CONCRETE BLOCK, CAVITY RETAINING & FENCE WALL AT REAR & NORTH BOUNDARY LOT 546, #41 GRAHAM ROAD, QUINNS ROCKS, WA 6030.

NOTE :

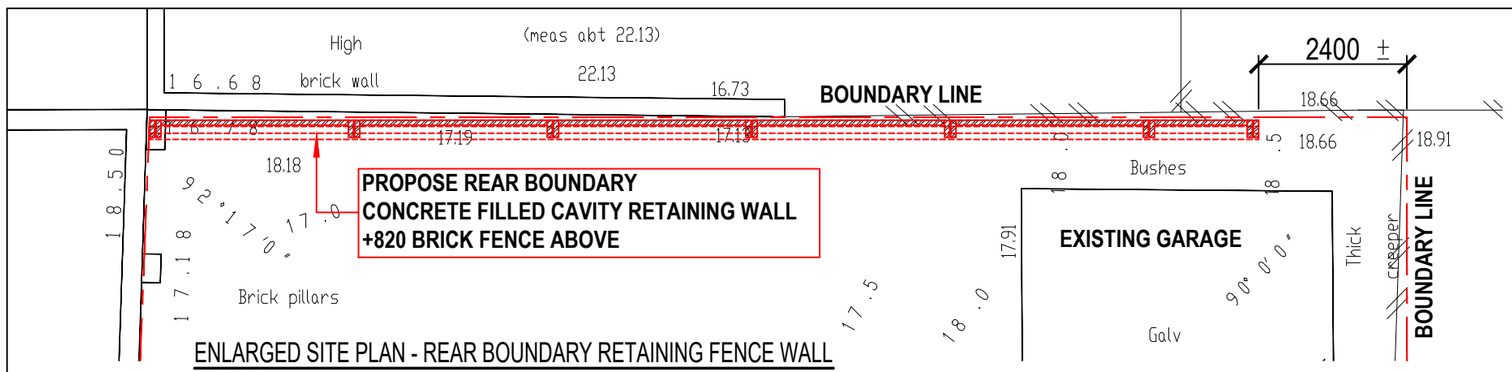
1. IT IS BUILDER RESPONSIBILY TO REPORT BACK TO ENGINEER IF EXISTING CONDITION SHOWN ON PROPOSED STRUCTURAL DOCUMENTS DEVIATE FROM SITE CONDITION.
2. ALL STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS.
3. CHECK ALL DIMENTIONS ON SITE. REPORT ALL DISCREPANCIES TO PROJECT MANAGER AND ENGINEER.
4. ALL WORKMANSHIP TO COMPLY WITH ALL RELEVANT AUSTRALIAN STANDARDS.

SUBI SMARTZ
CONSULTANTS PTY LTD
ABN 81624578687

Chong S. Liew, Steve
M.Sc(struc)MIEAust CPENG NER RPEQ
National Engineering Register
Signature _____ Date 02/11/21
Registered on NER in the area(s) of Civil and Structural Engineering
Membership No: 4512871

AMENDMENTS:
25/10/2021 : AMEND AS PER OWNER REQUEST AT WEST WALL

DWG.	TOTAL DWG.
A/01	**06**

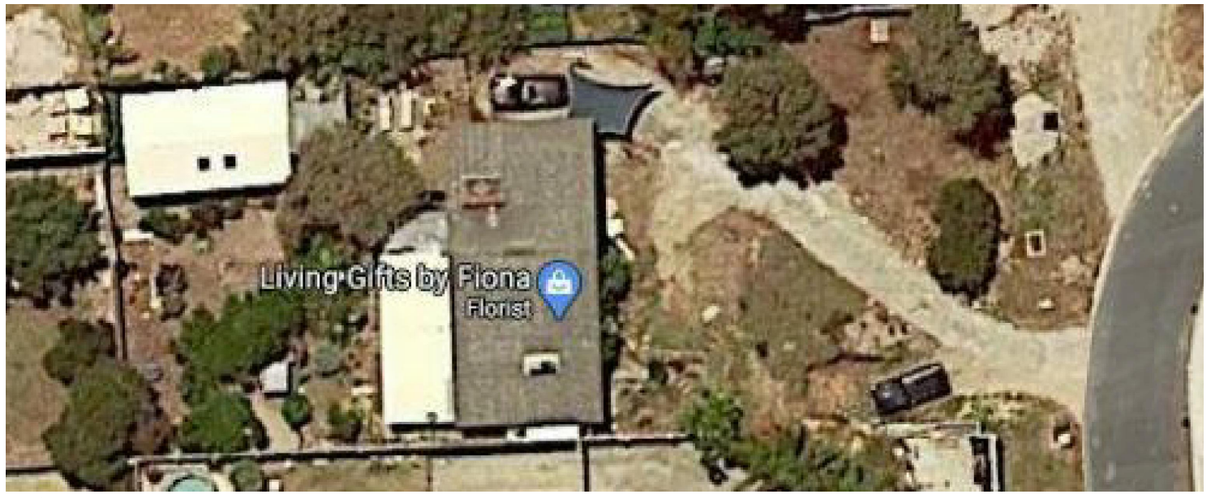


ENLARGED SITE PLAN - REAR BOUNDARY RETAINING FENCE WALL

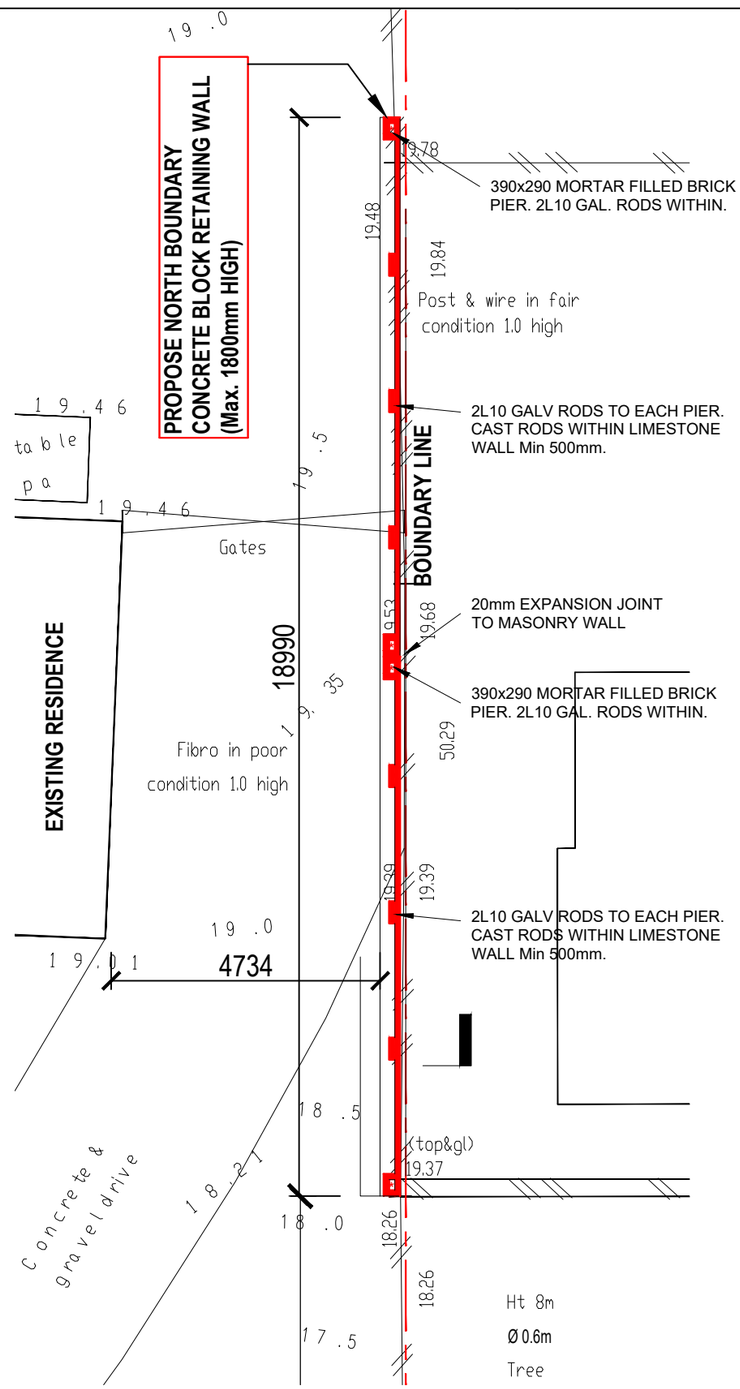
SCALE 1:200

STREET VIEW

REVISED



AERIAL VIEW



ENLARGED SITE PLAN - NORTH BOUNDARY RETAINING FENCE WALL

SCALE 1:200

DRAWING TITLE: ENLARGED SITE PLAN STREET VIEW AERIAL VIEW		DESCRIPTION OF WORK: PROPOSED CONCRETE BLOCK, CAVITY RETAINING & FENCE WALL AT REAR & NORTH BOUNDARY LOT 546, #41 GRAHAM ROAD, QUINNS ROCKS, WA 6030.	NOTE : 1. IT IS BUILDER RESPONSIBILY TO REPORT BACK TO ENGINEER IF EXISTING CONDITION SHOWN ON PROPOSED STRUCTURAL DOCUMENTS DEVIATE FROM SITE CONDITION. 2. ALL STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS. 3. CHECK ALL DIMENTIONS ON SITE. REPORT ALL DISCREPANCIES TO PROJECT MANAGER AND ENGINEER. 4. ALL WORKMANSHIP TO COMPLY WITH ALL RELEVANT AUSTRALIAN STANDARDS.
DRAWN: VERN	JOB NO: 98153		
SCALE: AS-SHOWN	DATE: 18/03/21		

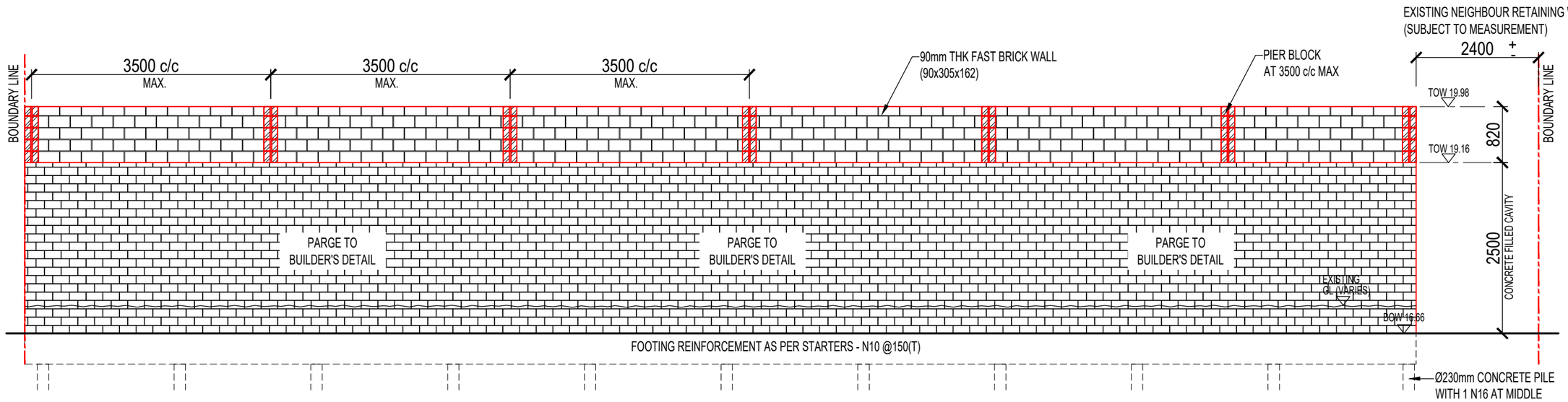
SUBI SMARTZ CONSULTANTS PTY LTD ABN 81624578687

Chong S. Liew, Steve
M.Sc(struc) MIEAust CPENG NER RPEQ
National Engineering Register
Signature Date 02/11/21
Registered on NER in the area(s) of Civil and Structural Engineering
Membership No: 4512871

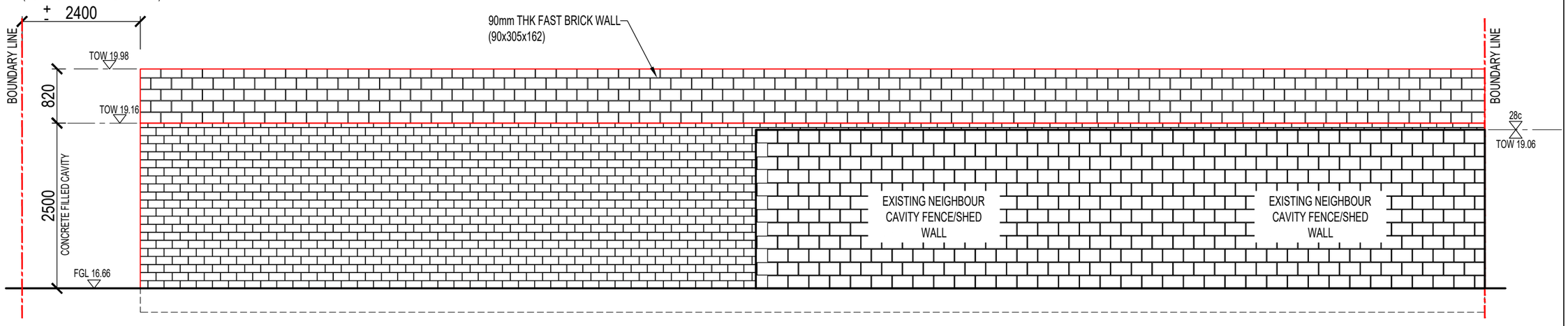
AMENDMENTS:
25/10/2021 : AMEND AS PER OWNER REQUEST AT WEST WALL

DWG.	TOTAL DWG.
A/02	06

REVISED



RW1 - WEST ELEVATION
SCALE 1:50



RW1 - EAST ELEVATION
SCALE 1:50

DRAWING TITLE:
REAR BOUNDARY RETAINING WALL
WEST ELEVATION
EAST ELEVATION

DRAWN:	JOB NO:
VERN	98153
SCALE:	DATE:
AS-SHOWN	18/03/21

DESCRIPTION OF WORK:

PROPOSED CONCRETE BLOCK, CAVITY RETAINING & FENCE WALL AT REAR & NORTH BOUNDARY
LOT 546, #41 GRAHAM ROAD, QUINNS ROCKS, WA 6030.

NOTE :

1. IT IS BUILDER RESPONSIBILY TO REPORT BACK TO ENGINEER IF EXISTING CONDITION SHOWN ON PROPOSED STRUCTURAL DOCUMENTS DEVIATE FROM SITE CONDITION.
2. ALL STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS.
3. CHECK ALL DIMENTIONS ON SITE. REPORT ALL DISCREPANCIES TO PROJECT MANAGER AND ENGINEER.
4. ALL WORKMANSHIP TO COMPLY WITH ALL RELEVANT AUSTRALIAN STANDARDS.

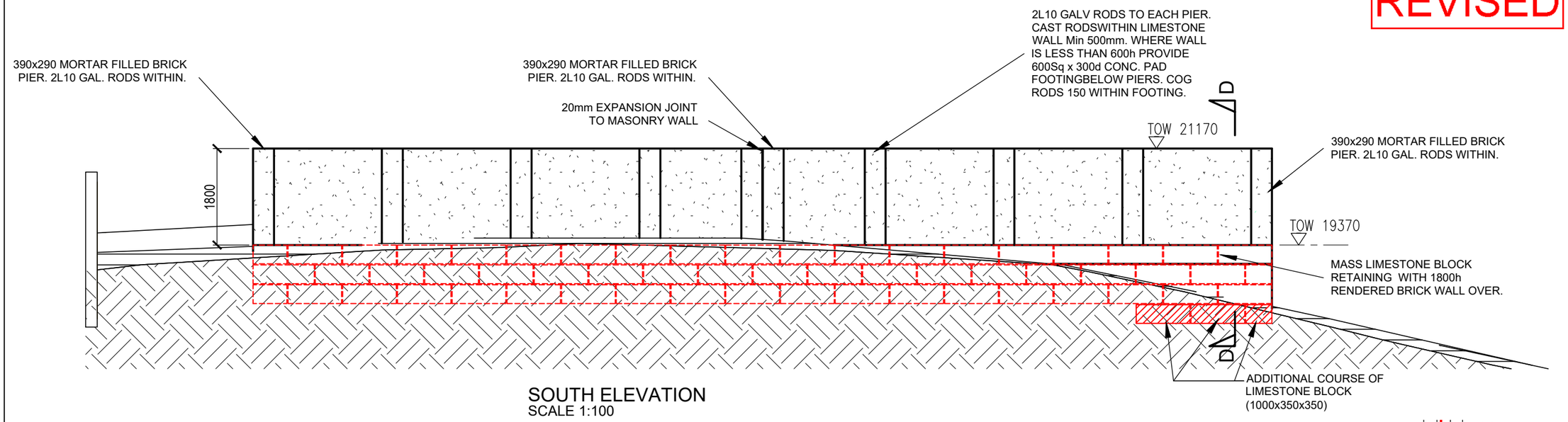
SUBI SMARTZ
CONSULTANTS PTY LTD
ABN 81624578687

Chong S. Liew, Steve
M.Sc(struc) MIEAust CPENG NER RPEQ
National Engineering Register
Signature
Date 02/11/21
Registered on NER in the area(s) of Civil and Structural Engineering
Membership No: 4512871

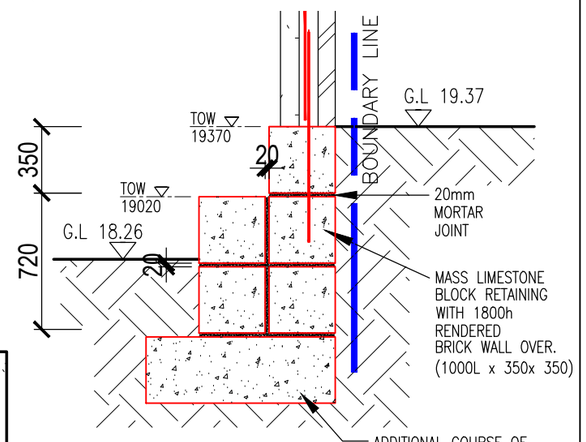
AMENDMENTS:
25/10/2021 : AMEND AS PER OWNER REQUEST AT WEST WALL

DWG.	TOTAL DWG.
A/04	06

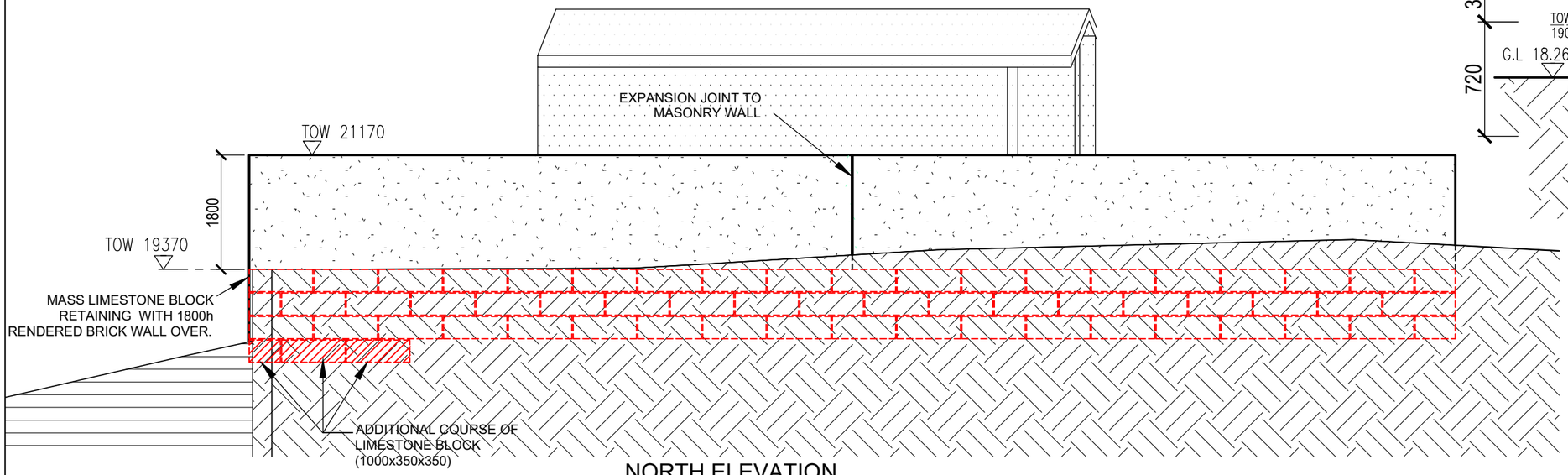
REVISED



SOUTH ELEVATION
SCALE 1:100



SECTION D-D
SCALE 1:50



NORTH ELEVATION
SCALE 1:100

DRAWING TITLE:
NORTH BOUNDARY RETAINING FENCE WALL
NORTH & SOUTH ELEVATION

DRAWN:	JOB NO:
VERN	98153
SCALE:	DATE:
AS-SHOWN	18/03/21

DESCRIPTION OF WORK:

PROPOSED CONCRETE BLOCK, CAVITY RETAINING & FENCE WALL AT REAR & NORTH BOUNDARY
LOT 546, #41 GRAHAM ROAD, QUINNS ROCKS, WA 6030.

NOTE :

1. IT IS BUILDER RESPONSIBILY TO REPORT BACK TO ENGINEER IF EXISTING CONDITION SHOWN ON PROPOSED STRUCTURAL DOCUMENTS DEVIATE FROM SITE CONDITION.
2. ALL STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS.
3. CHECK ALL DIMENTIONS ON SITE. REPORT ALL DISCREPANCIES TO PROJECT MANAGER AND ENGINEER.
4. ALL WORKMANSHIP TO COMPLY WITH ALL RELEVANT AUSTRALIAN STANDARDS.

SUBI SMARTZ CONSULTANTS PTY LTD
ABN 81624578687

Chong S. Liew, Steve
M.Sc(struc) MIEAust CPENG NER RPEQ
National Engineering Register
Signature _____ Date 02/11/21
Registered on NER in the area(s) of Civil and Structural Engineering
Membership No: 4512871

AMENDMENTS:

DWG.	TOTAL DWG.
A/06	06