

REV	DESCRIPTION	BY	APP	DATE
0	ORIGINAL ISSUE	EH	SRNP	FEB 2016
1	CHANGES CLOUDED	GV	SRNP	MAY 2016
2	CHANGES CLOUDED	GV	SRNP	AUG 2016

NOTES:



CERTA

ENGINEERING

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email@certa.nz

CLIENT

MISSION COLLEGES LOWER HUTT TRUST BOARD

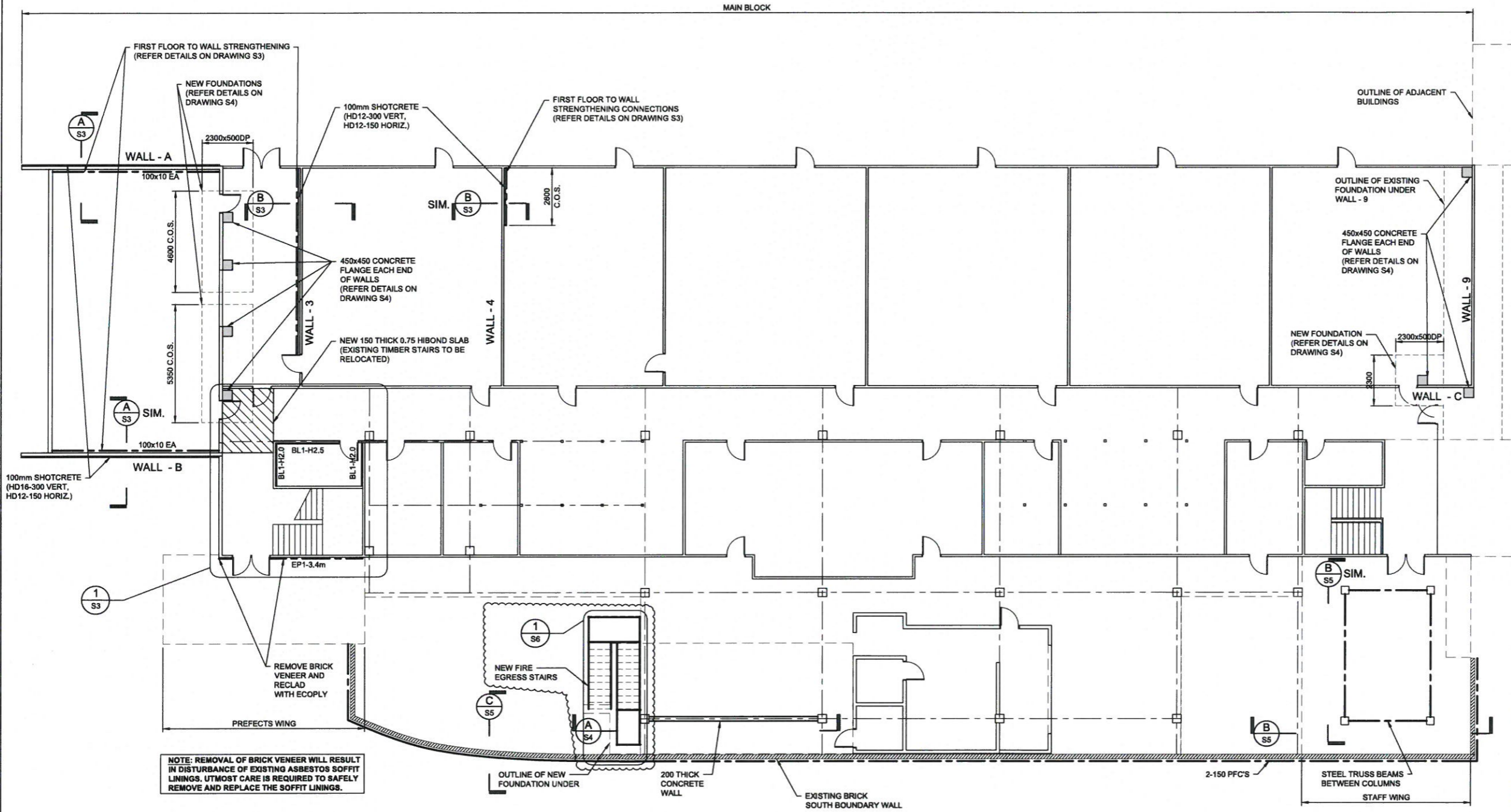
PROJECT

SEISMIC STRENGTHENING BLOCK A, SACRED HEART COLLEGE, LOWER HUTT

DRAWING

GROUND FLOOR PLAN

DESIGNED: GV	DATE: FEB 2016	REV
DRAWN: EH	SCALE: 1:100	1
APPROVED: SRNP	1:200	2
JOB No: 40249	SHEET No: S1	2



SEISMIC STRENGTHENING - GROUND FLOOR PLAN

SCALE 1:100

REV	DESCRIPTION	BY	APP	DATE
0	ORIGINAL ISSUE	EH	SRNP	FEB 2016
1	CHANGES CLOUDED	GV	SRNP	AUG 2016

NOTES:



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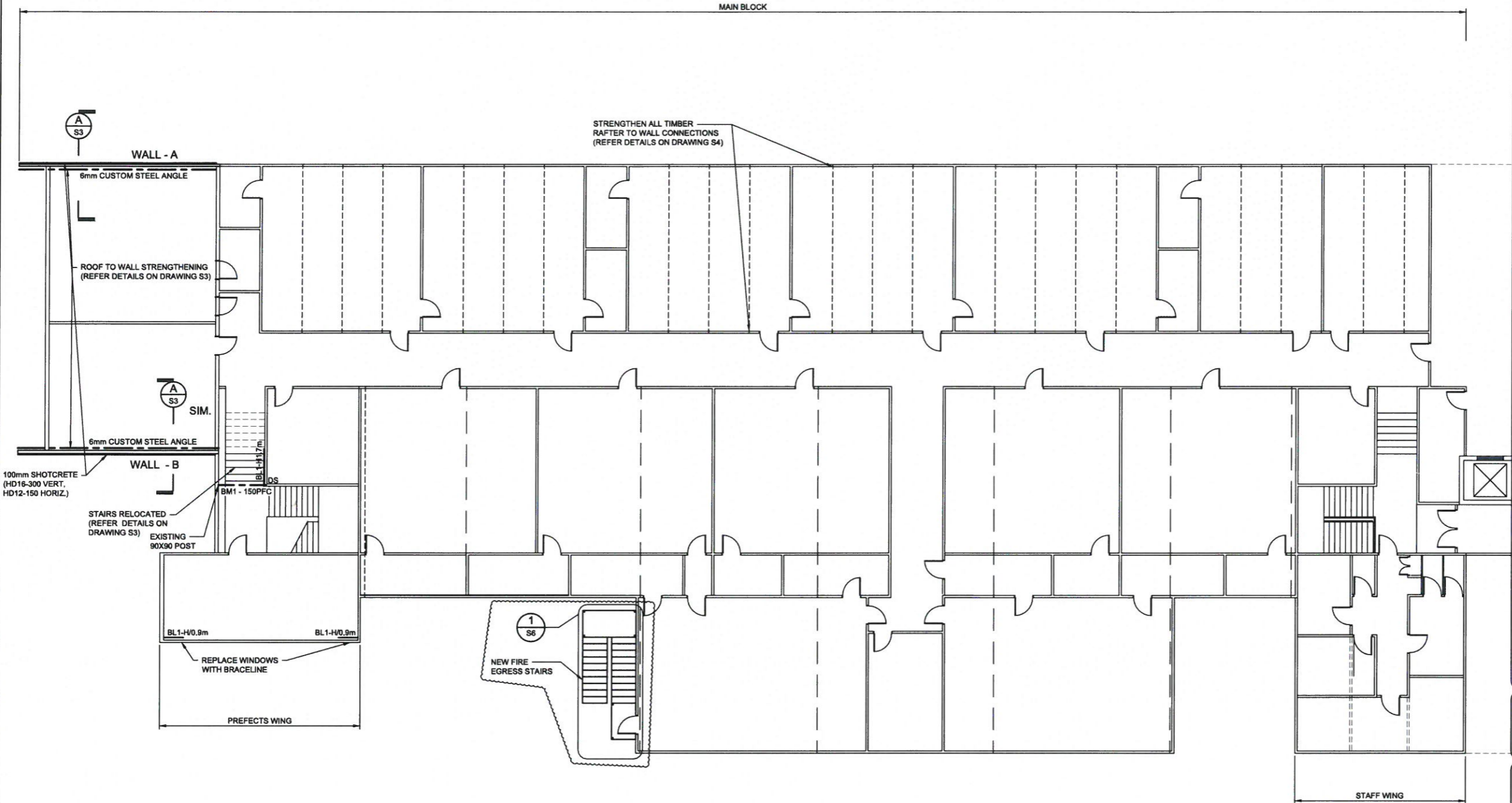
CLIENT
MISSION COLLEGES LOWER HUTT TRUST BOARD

PROJECT
**SEISMIC STRENGTHENING
BLOCK A, SACRED HEART
COLLEGE, LOWER HUTT**

DRAWING
FIRST FLOOR PLAN

DESIGNED: GV	DATE: FEB 2016	
DRAWN: EH	SCALE: 1:100	
APPROVED: SRNP	1:200	
JOB No: 40249	SHEET No: S2	REV 1

MAIN BLOCK



SEISMIC STRENGTHENING - FIRST FLOOR PLAN
SCALE 1:100

REV	DESCRIPTION	BY	APP	DATE
0	ORIGINAL ISSUE	EH	SRNP	FEB 2016

NOTES:

- DO NOT SCALE OFF DRAWINGS. CONFIRM ALL DIMENSIONS ON SITE
- ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF NZS3109:1997
- IF DIMENSIONS VARY FROM THAT SHOWN CONTACT ENGINEER IMMEDIATELY. IT IS THE CONTRACTOR'S RESPONSIBILITY FOR THE SET OUT ON SITE AND DETERMINING ACTUAL WALL HEIGHTS AS THESE MAY VARY FROM THAT SHOWN
- CONCRETE SHALL BE:
 - SLABS & FOOTINGS N25 (25MPa)
 - IN SITU WALLS & FLANGES N30 (30MPa)
 - TIDY SLABS N10 (10MPa)
- MAXIMUM SLUMP TO BE 100mm UNLESS NOTED OTHERWISE
- HD12 BARS LAP LENGTH IS 600mm IN CONCRETE.
HD16 BARS LAP LENGTH IS 800mm IN CONCRETE.
- CONCRETE FINISHES SHALL BE:
 - SLABS US
 - EXPOSED FOOTINGS F4
- CONCRETE COVER
 - 25mm MIN. INTERIOR
 - 45mm MIN. EXTERIOR
 - 75mm MIN. IN CONTACT WITH GROUND
- ALL REINFORCEMENT SHALL COMPLY WITH AS/NZS4671:2001 (HD BARS SHALL NOT BE REBENT)
- ENGINEER TO INSPECT PRIOR TO POURING CONCRETE. ENGINEER REQUIRES 24 HOURS NOTICE BEFORE ANY VISIT



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MISSION COLLEGES LOWER HUTT TRUST BOARD

PROJECT
**SEISMIC ASSESSMENT
 BLOCK A, SACRED HEART
 COLLEGE, LOWER HUTT**

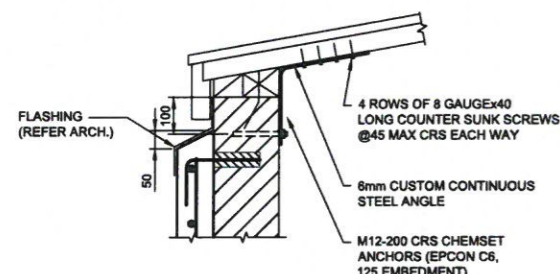
DRAWING
**MAIN BLOCK WALL TO
 ROOF/FLOOR CONNECTIONS**

SLAB EXTENSION DETAILS

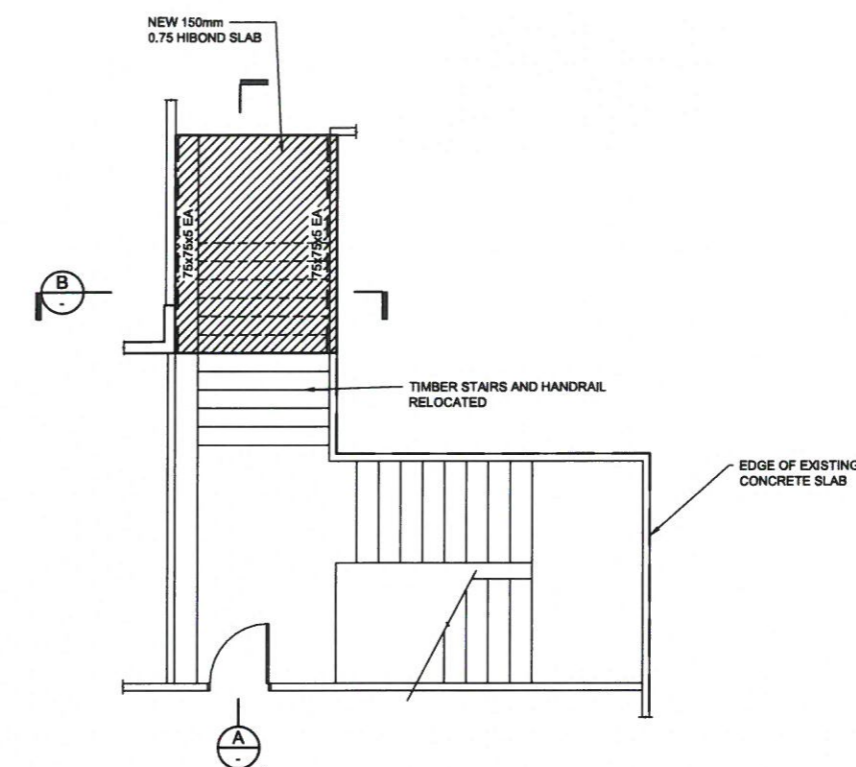
DESIGNED: GV	DATE: FEB 2016
DRAWN: EH	SCALE: 1:50, 1:20, 1:10
APPROVED: SRNP	1:100, 1:40, 1:20
JOB No: 40249	SHEET No: S3
	REV 0



**MAIN BLOCK: FIRST FLOOR RAFTER TO STUD
 STRENGTHENING DETAIL**
 SCALE 1:10

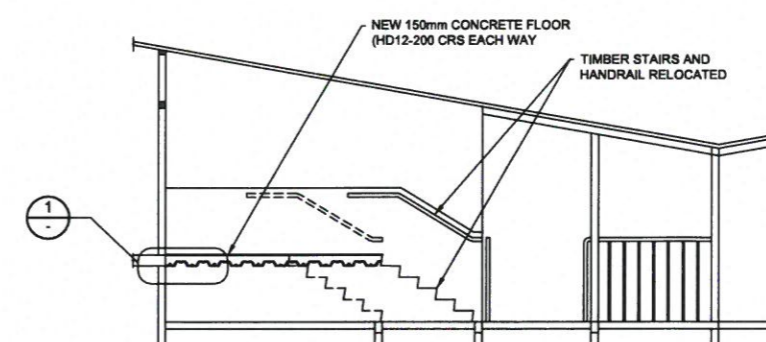


**MAIN BLOCK: WALL A & B TO ROOF
 STRENGTHENING DETAIL**
 SCALE 1:10

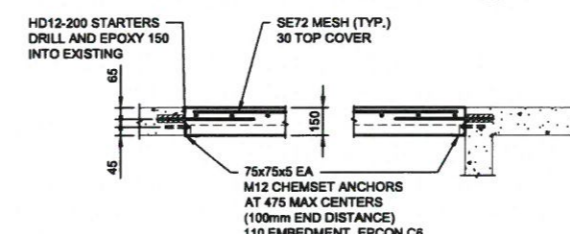


PREFECTS WING: SLAB EXTENSION

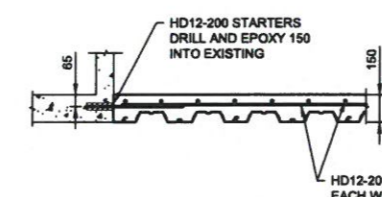
DETAIL 1
 SCALE 1:50



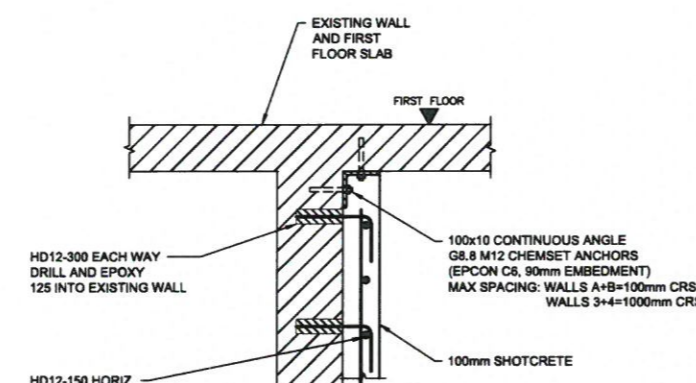
SECTION A
 SCALE 1:50



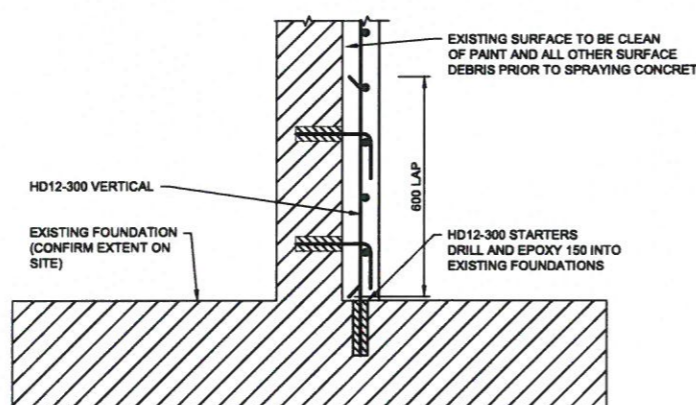
SECTION B
 SCALE 1:20



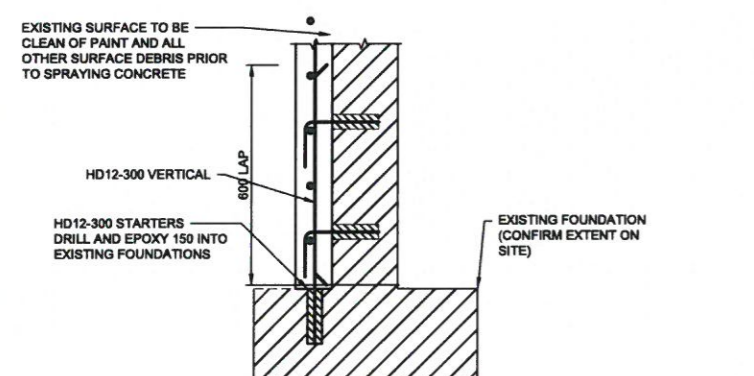
DETAIL 1
 SCALE 1:20



**MAIN BLOCK: WALL 3 & 4 TO FIRST FLOOR
 STRENGTHENING DETAIL**
 SCALE 1:10



SECTION B
 SCALE 1:10

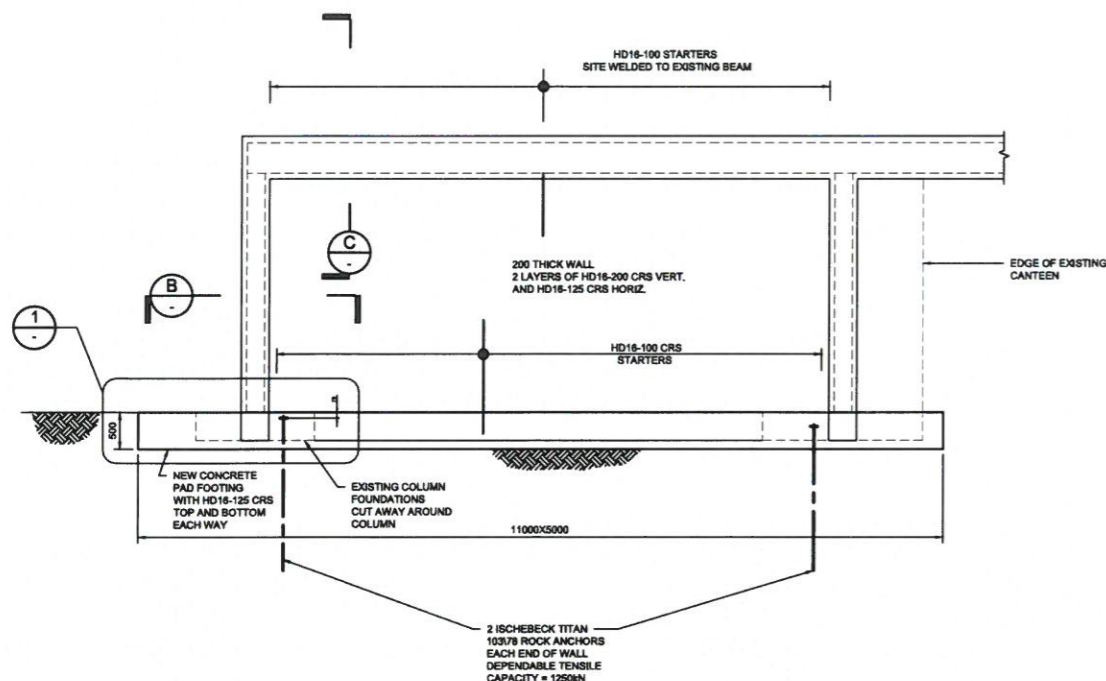


**MAIN BLOCK: WALL A & B TO FIRST FLOOR
 STRENGTHENING DETAIL**
 SCALE 1:10

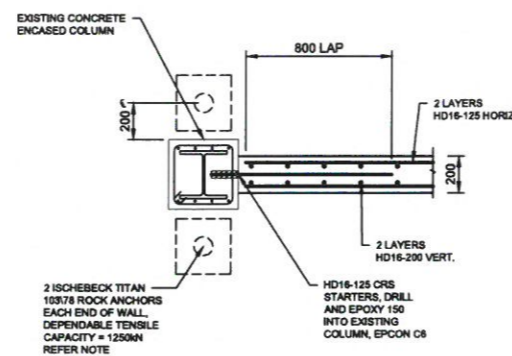
SECTION A
 SCALE 1:10

REV	DESCRIPTION	BY	APP	DATE
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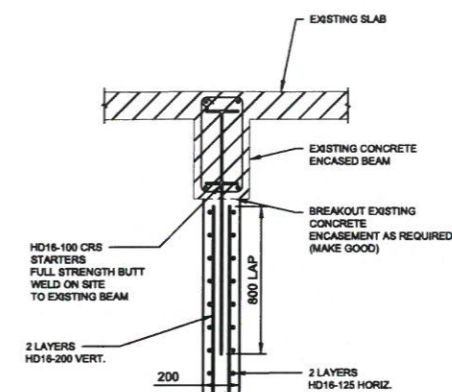
NOTES:



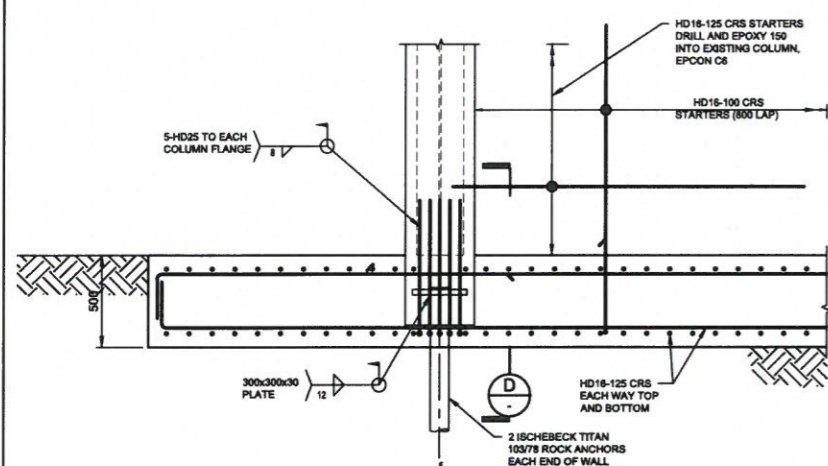
SECTION A
SCALE 1:50
S1



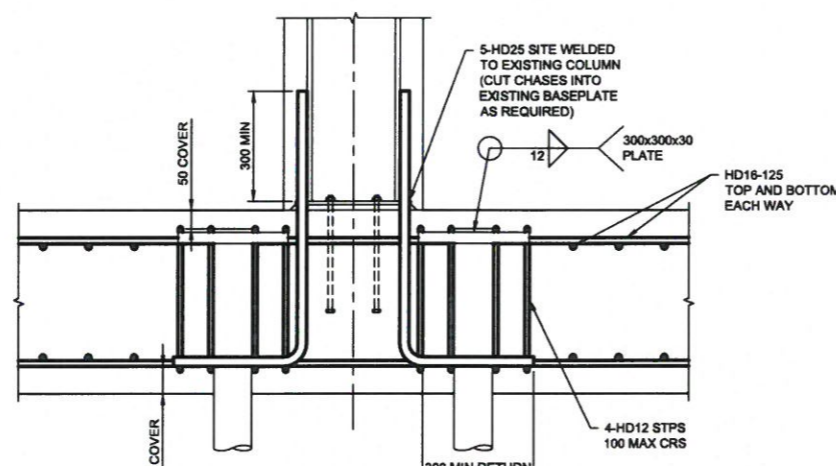
SECTION B
SCALE 1:20



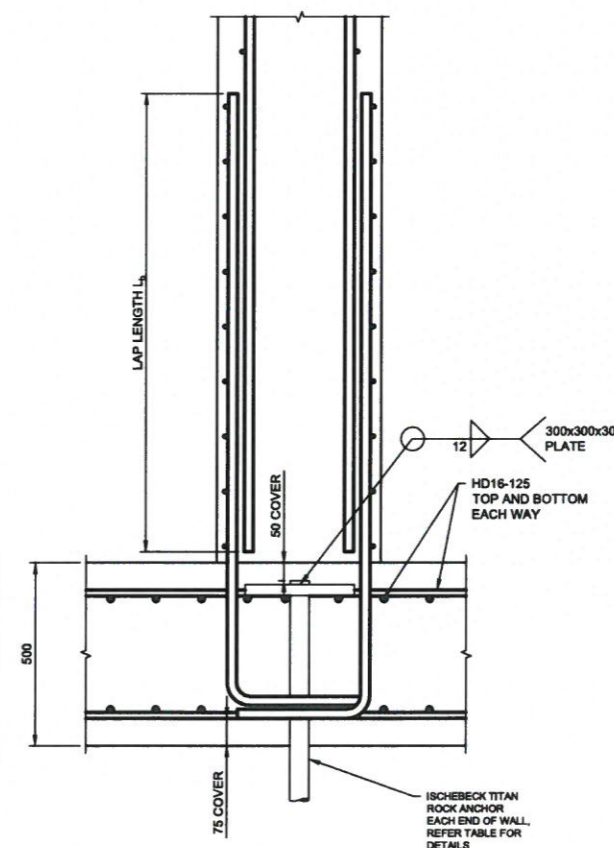
SECTION C
SCALE 1:20



DETAIL 1
SCALE 1:20

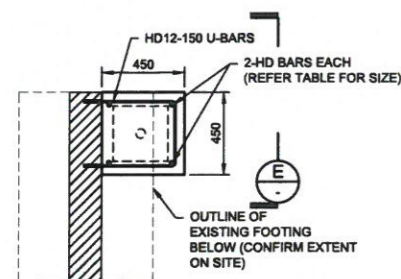


SECTION D
SCALE 1:10



SECTION E
SCALE 1:10

CONCRETE FLANGE/FOUNDATION DETAILS			
WALL ID	VERTICAL FLANGE REINFORCEMENT	LAP LENGTH L _d (mm)	ISCHEBECK TITAN ANCHOR TYPE
C	4-HD20	1000	40 / 16
2	4-HD20	1000	40 / 16
2A	4-HD20	1000	40 / 16
9	4-HD25	1250	73 / 53



MAIN BLOCK: TYPICAL CONCRETE WALL FLANGE DETAIL*
SCALE 1:20

*REFER TO GROUND FLOOR PLAN FOR LOCATIONS

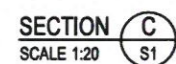
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CLIENT
MISSION COLLEGES LOWER HUTT TRUST BOARD

PROJECT
SEISMIC STRENGTHENING BLOCK A, SACRED HEART COLLEGE, LOWER HUTT

DRAWING
MAIN BLOCK VARIOUS STRENGTHENING DETAILS NEW WALL ELEVATION AND DETAILS

DESIGNED: GV	DATE: FEB 2016
DRAWN: EH	SCALE: 1:50, 1:20, 1:10
APPROVED: SRNP	1:100, 1:40, 1:20
JOB No: 40249	SHEET No: S4
	REV 0



1. DO NOT SCALE OFF DRAWINGS. CONFIRM ALL DIMENSIONS ON SITE.
2. ALL WELDS TO BE 6 FILLET WELDS ALL ROUND UNLESS NOTED OTHERWISE.
3. ALL M12 BOLTS TO BE GRADE 4.6. ALL M16 BOLTS TO BE GRADE 8.8 UNLESS NOTED OTHERWISE.
4. ALL PLATES TO BE 10 THICK UNLESS NOTED OTHERWISE.
5. STEEL GRADES:
 - PLATES 250MPa
 - HOLLOW SECTIONS 350MPa
6. ALL WELD ELECTRODES ARE $f_{ex} = 480MPa$.
7. ALL INTERNAL STRUCTURAL STEEL TO BE PAINTED IN ACCORDANCE WITH SYSTEM DESIGNATION AS/NZS2312/AKL1 BEFORE DELIVERY TO SITE. ANY AREAS DAMAGED TO BE MADE GOOD UPON INSTALLATION.
8. ALL EXTERNAL STRUCTURAL STEEL TO BE HOT DIP GALVANIZED IN ACCORDANCE WITH SYSTEM DESIGNATION AS/NZS2312/HDG800. ANY AREAS DAMAGED TO BE MADE GOOD UPON INSTALLATION.
9. ALL BOLTED TIMBER CONNECTIONS TO HAVE 50x50x3 WASHERS.
10. ALL TIMBER TO BE MSG6 UNLESS SPECIFIED OTHERWISE.
11. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE STRUCTURE IS ADEQUATELY SUPPORTED DURING CONSTRUCTION.
12. ENGINEER TO INSPECT ALL STEEL & TIMBER CONNECTIONS PRIOR TO CLOSING IN. ENGINEER REQUIRES 24 HOURS NOTICE BEFORE ANY VISIT.



PROJECT
SEISMIC STRENGTHENING
BLOCK A, SACRED HEART
COLLEGE, LOWER HUTT

DRAWING
STAFF WING FRAME DETAILS
SOUTH BOUNDARY WALL
DETAILS
PREFECTS WING DETAILS

DESIGNED: GV	DATE: FEB 2016	
DRAWN: EH	SCALE: 1:50, 1:20, 1:10	
APPROVED: SRNP	1:100, 1:40, 1:20	
JOB No: 40249	SHEET No: S5	REV 1

