

NOTES

FOR ALL NOTES REFER TO DRAWING KC00334.012 - C953

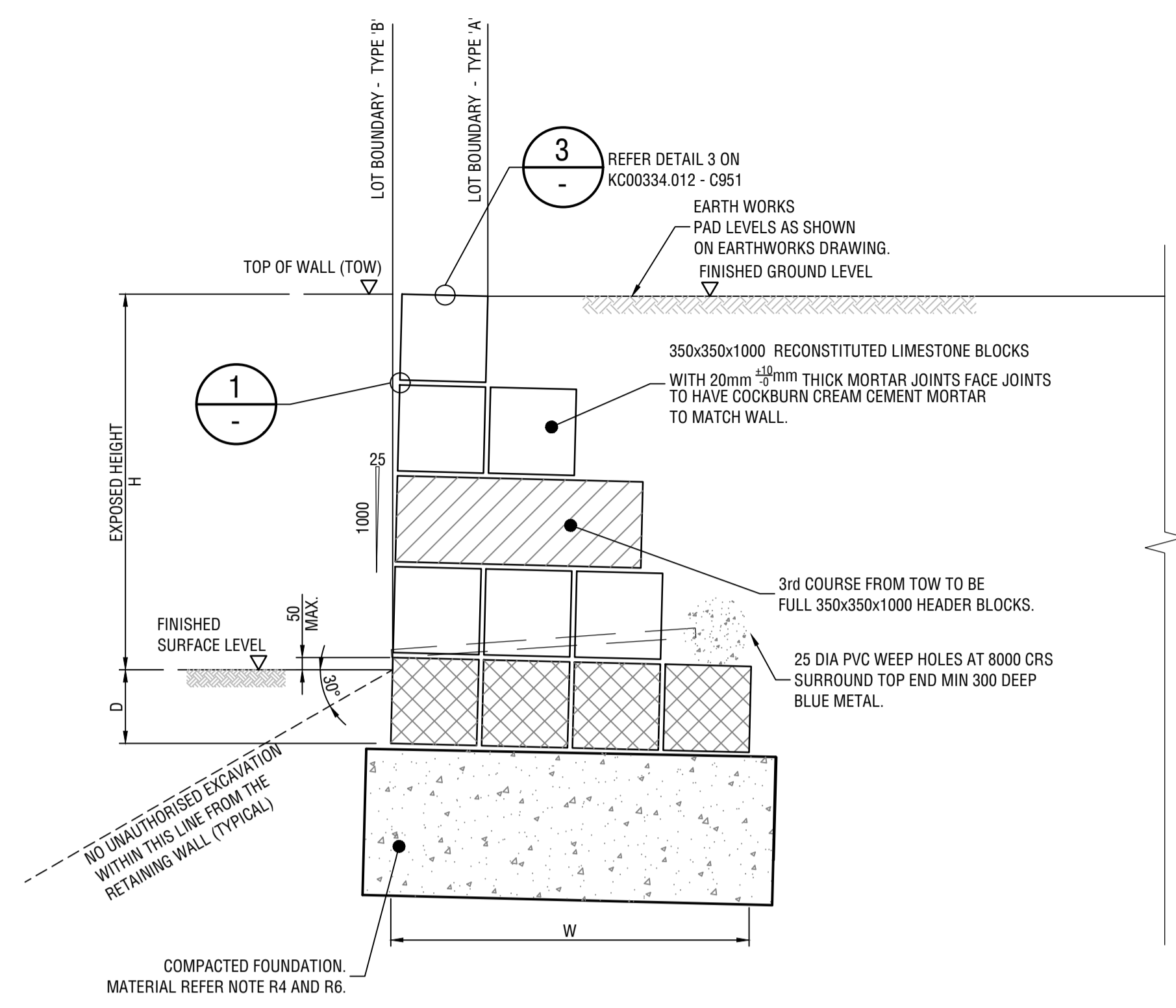
BACKFILL COMPACTION TABLE *

PENETROMETER DEPTH (mm)	MINIMUM ACCEPTABLE No OF BLOWS PER 300mm
150 TO 450	8
450 TO 750	10
750 TO 1050	11
1050 TO 1350	12
1350 TO 1650	13
1650 TO 1950	13
1950 TO 2250	14
2250 TO 2550	14
2550 TO 2850	15

* AN ALTERNATIVE SITE SPECIFIC BACKFILL COMPACTION TABLE MAY BE ACCEPTABLE TO THE SUPERINTENDENT IF IT CAN BE DEMONSTRATED THAT COMPACTION EQUIVALENT TO 95% MODIFIED MAXIMUM DRY DENSITY IS ACHIEVED.

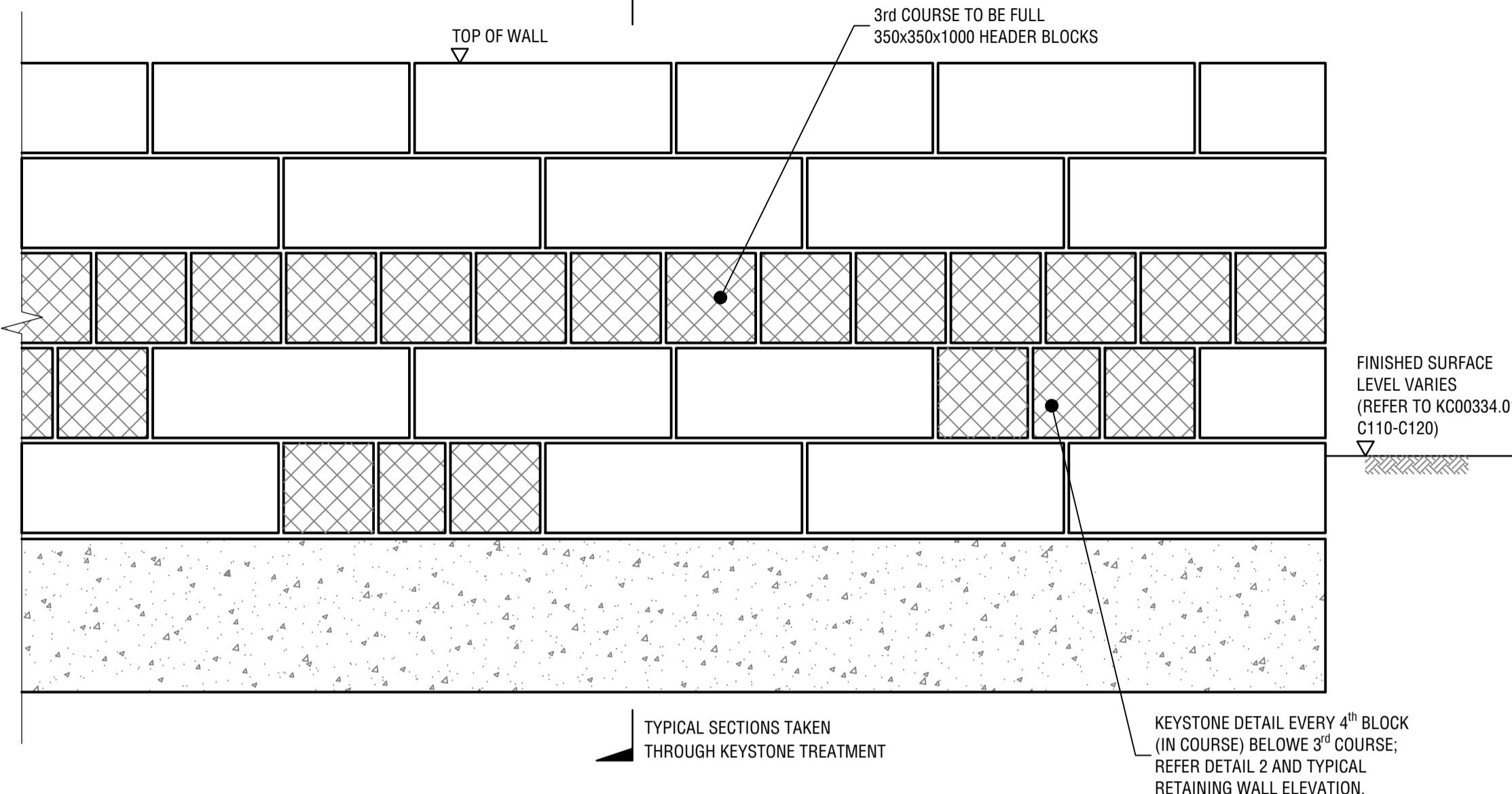
RETAINING WALL DIMENSIONS

TOTAL No. COURSES	H (EXPOSED)	D (MIN)	W (MIN)
3	420 - 790	300	1000
4	791 - 1160	300	1000
5	1161 - 1530	300	1460
6	1531 - 1900	300	1460
7	1901 - 2270	300	1830
8	2271 - 2640	300	2200
9	2641 - 3010	300	2570
10	3011 - 3380	300	2940
11	3381 - 3750	300	2940
12	3751 - 4120	300	3310



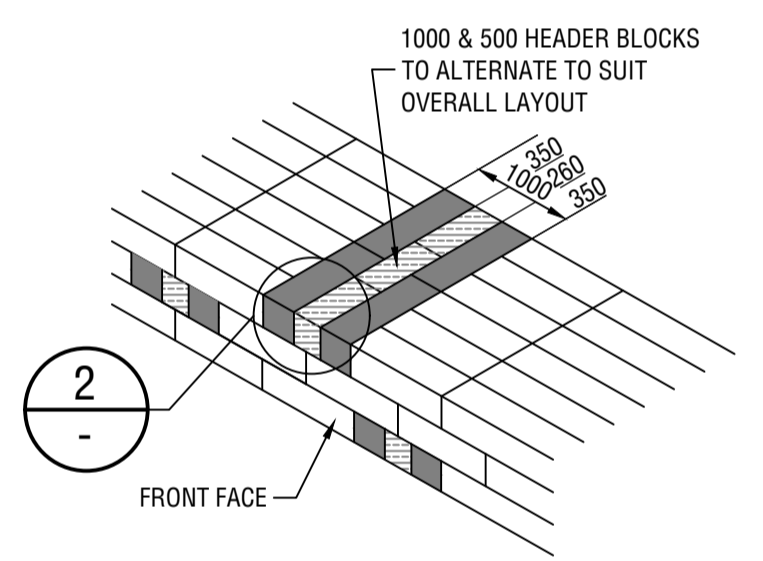
TYPICAL SECTION THROUGH RETAINING WALL (1)

SCALE 1 : 25



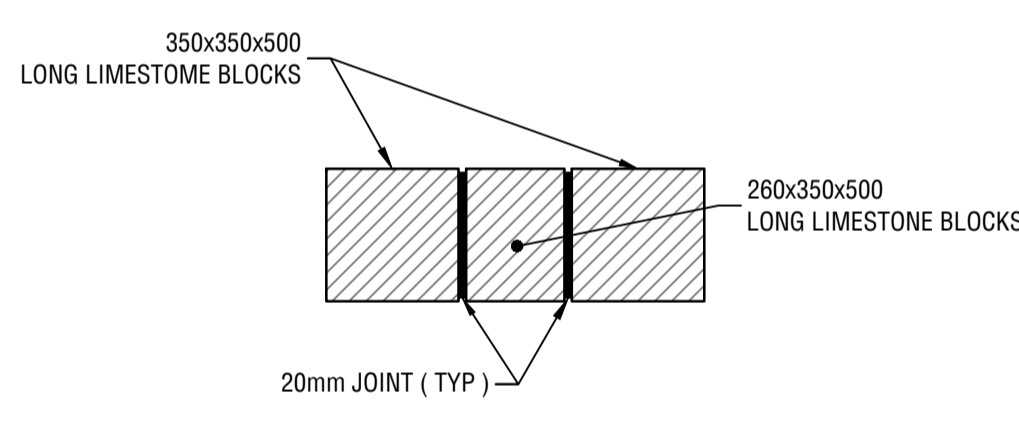
TYPICAL SECTION RETAINING WALL ELEVATION

SCALE 1 : 25



TYPICAL HEADER BLOCK DETAIL BELOW 3rd COURSE

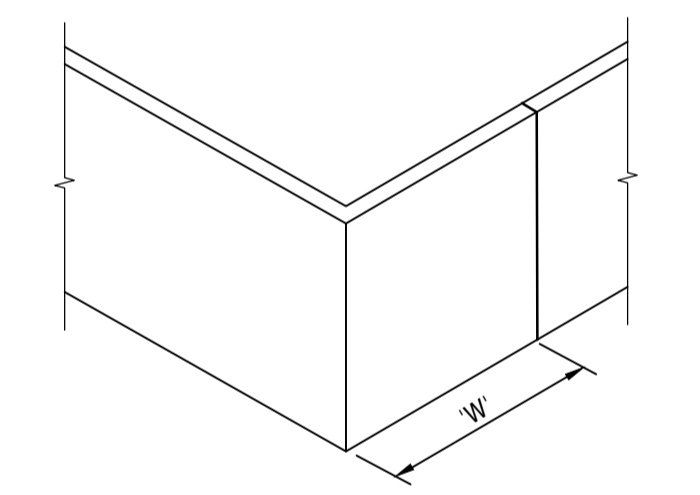
NOT TO SCALE



INTERLOCKING BLOCK DETAIL

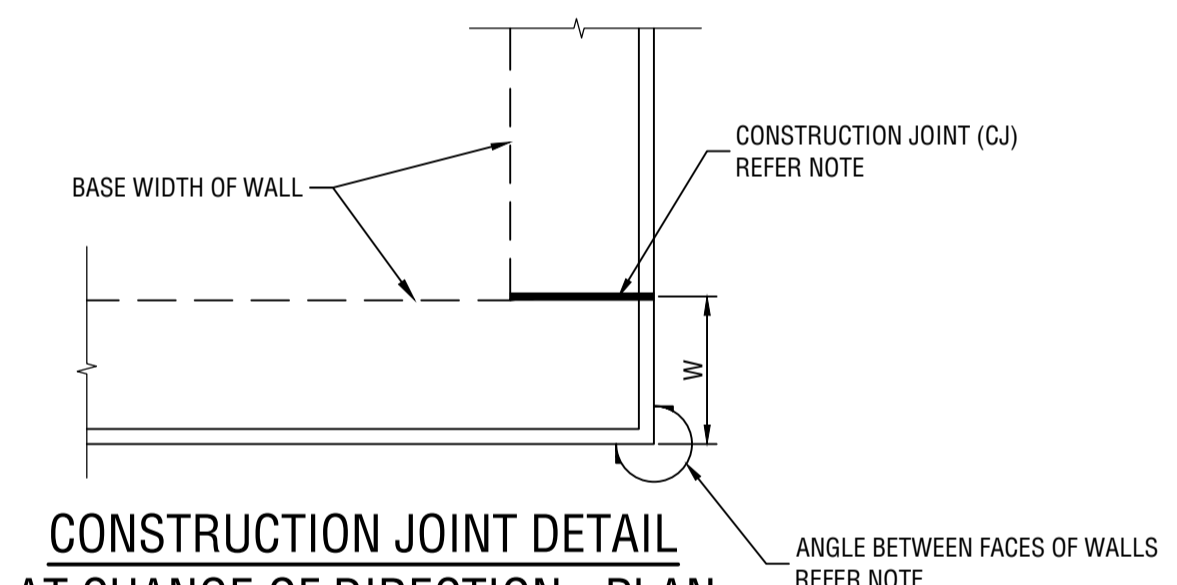
NOT TO SCALE

DETAIL **2**
-
-



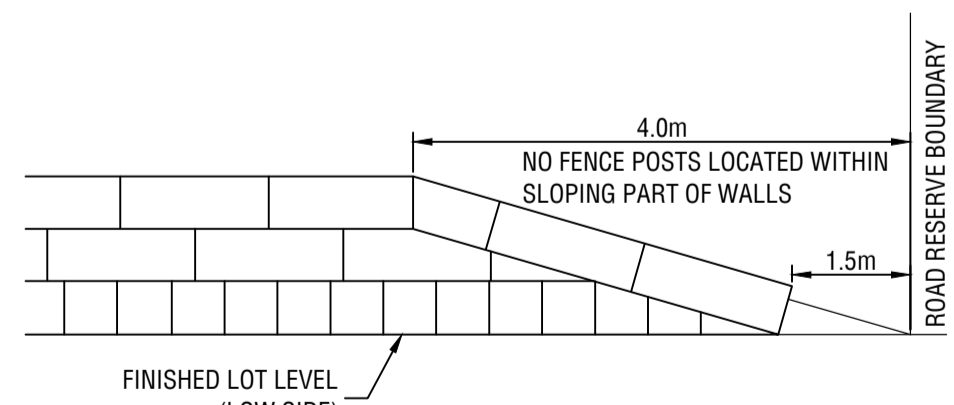
TYPICAL DETAIL OF CONTROL JOINT AT A CHANGE OF DIRECTION

NOT TO SCALE



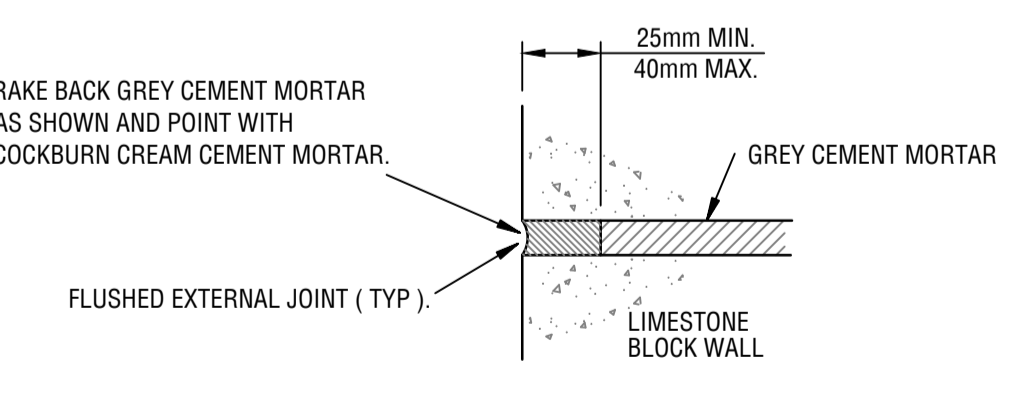
CONSTRUCTION JOINT DETAIL AT CHANGE OF DIRECTION - PLAN

NOT TO SCALE



TYPICAL LOT END WALL

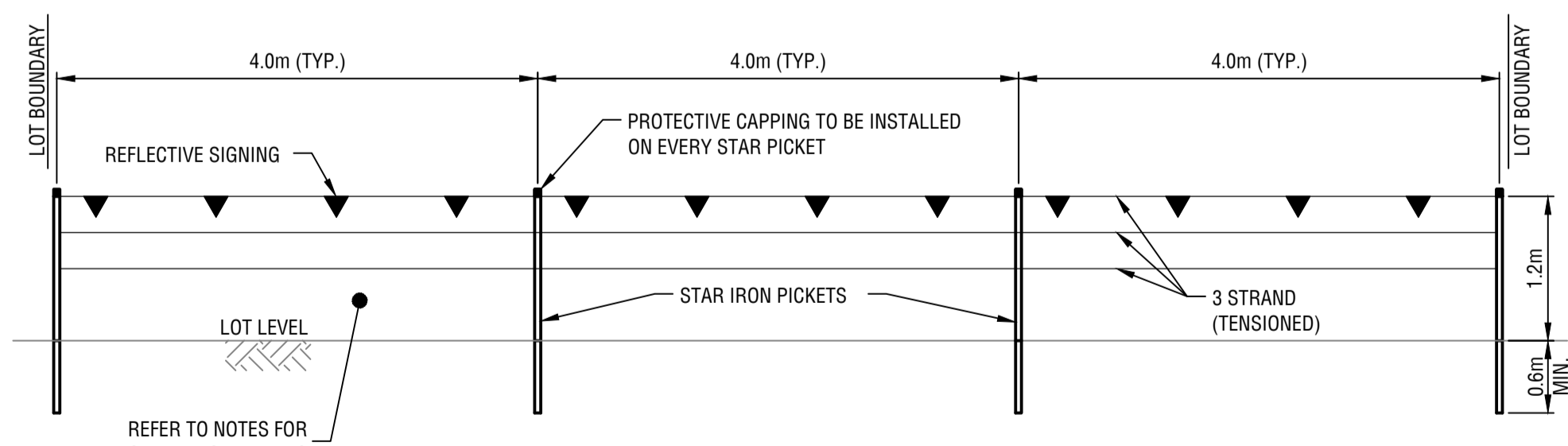
SCALE 1 : 40



BLOCK WALL JOINT DETAIL

NOT TO SCALE

DETAIL **1**
-
-



RETAINING WALL SAFETY FENCING DETAIL

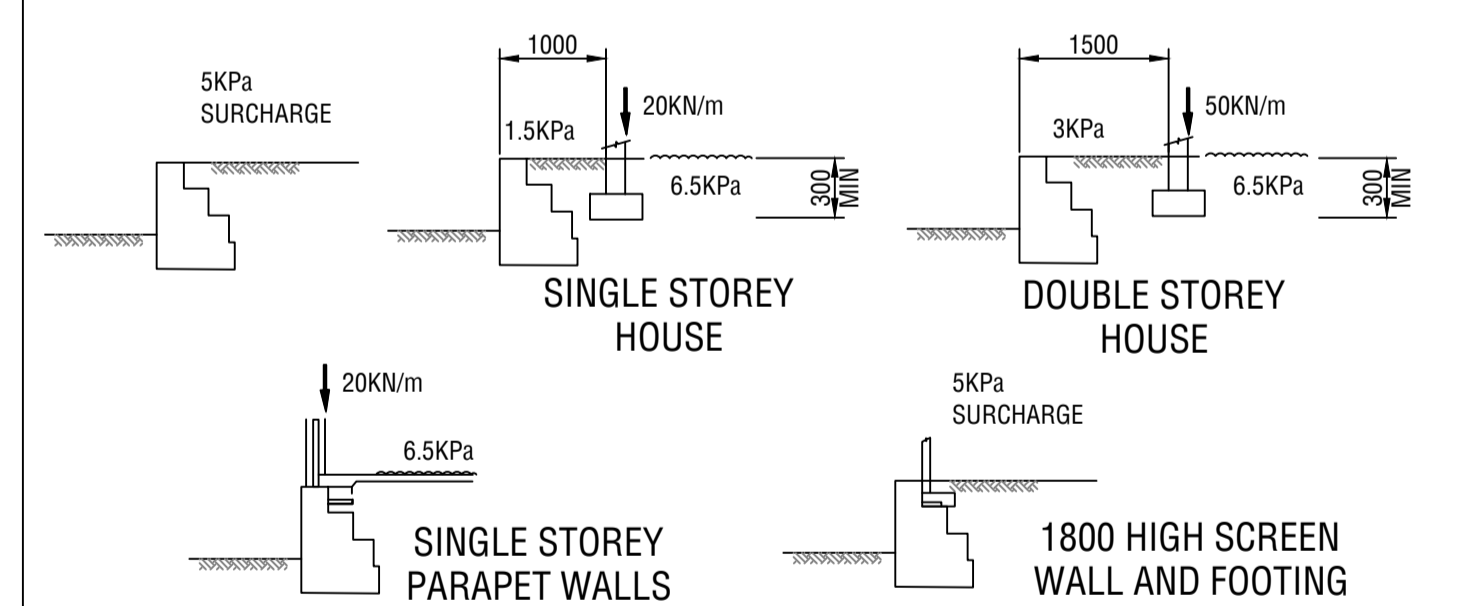
NOT TO SCALE

DANGER
DO NOT WALK ON OR NEAR THE RETAINING WALLS. YOU DO SO AT YOUR OWN RISK.
RISK OF SERIOUS INJURY MAY OCCUR FOR WHICH THE OWNER, DEVELOPERS AND CONTRACTORS WILL NOT ACCEPT LIABILITY.

WARNING
BEWARE OF UNDERGROUND SERVICES
The location of underground cables are approximate only and their exact position should be checked on site. No guarantee is given that all existing cables and services are shown. Locate all underground cables and services before commencement of work. Refer to Worksafe Regulation 3.21.

DIAL 1100 BEFORE YOU DIG

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT HAS BEEN CERTIFIED BY A PRACTICING STRUCTURAL ENGINEER. I/WE CERTIFY THAT THE WALLS SHOWN HAVE BEEN DESIGNED TO SUPPORT EFFECTIVE HEIGHT H PLUS THE LOAD CASES SHOWN BELOW.



FOR OTHER LOAD CASES, CERTIFICATION MUST BE OBTAINED FROM AN INDEPENDENT PRACTICING STRUCTURAL ENGINEER.

BLOCKS MAY NOT BE ADDED TO THE TOP OF RETAINING WALLS AND GROUND LEVELS MAY NOT BE ALTERED IN THE VICINITY OF THE WALLS FOLLOWING THEIR COMPLETION WITHOUT THE APPROVAL OF AN INDEPENDENT PRACTICING STRUCTURAL ENGINEER.

FENCES AND WALLS MAY NOT BE ADDED TO THE TOP OF RETAINING WALLS WITHOUT CERTIFICATION FROM AN INDEPENDENT PRACTICING STRUCTURAL ENGINEER, TO ENSURE AMONGST OTHER THINGS THAT THE LOADING CAUSED BY THE FENCE OR WALL IS SATISFACTORILY TRANSMITTED TO THE RETAINING WALL WITHOUT COMPROMISING THE INTEGRITY OF THE RETAINING WALL.

CERTIFIED NER ENGINEER _____ COMPANY _____ DATE _____

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REV No.	DATE	DRAFTING CHECK	DESIGN REVIEW	REV'D P.MGR	APP'D P.DIR	AMENDMENT
1	06/07/21	CK	CK			AMMENDMENTS TO THE RETAINING WALLS INFO
0	21/04/21	CK	CK			ISSUED FOR CONSTRUCTION

REV No.	DATE	DRAFTING CHECK	DESIGN REVIEW	REV'D P.MGR	APP'D P.DIR	AMENDMENT

kctt

KC Traffic and Transport Pty Ltd
ABN 35 148 970 727
7/10 Whipple Street, Balclutha WA 6021
Phone: 08 9441 2700
Website: www.kctt.com.au

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CLIENT PROGRESS DEVELOPMENTS PTY LTD			
PROJECT BROOKLANDS STAGE 1B HENLEY BROOK			
DRAFTER D.CENGAJ	DRAFTING CHECK A.TODD	REVIEWED PROJECT MANAGER	APPROVED PROJECT DIRECTOR
DESIGNED F.BOROVIC	DESIGN REVIEW C.KLEYWEG		

TITLE STANDARD DETAILS LIMESTONE RETAINING WALL SHEET 1 OF 4				
SHEET A1	DATUM PC94	WAPC No. 160183	PROJECT No. KC00334.001	DRAWING No. C950
	SCALE AS SHOWN			REVISION 1

NOTES

FOR ALL NOTES REFER TO DRAWING KC00334.012 - C953

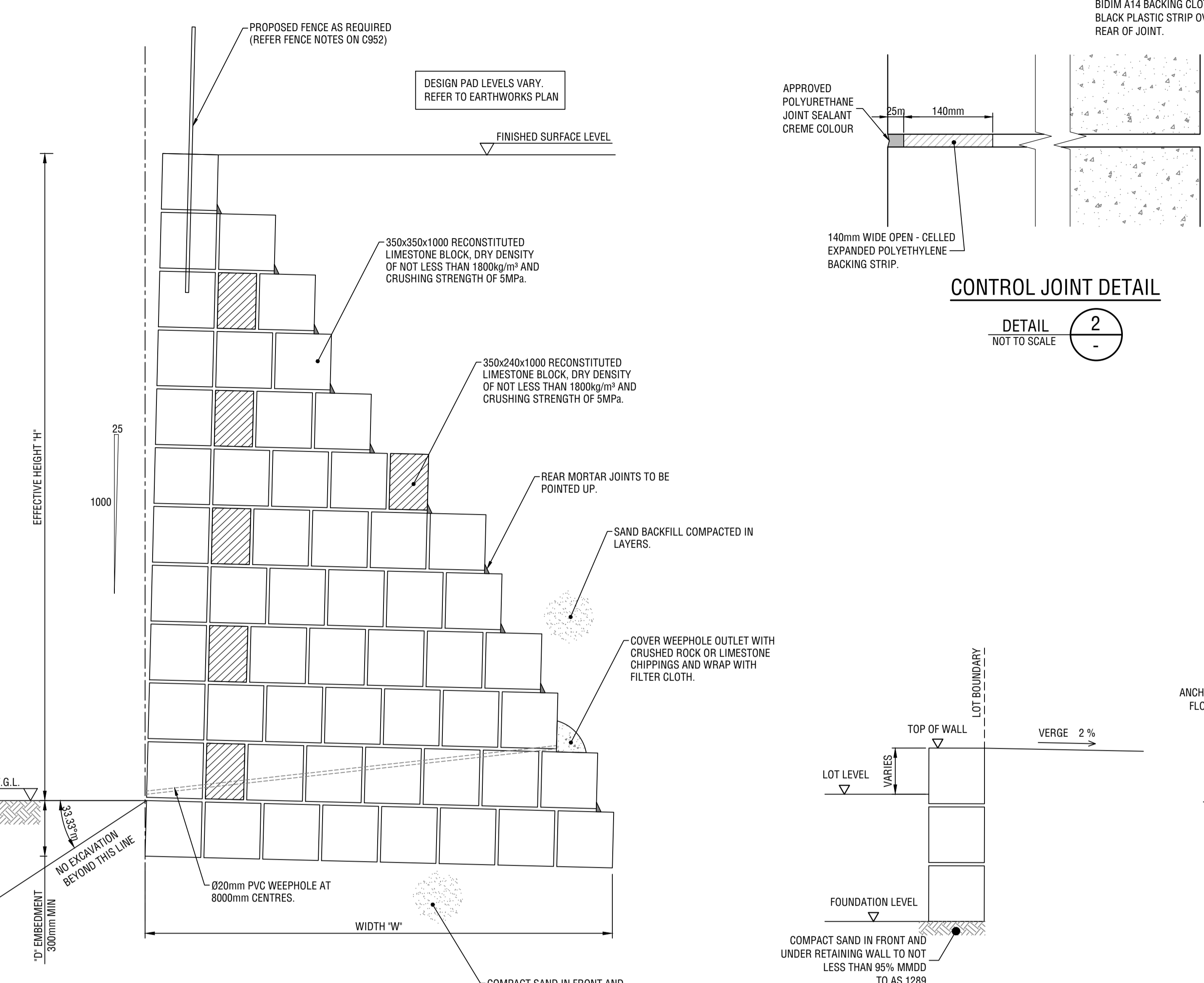
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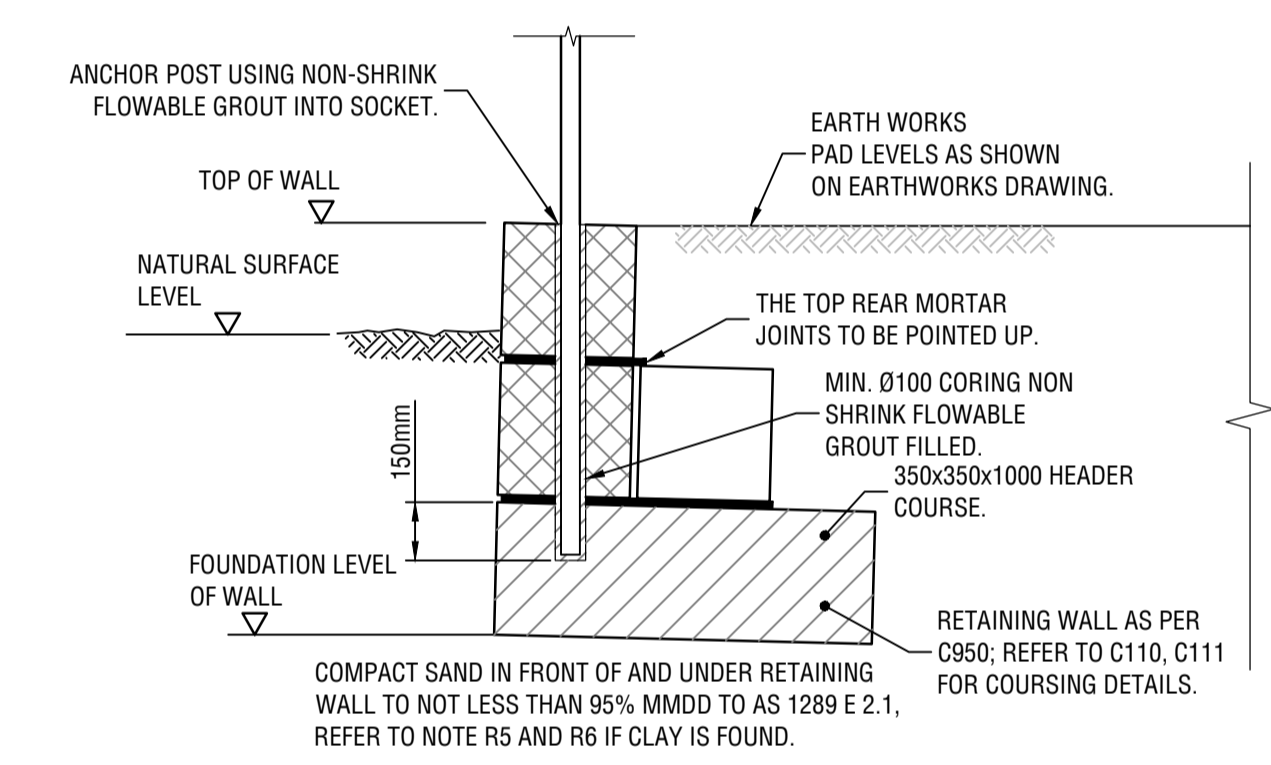
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9	2641 - 3010	300	2570
10	3011 - 3380	300	2940
11	3381 - 3750	300	2940
12	3751 - 4120	300	3310



TYPICAL SECTION THROUGH RETAINING WALL (2)
1 COURSE EXPOSED (WHERE NOMINATED ONLY)



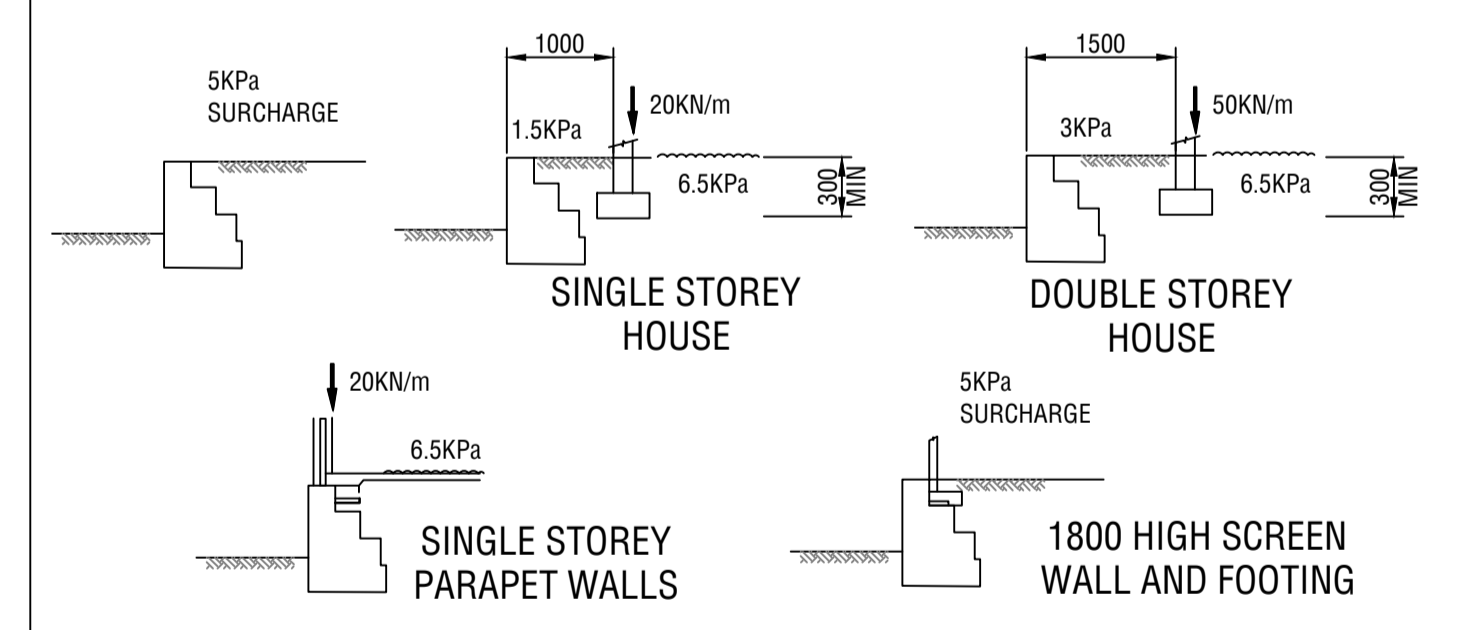
TYPICAL FENCE POST CORING DETAIL
DETAIL 3 NOT TO SCALE

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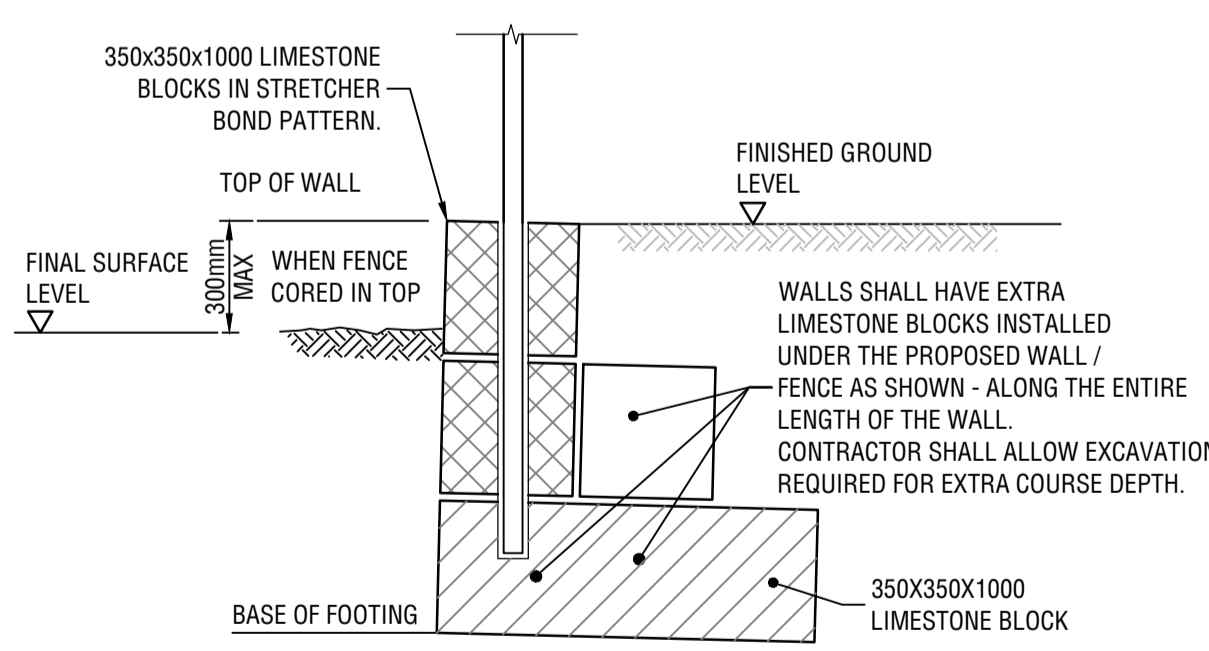
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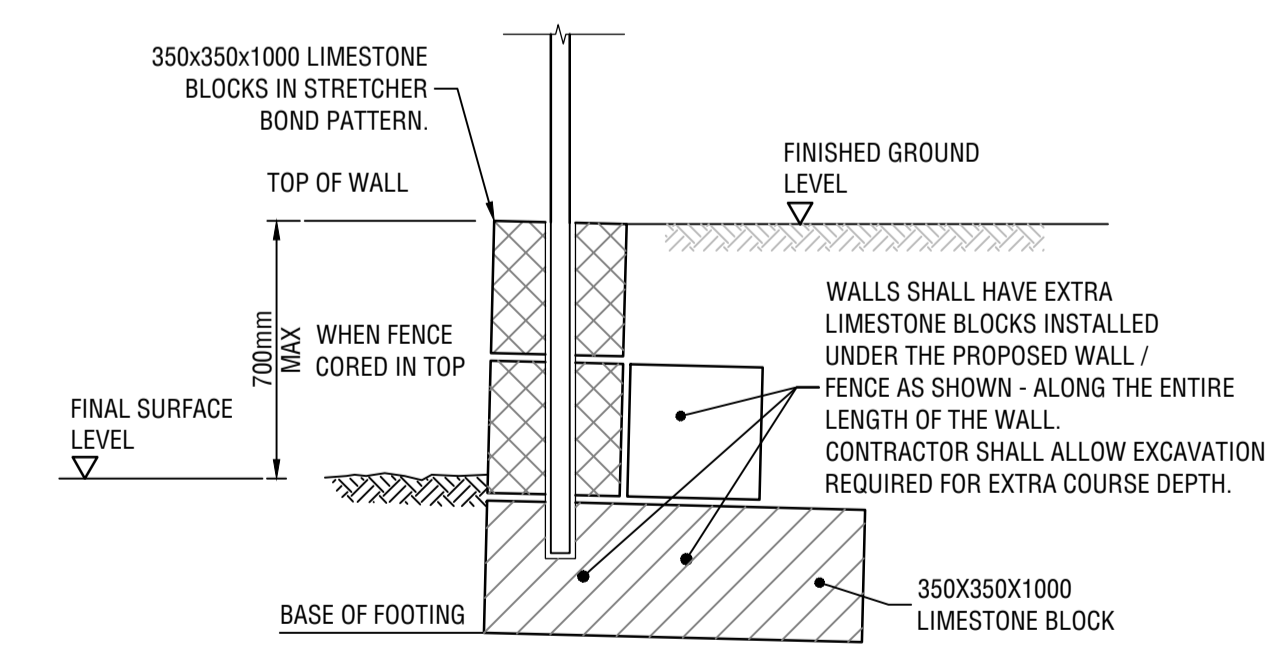
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CERTIFIED NER ENGINEER _____ COMPANY _____ DATE _____

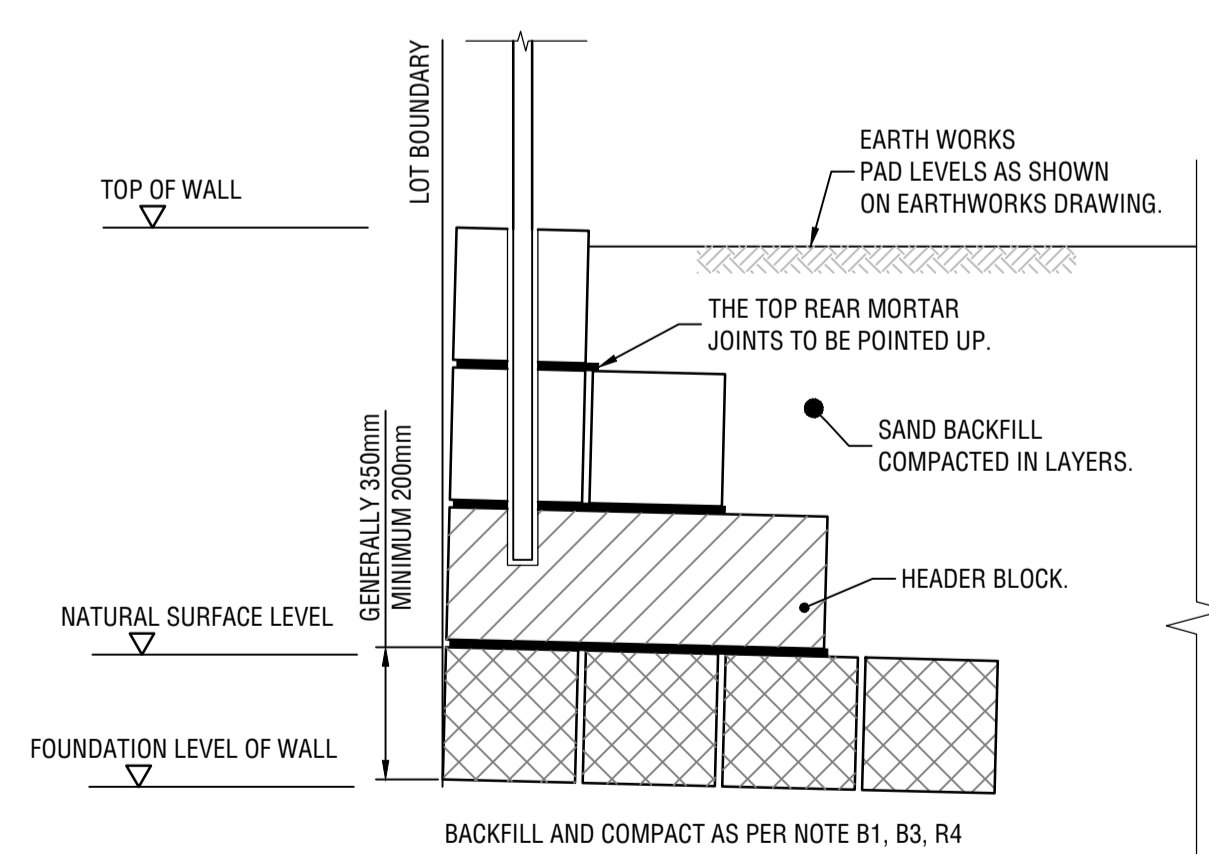
ISSUED FOR CONSTRUCTION



ONE COURSE EXPOSED HIGH WALL FOR CORED FENCING
 3 COURSE REQUIREMENT FOR FENCE POST CORED.
 SCALE 1:25



TWO COURSE EXPOSED HIGH WALL FOR CORED FENCING
 3 COURSE REQUIREMENT FOR FENCE POST CORED.
 SCALE 1:25



THREE COURSE WALL PROFILE FOR CORED FENCING
 SCALE 1:25

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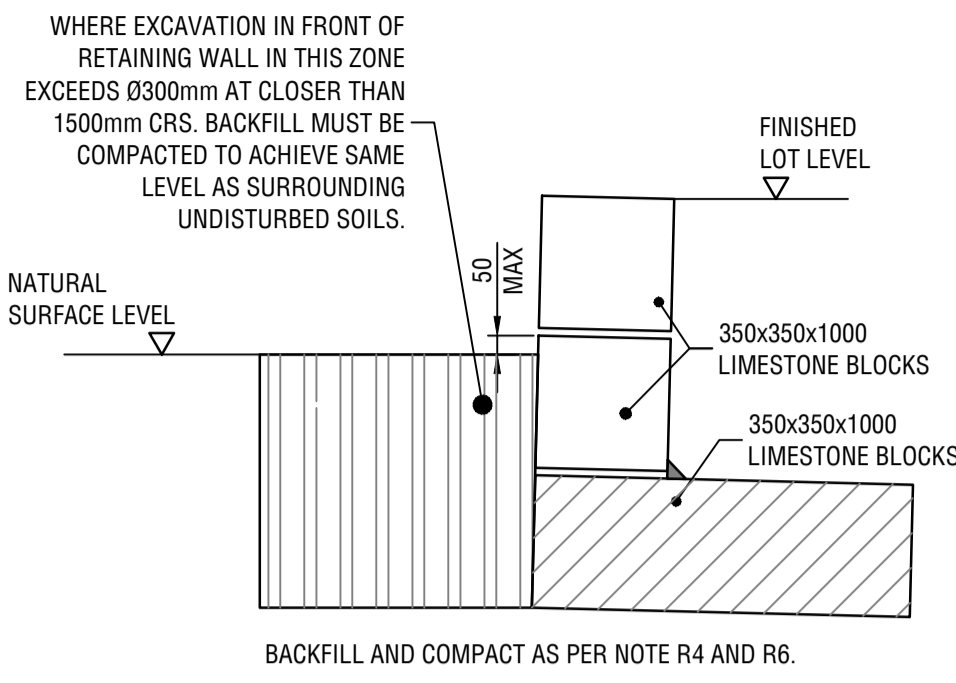
REV No.	DATE	DRAFTING CHECK	DESIGN REVIEW	REV'D P.MGR	APP'D P.DIR	AMENDMENT
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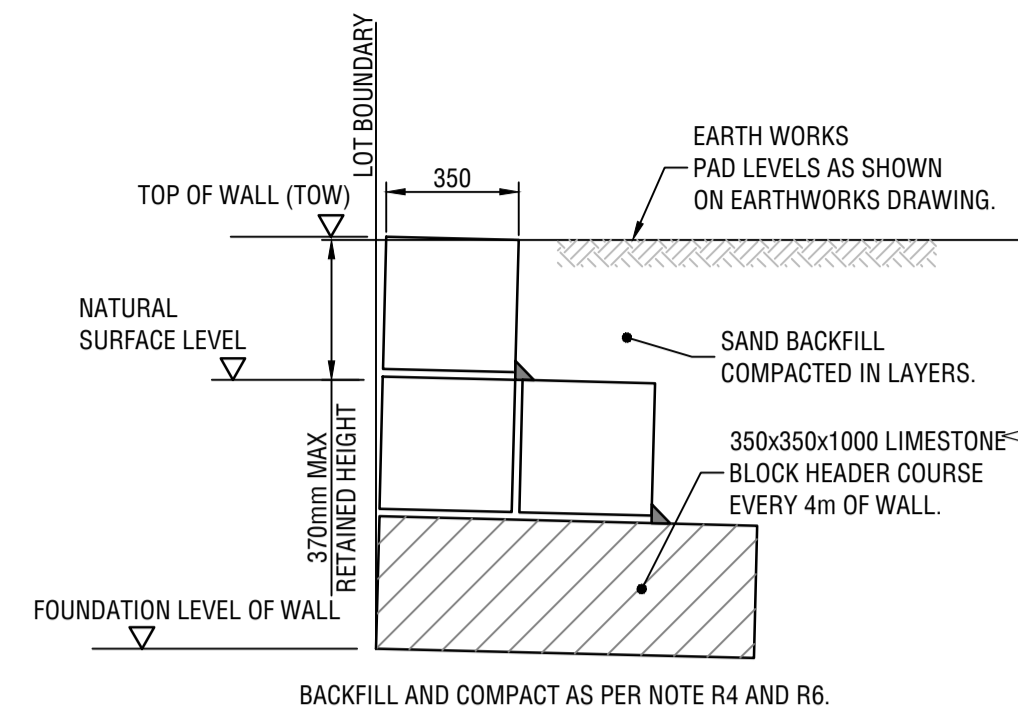
CLIENT	PROGRESS DEVELOPMENTS PTY LTD		
PROJECT	BROOKLANDS STAGE 1B HENLEY BROOK		
DRAFTER	D.CENGAJ	DRAFTING CHECK	C.KLEYWEG
DESIGNED	F.BOROVIC	REVIEWED PROJECT MANAGER	C.KLEYWEG
		APPROVED PROJECT DIRECTOR	

TITLE		STANDARD DETAILS		LIMESTONE RETAINING WALL		SHEET 2 OF 4	
SHEET	A1	DATUM	PC694	WAPC No.	160183	PROJECT No.	KC00334.001
SCALE	AS SHOWN	DRAWING No.	C951	REVISION	1		



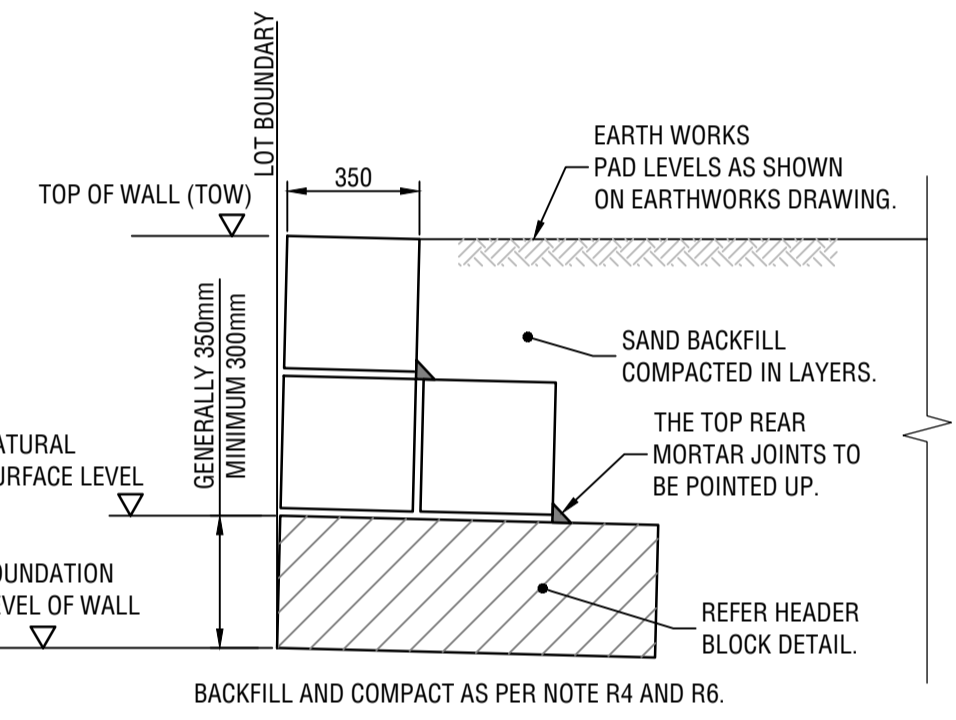
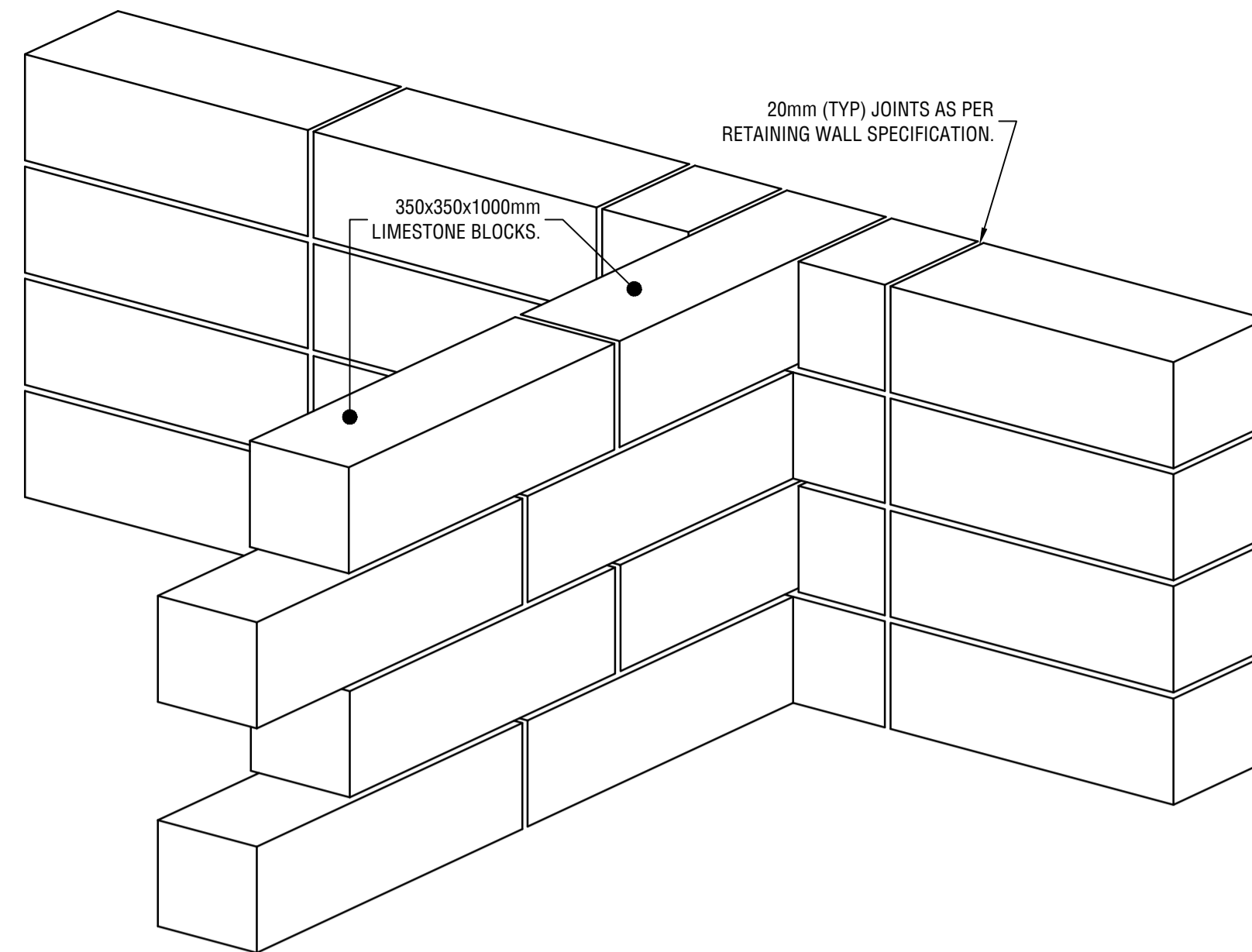
EXCAVATION IN FRONT OF RETAINING WALL

SCALE 1 : 25



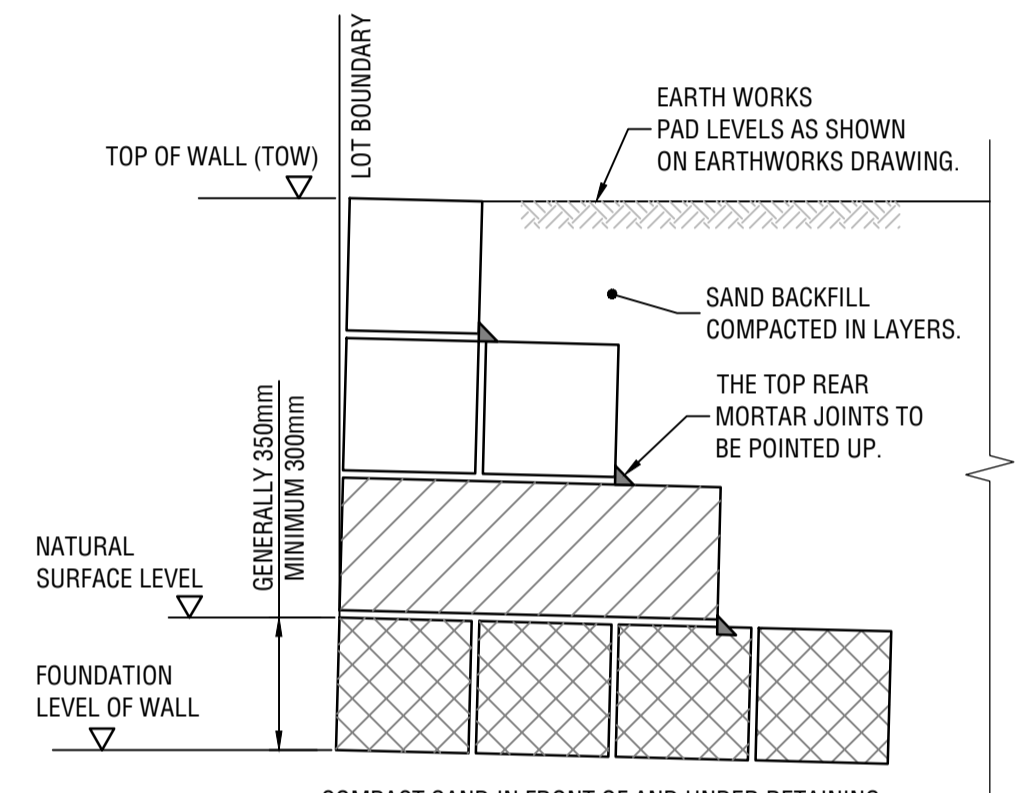
ONE COURSE EXPOSED WALL PROFILE

(370 MAX. RETAINED HEIGHT)
SCALE 1 : 25



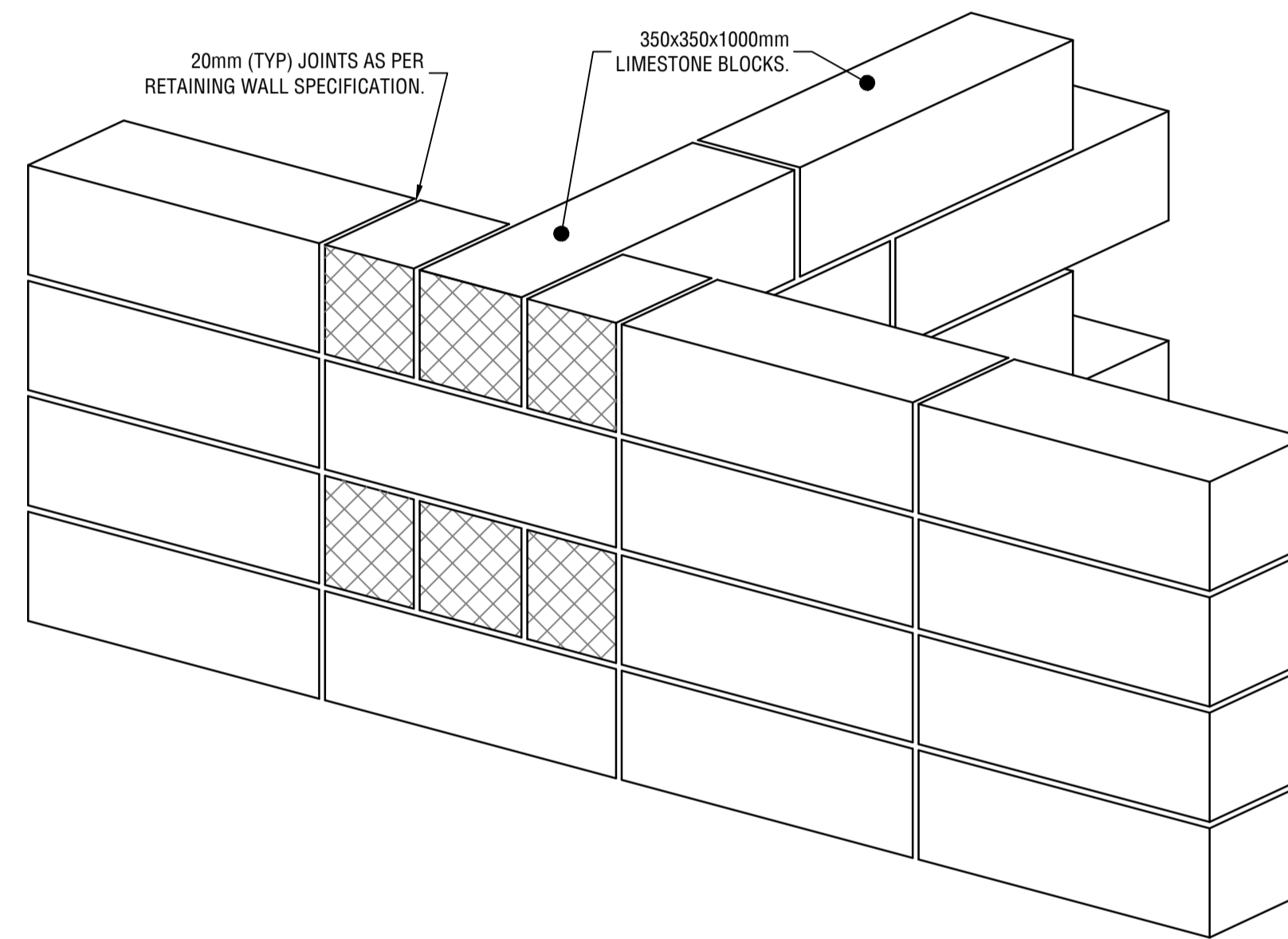
TWO COURSE EXPOSED WALL PROFILE

(890 MAX. RETAINED HEIGHT)
SCALE 1 : 25



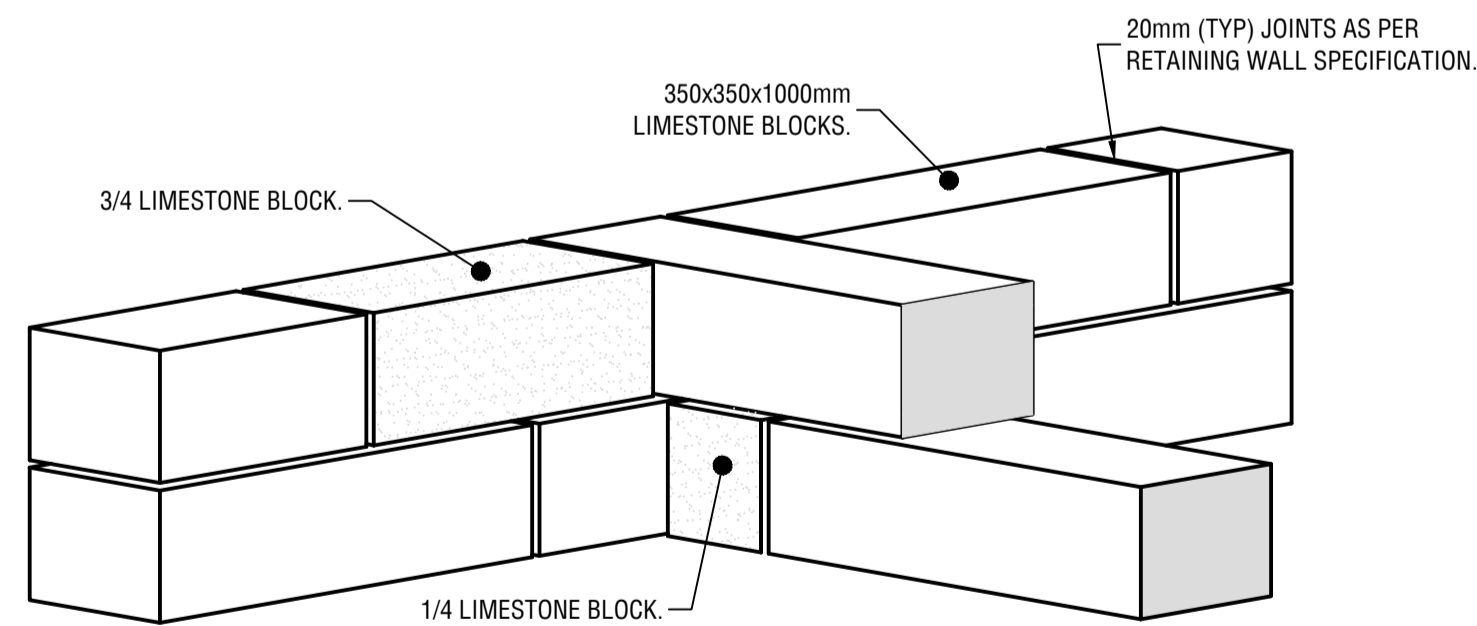
THREE COURSE EXPOSED WALL PROFILE

(1260 MAX. RETAINED HEIGHT)
SCALE 1 : 25



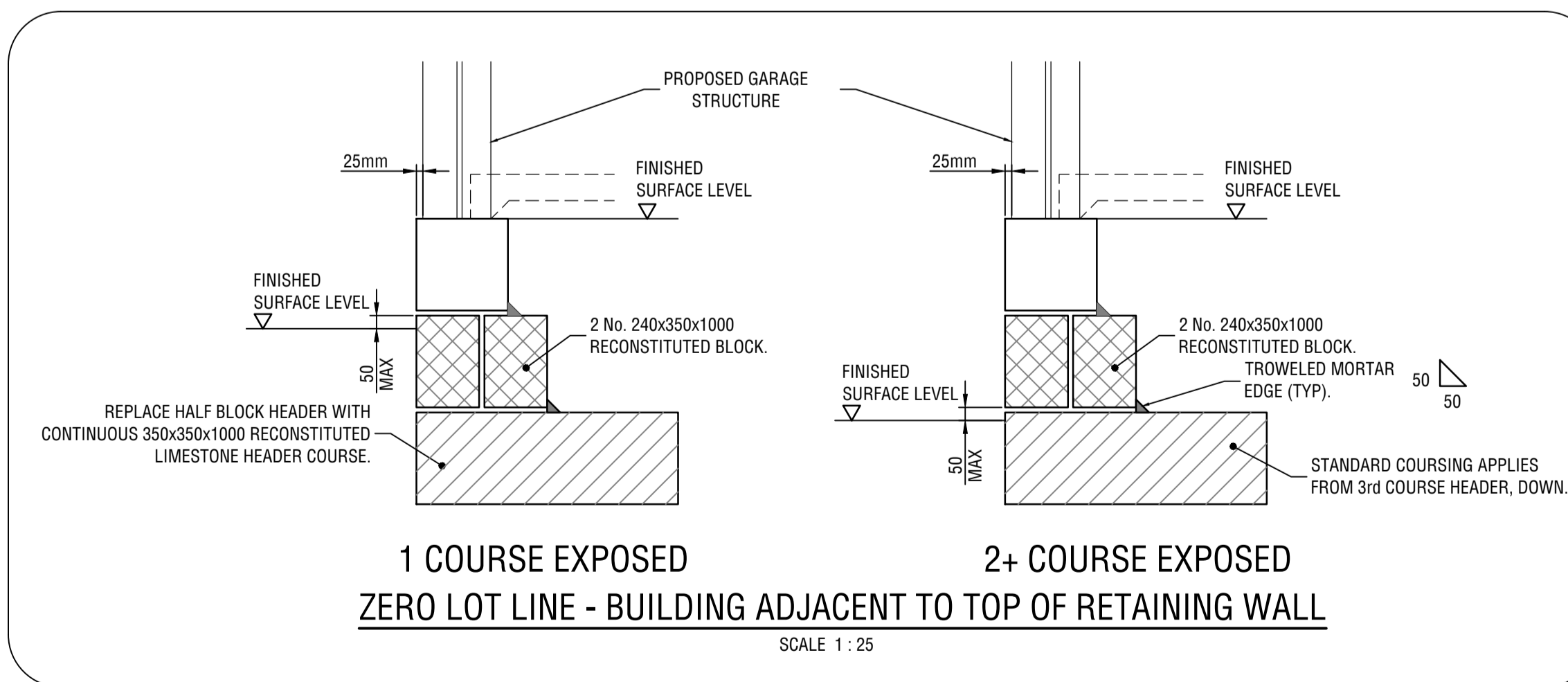
RETAINING WALL INTERLOCK DETAIL

NOT TO SCALE



TYPICAL EDGE OF PLANTER BOX INTERLOCK DETAIL

NOT TO SCALE



**1 COURSE EXPOSED
ZERO LOT LINE - BUILDING ADJACENT TO TOP OF RETAINING WALL**

SCALE 1 : 25

NOTES

FOR ALL NOTES REFER TO DRAWING KC00334.012 - C953

BACKFILL COMPACTION TABLE *

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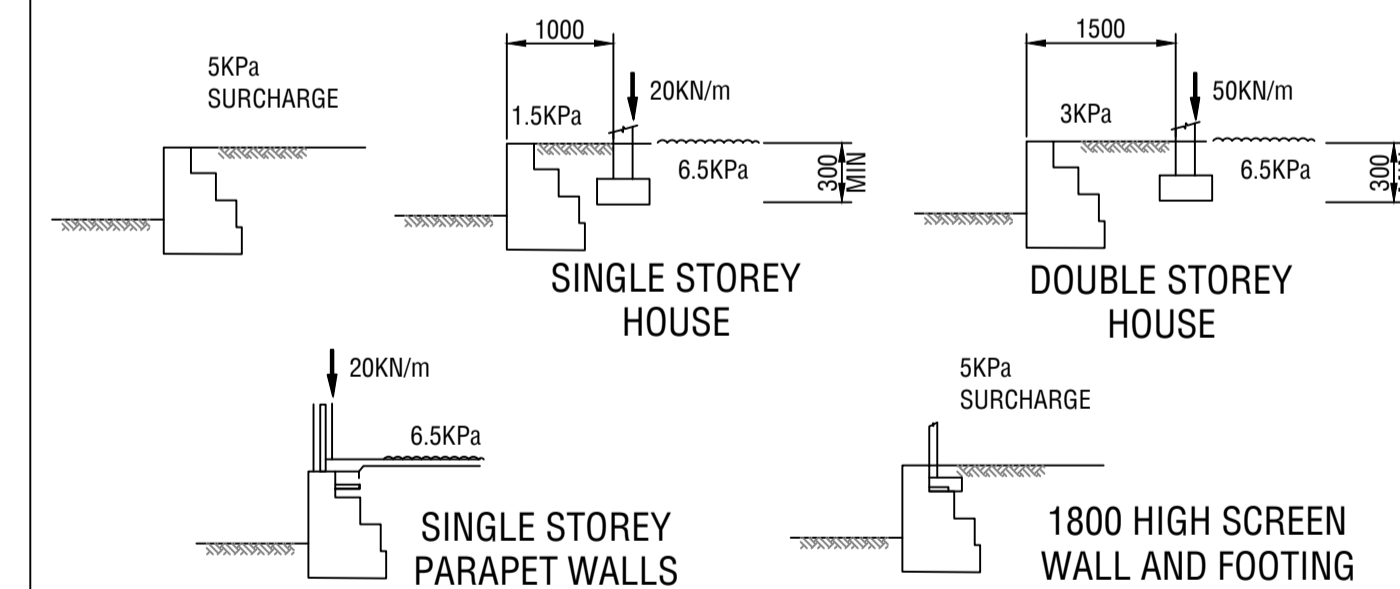


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CERTIFIED NER ENGINEER _____ COMPANY _____ DATE _____

ISSUED FOR CONSTRUCTION

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REV No.	DATE	DRAFTING CHECK	DESIGN REVIEW	REV'D P.MGR	APP'D P.DIR	AMENDMENT
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0	21/04/21	CK	CK			ISSUED FOR CONSTRUCTION

REV No.	DATE	DRAFTING CHECK	DESIGN REVIEW	REV'D P.MGR	APP'D P.DIR	AMENDMENT

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7/10 Whipple Street, Balclutha WA 6021
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CLIENT	PROGRESS DEVELOPMENTS PTY LTD		
PROJECT	BROOKLANDS STAGE 1B HENLEY BROOK		
DRAFTER	F.BOROVIC	DRAFTING CHECK	C.KLEYWEG
DESIGNED	F.BOROVIC	DESIGN REVIEW	C.KLEYWEG
REVIEWED PROJECT MANAGER		APPROVED PROJECT DIRECTOR	

TITLE		STANDARD DETAILS		LIMESTONE RETAINING WALL	
SHEET		A1		SHEET 3 OF 4	
DATUM	PC694	WAPC No.	160183	PROJECT No.	KC00334.001
SCALE	AS SHOWN	DRAWING No.	C952	REVISION	1

RETAINING WALL NOTES

GENERAL NOTES:

- G1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE OTHER RELEVANT CONTRACT DRAWINGS AND SPECIFICATIONS.
- G2. ALL WORK SHALL COMPLY WITH THE LATEST AUSTRALIAN STANDARDS AND ADDENDUMS. ALL DISCREPANCIES SHALL BE REFERRED TO THE SUPERINTENDENT FOR DECISION BEFORE PROCEEDING WITH THE WORK.
- G3. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE MATERIALS FOR CONSTRUCTION SUCH THAT NO DEFECTS ARE INCURRED PRIOR TO CONSTRUCTION ACTIVITIES.
- G4. DO NOT SCALE DRAWINGS, ALL DIMENSIONS TO BE CHECKED ON SITE.
- G5. THE CONTRACTOR SHALL KEEP A COPY OF THE DRAWINGS ON SITE DURING THE CONSTRUCTION PERIODS.
- G6. THE CONTRACTOR SHALL OBTAIN 'DIAL BEFORE YOU DIG' SERVICE INFORMATION ON THE AREA AFFECTED BY THE WORKS PRIOR TO ANY CONSTRUCTION.
- G7. LEVELS ARE RELATIVE TO AHD.
- G8. THE CONTRACTOR SHALL REINSTATE ALL PUBLIC OR PRIVATE PROPERTY THAT HAS BEEN AFFECTED BY THE WORKS TO AN ORIGINAL OR SUPERIOR CONDITION OF ITS ORIGINAL STATE.

RETAINING WALL DESIGN NOTES:

RW1. RETAINING WALLS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS4678 EARTH-RETAINING STRUCTURES AND ULTIMATE LOAD DESIGN AND PARTIAL LOAD FACTORS CONSISTENT WITH AS1170.1. DESIGN ALSO ACCOUNTS FOR THE FOLLOWING PARAMETERS:

- STRUCTURE CLASSIFICATION = 1
- DESIGN LIFE = 25YRS
- EARTHQUAKE CATEGORY = 1

RETAINING WALL DESIGN LOADS

- RD1. THE DESIGN WIND CRITERIA AS1170.2-2011 IS AS FOLLOWS:
- REGION = PERTH METROPOLITAN REGION A1
 - BASIC WIND SPEED V_{10} = 148 KPH
 - TERRAIN CATEGORY 1
 - TOPOGRAPHIC MULTIPLIER M_t = 1.1
- RD2. RETAINING WALLS TYPE 'A' AND 'B' HAVE BEEN DESIGNED FOR THE FOLLOWING CONDITIONS:
1. 5KPa SURCHARGE PLUS WIND LOAD ON FENCE REGION A1
 2. 4 KPa CONSTRUCTION SURCHARGE WITH A 10KN POINT LOAD 1M FROM WALL. WIND LOAD ON THE WALL SHEETING DURING CONSTRUCTION HAS NOT BEEN TAKEN INTO ACCOUNT. WALL SHEETING SHALL NOT BE PLACED UNTIL AFTER BACKFILLING TO THE RETAINING WALL & COMPACTION OF BACKFILL HAS OCCURRED.
 3. ALL RETAINING WALLS FOR THIS PROJECT ARE TO BE TYPE 'B' WALLS. THESE RETAINING WALLS HAVE ALSO BEEN DESIGNED FOR ADDITIONAL LOADS ARISING FROM SINGLE OR DOUBLE STOREY DWELLING FOOTINGS ADJACENT TO THE WALL. THESE LOAD CASES ARE ILLUSTRATED IN THIS DRAWING.

DESIGN PARAMETERS:

RETAINED SOIL: NOTE, THIS INFORMATION SHALL BE VERIFIED BY THE GEOTECHNICAL ENGINEER.

- D1. BACKFILL MATERIAL IS TO BE IMPORT PERTH SAND, MEDIUM DENSE. THE USE OF ALTERNATIVE BACKFILL MATERIALS WILL REQUIRE THE APPROVAL FROM THE SUPERINTENDENT.
- D2. EFFECTIVE SOIL FRICTION ANGLE = 34 degrees
- D3. DENSITY OF BACKFILL MATERIAL = 18 kN/m³
- D4. SOIL BEARING CAPACITY = 150 KPa. IF AN ALLOWABLE BEARING PRESSURE OVER 150 KPa IS REQUIRED, SEPARATE TESTING AND VERIFICATION WILL BE NECESSARY.

OTHER:

- D5. ANY IMPORTED STRUCTURAL FILL TO SUPPORT FOOTINGS SHALL COMPLY WITH THE REQUIREMENTS IN NOTE B3.
- D6. FOOTINGS SHALL BE TAKEN DOWN TO THE DEPTHS INDICATED IN KC00334.012-C950-C952 BELOW UNDISTURBED GROUND LEVEL.

BACKFILLING NOTES:

- B1. STABILIZED IMPORT FILL SHALL CONSIST OF EARTH WORKING SAND (CLEAN AND POROUS); FREE FROM CLAY AND ORGANIC MATERIAL; BOUND WITH 5% CEMENT (PORTLAND CEMENT OR APPROVED EQUIVALENT BY SUPERINTENDENT) PERCENTAGE BASED ON VOLUME.
- B2. STRUCTURAL IMPORT FILL SHALL HAVE A PLASTICITY INDEX LESS THAN 5%.
- B3. IN ALL CASES, THE BACKFILL AND COMPACTION SHALL BE SELECTED SUCH THAT, ONCE COMPACTED, THE STANDARD OF COMPACTION CAN BE MEASURED USING A STANDARD PERTH PENETROMETER. MIN 95% MMD FOR COHESIVE SOILS AND 70% MIN DENSITY INDEX FOR COHESION-LESS SOILS.
- B4. BACKFILLING BEHIND THE RETAINING WALLS IS NOT PERMITTED UNTIL 4 DAYS AFTER THE WALLS HAVE BEEN BUILT.
- B5. COMPACTION OF BACKFILL SHALL BE DONE USING A STEEL PLATE COMPACTOR TO ACHIEVE THE COMPACTION REQUIREMENTS STATED IN NOTE B3.
- B6. TESTING OF COMPACTED BACKFILL SHALL BE CARRIED OUT BY A NATA REGISTERED LABORATORY AT THE RATE OF ONE TEST PER 200 CUBIC METRES PLACED RANDOMLY THROUGHOUT THE LENGTH AND DEPTH.

DRAINAGE:

- D1. SUBSOIL DRAINAGE PIPE MATERIAL AND GEOFABRIC MATERIAL SHALL COMPLY WITH THE CONTRACT SPECIFICATION DOCUMENTS FOR THIS PROJECT.
- D2. METAL BEDDING FOR THE SUBSOIL DETAIL SHALL COMPLY WITH THE CONTRACT SPECIFICATION DOCUMENTS AND BE APPROVED BY THE SUPERINTENDENT PRIOR TO INSTALLATION.

ANTI-GRAFFITI REQUIREMENTS:

- A1. RETAINING WALLS TO BE ANTI-GRAFFITI COATED (NON-SACRIFICIAL).
- A2. AS-CONSTRUCTED OF ANTI-GRAFFITI COATING SHALL BE PROVIDED TO THE SUPERINTENDENT.
- A3. CLEANING SPECIFICATION SHALL BE PROVIDED PRIOR TO THE APPLICATION OF THE ANTI-GRAFFITI COATING.

LIMESTONE RETAINING WALL NOTES:

- R1. REMOVE ALL DEBRIS FROM EXISTING SOIL AND USE ONLY CLEAN SAND FILL REFER TO NOTE D1 FOR SUITABLE BACKFILL MATERIAL AND R4 FOR FOUNDATION COMPACTION.
- R2. RUBBLE SHALL NOT BE USED TO FILL Voids OR FOR USE AS MATERIAL FOR CONSTRUCTION WITHOUT THE WRITTEN APPROVAL FROM THE SUPERINTENDENT.
- R3. NO HEAVY CONSTRUCTION OR COMPACTION EQUIPMENT SHALL BE ALLOWED OR OPERATED WITHIN HEIGHT 'H' FROM THE REAR OF WALL OR 1000mm (WHICHEVER IS GREATER), UNLESS THE LOADS ARE COMPLIANT WITH NOTE R2.
- R4. COMPACTION OF SOIL UNDERNEATH FOUNDATIONS BLOCKS SHALL BE 95% MAX MOD DRY DENSITY (COHESIVE SOILS) THROUGH A MINIMUM DEPTH OF 600mm; PLACED IN LAYERS OF 300mm. FLOOR LOADINGS UP TO 120 KPa AND ISOLATED PAD OR STRIP FOOTING LOADINGS UP TO 100 KPa SHALL BE 98% MAX MOD DRY DENSITY (COHESIVE SOILS).
- R5. IF CLAY OR SUB-SOIL CONDITION OTHER THAN SAND IS ENCOUNTERED IN THE LOCATION IN WHICH FOUNDATION BLOCKS / FOOTINGS ARE TO BE PLACED; THE CONTRACTOR SHALL REFER TO NOTE R6 AND DETAIL KC00334.012-C952.
- R6. WHERE CLAYEY MATERIAL IS FOUND IN THE PROPOSED LOCATION FOR FOUNDATION / FOOTING PLACEMENT, THE CONTRACTOR SHALL EXCAVATE 600MM AND REPLACE THE CLAYEY MATERIAL WITH 5% STABILIZED IMPORT FILLAS PER NOTE B1.
- R7. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE COMPACTION WILL NOT HAVE ADVERSE EFFECT OF THE RETAINING WALLS.
- R8. A LICENSED SURVEYOR SHALL BE USED BY THE CONTRACTOR TO SETOUT ALL WORKS ASSOCIATED WITH RETAINING WALL CONSTRUCTION.
- R9. ALL BLOCKS FOR RETAINING WALLS SHALL BE RECONSTITUTED LIMESTONE BLOCKS WITH A MINIMUM DRY DENSITY OF 1.8t/m³. THE STANDARD BLOCK SIZE SHALL BE 350mmX350mmX1000mm (WxHxL) WITH A MINIMUM COMPRESSIVE STRENGTH OF 5MPa.
- R10. ALL BLOCKS SHALL BE SOLID, WHOLE CUT OR SAW CUT.
- R11. ALL VISIBLE LIMESTONE BLOCKS (INCLUDING THE FRONT, TOP AND REAR) SHALL BE OF CRÈME COLOUR, HIDDEN STONES SHALL BE GREY OR CRÈME IN COLOUR. VISIBLE LIMESTONE BLOCKS SHALL BE POINTED WITH CRÈME COLOURED MORTAR AS SHOWN IN DETAIL1 IN KC00334.012-C950.
- R12. THE CONTRACTOR SHALL PLACE INTERLOCKING KEYSTONES THROUGHOUT THE WALLS AS SHOWN IN KC00334.012-C950.
- R13. MORTAR MIX TO BE 1:1:6. CEMENT:LIME:SAND FOR BOTH TYPE A AND B WALLS. ALL LIMESTONE BLOCKS SHALL BE FULLY CEMENTED IN PLACE IN ACCORDANCE WITH THE DETAILS SHOWN IN KC00334.012-C950.
- R14. ALL BED AND PERPENDICULAR JOINTS ARE TO BE FULLY MORTARED INCLUDING CREAM MORTAR TO FOOTING BLOCKS AND BACK OF THE TOP COURSE.
- R15. CONTROL JOINTS (CJ) SHALL BE CONSTRUCTED WITHIN THE RETAINING WALL WHEN THE ANGLE BETWEEN FACES OF TWO WALLS EXCEEDS 180 degrees. THE CJ IS TO BE LOCATED ON ONE SIDE OF THE CHANGE OF DIRECTION, AT A DISTANCE AWAY FROM THE DIRECTION OF CHANGE EQUAL TO THE WIDTH OF THE WALL AND SHALL BE 20mm WIDE. SUITABLE FILLING MATERIALS AS PER NOTE R17.
- R16. FILLING MATERIALS FOR CJ SHALL BE 250mm DIA. FOAM CLOSED CELL BACKING ROD COVERED WITH A 25mm DEEP MASTIC OF COLOUR TO MATCH WALL MORTAR OR A POLYSTYRENE SHEETING OR EXPANDED POLYTHRYENE COVERED WITH A 25mm DEEP MASTIC COLOUR TO MATCH WALL MORTAR. DRAPE A 1000mm WIDE STRIP OF BIDUD FILTER CLOTH OVER THE REAR OF THE JOINTS FOR THE FULL HEIGHT OF THE WALL.
- R17. THE CONTROL JOINTS SHALL PROPERLY FORMED IN A STRAIGHT WALL AT 20m CENTERS MAX, AT CORNER LOCATIONS AS PER CORNER CONTROL JOINT DETAIL AS SHOWN KC00334.012-C950, AND AT SIGNIFICANT CHANGES IN WALL HEIGHT (> 700mm STEP), REQUIREMENT FOR A CONTROL JOINT SHALL BE DETERMINED ON SITE IN EACH CASE. THE CONTRACTOR SHALL FORM THE VERTICAL JOINT TO BE FORMED THROUGH THE FULL HEIGHT AND WIDTH OF THE WALL. NO BRIDGING ACROSS THE FORMED JOINT IS PERMITTED. PROVIDE BACKING STRIP AND SEAL AS PER CONTROL JOINT DETAIL AND REMAINDER OF JOINT TO BE CLEAR.
- R18. ALL WALLS EXCEEDING A STRAIGHT LENGTH OF 20m SHALL HAVE CONTROL JOINTS SPACED AT DISTANCES NO GREATER THAN 20m.
- R19. FENCE POSTS TO BE LOCATED MIN 1000mm FROM A CJ. IF A POST IS REQUIRED WITHIN 1000mm OF A CJ, INSTALL POST TO BOTH SIDES OF A CJ WITHIN 350mm.
- R20. ALL LOOSE MATERIAL IS TO BE REMOVED FROM THE BLOCKS AND WETTED DOWN PRIOR TO BEDDING IN MORTAR.
- R21. THE MAX VOID RATIO IS TO BE 20%.
- R22. ALL DIMENSIONS ARE SHOWN AS WIDTH X HEIGHT X DEPTH (LENGTH).
- R23. THE CONTRACTOR SHALL INFORM THE SUPERINTENDENT UPON COMPLETION OF THE CONSTRUCTION AND BACKFILL. WRITTEN CERTIFICATION SHALL VERIFY THE COMPLETED WORKS HAVE BEEN CARRIED OUT IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS.
- R24. UPON COMPLETION OF THE RETAINING WALLS AND LOT LEVELLING, FENCING SHALL BE ERECTED. IN AREAS WHERE THE EXPOSED WALL HEIGHT EXCEEDS 900mm, AND NO OTHER FENCING IS PRESCRIBED, SAFETY FENCING SHALL BE PLACED IN ACCORDANCE WITH KC00334.012-C950.
- R25. IN AREAS WHERE THE WALL HEIGHT EXCEEDS 900mm, 'WARNING' SIGNS SHALL BE INSTALLED WITH WORDING AS PER EXAMPLE BELOW. THE CONTRACTOR SHALL INSTALL ONE SIGN PER FIVE LOTS WITH BLACK LETTERING ON A YELLOW BACKGROUND.

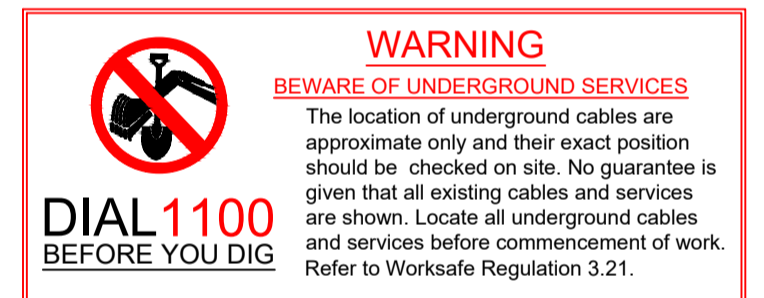
DANGER
DO NOT WALK ON OR NEAR THE RETAINING WALLS.
YOU DO SO AT YOUR OWN RISK.
RISK OF SERIOUS INJURY MAY OCCUR FOR WHICH
THE OWNER, DEVELOPERS AND CONTRACTORS
WILL NOT ACCEPT LIABILITY.

NOTES:

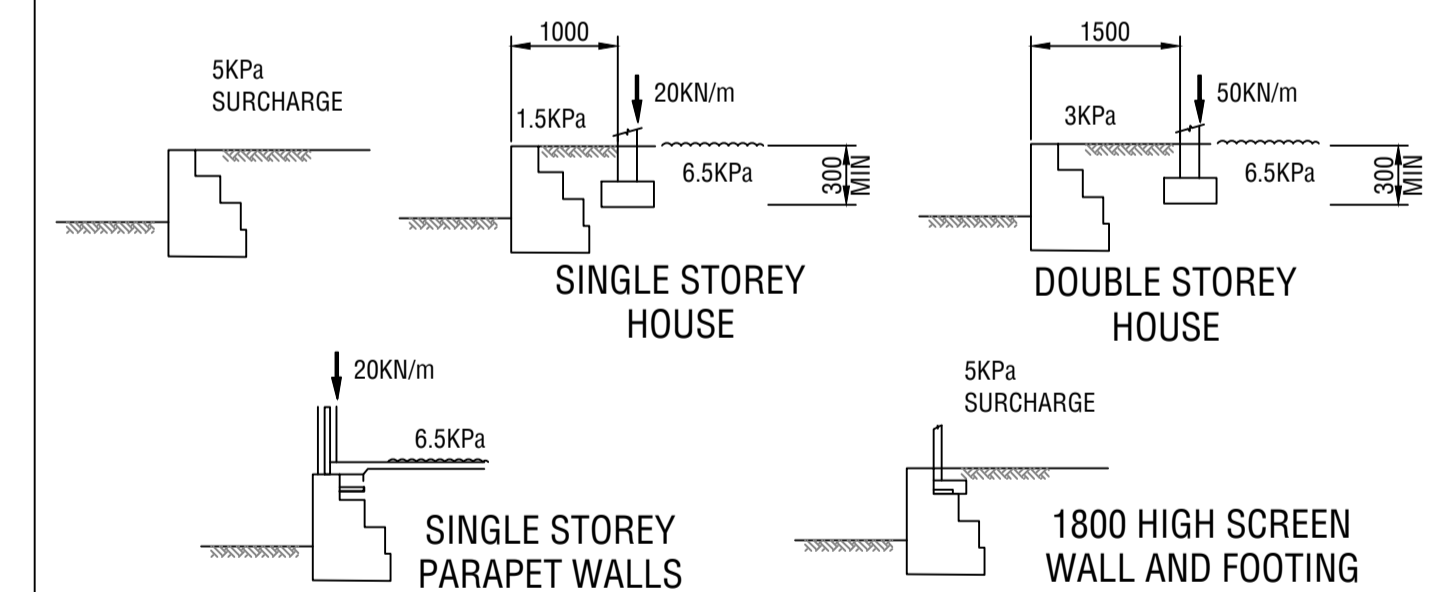
1. TYPE 'A' WALLS ARE THOSE WHERE THE LOT BOUNDARY IS ON REAR OF THE TOP OF THE BLOCK (AS SHOWN).
2. TYPE 'B' WALLS ARE THOSE THAT ARE CONTAINED WHOLLY WITHIN THE LOT.
3. REFER DETAIL ON KC00334.012 - C952 FOR FENCING DETAILS.

FENCE NOTES:

1. FENCE FOOTINGS INTEGRAL WITH WALL
2. 1.8m HIGH FENCE FIXED TO POSTS AND PIERS TO MANUFACTURERS SPECIFICATION.



THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT HAS BEEN CERTIFIED BY A PRACTICING STRUCTURAL ENGINEER. I/WE CERTIFY THAT THE WALLS SHOWN HAVE BEEN DESIGNED TO SUPPORT EFFECTIVE HEIGHT H PLUS THE LOAD CASES SHOWN BELOW.



FOR OTHER LOAD CASES, CERTIFICATION MUST BE OBTAINED FROM AN INDEPENDENT PRACTICING STRUCTURAL ENGINEER.

BLOCKS MAY NOT BE ADDED TO THE TOP OF RETAINING WALLS AND GROUND LEVELS MAY NOT BE ALTERED IN THE VICINITY OF THE WALLS FOLLOWING THEIR COMPLETION WITHOUT THE APPROVAL OF AN INDEPENDENT PRACTICING STRUCTURAL ENGINEER.

FENCES AND WALLS MAY NOT BE ADDED TO THE TOP OF RETAINING WALLS WITHOUT CERTIFICATION FROM AN INDEPENDENT PRACTICING STRUCTURAL ENGINEER, TO ENSURE AMONGST OTHER THINGS THAT THE LOADING CAUSED BY THE FENCE OR WALL IS SATISFACTORILY TRANSMITTED TO THE RETAINING WALL WITHOUT COMPROMISING THE INTEGRITY OF THE RETAINING WALL.

CERTIFIED NER ENGINEER _____ COMPANY _____ DATE _____

ISSUED FOR CONSTRUCTION

REV No.	DATE	DRAFTING CHECK	DESIGN REVIEW	REV'D P.MGR	APP'D P.DIR	AMENDMENT
1	06/07/21	CK	CK			AMMENDMENTS TO THE RETAINING WALLS INFO
0	21/04/21	CK	CK			ISSUED FOR CONSTRUCTION

REV No.	DATE	DRAFTING CHECK	DESIGN REVIEW	REV'D P.MGR	APP'D P.DIR	AMENDMENT

kctt

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CLIENT PROGRESS DEVELOPMENTS PTY LTD			
PROJECT BROOKLANDS STAGE 1B HENLEY BROOK			
DRAFTER F.BOROVIC	DRAFTING CHECK C.KLEYWEG	REVIEWED PROJECT MANAGER	APPROVED PROJECT DIRECTOR
DESIGNED F.BOROVIC	DESIGN REVIEW C.KLEYWEG		

TITLE STANDARD DETAILS LIMESTONE RETAINING WALL SHEET 4 OF 4					
SHEET A1	DATUM PC694	WAPC No. 160183 SCALE AS SHOWN	PROJECT No. KC00334.001	DRAWING No. C953	REVISION 1