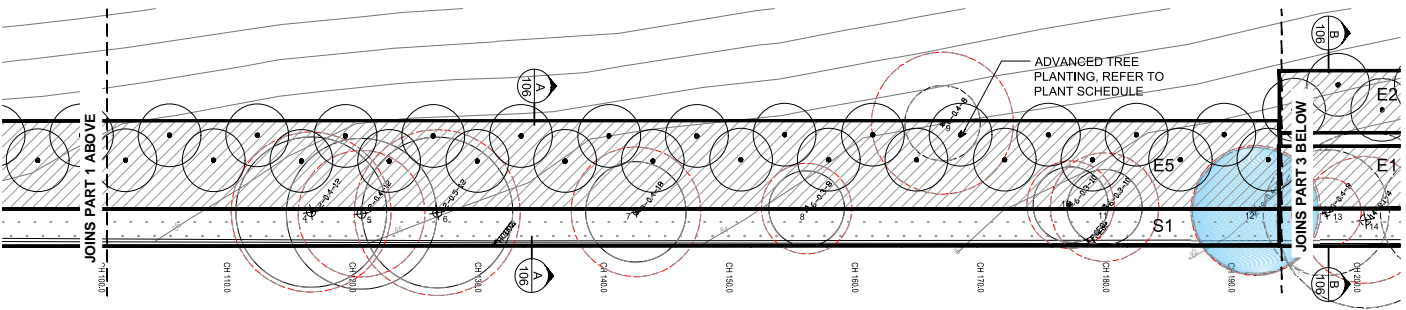
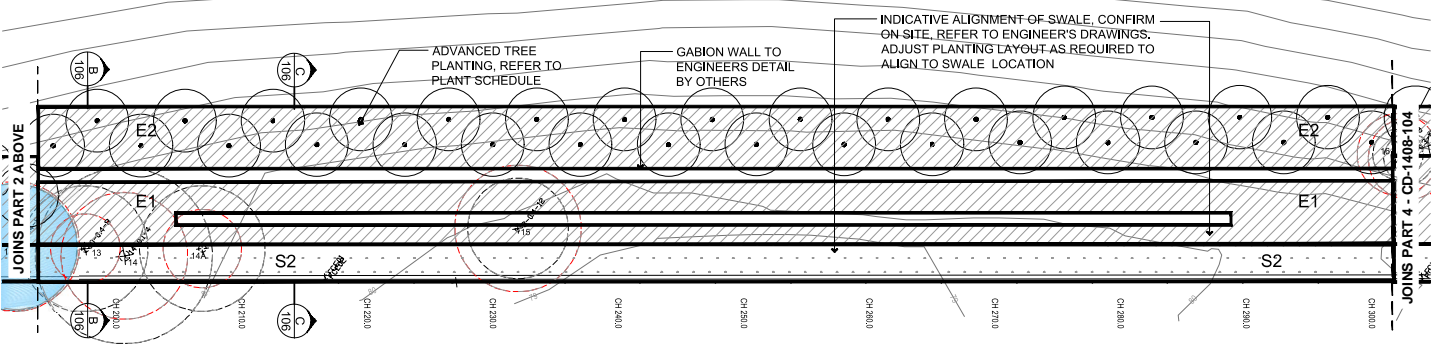


01 PLAN: PART 1
SCALE: 1:200 @ A1



02 PLAN: PART 2
SCALE: 1:200 @ A1



03 PLAN: PART 3
SCALE: 1:200 @ A1

LEGEND

- BOUNDARY
- EXISTING TREES TO BE RETAINED
TPZ - REFER ARBORISTS REPORT
- EXISTING TREES - POSSIBLE RETENTION
REFER ARBORISTS REPORT
- EXISTING TREES TO BE REMOVED
REFER ARBORISTS REPORT
- TREE PLANTING
REFER TO PLANT SCHEDULE
- SWALE PLANTING
REFER TO PLANT SCHEDULE
- EMBANKMENT PLANTING
REFER TO PLANT SCHEDULE
- BUND PLANTING - TOP
REFER TO PLANT SCHEDULE
- BUND TERRACE PLANTING
REFER TO PLANT SCHEDULE
- BUND PLANTING TERRACES
REFER TO PLANT SCHEDULE
- BUND SETBACK PLANTING
REFER TO PLANT SCHEDULE

NOTES

GENERAL
Read drawing in conjunction with the plans, specification and details.

Refer to drawings:
 CD-1408-103 Landscape Plan - Parts 1 to 3
 CD-1408-104 Landscape Plan - Part 4 to 6
 CD-1408-105 Landscape Plan - Part 7 and Specification
 CD-1408-106 Typical Sections
 CD-1408-107 Plant Schedule
 CD-1408-108 Landscape Details

Refer to Engineers' Drawings for precise information regarding finished levels, retaining walls and bund, fences and drainage details.

SERVICES
Before landscape work is commenced, Landscape Contractor is to establish the positions of all service lines and protect them from damage during construction.

SETOUT
All setout to be approved by Superintendent prior to construction. Where no centres are shown for planting, space plants evenly to best fill the beds shown.

These plans are referred to in certificate no. 15436 approved by:

LDC
Eric Hausfeld
Accredited Certifier
Registration No: SPB 2416
Categories: B1, C1, C2, C3, C4, C6, C15 & D1

Land Development Certificates
www.LDC.com.au

NO	DESCRIPTION	DATE
C	AMEND TO REVISED BUND DESIGN	02/11/2018
B	ISSUE FOR CC	16/06/2016
A	ISSUE FOR APPROVAL	03/06/2016

Sturt Noble Associates
Suite 91, L5, 330 Wattle St
Ulbrino NSW 2007
T: 02 9711 3744
W: www.sturt-noble.com.au
landscape architecture
environmental & urbandesign

PROJECT
CSR HORSLEY PARK

CLIENT
CALIBRE CONSULTING

DRAWING
SOUTHERN BOUNDARY
LANDSCAPE PLAN - PARTS 1 TO 3

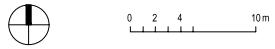
DRAWING NUMBER
CD-1408-103

SCALE
1:200 @ A1

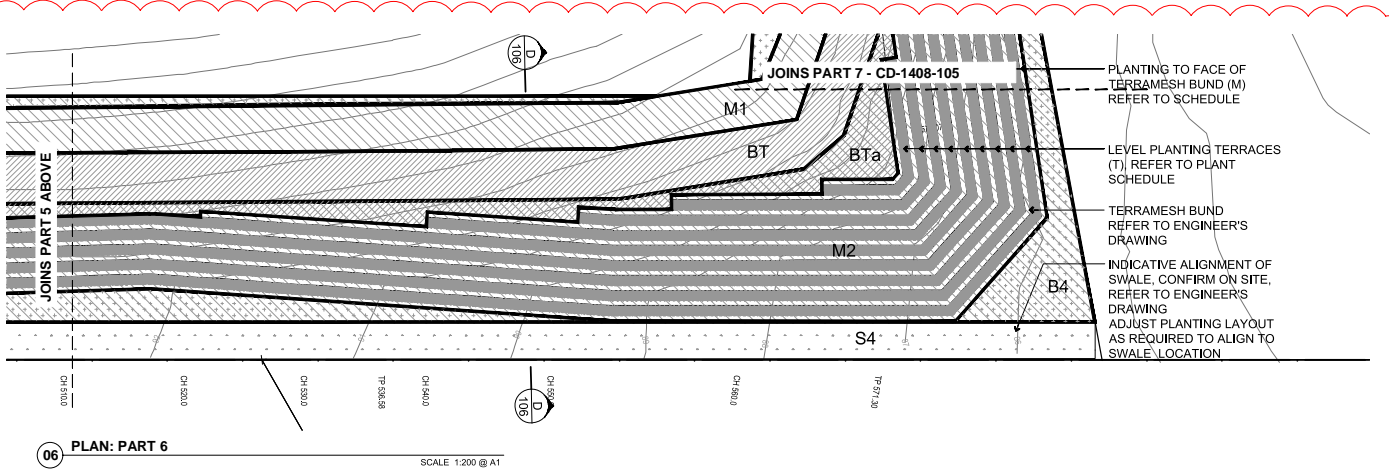
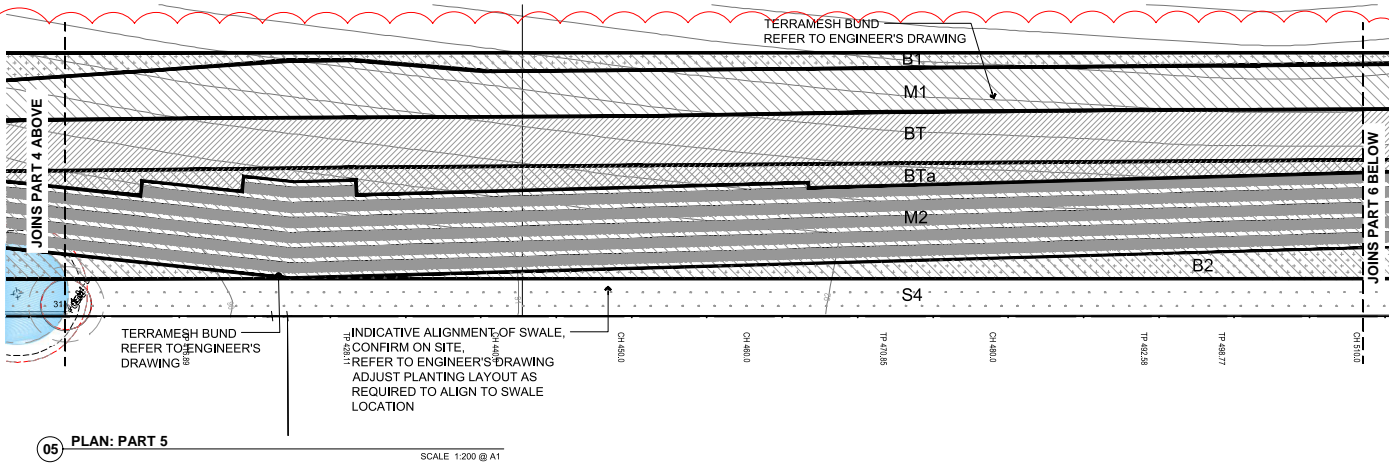
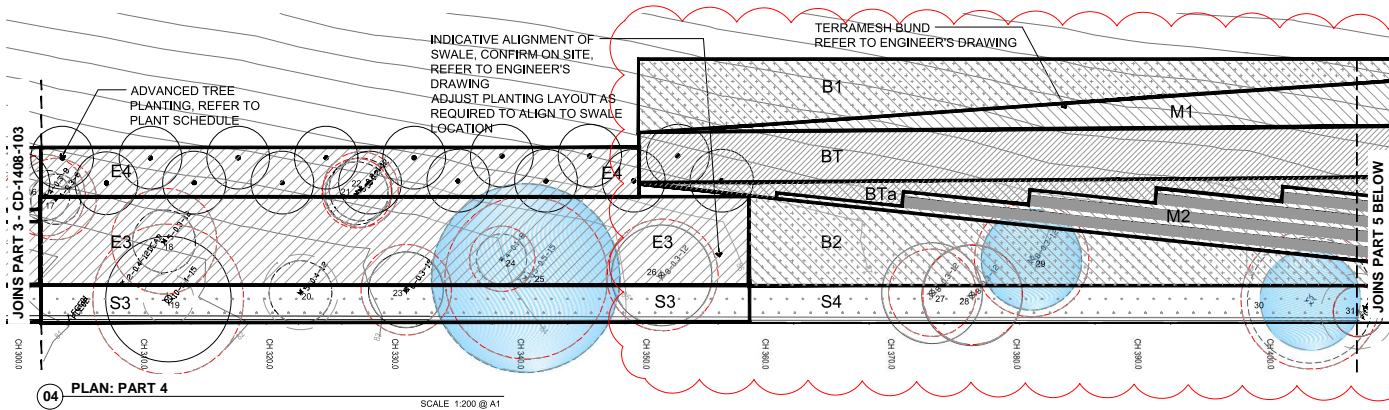
DATE
hp/bx

DESIGNED
hp

DRAWN
gs



ACN: 164 245 514 ABN: 99 164 245 514
THIS DOCUMENT SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT CONTRACTS, SPECIFICATIONS, CONDITIONS OF SALE AND DRAWINGS, COPYRIGHT OF THIS DRAWING IS RESERVED BY STURT NOBLE ASSOCIATES PTY LTD.



LEGEND

- BOUNDARY
- EXISTING TREES TO BE RETAINED
TP2 - REFER ARBORISTS REPORT
- EXISTING TREES - POSSIBLE RETENTION
REFER ARBORISTS REPORT
- EXISTING TREES TO BE REMOVED
REFER ARBORISTS REPORT
- TREE PLANTING
REFER TO PLANT SCHEDULE
- SWALE PLANTING
REFER TO PLANT SCHEDULE
- EMBANKMENT PLANTING
REFER TO PLANT SCHEDULE
- BUND PLANTING - TOP
REFER TO PLANT SCHEDULE
- BUND TERRAMESH PLANTING
REFER TO PLANT SCHEDULE
- BUND PLANTING TERRACES
REFER TO PLANT SCHEDULE
- BUND SETBACK PLANTING
REFER TO PLANT SCHEDULE

NOTES

GENERAL
Read drawing in conjunction with the plans, specification and details.

Refer to drawings:
CD-1408-103 Landscape Plan - Parts 1 to 3
CD-1408-104 Landscape Plan - Part 4 to 6
CD-1408-105 Landscape Plan - Part 7 and Specification
CD-1408-106 Typical Sections
CD-1408-107 Plant Schedule
CD-1408-108 Landscape Details

Refer to Engineers' Drawings for precise information regarding finished levels, retaining walls and bund, fences and drainage details.

SERVICES
Before landscape work is commenced, Landscape Contractor is to establish the positions of all service lines and protect them from damage during construction.

SETOUT
All setout to be approved by Superintendent prior to construction. Where no centres are shown for planting, space plants evenly to best fill the beds shown.

These plans are referred to in certificate no. 15436 approved by:

LDC
Eric Hausfeld
Accredited Certifier
Registration No: BPB 2416
Categories: B1,C1,C2,C3,C4,C6,C8,C15 & D1

Land Development Certificates
www.LDC.com.au

NO	DESCRIPTION	DATE
D	AMEND TO REVERSE BUND DESIGN	02/11/2018
C	COORDINATE ENGS DRAWINGS, REVERSE BUND DESIGN	16/10/2018
B	ISSUE FOR CC	16/06/2018
A	ISSUE FOR APPROVAL	06/06/2018

Suite 91, LS, 330 Wattle St
Ultimo NSW 2007
T: 02 9211 3744
W: www.sturtnoble.com.au
landscape architecture
environmental & urban design

Sturt Noble Associates

PROJECT
CSR HORSLEY PARK

CLIENT
CALIBRE CONSULTING

DRAWING
SOUTHERN BOUNDARY LANDSCAPE PLAN - PARTS 4 TO 6

DRAWING NUMBER
CD-1408-104

SCALE
1:200 @ A1

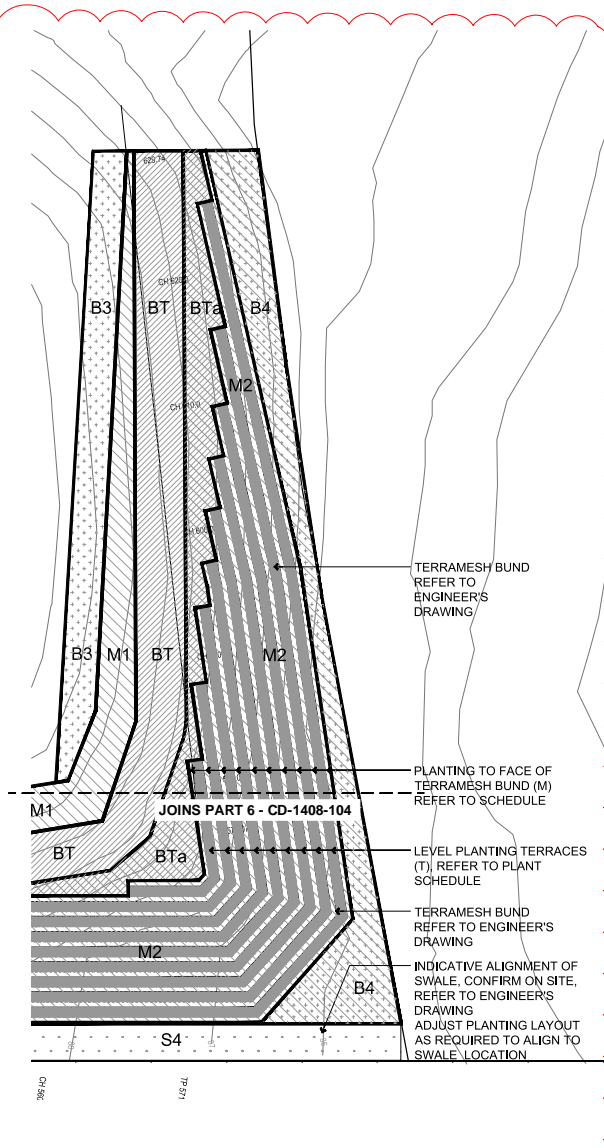
DATE
D

DRAWN
hp/bx

CHECKED
hp

DIRECTOR
gs

0 2 4 10m



07 PLAN: PART 7

SCALE 1:200 @ A1

SPECIFICATION

GENERAL
Read drawings in conjunction with the specification and details.
Refer to Engineers Drawings for precise information regarding, finished levels, grading, embankments, retaining walls, fences and drainage details.

SERVICES
Before landscape work is commenced, Landscape contractor is to establish the positions of all service lines and protect them from damage during construction.

TREE PROTECTION
Retain & protect all existing trees unless specifically noted for removal. Refer Arborists report for tree protection measures and Tree Protection Zones (TPZ).

Do not excavate or fill within the root zone of existing trees to be retained, unless approved by Arborist.

Trees must not be removed or topped or otherwise damaged, unless specified and approved to do so as given by the Superintendent.

WEED ERADICATION
Eradicate all weeds from planting areas prior to planting operations. Apply 'Roundup' or equivalent glyphosate herbicide to all weeds to manufacturer's recommendations and rates, two weeks prior to commencement of soil works. Ensure that all weed growth has fallen prior to commencement of soil works and reapply herbicide as necessary. Remove all weed material from site.

SETOUT
All setout to be approved by Superintendent prior to construction. Where no centres are shown for planting, space plants evenly to best fill the beds shown.

DRAINAGE
Refer to Engineers drawings for drainage details. Notify Superintendent of all soil or drainage conditions encountered during planting operations which the Contractor considers detrimental to plant growth. Include a proposal for the correction for approval before proceeding with work.

Tree Pits
Ensure tree pits drain adequately. Add clay breaker to heavy soils. Where required to drain pits, install sub-soil drainage to the base of tree pits and connect to site drainage system.

SWALE
Swale alignment indicative only. Confirm location on site, refer to Engineers drawings. Adjust planting layout as required to align with swale location.

SOIL TESTING
Prior to soil preparation, Contractor to investigate existing site soil to determine suitability as planting medium.

Undertake soil testing to all proposed planting areas, Swale, Embankments, Gabions, Terramesh bund and soil stockpiles.

Allow for soil testing by an approved soil testing laboratory with demonstrated horticultural experience. Testing to confirm soil preparation specification subject to nature of site soil & stockpiled material.

Testing shall be a full soil test including plant available nutrients, Phosphorous saturation index, PH, salinity, texture, estimated clay content, permeability, organic matter and all other tests to enable the soil testing laboratory to prepare a detailed amendment strategy to provide soils suitable for the project and plant selection.

Contractor to provide soil test results and confirm soil preparation method with Superintendent prior to carrying out soil works.

SOIL PREPARATION
Confirm soil preparation specification in line with results of soil testing.
Amend site soil as specified in the results of soil testing.

SOIL SPECIFICATION
Provide planting soil to the locations and depths as specified. Soil to be '90 for purpose' sandy loam to clay loam equal to that described in Specification D1. Mass planting soil. Soils for Landscape Development by Simon Leake and Elke Haage.
pH - standard range
pH - phosphorous sensitive plants

A. Swale:
Total soil depth available for planting to swale to be minimum 1m including existing site soil.
Undertake soil preparation as defined by the results of soil testing.
Install compost & amendments as required and cultivate into existing site soil to minimum 500mm depth.

B. Bund:
Soil installation to bund & terramesh to be undertaken during construction of the bund. Confirm installed soil is suitable for planting works, prior to commencing works.
Terramesh: Install 500mm depth planting medium to meet specification D1. Install topsoil behind terramesh and grade to manufacturers specification. Compact lightly. Overfill by 5% to allow for settlement.

Bund terraces: Provide 500mm depth planting medium to meet specification D1 to level terraces to bund.

Bund top: Planting medium to meet specification D1. Provide minimum 1000mm depth planting medium to bund top.

C. Retained embankment (Gabions):
Provide minimum depth 600mm of planting medium to extent of retained embankment. Planting soil to meet requirements of specification D1.

D. Graded embankment:
Rip subgrade to 300mm depth.
Provide minimum depth 500mm of planting medium.
Install compost & amendments as required and cultivate into existing site soil to achieve minimum 500mm depth of planting medium to meet specification D1.

E. Pocket planting to tree rootzone:
Pocket plant within the rootzone of existing trees, do not cultivate these areas.
Incorporate compost equal to the volume of the rootball into the planting hole.

F. Planting soil to make up grades:
Where amended site soil is not suitable and as required to make up grades, install soil mix to meet specification D1.

G. Tree pits:
For advanced trees, excavate as shown on the details. Backfill tree pits with soil mix as detailed. Create watering dish to base of trees.

JUTE MESH
After all soil works and mulching, install jute mesh to planting areas steeper than 1:3 (other than terramesh bund) and as directed by Superintendent, refer to detail.
Install Geofabrics 'Jute Mesh' or equivalent.

Remove any rocks or dodds from the surface before laying matting. Apply topsoil & mulch as specified. Grade the surface carefully so that the fabric remains in contact with the soil. The matting shall be laid loosely on the surface and not stretched.

The up-slope ends edges of the matting shall be slotted into a trench 150 mm wide by 150 mm deep and pinned to the base of the trench at 250 mm centres. The trench shall be backfilled with soil and compacted by foot.

Lay matting in 'single fashion' with the end of the up-slope roll overlapping the next roll placed. Overlap matting at least 100mm at the sides and 300mm at the ends of runs and the overlap facing down slope.

The matting shall be pinned along the sides of each run at min. 500mm centres and along the middle of each run at min. 1m centres. End overlaps shall be pinned at 200mm centres.

The pins shall be 'U' shaped 8 gauge 4mm wire. 50 mm wide with 150-300mm long legs.

PLANT MATERIAL
It is the Contractor's responsibility to provide quality control on all plant stock delivered to and stored on site in compliance with the following. Reject any plants not complying and notify the Superintendent.

A. Trees shall be grown and maintained to achieve compliance with NATSPEC - Specifying Trees, a guide to assessment of tree quality (2003) and AS 2303.2015, Tree Stock for Landscape Use.

B. Trees to be minimum 1m high at planting.

C. All plants shall have a normal habit of growth and shall be sound, healthy, vigorous and free from insect infestations. Any tree or shrub with a weak, thin trunk not capable of supporting itself when planted in the open will not be accepted.

D. Plants shall have been grown in containers of the size stated on drawings, and shall have sufficient roots to hold earth together intact after removal from containers without being rootbound.

E. Plants shall have large healthy root systems, with no evidence of root curl, restriction or damage.

F. Plants that meet the measurements specified but do not possess a normal balanced height and growth will be rejected.

G. Plants shall be hardened off, not soft or forced, and suitable for planting in the natural climate conditions existing at the site.

PLANTING
A. Protect plants at all times from sun or drying winds. Plants that cannot be planted immediately on delivery shall be kept in the shade, well protected and adequately watered. Plants shall be handled in such a manner to avoid any damage to the plant. After removing plant from container, scarify side of rootball to prevent rootbound condition.

B. Notify Superintendent of all soil or drainage conditions encountered during planting operations which the Landscape Contractor considers detrimental to plant growth.

C. Thoroughly water the plants before planting begins and immediately after planting.

D. When the plant is in its final position in its hole or bed the top soil level of the plant root ball shall be level with the finished surface of the soil surrounding the hole or beds

E. Plants shall be placed in the centre of the hole and planted. Backfill with topsoil mixture. Lightly tamp down the mixture and water to eliminate air pockets. Smooth planting areas to conform to specified grades after full settlement has occurred. An application of an approved slow release type fertiliser shall be placed at the time of each plant in accordance with the manufacturers written specification.

F. Tree Planting: Install advanced trees as detailed. Create watering dish to base of trees.
Any tree with a weak, thin trunk not capable of supporting itself when planted in the open will not be accepted.
Advanced trees to achieve 7m height prior to certification.

G. Plant mixes: Install planting mixes to the areas and at the spacings shown, in neat rows, ensuring complete coverage. Spacings shown on drawings are triangular spacings unless otherwise noted.

SWALE
Adjust planting layout to suit swale location on site. Install plants indicated with * to invert of swale. Locate trees outside of invert. Do not plant trees to invert / central metre strip of 3m wide swale. Groundcovers to this zone only.

POCKET PLANTING
Existing trees
To avoid root disturbance, pocket plant within the dripline of existing trees. Do not cut, fill or machine cultivate within the dripline of existing trees, unless approved by Arborist.
Pocket plant to these areas. Incorporate compost, volume equal to the rootball, into site soil at the time of planting.

MULCHING
At completion of planting areas shall be mulched with 75mm depth of recycled mulch equal to ANL Forest Blend.

Terramesh bund: DO NOT mulch terramesh bund.

Place after the preparation of the planting bed, planting and all other work. Place mulch clear of plant stems, and take to an even surface flush with the surrounding finished levels.

MAKING GOOD
Make good all planting & turf areas damaged during construction works.

IRRIGATION
A fully automatic irrigation system shall be installed to all planting areas & trees. System to provide complete coverage to all areas.

All pipework and control cable shall be trenching in planting beds and installed under paving. No exposed pipework/cable will be allowed.
System type and construction to be in accordance with Water Board regulations, Supply full details at tender stage.

MAINTENANCE
Maintain the works in good condition for the maintenance period. Works shall include but not be exclusive to weeding, checking and making good of irrigation, drainage and tree ties, application of fertiliser, removal of litter from plant beds and replacement of dead and dying plants.

Maintain all plants and planted areas in optimum growing condition and appearance.

- Water all plants as required to ensure active growth keeping areas moist but not saturated.
- Install irrigation system as required to maintain soil moisture during the establishment period.
- Apply maintenance period fertiliser in accordance with the manufacturer's specifications. Exercise proper caution and take measures necessary to avoid plant burn.
- Keep planting areas free of weeds and undesirable grasses. Remove the entire root system. Dispose of all weeds in appropriate containers. No chemical weed killer will be used unless authorised by the Superintendent.

PLANT MATERIAL
Each area shall be kept clear of fallen leaves, branches and rubbish. Any soil erosion or subsidence shall be made good immediately.

- Each area shall be kept clear of fallen leaves, branches and rubbish. Any soil erosion or subsidence shall be made good immediately.
- Inspect all plants for disease or insect damage weekly. Treat affected material immediately.
- Remove damaged or diseased growth from plants.
- Immediately replace any failed or damaged plants. Replacement shall be of equal size and species as the original plants.

Re-set to proper grades or upright position any plants that are not in their proper growing position.

Pruning Plants: Prune plants to repair mechanical damage, promote dense hedge growth, to improve plant shape and form, or to clear footpaths.

Plants in terramesh to achieve maximum 80mm trunk width to avoid damaging the structure of the bund. Remove any shrubs within the mesh which exceed this size. Replace with smaller growing species selected from the plant schedule.

LEGEND

- BOUNDARY
- EXISTING TREES TO BE RETAINED
TPZ - REFER ARBORISTS REPORT
- EXISTING TREES - POSSIBLE RETENTION
REFER ARBORISTS REPORT
- EXISTING TREES TO BE REMOVED
REFER ARBORISTS REPORT
- TREE PLANTING
REFER TO PLANT SCHEDULE
- SWALE PLANTING
REFER TO PLANT SCHEDULE
- EMBANKMENT PLANTING
REFER TO PLANT SCHEDULE
- BUND PLANTING - TOP
REFER TO PLANT SCHEDULE
- BUND TERRAMESH PLANTING
REFER TO PLANT SCHEDULE
- BUND PLANTING TERRACES
REFER TO PLANT SCHEDULE
- BUND SETBACK PLANTING
REFER TO PLANT SCHEDULE

NOTES

GENERAL
Read drawing in conjunction with the plans, specification and details.

Refer to drawings:
CD-1408-103 Landscape Plan - Parts 1 to 3
CD-1408-104 Landscape Plan - Part 4 to 6
CD-1408-105 Landscape Plan - Part 7 and Specification
CD-1408-106 Typical Sections
CD-1408-107 Plant Schedule
CD-1408-108 Landscape Details

Refer to Engineers Drawings for precise information regarding finished levels, retaining walls and bund, fences and drainage details.

SERVICES
Before landscape work is commenced, Landscape Contractor is to establish the positions of all service lines and protect them from damage during construction.

SETOUT
All setout to be approved by Superintendent prior to construction. Where no centres are shown for planting, space plants evenly to best fill the beds shown.

REV	DESCRIPTION	DATE
D	AMEND TO REVEAL BUND DESIGN	02.11.2018
C	COORDINATE ENDS DRAWINGS, REVEAL BUND DESIGN	16.11.2018
B	ISSUE FOR CC	16.05.2016
A	ISSUE FOR APPROVAL	09.02.2016

Suite 91, 15, 330 Wattle St
Lidcombe NSW 2007
T: 02 9711 3744
W: www.sturt-noble.com.au
landscaping architecture
environmental & urban design

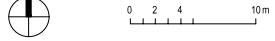
Sturt Noble Associates

PROJECT: CSR HORSLEY PARK

CLIENT: CALIBRE CONSULTING

DRAWING: SOUTHERN BOUNDARY LANDSCAPE PLAN - PART 7 & SPECIFICATION

DRAWING NUMBER	ROLE	DRAWN	CHECKED	DIRECTOR
CD-1408-105	D	hp/bx	hp	gs



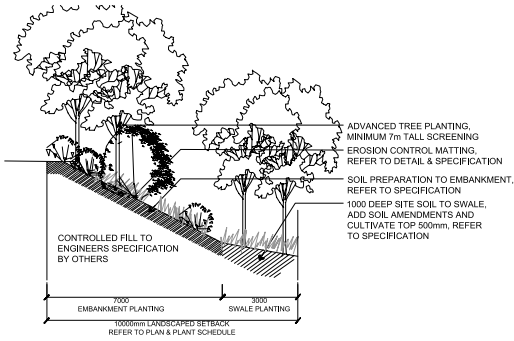
ACN: 164 245 514 ABN: 99 164 245 514
THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT CONTRACTS, STATEMENT OF WORKS, CONDITIONS AND DRAWINGS. COPYRIGHT OF THIS DRAWING IS RESERVED BY STURT NOBLE ASSOCIATES PTY LTD.

These plans are referred to in certificate no. 15436 approved by:

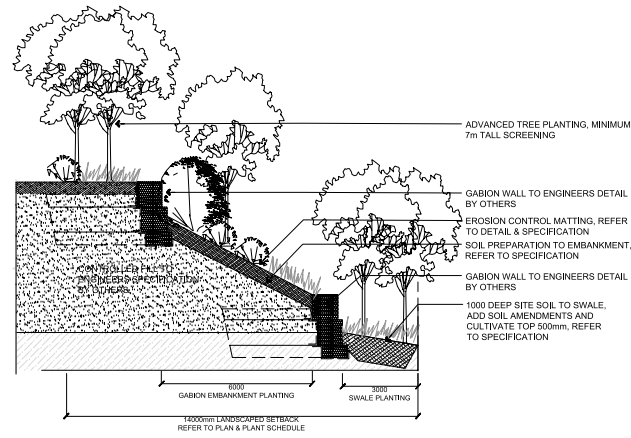
Eric Hausfeld
Accredited Certifier

Registration No: BFB 2416
Categories: B1, C1, C2, C3, C4, C6, C15 & D1

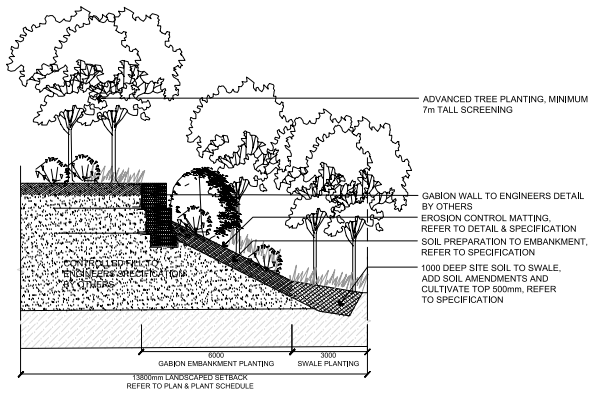
Land Development Certificates
www.LDC.com.au



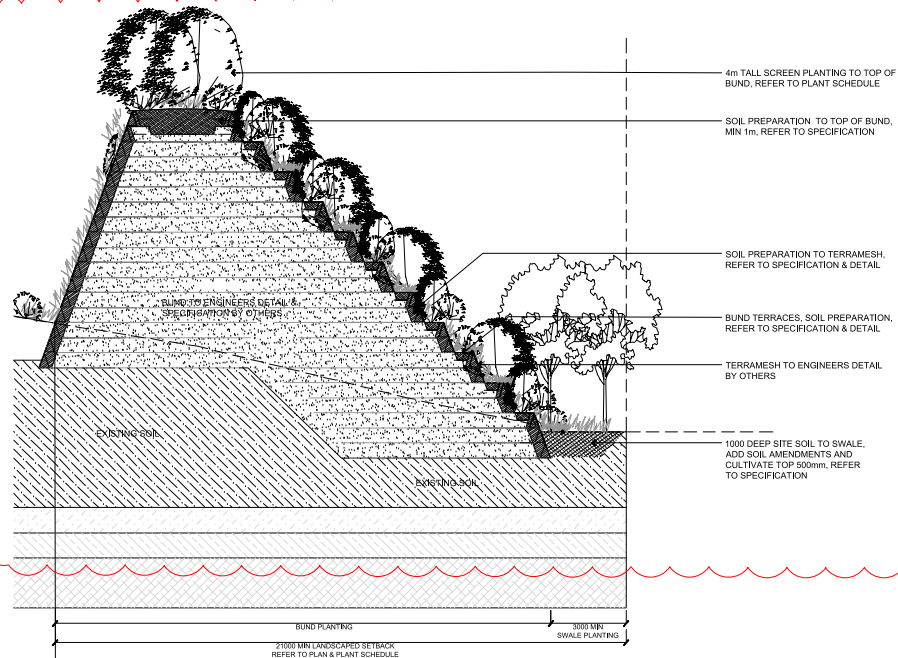
01 SECTION AA - TYPICAL EMBANKMENT PLANTING
SCALE 1:100 @ A1



03 SECTION CC - TYPICAL PLANTING - DOUBLE GABION WALL
SCALE 1:100 @ A1



02 SECTION BB - TYPICAL PLANTING - SINGLE GABION WALL
SCALE 1:100 @ A1



04 SECTION DD - TYPICAL BUND PLANTING
SCALE 1:100 @ A1

NOTES

GENERAL
Read drawing in conjunction with the plans, specification and details.

Refer to drawings:
 CD-1408-103 Landscape Plan - Parts 1 to 3
 CD-1408-104 Landscape Plan - Parts 4 to 6
 CD-1408-105 Landscape Plan - Part 7 and Specification
 CD-1408-106 Typical Sections
 CD-1408-107 Plant Schedule
 CD-1408-108 Landscape Details

Refer to Engineers' Drawings for precise information regarding finished levels, retaining walls and bund, fences and drainage details.

SERVICES
Before landscape work is commenced, Landscape Contractor is to establish the positions of all service lines and protect them from damage during construction.

SETOUT
All setout to be approved by Superintendent prior to construction. Where no centres are shown for planting, space plants evenly to best fill the beds shown.

These plans are referred to in certificate no. **15436** approved by:

LDC Eric Hausfeld
 Accredited Certifier
 Registration No: **BPB 2416**
 Categories: **B1,C1,C2,C3,C4,C6,C15 & D1**
 Land Development Certificates
 www.LDC.com.au

D	AMEND TO REVERSE BUND DESIGN	02/11/2018
C	COORDINATE ENGS DRAWINGS, REVERSE BUND DESIGN	16/10/2018
S	ISSUE FOR CD	16/09/2018
A	ISSUE FOR APPROVAL	06/09/2018
FILE	DESCRIPTION	DATE

Suite 91, LS, 330 Wattle St
 Ultimo NSW 2007
 T: 02 9711 3744
 W: www.sturt-noble.com.au
 landscape architecture
 environmental & urbandesign

Sturt Noble Associates

PROJECT
CSR HORSLEY PARK

CLIENT
CALIBRE CONSULTING

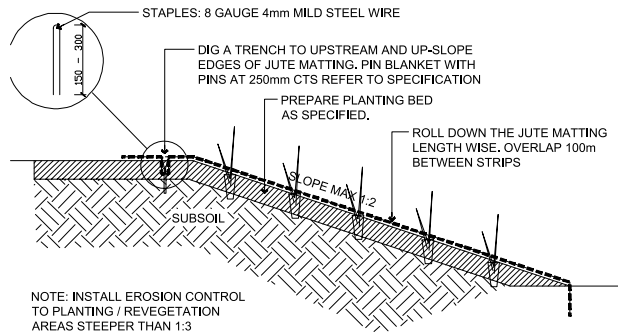
DRAWING
SOUTHERN BOUNDARY
TYPICAL SECTIONS

DRAWING NUMBER
CD-1408-106

SCALE
1:100 @ A1

FILE	DATE	DESIGNER	CHECKER	DRAWN
D		hp/bx	hp	gs

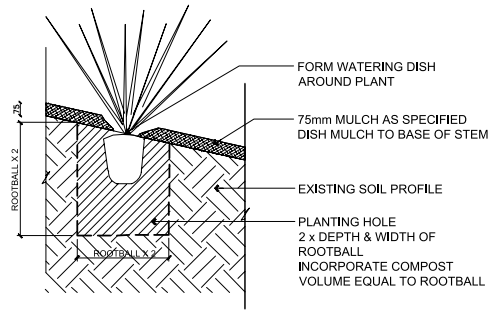




NOTE: INSTALL EROSION CONTROL TO PLANTING / REVEGETATION AREAS STEEPER THAN 1:3

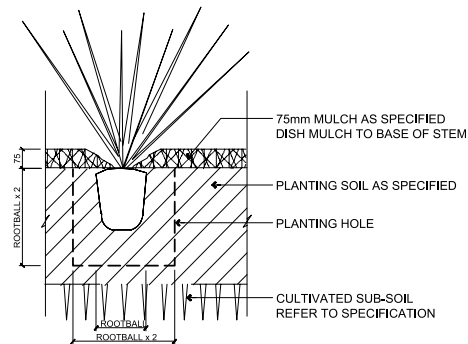
01 DETAIL: EROSION CONTROL MATTING

SCALE 1:20 @ A1



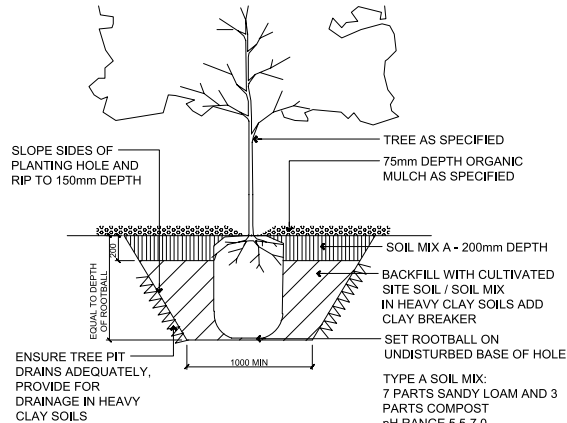
04 DETAIL: POCKET PLANTING

SCALE 1:10 @ A1



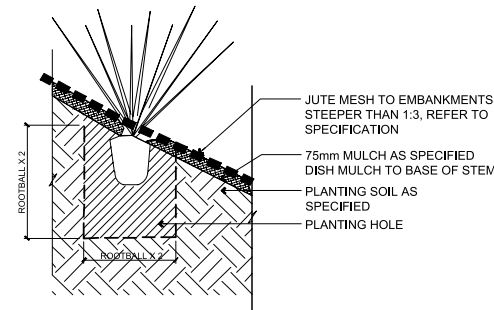
02 DETAIL: TYPICAL PLANTING

SCALE 1:10 @ A1



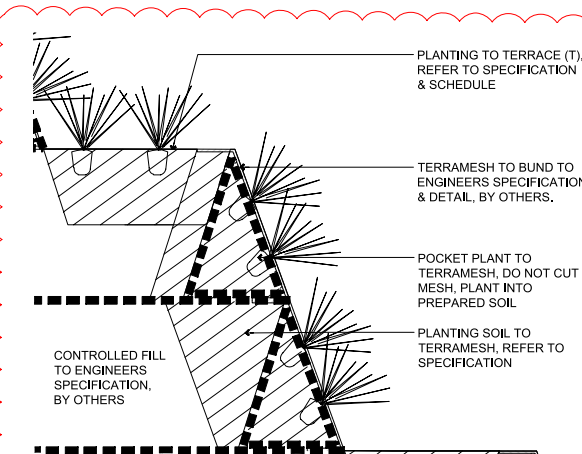
03 DETAIL: TYPICAL TREE PLANTING

SCALE 1:20 @ A1



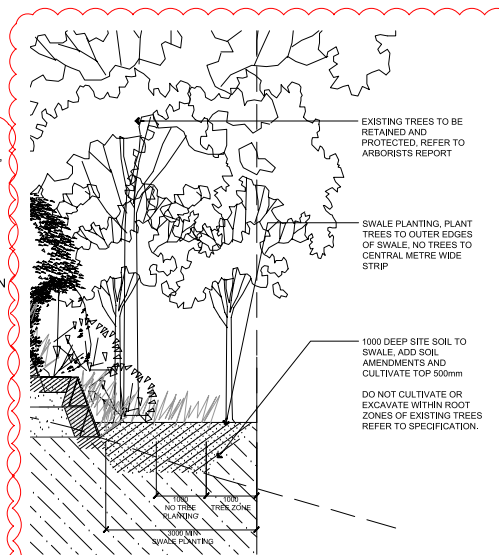
05 DETAIL: EMBANKMENT PLANTING

SCALE 1:10 @ A1



06 DETAIL: PLANTING TO TERRAMESH

SCALE 1:10 @ A1



07 DETAIL: SWALE PLANTING

SCALE 1:50 @ A1

NOTES

GENERAL
Read drawing in conjunction with the plans, specification and details.

Refer to drawings:
CD-1408-103 Landscape Plan - Parts 1 to 3
CD-1408-104 Landscape Plan - Parts 4 to 6
CD-1408-105 Landscape Plan - Part 7 and Specification
CD-1408-106 Typical Sections
CD-1408-107 Plant Schedule
CD-1408-108 Landscape Details

Refer to Engineers' Drawings for precise information regarding finished levels, retaining walls and bund, fences and drainage details.

SERVICES
Before landscape work is commenced, Landscape Contractor is to establish the positions of all service lines and protect them from damage during construction.

SETOUT
All setout to be approved by Superintendent prior to construction. Where no centres are shown for planting, space plants evenly to best fill the beds shown.

These plans are referred to in certificate no. **15436** approved by:

LDC
Eric Hausfeld
Accredited Certifier
Registration No: BPB 2416
Categories: B1, C1, C2, C3, C4, C6, C15 & D1
Land Development Certificates
www.LDC.com.au

D	AMEND TO REVEAL BLIND DESIGN	02/11/2018
C	COORDINATE ENGS DRAWINGS, REVEAL BLIND DESIGN	16/10/2018
B	ISSUE FOR CDC	16/06/2018
A	ISSUE FOR APPROVAL	09/06/2018
FILE	DESCRIPTION	DATE

Suite 91, LS, 330 Wattle St
Ulmarra NSW 2007
T. 02 9711 3744
W. www.sturt-noble.com.au
landscape architecture
environmental & urbandesign

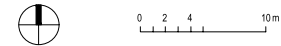
Sturt Noble Associates

PROJECT
CSR HORSLEY PARK

CLIENT
CALIBRE CONSULTING

DRAWING
SOUTHERN BOUNDARY LANDSCAPE DETAILS

DRAWING NUMBER CD-1408-108	SCALE A.S. @ A1	DATE D	DRAWN hp/bx	CHECKED hp	REVISOR gs
-------------------------------	--------------------	-----------	----------------	---------------	---------------



ACN: 164 245 514 ABN: 99 164 245 514
THIS DRAWING IS VALID AS LONG AS IT IS IN CONJUNCTION WITH ALL RELEVANT CONTRACTS, T&Cs, SPECIFICATIONS, REVISIONS AND DRAWINGS, COPYRIGHT OF THIS DRAWING IS RESTED IN STURT NOBLE ASSOCIATES PTY LTD.

ROCK FILLED GABION / GREEN TERRAMESH / PARALINK REINFORCED EARTH WALLS

GENERAL

1. THESE PLANS RELATE TO DESIGN AND CONSTRUCTION OF THE GABION WALLS AND EARTH BUND PROPOSED AT THE SOUTHERN BOUNDARY OF THE DEVELOPMENT. ALL OTHER CONSTRUCTION ACTIVITIES RELATED TO THE DEVELOPMENT ARE DOCUMENTED ELSEWHERE.
2. SITE PLAN & SECTION/S BASED UPON BROWN SMART CONSULTING DEVELOPMENT APPLICATION DRAWINGS ISSUED ON 6 MARCH 2015 AND AS MODIFIED TO FULFIL THE REQUIREMENTS OF THE COURT ORDER OF 16 OCTOBER 2015.

EXCAVATION AND BACKFILL

1. ALL EXCAVATION, BACKFILLING AND COMPACTION SHALL BE CARRIED OUT STRICTLY IN ACCORDANCE WITH AS3798 - 2007 GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENT AND AS SHOWN ON THE CONSTRUCTION DRAWINGS.
2. CLEARING AND DISTURBING OF VEGETATION SHALL BE KEPT TO A MINIMUM AND SHALL BE LIMITED TO AREAS CONTAINING THE EXCAVATIONS FOR THE CONSTRUCTION.
3. ALL EXCAVATIONS SHALL BE MADE SECURE AGAINST MOVEMENT BY MEANS OF STABLE BATTERS, TIMBERING, SHEET PILING OR PROTECTIVE SHIELDS.
4. ADEQUATE TEMPORARY PROTECTION AND MAN PROOF SITE FENCING SHALL BE PROVIDED FOR ALL PERSONS AND ANIMALS DURING CONSTRUCTION.

FOUNDATIONS

1. THE FOUNDATION DESIGN FOR THE GABION WALLS IS BASED ON THE ASSUMPTION THAT THE MATERIAL IS STIFF SILTY CLAY WITH A MINIMUM ULTIMATE BEARING PRESSURE OF 300kPa.
2. THE FOUNDATION DESIGN FOR THE EARTH BUND IS BASED ON THE ASSUMPTION THAT THE MATERIAL IS VERY STIFF SILTY CLAY WITH A MINIMUM ULTIMATE BEARING PRESSURE OF 600kPa.
3. THE FOUNDATION DESIGN FOR THE TERRAMESH REINFORCED SOIL WALL BASED ON THE ASSUMPTION THAT MATERIALS IS EXTREMELY WEATHERED SHALE WITH MINIMUM FRICTION ANGLE OF 30°.
4. THE FOUNDATION MATERIAL SHALL BE INSPECTED BY AN EXPERIENCED GEOTECHNICAL ENGINEER TO CONFIRM THAT THE EXPOSED MATERIAL SATISFIES THE DESIGN ASSUMPTION. ANY MATERIAL ASSESSED TO BE UNSUITABLE SHOULD BE REMOVED AND REPLACED WITH MATERIAL THAT COMPLIES WITH THE EARTHWORKS SPECIFICATION AND TO SATISFY THE DESIGN ASSUMPTIONS.
5. IF THE SITE CONDITIONS ENCOUNTERED ARE SUBSTANTIALLY DIFFERENT FROM THE CONDITIONS REQUIRED ON THIS PLAN, THE DESIGNER TO BE NOTIFIED IMMEDIATELY FOR FURTHER INSTRUCTIONS.

GABION RETAINING WALLS

1. THE STAGGERED GABION WALLS SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS TO THE DETAILS AND LEVELS AS SHOWN ON THESE CONSTRUCTION DRAWINGS.
2. GABIONS SHALL CONSIST OF DOUBLE TWISTED, HEXAGONAL WIRE MESH GABIONS OF NOMINAL 80 X 100 MESH, WITH 3.4mm O/D FRAME WIRE AND 2.7mm MESH WIRE, COMPLETE WITH DIAPHRAGMS AT 1.0m CENTRES.

3. PVC COATED-WIRE TO BE MILD STEEL, GALMAC (95%ZINC + 5% ALUMINIUM MISCHMETAL ALLOY) COATED AND HEAT BONDED WITH HEAVY DUTY GREY PVC COATING OF NOMINAL 0.5mm WALL THICKNESS.
4. BIDIM A34 OR EQUIVALENT NON-WOVEN GEOTEXTILE TO BE PLACED AT ALL MESH SOIL ROCK INTERFACES.
5. THE GABION FILL MATERIAL SHALL BE HARD, ANGULAR TO ROUND, DURABLE ROCK OF SUCH QUALITY THAT THEY SHALL NOT DISINTEGRATE ON EXPOSURE TO WATER OR WEATHERING DURING THE LIFE OF THE STRUCTURE. THE ROCK SIZE SHALL BE 100mm TO 250mm AND SHALL BE PLACED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION.

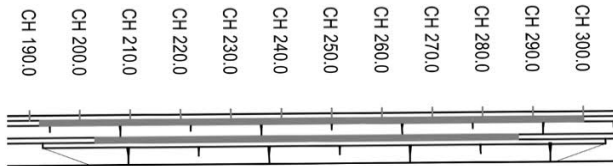
EARTH BUND

1. THE EARTH BUND CONSISTS OF MACCAFERRI GREEN TERRAMESH™ UNITS WITH PARALINK GEOGRID.
2. SOIL REINFORCEMENT UNITS IN THE UPPER LEVEL SHALL BE MACCAFERRI GREEN TERRAMESH™ UNITS. GREEN TERRAMESH™ IS A MODULAR SYSTEM MANUFACTURED USING HEXAGONAL DOUBLE TWIST GALMAC PVC COATED WIRE MESH.
3. ASSEMBLY OF GREEN TERRAMESH™ UNITS TO BE IN ACCORDANCE WITH MACCAFERRI/GEOFABRICS AUSTRALIA INSTALLATION GUIDELINES AND AS PER DETAILS AND LEVELS SHOWN ON THESE CONSTRUCTION DRAWINGS.
4. THE HEXAGONAL DOUBLE TWIST MESH REINFORCEMENT TAIL SHALL BE A MINIMUM OF 3m LONG.
5. ALL WIRE IS MILD STEEL, GALMAC COATED (95% ZINC + 5% ALUMINIUM MISCHMETAL ALLOY) TO THE REQUIREMENTS OF ASTM B750-99 AND HEAT BONDED THROUGH EXTRUSION WITH AN ADDITIONAL 0.5MM HEAVY DUTY GREY PVC COATING.
6. THE MESH SHALL BE TYPE 8X10, HEXAGONAL DOUBLE TWISTED WIRE MESH, WITH 3.4MM OLD SELVEDGE WIRE AND 2.7MM OLD MESH WIRE, LINED WITH BIOMAC ON THE FRONT FACE AND STRENGTHENED WITH A STEEL PANEL.
7. THE TWO PREFORMED STEEL BRACKETS INCLINE THE FRONT FACE AT AN ANGLE OF 70°.
8. THE MACJUTE SHALL BE PLACED BETWEEN THE FRONT FACE AND A WELDED STEEL PANEL DURING MANUFACTURE. THE WELDED STEEL PANEL IS MANUFACTURED FROM 6MM OLD MILD STEEL BARS WITH APERTURE 160mm X 200mm WHICH IS HEAVILY CLASS A GALVANISED.
9. THE SPECIFICATION FOR THE TERRAMESH BASKETS SHALL BE AS FOR THE GABION BASKETS.
10. THE TERRAMESH WALL SHALL BE INSTALLED IN ACCORDANCE WITH MACCAFERRI/GEOFABRICS AUSTRALIA INSTALLATION GUIDELINES AND AS PER DETAILS AND LEVELS SHOWN ON THESE CONSTRUCTION DRAWINGS.



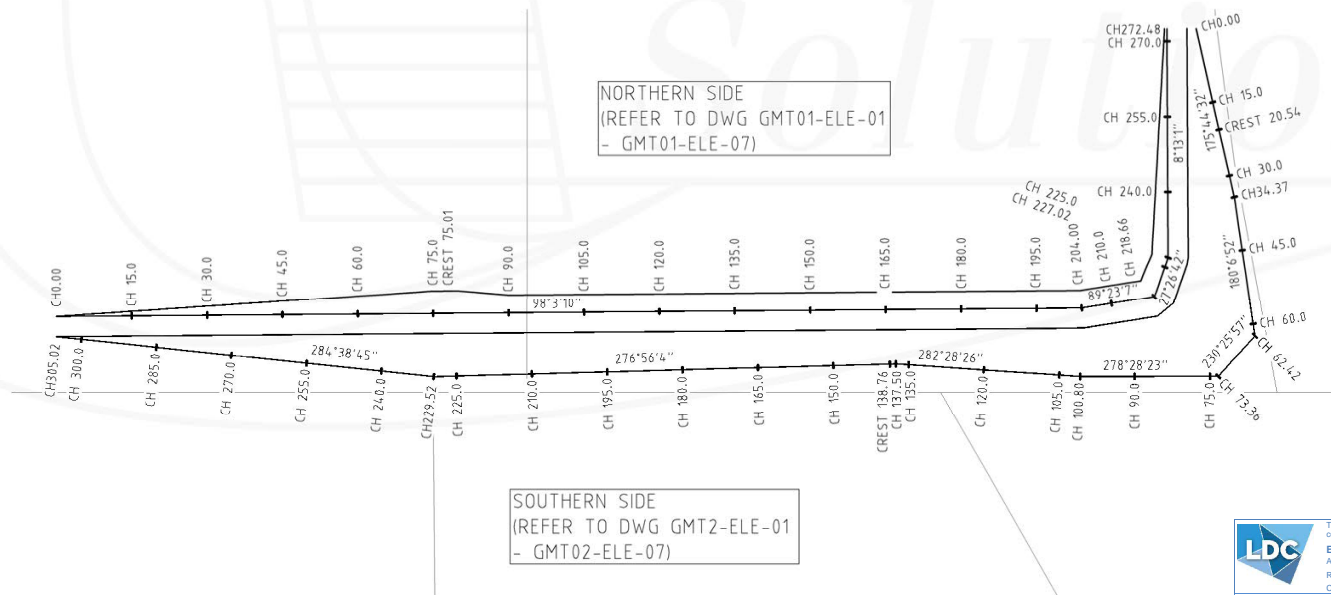
ISSUED FOR APPROVAL

					 ABN 16 103 223 721 PHONE (02)9899 2111 FACSIMILE (02)9899 2112 SYDNEY AUSTRALIA	ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES		PROJECT TITLE BURLEY ROAD HORSLEY PARK (STAGE 2) CSR LTD GROUP PROPERTY DEVELOPMENT		DESIGN NOTES SHEET 1 OF 1												
<table border="1"> <tr> <td>0</td> <td>FOR APPROVAL PURPOSES</td> <td>HE</td> <td>BAI</td> <td>BAI</td> <td>11-09-18</td> </tr> <tr> <td>REV</td> <td>REVISION DESCRIPTION</td> <td>DRAWN</td> <td>DESIGNED</td> <td>APPROVED</td> <td>DATE</td> </tr> </table>						0	FOR APPROVAL PURPOSES	HE	BAI	BAI	11-09-18	REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE	SCALE N.T.S.		CLIENT/DEVELOPER MULGOA QUARRIES PTY LTD		PROJECT NO RS-1280
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	11-09-18																	
REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE																	
								AUTOCAD REF RS-1280-2		Dwg. NO RS-1280-NOTES-01												
										REVISION 0												



PLAN VIEW OF ROCK FILLED GABION WALL

SCALE 1:1000



PLAN VIEW GREEN TERRAMESH WALL

SCALE 1:1000

These plans are referred to in certificate no. **15436** approved by:

Eric Hausfeld
Accredited Certifier

Registration No: BPB 2416
Categories: B1, C1, C3, C4, C6, C15 & D1

Land Development Certificates
www.LDC.com.au

ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	11-09-18

ABN 16 103 223 721
PHONE (02)9899 2111 FACSIMILE (02)9899 2112
SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SDIL STRUCTURES

SCALE 1:1500 (A3)

PROJECT TITLE
BURLEY ROAD HORSLEY PARK (STAGE 2) CSR LTD GROUP PROPERTY DEVELOPMENT

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

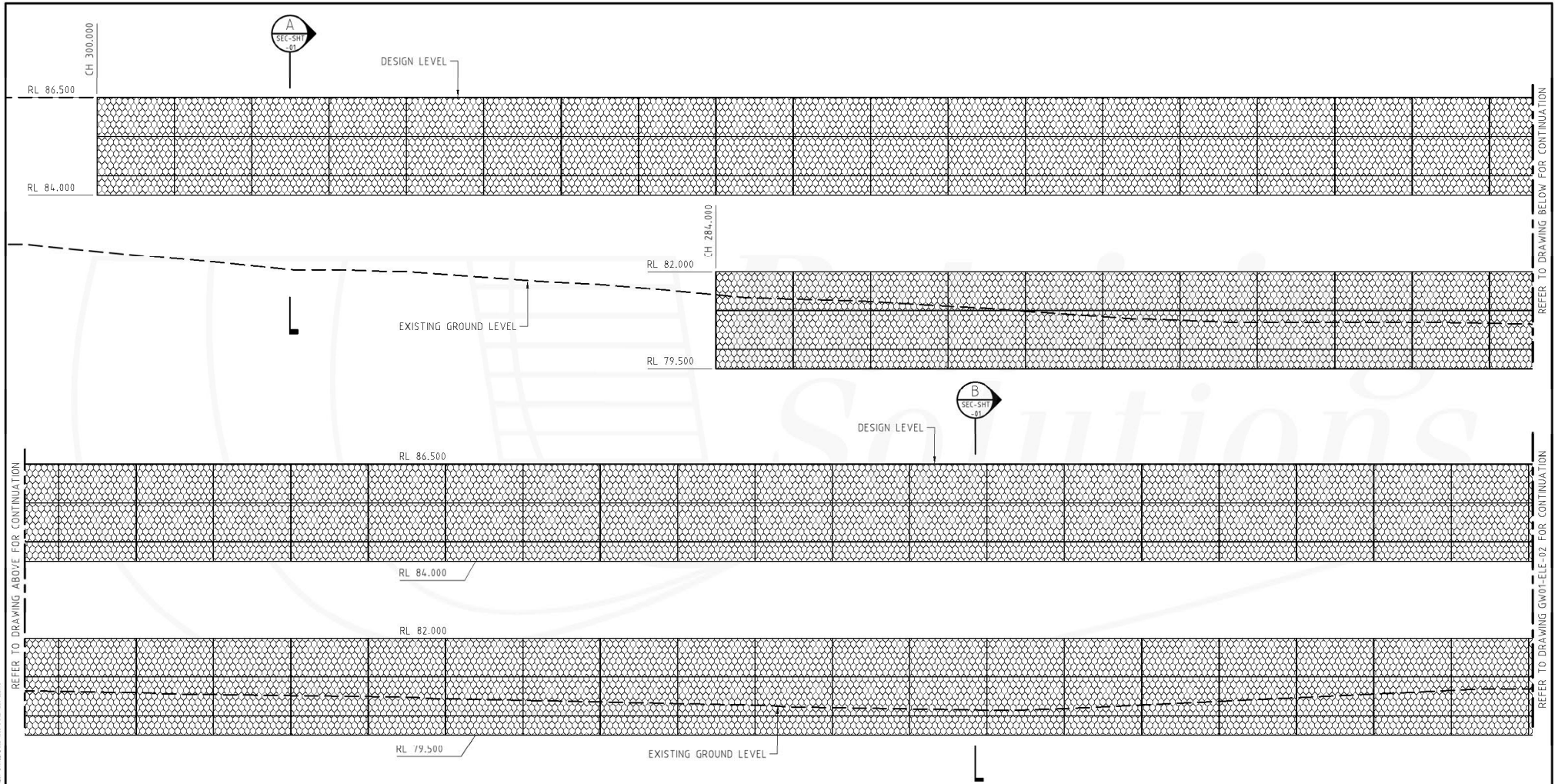
PLAN LAYOUT SHEET 1 OF 1

PROJECT NO
RS-1280

AUTOCAD REF **RS-1280-2**
Dwg. NO **RS-1280-PLAN-01** REVISION **0**

SYDNEY/NSW/REGISTERED PROFESSIONAL ENGINEERING DRAWING/STAGE 2/STAGE 2/RS-1280-PLAN-01-2/2018

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF RETAINING SOLUTIONS AND MAY NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN APPROVAL FROM RETAINING SOLUTIONS



REFER TO DRAWING ABOVE FOR CONTINUATION

REFER TO DRAWING BELOW FOR CONTINUATION

REFER TO DRAWING GW01-ELE-02 FOR CONTINUATION

GABION WALL GW01 FRONT ELEVATION

SCALE 1:100

WALL SURFACE AREA UPPER TERRACE - 212m²
 WALL SURFACE AREA LOWER TERRACE - 152m²

These plans are referred to in certificate no. **15436** approved by:

LDC Eric Hausfeld
 Accredited Certifier
 Registration No: BPS 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1
 Land Development Certificates
 www.LDC.com.au

NOTE:
 DESIGN LEVELS FOR TOP & BOTTOM OF WALL ARE BASED UPON DRAWINGS PROVIDED BY GEINVENTIONS CONSULTING/CALIBRE GROUP. RETAINING SOLUTIONS WILL NOT BE HELD RESPONSIBLE FOR ANY RL'S DISCREPANCIES ON SITE.

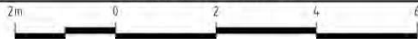
ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	11-09-18



ABN 16 103 223 721
 PHONE (02)9899 2111 FACSIMILE (02)9899 2112
 SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
 GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES



SCALE 1:100 (A3)

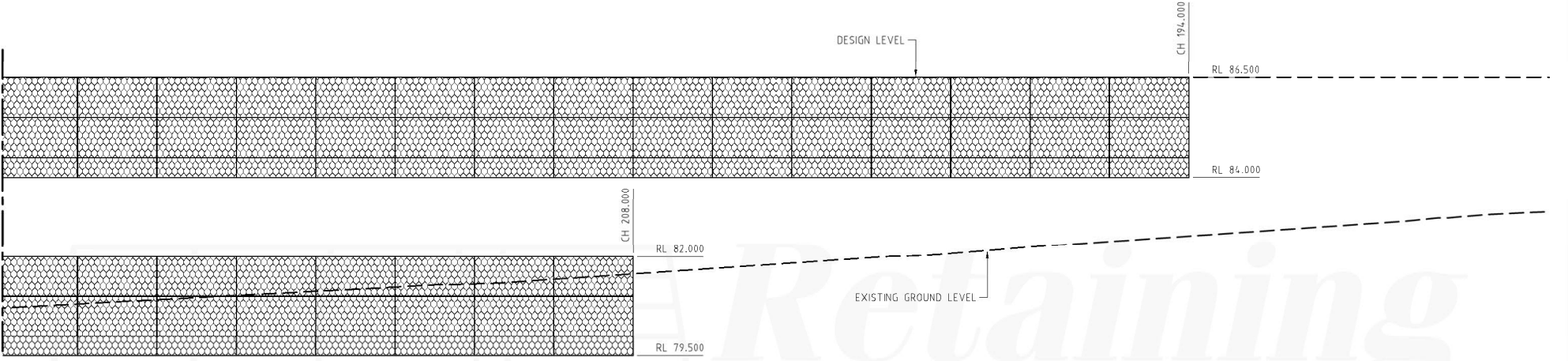
PROJECT TITLE
**BURLEY ROAD HORSLEY PARK (STAGE 2)
 CSR LTD GROUP PROPERTY DEVELOPMENT**

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

GW01 - FRONT ELEVATION
 SHEET 1 OF 2

PROJECT NO RS-1280	AUTOCAD REF RS-1280-2	REVISION 0
DWG. NO RS-1280-GW01-ELE-01		

REFER TO DRAWING GW01-ELE-01 FOR CONTINUATION



GABION WALL GW01 FRONT ELEVATION

SCALE 1:100

WALL SURFACE AREA UPPER TERRACE - 212m²
 WALL SURFACE AREA LOWER TERRACE - 152m²

NOTE:
 DESIGN LEVELS FOR TOP & BOTTOM OF WALL ARE BASED UPON DRAWINGS PROVIDED BY GEDINVENTIONS CONSULTING/CALIBRE GROUP. RETAINING SOLUTIONS WILL NOT BE HELD RESPONSIBLE FOR ANY RL'S DISCREPANCIES ON SITE.

These plans are referred to in certificate no. **15436** approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPS 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1
 Land Development Certificates
 www.LDC.com.au

ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	11-09-18

ARBN 16 103 223 721
 PHONE (02)9899 2111 FACSIMILE (02)9899 2112
 SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
 GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES

SCALE 1:100 (A3)

PROJECT TITLE
BURLEY ROAD HORSLEY PARK (STAGE 2) CSR LTD GROUP PROPERTY DEVELOPMENT

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

PROJECT NO
RS-1280

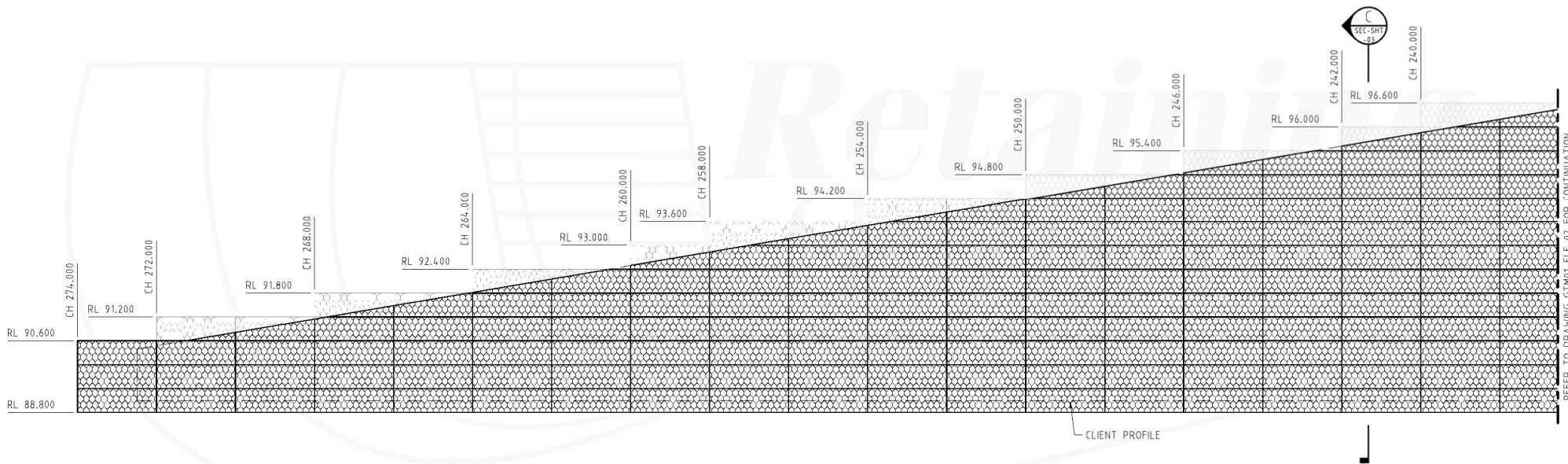
AUTOCAD REF
RS-1280-2

DWG. NO
RS-1280-GW01-ELE-02

REVISION
0

NSWPLANNING/ISSUES/PROJECTS/INTEGRATED/CONTRACTORS/100 - CSR HORSLEY PARK/STATION DRAWINGS/1811 STAGE 2/AS-100-1811-2/2018

NOTE:
GREEN TERRAMESH UNITS THAT ARE SHOWN IN A LIGHTER LINE WORK INDICATES WHERE THE UNITS WILL BE ALTERED ON SITE TO MATCH DESIGN PROFILE



GREEN TERRAMESH GTM01 (NORTHERN SIDE) ELEVATION

SCALE 1:100
WALL SURFACE AREA - 2429m²

LDC These plans are endorsed to in certificate no. **15436** approved by:
Eric Hausfeld
Accredited Certifier
Registration No: BPB 2416
Categories: B1, C1, C2, C3, C4, C8, C15 & D1
Land Development Certificates
www.LDC.com.au



KEY PLAN
SCALE 1:2000

NOTE:
DESIGN LEVELS FOR TOP & BOTTOM OF WALL ARE BASED UPON DRAWINGS PROVIDED BY GEINVENTIONS CONSULTING/CALIBRE GROUP. RETAINING SOLUTIONS WILL NOT BE HELD RESPONSIBLE FOR ANY RL'S DISCREPANCIES ON SITE.

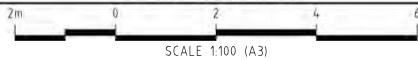
ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
1	CALIBRE RE-DESIGN	HE	BAI	BAI	30-10-18
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	11-09-18



ABN 16 103 223 721
PHONE (02)9899 2111 FACSIMILE (02)9899 2112
SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES



PROJECT TITLE
BURLEY ROAD HORSLEY PARK (STAGE 2) CSR LTD GROUP PROPERTY DEVELOPMENT
CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

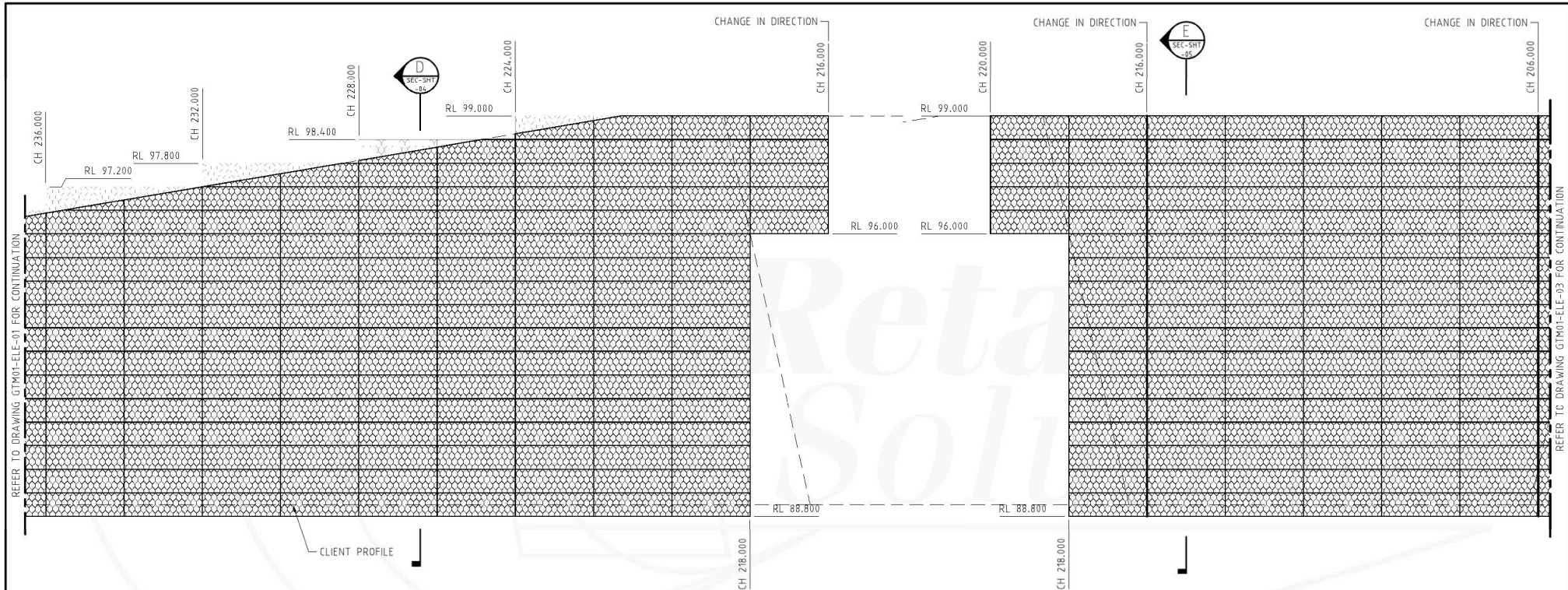
GTM01 - (NORTHERN SIDE) ELEVATION SHEET 1 OF 7

PROJECT NO RS-1280	AUTOCAD REF RS-1280-2	REVISION 1
DWG. NO RS-1280-GTM01-ELE-01		

N:\PROJECTS\BUREAU\BUREAU\DRAWINGS\STAGE 2\RS-1280-GTM01-ELE-01.dwg

REFER TO DRAWING GTM01-ELE-01 FOR CONTINUATION

REFER TO DRAWING GTM01-ELE-03 FOR CONTINUATION



NOTE:
GREEN TERRAMESH UNITS THAT ARE SHOWN IN A LIGHTER LINE WORK INDICATES WHERE THE UNITS WILL BE ALTERED ON SITE TO MATCH DESIGN PROFILE

GREEN TERRAMESH GTM01 (NORTHERN SIDE) ELEVATION

SCALE 1:100
WALL SURFACE AREA - 2429m²

LDC These plans are referred to in certificate no. **15436** approved by:
Eric Hausfeld
Accredited Certifier
Registration No: BFB 2416
Categories: B1,C1,C2,C3,C4,C6,C15 & D1
Land Development Certificates
www.LDC.com.au

NOTE:
DESIGN LEVELS FOR TOP & BOTTOM OF WALL ARE BASED UPON DRAWINGS PROVIDED BY GEINVENTIONS CONSULTING/CALIBRE GROUP. RETAINING SOLUTIONS WILL NOT BE HELD RESPONSIBLE FOR ANY RL'S DISCREPANCIES ON SITE.



KEY PLAN
SCALE 1:2000

ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
1	CALIBRE RE-DESIGN	HE	BAI	BAI	30-10-18
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	11-09-18

ABN 16 103 223 721
PHONE (02)9899 2111 FACSIMILE (02)9899 2112
SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES

SCALE 1:100 (A3)

PROJECT TITLE
**BURLEY ROAD HORSLEY PARK (STAGE 2)
CSR LTD GROUP PROPERTY DEVELOPMENT**

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

GTM01 - (NORTHERN SIDE) ELEVATION
SHEET 2 OF 7

PROJECT NO
RS-1280

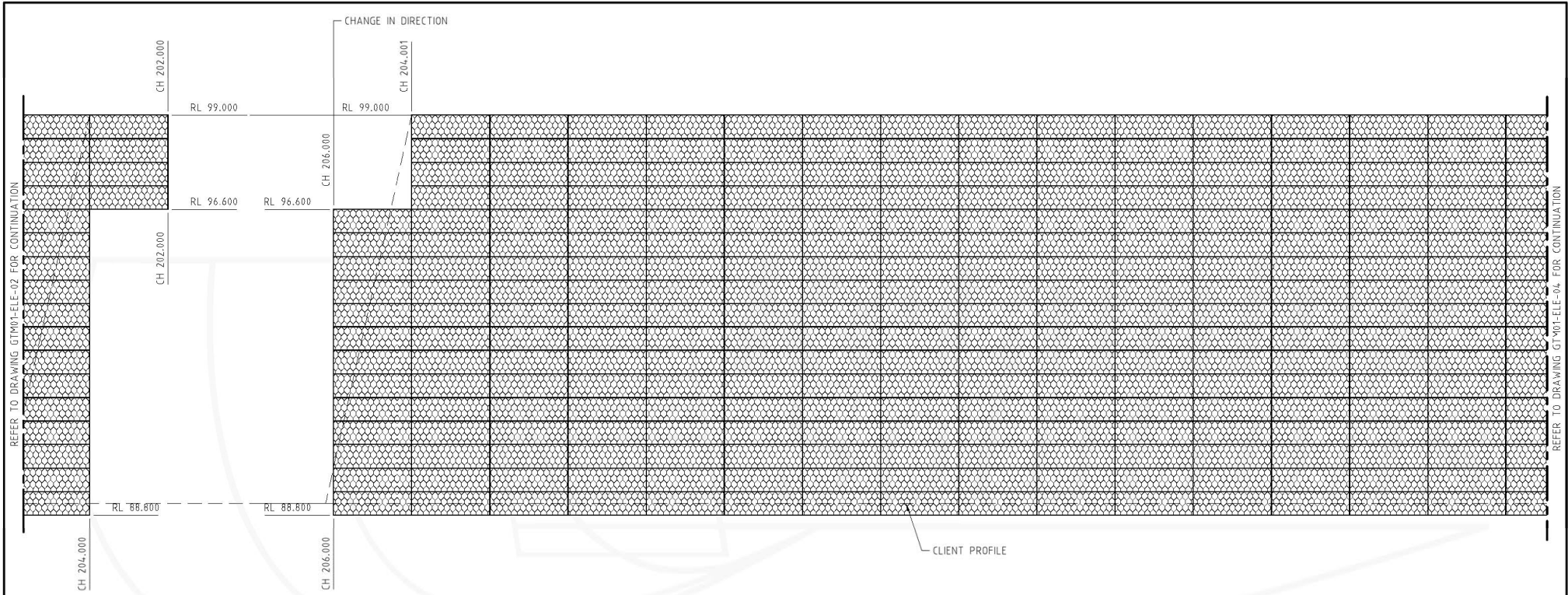
AUTOCAD REF
RS-1280-2

DWG. NO
RS-1280-GTM01-ELE-02

REVISION
1

REFER TO DRAWING GTM01-ELE-02 FOR CONTINUATION

REFER TO DRAWING GTM01-ELE-04 FOR CONTINUATION



GREEN TERRAMESH GTM01 (NORTHERN SIDE) ELEVATION

SCALE 1:100
WALL SURFACE AREA - 2429m²

These plans are referred to in certificate no. **15436** approved by:
Eric Hassfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1, C1, C2, C3, C4, C6, C15 & D1
 Land Development Certificates
 www.LDC.com.au



KEY PLAN
SCALE 1:2000

NOTE:
 DESIGN LEVELS FOR TOP & BOTTOM OF WALL ARE BASED UPON DRAWINGS PROVIDED BY GEINVENTIONS CONSULTING/CALIBRE GROUP. RETAINING SOLUTIONS WILL NOT BE HELD RESPONSIBLE FOR ANY RL'S DISCREPANCIES ON SITE.

ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
1	CALIBRE RE-DESIGN	HE	BAI	BAI	30-10-18
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	11-09-18

ABN 16 103 223 721
 PHONE (02)9899 2111 FACSIMILE (02)9899 2112
 SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
 GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES

SCALE 1:100 (A3)

PROJECT TITLE
BURLEY ROAD HORSLEY PARK (STAGE 2) CSR LTD GROUP PROPERTY DEVELOPMENT

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

GTM01 - (NORTHERN SIDE) ELEVATION
 SHEET 3 OF 7

PROJECT NO
RS-1280

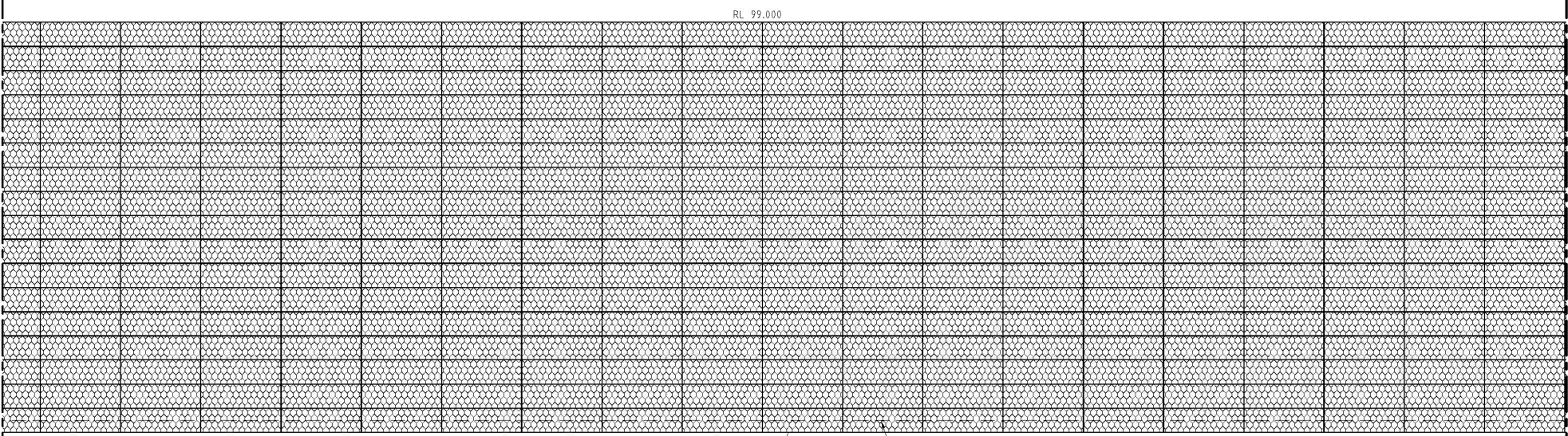
AUTOCAD REF
RS-1280-2

DWG. NO
RS-1280-GTM01-ELE-03

REVISION
1

REFER TO DRAWING GTM01-ELE-03 FOR CONTINUATION

REFER TO DRAWING GTM01-ELE-05 FOR CONTINUATION



GREEN TERRAMESH GTM01 (NORTHERN SIDE) ELEVATION
 SCALE 1:100
 WALL SURFACE AREA - 2429m²

These plans are referred to in certificate no. **15436** approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1
 Land Development Certificates
 www.LDC.com.au



KEY PLAN
 SCALE 1:2000

NOTE:
 DESIGN LEVELS FOR TOP & BOTTOM OF WALL ARE BASED UPON DRAWINGS PROVIDED BY GEINVENTIONS CONSULTING/CALIBRE GROUP. RETAINING SOLUTIONS WILL NOT BE HELD RESPONSIBLE FOR ANY RL'S DISCREPANCIES ON SITE.

ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
1	CALIBRE RE-DESIGN	HE	BAI	BAI	30-10-18
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	11-09-18

ABN 16 103 223 721
 PHONE (02)9899 2111 FACSIMILE (02)9899 2112
 SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
 GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES

SCALE 1:100 (A3)

PROJECT TITLE
BURLEY ROAD HORSLEY PARK (STAGE 2) CSR LTD GROUP PROPERTY DEVELOPMENT

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

GTM01 - (NORTHERN SIDE) ELEVATION
 SHEET 4 OF 7

PROJECT NO
RS-1280

AUTOCAD REF
RS-1280-2

DWG. NO
RS-1280-GTM01-ELE-04

REVISION
1

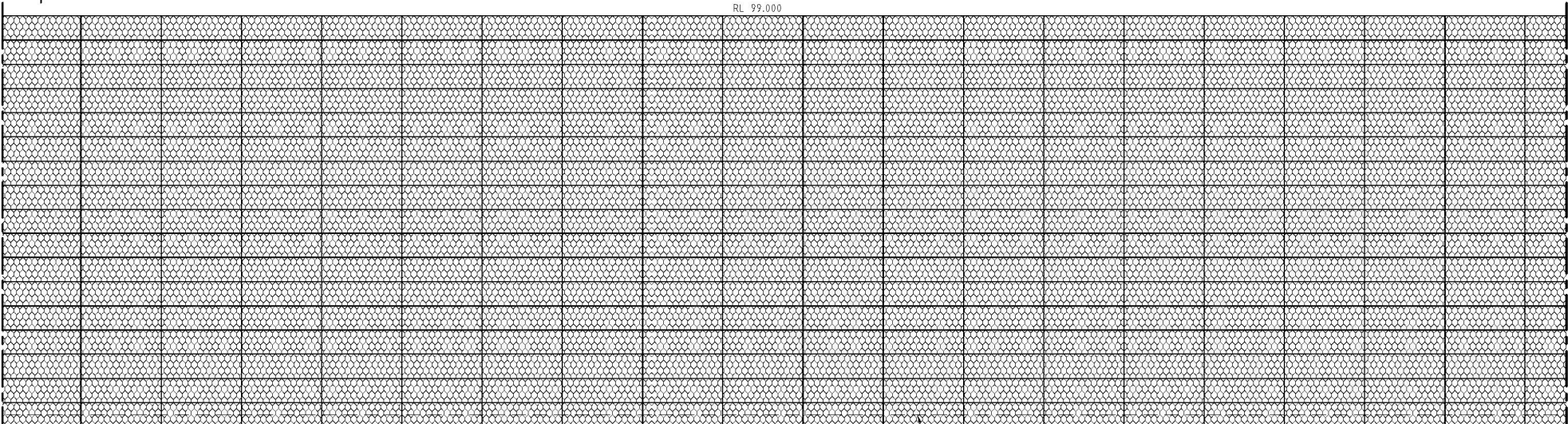
N:\PROJECTS\2018\BURLEY ROAD HORSLEY PARK (STAGE 2)\DRAWINGS\2018 STAGE 2\RS-1280-GTM01-ELE-04.dwg



RL 99.000

REFER TO DRAWING GTM01-ELE-04 FOR CONTINUATION

REFER TO DRAWING GTM01-ELE-06 FOR CONTINUATION



RL 88.800

CLIENT PROFILE

GREEN TERRAMESH GTM01 (NORTHERN SIDE) ELEVATION

SCALE 1:100
WALL SURFACE AREA - 2429m²

LDC These plans are referred to in certificate no. **15436** approved by
Eric Hausfeld
 Accredited Certifier
 Registration No: BPS 2416
 Categories: B1, C1, C2, C3, C4, C6, C15 & D1
 Land Development Certificates
 www.LDC.com.au



KEY PLAN
SCALE 1:2000

NOTE:
 DESIGN LEVELS FOR TOP & BOTTOM OF WALL ARE BASED UPON DRAWINGS PROVIDED BY GEINVENTIONS CONSULTING/CALIBRE GROUP. RETAINING SOLUTIONS WILL NOT BE HELD RESPONSIBLE FOR ANY RL'S DISCREPANCIES ON SITE.

ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
1	CALIBRE RE-DESIGN	HE	BAI	BAI	30-10-18
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	11-09-18

Retaining Solutions
 ABN 16 103 223 721
 PHONE (02)9899 2111 FACSIMILE (02)9899 2112
 SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
 GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES

SCALE 1:100 (A3)

PROJECT TITLE
BURLEY ROAD HORSLEY PARK (STAGE 2) CSR LTD GROUP PROPERTY DEVELOPMENT

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

GTM01 - (NORTHERN SIDE) ELEVATION
 SHEET 5 OF 7

PROJECT NO
RS-1280

AUTOCAD REF
RS-1280-2

DWG. NO
RS-1280-GTM01-ELE-05

REVISION
1

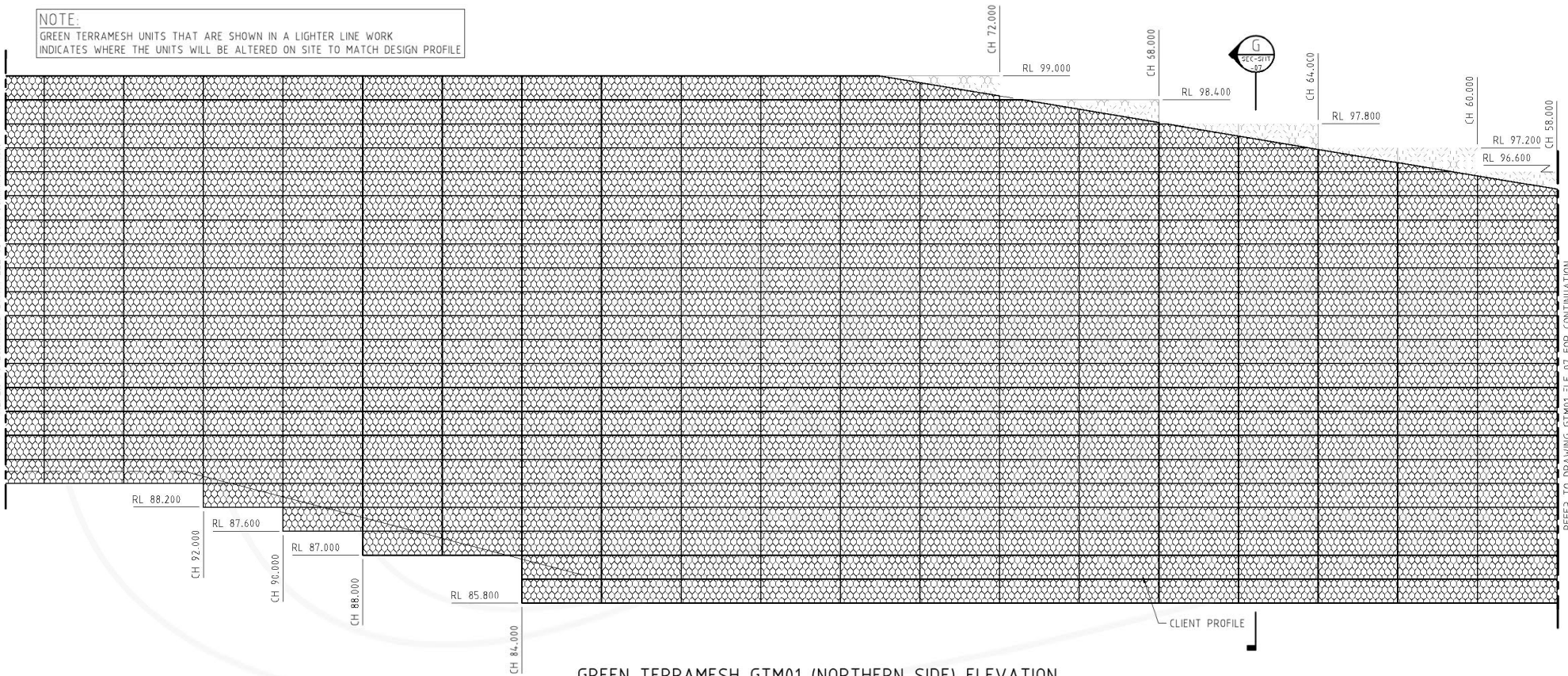
THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF RETAINING SOLUTIONS AND MAY NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN APPROVAL FROM RETAINING SOLUTIONS

N:\PROJECTS\2018\BURLEY ROAD HORSLEY PARK (STAGE 2)\DRAWINGS\2D\STAGE 2\RS-1280-GTM01-ELE-05.dwg

NOTE:
GREEN TERRAMESH UNITS THAT ARE SHOWN IN A LIGHTER LINE WORK INDICATES WHERE THE UNITS WILL BE ALTERED ON SITE TO MATCH DESIGN PROFILE

REFER TO DRAWING GTM01-ELE-05 FOR CONTINUATION

REFER TO DRAWING GTM01-ELE-07 FOR CONTINUATION



GREEN TERRAMESH GTM01 (NORTHERN SIDE) ELEVATION
SCALE 1:100
WALL SURFACE AREA - 2429m²



KEY PLAN
SCALE 1:2000

NOTE:
DESIGN LEVELS FOR TOP & BOTTOM OF WALL ARE BASED UPON DRAWINGS PROVIDED BY GEINVENTIONS CONSULTING/CALIBRE GROUP. RETAINING SOLUTIONS WILL NOT BE HELD RESPONSIBLE FOR ANY RL'S DISCREPANCIES ON SITE.

These plans are referred to in certificate no. 15436 approved by:
Eric Hausfeld
Accredited Certifier
Registration No: BPS 2416
Categories: B1, C1, C2, C3, C4, C6, C15 & D1
Land Development Certificates
www.LDC.com.au

ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
1	CALIBRE RE-DESIGN	HE	BAI	BAI	30-10-18
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	11-09-18

ABN 16 103 223 721
PHONE (02)9899 2111 FACSIMILE (02)9899 2112
SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES

SCALE 1:100 (A3)

PROJECT TITLE
**BURLEY ROAD HORSLEY PARK (STAGE 2)
CSR LTD GROUP PROPERTY DEVELOPMENT**

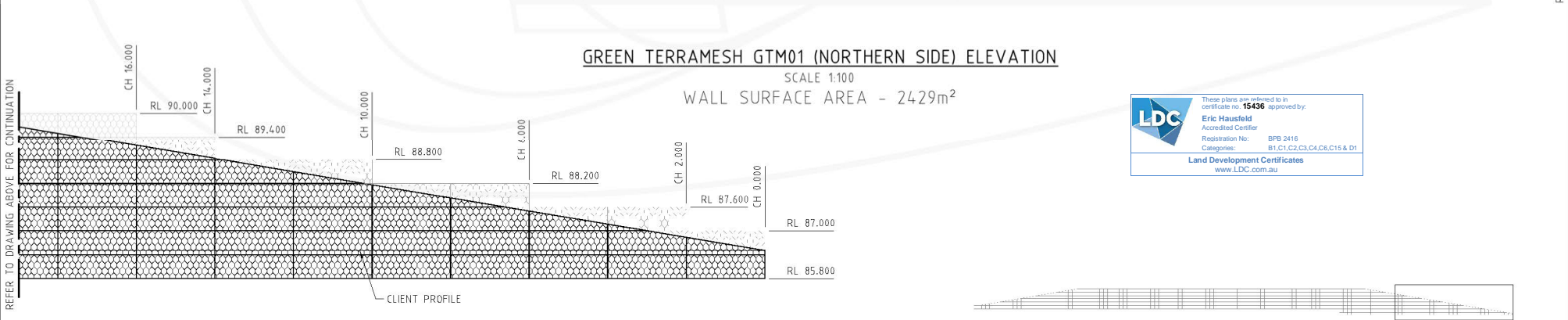
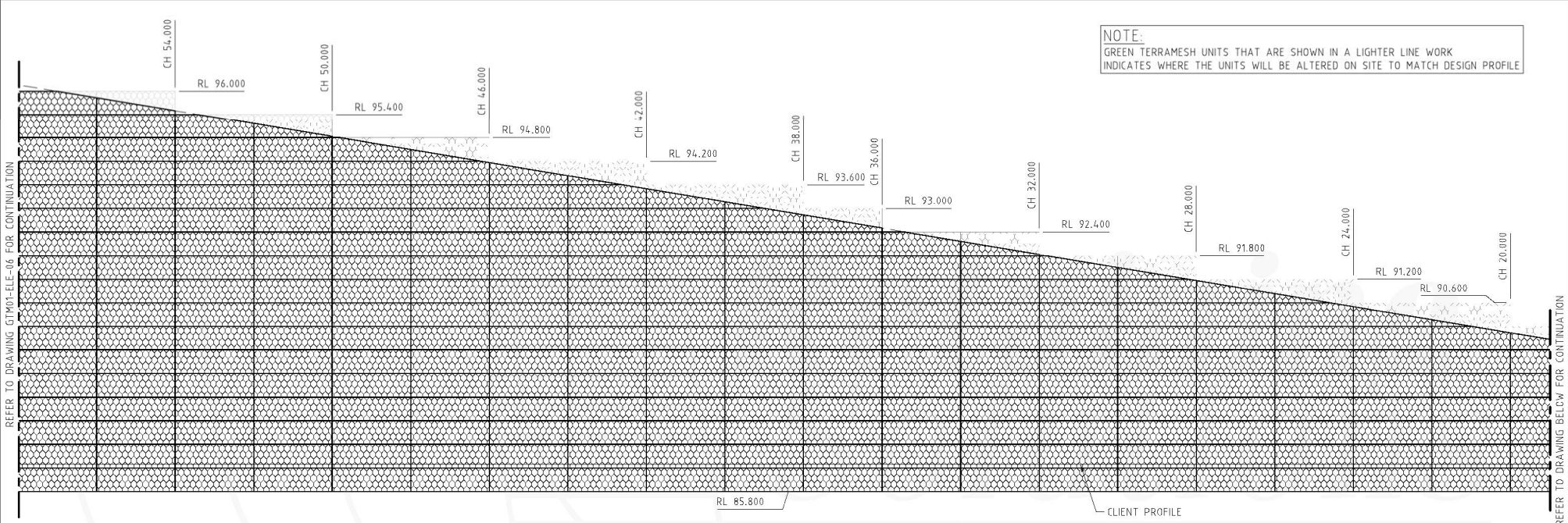
CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

GTM01 - (NORTHERN SIDE) ELEVATION
SHEET 6 OF 7

PROJECT NO
RS-1280

AUTOCAD REF **RS-1280-2**
DWG. NO **RS-1280-GTM01-ELE-06** REVISION **1**

NOTE:
GREEN TERRAMESH UNITS THAT ARE SHOWN IN A LIGHTER LINE WORK INDICATES WHERE THE UNITS WILL BE ALTERED ON SITE TO MATCH DESIGN PROFILE



GREEN TERRAMESH GTM01 (NORTHERN SIDE) ELEVATION

SCALE 1:100
WALL SURFACE AREA - 2429m²

LDC These plans are endorsed in certificate no. **15436** approved by:
Eric Hausfeld
Accredited Certifier
Registration No: BPB 2416
Categories: B1,C1,C2,C3,C4,C6,C15 & D1
Land Development Certificates
www.LDC.com.au

KEY PLAN
SCALE 1:2000

NOTE:
DESIGN LEVELS FOR TOP & BOTTOM OF WALL ARE BASED UPON DRAWINGS PROVIDED BY GEINVENTIONS CONSULTING/CALIBRE GROUP. RETAINING SOLUTIONS WILL NOT BE HELD RESPONSIBLE FOR ANY RL'S DISCREPANCIES ON SITE.

ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
1	CALIBRE RE-DESIGN	HE	BAI	BAI	30-10-18
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	11-09-18

Retaining Solutions
ABN 16 103 223 721
PHONE (02)9899 2111 FACSIMILE (02)9899 2112
SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES

SCALE 1:100 (A3)

PROJECT TITLE
**BURLEY ROAD HORSLEY PARK (STAGE 2)
CSR LTD GROUP PROPERTY DEVELOPMENT**

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

GTM01 - (NORTHERN SIDE) ELEVATION
SHEET 7 OF 7

PROJECT NO
RS-1280

AUTOCAD REF **RS-1280-2**
DWG. NO **RS-1280-GTM01-ELE-07** REVISION **1**

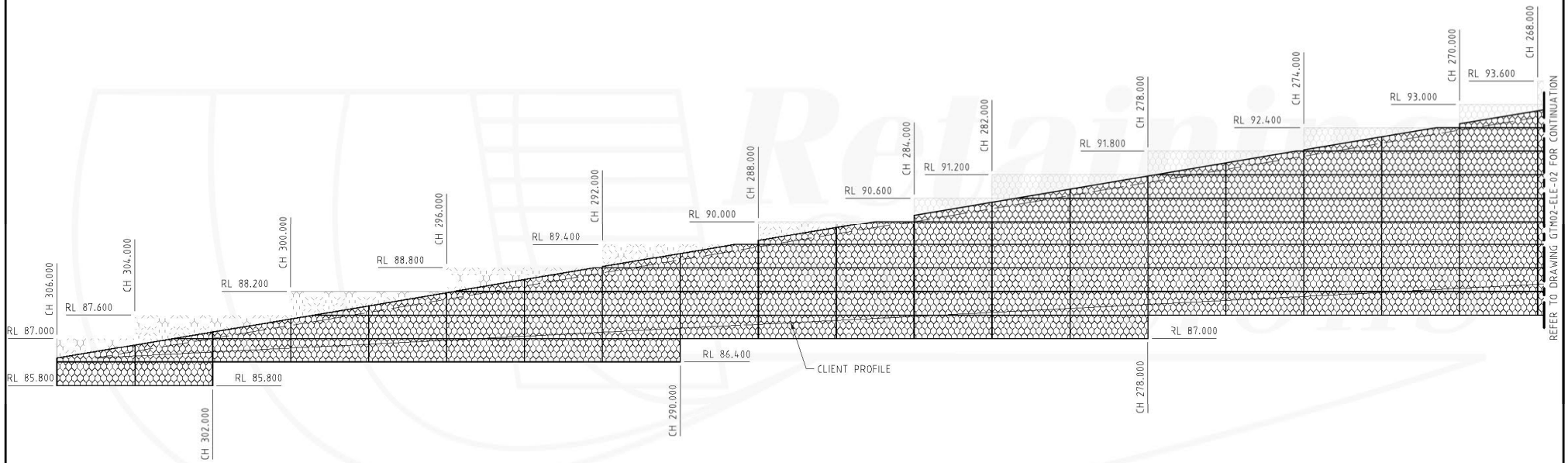
N:\PROJECTS\BURLEY ROAD HORSLEY PARK (STAGE 2)\DRAWINGS\ENGINEERING\RETAINING\GTM01 - (NORTHERN SIDE) ELEVATION.DWG

REFER TO DRAWING GTM01-ELE-06 FOR CONTINUATION

REFER TO DRAWING ABOVE FOR CONTINUATION

REFER TO DRAWING BELOW FOR CONTINUATION

NOTE:
GREEN TERRAMESH UNITS THAT ARE SHOWN IN A LIGHTER LINE WORK INDICATES WHERE THE UNITS WILL BE ALTERED ON SITE TO MATCH DESIGN PROFILE



REFER TO DRAWING GTM02-ELE-02 FOR CONTINUATION

GREEN TERRAMESH GTM02 (SOUTHERN SIDE) ELEVATION

SCALE 1:100
WALL SURFACE AREA - 2524m²

LDC
These plans are referred to in certificate no. **15436** approved by:
Eric Hausfeldt
Accredited Certifier
Registration No: BPB 2416
Categories: B1, C1, C2, C3, C4, C6, C15 & D1
Land Development Certificates
www.LDC.com.au



KEY PLAN
SCALE 1:2000

NOTE:
DESIGN LEVELS FOR TOP & BOTTOM OF WALL ARE BASED UPON DRAWINGS PROVIDED BY GEONVENTIONS CONSULTING/CALIBRE GROUP. RETAINING SOLUTIONS WILL NOT BE HELD RESPONSIBLE FOR ANY RL'S DISCREPANCIES ON SITE.

ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
1	CALIBRE RE-DESIGN	HE	BAI	BAI	30-10-18
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	11-09-18

Retaining Solutions
ABN 16 103 223 721
PHONE (02)9899 2111 FACSIMILE (02)9899 2112
SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES

2m 0 2 4 6
SCALE 1:100 (A3)

PROJECT TITLE
**BURLEY ROAD HORSLEY PARK (STAGE 2)
CSR LTD GROUP PROPERTY DEVELOPMENT**

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

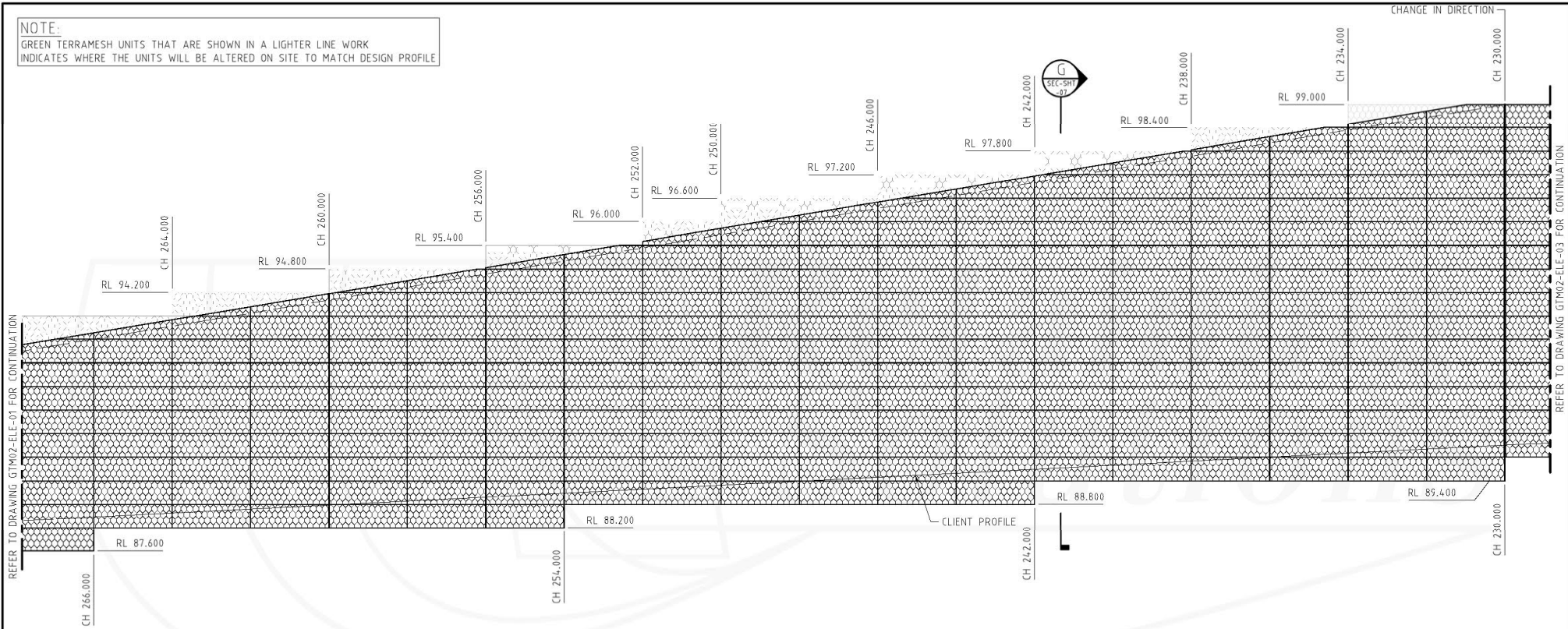
GTM02 - (SOUTHERN SIDE) ELEVATION
SHEET 1 OF 7

PROJECT NO
RS-1280

AUTOCAD REF **RS-1280-2**
DWG. NO **RS-1280-GTM02-ELE-01** REVISION **1**

N:\PROJECTS\HORSLEY PARK\HORSLEY PARK\DRAWINGS\STAGE 2\STAGE 2\RS-1280-GTM02-ELE-01.dwg

NOTE:
GREEN TERRAMESH UNITS THAT ARE SHOWN IN A LIGHTER LINE WORK INDICATES WHERE THE UNITS WILL BE ALTERED ON SITE TO MATCH DESIGN PROFILE



GREEN TERRAMESH GTM02 (SOUTHERN SIDE) ELEVATION

SCALE 1:100
WALL SURFACE AREA - 2524m²

These plans are referred to in certificate no. **15436** approved by:

Eric Hausfeld
Accredited Certifier
Registration No: 898,2416
Categories: B1, C1, C2, C3, C4, C6, C15 & D1

Land Development Certificates
www.LDC.com.au



KEY PLAN
SCALE 1:2000

NOTE:
DESIGN LEVELS FOR TOP & BOTTOM OF WALL ARE BASED UPON DRAWINGS PROVIDED BY GEONVENTIONS CONSULTING/CALIBRE GROUP. RETAINING SOLUTIONS WILL NOT BE HELD RESPONSIBLE FOR ANY RL'S DISCREPANCIES ON SITE.

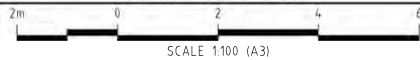
ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
1	CALIBRE RE-DESIGN	HE	BAI	BAI	30-10-18
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	10-03-18



ABN 16 103 223 721
PHONE (02)9899 2111 FACSIMILE (02)9899 2112
SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES



PROJECT TITLE
**BURLEY ROAD HORSLEY PARK (STAGE 2)
CSR LTD GROUP PROPERTY DEVELOPMENT**

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

**GTM02 - (SOUTHERN SIDE) ELEVATION
SHEET 2 OF 7**

PROJECT NO RS-1280	AUTOCAD REF RS-1280-2	REVISION 1
DWG. NO RS-1280-GTM02-ELE-02		

V:\PROJECTS\HORSLEY PARK\HORSLEY PARK STAGE 2\GTM02-ELE-02.DWG

REFER TO DRAWING GTM02-ELE-02 FOR CONTINUATION

REFER TO DRAWING ABOVE FOR CONTINUATION

REFER TO DRAWING BELOW FOR CONTINUATION

REFER TO DRAWING CIP02-ELE-04 FOR CONTINUATION



NOTE:
 DESIGN LEVELS FOR TOP & BOTTOM OF WALL ARE BASED UPON DRAWINGS PROVIDED BY GEONVENTIONS CONSULTING/CALIBRE GROUP. RETAINING SOLUTIONS WILL NOT BE HELD RESPONSIBLE FOR ANY RL'S DISCREPANCIES ON SITE.

GREEN TERRAMESH GTM02 (SOUTHERN SIDE) ELEVATION
 SCALE 1:100
 WALL SURFACE AREA - 2524m²

KEY PLAN
 SCALE 1:2000

These plans were prepared in accordance with the provisions of the Land Development Certification Act 1943 approved by:

LDC
 Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1
 Land Development Certificates
 www.LDC.com.au

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
1	CALIBRE RE-DESIGN	HE	BAI	BAI	30-10-18
0	FOR APPROVAL PURPOSE	HE	BAI	BAI	03-10-18

ABN 16 103 223 721
 PHONE (02)9899 2111 FACSIMILE (02)9899 2172
 SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
 GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES

SCALE 1:100 (A3)

PROJECT TITLE
**BURLEY ROAD HORSLEY PARK (STAGE 2)
 CSR LTD GROUP PROPERTY DEVELOPMENT**

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

GTM02 - (SOUTHERN SIDE) ELEVATION
 SHEET 3 OF 7

PROJECT NO
RS-1280

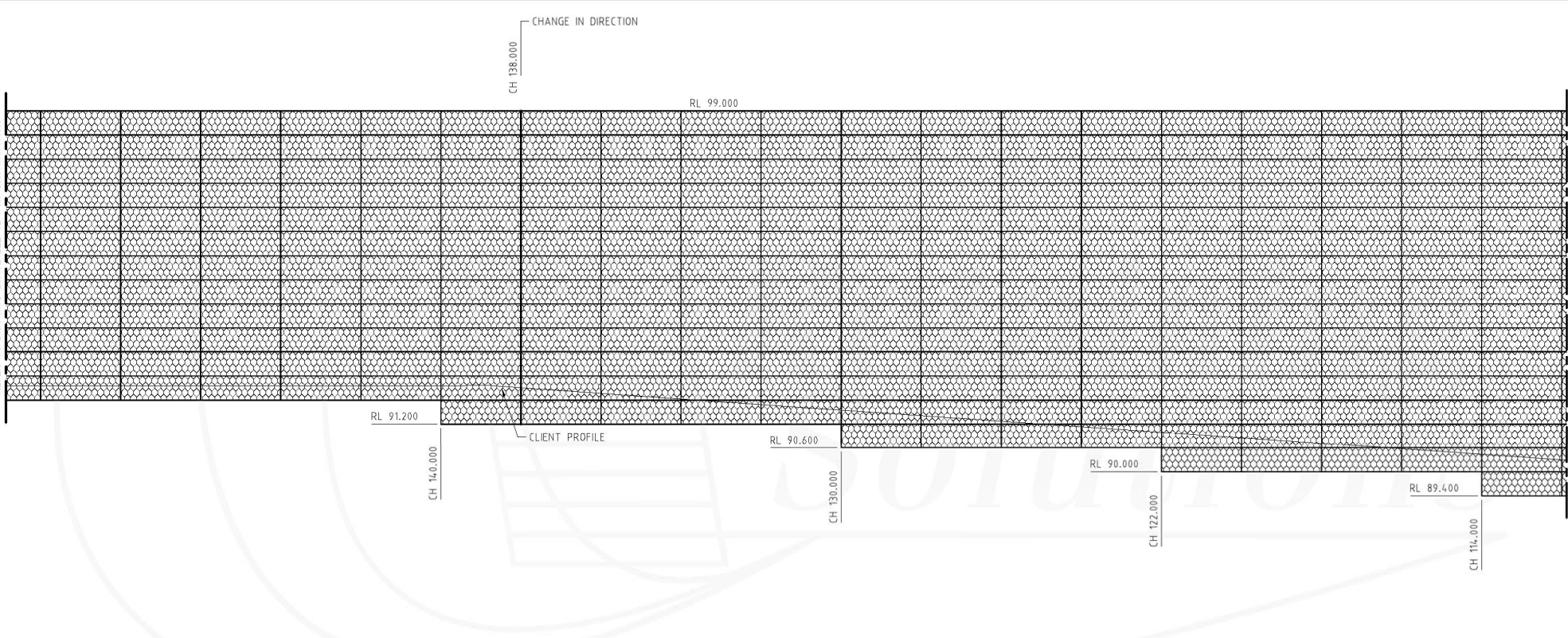
AUTOCAD REF
RS-1280-2

DWG. NO
RS-1280-GTM02-ELE-03

REVISION
1

REFER TO DRAWING GTM02-ELE-03 FOR CONTINUATION

REFER TO DRAWING GTM02-ELE-05 FOR CONTINUATION

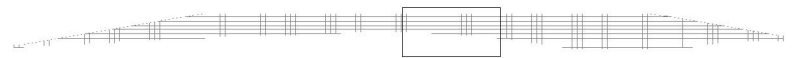


GREEN TERRAMESH GTM02 (SOUTHERN SIDE) ELEVATION

SCALE 1:100
WALL SURFACE AREA - 2524m²

These plans are referred to in certificate no. **15436** approved by:

LDC
Eric Hausfeld
Accredited Certifier
Registration No. BPS 2416
Categories: B1,C1,C2,C3,C4,C6,C15 & D1
Land Development Certificates
www.LDC.com.au



KEY PLAN
SCALE 1:2000

NOTE:
DESIGN LEVELS FOR TOP & BOTTOM OF WALL ARE BASED UPON DRAWINGS PROVIDED BY GEINVENTIONS CONSULTING/CALIBRE GROUP. RETAINING SOLUTIONS WILL NOT BE HELD RESPONSIBLE FOR ANY RL'S DISCREPANCIES ON SITE.

ISSUED FOR APPROVAL

1	CALIBRE RE-DESIGN	HE	BAI	BAI	30-10-18
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	03-10-18
REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE

ABN 16 103 223 721
PHONE (02)9899 2111 FACSIMILE (02)9899 2112
SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES

SCALE 1:100 (A3)

PROJECT TITLE
**BURLEY ROAD HORSLEY PARK (STAGE 2)
CSR LTD GROUP PROPERTY DEVELOPMENT**

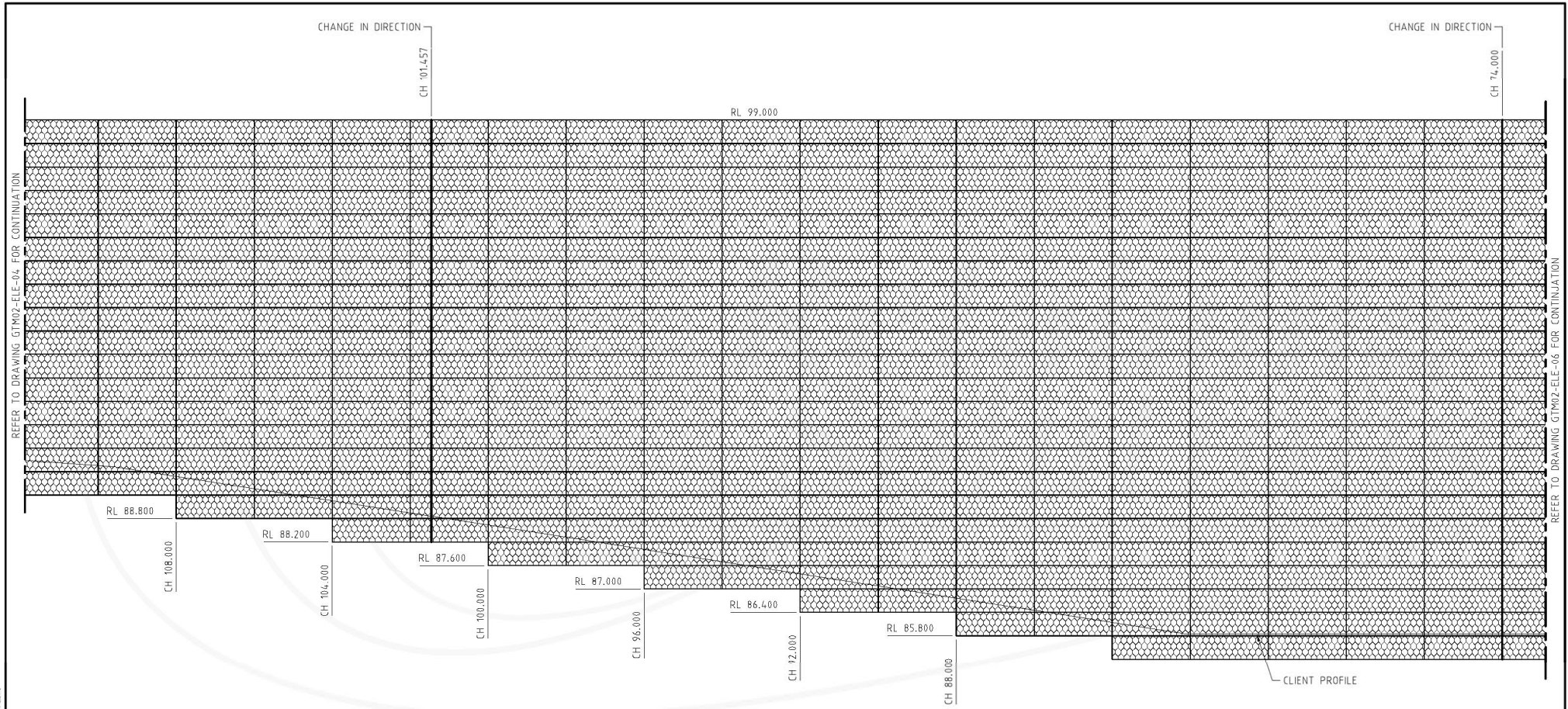
CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

GTM02 - (SOUTHERN SIDE) ELEVATION
SHEET 4 OF 7

PROJECT NO
RS-1280

AUTOCAD REF **RS-1280-2**
DWG. NO **RS-1280-GTM02-ELE-04**

REVISION
1



GREEN TERRAMESH GTM02 (SOUTHERN SIDE) ELEVATION

SCALE 1:100
WALL SURFACE AREA - 2524m²

NOTE:
DESIGN LEVELS FOR TOP & BOTTOM OF WALL ARE BASED UPON DRAWINGS PROVIDED BY GEINVENTIONS CONSULTING/CALIBRE GROUP. RETAINING SOLUTIONS WILL NOT BE HELD RESPONSIBLE FOR ANY RL'S DISCREPANCIES ON SITE.

LDC These plans are referred to in certificate no. **15436** approved by:
Eric Hausfeld
Accredited Certifier
Registration No: **BPB 2416**
Categories: **B1.C1.C2.C3.C4.C6.C16 & D1**
Land Development Certificates
www.LDC.com.au



KEY PLAN
SCALE 1:2000

ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
1	RE-DESIGN OF GTM	HE	BAI	BAI	30-10-18
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	03-10-18

Retaining Solutions
ABN 16 103 223 721
PHONE (02)9899 2111 FACSIMILE (02)9899 2112
SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES

SCALE 1:100 (A3)

PROJECT TITLE
**BURLEY ROAD HORSLEY PARK (STAGE 2)
CSR LTD GROUP PROPERTY DEVELOPMENT**

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

GTM02 - (SOUTHERN SIDE) ELEVATION
SHEET 5 OF 7

PROJECT NO
RS-1280

AUTOCAD REF **RS-1280-2**
DWG. NO **RS-1280-GTM02-ELE-05** REVISION **1**

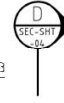
N:\PROJECTS\2018\BURLEY ROAD HORSLEY PARK (STAGE 2)\DRAWINGS\GTM02-ELE-05.dwg



CHANGE IN DIRECTION

CH 63.077

NOTE:
GREEN TERRAMESH UNITS THAT ARE SHOWN IN A LIGHTER LINE WORK INDICATES WHERE THE UNITS WILL BE ALTERED ON SITE TO MATCH DESIGN PROFILE



CH 50.000

RL 98.993

CH 46.000

RL 98.400

CH 42.000

RL 97.800

RL 97.200

CH 38.000

CHANGE IN DIRECTION

CH 35.027

CH 34.000

REFER TO DRAWING GTM02-ELE-05 FOR CONTINUATION

REFER TO DRAWING GTM02-ELE-07 FOR CONTINUATION



GREEN TERRAMESH GTM02 (SOUTHERN SIDE) ELEVATION

SCALE 1:100
WALL SURFACE AREA - 2524m²

NOTE:
DESIGN LEVELS FOR TOP & BOTTOM OF WALL ARE BASED UPON DRAWINGS PROVIDED BY GEINVENTIONS CONSULTING/CALIBRE GROUP. RETAINING SOLUTIONS WILL NOT BE HELD RESPONSIBLE FOR ANY RL'S DISCREPANCIES ON SITE.

These plans are referred to in certificate no. **15436** approved by:

Eric Hausfeld
Accredited Engineer

Registration No: BPS 2416
Categories: B1, C1, C2, C3, C4, C6, C15 & D1

Land Development Certificates
www.LDC.com.au

KEY PLAN
SCALE 1:2000



ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
1	CALIBRE RE-DESIGN	HE	BAI	BAI	30-10-18
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	03-10-18



ABN 16 103 223 721
PHONE (02)9899 2111 FACSIMILE (02)9899 2112
SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES



SCALE 1:100 (A3)

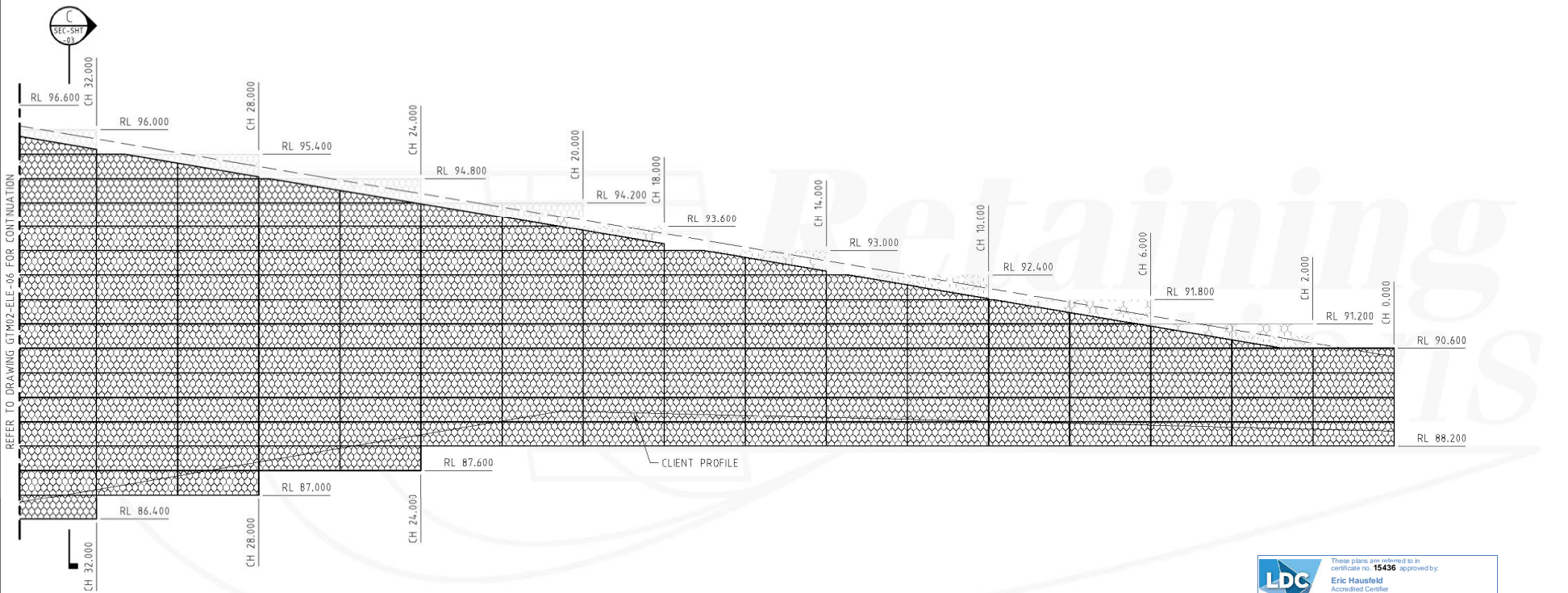
PROJECT TITLE
**BURLEY ROAD HORSLEY PARK (STAGE 2)
CSR LTD GROUP PROPERTY DEVELOPMENT**

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

GTM02 - (SOUTHERN SIDE) ELEVATION
SHEET 6 OF 7

PROJECT NO RS-1280	AUTOCAD REF RS-1280-2	REVISION 1
DWG. NO RS-1280-GTM02-ELE-06		

NOTE:
GREEN TERRAMESH UNITS THAT ARE SHOWN IN A LIGHTER LINE WORK INDICATES WHERE THE UNITS WILL BE ALTERED ON SITE TO MATCH DESIGN PROFILE



REFER TO DRAWING GTM02-ELE-06 FOR CONTINUATION

GREEN TERRAMESH GTM02 (SOUTHERN SIDE) ELEVATION
SCALE 1:100
WALL SURFACE AREA - 2524m²

LDC These plans are returned to its certificate no. **15436** approved by:
Eric Hausfeld
Accredited Certifier
Registration No: BFB 2416
Categories: RL, CH, CZ, CA, C6, C15 & D1
Land Development Certificates
www.LDC.com.au



KEY PLAN
SCALE 1:2000

NOTE:
DESIGN LEVELS FOR TOP & BOTTOM OF WALL ARE BASED UPON DRAWINGS PROVIDED BY GEINVENTIONS CONSULTING/CALIBRE GROUP. RETAINING SOLUTIONS WILL NOT BE HELD RESPONSIBLE FOR ANY RL'S DISCREPANCIES ON SITE.

ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
1	CALIBRE RE-DESIGN	HE	BAI	BAI	30-10-18
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	03-10-18

Retaining Solutions
ABN 16 103 223 721
PHONE (02)9899 2111 FACSIMILE (02)9899 2112
SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES

2m 0 2 4 6
SCALE 1:100 (A3)

PROJECT TITLE
BURLEY ROAD HORSLEY PARK (STAGE 2) CSR LTD GROUP PROPERTY DEVELOPMENT

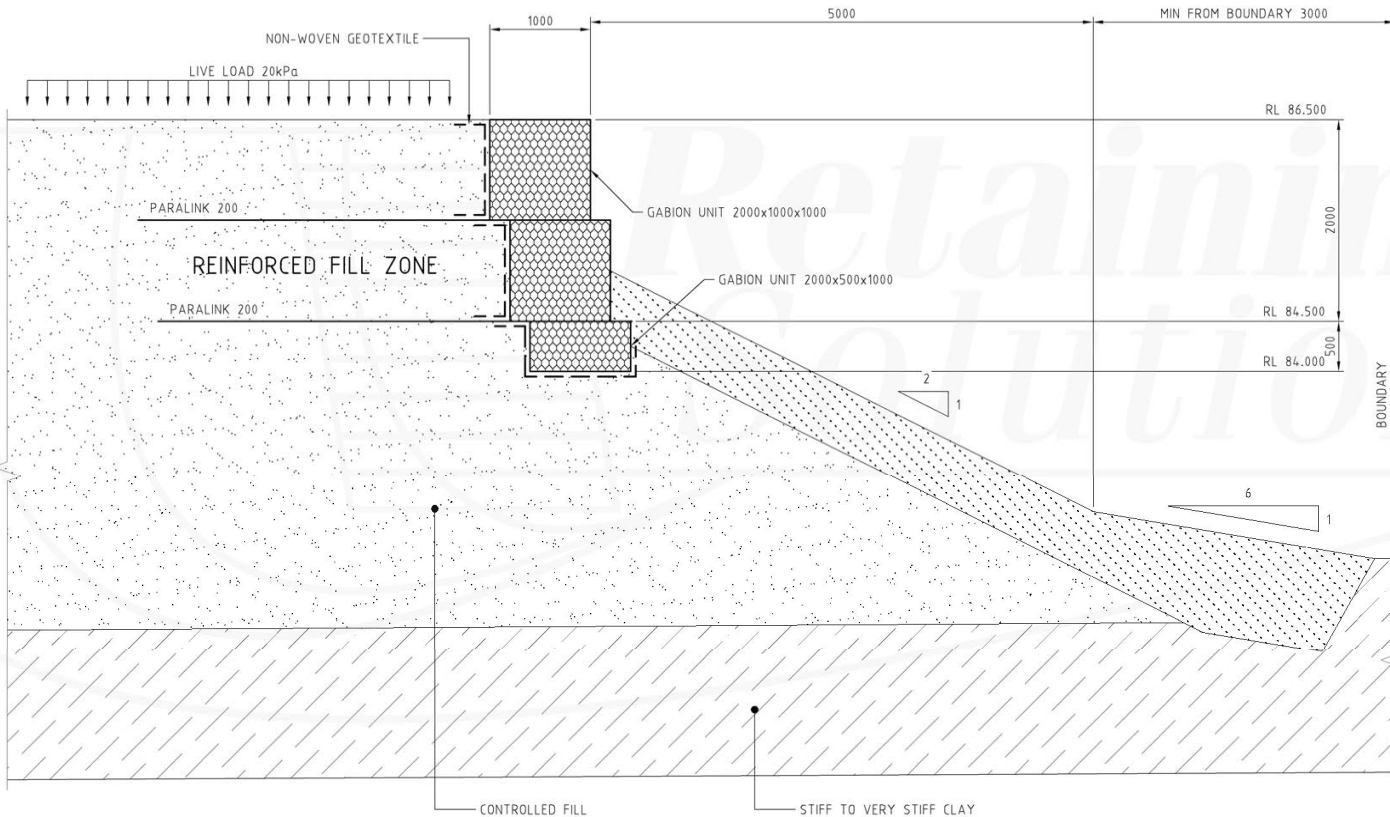
CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

GTM02 - (SOUTHERN SIDE) ELEVATION SHEET 7 OF 7

PROJECT NO
RS-1280

AUTOCAD REF **RS-1280-2**
DWG. NO **RS-1280-GTM02-ELE-07** REVISION **1**

N:\PROJECTS\HORSLEY PARK\HORSLEY PARK STAGE 2\AS-18-10-18\DRAWINGS\07 - CSR HORSLEY PARK\HORSLEY PARK STAGE 2\AS-18-10-18\DRAWINGS



SECTION A
SCALE 1:50

These plans are referred to in certificate no. 15436 approved by:

LDC Eric Hausfeld
Accredited Certifier
Registration No: BPS 2416
Categories: B1,C1,C2,C3,C4,C6,C16 & D1
Land Development Certificates
www.LDC.com.au

ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	11-09-18

Retaining Solutions

ABN 16 103 223 721
PHONE (02)9899 2111 FACSIMILE (02)9899 2112
SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SDIL STRUCTURES

1m 0 1 2 3
SCALE 1:50 (A3)

PROJECT TITLE
**BURLEY ROAD HORSLEY PARK (STAGE 2)
CSR LTD GROUP PROPERTY DEVELOPMENT**

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

PROJECT NO
RS-1280

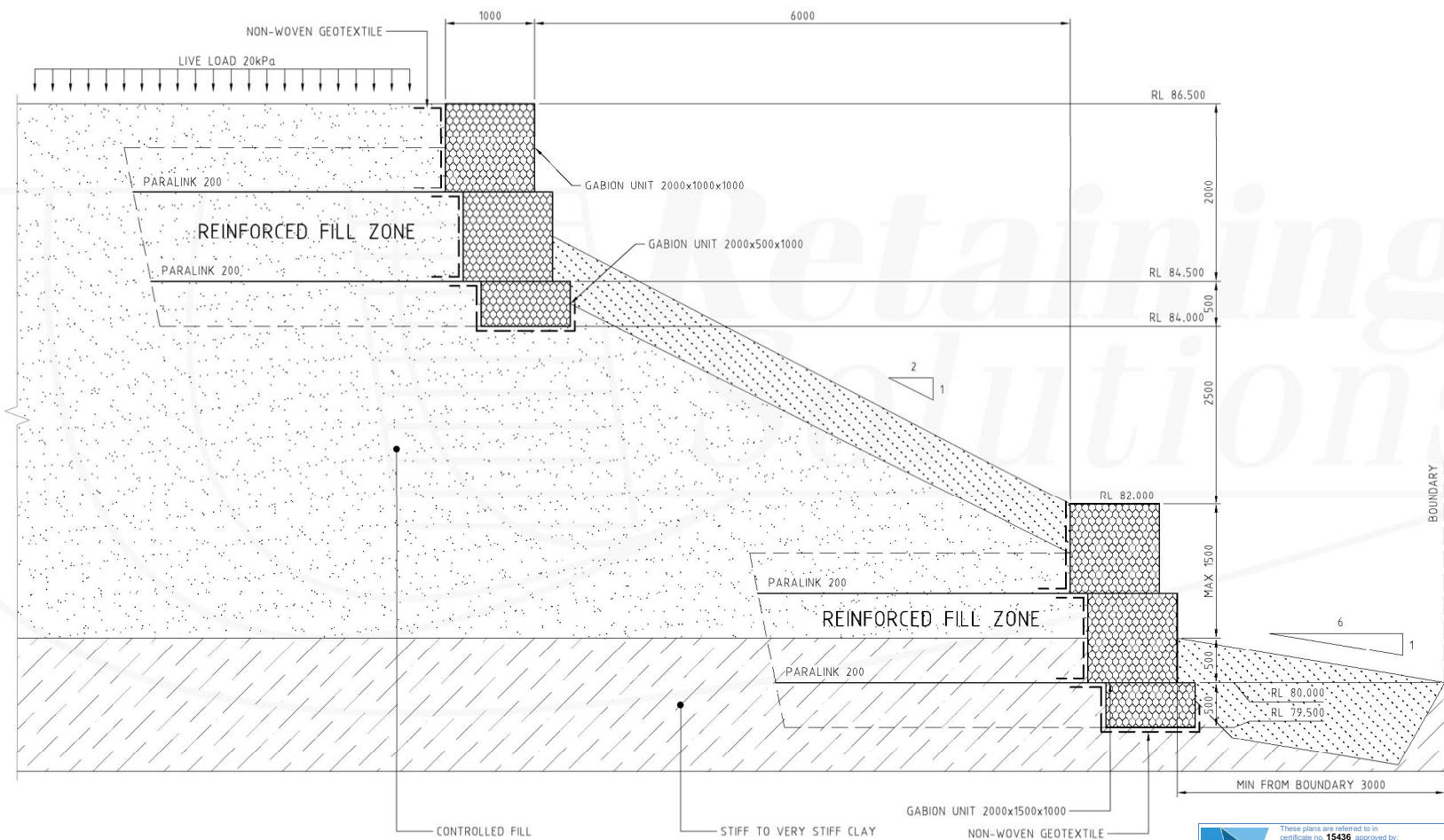
AUTOCAD REF
RS-1280-2

DWG. NO
RS-1280-SEC-SHT-01

REVISION
0

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF RETAINING SOLUTIONS AND MAY NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN APPROVAL FROM RETAINING SOLUTIONS

N:\PROJECTS\BURLEY ROAD HORSLEY PARK (STAGE 2)\DWG\RS-1280-SEC-SHT-01.DWG



SECTION B
SCALE 1:50
GW01-ELE 01

These plans are referred to in certificate no. **15436** approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1, C1, C2, C3, C4, G6, C15 & D1
 Land Development Certificates
 www.LDC.com.au

ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	11-09-18

ABN 16 103 223 721
 PHONE (02)9899 2111 FACSIMILE (02)9899 2112
 SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
 GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SDIL STRUCTURES

SCALE 1:50 (A3)

PROJECT TITLE
BURLEY ROAD HORSLEY PARK (STAGE 2) CSR LTD GROUP PROPERTY DEVELOPMENT

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

PROJECT NO
RS-1280

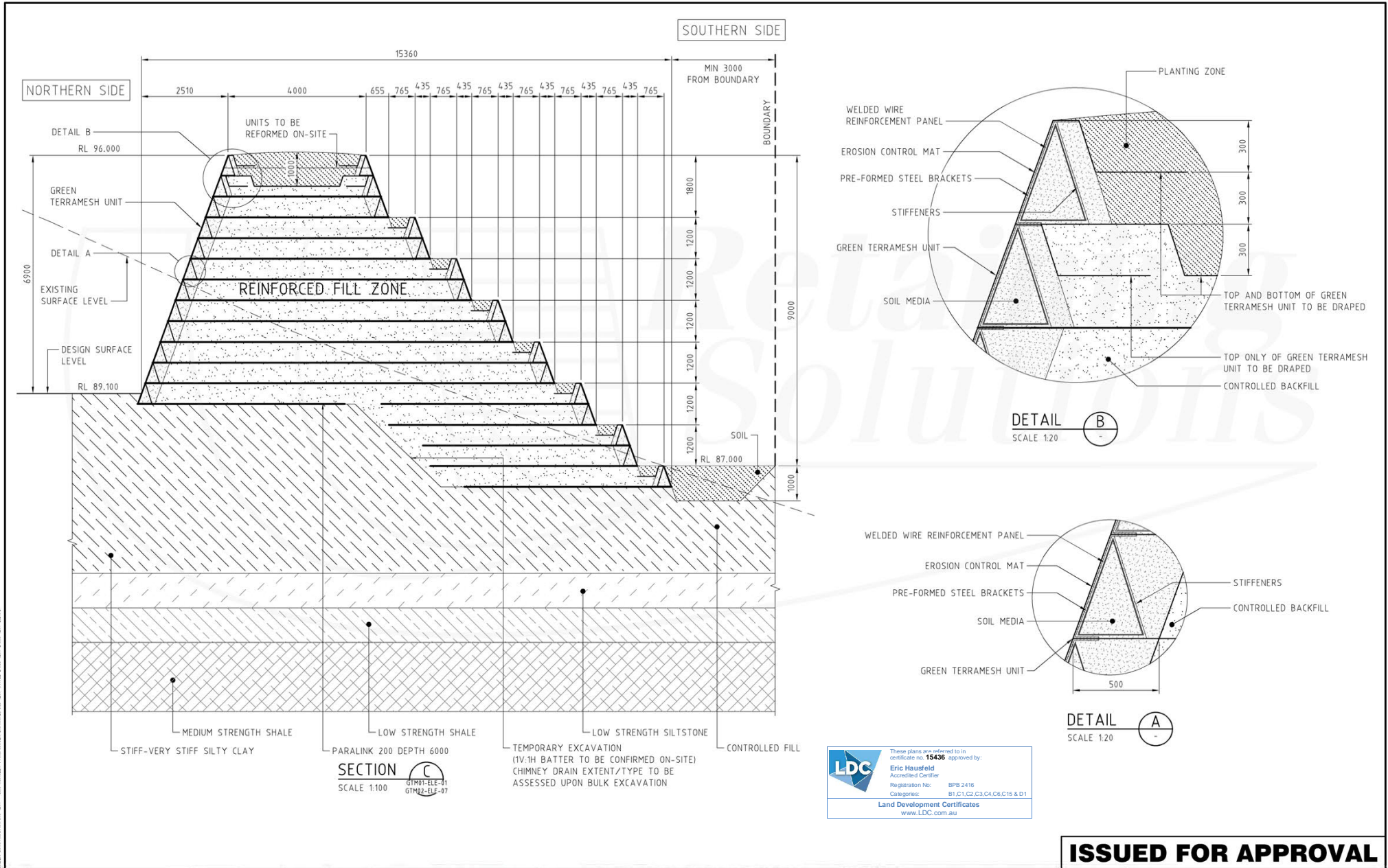
AUTOCAD REF
RS-1280-2

Dwg. NO
RS-1280-SEC-SHT-02

REVISION
0

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF RETAINING SOLUTIONS AND MAY NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN APPROVAL FROM RETAINING SOLUTIONS

\P\PROJECTS\BUREAU\PROJECTS\HORSLEY PARK\CONTRACTORS\DWG - CSR HORSLEY PARK\HORSLEY PARK (STAGE 2)\RS-1280-SEC-SHT-02.DWG

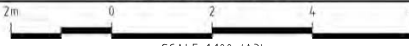



 These plans are referred to in certificate no. **15436** approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1, C1, C2, C3, C4, C6, C15 & D1
Land Development Certificates
 www.LDC.com.au

ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
2	CALIBRE RE-DESIGN	HE	BAI	BAI	31-10-18
1	STURT NOBLE REVIEW	HE	BAI	BAI	10-04-18
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	20-09-18

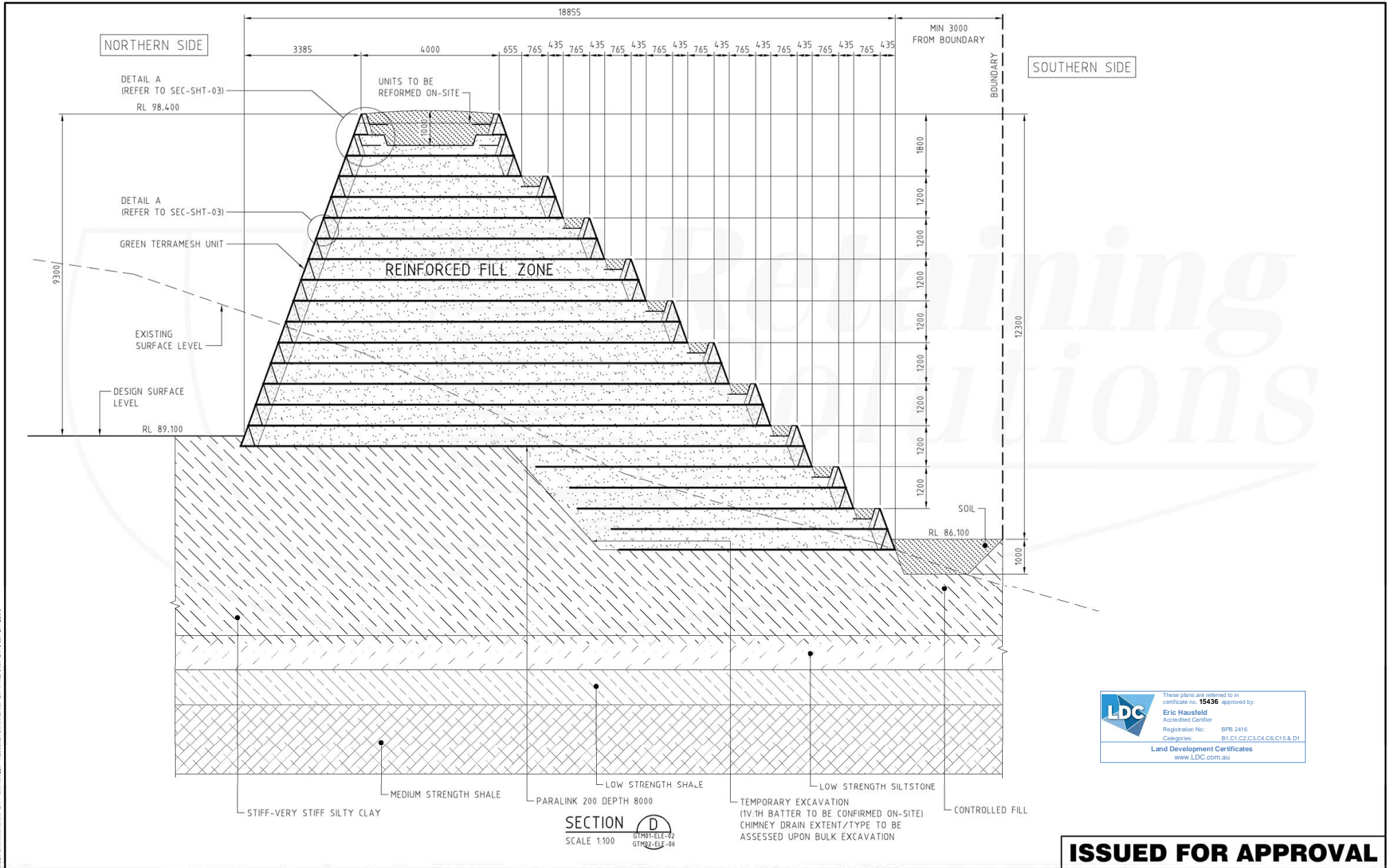

 ABN 16 103 223 721
 PHONE (02)9899 2111 FACSIMILE (02)9899 2172
 SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
 GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES

 SCALE 1:100 (A3)

PROJECT TITLE
BURLEY ROAD HORSLEY PARK (STAGE 2)
CSR LTD GROUP PROPERTY DEVELOPMENT
 CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

GTM - SECTION SHEET 1 OF 5
 PROJECT NO
RS-1280
 AUTOCAD REF **RS-1280-2**
 DWG. NO **RS-1280-SEC-SHT-03** REVISION **2**

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF RETAINING SOLUTIONS AND MAY NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN APPROVAL FROM RETAINING SOLUTIONS




 These plans are referred to in certificate no. **15436** approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BFB 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1
 Land Development Certificates
 www.LDC.com.au

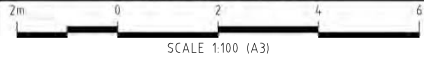
ISSUED FOR APPROVAL

2	CALIBRE RE-DESIGN	HE	BAI	BAI	31-10-18
1	STURT NOBLE REVIEW	HE	BAI	BAI	10-04-18
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	20-09-18
REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE



ABN 16 103 223 721
 PHONE (02)9899 2111 FACSIMILE (02)9899 2172
 SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
 GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES



PROJECT TITLE
BURLEY ROAD HORSLEY PARK (STAGE 2)
CSR LTD GROUP PROPERTY DEVELOPMENT

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

GTM - SECTION
SHEET 2 OF 5

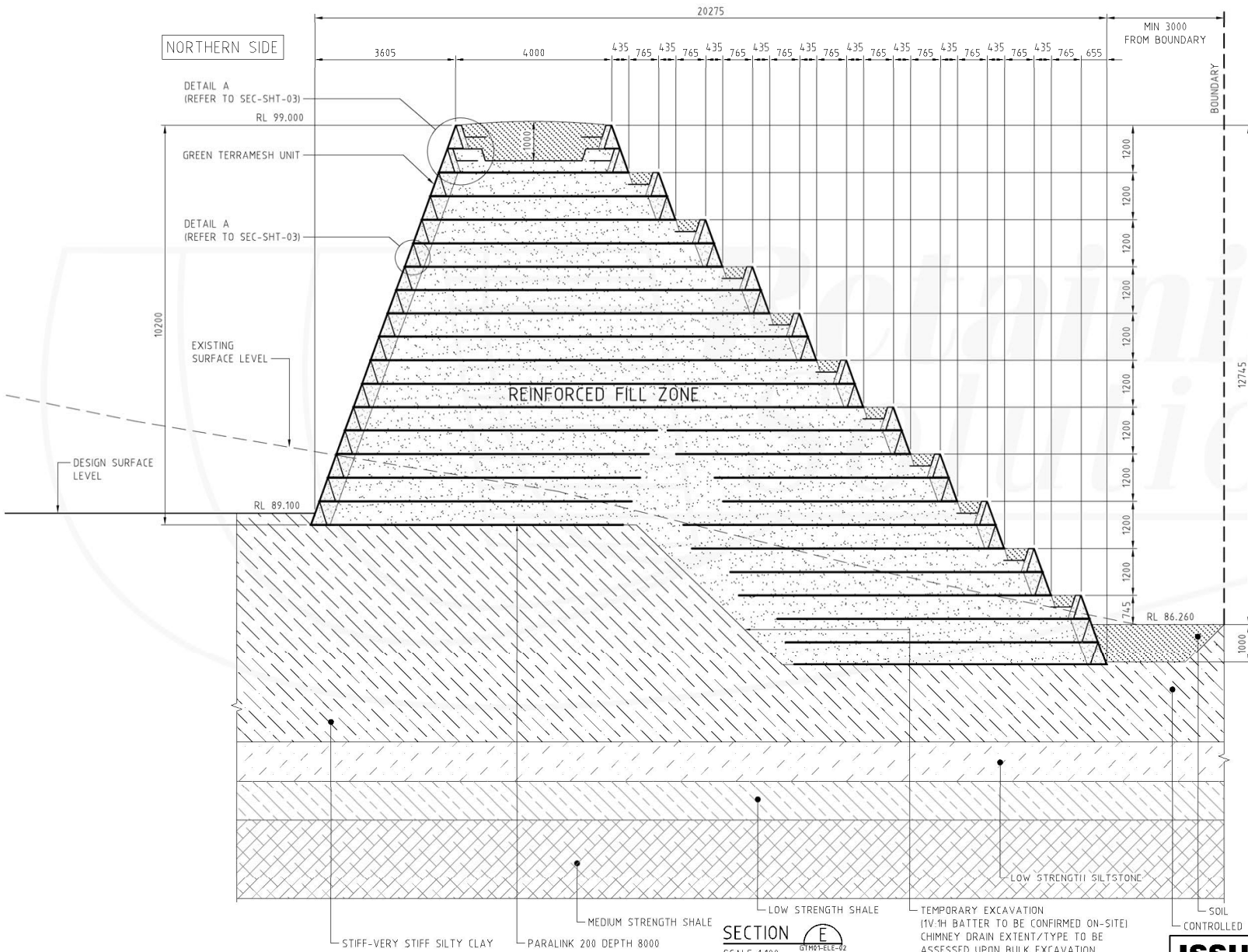
PROJECT NO	AUTOCAD REF	REVISION
RS-1280	RS-1280-2	2
DWG. NO	RS-1280-SEC-SHT-04	

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF RETAINING SOLUTIONS AND MAY NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN APPROVAL FROM RETAINING SOLUTIONS

\P\PROJECTS\BURLEY PARK\CONSTRUCTION\04 - CSR HORSLEY PARK\CONSTRUCTION\04 - STAGE 2\RS-1280-SEC-SHT-04.DWG

NORTHERN SIDE

SOUTHERN SIDE



These plans are referred to in certificate no. 15436 approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BFD 2418
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1
 Land Development Certificates
 www.LDC.com.au

SECTION E
 SCALE 1:100
 GTR03-ELE-02
 GTR02-ELE-06

ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
2	CALIBRE RE-DESIGN	HE	BAI	BAI	31-10-18
1	STURT NOBLE REVIEW	HE	BAI	BAI	10-04-18
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	20-09-18

ABN 16 103 223 721
 PHONE (02)9899 2111 FACSIMILE (02)9899 2172
 SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
 GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES

SCALE 1:100 (A3)

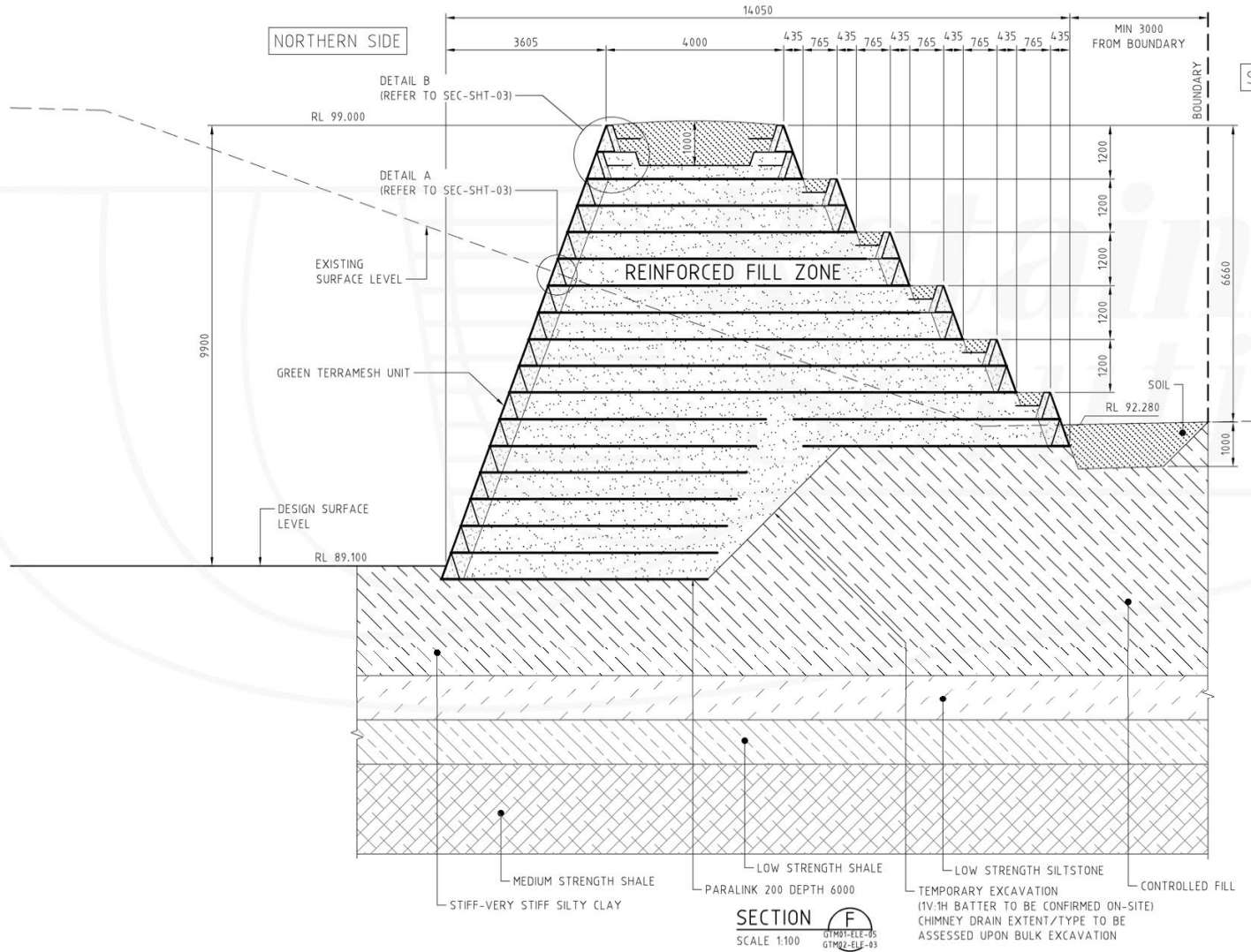
PROJECT TITLE
BURLEY ROAD HORSLEY PARK (STAGE 2)
CSR LTD GROUP PROPERTY DEVELOPMENT

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

PROJECT NO RS-1280	AUTOCAD REF RS-1280-2	REVISION 2
Dwg. NO RS-1280-SEC-SHT-05		

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF RETAINING SOLUTIONS AND MAY NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN APPROVAL FROM RETAINING SOLUTIONS

\P\PROJECTS\BURLEY ROAD HORSLEY PARK\STAGE 2\GTM - SECTION E\GTM - SECTION E - BURLEY PARK\GTM - SECTION E - BURLEY PARK.dwg



SECTION F
SCALE 1:100
G1981-FILE-05
G1982-FILE-03

These plans are referred to in certificate no. **15436** approved by:
Eric Hausfeld
Accredited Certifier
Registration No: BPB 2416
Categories: B1, C1, C2, C3, C4, C6, C15 & D1
Land Development Certificates
www.LDC.com.au

ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
2	CALIBRE RE-DESIGN	HE	BAI	BAI	31-10-18
1	STURT NOBLE REVIEW	HE	BAI	BAI	10-04-18
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	20-09-18

Retaining Solutions
ABN 16 103 223 721
PHONE (02)9899 2111 FACSIMILE (02)9899 2112
SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES

SCALE 1:100 (A3)

PROJECT TITLE
**BURLEY ROAD HORSLEY PARK (STAGE 2)
CSR LTD GROUP PROPERTY DEVELOPMENT**

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

GTM - SECTION
SHEET 5 OF 5

PROJECT NO
RS-1280

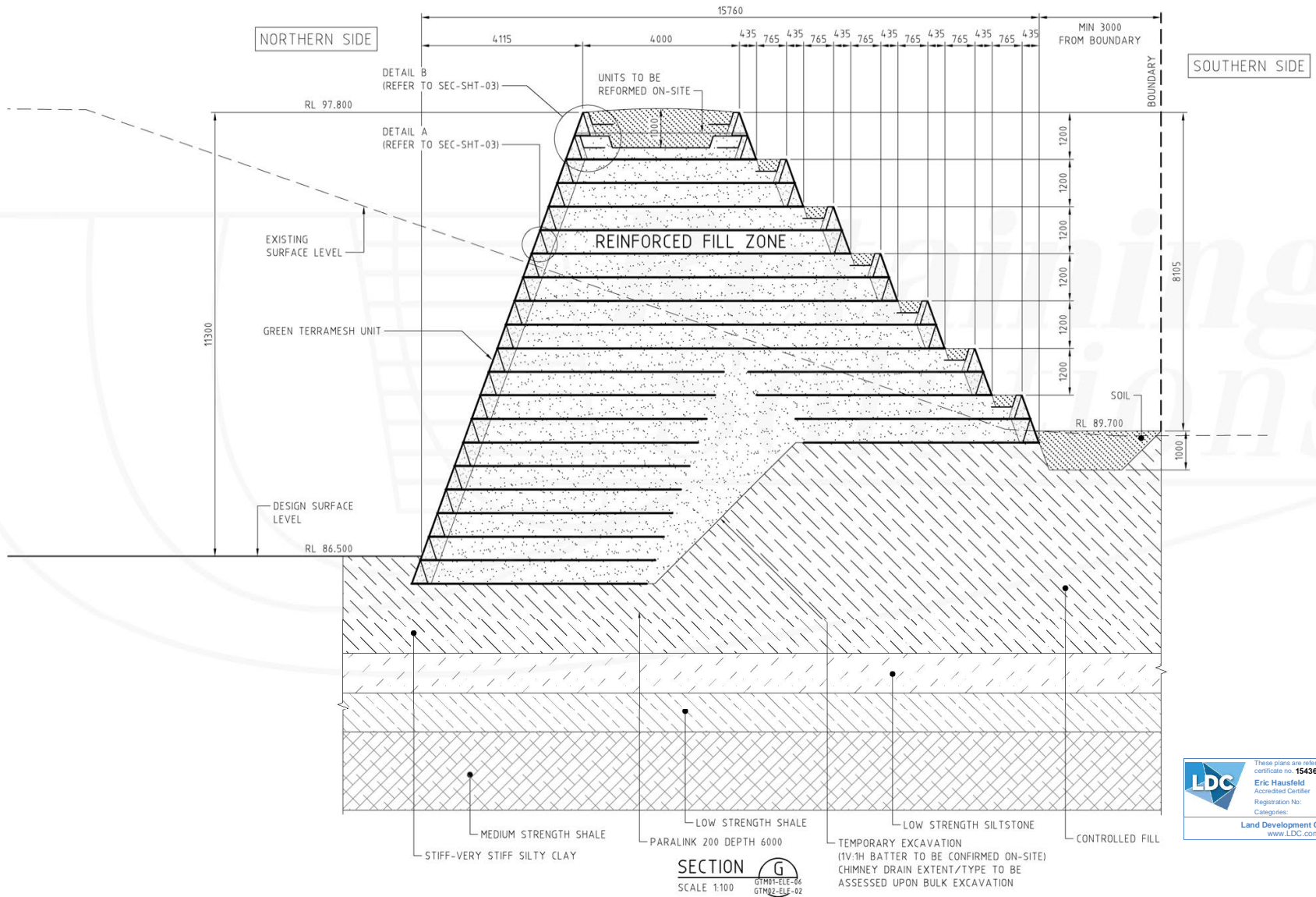
AUTOCAD REF
RS-1280-2

DWG. NO
RS-1280-SEC-SHT-06

REVISION
2

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF RETAINING SOLUTIONS AND MAY NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN APPROVAL FROM RETAINING SOLUTIONS

V:\PROJECTS\BUNDASHEE PROJECT\DRAWINGS\CONTRACTORS\DR - CSR MOBILITY PARKURUM DRAWINGS\DR-181 STAGE 2\RS-1280-SEC-SHT-06.dwg



SECTION G
SCALE 1:100
GTM01-ELLE-06
GTM02-ELF-02

These plans are referred to in certificate no. 15436 approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BFB 2416
 Categories: B1, C1, C2, C3, C4, C6, C15 & D1
 Land Development Certificates
 www.LDC.com.au

ISSUED FOR APPROVAL

REV	REVISION DESCRIPTION	DRAWN	DESIGNED	APPROVED	DATE
2	CALIBRE RE-DESIGN	HE	BAI	BAI	31-10-18
1	STURT NOBLE REVIEW	HE	BAI	BAI	10-04-18
0	FOR APPROVAL PURPOSES	HE	BAI	BAI	20-09-18

ABN 16 103 223 721
 PHONE (02)9899 2111 FACSIMILE (02)9899 2112
 SYDNEY AUSTRALIA

ENGINEERING DESIGN SERVICES FOR ALL TYPE OF RETAINING STRUCTURES
 GABIONS, TERRAMESH, CRIB WALLS, SEGMENTAL WALLS AND REINFORCED SOIL STRUCTURES

SCALE 1:100 (A3)

PROJECT TITLE
BURLEY ROAD HORSLEY PARK (STAGE 2)
CSR LTD GROUP PROPERTY DEVELOPMENT

CLIENT/DEVELOPER
MULGOA QUARRIES PTY LTD

PROJECT NO
RS-1280

AUTOCAD REF
RS-1280-2

DWG. NO
RS-1280-SEC-SHT-07

REVISION
2

THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF RETAINING SOLUTIONS AND MAY NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN APPROVAL FROM RETAINING SOLUTIONS

\P\PROJECTS\BUREAU\PROJECTS\HORSLEY PARK\CONTRACTORS\BID - CSR HORSLEY PARK\HORSLEY PARK (STAGE 2)\RS-1280-2\RS-1280-2.DWG

CSR HORSLEY PARK - STAGE 1 & 2

ROAD, DRAINAGE AND EARTHWORKS

FOR CONSTRUCTION CERTIFICATE



DRAWING LIST

NO.	DRAWING TITLE
GENERAL	
000	COVER SHEET
001	GENERAL ARRANGEMENT PLAN
002	SHEET LAYOUT PLAN
003	GENERAL NOTES & LEGEND
SEDIMENT & EROSION CONTROL	
101	SOIL & WATER MANAGEMENT PLAN 01 OF 02
102	SOIL & WATER MANAGEMENT PLAN 02 OF 02
111	SOIL & WATER MANAGEMENT NOTES & LEGEND
SITE REGRADING	
201	BULK EARTHWORKS PLAN - STAGE A - SHEET 01 OF 02
202	BULK EARTHWORKS PLAN - STAGE A - SHEET 02 OF 02
203	BULK EARTHWORKS - STAGE A - LONGSECTIONS SHEET 01 OF 07
204	BULK EARTHWORKS - STAGE A - LONGSECTIONS SHEET 02 OF 07
205	BULK EARTHWORKS - STAGE A - LONGSECTIONS SHEET 03 OF 07
206	BULK EARTHWORKS - STAGE A - LONGSECTIONS SHEET 04 OF 07
207	BULK EARTHWORKS - STAGE A - LONGSECTIONS SHEET 05 OF 07
208	BULK EARTHWORKS - STAGE A - LONGSECTIONS SHEET 06 OF 07
209	BULK EARTHWORKS - STAGE A - LONGSECTIONS SHEET 07 OF 07
ENGINEERING PLANS	
301	ENGINEERING PLAN - STAGE C - SHEET 01 OF 07
302	ENGINEERING PLAN - STAGE C - SHEET 02 OF 07
303	ENGINEERING PLAN - STAGE C - SHEET 03 OF 07
304	ENGINEERING PLAN - STAGE C - SHEET 04 OF 07
305	ENGINEERING PLAN - STAGE C - SHEET 05 OF 07
306	ENGINEERING PLAN - STAGE C - SHEET 06 OF 07
307	ENGINEERING PLAN - STAGE C - SHEET 07 OF 07
ROAD LONGITUDINAL SECTIONS	
401	ROAD LONG SECTIONS SHEET 01 OF 03
402	ROAD LONG SECTIONS SHEET 02 OF 03
403	ROAD LONG SECTIONS SHEET 03 OF 03
410	FUTURE BASIN & BUND SECTIONS
411	EARTH BUND SECTIONS
ROAD CROSS SECTIONS	
501	ROAD CROSS SECTIONS SHEET 01 OF 07
502	ROAD CROSS SECTIONS SHEET 02 OF 07
503	ROAD CROSS SECTIONS SHEET 03 OF 07
504	ROAD CROSS SECTIONS SHEET 04 OF 07
505	ROAD CROSS SECTIONS SHEET 05 OF 07
506	ROAD CROSS SECTIONS SHEET 06 OF 07
507	ROAD CROSS SECTIONS SHEET 07 OF 07
INTERSECTION PLANS	
601	KERB RETURN PLANS & LONG SECTIONS SHEET 01 OF 02
602	KERB RETURN PLANS & LONG SECTIONS SHEET 02 OF 02
MISCELLANEOUS ROADWORKS PLANS	
701	PAVEMENT PLAN 01 OF 02
702	PAVEMENT PLAN 02 OF 02
DRAINAGE	
801	CATCHMENT PLAN 01 OF 02
802	CATCHMENT PLAN 02 OF 02
803	DRAINAGE LONG SECTIONS SHEET 01 OF 10
804	DRAINAGE LONG SECTIONS SHEET 02 OF 10
805	DRAINAGE LONG SECTIONS SHEET 03 OF 10
806	DRAINAGE LONG SECTIONS SHEET 04 OF 10
807	DRAINAGE LONG SECTIONS SHEET 05 OF 10
808	DRAINAGE LONG SECTIONS SHEET 06 OF 10
809	DRAINAGE LONG SECTIONS SHEET 07 OF 10
810	DRAINAGE LONG SECTIONS SHEET 08 OF 10
811	DRAINAGE LONG SECTIONS SHEET 09 OF 10
812	DRAINAGE LONG SECTIONS SHEET 10 OF 10
813	DRAINAGE CALCULATIONS SHEET 01 OF 03
814	DRAINAGE CALCULATIONS SHEET 02 OF 03
815	DRAINAGE CALCULATIONS SHEET 03 OF 03
820	TEMPORARY SWALE DRAIN No.01 PLAN AND LONGSECTION
821	BURLEY ROAD TEMPORARY ROAD AND DRAINAGE WORKS
STRUCTURAL DETAILS	
901	STRUCTURAL TYPICAL PIT DETAILS SHEET 01 OF 02
902	STRUCTURAL TYPICAL PIT DETAILS SHEET 02 OF 02
903	STRUCTURAL PIT 120-09
904	STRUCTURAL PIT 100-19 PLAN
905	STRUCTURAL PIT 100-19 SECTIONS
906	STRUCTURAL CULVERT DETAILS
907	STRUCTURAL PIT No.100-20 PLAN & SECTION
908	STRUCTURAL PIT No.100-20 SECTION
909	STRUCTURAL PIT SW ACCESS RD-7 DETAIL
910	TYPICAL PIT 2x1500 DETAIL
911	RETAINING WALL PLAN SHEET 01 OF 02
912	RETAINING WALL PLAN SHEET 02 OF 02
917	RETAINING WALL LONG SECTIONS SHEET 01 OF 03
918	RETAINING WALL LONG SECTIONS SHEET 02 OF 03
919	RETAINING WALL LONG SECTIONS SHEET 03 OF 03
922	INSITU REINFORCED CONCRETE RETAINING WALL DETAILS
SERVICES	
1001	SERVICES PLAN 01 OF 02
1002	SERVICES PLAN 02 OF 02
LINEMARKING & SIGNAGE PLAN	
1011	LINEMARKING & SIGNAGE PLAN 01 OF 02
1012	LINEMARKING & SIGNAGE PLAN 02 OF 02

CLIENT:



LOCALITY PLAN
N.T.S.

LGA FAIRFIELD COUNCIL

DA 893.1/2013
LOT 1, DP 106143

These plans are referred to in certificate no. 15992 approved by:

Eric Hausfeld
Accredited Certifier

Registration No: BPB 2416
Categories: B1, C1, C2, C3, C4, C6, C15 & D1

Land Development Certificates
www.LDC.com.au

WORK AS EXECUTED SURVEY BY:
H. J. Murphy
Registered Surveyor No. 1677
Date: 16/07/2020

CSR HORSLEY PARK - STAGE 1 & 2

ROAD, DRAINAGE AND EARTHWORKS






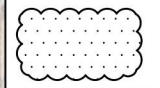
FILE: H1501115 - CSR HORSLEY PARK15-001115.12 - STAGE 1&2 DRAWINGS/DA CC15-001115.12-CC-000.DWG LAST SAVED BY: ANDREW LANGRISH



TEMPORARY SWALE DRAIN No.01 BURLEY ROAD (ACCESS ROAD)

ALL WORKS WITHIN BURLEY ROAD
SUBJECT TO ROADS
ACT APPROVAL - SECTION 138

LEGEND

-  PROPOSED STAGE 1
-  PROPOSED STAGE 2A
-  PROPOSED STAGE 2B
-  PROPOSED STAGE 2C
-  FUTURE STAGE 3
-  TREES TO REMAIN

STAGE 1

FUTURE STAGE 3

TEMPORARY TURNING HEAD STAGE 1

TEMPORARY TURNING HEAD STAGE 2C

STAGE 2C

STAGE 2B

TEMPORARY TURNING HEAD TO BE CONSTRUCTED IN STAGE 2A ONLY, SHOULD STAGE 2A & STAGE 2C NOT BE DELIVERED CONCURRENTLY.

LANDFILL

CONSERVATION AREA

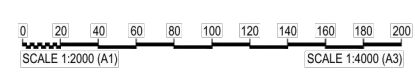
STAGE 2A

These plans are related to a certificate no. **15992** approved by **Eric Hausfeld** Accredited Certifier.
 Registration No. **BPB 2416**
 Categories **C1, C2, C3, C4, C5, C15 & D1**
 Land Development Certificates
www.LDC.com.au


NEARMAP IMG DATED: 26.02.2016

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

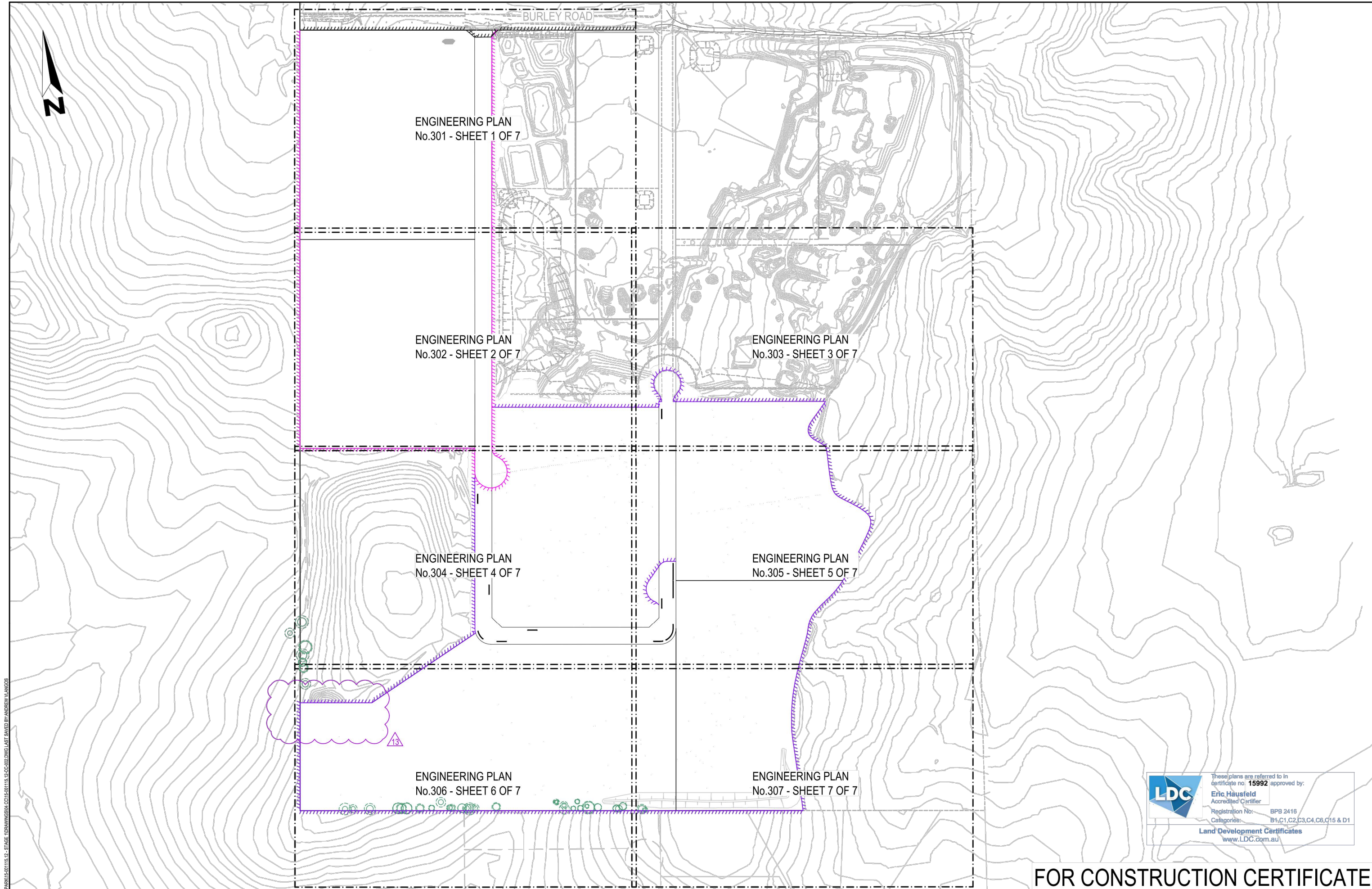
Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CPEng NER
 SIGN: 
 DATE: 1/27/20

Client: **CSR LTD**
 Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**



Drawing Title: GENERAL ARRANGEMENT PLAN				
Project No: 15-001115.12	Stage: 1&2	Milestone: CC	Dwg No.: 001	Revision: 13

FILE: H:\15\001115 - CSR HORSLEY PARK\15-001115.12 - STAGE 1\DRAWINGS\CD\15-001115.12-02-01.DWG LAST SAVED BY: ANDREW LANGOS

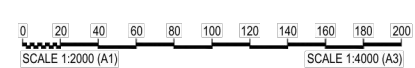


LDC: 15-001115 - CSR HORSLEY PARK 15-001115_12 - STAGE 1 & 2 - ROAD, DRAINAGE AND EARTHWORKS - DWG LAST SAVED BY ANDREW LANGOS


 These plans are referred to in certificate no. **15992** approved by:
Eric Häusfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1, C1, C2, C3, C4, C6, C15 & D1
Land Development Certificates
www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP Eng NER
 SIGN: 
 DATE: 12/7/20

Client:
CSR LTD
 Project:
**CSR HORSLEY PARK - STAGE 1 & 2
 ROAD, DRAINAGE AND EARTHWORKS**


 ©2020 calibregroup.com.au calibreconsulting.co

Drawing Title: SHEET LAYOUT PLAN				
Project No: 15-001115.12	Stage: 1&2	Milestone: CC	Dwg No.: 002	Revision: 13

GENERAL NOTES

GENERAL

- G1. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH FAIRFIELD COUNCIL'S ENGINEERING DESIGN AND ENGINEERING CONSTRUCTION SPECIFICATIONS AND TO THE REQUIREMENTS OF THE CERTIFYING AUTHORITY.
- G2. INSPECTIONS BY CERTIFYING AUTHORITY ARE REQUIRED AT THE FOLLOWING STAGES AND THE WORKS APPROVED PRIOR TO CONTINUANCE OF ANY FUTURE WORK:
 - (A) FOLLOWING INSTALLATION OF EROSION AND SEDIMENT CONTROL STRUCTURES/MEASURES.
 - (B) PRIOR TO BACKFILLING PIPELINES, SUBSOIL DRAINS AND DAMS.
 - (C) PRIOR TO CASTING OF PITS AND OTHER CONCRETE STRUCTURES, INCLUDING KERB AND GUTTER BUT FOLLOWING PLACEMENT OF FOOTINGS, FORMWORK, AND REINFORCEMENT.
 - (D) PRIOR TO PLACEMENT OF SUB BASE AND ALL SUBSEQUENT PAVEMENT LAYERS, A PROOF ROLLER TEST OF EACH PAVEMENT LAYER IS REQUIRED.
 - (E) FORMWORKS PRIOR TO POURING CONCRETE IN PARKING AREA FOR FOOTPATH CROSSING AND OTHER ASSOCIATED WORK.
 - (F) PRIOR TO BACKFILLING PUBLIC UTILITY CROSSINGS IN ROAD RESERVES.
 - (G) FINAL INSPECTIONS AFTER ALL WORKS ARE COMPLETED AND 'WORKS AS EXECUTED' PLANS HAVE BEEN SUBMITTED TO COUNCIL.
- G3. NO TREES ARE TO BE REMOVED UNLESS APPROVAL IS GRANTED BY COUNCIL'S LANDSCAPE COMPLIANCE OFFICER OR AS AUTHORISED BY DEVELOPMENT CONSENT.
- G4. MAKE SMOOTH JUNCTIONS WITH EXISTING WORKS.
- G5. NO WORK IS TO BE CARRIED OUT ON COUNCIL PROPERTY OR ADJOINING PROPERTIES WITHOUT THE WRITTEN PERMISSION FROM THE OWNER/S.
- G6. VEHICULAR ACCESS AND ALL UTILITIES/SERVICES ARE TO BE MAINTAINED AT ALL TIMES TO ADJOINING PROPERTIES AFFECTED BY CONSTRUCTION.
- G7. ALL RUBBISH, BUILDINGS, SHEDS AND FENCES TO BE REMOVED TO SATISFACTION OF COUNCIL'S ENGINEER.
- G8. COUNCIL ENGINEERS HAVE DISCRETION TO VARY, AS CONSIDERED NECESSARY, THE ENGINEERING REQUIREMENTS IN RESPECT OF A PARTICULAR SUBDIVISION OR DEVELOPMENT HAVING REGARD TO THE SITE CONTEXT.

EARTHWORKS

- E1. EARTHWORKS ARE TO BE CARRIED OUT TO THE SATISFACTION OF THE COUNCIL. UNSUITABLE MATERIALS ARE TO BE REMOVED FROM ROADS AND LOTS PRIOR TO FILLING. THE CONTRACTOR IS TO ARRANGE AND MAKE AVAILABLE COMPACTION TESTING RESULTS FOR ALL AREAS THAT CONTAIN FILL IN EXCESS OF 200 MM.
- E2. COMPACTION OF EARTHWORKS SHALL CONTINUE UNTIL A DRY DENSITY RATIO OF 95% FOR SITE FILLING AND 100% FOR ROAD PAVEMENT SUBGRADES HAS BEEN ACHIEVED IN ACCORDANCE WITH TEST METHOD AS1289.5.3.1 OR AS.1289.5.1.1. THE CONTROL TESTING OF EARTHWORKS SHALL BE IN ACCORDANCE WITH THE GUIDELINES IN AS3798 'GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS'. WHERE IT IS PROPOSED TO USE TEST METHOD AS1289.5.8.1 TO DETERMINE THE FIELD DENSITY, A SAND REPLACEMENT METHOD SHALL BE USED TO CONFIRM THE RESULTS.
- E3. THE SUITABLE QUALIFIED GEOTECHNICAL ENGINEER, SHALL HAVE A LEVEL 1 RESPONSIBILITY FOR ALL FILLING AS DEFINED IN APPENDIX B AS3798 'GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS', AND AT THE END OF THE WORKS SHALL CONFIRM THE EARTHWORKS COMPLY WITH THE REQUIREMENTS OF THE SPECIFICATION AND DRAWINGS BY WRITTEN NOTIFICATION.
- E4. IN AREAS TO BE FILLED WHERE THE SLOPE OF THE NATURAL SURFACE EXCEEDS 1(V):4(H), BENCHES ARE TO BE CUT TO PREVENT SLIPPING OF THE PLACED FILL MATERIAL AS REQUIRED BY THE COUNCIL.
- E5. ALL BATTERS ARE TO BE SCARIFIED TO A DEPTH OF 50 MM TO ASSIST WITH ADHESION OF TOP SOIL TO BATTER FACE.
- E6. PROVIDE MINIMUM 150 MM AND MAXIMUM 300 MM TOPSOIL WITH ON FOOTPATHS, FILLED AREAS AND ALL OTHER AREAS DISTURBED DURING CONSTRUCTION. TOPSOILED AREAS TO BE STABILISED WITH APPROVED VEGETATION A MAXIMUM OF 14 DAYS AFTER TOPSOILING AND ARE TO BE WATERED TO ENSURE GERMINATION.
- E7. THE CONTRACTOR SHALL CONTROL SEDIMENTATION, EROSION AND POLLUTION DURING CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITION OF 'MANAGING URBAN STORMWATER: SOILS AND CONSTRUCTION' PRODUCED BY LANDCOM.
- E8. A MINIMUM 1 METRE WIDE, CONTINUOUS STRIP OF COUCH GRASS SHALL BE PLACED BEHIND THE BACK OF ALL KERBS AND OTHER CONCRETE STRUCTURES IMMEDIATELY AFTER THE COMPLETION OF THE FOOTPATH GRADING OR OTHER ELEMENTS AS APPLICABLE, AND SHALL BE MAINTAINED AND REPLACED AS REQUIRED DURING THE CONSTRUCTION MAINTENANCE PERIOD.
- E9. LOT PAD DELIVERY IS TO BE STAGED AS PER PLANS:
 - STAGE A - BULK EARTHWORKS (PLANS 201-209).
 - STAGE B - INTERIM GRADING AS DIRECTED BY SUPERINTENDENT (PLANS 215-220) CONTRACTOR TO CONFIRM WITH SUPERINTENDENT PRIOR TO UNDERTAKING STAGE C.
 - STAGE C - FINISHED SURFACE LEVELS (PLANS 301-307)

CALIBRE CONSULTING GENERAL

- CG1. SURVEY SOURCED FROM:
 - SURVEYOR: CALIBRE CONSULTING
 - D.T.M.: HORSLEY PARK BRICK PLANT - MGA Z56, SURVEY DATED 05 JUNE 2013
 - BOUNDARY: X13044.SP1 DATED 03 APRIL 2013
- CG2. CONTRACTOR IS TO ENSURE THAT ALL WORKS ASSOCIATED WITH PROPERTY BOUNDARIES ARE TO BE SET OUT OR VERIFIED BY A REGISTERED SURVEYOR

CALIBRE CONSULTING GENERAL (CONTINUED)

- CG3. PIPES UP TO 750Ø SHALL BE CONSTRUCTED WITH SPIGOT AND SOCKET RUBBER RING JOINTS AND BE OF FIBRE REINFORCED CONCRETE WHICH SHALL CONFORM RESPECTIVELY TO THE REQUIREMENTS OF AS 4139 AND AS 4058. WHERE FIBRE REINFORCED CONCRETE PIPES ARE TO BE USED, A PROPRIETARY COLLAR IS TO BE APPLIED OVER THE PIPE JOINTS.
- CG4. PIPES GREATER THAN 750Ø ARE TO BE CONSTRUCTED FROM SULPHATE RESISTANT CEMENT.
- ROADWORKS**
 - R1. SUBGRADES AND SUB BASES ARE TO BE COMPACTED IN ACCORDANCE WITH COUNCIL'S CONSTRUCTION SPECIFICATION.
 - R2. SUBSOIL DRAINS TO BE PROVIDED ON BOTH SIDES OF ROADS (EXCEPT WHERE THERE IS STORMWATER DRAINAGE).
 - R3. 150 X 50 H.D. GALVANISED STEEL KERB OUTLETS TO BE PLACED IN ALL KERB TYPES ON LOW SIDE OF LOTS. PROVIDE SUITABLE ADAPTOR TO ALLOW CONNECTION OF 90 MM DIAMETER STORMWATER PIPE.
 - R4. LIPLESS PERAMBULATOR CROSSINGS ARE TO BE PROVIDED IN ALL KERB RETURNS AND WHERE REQUIRED BY COUNCIL.
 - R5. SERVICE CONDUITS TO BE PLACED AS DIRECTED BY ALL PUBLIC UTILITY AUTHORITIES INCLUDING INTEGRAL ENERGY, TELSTRA AND SYDNEY WATER
 - R6. PROPOSED UTILITIES AND SERVICES CROSSING EXISTING ROADS SHALL BE PROVIDED FOR USING A TRENCHLESS TECHNIQUE SO AS NOT TO DAMAGE THE EXISTING SURFACE. ALL SERVICE CONDUITS UNDER ROADS MUST BE LAID TO A MINIMUM DEPTH OF 750 MM.
 - R7. CONCRETE FOOTPATH CONSTRUCTION IS TO BE BONDED WITH COUNCIL PENDING COMPLETION OF UTILITY/SERVICES AND SURROUNDING DWELLINGS.
 - R8. ALL TEMPORARY ROADS MUST BE TEMPORARILY SEALED WITH A SINGLE COAT FLUSH SEAL.
 - R9. ALL PERMANENT ROADS MUST BE SEALED WITH A SINGLE COAT FLUSH SEAL AND 50 MM OF AC TO BE APPLIED IN TWO 25 MM THICK LAYERS. THE FINAL AC LAYER IS TO BE AC 10 AND IS TO BE BONDED WITH COUNCIL AND PLACED FOLLOWING APPROVAL FROM COUNCIL.
 - R10. SIGNPOSTING AND LINE MARKING SHALL CONFORM TO AS1742.2 'TRAFFIC CONTROL DEVICES FOR GENERAL USE'. RAISED RETRO-REFLECTIVE PAVEMENT MARKERS TO CONFORM TO AS1906 'RETRO-REFLECTIVE MATERIALS AND DEVICES FOR ROAD TRAFFIC CONTROL PURPOSES'. ALL APRONS AND KERB FACE ON CENTRAL ISLANDS OF ROUNDABOUTS AND ALL OTHER ISLANDS TO BE DELINEATED BY REFLECTIVE WHITE MARKING. INSTALLATION SHALL OCCUR IN ACCORDANCE WITH THE PLAN APPROVED BY THE LOCAL TRAFFIC COMMITTEE.
 - R11. ALL LOT AND HOUSE NUMBERS MUST BE STENCILLED ON KERB FACE.
 - R12. STREET SIGNS TO COUNCIL STANDARD MUST BE INSTALLED BY THE CONTRACTOR.

STORMWATER

- S1. ALL PIPES TO BE SPIGOT AND SOCKET, RUBBER RING JOINTED.
- S2. ALL LONGITUDINAL PIPELINES IN ROADS MUST BE LOCATED UNDER KERB AND GUTTER AND BE BACKFILLED WITH APPROVED GRANULAR MATERIAL UNLESS OTHERWISE APPROVED BY THE COUNCIL ENGINEER.
- S3. DRAINAGE LINES MUST BE BACKFILLED WITH APPROVED GRANULAR MATERIAL IN TRAFFICABLE AREAS. THREE (3) METRES OF SUBSOIL DRAINAGE WRAPPED IN GEOTEXTILE STOCKING MUST BE PROVIDED TO ALL DOWNSTREAM PITS.
- S4. ALL GULLY PITS TO COUNCIL'S STANDARD AND LINTELS CENTRALLY PLACED AT SAG PITS.
- S5. ALL PITS MUST BE BENCHED AND STREAMLINED. PROVIDE SL72 REINFORCEMENT AND GALVANISED STEP IRONS IN ALL PITS OVER 1.2-METRES DEEP AS MEASURED FROM THE TOP OF GRATE TO THE INVERT OF THE PIT.
- S6. CONCRETE IS TO HAVE MINIMUM COMPRESSIVE STRENGTH OF 32MPA AT 28-DAYS UNLESS OTHERWISE APPROVED BY THE COUNCIL ENGINEER.
- S7. ALL INTERALLOTMENT DRAINAGE MUST HAVE A MINIMUM PIPE DIAMETER OF 150 MM AND A MINIMUM GRADE OF 1% UNLESS OTHERWISE APPROVED BY THE COUNCIL ENGINEER.
- S8. ALL INTERALLOTMENT DRAINAGE LINES MUST BE LAID CENTRALLY WITHIN DRAINAGE EASEMENTS. INSPECTION PITS MUST BE PROVIDED AT ALL CHANGES OF GRADE AND DIRECTION.
- S9. INTERALLOTMENT DRAINAGE LINES MUST BE INSTALLED AFTER SYDNEY WATER SEWERAGE LINES HAVE BEEN INSTALLED WHERE SEWER IS PROPOSED ADJACENT TO INTERALLOTMENT DRAINAGE LINES.
- S10. 1% AEP OVERLAND FLOW PATHS MUST BE FORMED AND SHOWN ON 'WORKS AS EXECUTED' DRAWINGS.
- S11. ALL PLANS (BOTH DESIGN AND WAE) ARE TO CLEARLY DELINEATE THE EXTENT/LOCATION OF FLOOD LINES INCLUDING THE 5% AEP, 1% AEP AND PMF.
- S12. ADEQUATE PROVISION IS TO BE MADE TO PREVENT SCOURING AND SEDIMENTATION FOR ALL DRAINAGE WORKS IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS.
- S13. PIT LINTELS ARE TO BE STENCILLED WITH APPLICABLE DISTINCTION STENCIL AVAILABLE FROM COUNCIL.
- S14. CATCH DRAINS MUST BE CONSTRUCTED AS REQUIRED BY THE APPROVED PLANS OR THE PRINCIPAL CERTIFYING AUTHORITY.
- S15. SOIL AND WATER MANAGEMENT PLANS ARE TO BE PREPARED FOR ALL DISTURBED SITES AND ADHERED TO AT ALL TIMES DURING THE CONSTRUCTION AND MAINTENANCE PERIODS.

These plans are referred to in certificate no. **15992** approved by:

Eric Hausfeld
Accredited Certifier

Registration No: BPB 2416
Categories: B1,C1,C2,C3,C4,C8,C15 & D1

Land Development Certificates
www.LDC.com.au



FOR CONSTRUCTION CERTIFICATE

LEGEND

DESCRIPTION	PROPOSED	EXISTING	FUTURE
STORMWATER PIPELINE			
STORMWATER DRAINAGE PITS			
DRAINAGE LINE No. 3 DRAINAGE PIT No. 10			
CONCRETE HEADWALL			
SUBSOIL DRAIN			
150mm KERB AND GUTTER			
ROLL KERB AND GUTTER			
KERB ONLY			
EDGE STRIP			
MOUNTABLE KERB			
DISH CROSSING			
VEHICULAR CROSSING			
PEDESTRIAN RAMP			
EDGE OF BITUMEN			
ROAD PAVEMENT			
BENCHMARK			
BATTERS			
CONCRETE PATHWAY (F.C.C. STANDARD) (S-1)			
CONTOURS			
SITE REGRADING AREA			
SERVICE LINES SEWER, GAS, WATER, ELECTRICITY			
COMMUNICATION LINES TELSTRA, FIBRE OPTIC			
OVER HEAD LINES AND POLES			
SERVICE PITS TELECOM PIT, ACCESS CHAMBER, HYDRANT, STOP VALVE, AIR VALVE			
STAGE 1 LIMIT OF WORKS			
STAGE 2 LIMIT OF WORKS			
LIMIT OF STAGE			
FENCE POST AND RAIL FENCE SECURITY FENCE			
LOT NUMBERS			
TREES TO RETAIN WITHIN SITE TREES TO BE REMOVED WITHIN SITE			
RETAINING WALL			
ROCK WALL			
ROOF WATER OUTLET TO KERB ROOF WATER OUTLET TO BACK OF PIT			
EXISTING FLOW PATHS			
EASEMENT TO DRAIN WATER WIDTH			

FILE: H1919-00115 - CSR HORSLEY PARK 15-00115.12 - STAGE 1 DRAWING CD15-00115.12-00-000.DWG LAST SAVED BY ANDREW LANGIOS

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	

Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.

NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIE(Aust), CP(Eng) NER

SIGN:

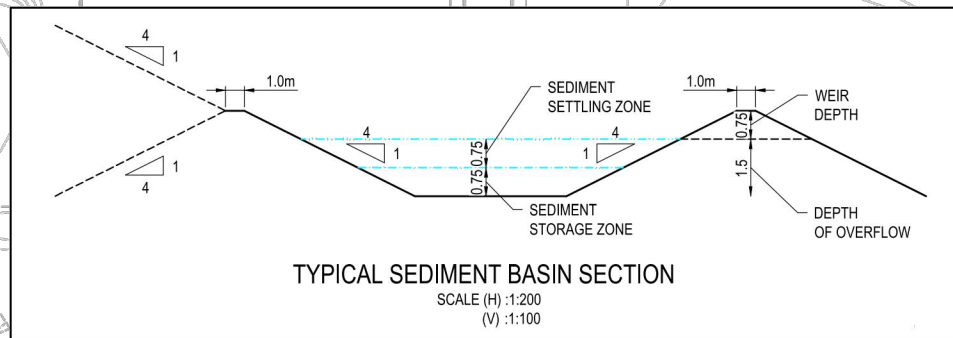
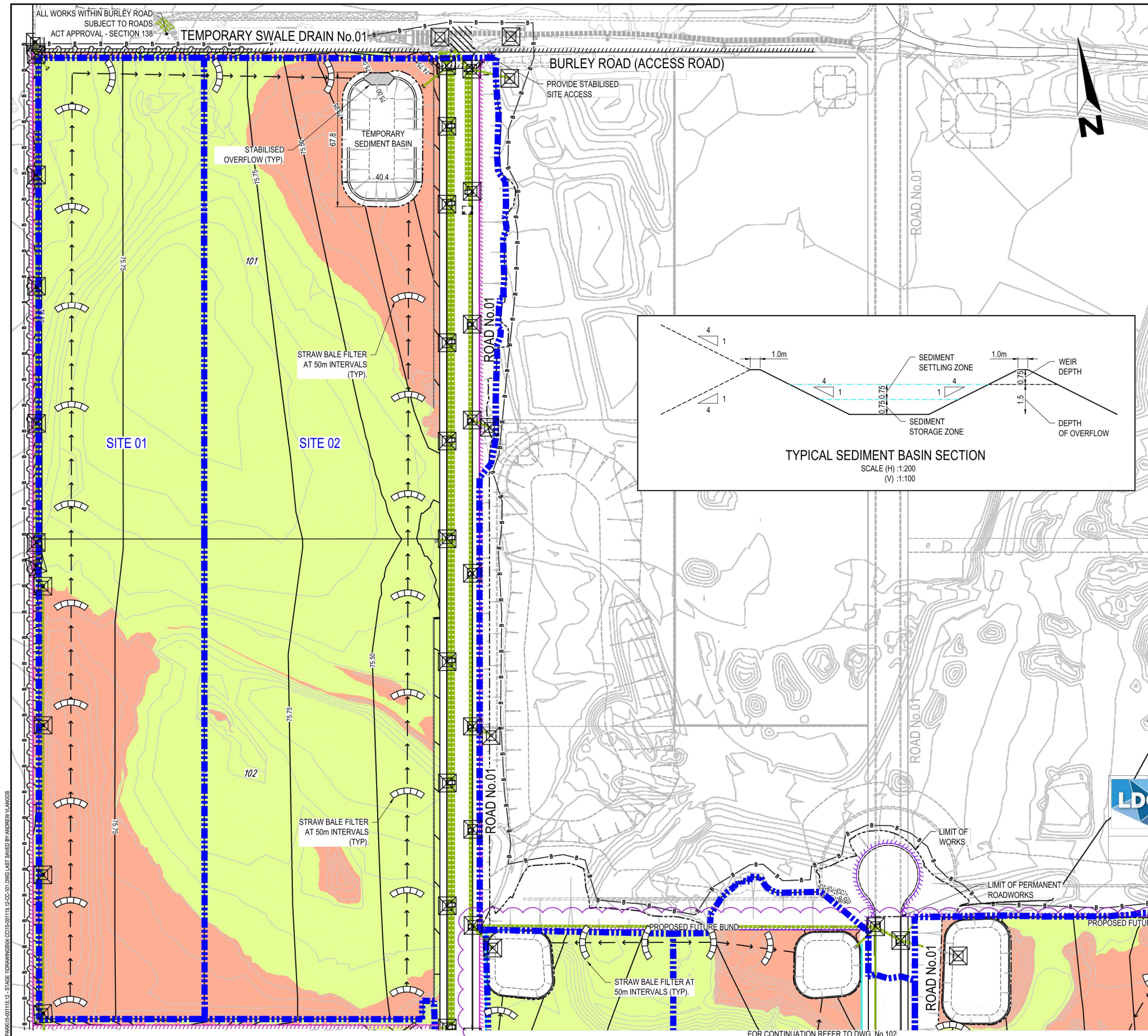
DATE: 12/7/20

Client: **CSR LTD**

Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**

©2020
calibregroup.com.au | calibreconsulting.com.au

Project No.:	Stage:	Milestone:	Dwg No.:	Revision:
15-00115.12	1&2	CC	003	13



Site Name:		CSR Horsley						
Site Location:		Horsley Park						
Precinct/Stage:		Stages 1 and 2						
Site area	Sub-catchment or Name of Structure							Notes
	1	2	3	4	5	6	7	
Total catchment area (ha)	4.0458	8.299	2.2818	3.1167	6.916	3.8328	3.3194	
Disturbed catchment area (ha)	4.0458	8.299	2.2818	3.1167	6.916	3.8328	3.3194	
Soil analysis (enter sediment type if known, or laboratory particle size data)								
Sediment Type (C, F or D) if known:	D	D	D	D	D	D	D	From Appendix C (if known)
% sand (fraction 0.02 to 2.00 mm)								Enter the percentage of each soil fraction. E.g. enter 10 for 10%
% silt (fraction 0.002 to 0.02 mm)								
% clay (fraction finer than 0.002 mm)								
Dispersion percentage								E.g. enter 10 for dispersion of 10%
% of whole soil dispersible	0	0	0	0	0	0	0	See Section 6.3.3(a). Auto-calculated
Soil Texture Group	D	D	D	D	D	D	D	Automatic calculation from above
Rainfall data								
Design rainfall depth (no of days)	5	5	5	5	5	5	5	See Section 6.3.4 and, particularly, Table 6.3 on pages 6-24 and 6-25.
Design rainfall depth (percentile)	85	85	85	85	85	85	85	
x-day, y-percentile rainfall event (mm)	32.2	32.2	32.2	32.2	32.2	32.2	32.2	
Rainfall R-factor (if known)								Only need to enter one or the other here
IFD: 2-year, 6-hour storm (if known)	10.1	10.1	10.1	10.1	10.1	10.1	10.1	
RUSLE Factors								
Rainfall erosivity (R-factor)	2260	2260	2260	2260	2260	2260	2260	Auto-filled from above
Soil erodibility (K-factor)	0.028	0.028	0.028	0.028	0.028	0.028	0.028	RUSLE LS factor calculated for a high illitid soil.
Slope length (m)	80	120	250	30	8	25	100	
Slope gradient (%)	0.5	2.5	0.5	25	0.5	0.5	100	
Length/gradient (LS-factor)	0.19	0.52	0.12	4.43	3.99	3.99	4.33	
Erosion control practice (P-factor)	1.3	1.3	1.3	1.3	1.3	1.3	1.3	
Ground cover (C-factor)	1	1	1	1	1	1	1	
Sediment Basin Design Criteria (for Type D/F basins only. Leave blank for Type C basins)								
Storage (soil) zone design (no of months)	2	2	2	2	2	2	2	Minimum is generally 2 months
Cv (Volumetric runoff coefficient)	0.51	0.51	0.51	0.51	0.51	0.51	0.51	See Table F2, page F-4 in Appendix F
Calculations and Type D/F Sediment Basin Volumes								
Soil loss (t/ha/y)	21	58	14	462	398	427	481	
Soil Loss Class	1	1	1	4	4	4	1	See Table 4.2, page 4-13
Soil loss (m ³ /ha/y)	16	44	10	378	306	328	370	Conversion to cubic metres
Sediment basin storage (soil) volume (m ³)	11	61	4	167	353	210	205	See Sections 6.3.4(i) for calculations
Sediment basin settling (water) volume (m ³)	665	1363	375	512	1136	629	545	See Sections 6.3.4(j) for calculations
Sediment basin total volume (m ³)	676	1424	379	709	1489	839	750	
Structure Details								
Structure Name	1	2	3	4	5	6	7	Auto-filled from Worksheet 1
Catchment Area (ha)	4.0458	8.299	2.2818	3.1167	6.6776	3.8328	3.3194	Auto-filled from Worksheet 1
Time of concentration (tc)	7	8	5	6	8	7	7	Auto-calculated assuming tc is halved
Rainfall Intensities (IFD Values)								
1 year, 1c	69.1	65.8	77.4	72.4	65.8	69.1	72.4	Enter the relevant rainfall intensities (in mm/hr) for each of the nominated rainfall events. The time of concentration (tc) determines the duration of the event to be used
2 year, 1c	86.05	84.8	99.7	93.3	84.8	86.05	93.3	
5 year, 1c	114.525	109.05	128	120	109.05	114.525	120	
10 year, 1c	129.75	123.5	145	136	123.5	129.75	136	
20 year, 1c	148.75	141.5	167	156	141.5	148.75	156	
50 year, 1c	174.5	166	196	183	166	174.5	183	
100 year, 1c	194.5	185	218	204	185	194.5	204	
Cs runoff coefficient	0.8	0.8	0.8	0.8	0.8	0.8	0.8	Use ARAR or Table F3, pg F-6
Design ARI event (select):	100	100	100	100	100	100	100	Select design ARI (y years) from dropdown
Frequency Factor	1.2	1.2	1.2	1.2	1.2	1.2	1.2	Auto-filled based on selected ARI
Flow Calculation	2.16	4.09	1.33	1.70	3.29	1.99	1.81	Auto-calculated based on selected ARI

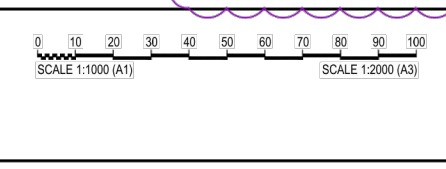
NOTE:
CONTRACTOR TO VERIFY BY SURVEY THAT THE CONSTRUCTED VOLUME OF SEDIMENT BASINS IS EQUAL TO OR GREATER THAN THE REQUIRED VOLUME

LEGEND

- SEDIMENT FENCE (SD 6-8)
- BARRIER FENCE
- CATCH DRAIN/ DIVERSION BANK (SD 5-5)
- STABILISED ACCESS POINT
- GEOTEXTILE INLET FILTER (SD 6-12) DURING CONSTRUCTION. MESH & GRAVEL INLET FILTER (SD 6-11) AFTER CONSTRUCTION
- STRAW BALE FILTER (SD 6-7)
- LEVEL SPREADER (SD 5-6)
- EXISTING CONTOUR (ORIGINAL NATURAL SURFACE)
- PROPOSED CONTOUR
- CUT AREA
- FILL AREA
- SEDIMENT CATCHMENT

LDC
These plans are referred to in certificate no. 15992 approved by:
Eric Hausfeld
Accredited Certifier
Registration No: BPB 2416
Categories: B1, C1, C2, C3, C4, C6, C15 & D1
Land Development Certificates
www.LDC.com.au

Revision	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



Disclaimers and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust, CPEng, NER
SIGN: [Signature]
DATE: 1/27/20

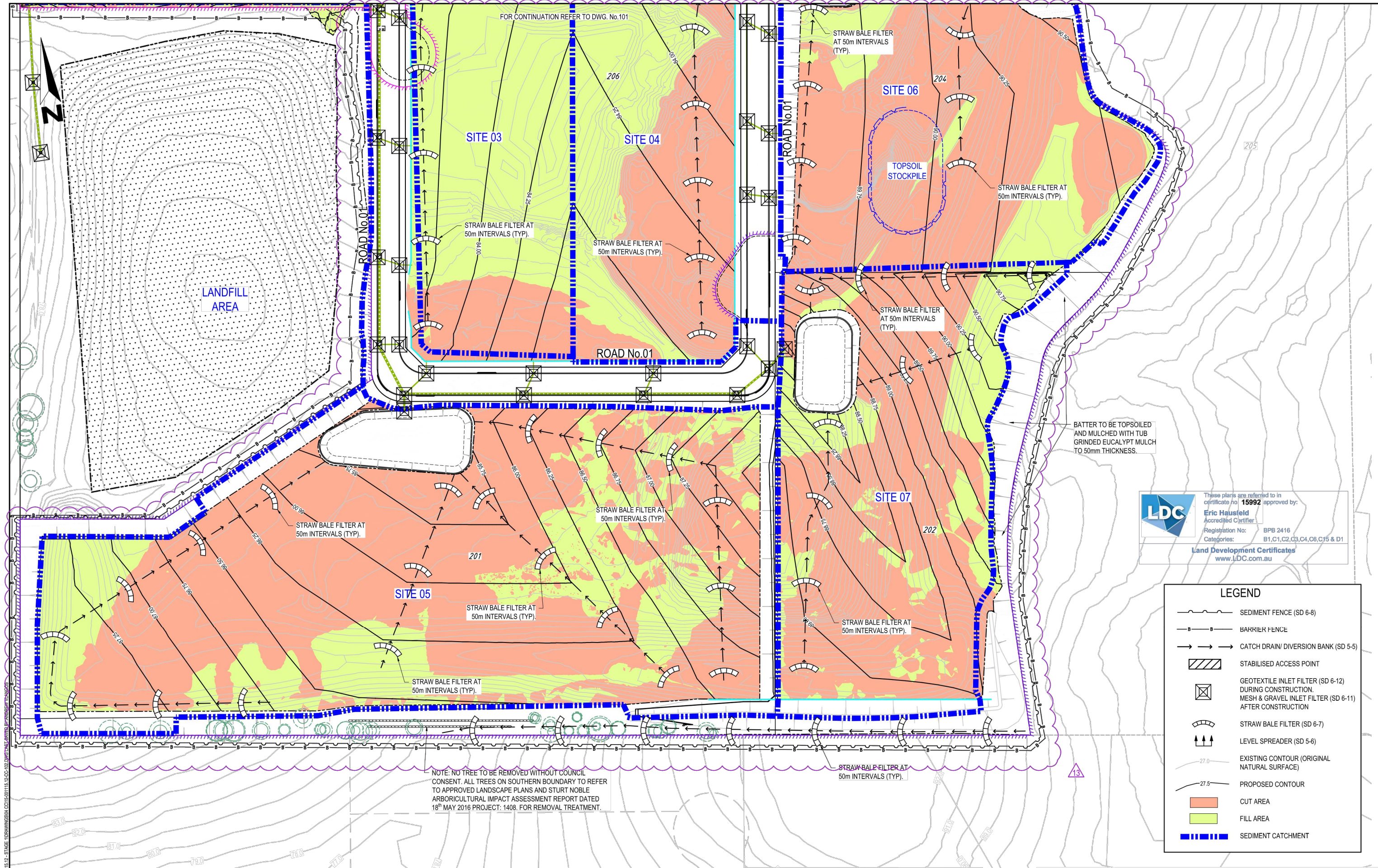
Client:
CSR LTD
Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



Drawing Title:
SOIL & WATER MANAGEMENT PLAN 01 OF 02
Project No.: 15-001115.12
Stage: 1&2
Milestone: CC
Dwg No.: 101
Revision: 13

FOR CONSTRUCTION CERTIFICATE

LDC: 15-001115-CSR HORSLEY PARK: 15-001115-12-STAGE 1&2 ROAD, DRAINAGE AND EARTHWORKS: DWG LAST SAVED BY ANDREW LANGDON



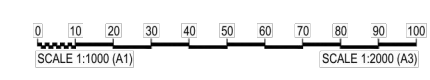
These plans are referred to in certificate no. 15992 approved by:

LDC
 Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1, C1, C2, C3, C4, C6, C15 & D1
 Land Development Certificates
 www.LDC.com.au

LEGEND	
	SEDIMENT FENCE (SD 6-8)
	BARRIER FENCE
	CATCH DRAIN / DIVERSION BANK (SD 5-5)
	STABILISED ACCESS POINT
	GEOTEXTILE INLET FILTER (SD 6-12) DURING CONSTRUCTION.
	MESH & GRAVEL INLET FILTER (SD 6-11) AFTER CONSTRUCTION
	STRAW BALE FILTER (SD 6-7)
	LEVEL SPREADER (SD 5-6)
	EXISTING CONTOUR (ORIGINAL NATURAL SURFACE)
	PROPOSED CONTOUR
	CUT AREA
	FILL AREA
	SEDIMENT CATCHMENT

FOR CONSTRUCTION CERTIFICATE

Revisions	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



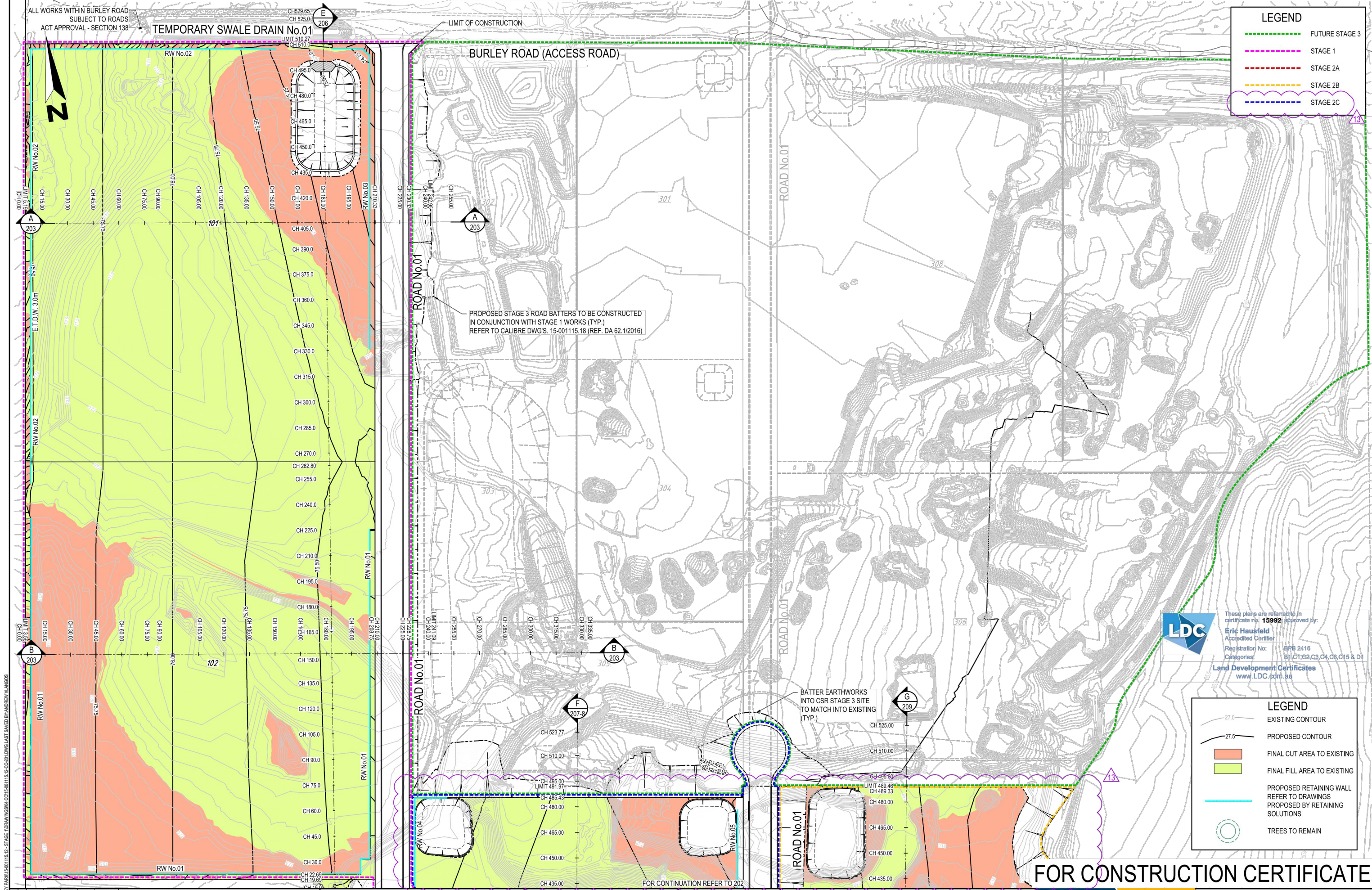
Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BEI(Hons) MIEAust. CP/Eng NER
 SIGN:
 DATE: 12/7/20

Client: **CSR LTD**
 Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**



Drawing Title:				
SOIL & WATER MANAGEMENT PLAN 02 OF 02				
Project No.:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	102	13



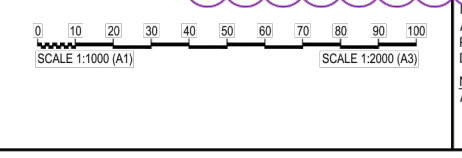
LEGEND	
	FUTURE STAGE 3
	STAGE 1
	STAGE 2A
	STAGE 2B
	STAGE 2C

These plans are referred to in certificate no. **15992** approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPS 2416
 Categories: B1, C1, G2, C3, C4, C6, C15 & D1
Land Development Certificates
 www.LDC.com.au

LEGEND	
	EXISTING CONTOUR
	PROPOSED CONTOUR
	FINAL CUT AREA TO EXISTING
	FINAL FILL AREA TO EXISTING
	PROPOSED RETAINING WALL REFER TO DRAWINGS PROPOSED BY RETAINING SOLUTIONS
	TREES TO REMAIN

FOR CONSTRUCTION CERTIFICATE

Revisors	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust, CPEng, NER
 SIGN:
 DATE: 12/7/20

Client: **CSR LTD**
 Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**



Project No.	Stage	Milestone	Dwg No.:	Revision
15-001115.12	1&2	CC	201	13



LEGEND

- FUTURE STAGE 3
- STAGE 1
- STAGE 2A
- STAGE 2B
- STAGE 2C

These plans are referred to in certificate no. **15992** approved by

LDC Eric Hausfeld
Accredited Certifier
Registration No: 3PB 2416
Categories: B1, C1, C2, C3, C4, C5, C15 & D1
Land Development Certificates
www.LDC.com.au

NOTE:
THE FUTURE PAD LEVEL OF LOT 201 IS TO BE A MAXIMUM OF 86.5m AHD.

NOTE:
ENGINEERING BUND AND LANDSCAPING DESIGN
REFER TO:
- GEOINVENTIONS CONSULTING SERVICES 'GABION WALL AND EARTH BUND DESIGN' PROJECT No: Geoinv_CSR_001
- STURT NOBLE ASSOCIATES SPECIFICATION & DETAILS - DWG No.CD-1408-103 - DATED: 15.04.2016

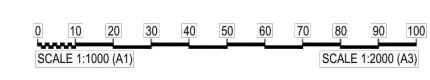
LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- FINAL CUT AREA TO EXISTING
- FINAL FILL AREA TO EXISTING
- PROPOSED RETAINING WALL REFER TO DRAWINGS PROPOSED BY RETAINING SOLUTIONS
- TREES TO REMAIN

CONSTRUCTION OF BUND AS FOLLOWS:
THE CONSTRUCTION OF THE NEW SOUTHERN BUND SHALL BE CONSTRUCTED AND LANDSCAPED, WITH THE EXISTING BUND TO REMAIN IN SITU BEHIND THE WORKS (I.E. WITHOUT REDUCING THE EFFECTIVE HEIGHT OF THE EXISTING BUND) UNTIL THE NEW BUND WORKS ARE COMPLETED AFTER WHICH TIME THE EXISTING BUND CAN BE REMOVED.

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED





Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CP(Eng) NER
SIGN: *[Signature]*
DATE: 12/7/20

Client: **CSR LTD**
Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**

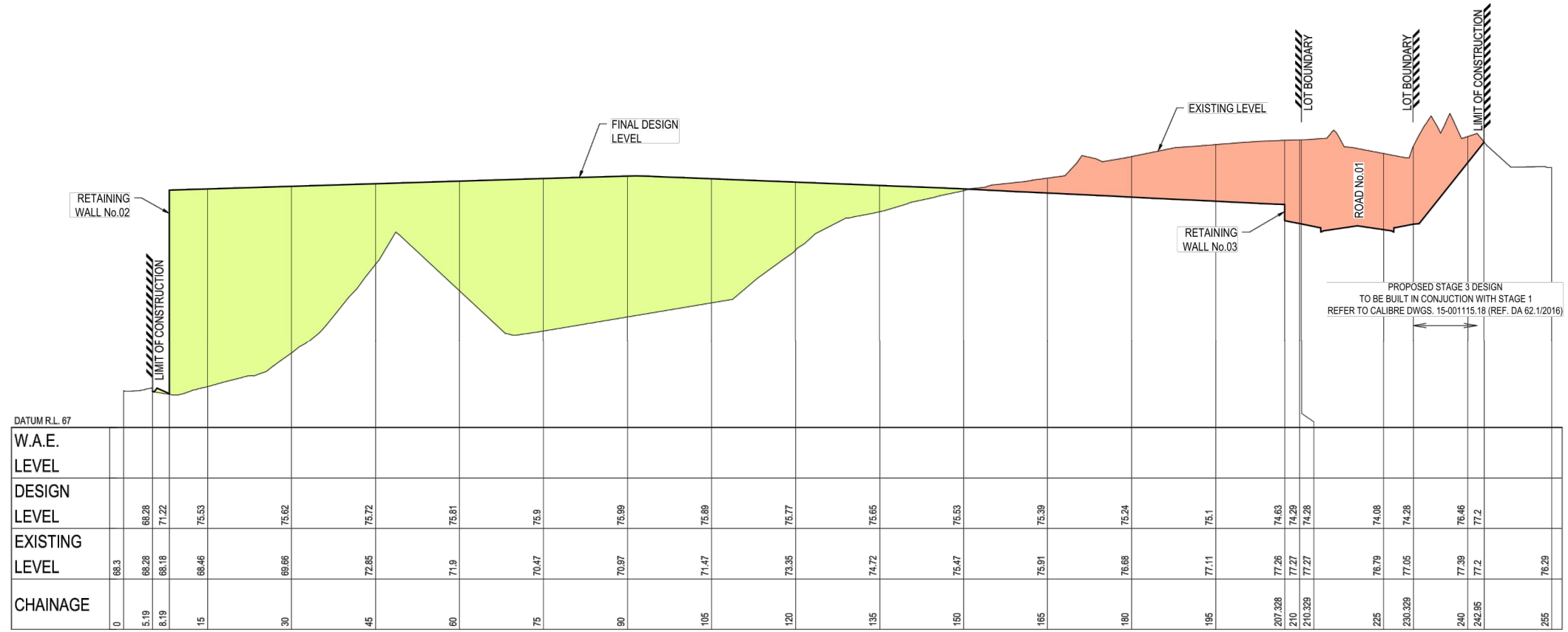
calibre
©2020 calibregroup.com.au calibreconsulting.com.au

Drawing Title: **BULK EARTHWORKS PLAN - STAGE A - SHEET 02 OF 02**

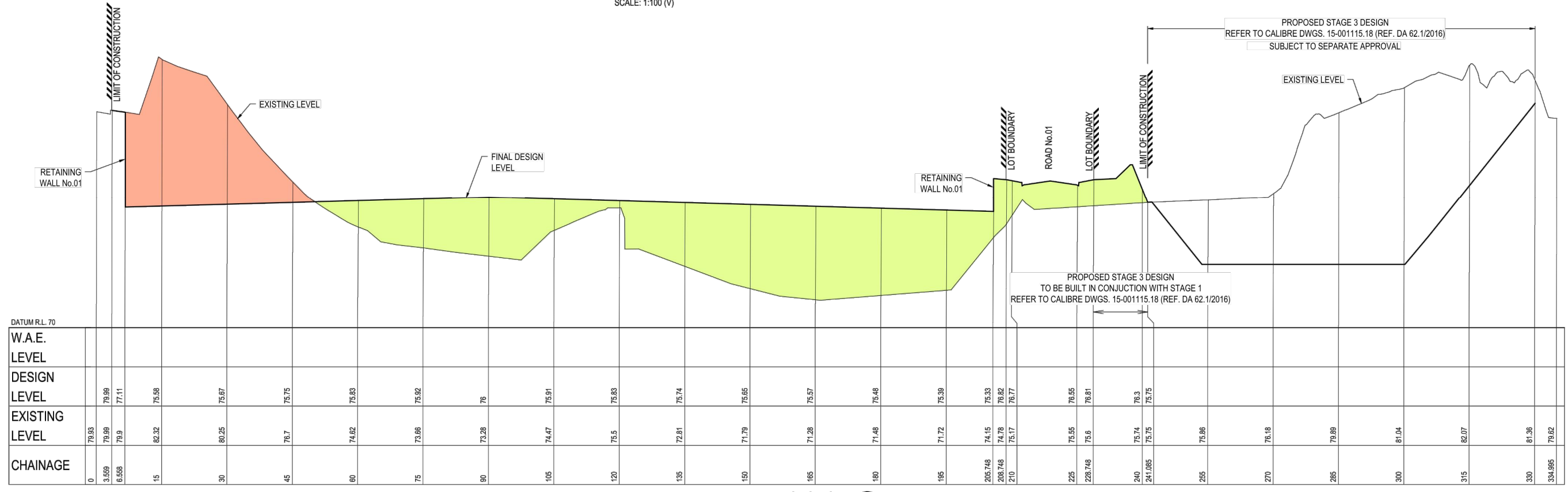
Project No:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	202	13

LEGEND	
	CUT AREA
	FILL AREA
	FINAL DESIGN
	EXISTING LEVEL

NOTE:
ALL BATTERS 1:4 UNLESS NOTED OTHERWISE



SECTION **A**
SCALE: 1:500 (H)
SCALE: 1:100 (V)

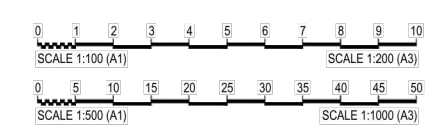


SECTION **B**
SCALE: 1:500 (H)
SCALE: 1:100 (V)

FOR CONSTRUCTION CERTIFICATE

FILE: H:\15-001115-CSR-HORSLEY PARK\15-001115-12-STAGE 1-DRAINAGE.DWG LAST SAVED BY: ERDEN MAZZA

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
	DJW	LF	PD	SAG		11/04/16	



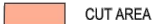


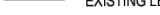
Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CP(Eng) NER
SIGN: 
DATE: 12/7/20

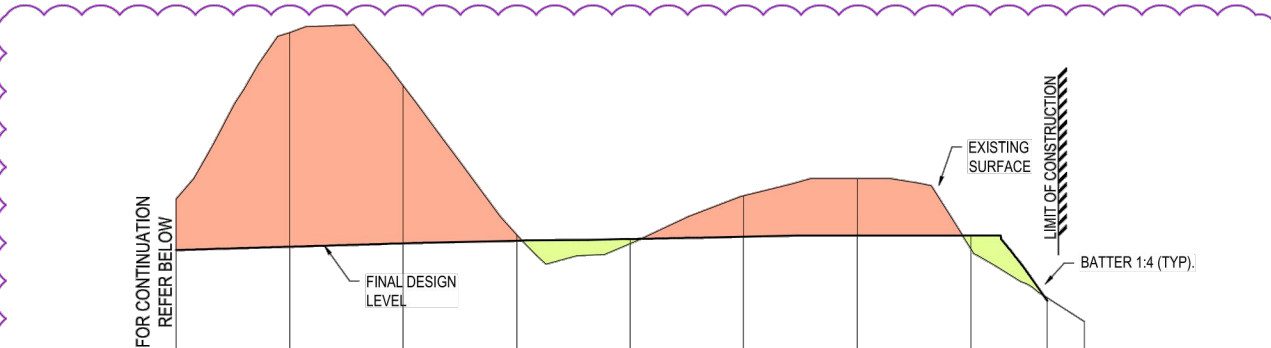
Client: **CSR LTD**
Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**



Drawing Title:				
BULK EARTHWORKS - STAGE A - LONGSECTIONS SHEET 01 OF 07				
Project No:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	203	13

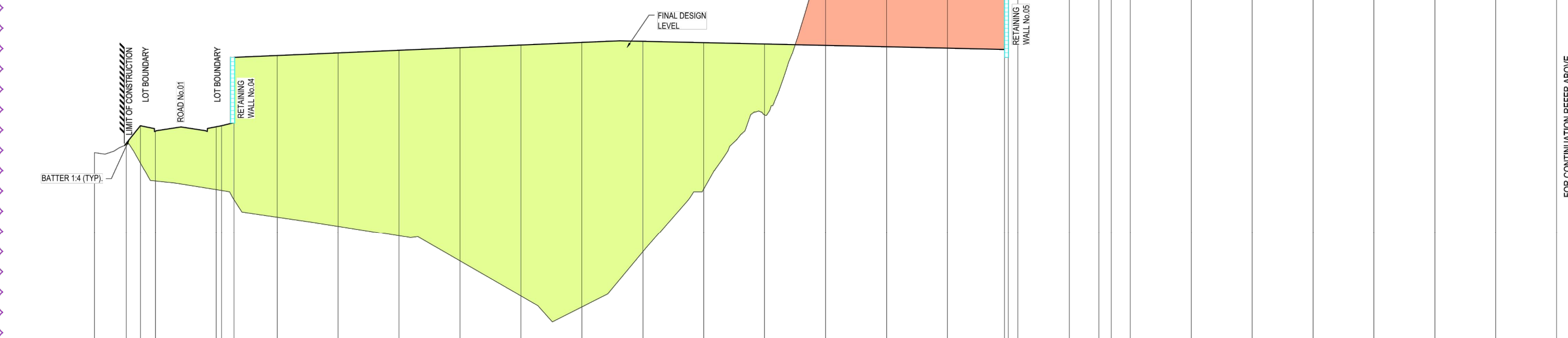
LEGEND	
	CUT AREA
	FILL AREA
	FINAL DESIGN
	EXISTING LEVEL

NOTE:
ALL BATTERS 1:4 UNLESS NOTED OTHERWISE



DATUM R.L. 87	
W.A.E. LEVEL	CHAINAGE
DESIGN LEVEL	360
EXISTING LEVEL	375
DESIGN LEVEL	390
EXISTING LEVEL	405
DESIGN LEVEL	420
EXISTING LEVEL	435
DESIGN LEVEL	450
EXISTING LEVEL	465
DESIGN LEVEL	475.072
EXISTING LEVEL	480

SECTION C
SCALE: 1:500 (H)
SCALE: 1:100 (V)



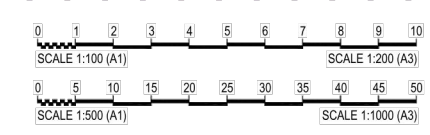
DATUM R.L. 89	
W.A.E. LEVEL	CHAINAGE
DESIGN LEVEL	0
EXISTING LEVEL	7.837
DESIGN LEVEL	11.3
EXISTING LEVEL	15
DESIGN LEVEL	30
EXISTING LEVEL	31.3
DESIGN LEVEL	34.337
EXISTING LEVEL	45
DESIGN LEVEL	60
EXISTING LEVEL	75
DESIGN LEVEL	90
EXISTING LEVEL	105
DESIGN LEVEL	120
EXISTING LEVEL	135
DESIGN LEVEL	150
EXISTING LEVEL	165
DESIGN LEVEL	180
EXISTING LEVEL	195
DESIGN LEVEL	210
EXISTING LEVEL	224.042
DESIGN LEVEL	225
EXISTING LEVEL	227.289
DESIGN LEVEL	240
EXISTING LEVEL	247.289
DESIGN LEVEL	250.336
EXISTING LEVEL	255
DESIGN LEVEL	270
EXISTING LEVEL	285
DESIGN LEVEL	300
EXISTING LEVEL	315
DESIGN LEVEL	330
EXISTING LEVEL	345
DESIGN LEVEL	360

SECTION C
SCALE: 1:500 (H)
SCALE: 1:100 (V)


FOR CONSTRUCTION CERTIFICATE

FILE: H:\15-00115-CSR-HORSLEY PARK\15-00115-12-STAGE 1\DRAWINGS\CD15-00115-12-02-204.DWG LAST SAVED BY ANDREW LANGOS

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CP(Eng) NER
SIGN: 
DATE: 12/7/20

Client: **CSR LTD**
Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**



Drawing Title:				
BULK EARTHWORKS - STAGE A - LONGSECTIONS SHEET 02 OF 07				
Project No:	Stage:	Milestone:	Dwg No.:	Revision:
15-00115.12	1&2	CC	204	13

These plans are referred to in certificate no. 15992 approved by:

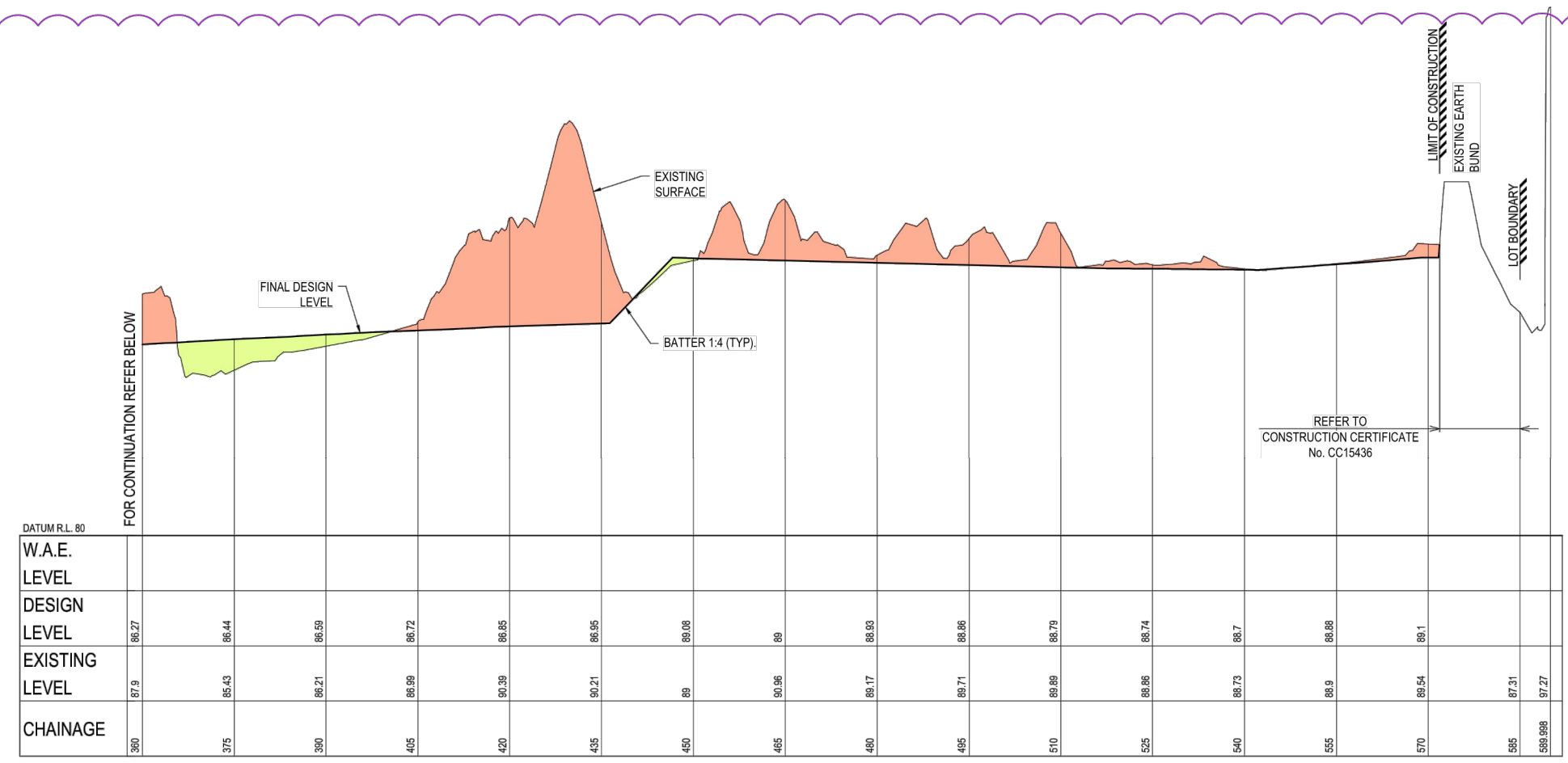
LDC
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1

Land Development Certificates
 www.LDC.com.au

LEGEND

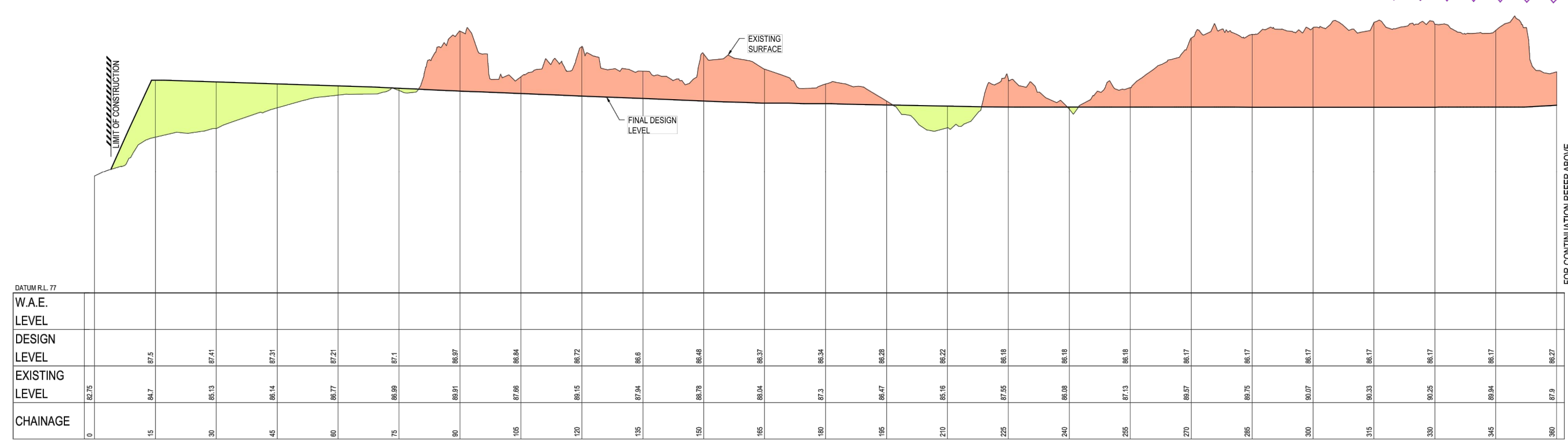
- CUT AREA
- FILL AREA
- FINAL DESIGN
- EXISTING LEVEL

NOTE:
 ALL BATTERS 1:4 UNLESS NOTED OTHERWISE



CHAINAGE	360	375	390	405	420	435	450	465	480	495	510	525	540	555	570	585	598.998
W.A.E. LEVEL																	
DESIGN LEVEL	86.27	86.44	86.59	86.72	86.85	86.95	89.08	89	88.93	88.86	88.79	88.74	88.7	88.88	89.1	87.31	87.27
EXISTING LEVEL	87.9	85.43	86.21	86.89	90.39	90.21	89	90.96	89.17	89.71	89.69	88.86	88.73	88.9	89.54	87.31	87.27

SECTION D
 SCALE: 1:500 (H)
 SCALE: 1:100 (V)



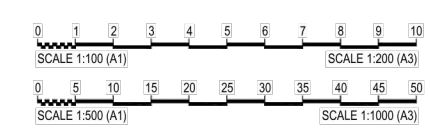
CHAINAGE	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345	360	
W.A.E. LEVEL																										
DESIGN LEVEL		87.5	87.41	87.31	87.21	87.1	86.97	86.84	86.72	86.6	86.48	86.37	86.34	86.28	86.22	86.18	86.18	86.18	86.17	86.17	86.17	86.17	86.17	86.17	86.17	86.27
EXISTING LEVEL	82.75	84.7	85.13	86.14	86.77	86.99	89.91	87.66	88.15	87.94	88.78	88.04	87.3	86.47	85.16	87.55	86.08	86.18	86.18	86.17	86.17	86.17	86.17	86.17	86.17	87.9

SECTION D
 SCALE: 1:500 (H)
 SCALE: 1:100 (V)

FOR CONSTRUCTION CERTIFICATE

FILE: H:\161910-0115 - CSR HORSLEY PARK\15-01115_12 - STAGE 1 DRAWINGS\15-01115_12-CC-202.DWG LAST SAVED BY ANDREW LANGSOS

Revisions	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

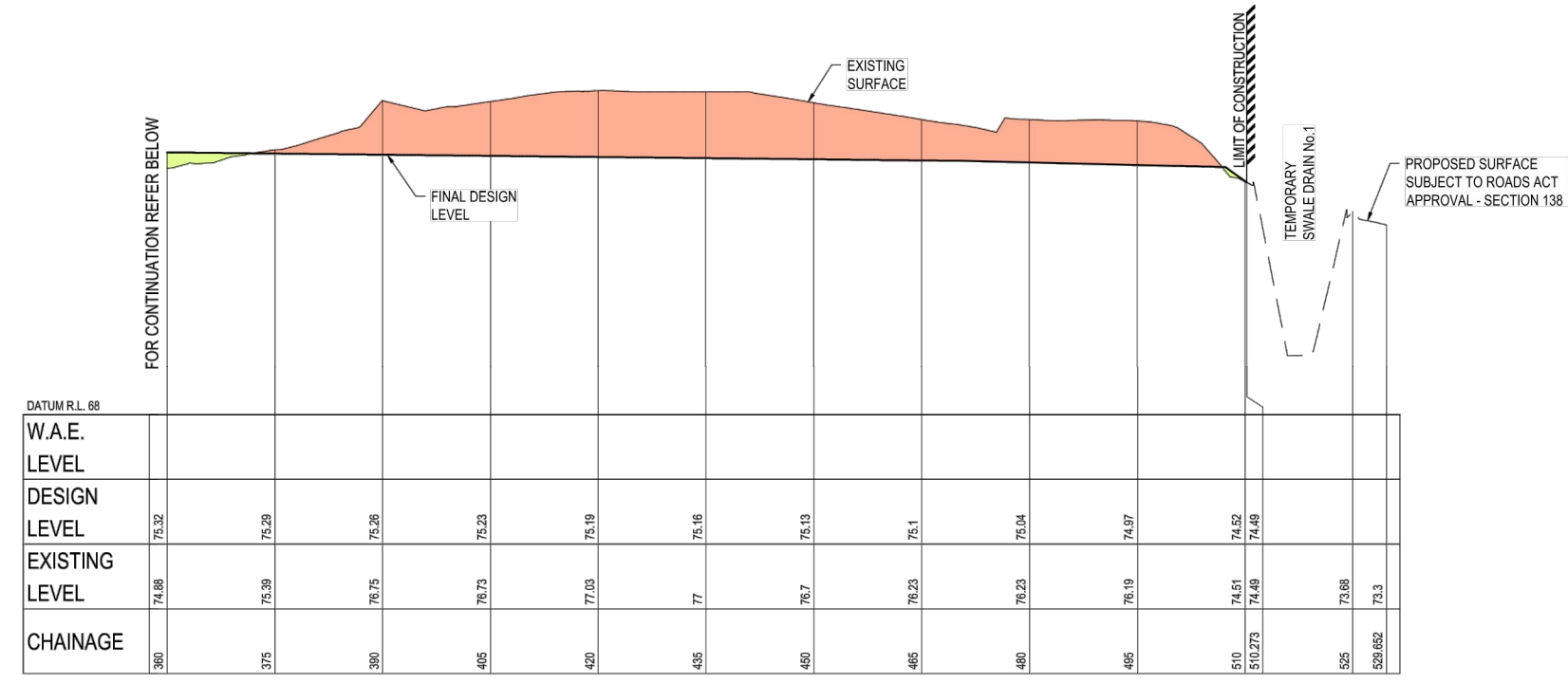
Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CPEng NER
 SIGN: *[Signature]*
 DATE: 12/7/20

Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS

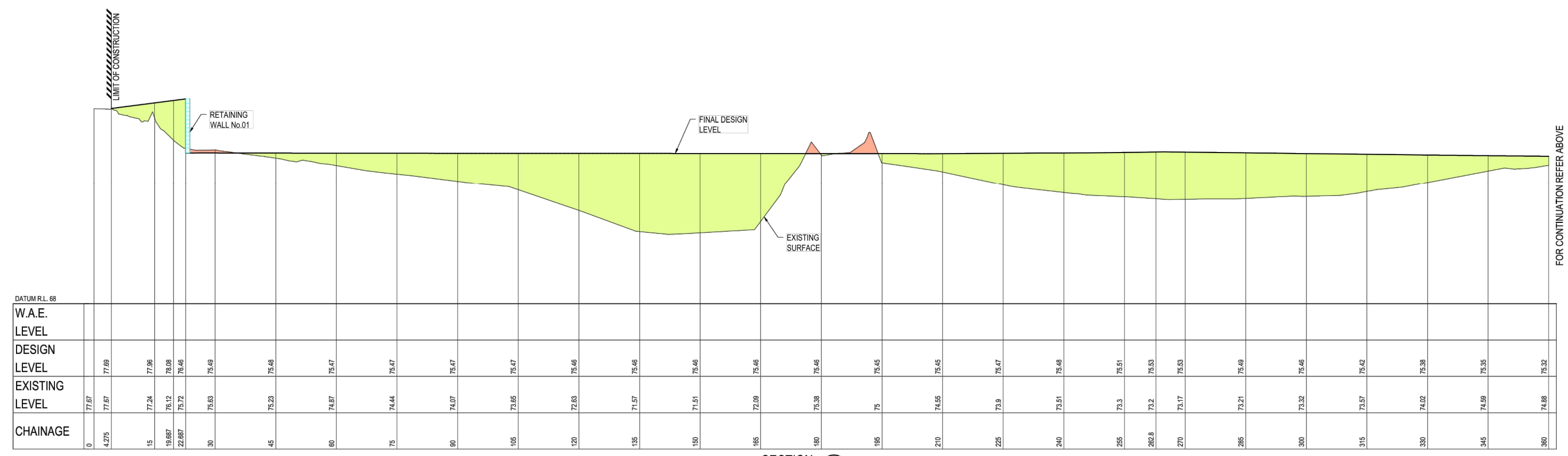


Drawing Title: BULK EARTHWORKS - STAGE A - LONGSECTIONS SHEET 03 OF 07				
Project No.:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	205	13

NOTE:
 ALL BATTERS 1:4 UNLESS NOTED OTHERWISE



SECTION E
 SCALE: 1:500 (H)
 SCALE: 1:100 (V)



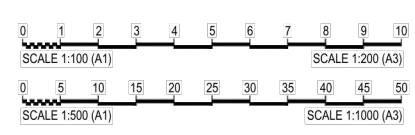
SECTION E
 SCALE: 1:500 (H)
 SCALE: 1:100 (V)

FOR CONSTRUCTION CERTIFICATE

LDC: 15-001115-12 - CSR HORSLEY PARK - STAGE 1 & 2 - ROAD, DRAINAGE AND EARTHWORKS - LONG SECTIONS SHEET 04 OF 07 - LAST SAVED BY LAURO FAGER

Rev	Issue	Drawn	Design	Check	Appd.	Date	Description
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD DRAGING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
13	DJW	LF	PD	SAG		11/04/16	

Revision Details



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP Eng NER
 SIGN: 
 DATE: 12/7/20

Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



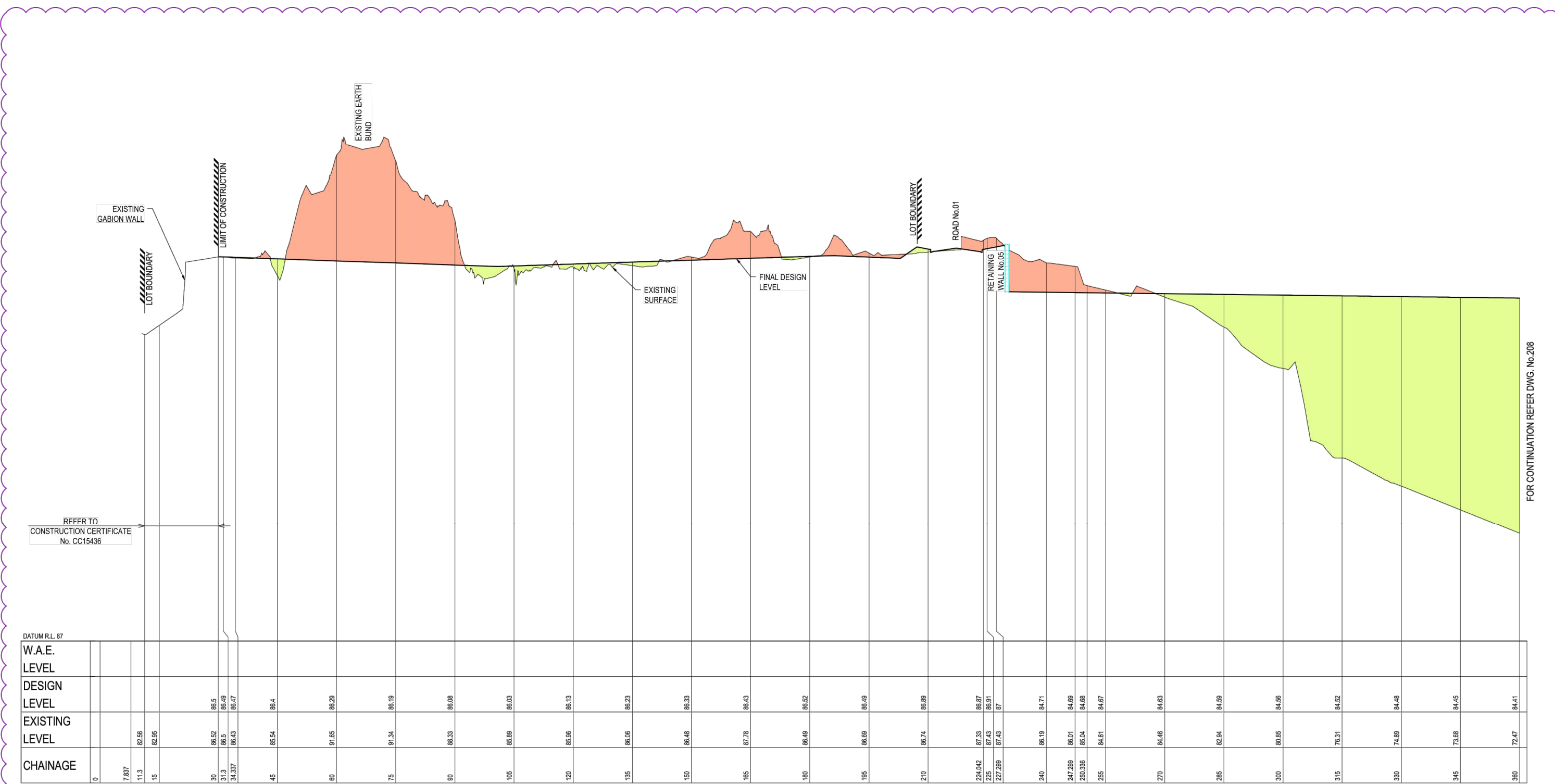
Drawing Title:				
BULK EARTHWORKS - STAGE A - LONGSECTIONS SHEET 04 OF 07				
Project No:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	206	13



These plans are referred to in certificate no. **15992** approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1
Land Development Certificates
 www.LDC.com.au

LEGEND	
	CUT AREA
	FILL AREA
	FINAL DESIGN
	EXISTING LEVEL

NOTE:
 ALL BATTERS 1:4 UNLESS NOTED OTHERWISE



REFER TO CONSTRUCTION CERTIFICATE No. CC15436

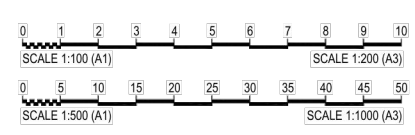
DATUM R.L. 67	
W.A.E. LEVEL	
DESIGN LEVEL	
EXISTING LEVEL	
CHAINAGE	
	0
	7.837
	11.3
	15
	30
	31.3
	34.337
	45
	60
	75
	90
	105
	120
	135
	150
	165
	180
	195
	210
	224.042
	225
	227.289
	240
	247.289
	250.336
	255
	270
	285
	300
	315
	330
	345
	360

SECTION **F**
 SCALE: 1:500 (H)
 SCALE: 1:100 (V)

FOR CONSTRUCTION CERTIFICATE

FILE: H:\161615-01115-CSR-HORSLEY PARK\15-001115-12-STAGE 1\DRAWINGS\A-C\15-001115-12-CC-207.DWG LAST SAVED BY ANDREW LANGOS

Revisions	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD DRAGING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS



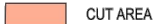


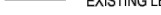
Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP Eng NER
 SIGN:
 DATE: 12/7/20

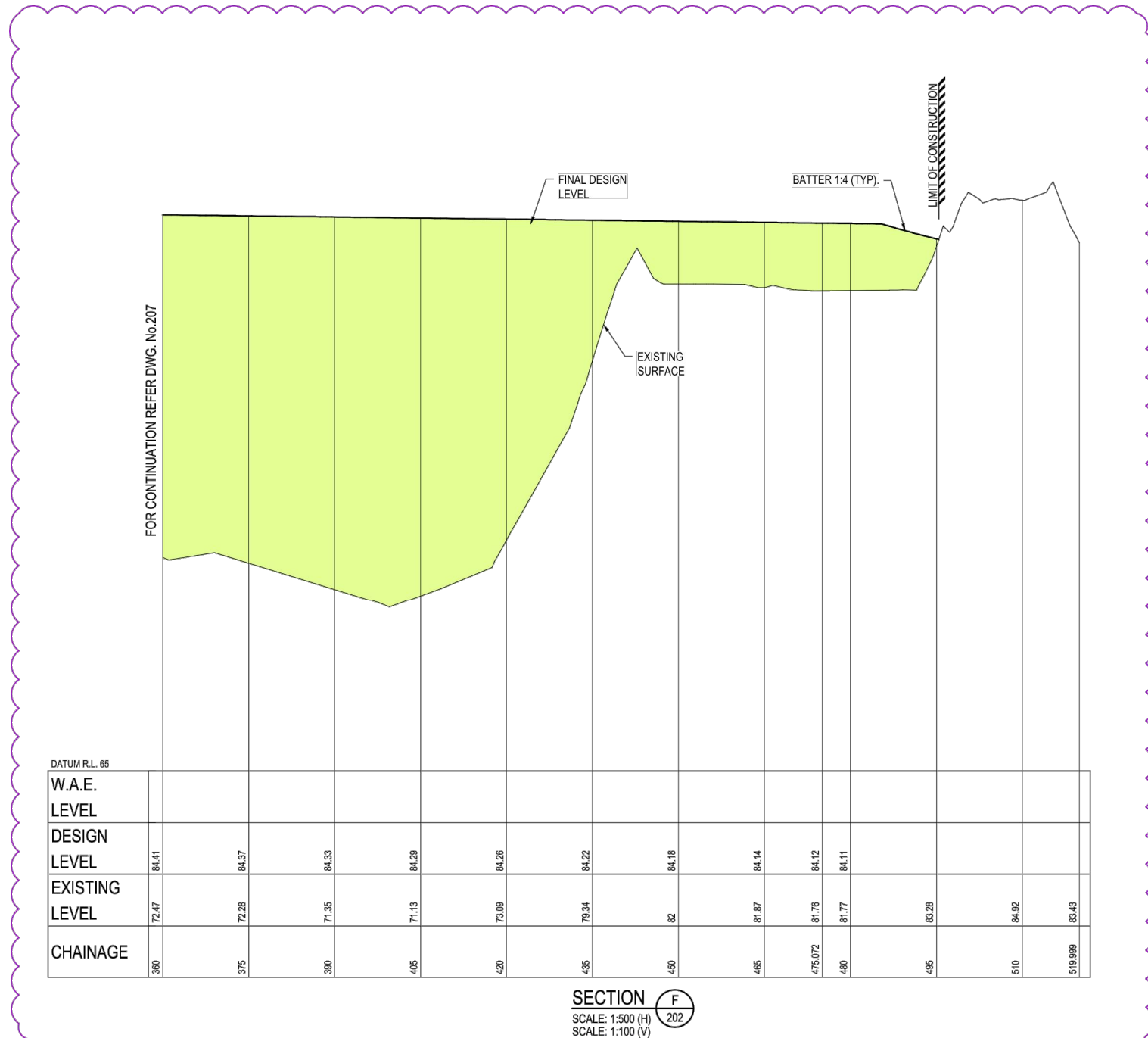
Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



Drawing Title:				
BULK EARTHWORKS - STAGE A - LONGSECTIONS SHEET 05 OF 07				
Project No:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	207	13

LEGEND	
	CUT AREA
	FILL AREA
	FINAL DESIGN
	EXISTING LEVEL

NOTE:
ALL BATTERS 1:4 UNLESS
NOTED OTHERWISE



These plans are referred to in certificate no. **15992** approved by:

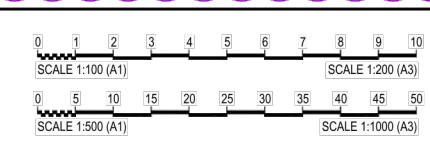
Eric Hausfeld
Accredited Certifier

Registration No: BPB 2416
Categories: B1,C1,C2,C3,C4,C6,C15 & D1

Land Development Certificates
www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE


Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.

NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CP Eng NER

SIGN: 

DATE: 12/7/20

Client:
CSR LTD

Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



©2020
calbregroup.com.au calbreconsulting.co

Project No.	Stage	Milestone	Dwg No.	Revision
15-001115.12	1&2	CC	208	13

FILE: H:\15-001115-0115-12-STAGE 1-DRAWINGS\BULK EARTHWORKS\15-001115.12-02-208.DWG LAST SAVED BY: ANDREW LANGSOS

These plans are referred to in certificate no. **15992** approved by:

LDC Eric Hausfeld
Accredited Certifier

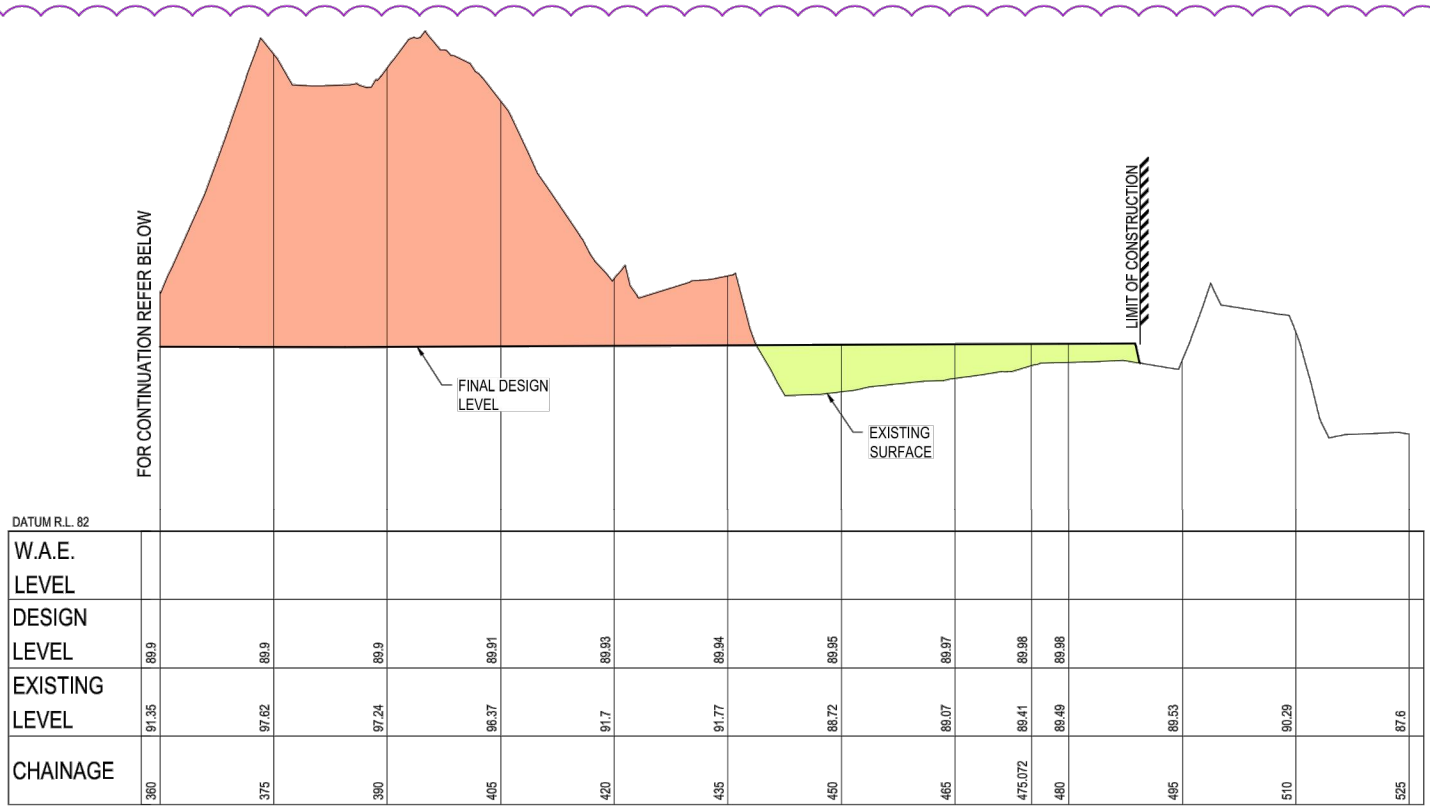
Registration No: BPB 2416
Categories: B1,C1,C2,C3,C4,C6,C15 & D1

Land Development Certificates
www.LDC.com.au

LEGEND

- CUT AREA
- FILL AREA
- FINAL DESIGN
- EXISTING LEVEL

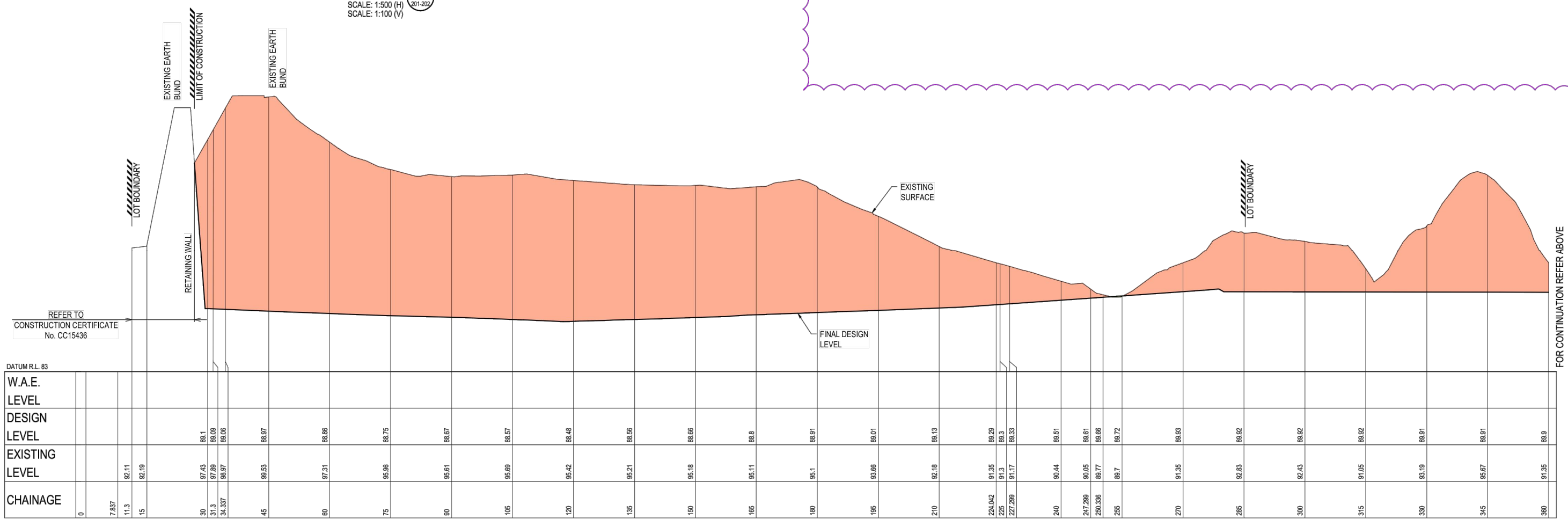
NOTE:
ALL BATTERS 1:4 UNLESS NOTED OTHERWISE



DATUM R.L. 82

CHAINAGE	EXISTING LEVEL	DESIGN LEVEL
360	91.35	88.9
375	97.62	88.9
380	97.24	88.9
405	88.37	88.91
420	91.7	88.93
435	91.77	88.94
450	88.72	88.95
465	88.07	88.97
475.072	88.41	88.98
480	88.49	88.98
485	88.53	
510	90.29	
525	87.6	

SECTION G
SCALE: 1:500 (H)
SCALE: 1:100 (V)



DATUM R.L. 83

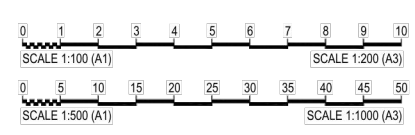
CHAINAGE	EXISTING LEVEL	DESIGN LEVEL
0		
7.837		
11.3	92.11	
15	92.19	
30	97.43	89.1
31.3	97.69	89.09
34.337	98.57	89.06
45	89.53	88.97
60	97.31	88.86
75	95.86	88.75
90	95.81	88.67
105	95.69	88.57
120	95.42	88.48
135	95.21	88.36
150	95.18	88.66
165	95.11	88.8
180	95.1	88.91
195	93.86	88.01
210	92.18	88.13
224.042	91.35	89.29
225	91.3	89.3
227.289	91.17	89.33
240	90.44	89.51
247.289	90.05	89.61
250.336	89.77	89.66
255	88.7	88.72
270	91.35	89.93
285	92.83	89.92
300	92.43	89.92
315	91.05	89.92
330	93.19	89.91
345	95.67	89.91
360	91.35	89.9

SECTION G
SCALE: 1:500 (H)
SCALE: 1:100 (V)

FOR CONSTRUCTION CERTIFICATE

FILE: H:\15-001115-12-CSR-HORSLEY PARK\15-001115-12-STAGE 1\DRAWINGS\CC15-001115-12-CC-200.DWG LAST SAVED BY ANDREW LANGOS

Rev	Issue	Drawn	Design	Check	Appd.	Date	Description
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.

NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CP Eng NER

SIGN: *[Signature]*
DATE: 1/27/20

Client:
CSR LTD

Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



Drawing Title: BULK EARTHWORKS - STAGE A - LONGSECTIONS SHEET 07 OF 07				
Project No: 15-001115.12	Stage: 1&2	Milestone: CC	Dwg No.: 209	Revision: 13

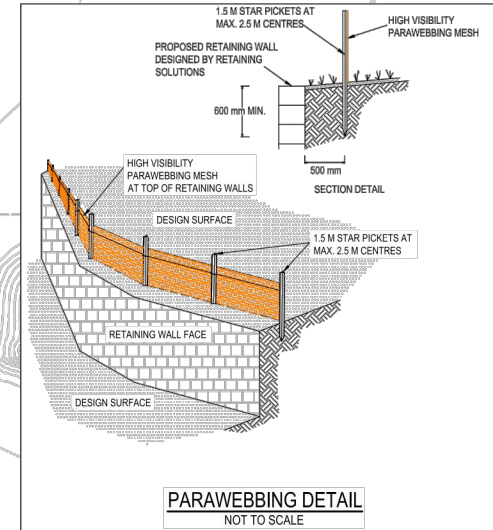
REFER TO ROAD ACT APPROVAL
No.292.1/2018 ISSUED BY
FAIRFIELD CITY COUNCIL

REFER TO TEMPORARY ACCESS RD
(ROAD ACT APPROVAL), SECTION 138
DWG BY CALIBRE CONSULTING REF
15-001115.15-16 REV 03

LDC These plans are referred to in certificate no. **15992** approved by:
Eric Hausfeld
Accredited Certifier
Registration No: BPB 2416
Categories: B1,C1,C2,C3,C4,C6,C15 & D1
Land Development Certificates
www.LDC.com.au

LEGEND

- FUTURE STAGE 3
- STAGE 1
- STAGE 2A
- STAGE 2B
- STAGE 2C



FOR CONSTRUCTION CERTIFICATE

4m WIDE TEMPORARY ACCESS ROAD.
CONSTRUCT WITH 200mm CRUSHED
RECYCLED MATERIAL AND MAKE GOOD
INSTALL REFLECTORISED GUIDE
POSTS AT 20M CRS

REFER TO SHEET No.820
FOR TEMPORARY SWALE
DRAIN DETAILS.

ALL WORKS WITHIN BURLEY ROAD
SUBJECT TO ROADS
ACT APPROVAL - SECTION 138

1.2m WIDE FOOTPATH TO
COUNCIL SPECIFICATIONS

PROVIDE HIGH VISIBILITY
PARAWEBBING BARRIER FENCE AT
TOPS OF RETAINING WALLS (TYP.)
REFER TO RIGHT FOR DETAIL

BURLEY ROAD (ACCESS ROAD)

LIMIT OF WORKS FOR
SUBDIVISION APPROVALS

STAGE 1 LIMIT OF
WORKS (TYP.)

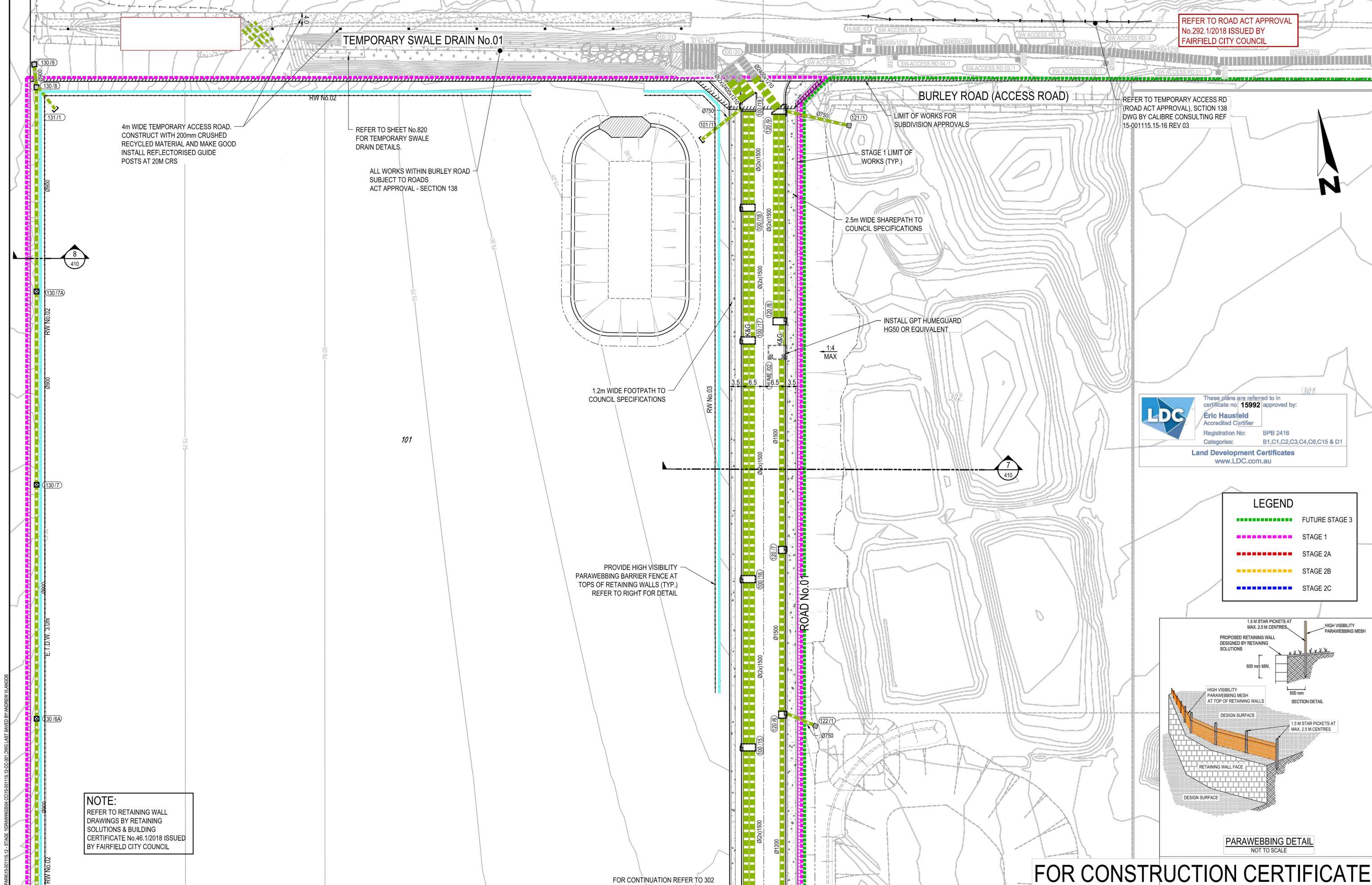
2.5m WIDE SHAREPATH TO
COUNCIL SPECIFICATIONS

INSTALL GPT HUMEGUARD
HG50 OR EQUIVALENT

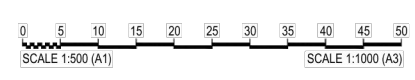
1:4
MAX

NOTE:
REFER TO RETAINING WALL
DRAWINGS BY RETAINING
SOLUTIONS & BUILDING
CERTIFICATE No.46.1/2018 ISSUED
BY FAIRFIELD CITY COUNCIL

FOR CONTINUATION REFER TO 302



Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR
PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY.
DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING
AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CP Eng NER
SIGN: *[Signature]*
DATE: 2/7/20

Client:
CSR LTD
Project:
**CSR HORSLEY PARK - STAGE 1 & 2
ROAD, DRAINAGE AND EARTHWORKS**

calibre
©2020 calibregroup.com.au calibreconsulting.com.au

Drawing Title:
**ENGINEERING PLAN - STAGE C -
SHEET 01 OF 07**
Project No.: 15-001115.12 Stage: 1&2 Milestone: CC Dwg No.: 301 Revision: --43

FOR CONTINUATION REFER TO 301

LEGEND

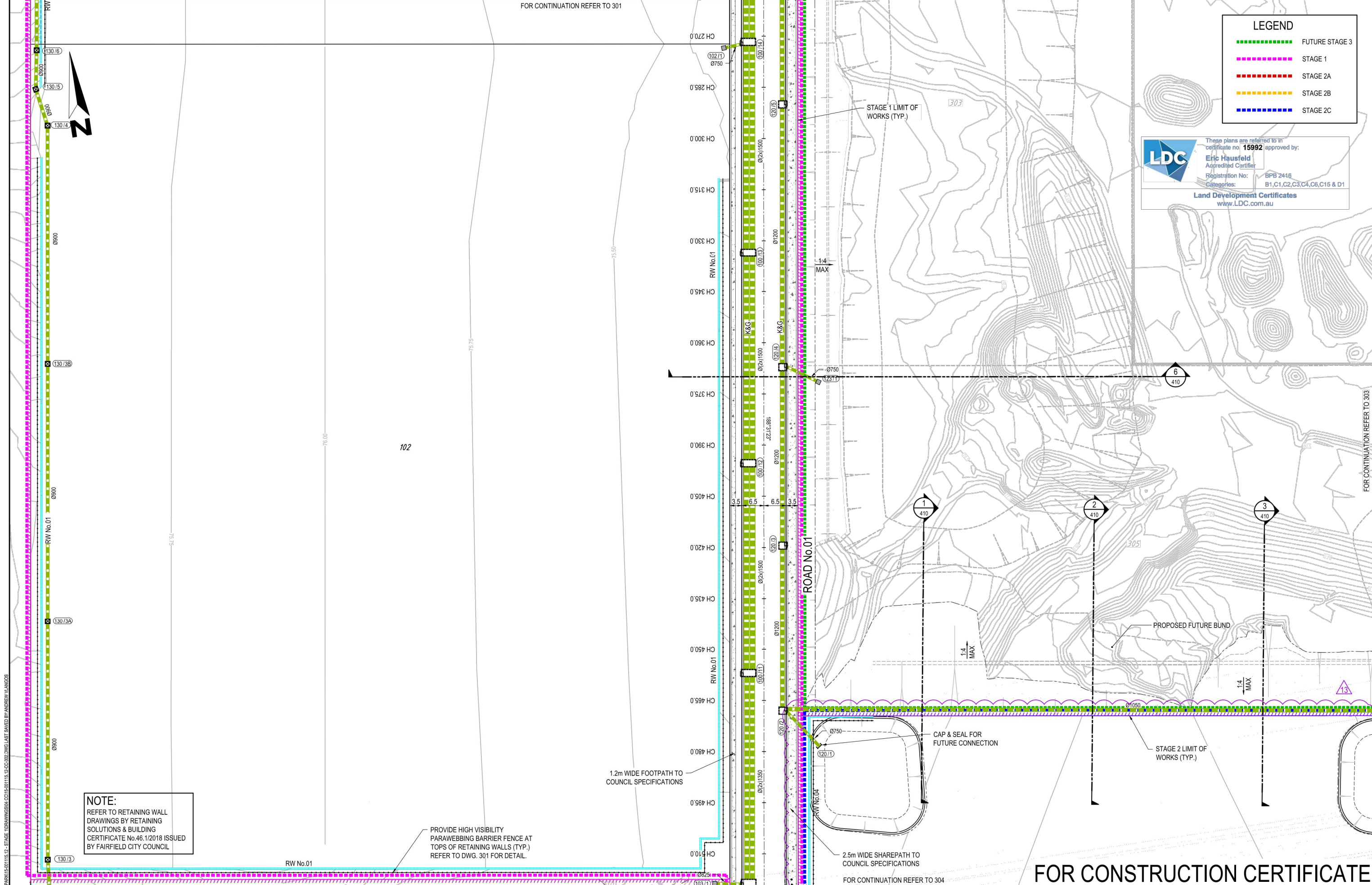
- FUTURE STAGE 3
- STAGE 1
- STAGE 2A
- STAGE 2B
- STAGE 2C

These plans are referred to in certificate no. **15992** approved by:

LDC Eric Hausfeld
Accredited Certifier

Registration No: BPB 2416
Categories: B1, C1, C2, C3, C4, C6, C15 & D1

Land Development Certificates
www.LDC.com.au



NOTE:
REFER TO RETAINING WALL DRAWINGS BY RETAINING SOLUTIONS & BUILDING CERTIFICATE No.46.1/2018 ISSUED BY FAIRFIELD CITY COUNCIL

PROVIDE HIGH VISIBILITY PARAWEBBING BARRIER FENCE AT TOPS OF RETAINING WALLS (TYP.) REFER TO DWG. 301 FOR DETAIL.

1.2m WIDE FOOTPATH TO COUNCIL SPECIFICATIONS

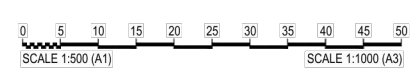
2.5m WIDE SHAREPATH TO COUNCIL SPECIFICATIONS

CAP & SEAL FOR FUTURE CONNECTION

STAGE 2 LIMIT OF WORKS (TYP.)

FOR CONSTRUCTION CERTIFICATE

Revisions	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust, CPEng NER
SIGN: *[Signature]*
DATE: 2/7/20

Client: **CSR LTD**
Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**

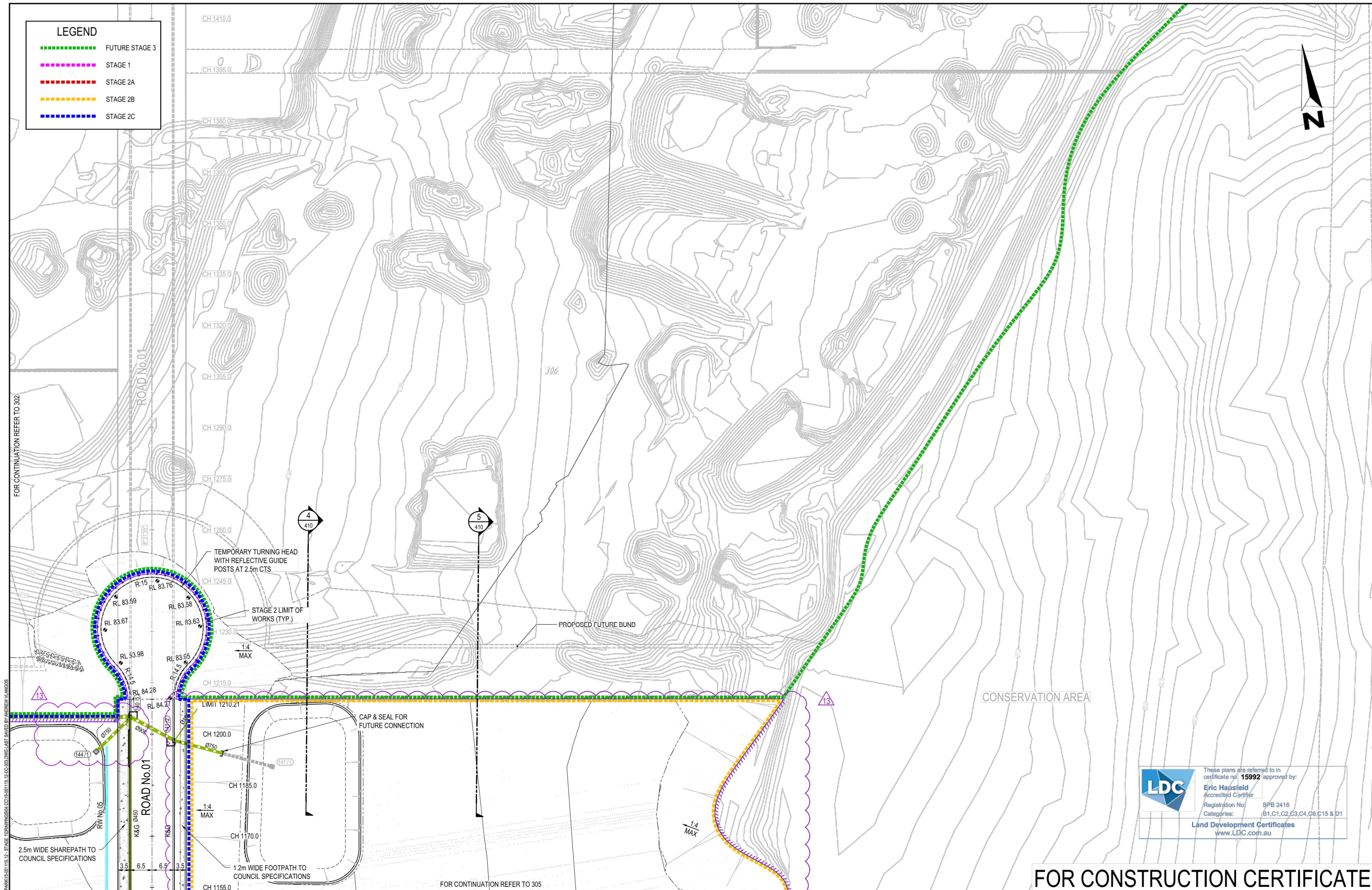
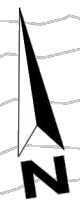


Drawing Title				
ENGINEERING PLAN - STAGE C - SHEET 02 OF 07				
Project No:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	302	13

LE: H1616-01115 - CSR HORSLEY PARK 15-01115.12 - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS - DWG LAST SAVED BY ANDREW LANGOS

FOR CONTINUATION REFER TO 303

LEGEND	
	FUTURE STAGE 3
	STAGE 1
	STAGE 2A
	STAGE 2B
	STAGE 2C

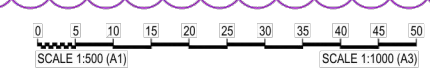


FOR CONTINUATION REFER TO 302
 FOR CONTINUATION REFER TO 305
 L15-001115-12 - STAGE 1 DRAWING - CSR HORSLEY PARK - 15-001115-12-00-000.DWG LAST SAVED BY ANDREW LANGOS



 These plans are referred to in certificate no. **15992** approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BFB 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1
 Land Development Certificates
 www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimers and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP Eng NER
 SIGN: 
 DATE: 12/7/20

Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS

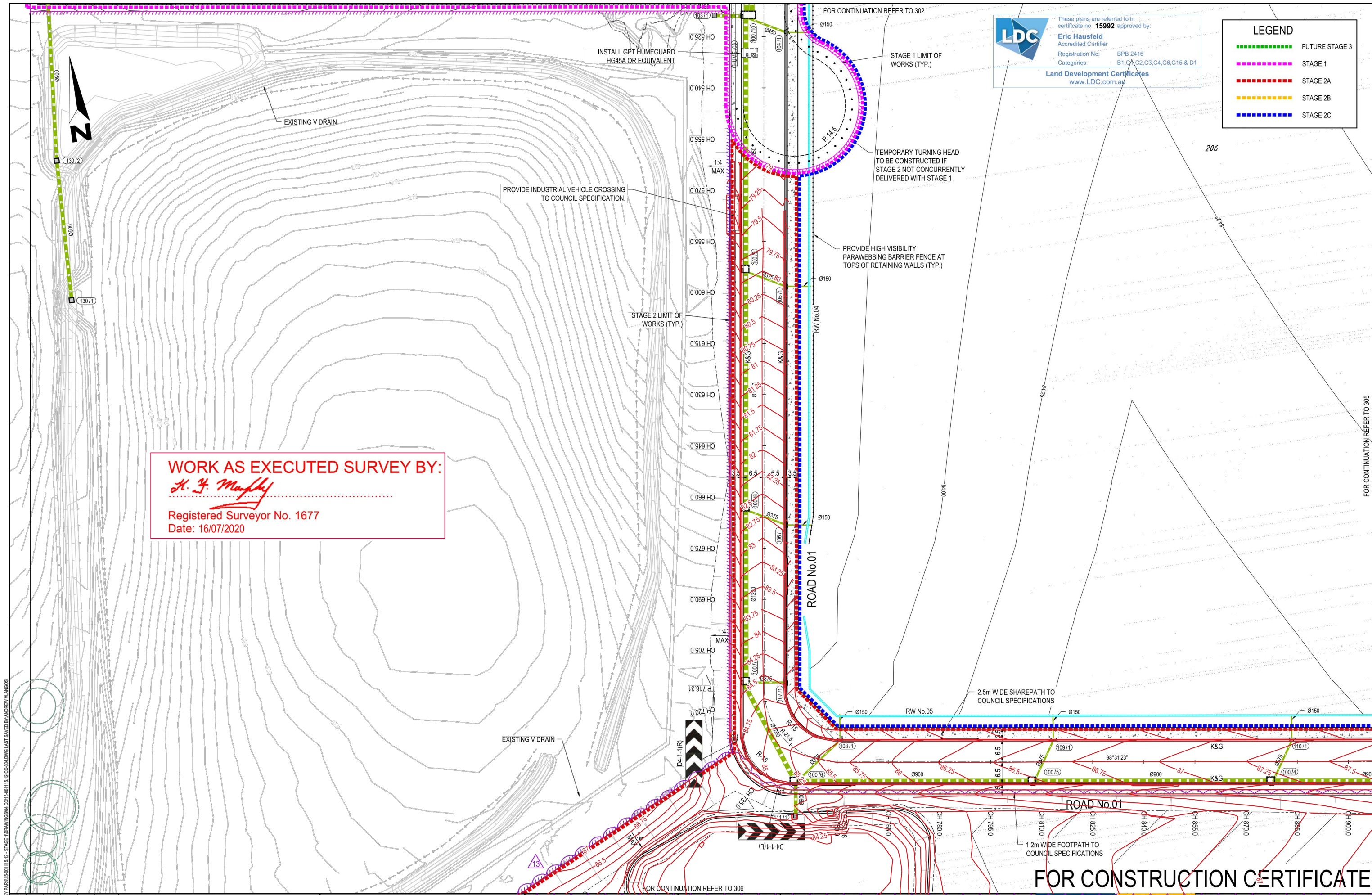

 ©2020 calibregroup.com.au calibreconsulting.co

Drawing Title:				
ENGINEERING PLAN - STAGE C - SHEET 03 OF 07				
Project No:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	303	13

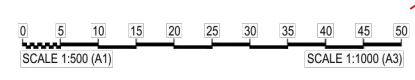
LDC
 These plans are referred to in certificate no. 15992 approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1, C1, C2, C3, C4, C6, C15 & D1
 Land Development Certificates
 www.LDC.com.au

LEGEND	
	FUTURE STAGE 3
	STAGE 1
	STAGE 2A
	STAGE 2B
	STAGE 2C

WORK AS EXECUTED SURVEY BY:
H. J. Murphy
 Registered Surveyor No. 1677
 Date: 16/07/2020



L15-001115-01115-12-STAGE 1-DRAINAGE AND EARTHWORKS-01115-12-00-00-DWG LAST SAVED BY ANDREW LANGOS
 Revisions
 08 AV AV CK SAG 02/02/18 RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
 09 AV AV CK SAG -02/18 ISSUED FOR CONSTRUCTION CERTIFICATE
 10 VS/PS AV/MC CK BH 27/08/18 AMENDMENTS AS PER CERTIFIER'S COMMENTS
 11 VS AV/MC CK BH 03/06/19 AMENDMENTS AS PER CERTIFIER'S COMMENTS
 12 LH LF EF BH 15/05/20 ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
 13 AV AV LF EF 02/07/20 ISSUE TO SUIT LDC COMMENTS
 First Issue DJW LF PD SAG 11/04/16
 Drawn Design Check Appd. Date



Disclaimers and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

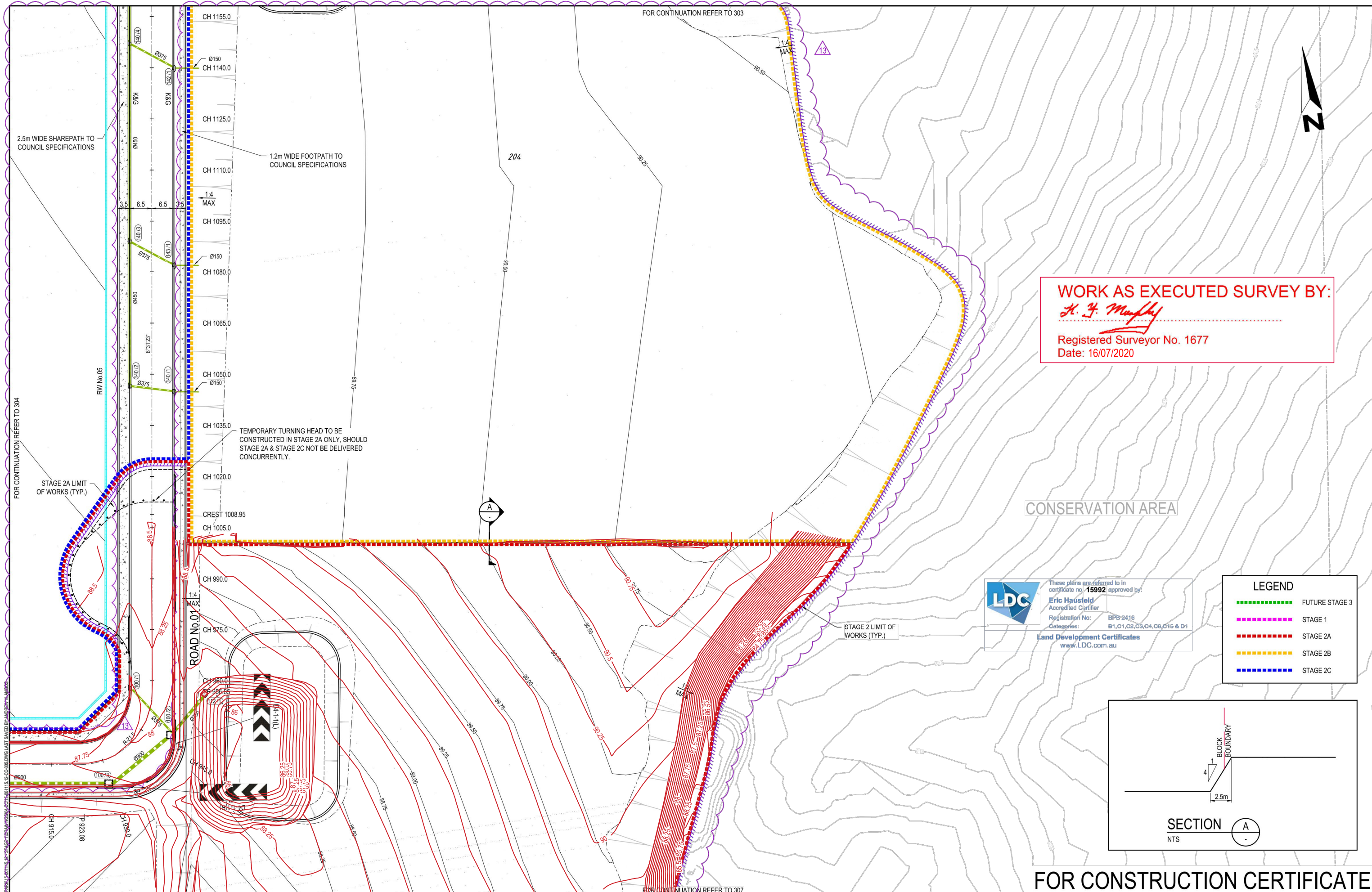
Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP Eng NER
 SIGN: *[Signature]*
 DATE: 2/7/20

Client: **CSR LTD**
 Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**

calibre
 ©2020 calibregroup.com.au calibreconsulting.co

FOR CONSTRUCTION CERTIFICATE

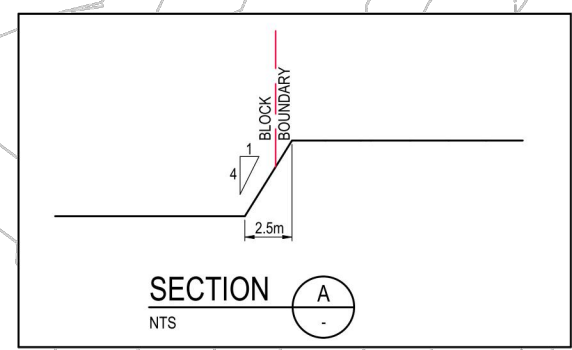
Drawing Title: **ENGINEERING PLAN - STAGE C - SHEET 04 OF 07**
 Project No.: 15-001115.12 Stage: 1&2 Milestone: CC Dwg No.: 304 Revision: -43



WORK AS EXECUTED SURVEY BY:
H. J. Murphy
 Registered Surveyor No. 1677
 Date: 16/07/2020

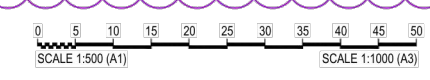
LDC
 These plans are referred to in certificate no. 15992 approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1, C1, C2, C3, C4, C6, C15 & D1
Land Development Certificates
 www.LDC.com.au

LEGEND	
	FUTURE STAGE 3
	STAGE 1
	STAGE 2A
	STAGE 2B
	STAGE 2C



FOR CONSTRUCTION CERTIFICATE

Revisions	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/16	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

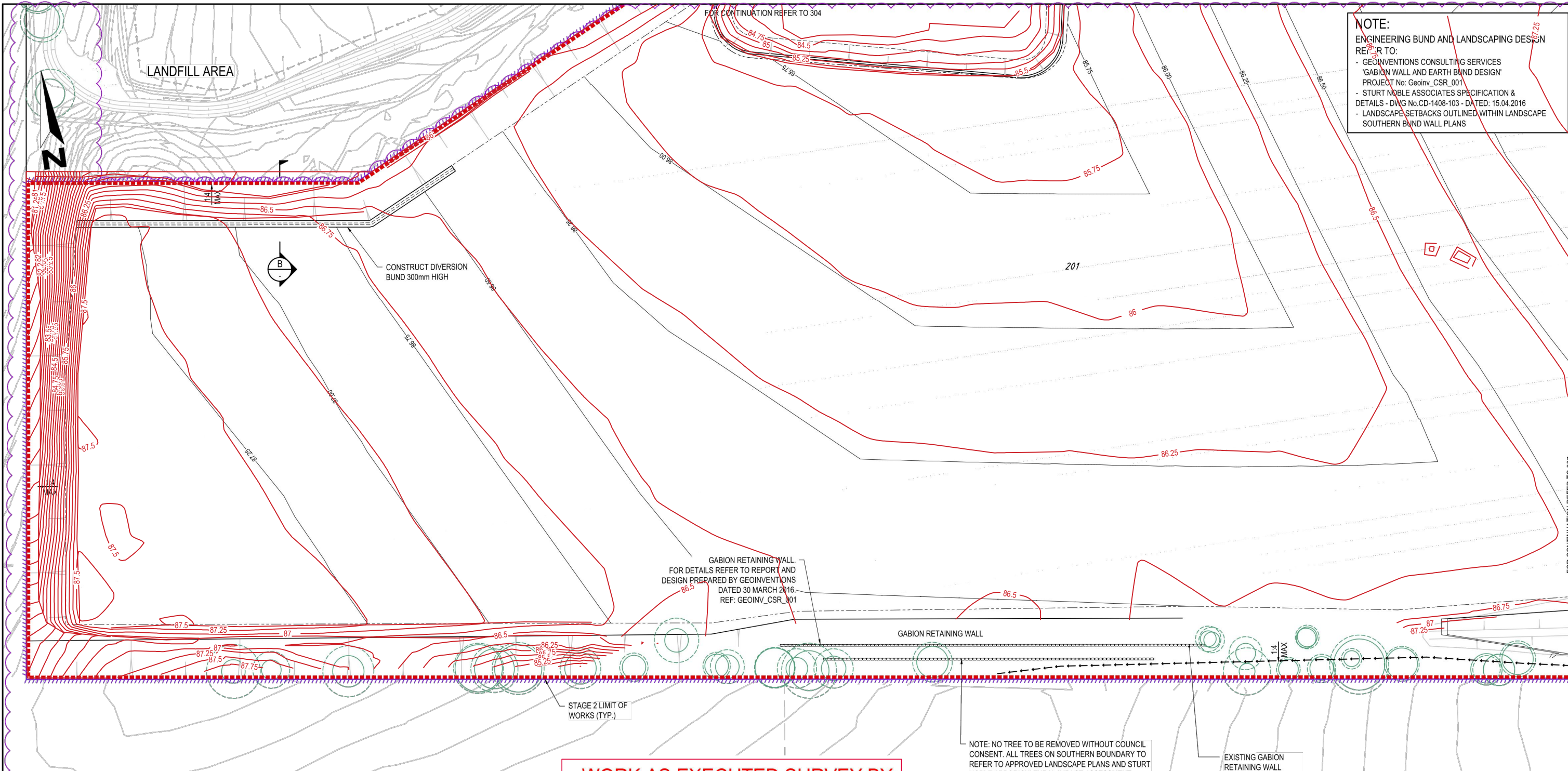
Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP Eng NER
 SIGN: *[Signature]*
 DATE: 1/7/20

Client: **CSR LTD**
 Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**



Project No.	Stage	Milestone	Dwg No.	Revision
15-001115.12	1&2	CC	305	13

NOTE:
 ENGINEERING BUND AND LANDSCAPING DESIGN
 REFER TO:
 - GEONVENTIONS CONSULTING SERVICES
 'GABION WALL AND EARTH BUND DESIGN'
 PROJECT No: Geoinv_CSR_001
 - STURT NOBLE ASSOCIATES SPECIFICATION &
 DETAILS - DWG No.CD-1408-103 - DATED: 15.04.2016
 - LANDSCAPE SETBACKS OUTLINED WITHIN LANDSCAPE
 SOUTHERN BUND WALL PLANS



GABION RETAINING WALL
 FOR DETAILS REFER TO REPORT AND
 DESIGN PREPARED BY GEONVENTIONS
 DATED 30 MARCH 2016.
 REF: GEOINV_CSR_001

NOTE: NO TREE TO BE REMOVED WITHOUT COUNCIL
 CONSENT. ALL TREES ON SOUTHERN BOUNDARY TO
 REFER TO APPROVED LANDSCAPE PLANS AND STURT
 NOBLE ARBORICULTURAL IMPACT ASSESSMENT
 REPORT DATED 18th MAY 2016 PROJECT: 1408. FOR
 REMOVAL TREATMENT.

WORK AS EXECUTED SURVEY BY:
H. F. Manley
 Registered Surveyor No. 1677
 Date: 16/07/2020



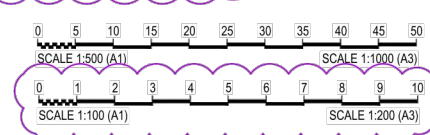
LDC
 These plans are referred to in
 certificate no. **15992** approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1
Land Development Certificates
 www.LDC.com.au

LEGEND

	FUTURE STAGE 3
	STAGE 1
	STAGE 2A
	STAGE 2B
	STAGE 2C

FOR CONSTRUCTION CERTIFICATE

Revisions	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BF	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR
 PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY.
 DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING
 AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP Eng NER
 SIGN: *[Signature]*
 DATE: 1/7/20

Client:
CSR LTD
 Project:
**CSR HORSLEY PARK - STAGE 1 & 2
 ROAD, DRAINAGE AND EARTHWORKS**

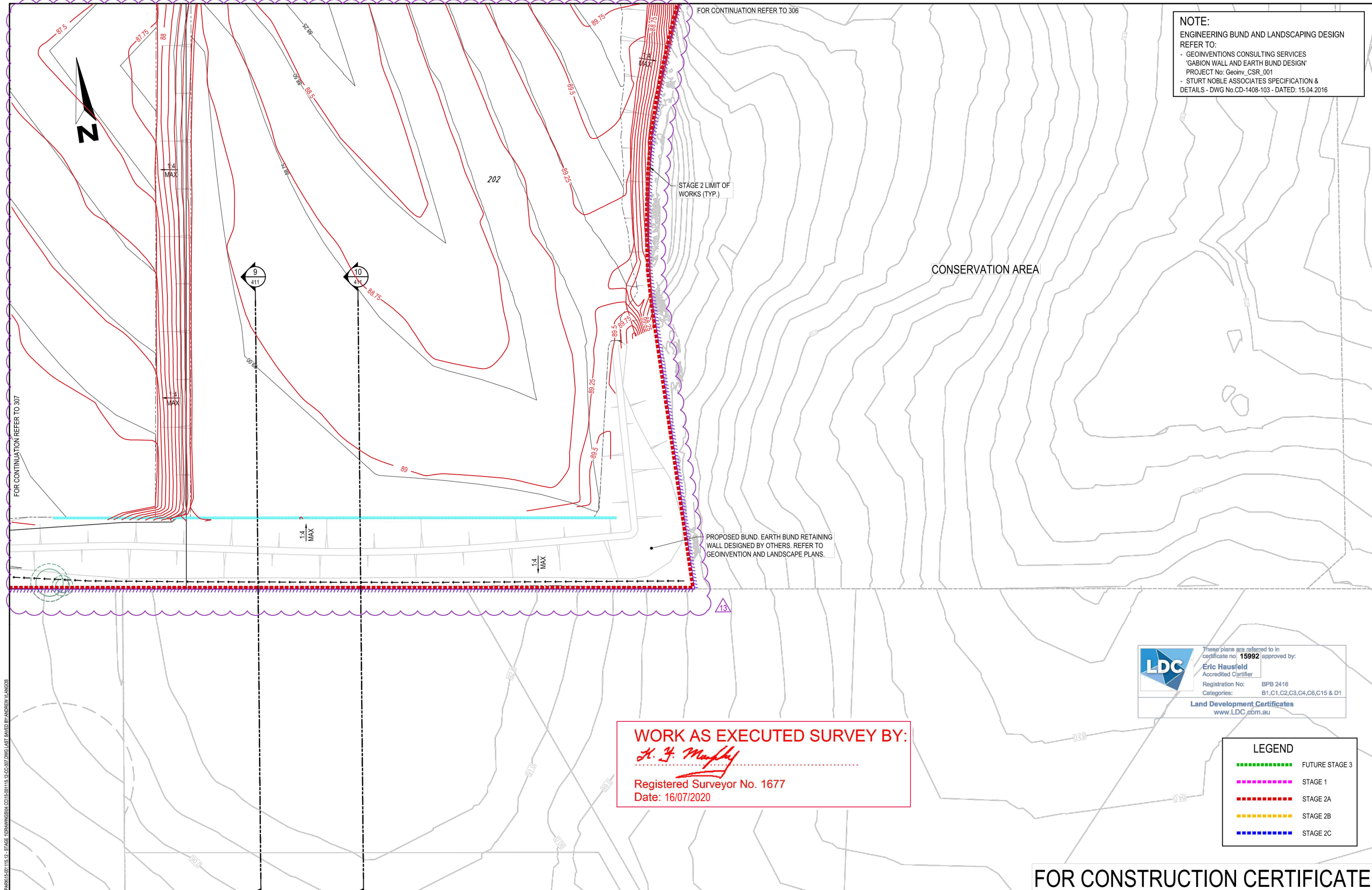
calibre
 ©2020 calibregroup.com.au calibreconsulting.com.au

Drawing Title:
**ENGINEERING PLAN - STAGE C -
 SHEET 06 OF 07**

Project No:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	306	13

LE:161916-01115_CSR_HORSLEY PARK15-01115.12 - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS LAST SAVED BY ANDREW LANGOS

NOTE:
 ENGINEERING BUND AND LANDSCAPING DESIGN
 REFER TO:
 - GEOINVENTIONS CONSULTING SERVICES
 'GABION WALL AND EARTH BUND DESIGN'
 PROJECT No: Geoinv_CSR_001
 - STURT NOBLE ASSOCIATES SPECIFICATION &
 DETAILS - DWG No.CD-1408-103 - DATED: 15.04.2016



WORK AS EXECUTED SURVEY BY:
H. J. Manly
 Registered Surveyor No. 1677
 Date: 16/07/2020

LDC
 These plans are referred to in certificate no. **15992** approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1
Land Development Certificates
 www.LDC.com.au

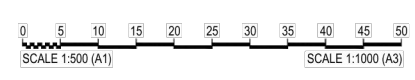
LEGEND

	FUTURE STAGE 3
	STAGE 1
	STAGE 2A
	STAGE 2B
	STAGE 2C

FOR CONSTRUCTION CERTIFICATE

Rev	By	Appd.	Date	Description		
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	

Revision Details



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust, CPEng NER
 SIGN: *[Signature]*
 DATE: 12/7/20

Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS

calibre
 ©2020
 calibregroup.com.au calibreconsulting.co

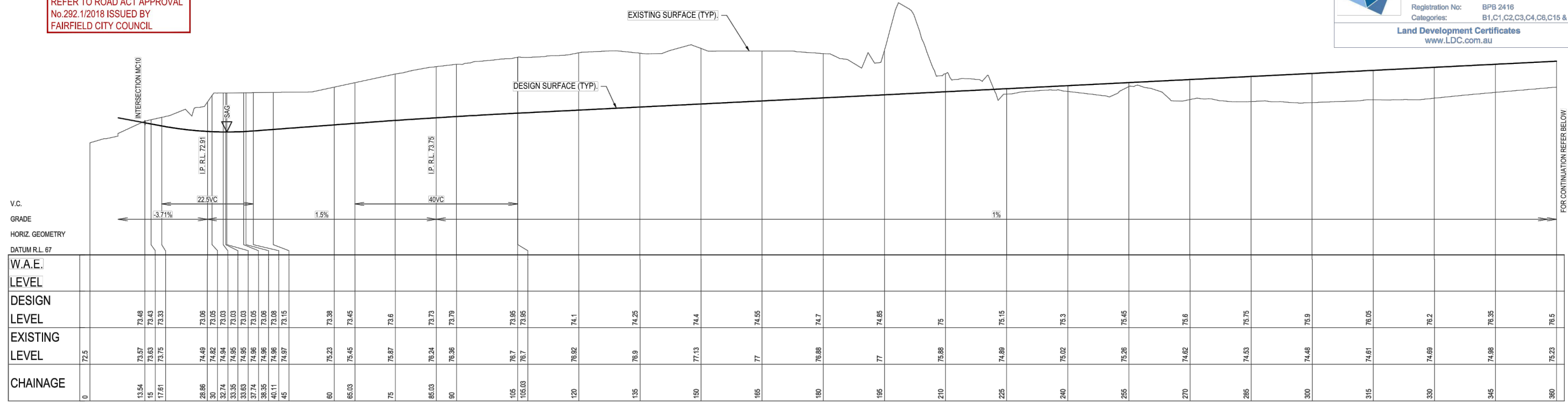
Drawing Title:
ENGINEERING PLAN - STAGE C - SHEET 07 OF 07

Project No:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	307	13

LDC: 151619101115 - CSR HORSLEY PARK 15-001115.12 - STAGE 1&2 ROAD, DRAINAGE AND EARTHWORKS - DWG LAST SAVED BY ANDREW LANGS

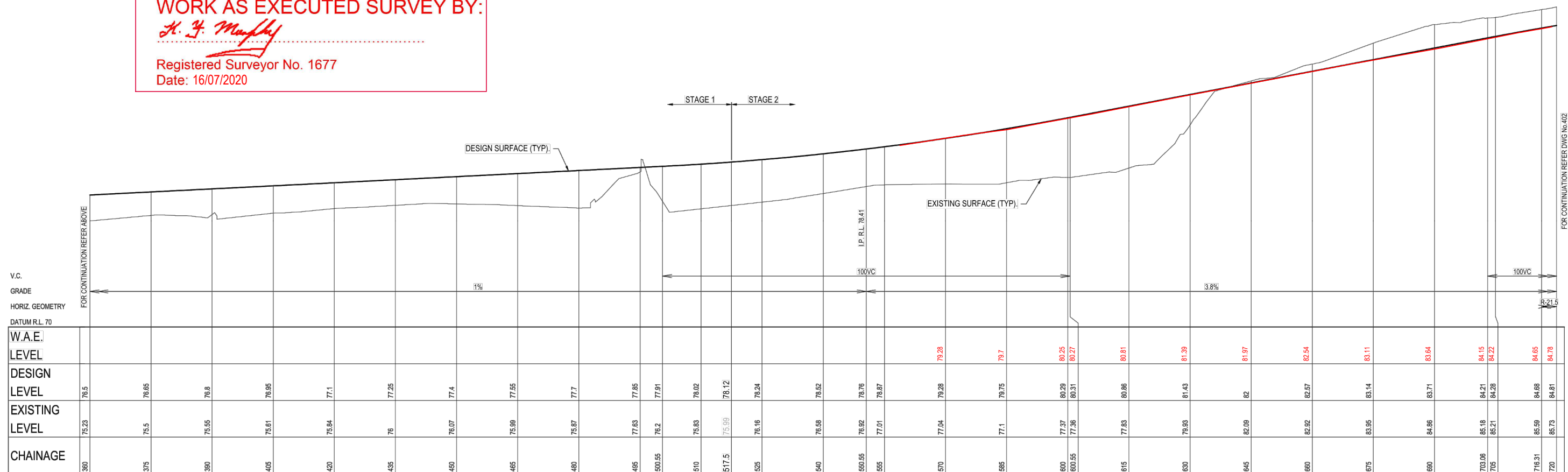
REFER TO ROAD ACT APPROVAL
No.292.1/2018 ISSUED BY
FAIRFIELD CITY COUNCIL

These plans are referred to in certificate no. **15992** approved by:
Eric Hausfeld
Accredited Certifier
Registration No: BPB 2416
Categories: B1,C1,C2,C3,C4,C6,C15 & D1
Land Development Certificates
www.LDC.com.au



LONGITUDINAL SECTION CENTRELINE - ROAD No.01
SCALE 1:500 (H)
SCALE 1:100 (V)

WORK AS EXECUTED SURVEY BY:
H. J. Murphy
Registered Surveyor No. 1677
Date: 16/07/2020

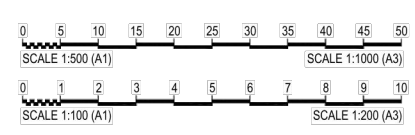


LONGITUDINAL SECTION CENTRELINE - ROAD No.01 (cont)
SCALE 1:500 (H)
SCALE 1:100 (V)

FOR CONSTRUCTION CERTIFICATE

FILE: H:\1919-01115 - CSR HORSLEY PARK\1919-01115_12 - STAGE 1\DRAWINGS\CD15-01115_12-02-40.DWG LAST SAVED BY: VERONIQUE BELLER

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
	DJW	LF	PD	SAG		11/04/16	



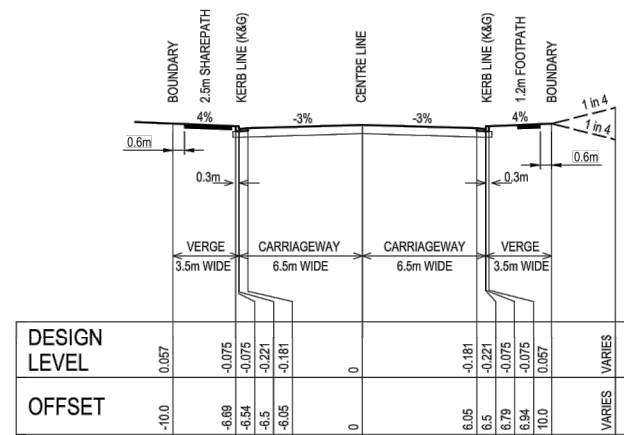
Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CP Eng NER
SIGN: *[Signature]*
DATE: 12/7/20

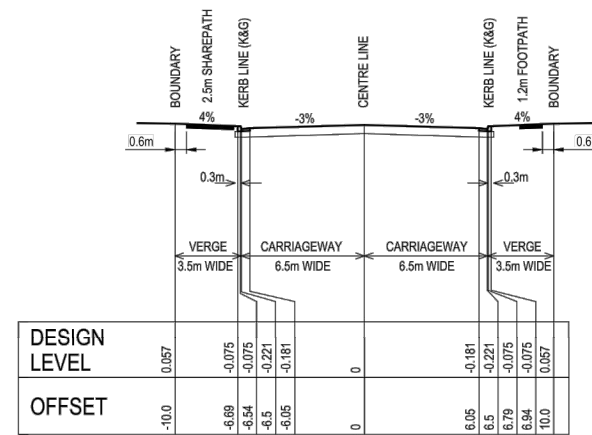
Client:
CSR LTD
Project:
**CSR HORSLEY PARK - STAGE 1 & 2
ROAD, DRAINAGE AND EARTHWORKS**



Project No.:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	401	13

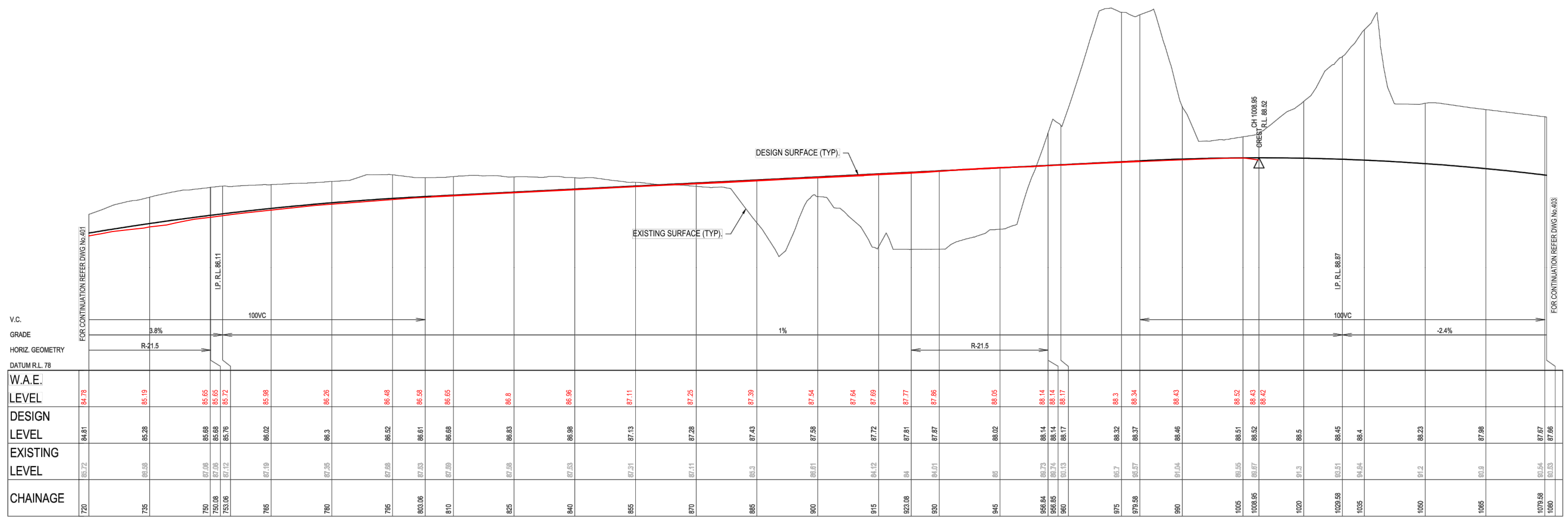


TYPICAL CROSS SECTION - ROAD No.01
 CH 0 to CH 720 & CH 998.03 to END
 SCALE 1:100 (NATURAL)



TYPICAL CROSS SECTION - ROAD No.01
 CH 720 to CH 998.03
 SCALE 1:100 (NATURAL)

WORK AS EXECUTED SURVEY BY:
H. J. Manly
 Registered Surveyor No. 1677
 Date: 16/07/2020

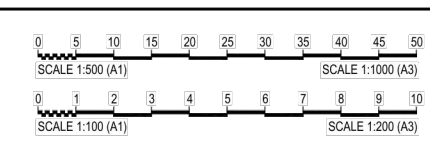


LONGITUDINAL SECTION CENTRELINE - ROAD 01
 SCALE 1:500 (H)
 SCALE 1:100 (V)

FOR CONSTRUCTION CERTIFICATE

FILE: H:\15-00115 - CSR HORSLEY PARK\15-00115-12 - STAGE 1\DRAWINGS\CD15-00115-12-02-DWG.LAST SAVED BY: WISH KULKARNI

Revisions	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



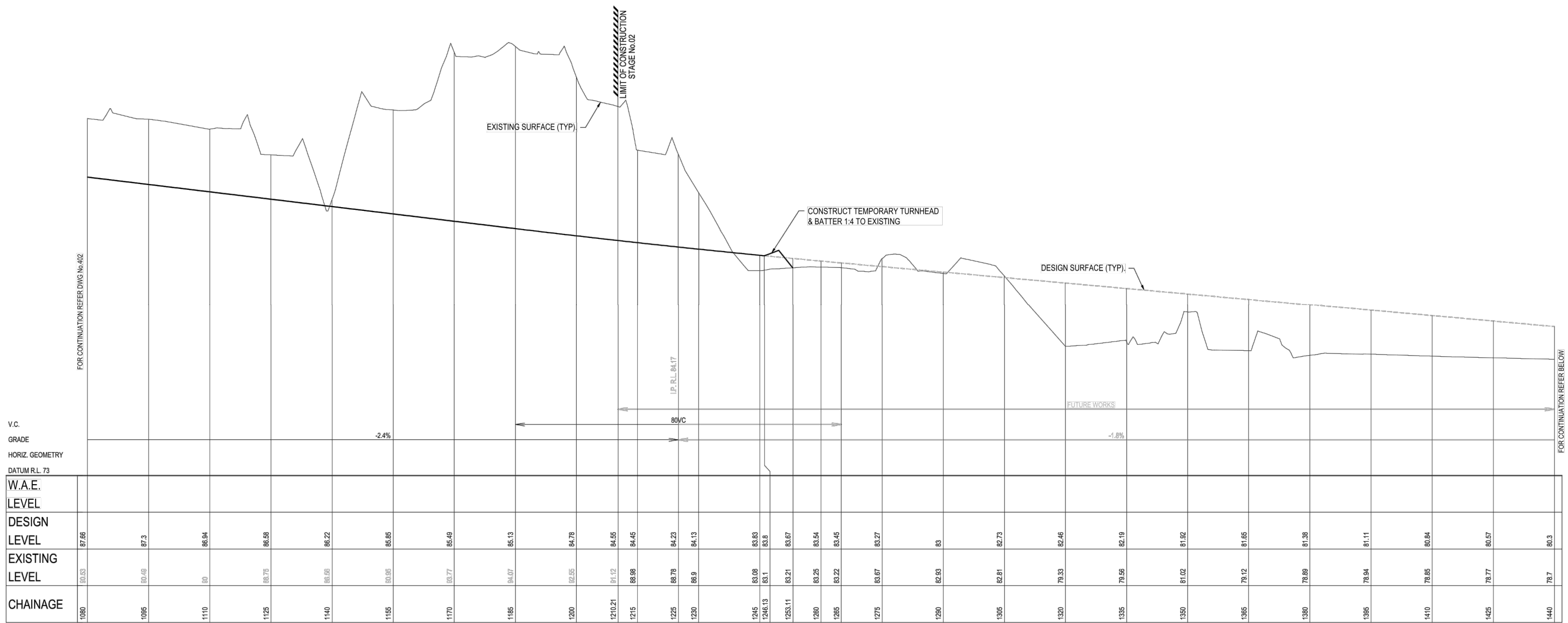
Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust, CP Eng NER
 SIGN: *[Signature]*
 DATE: 12/7/20

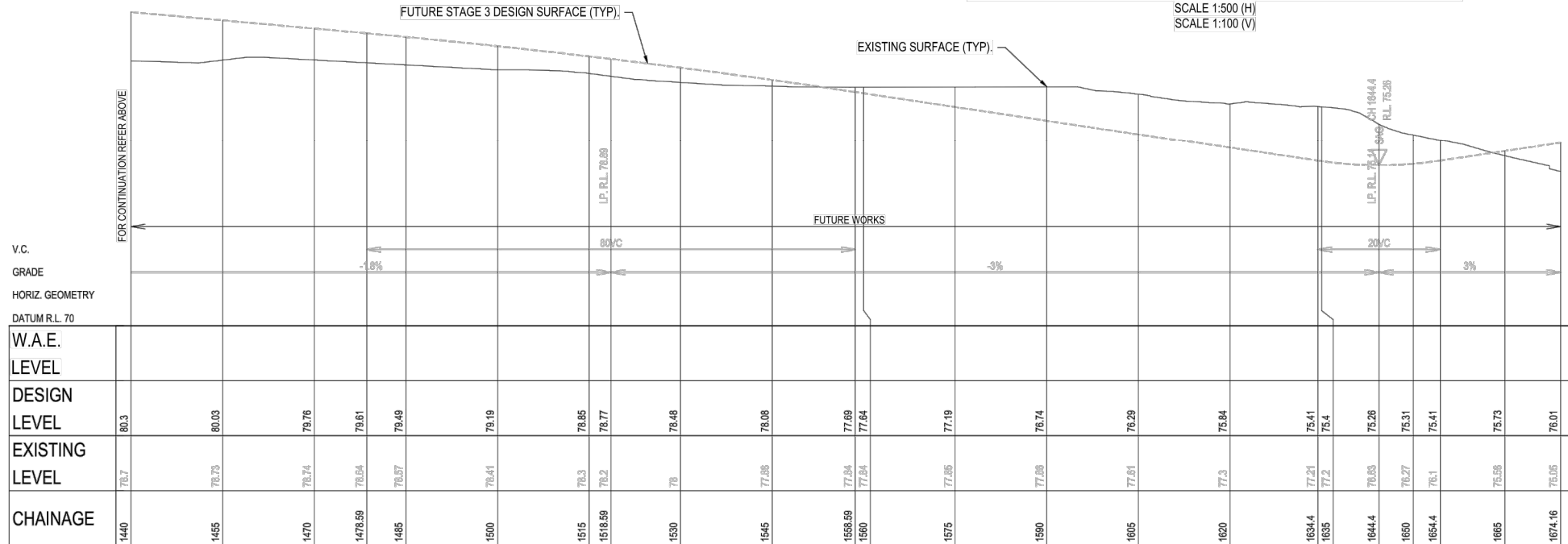
Client: **CSR LTD**
 Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**



ROAD LONG SECTIONS SHEET 02 OF 03				
Project No:	Stage:	Milestone:	Dwg No.:	Revision:
15-00115.12	1&2	CC	402	13



LONGITUDINAL SECTION CENTRELINES - ROAD No.01 (cont)



LONGITUDINAL SECTION CENTRELINES - ROAD No.01 (cont)

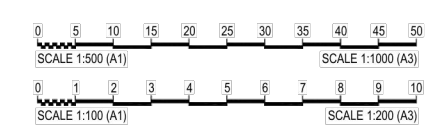
These plans are referred to in certificate no. **15992** approved by:

LDC Eric Hausfield
Accredited Certifier
Registration No: BPS 2416
Categories: B1,C1,C2,C3,C4,C6,C15 & D1
Land Development Certificates
www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

FILE: H:\15-001115-CSR HORSLEY PARK\15-001115-12-STAGE 1\DRAWINGS\04-C015-001115-12-02-403.DWG LAST SAVED BY: VISH KULKARNI

Revisions	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VSP/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

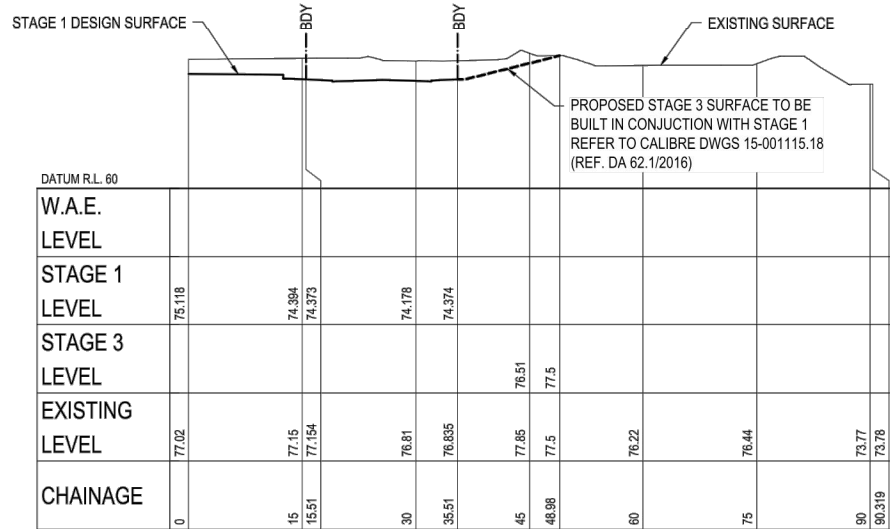
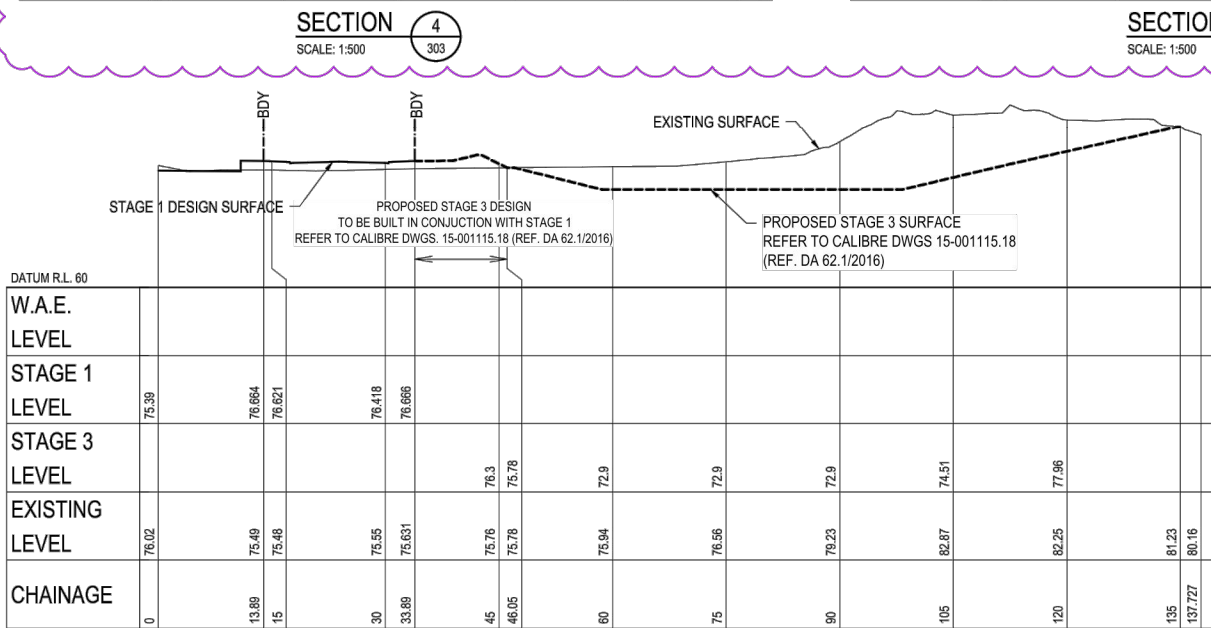
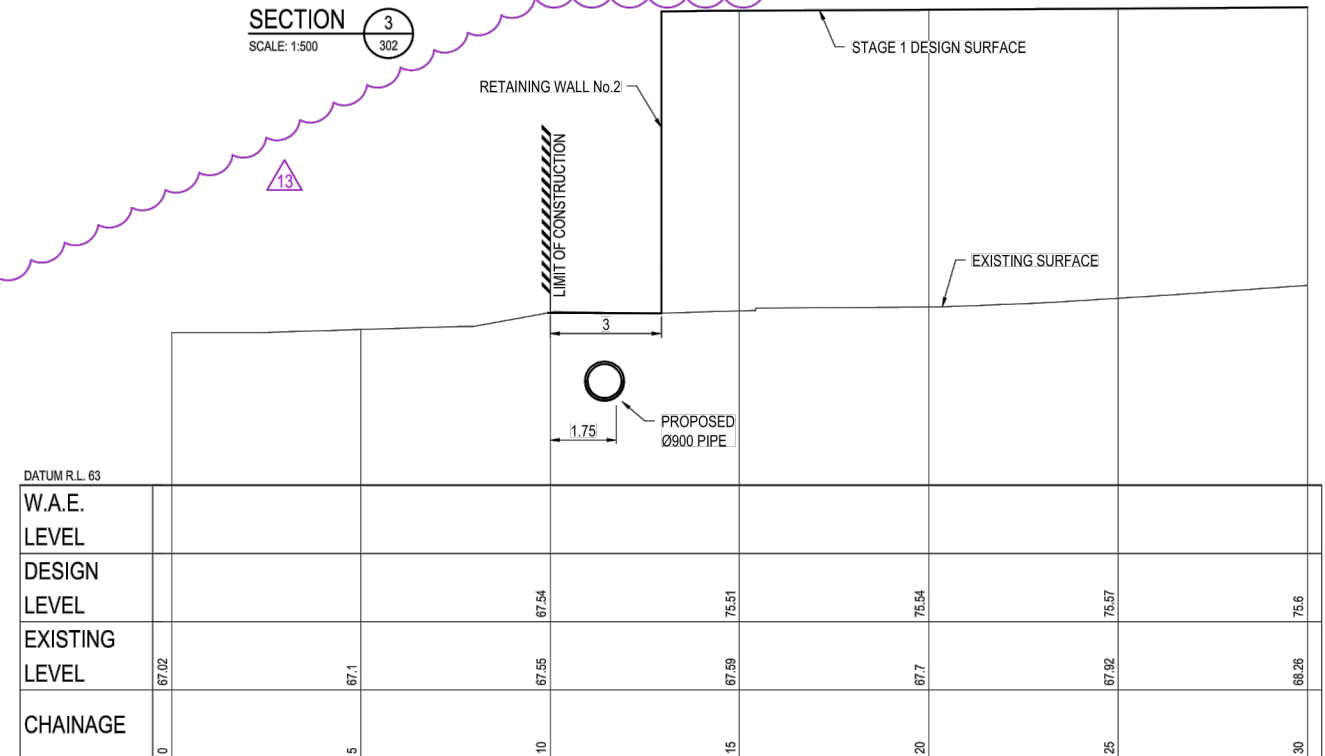
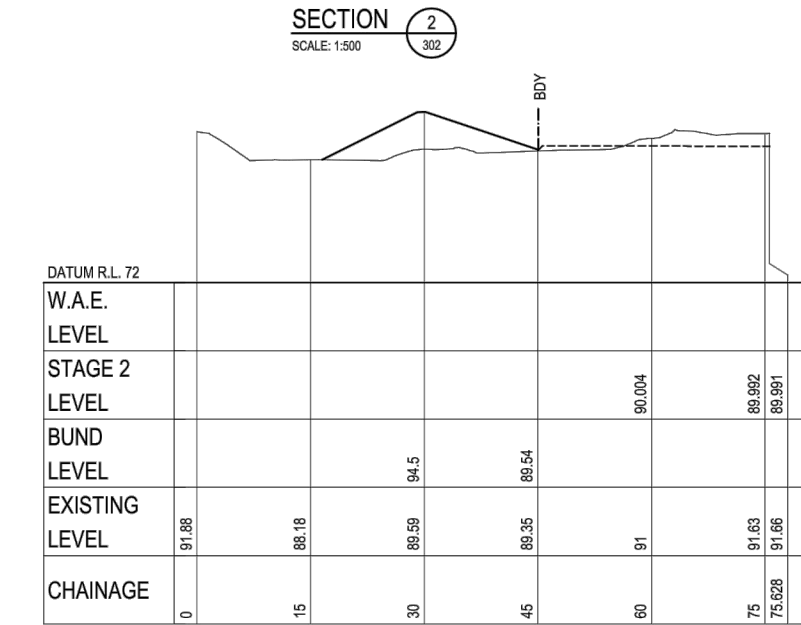
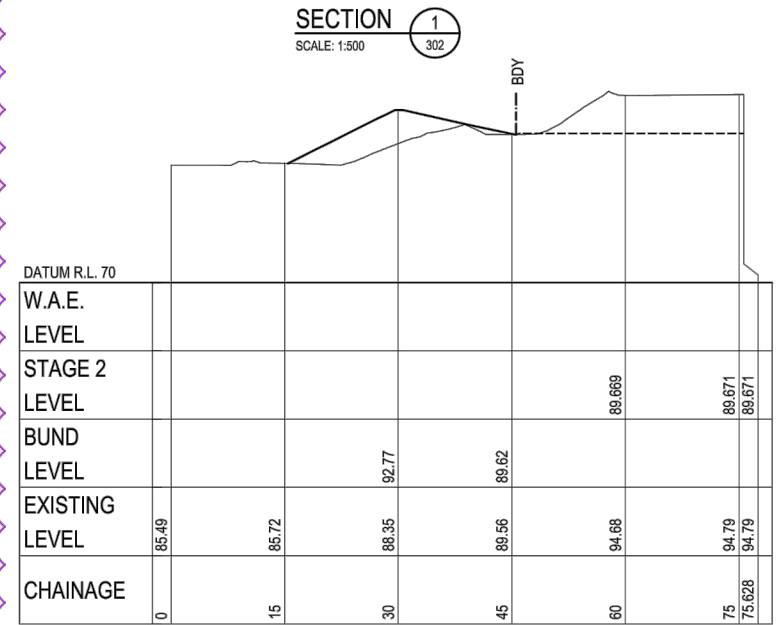
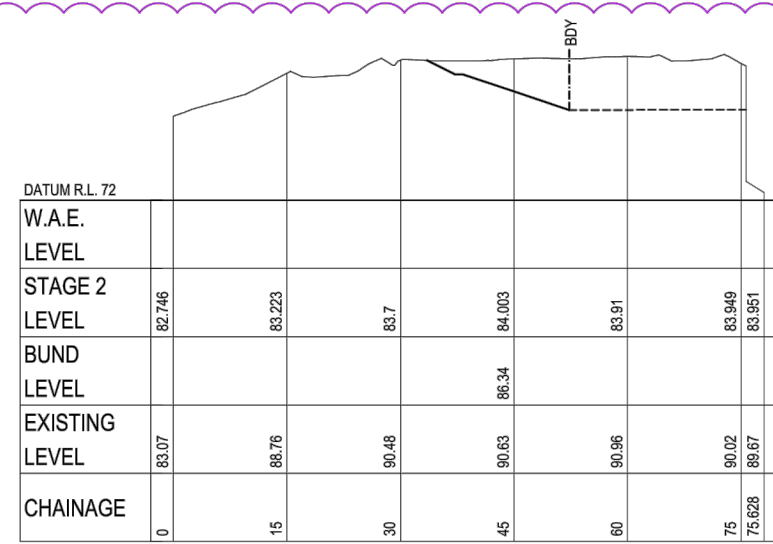
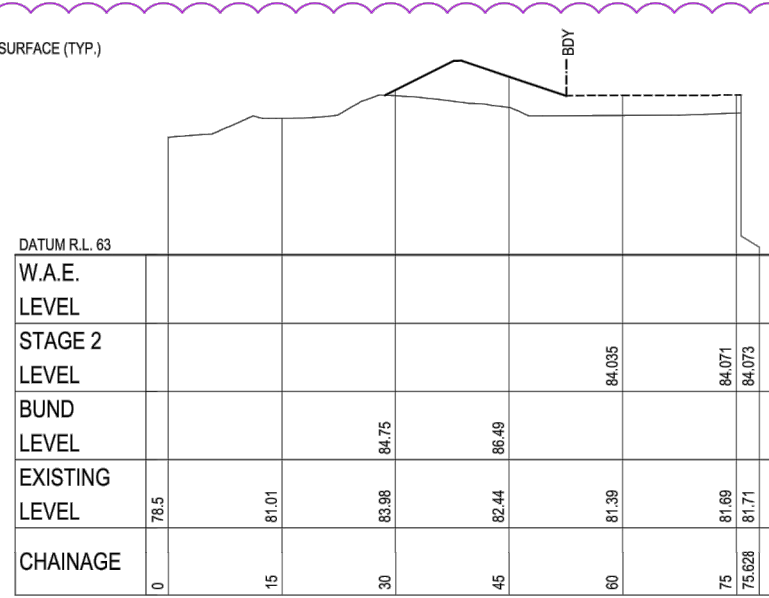
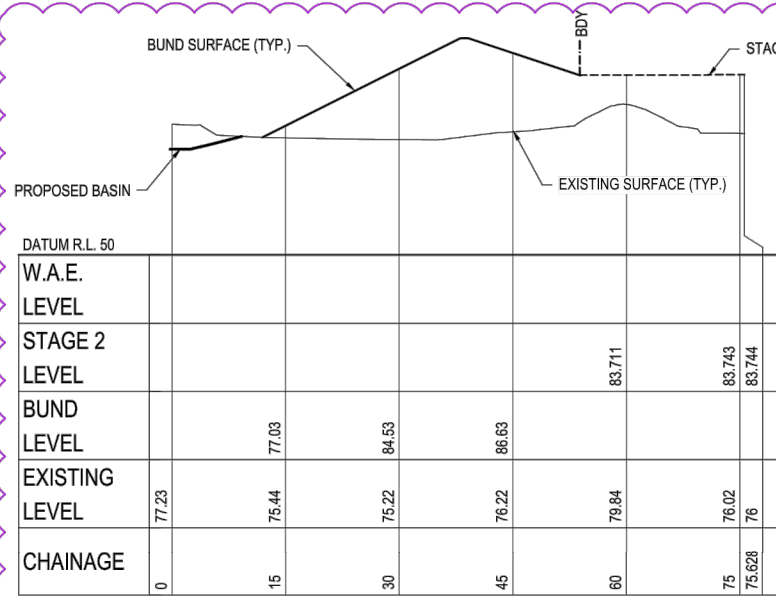
Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CP Eng NER
SIGN: *[Signature]*
DATE: 12/7/20

Client: **CSR LTD**
Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**



Drawing Title: ROAD LONG SECTIONS SHEET 03 OF 03				
Project No: 15-001115.12	Stage: 1&2	Milestone: CC	Dwg No.: 403	Revision: 13

NOTE:
SECTIONS AS PER FINAL
DESIGN LEVEL. STAGE C



SECTION 8 SCALE: 1:100

SECTION 6 SCALE: 1:500

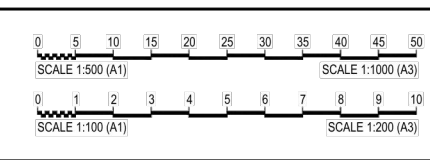
SECTION 7 SCALE: 1:500

These plans are referred to in certificate no. 15992 approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1
 Land Development Certificates
 www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

FILE: H:\15-001115-CSR_HORSLEY PARK\15-001115-12-STAGE 1 DRAININGSUM.CCD1501115.12-02-410.DWG LAST SAVED BY: ANDREW LANGSOS

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

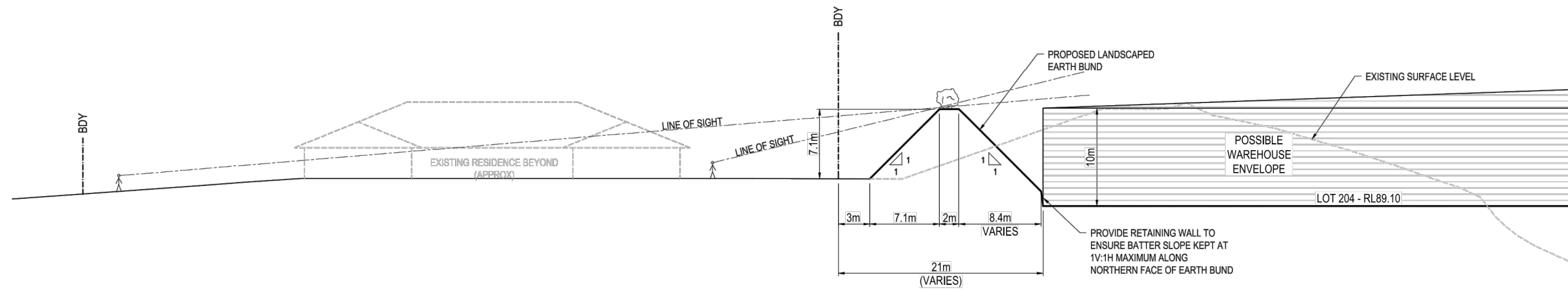
Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust, CPEng NER
 SIGN: [Signature]
 DATE: 12/7/20

Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS

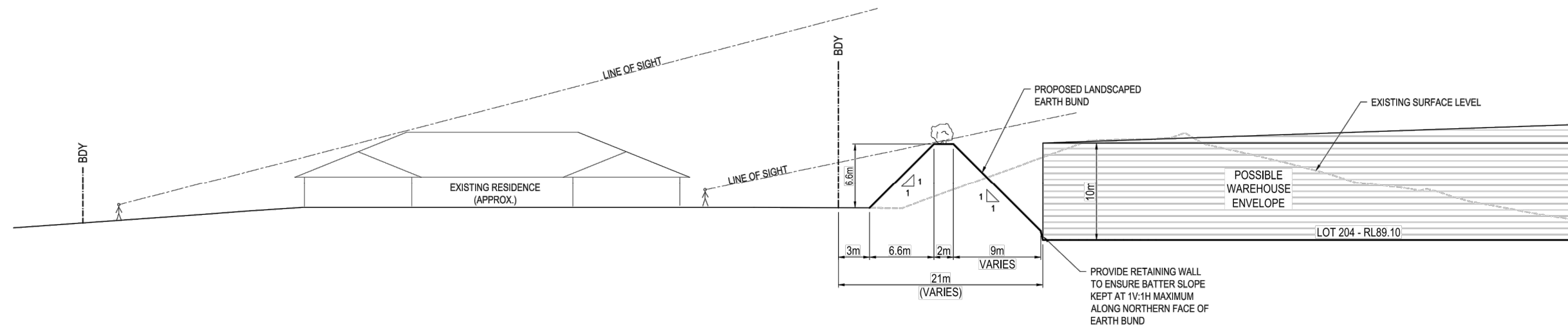


Drawing Title:				
FUTURE BASIN & BUND SECTIONS				
Project No.:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	410	13

NOTE:
 ENGINEERING BUND AND LANDSCAPING DESIGN
 REFER TO:
 - GEONVENTIONS CONSULTING SERVICES
 'GABION WALL AND EARTH BUND DESIGN'
 PROJECT No: Geolnv_CSR_001
 - STURT NOBLE ASSOCIATES SPECIFICATION &
 DETAILS - DWG No.CD-1408-103 - DATED: 15.04.2016



SECTION 9
 SCALE: 1:250 (H)
 SCALE: 1:250 (V)



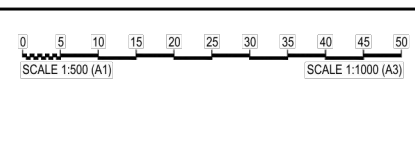
SECTION 10
 SCALE: 1:250 (H)
 SCALE: 1:250 (V)

These plans are referred to in certificate no. **15992** approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1
Land Development Certificates
 www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

FILE: H:\161615-01115-CSR HORSLEY PARK\161615-01115-12 - STAGE 1 DRAWINGS\CD-1408-103-11.DWG LAST SAVED BY: HARRISON STEEN

Revisions	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	--/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



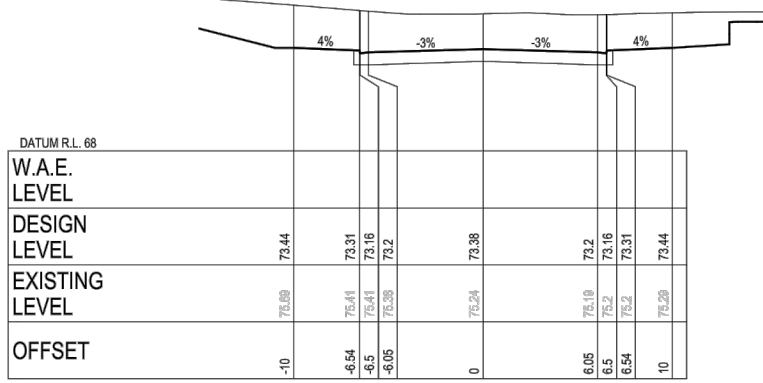
Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP Eng NER
 SIGN: *[Signature]*
 DATE: 12/7/20

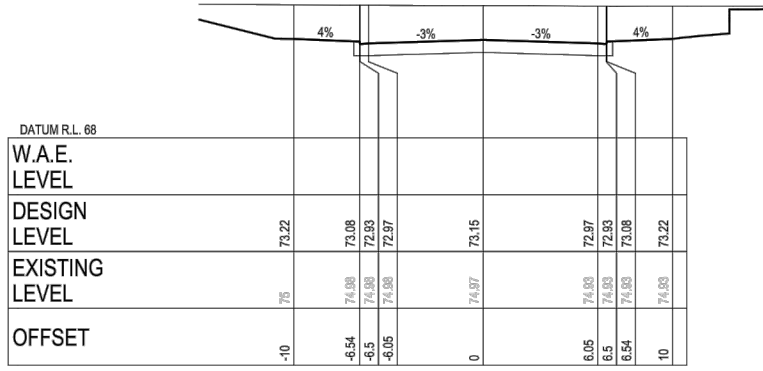
Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



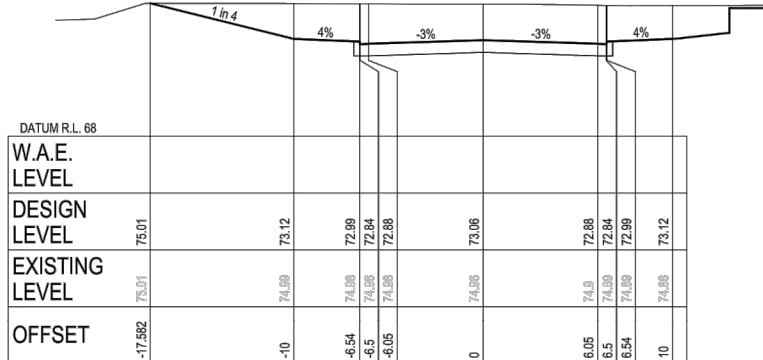
Drawing Title: EARTH BUND SECTIONS				
Project No: 15-001115.12	Stage: 1&2	Milestone: CC	Dwg No.: 411	Revision: 13



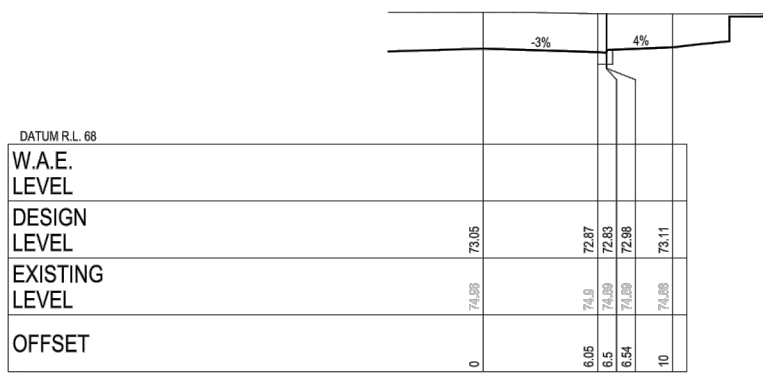
CH 60



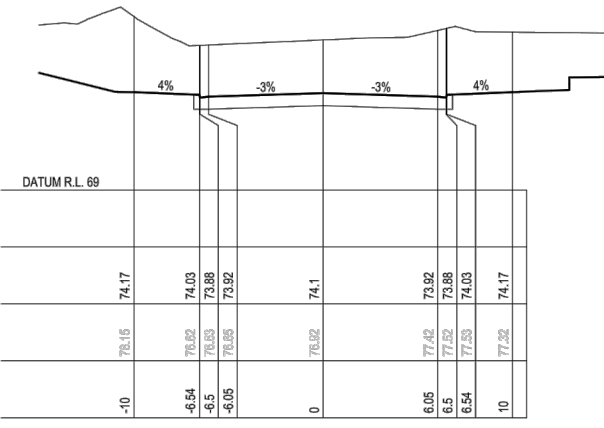
CH 45



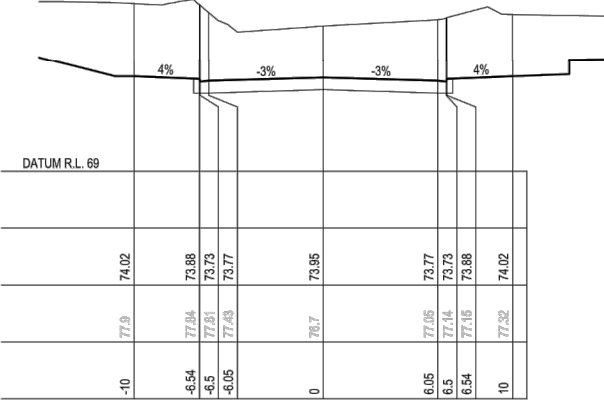
CH 38.336



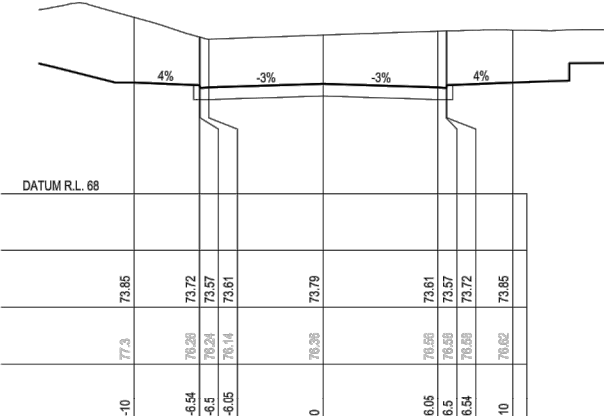
CH 37.74



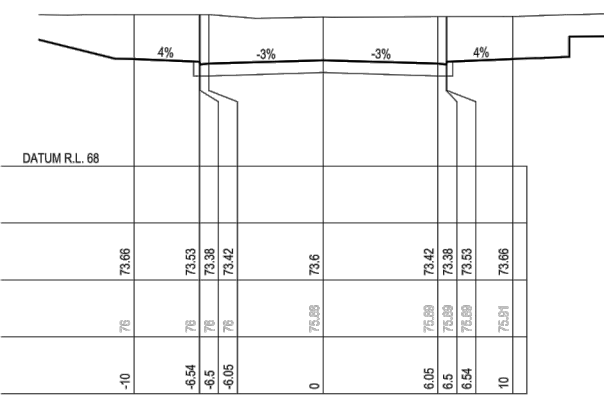
CH 120



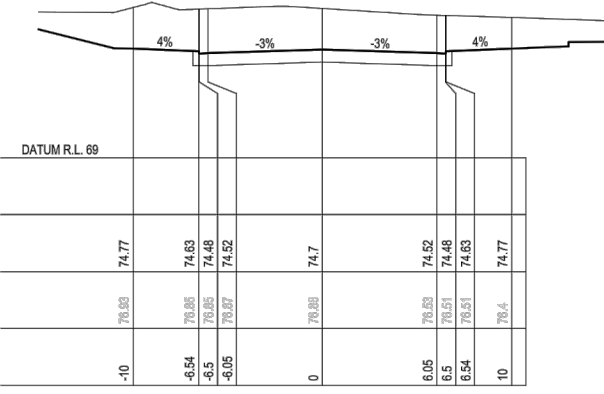
CH 105



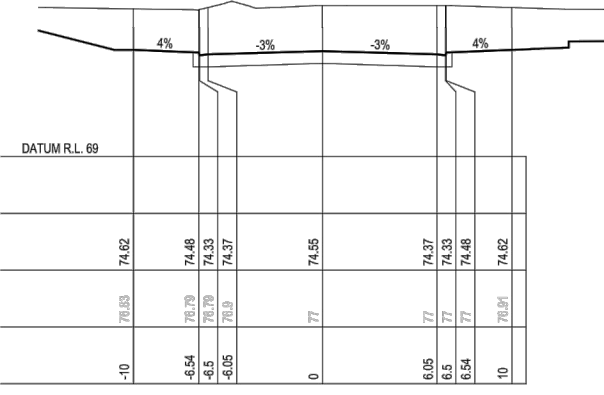
CH 90



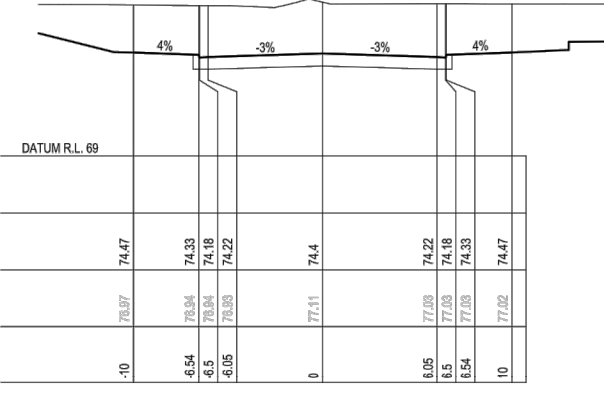
CH 75



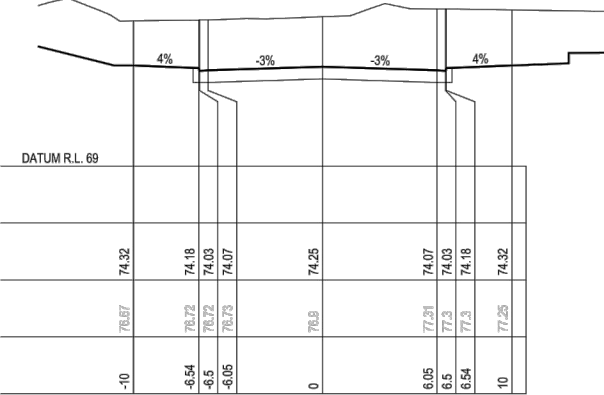
CH 180



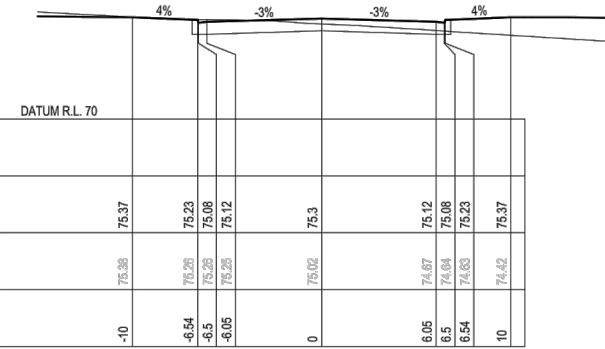
CH 165



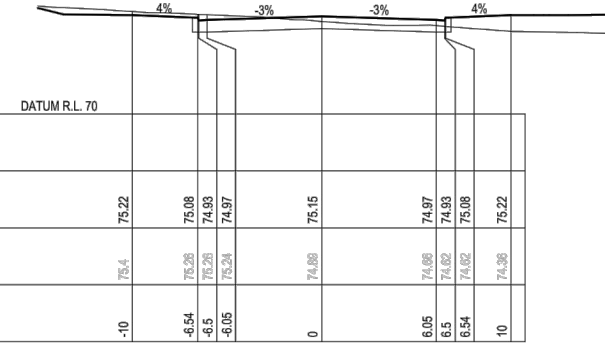
CH 150



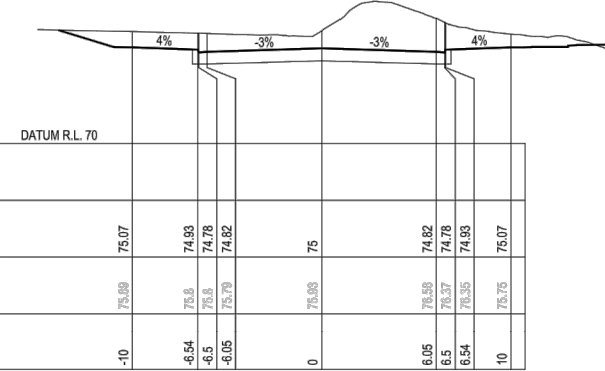
CH 135



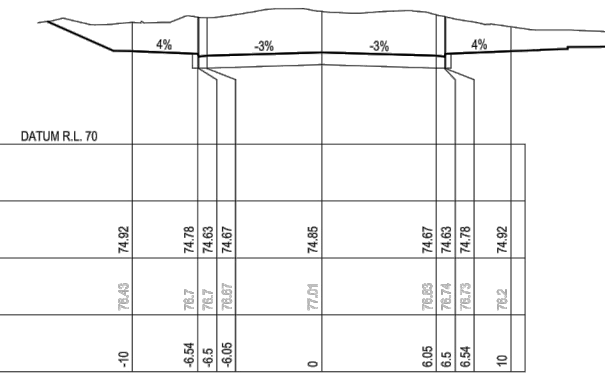
CH 240



CH 225



CH 210



CH 195

FOR CONSTRUCTION CERTIFICATE

L:\15915-01115-CSR HORSLEY PARK\15-01115-12-STAGE 1\DRAWINGS\A-C\15-01115-12-CC-501.DWG LAST SAVED BY VERONIQUE BELLER

Revisions	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



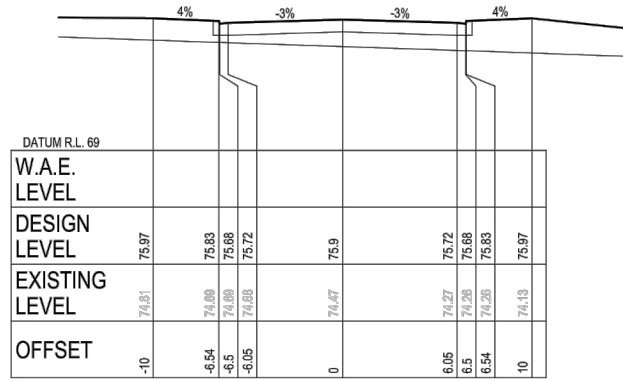
Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust, CPEng, NER
 SIGN: 
 DATE: 2/7/20

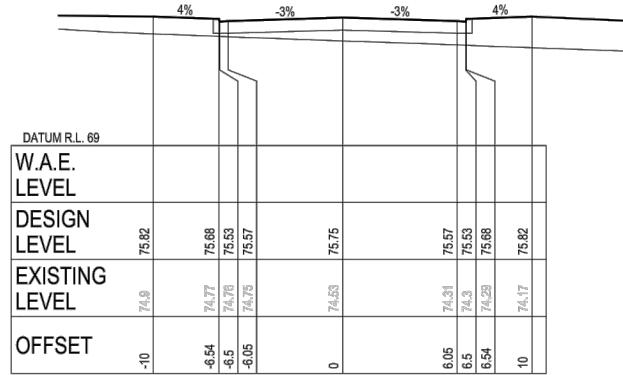
Client: **CSR LTD**
 Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**



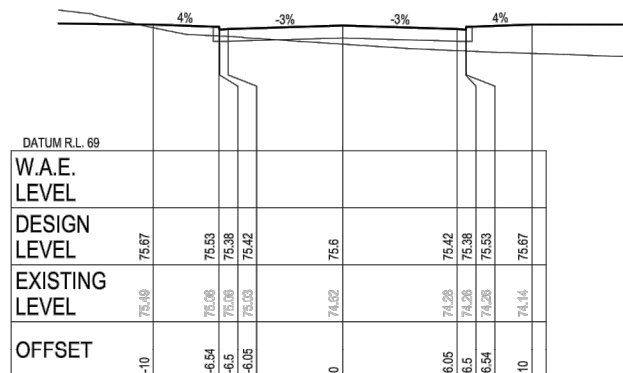
Drawing Title:				
ROAD CROSS SECTIONS SHEET 01 OF 07				
Project No:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	501	13



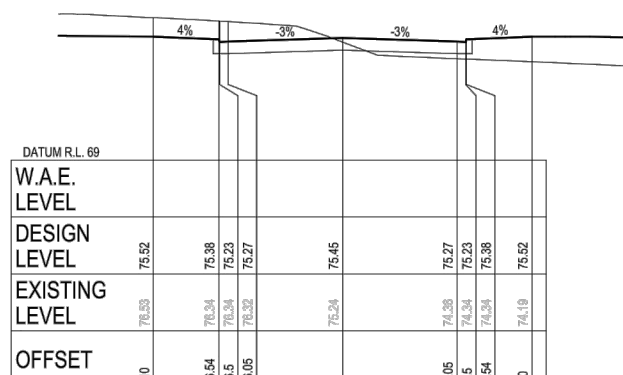
CH 300



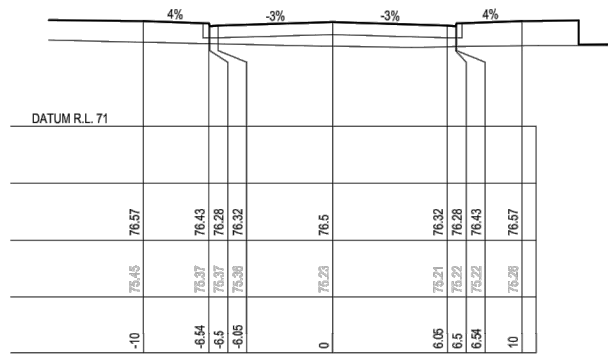
CH 285



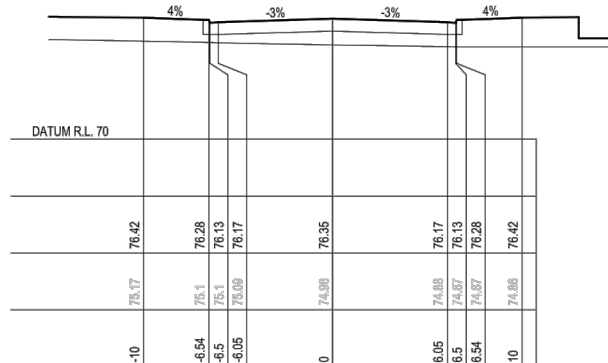
CH 270



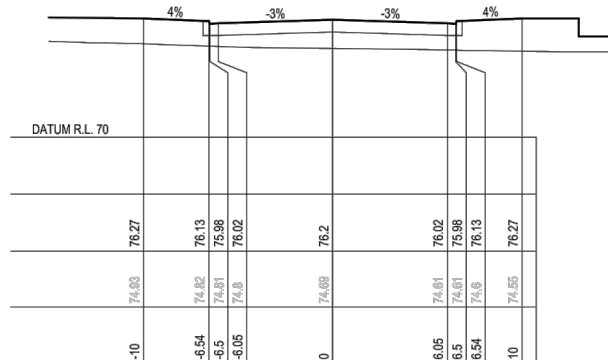
CH 255



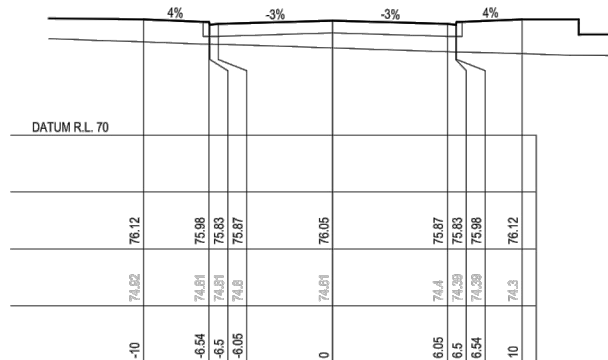
CH 360



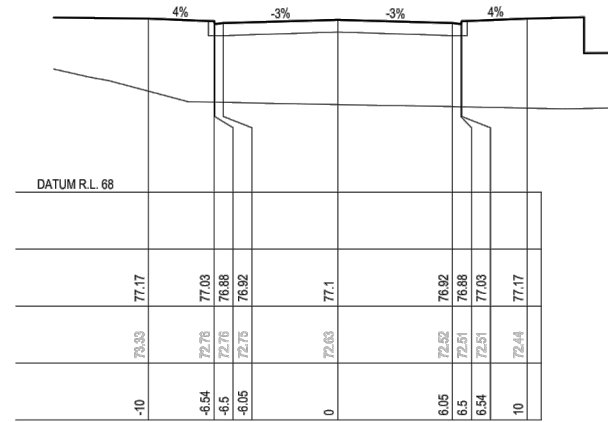
CH 345



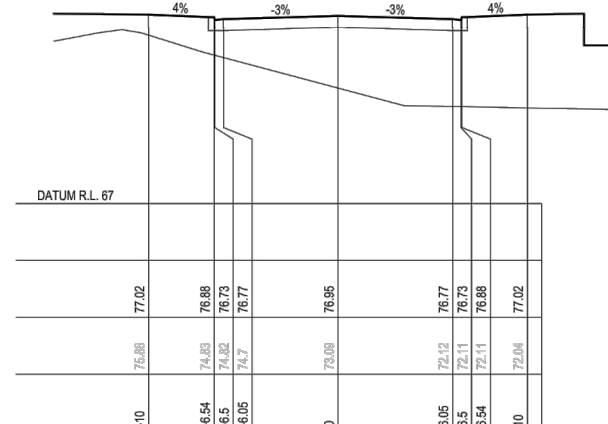
CH 330



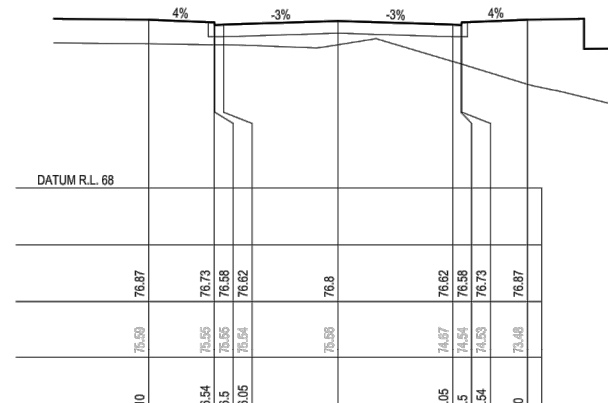
CH 315



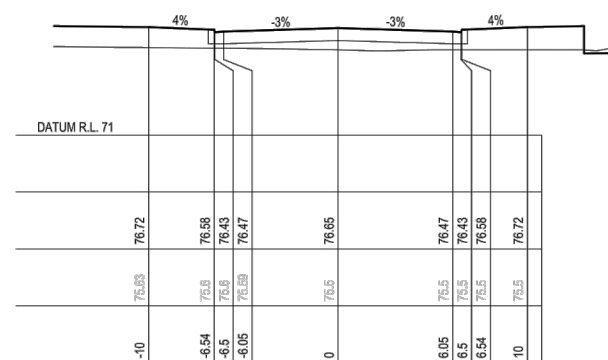
CH 420



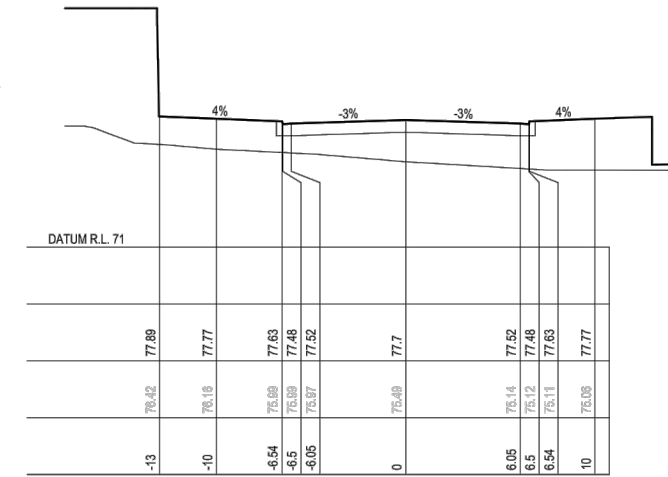
CH 405



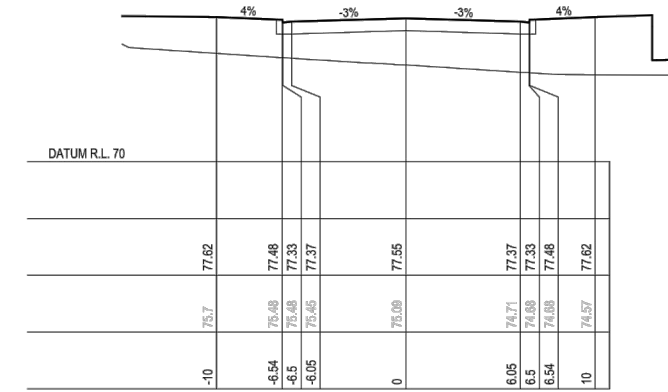
CH 390



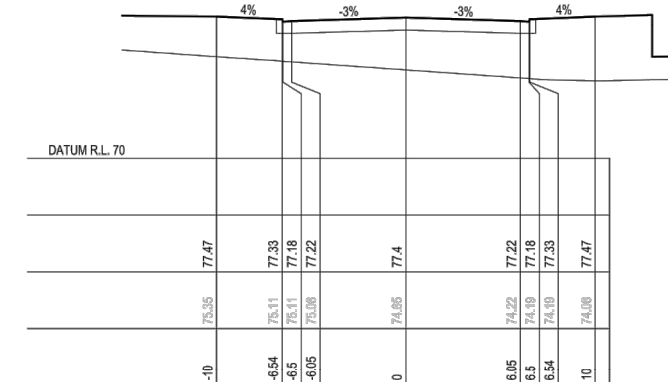
CH 375



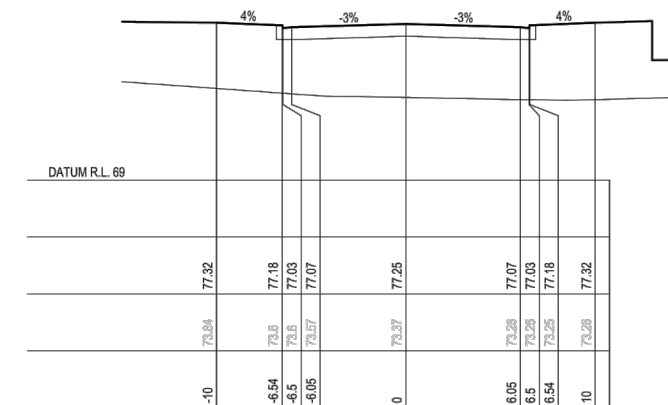
CH 480



CH 465



CH 450

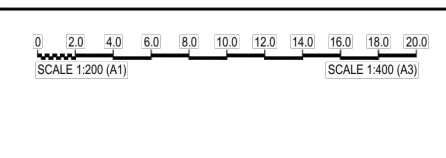


CH 435


FOR CONSTRUCTION CERTIFICATE

FILE: I:\15-001115-CSR HORSLEY PARK\15-001115-12-STAGE 1\DRAWINGS\CD\15-001115-12-CC-502.DWG LAST SAVED BY:VERONIQUE BELLES

Revisions	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VSI/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP Eng NER
 SIGN: 
 DATE: 12/7/20

Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS

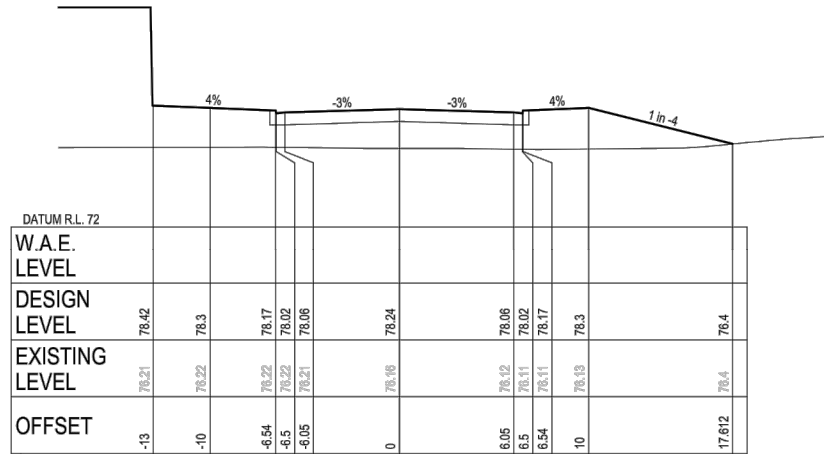


Drawing Title:				
ROAD CROSS SECTIONS SHEET 02 OF 07				
Project No.:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	502	13

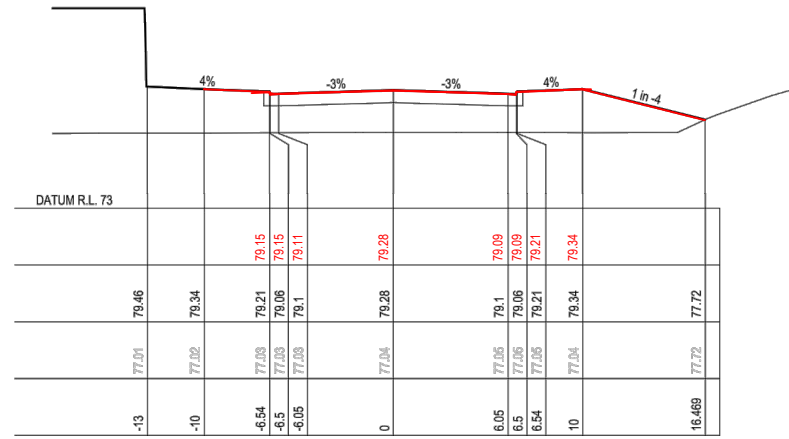
WORK AS EXECUTED SURVEY BY:

H. J. Murphy

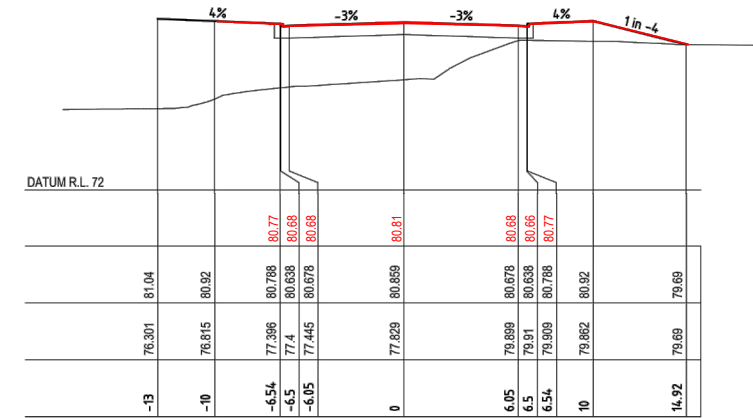
Registered Surveyor No. 1677
Date: 16/07/2020



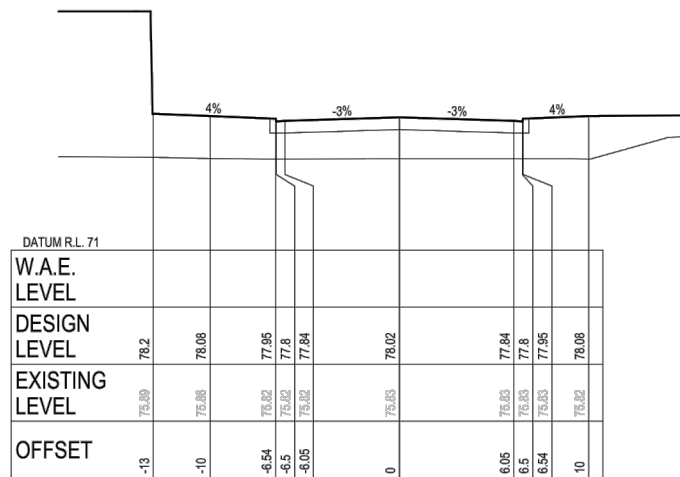
CH 525



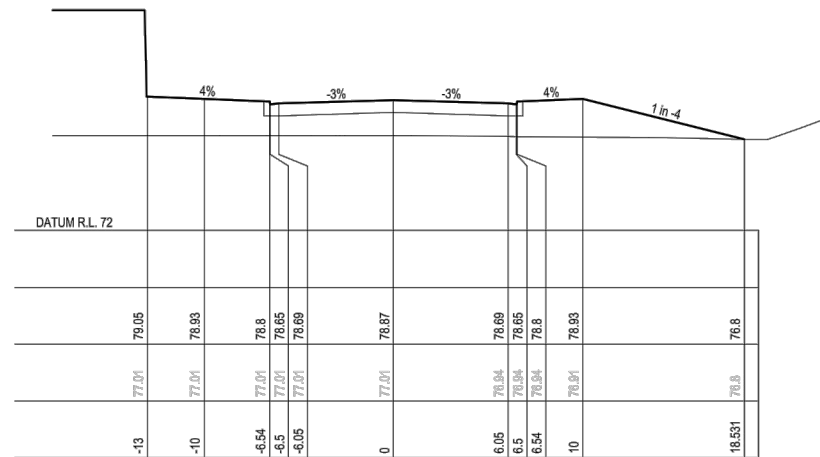
CH 570



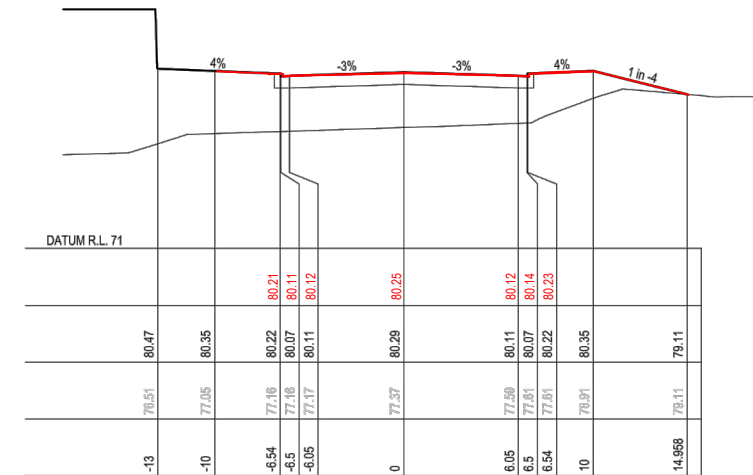
CH 615



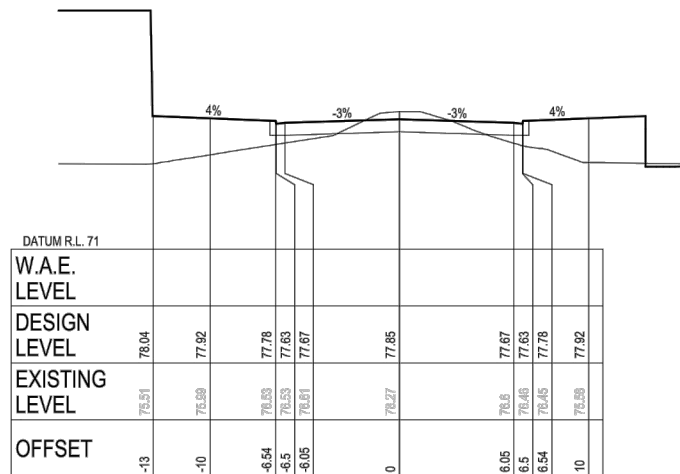
CH 510



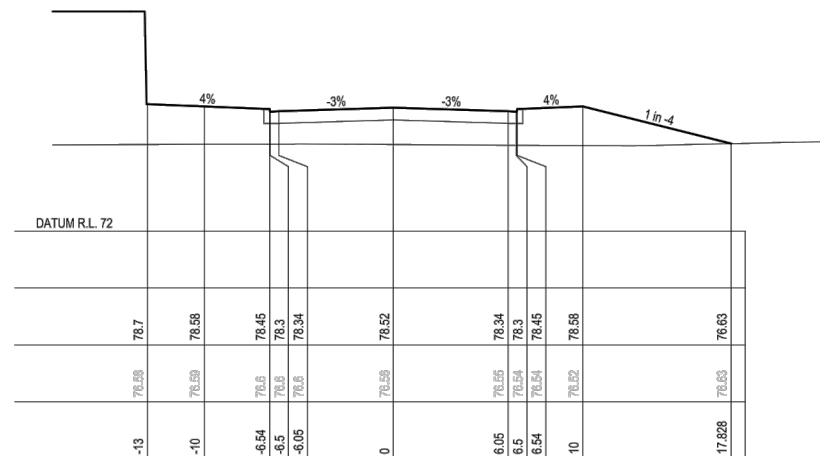
CH 555



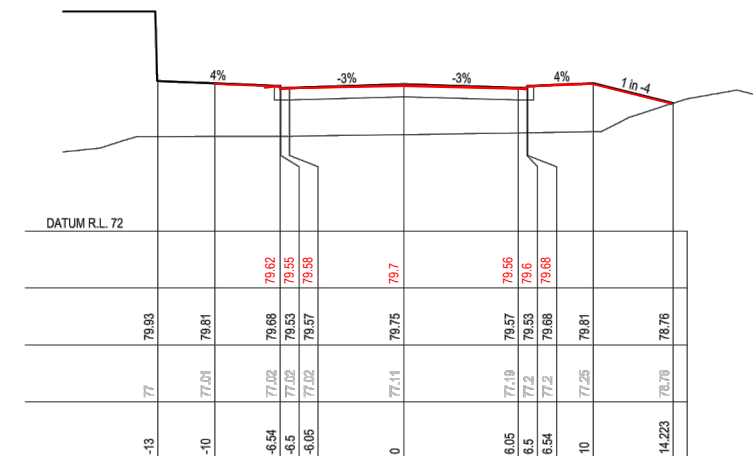
CH 600



CH 495



CH 540



CH 585

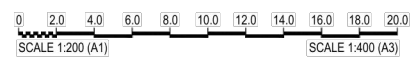
These plans are referred to in certificate no. 15992 approved by:

LDC
Eric Hausfeld
Accredited Cartifier
Registration No: BPB 2416
Categories: B1,C1,C2,C3,C4,C6,C15 & D1
Land Development Certificates
www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

FILE: H:\1616-01115 - CSR HORSLEY PARK\1616-01115_12 - STAGE 1\DRAWINGS\CD15-001115_12-CD-501.DWG LAST SAVED BY: VERONIQUE BELLES

Revisions	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VSP/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CP Eng NER
SIGN: *[Signature]*
DATE: 12/7/20

Client: **CSR LTD**
Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**



Drawing Title: **ROAD CROSS SECTIONS SHEET 03 OF 07**
Project No.: 15-001115.12
Stage: 1&2
Milestone: CC
Dwg No.: 503
Revision: 13

DATUM R.L. 78

W.A.E. LEVEL					
DESIGN LEVEL	83.2	83.08	83.05	83.11	84.124
EXISTING LEVEL	83.6	83.84	83.841	83.951	84.124
OFFSET	-10	-6.54	-6.5	-6.05	13.693

CH 675

DATUM R.L. 80

W.A.E. LEVEL				
DESIGN LEVEL	84.89	84.87	84.78	84.78
EXISTING LEVEL	85.861	85.81	85.806	84.628
OFFSET	-13	-10	-6.54	-6.05

CH 720

DATUM R.L. 81

W.A.E. LEVEL					
DESIGN LEVEL	86.203	86.083	85.91	85.82	85.98
EXISTING LEVEL	86.57	86.713	86.885	86.801	86.83
OFFSET	-13	-10	-6.54	-6.5	-6.05

CH 765

DATUM R.L. 77

W.A.E. LEVEL					
DESIGN LEVEL	82.75	82.63	82.48	82.38	82.963
EXISTING LEVEL	81.527	81.584	82.817	82.348	82.38
OFFSET	-13	-10	-6.54	-6.5	-6.05

CH 660

DATUM R.L. 80

W.A.E. LEVEL					
DESIGN LEVEL	84.866	84.746	84.613	84.613	85.653
EXISTING LEVEL	85.774	85.694	85.685	84.483	84.613
OFFSET	-13	-10	-6.54	-6.5	-6.05

CH 716.311

DATUM R.L. 81

W.A.E. LEVEL					
DESIGN LEVEL	86.864	86.744	86.611	86.481	86.683
EXISTING LEVEL	86.354	86.507	86.693	86.461	86.501
OFFSET	-13	-10	-6.54	-6.5	-6.05

CH 750.083

DATUM R.L. 75

W.A.E. LEVEL					
DESIGN LEVEL	82.18	82.06	81.928	81.81	81.92
EXISTING LEVEL	80.424	80.255	80.191	80.198	81.82
OFFSET	-13	-10	-6.54	-6.5	-6.05

CH 645

DATUM R.L. 80

W.A.E. LEVEL					
DESIGN LEVEL	84.34	84.21	84.097	84.15	84.19
EXISTING LEVEL	85.073	85.119	85.492	84.057	84.1
OFFSET	-10	-6.54	-6.5	-6.05	-6.05

CH 705

DATUM R.L. 81

W.A.E. LEVEL					
DESIGN LEVEL	86.862	86.742	86.609	86.49	86.65
EXISTING LEVEL	86.303	86.507	86.692	86.484	86.48
OFFSET	-13	-10	-6.54	-6.5	-6.05

CH 750

DATUM R.L. 82

W.A.E. LEVEL					
DESIGN LEVEL	86.897	86.577	86.444	86.31	86.48
EXISTING LEVEL	87.212	87.338	87.456	86.294	86.31
OFFSET	-13	-10	-6.54	-6.5	-6.05

CH 795

DATUM R.L. 73

W.A.E. LEVEL					
DESIGN LEVEL	81.61	81.49	81.358	81.25	81.33
EXISTING LEVEL	76.284	76.595	76.614	76.609	81.27
OFFSET	-13	-10	-6.54	-6.5	-6.05

CH 630

DATUM R.L. 79

W.A.E. LEVEL					
DESIGN LEVEL	83.77	83.64	83.528	83.51	83.51
EXISTING LEVEL	84.344	84.585	84.598	83.688	83.54
OFFSET	-10	-6.54	-6.5	-6.05	-6.05

CH 690

DATUM R.L. 81

W.A.E. LEVEL					
DESIGN LEVEL	85.67	85.337	85.205	85.07	85.19
EXISTING LEVEL	86.175	86.291	86.394	86.394	85.095
OFFSET	-13	-10	-6.54	-6.5	-6.05

CH 735

DATUM R.L. 82

W.A.E. LEVEL					
DESIGN LEVEL	86.481	86.381	86.229	86.16	86.26
EXISTING LEVEL	86.846	86.937	87.098	86.079	86.19
OFFSET	-13	-10	-6.54	-6.5	-6.05

CH 780

FOR CONSTRUCTION CERTIFICATE

FILE: H:\1910-10115 - CSR HORSLEY PARK\1910-10115.12 - STAGE 1\DRAWINGS\CD\1910115.12-02-SD-DWG.LAST SAVED BY: VISH KULKARNI

08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	
Drawn	Design	Check	Appd.	Date		Revision Details



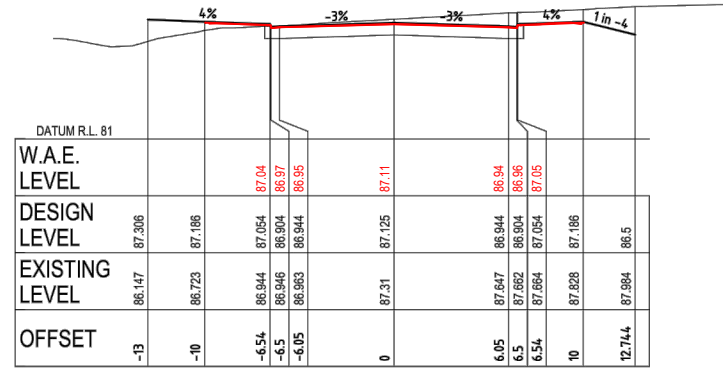
Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
 ENRIQUE FRANCO
 BE(Hons) MIEAust. CP/Eng NER
 SIGN: *[Signature]*
 DATE: 12/7/20

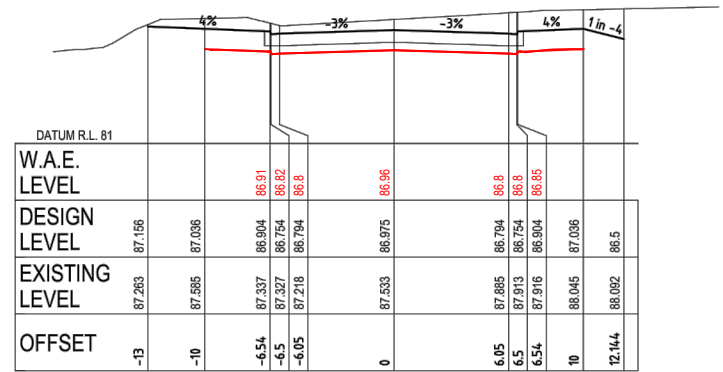
Client: CSR LTD
 Project: CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS

calibre
 calibregroup.com

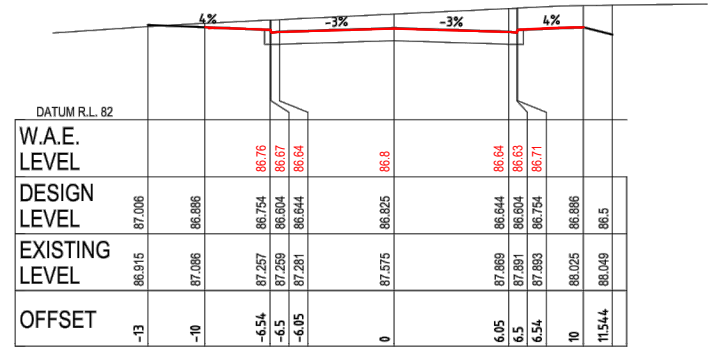
Drawing Title: ROAD CROSS SECTIONS SHEET 04 OF 07
 Project No.: 15-001115.12 Stage: 1&2 Milestone: CC Dwg No.: 504 Revision: 13



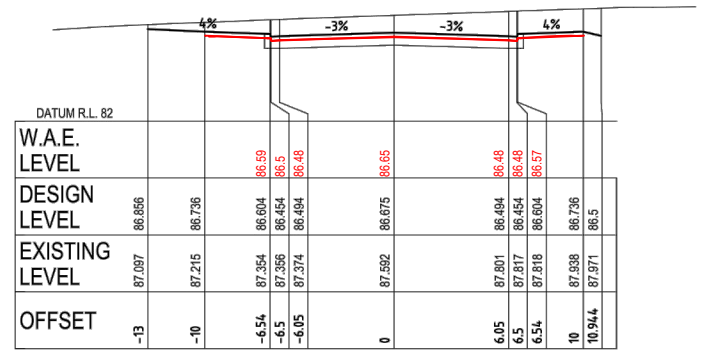
CH 855



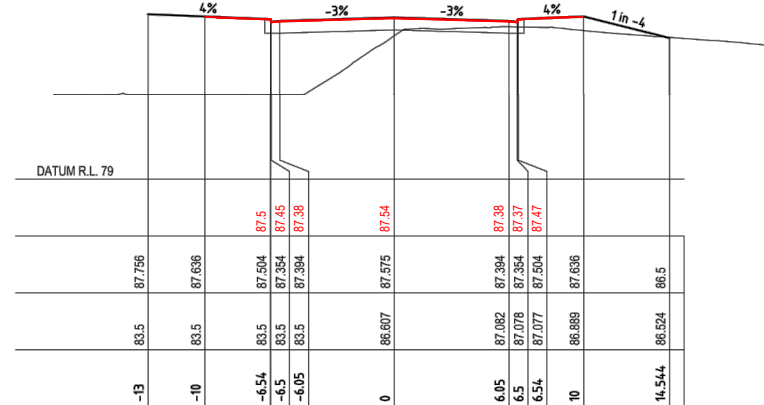
CH 840



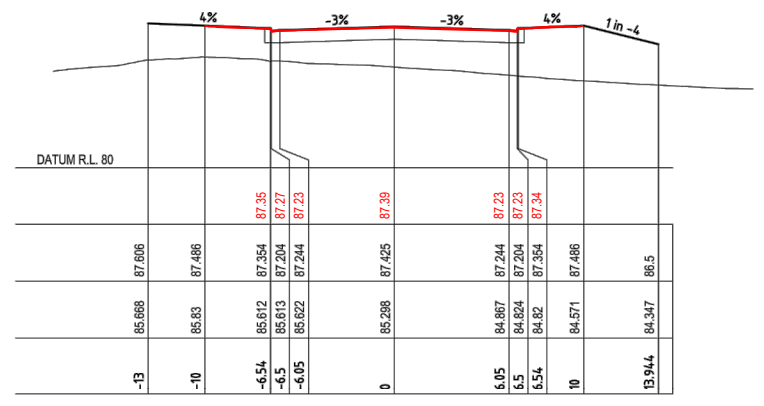
CH 825



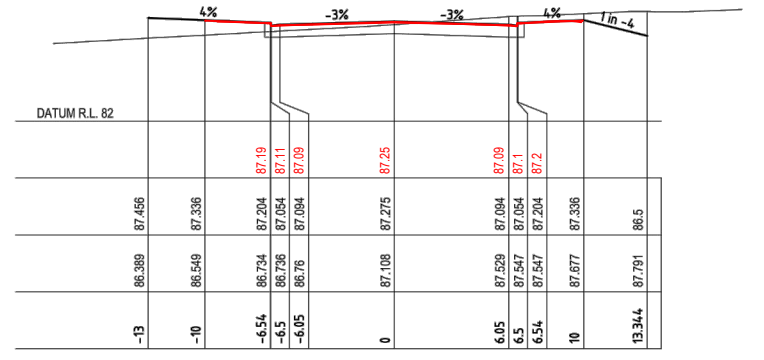
CH 810



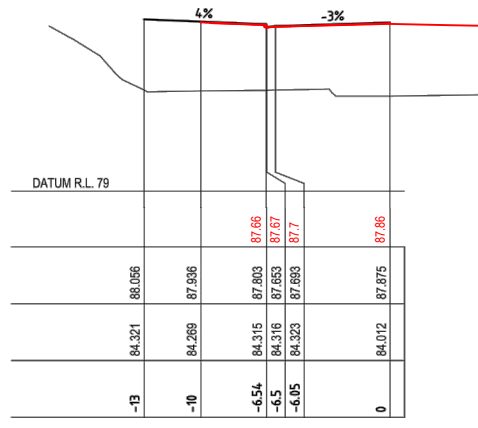
CH 900



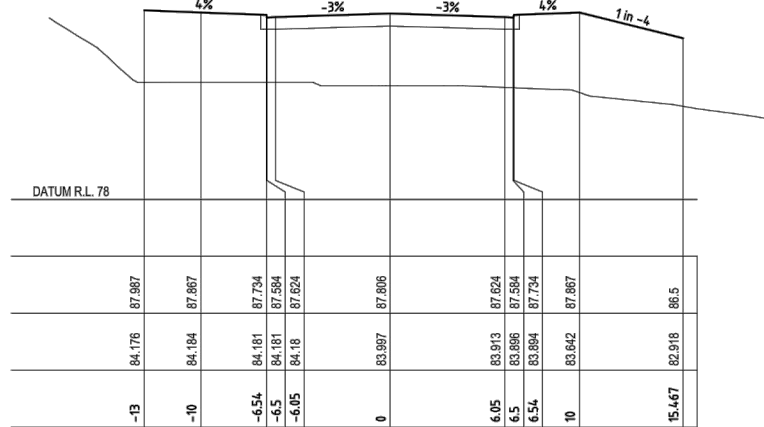
CH 885



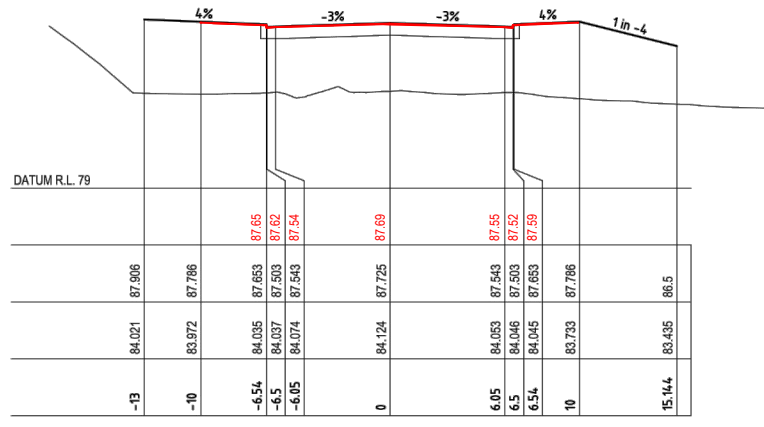
CH 870



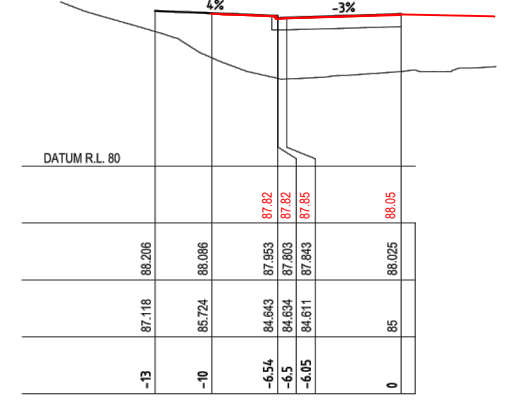
CH 930



CH 923.078



CH 915



CH 945

WORK AS EXECUTED SURVEY BY:
H. J. Murphy
 Registered Surveyor No. 1677
 Date: 16/07/2020

FOR CONSTRUCTION CERTIFICATE

FILE: I:\1619-00115-CSR HORSLEY PARK\1619-00115-12-STAGE 1\DRAWINGS\CD15-00115-12-02-050.DWG LAST SAVED BY: WISH KULLARIN

Revisions	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VSP/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

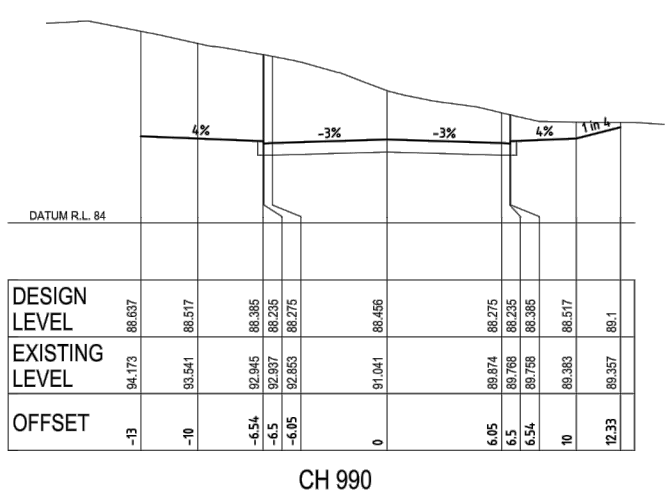
Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP(Eng) NER
 SIGN: *[Signature]*
 DATE: 12/7/20

Client: **CSR LTD**
 Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**

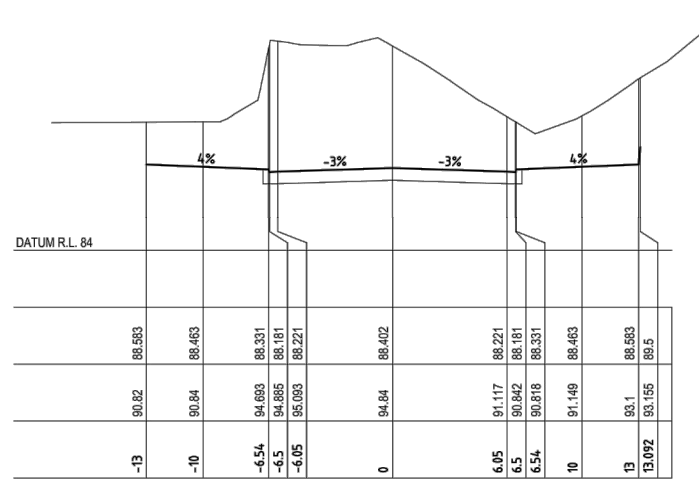


Project No.	Stage	Milestone	Dwg No.	Revision
15-001115.12	1&2	CC	505	13

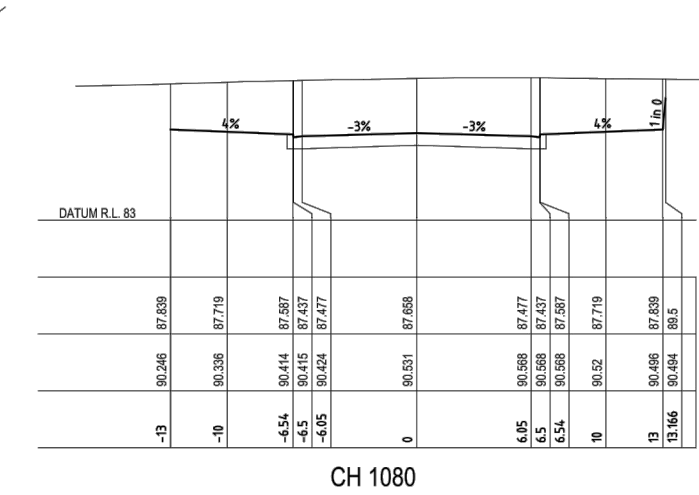
WORK AS EXECUTED SURVEY BY:
H. J. Murphy
 Registered Surveyor No. 1677
 Date: 16/07/2020



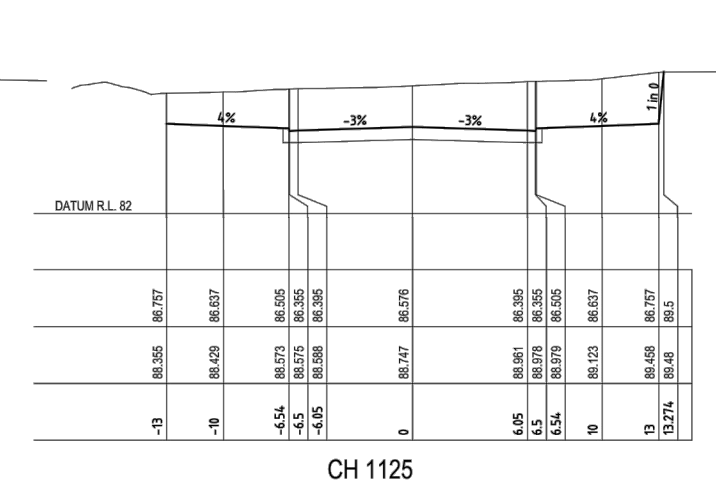
CH 990



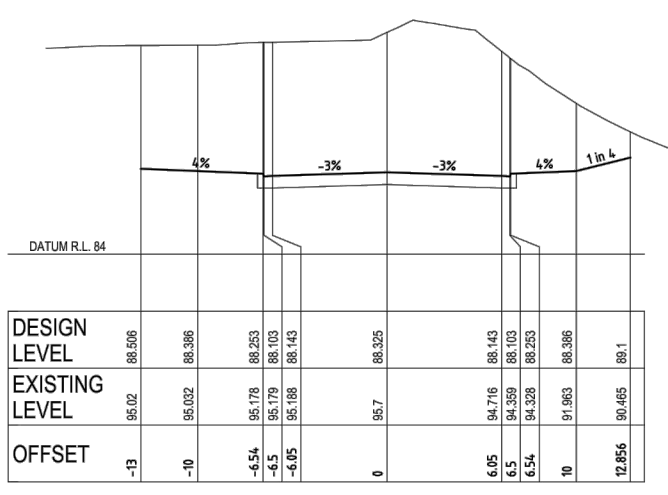
CH 1035



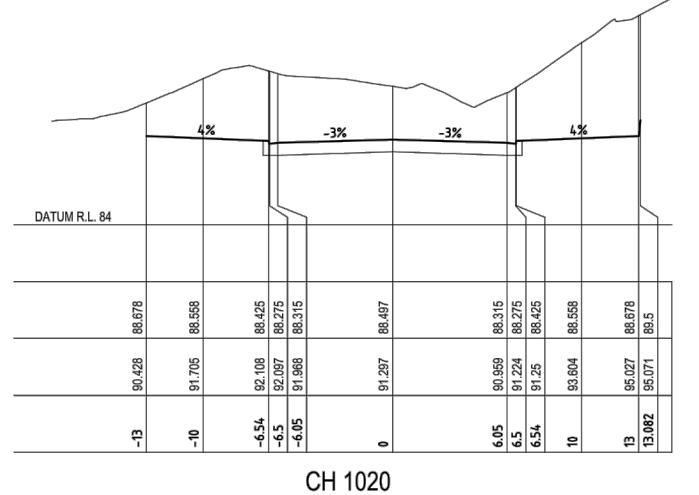
CH 1080



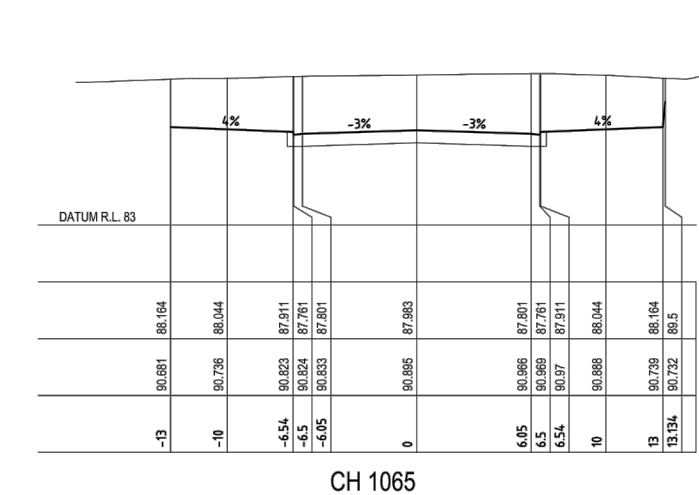
CH 1125



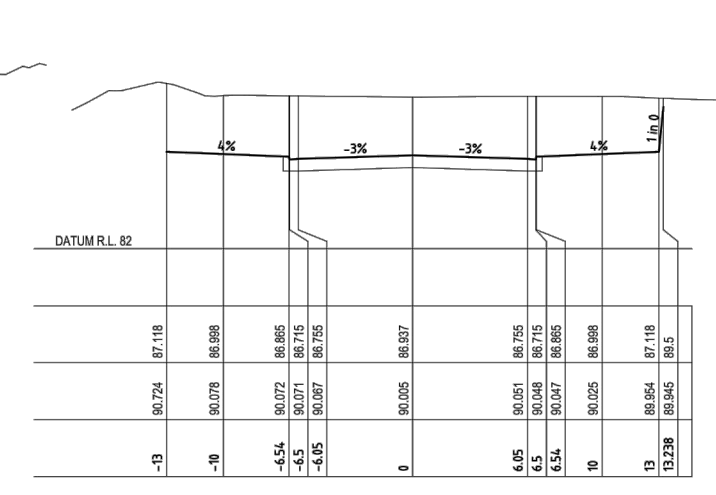
CH 975



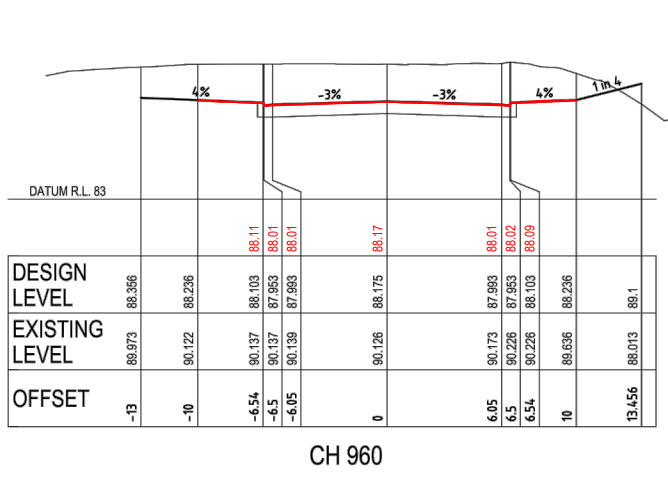
CH 1020



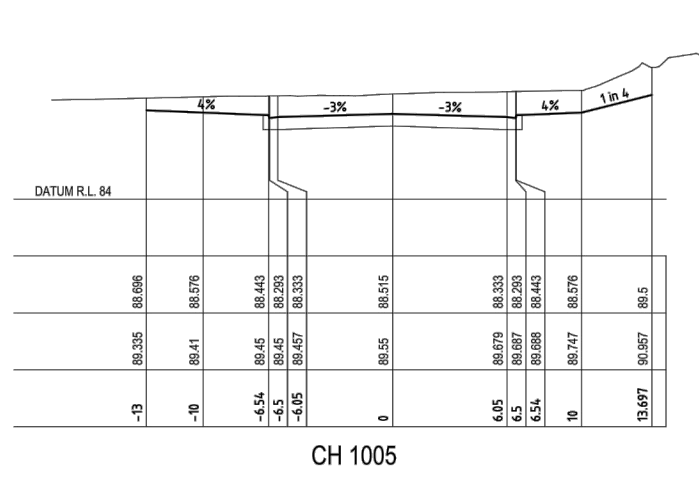
CH 1065



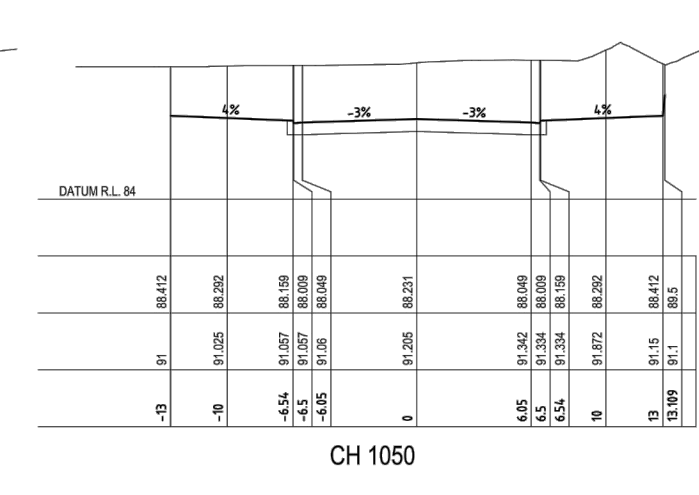
CH 1110



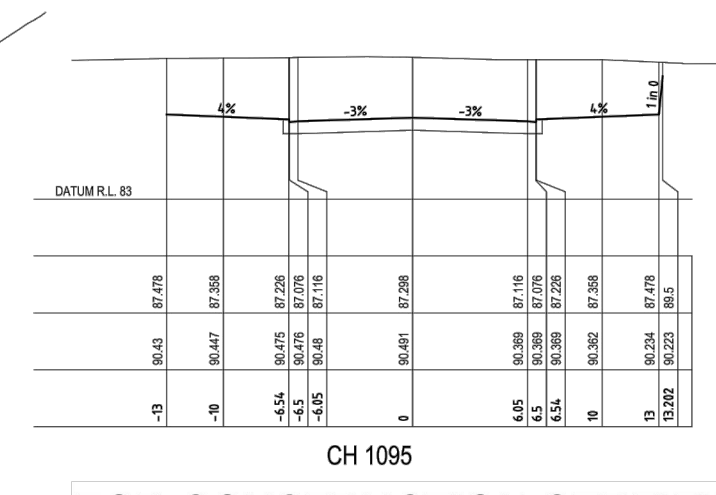
CH 960



CH 1005



CH 1050



CH 1095

FOR CONSTRUCTION CERTIFICATE

FILE: H:\1510-115 - CSR HORSLEY PARK\1510-115 - STAGE 1 DRAWINGS\CD1510115_12 - STAGE 1 DRAWINGS\CD1510115_12-02-00-DWG.LAST SAVED BY: VISH KULKARNI

Rev	By	Appd.	Date	Description
08	AV	CK	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	CK	02/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VSP/PS	AV/MC	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	LF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	11/04/16	



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP/Eng NER
 SIGN: *[Signature]*
 DATE: 12/7/20

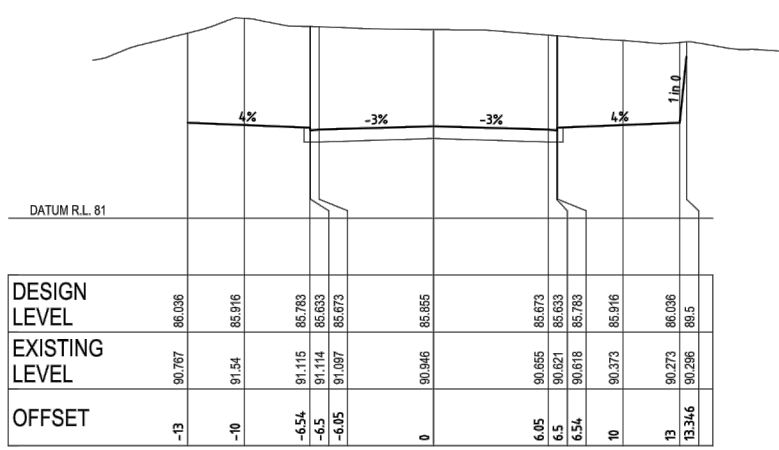
Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



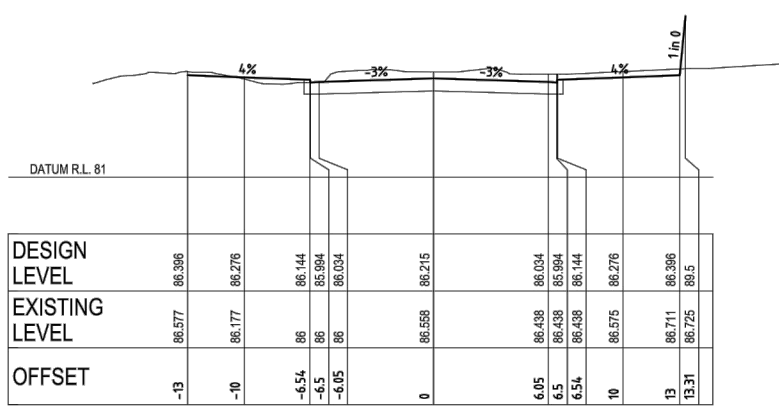
Drawing Title:
ROAD CROSS SECTIONS SHEET 06 OF 07
 Project No.: 15-001115.12
 Stage: 1&2
 Milestone: CC
 Dwg No.: 506
 Revision: 13



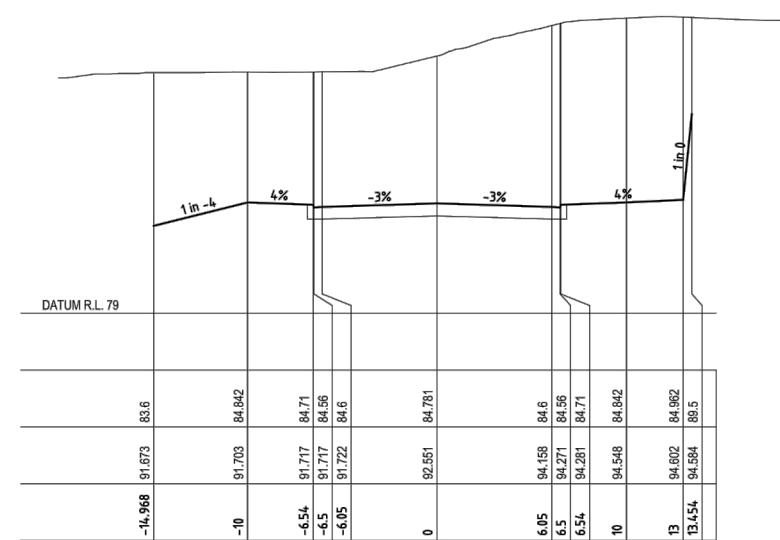
CH 1170



CH 1155



CH 1140



CH 1200



CH 1185

These plans are referred to in certificate no **15992** approved by:

Eric Hausfeld
Accredited Certifier

Registration No: BPB 2416
Categories: B1,C1,C2,C3,C4,C6,C15 & D1

Land Development Certificates
www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

Revisions	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.

NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CP Eng NER

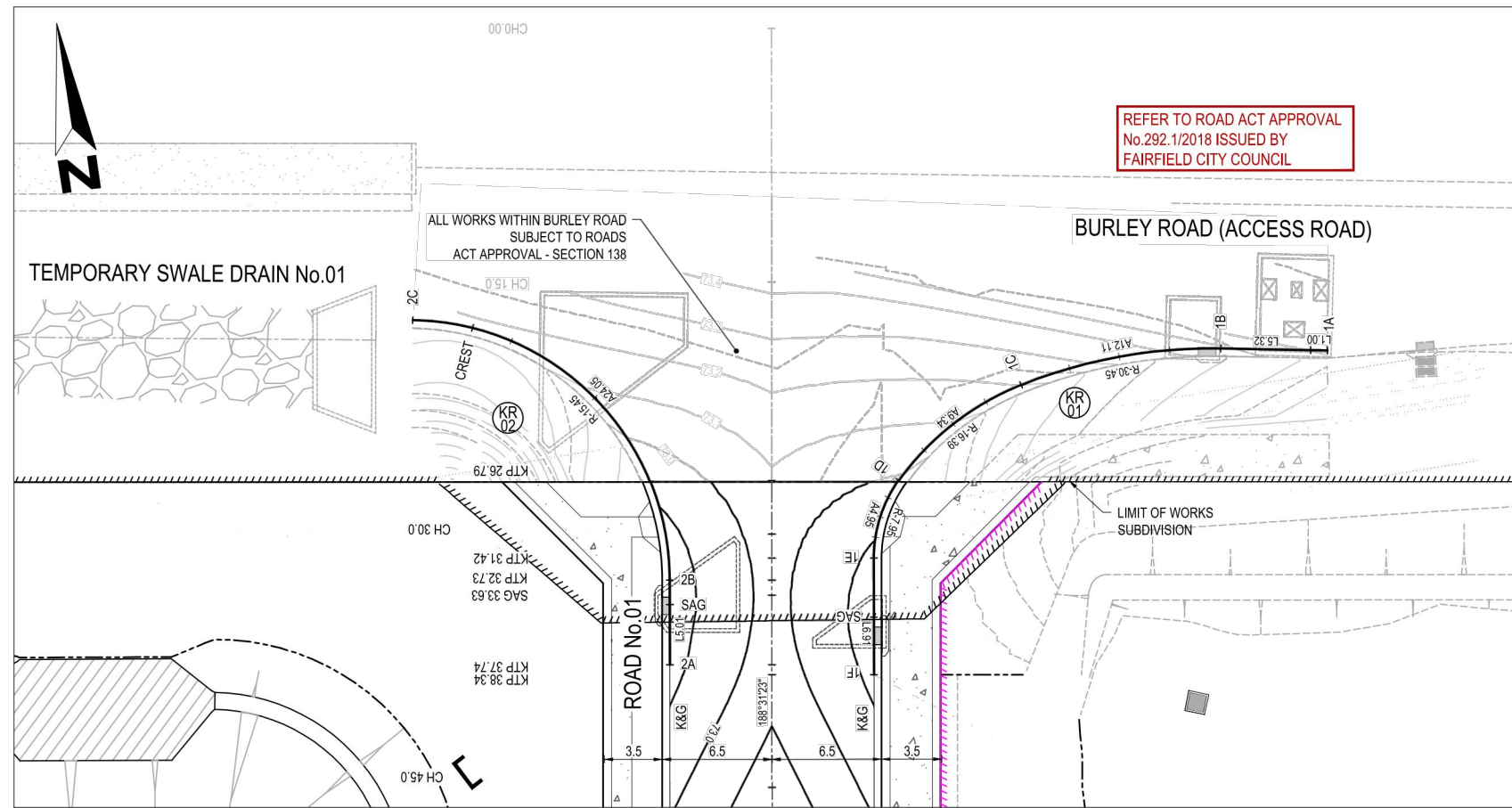
SIGN: *[Signature]*
DATE: 12/7/20

Client: **CSR LTD**

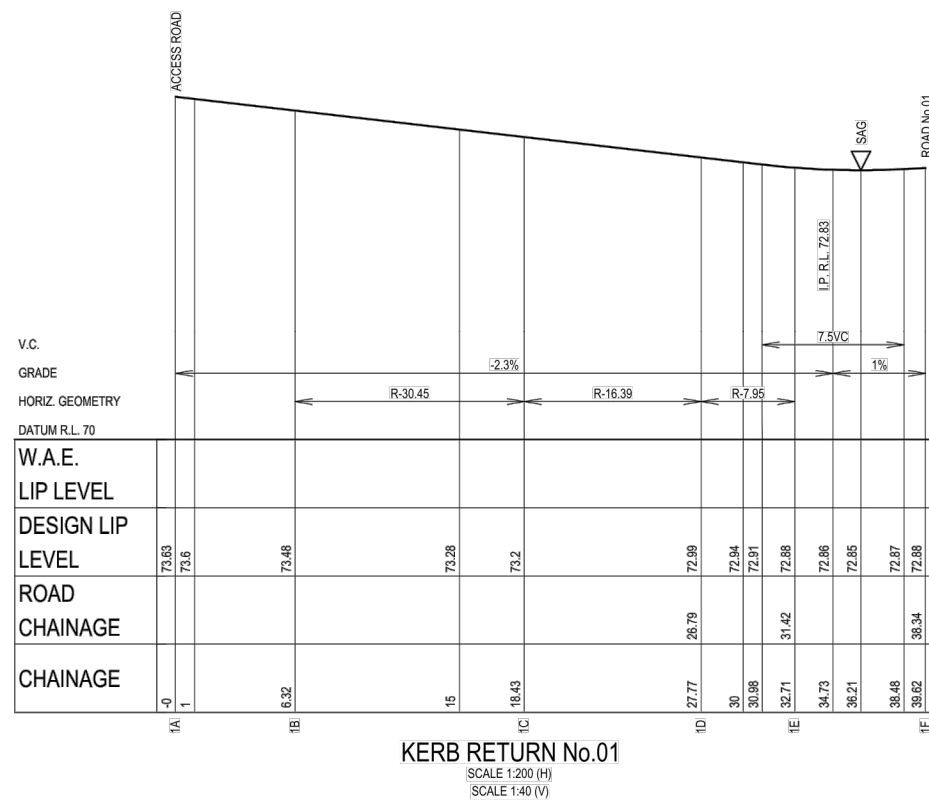
Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**



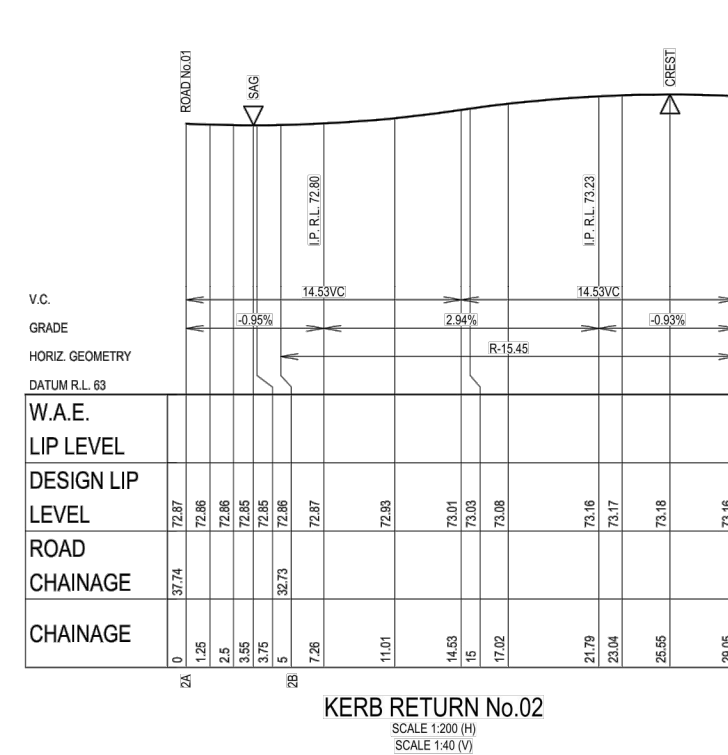
Drawing Title:				
ROAD CROSS SECTIONS SHEET 07 OF 07				
Project No:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	507	13



PLAN
1:200



KERB RETURN No.01
SCALE 1:200 (H)
SCALE 1:40 (V)



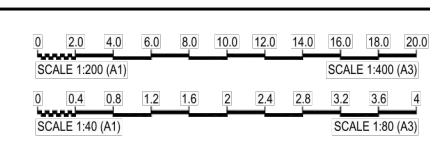
KERB RETURN No.02
SCALE 1:200 (H)
SCALE 1:40 (V)

NOTE:
• KERB RETURNS REPRESENT DESIGN LIP OF GUTTER

FOR CONSTRUCTION CERTIFICATE

LE:151619-01115-CSR-HORSLEY PARK15-01115.12-STAGE 1-DRAINAGE AND EARTHWORKS.DWG LAST SAVED BY:ERDEN MAZZA

Revisions	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD DRAGING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



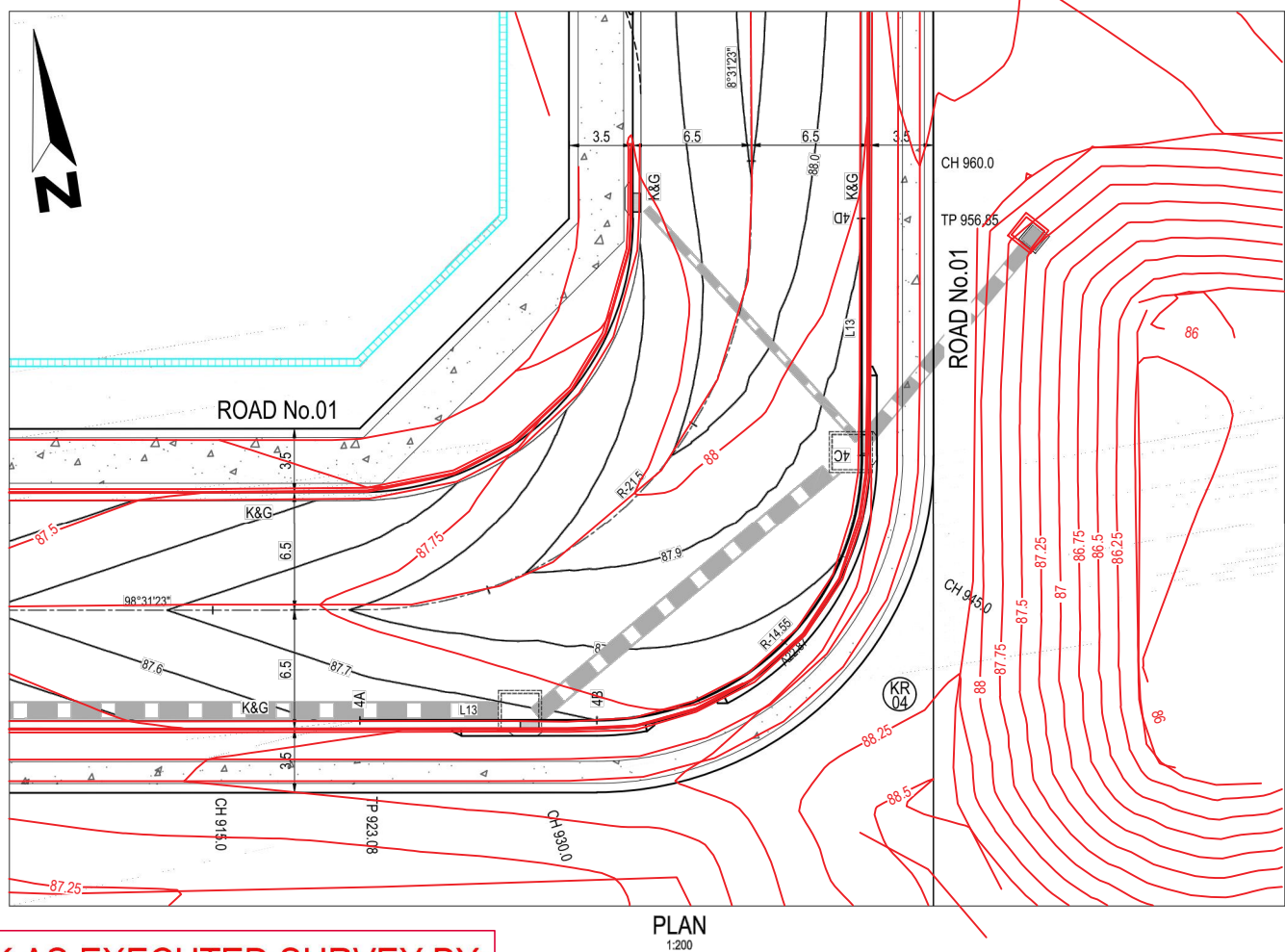
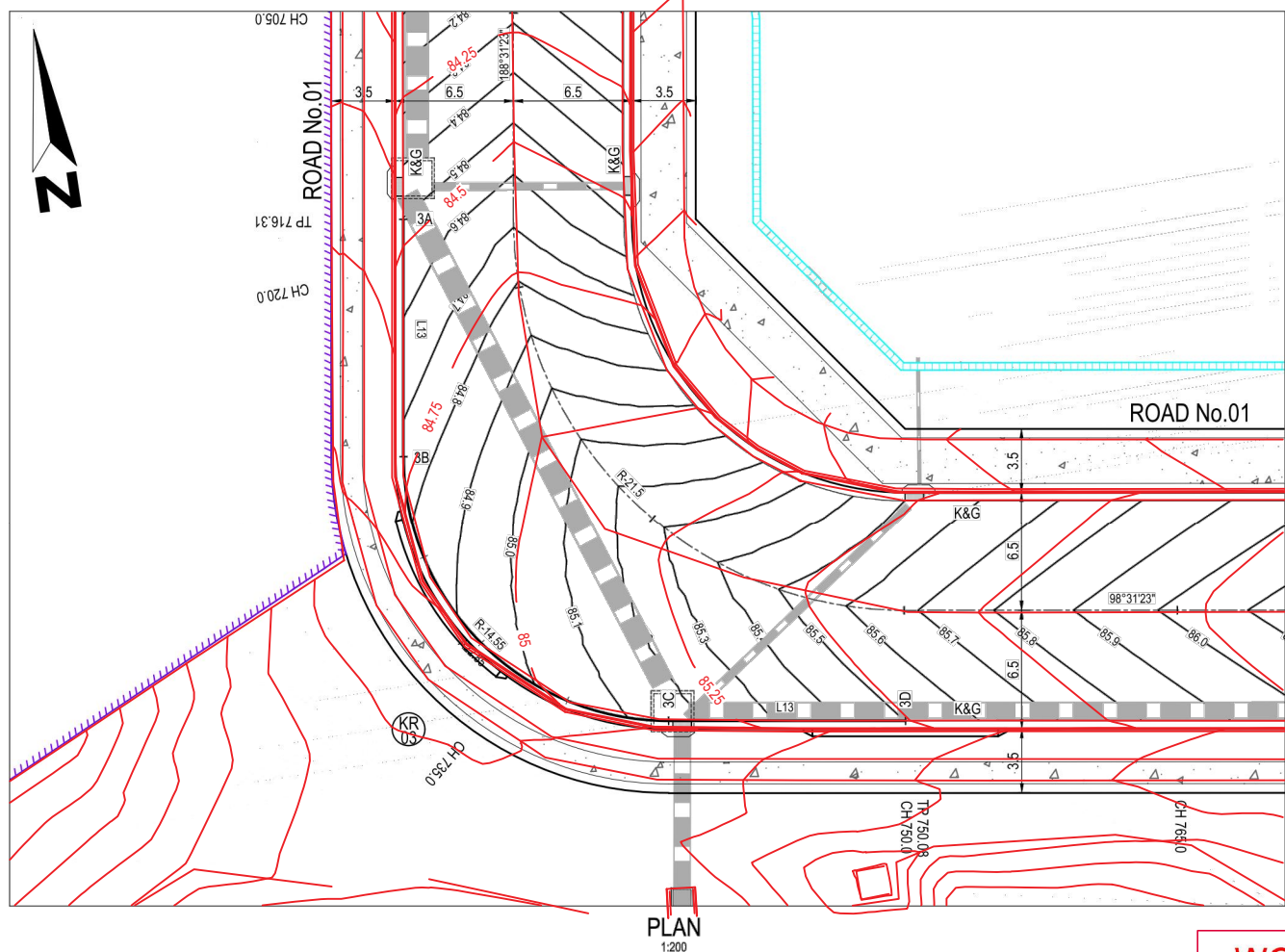
Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust, CPEng NER
SIGN: *[Signature]*
DATE: 12/7/20

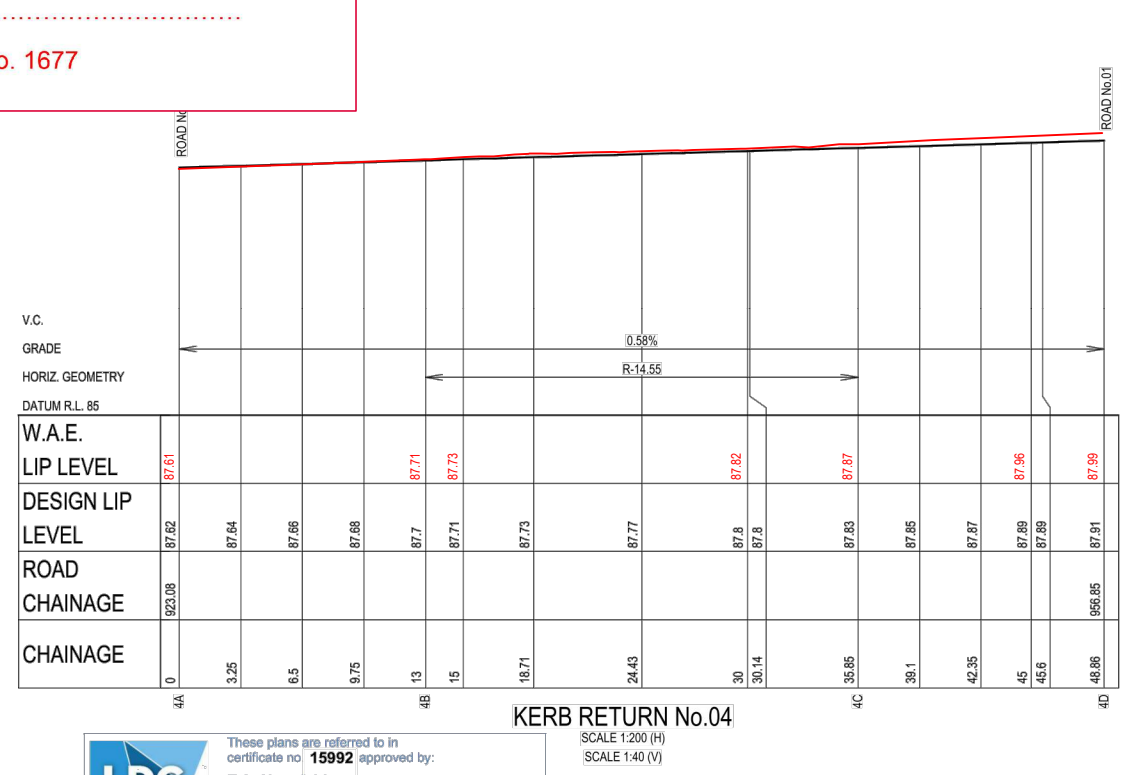
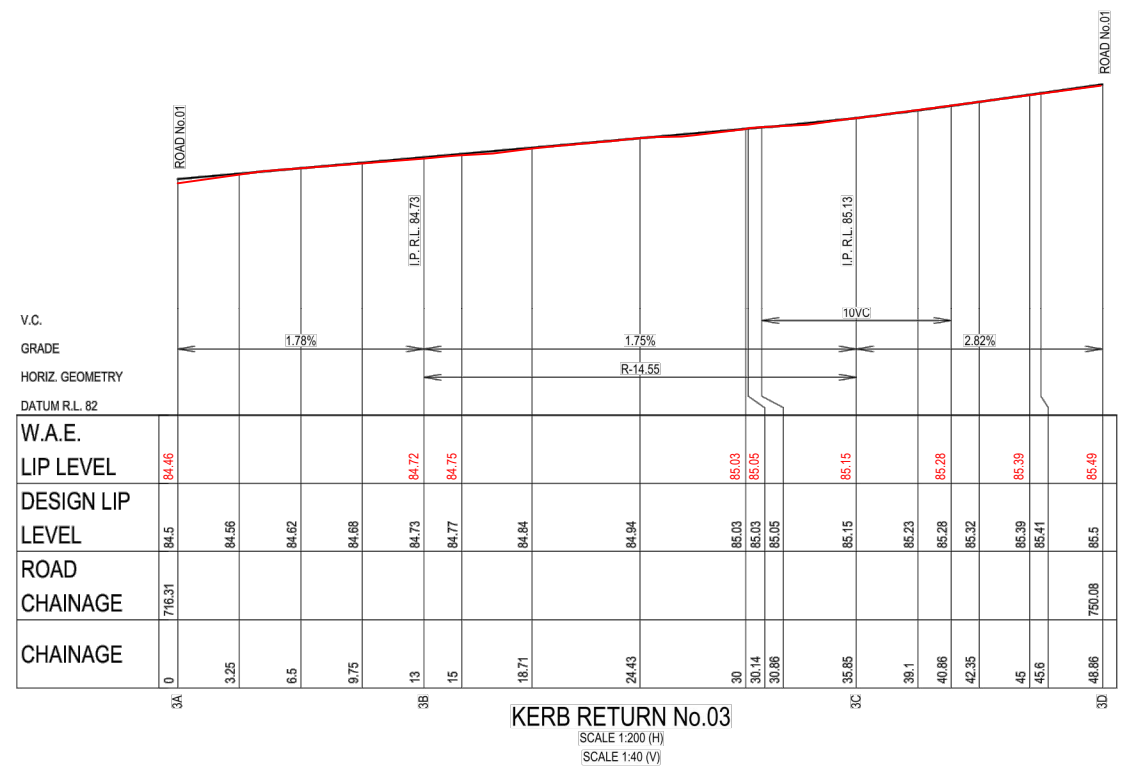
Client:
CSR LTD
Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



Drawing Title: KERB RETURN PLANS & LONG SECTIONS SHEET 01 OF 02				
Project No.:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	601	13



WORK AS EXECUTED SURVEY BY:
H. J. Murphy
 Registered Surveyor No. 1677
 Date: 16/07/2020



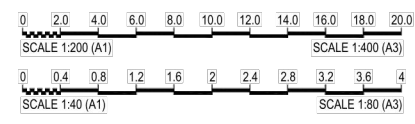
NOTE:
 • KERB RETURNS REPRESENT DESIGN LIP OF GUTTER

LDC
 These plans are referred to in certificate no. 15992 approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1, C1, C2, C3, C4, C6, C15 & D1
 Land Development Certificates
 www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

LDC: 15-001115-12 - STAGE 1 & 2 - DRAWING NO. 02 OF 02 - DRAWING TITLE: KERB RETURN PLANS & LONG SECTIONS SHEET 02 OF 02 - DRAWING DATE: 16/07/2020 - DRAWING BY: ANDREW LANGOS

Revisions	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP Eng NER
 SIGN: *[Signature]*
 DATE: 12/7/20

Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS

calibre
 ©2020
 calibregroup.com.au | calibreconsulting.co

Project No.:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	602	13

TEMPORARY SWALE DRAIN No.01

ALL WORKS WITHIN BURLEY ROAD
SUBJECT TO ROADS
ACT APPROVAL - SECTION 138

BURLEY ROAD (ACCESS ROAD)

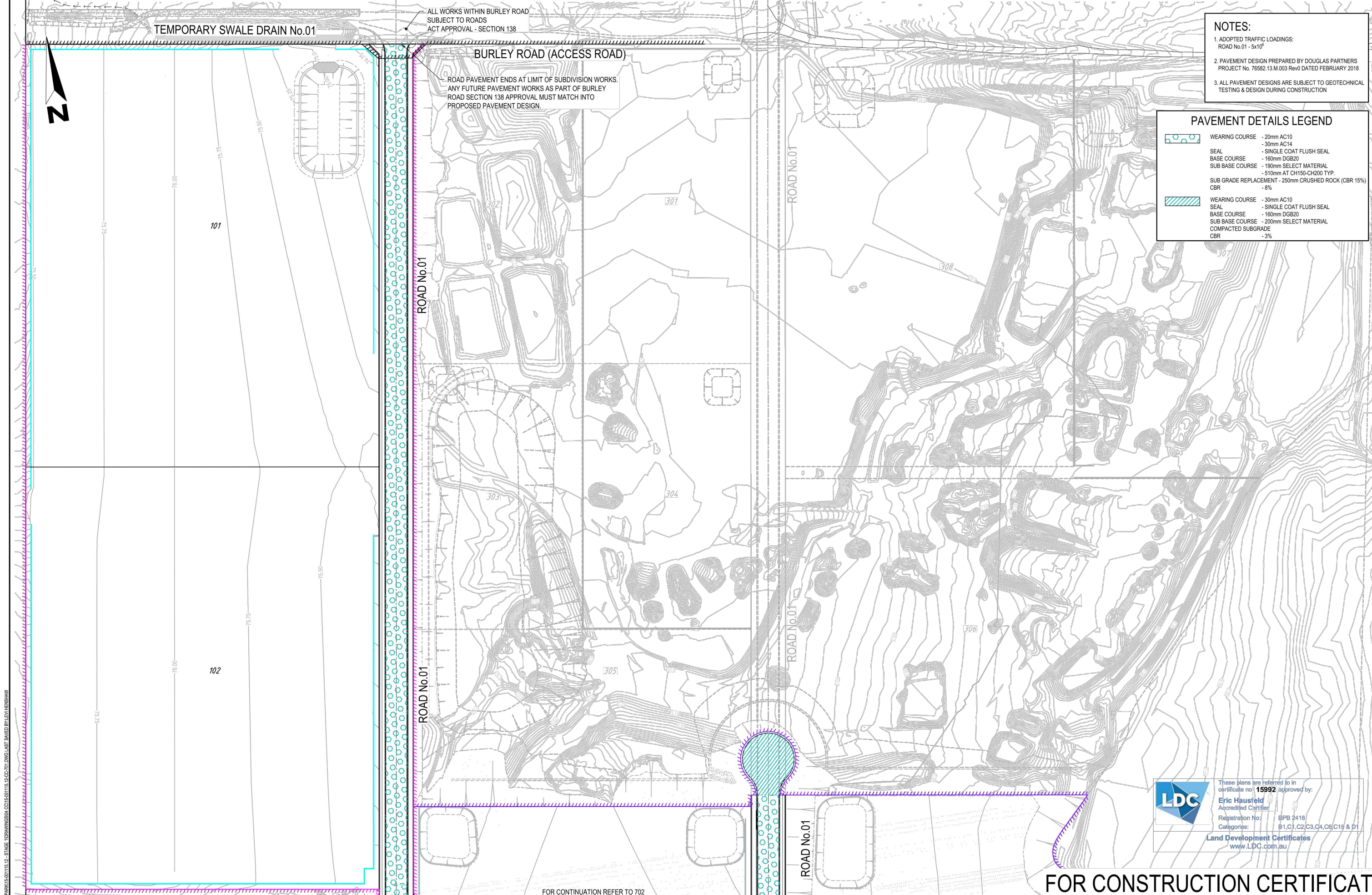
ROAD PAVEMENT ENDS AT LIMIT OF SUBDIVISION WORKS.
ANY FUTURE PAVEMENT WORKS AS PART OF BURLEY
ROAD SECTION 138 APPROVAL MUST MATCH INTO
PROPOSED PAVEMENT DESIGN.

NOTES:

- ADOPTED TRAFFIC LOADINGS:
ROAD No.01 - 5x10⁶
- PAVEMENT DESIGN PREPARED BY DOUGLAS PARTNERS
PROJECT No. 76562.13.M.003 Rev0 DATED FEBRUARY 2018
- ALL PAVEMENT DESIGNS ARE SUBJECT TO GEOTECHNICAL
TESTING & DESIGN DURING CONSTRUCTION

PAVEMENT DETAILS LEGEND

- | | |
|---|--|
|  | WEARING COURSE - 20mm AC10
- 30mm AC14 |
|  | SEAL - SINGLE COAT FLUSH SEAL |
|  | BASE COURSE - 160mm DGB20 |
|  | SUB BASE COURSE - 190mm SELECT MATERIAL |
|  | SUB GRADE REPLACEMENT - 250mm CRUSHED ROCK (CBR 15%) |
|  | CBR - 8% |
|  | WEARING COURSE - 30mm AC10
- SINGLE COAT FLUSH SEAL |
|  | SEAL - SINGLE COAT FLUSH SEAL |
|  | BASE COURSE - 160mm DGB20 |
|  | SUB BASE COURSE - 200mm SELECT MATERIAL |
|  | COMPACTED SUBGRADE |
|  | CBR - 3% |

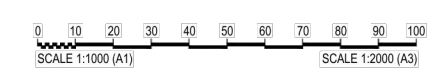


These plans are referred to in certificate no. **15992** approved by:

LDC Eric Hausfeld
Accredited Certifier
Registration No: BPB 2416
Categories: B1,C1,C2,C3,C4,C6,C16 & D1
Land Development Certificates
www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

Revisions	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD DRAGING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CP Eng NER
SIGN: *[Signature]*
DATE: 1/27/20

Client: **CSR LTD**
Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**



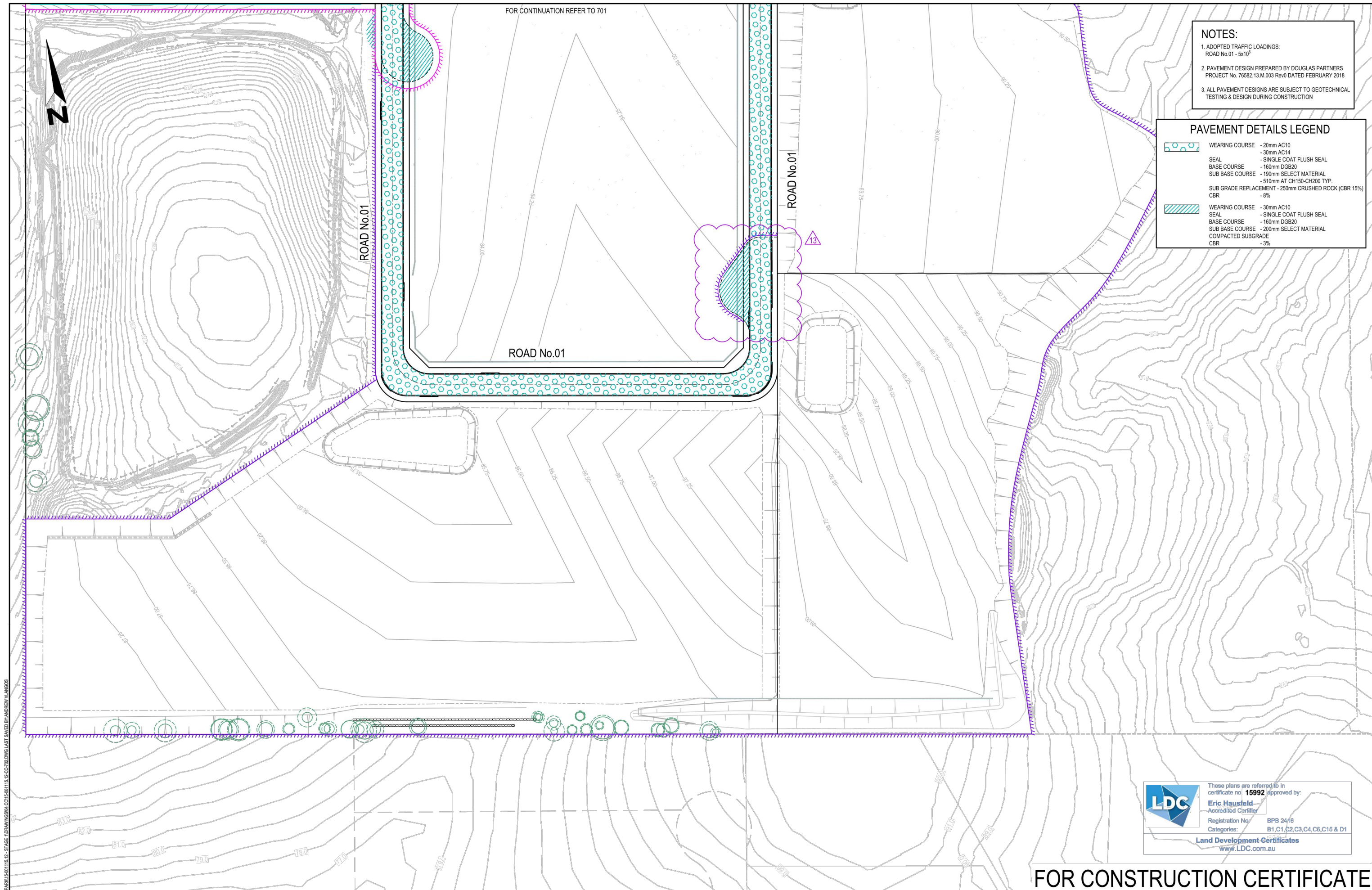
Drawing Title: PAVEMENT PLAN 01 OF 02	Project No.: 15-001115.12	Stage: 1&2	Milestone: CC	Dwg No.: 701	Revision: 13
---	------------------------------	---------------	------------------	-----------------	-----------------

FOR CONTINUATION REFER TO 701

NOTES:
 1. ADOPTED TRAFFIC LOADINGS:
 ROAD No.01 - 5x10⁶
 2. PAVEMENT DESIGN PREPARED BY DOUGLAS PARTNERS
 PROJECT No. 76582.13.M.003 Rev0 DATED FEBRUARY 2018
 3. ALL PAVEMENT DESIGNS ARE SUBJECT TO GEOTECHNICAL
 TESTING & DESIGN DURING CONSTRUCTION

PAVEMENT DETAILS LEGEND

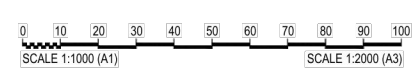
	WEARING COURSE - 20mm AC10 - 30mm AC14
	SEAL - SINGLE COAT FLUSH SEAL
	BASE COURSE - 160mm DGB20
	SUB BASE COURSE - 190mm SELECT MATERIAL - 510mm AT CH150-CH200 TYP.
	SUB GRADE REPLACEMENT - 250mm CRUSHED ROCK (CBR 15%) CBR - 8%
	WEARING COURSE - 30mm AC10
	SEAL - SINGLE COAT FLUSH SEAL
	BASE COURSE - 160mm DGB20
	SUB BASE COURSE - 200mm SELECT MATERIAL
	COMPACTED SUBGRADE CBR - 3%



LDC These plans are referred to in certificate no. **15992** approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No. BPB 24/16
 Categories: B1, C1, C2, C3, C4, C6, C15 & D1
Land Development Certificates
 www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

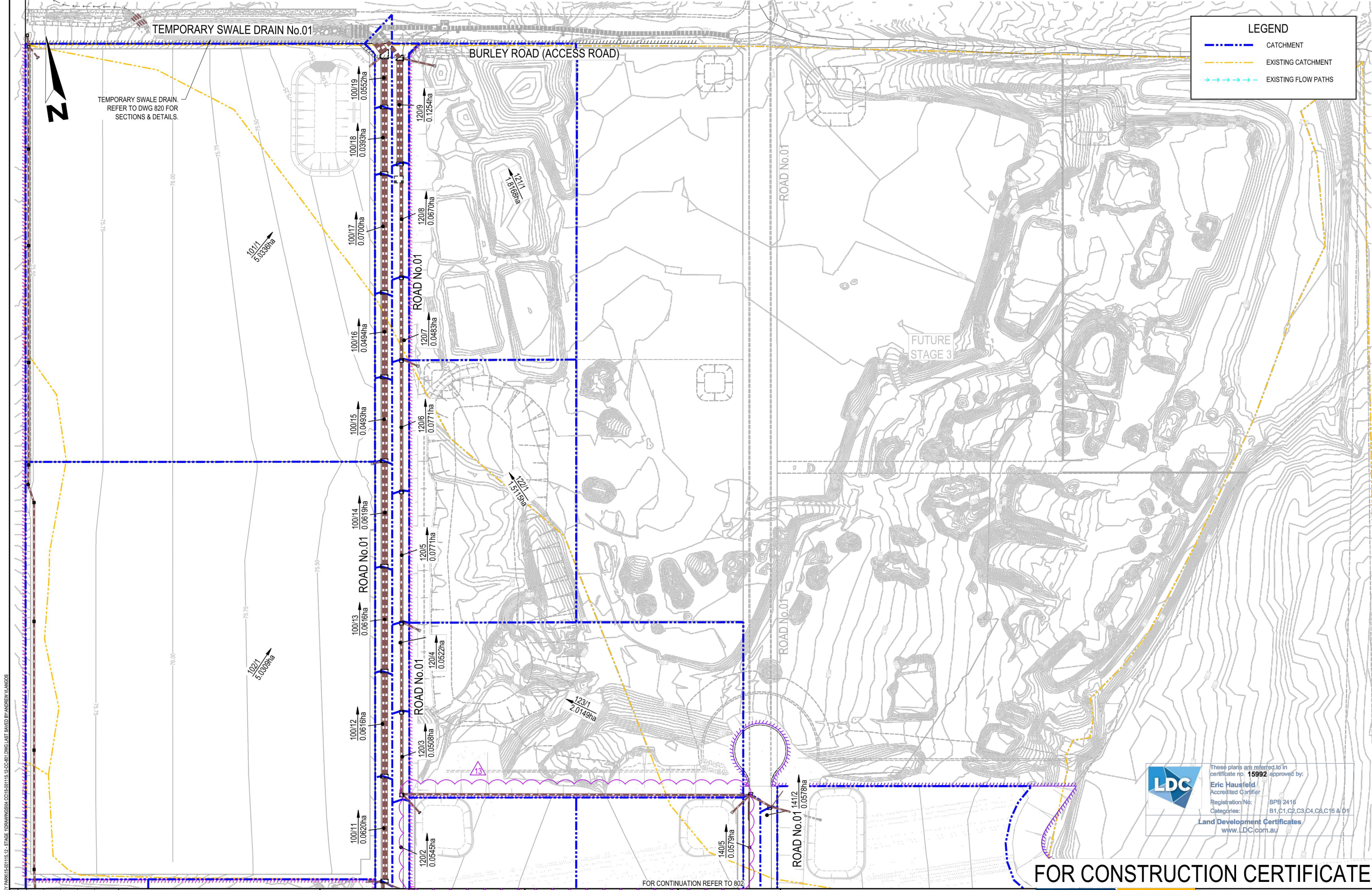
Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CPEng NER
 SIGN:
 DATE: 12/7/20

Client: **CSR LTD**
 Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**

calibre
 ©2020 calibregroup.com.au calibreconsulting.co

Project No:	15-001115.12	Stage:	1&2	Milestone:	CC	Dwg No.:	702	Revision:	13
-------------	--------------	--------	-----	------------	----	----------	-----	-----------	----

LE: H1616-01115_CSR_HORSLEY PARK15-001115.12 - STAGE 1&2 DRAINAGE AND EARTHWORKS DRAWING LAST SAVED BY ANDREW LANGOS



LEGEND

- - - - CATCHMENT
- - - - EXISTING CATCHMENT
- - - - EXISTING FLOW PATHS

These plans are referred to in certificate no. **15992** approved by:

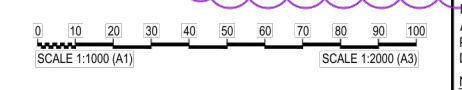
Eric Hausfeld
Accredited Certifier

Registration No: BPS 2416
Categories: B1, C1, C2, C3, C4, C6, C15 & D1

Land Development Certificates
www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimers and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.

NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorized for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust, CP Eng NER

SIGN: *[Signature]*
DATE: 14/7/20

Client: **CSR LTD**

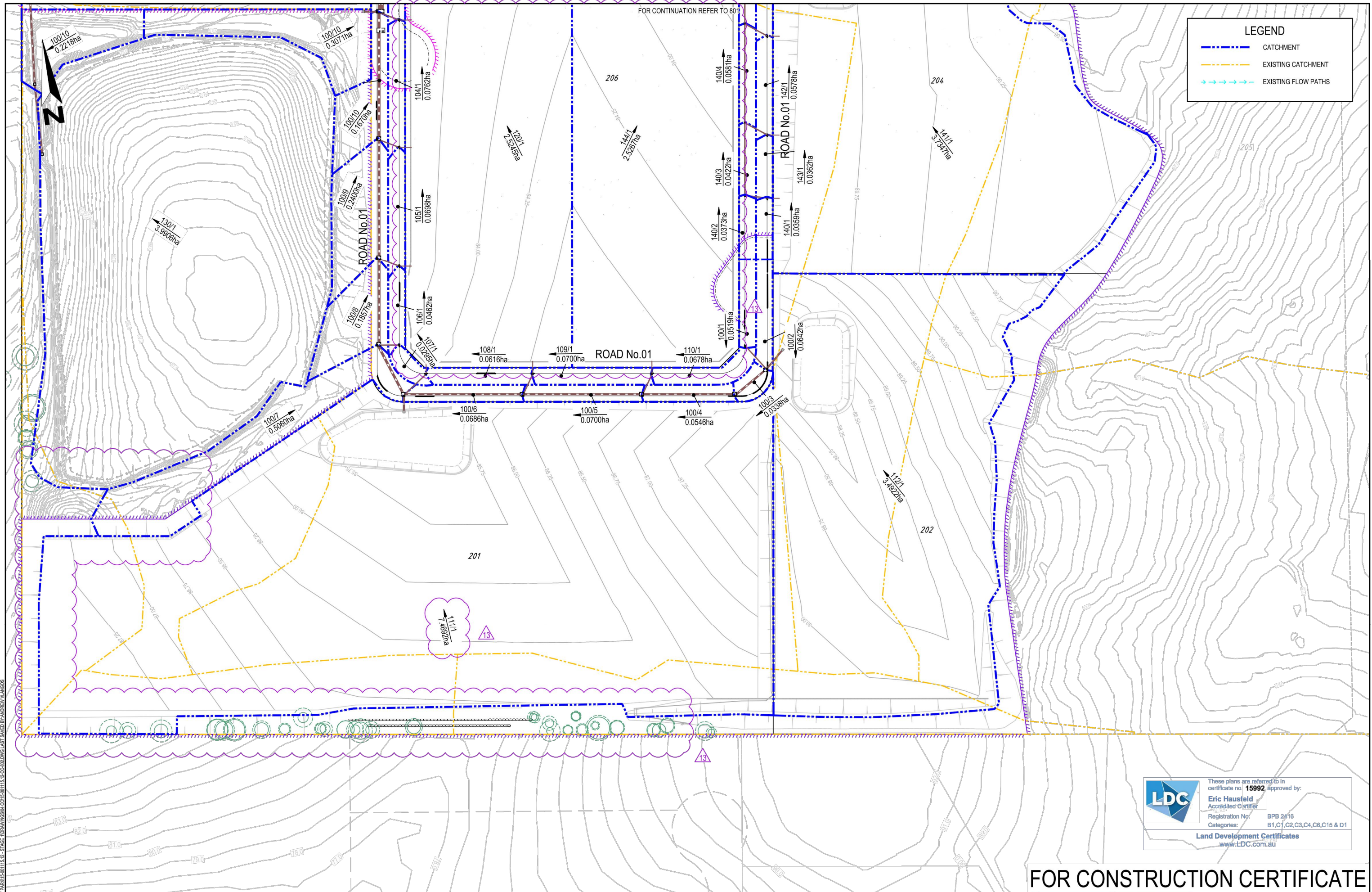
Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**

©2020 calibregroup.com.au calibreconsulting.co

Drawing Title: CATCHMENT PLAN 01 OF 02				
Project No: 15-001115.12	Stage: 1&2	Milestone: CC	Dwg No.: 801	Revision: 13

LE: H1616-001115 - CSR HORSLEY PARK/15-001115.12 - STAGE 1&2 ROAD, DRAINAGE AND EARTHWORKS. DWG LAST SAVED BY ANDREW LANGS

FOR CONTINUATION REFER TO 802



LE: 15/02/2015 - CSR HORSLEY PARK 15-01115.12 - STAGE 1 DRAWING(S) C:\1501115.12-02-002.DWG LAST SAVED BY ANDREW LANGOS

These plans are referred to in certificate no. **15992** approved by:

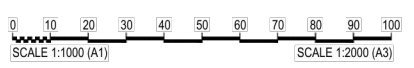
LDC Eric Hausfeld Accredited Certifier

Registration No: BPB 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1

Land Development Certificates
www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

Revisions	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP(Eng) NER
 SIGN: [Signature]
 DATE: 12/7/20

Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



Drawing Title:				
CATCHMENT PLAN 02 OF 02				
Project No:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	802	13

WORK AS EXECUTED SURVEY BY:

H. J. Murphy

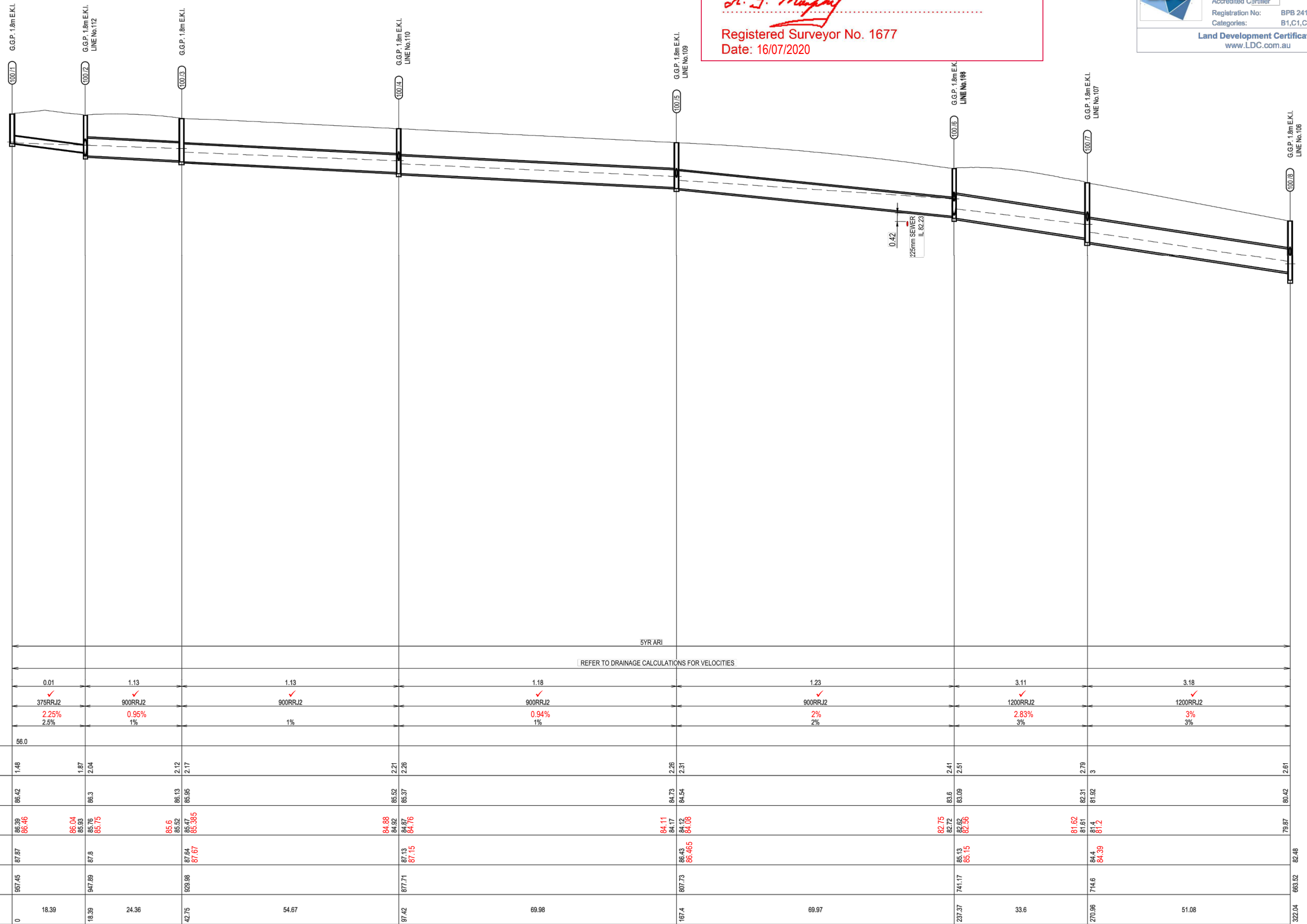
Registered Surveyor No. 1677
Date: 16/07/2020

These plans are referred to in certificate no. 15992 approved by:

LDC
Eric Hausfeld
Accredited Certifier

Registration No: BPB 2416
Categories: B1,C1,C2,C3,C4,C6,C15 & D1

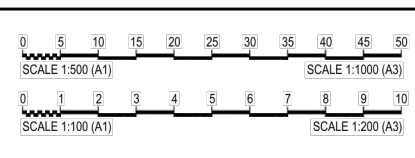
Land Development Certificates
www.LDC.com.au



LINE No.100

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD DRAINING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
13	AV	AV	LF	PD		11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CP Eng NER

SIGN: *[Signature]*
DATE: 12/7/20

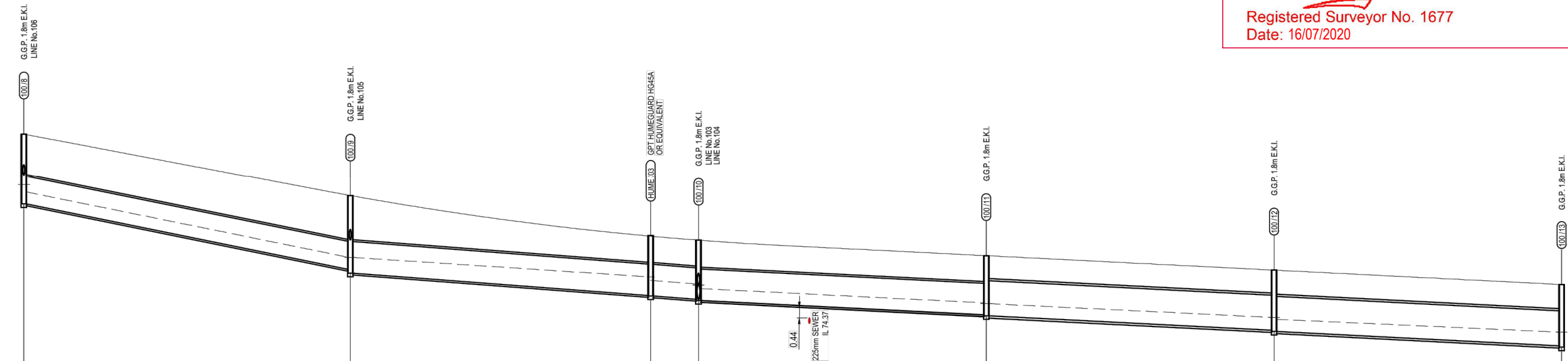
Client:
CSR LTD

Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



Project No.	Stage	Milestone	Dwg No.	Revision
15-001115.12	1&2	CC	803	13

WORK AS EXECUTED SURVEY BY:
H. F. Mungley
 Registered Surveyor No. 1677
 Date: 16/07/2020



DISCHARGE (cu.m/s)		3.26		3.35		3.37		3.5		3.66		3.81
PIPE SIZE (mm) & CLASS		1200RRJ2		1350RRJ2		1350RRJ2		(2x)1350RRJ2		(2x)1500RRJ2		(2x)1500RRJ2
DESIGN GRADE		4%		1.5%		1.5%		1%		1%		1%
DATUM R.L.		58.0										
DEPTH TO INVERT		2.61		3.16		2.55		2.53		2.62		2.62
H.G.L. LEVEL		80.42		77.19		76.35		75.24		74.62		73.99
INVERT LEVEL		79.74		76.51		75.55		74.72		74.07		73.4
SURFACE LEVEL		82.48		79.83		78.09		77.26		76.64		76.02
ROAD CHAINAGE		663.52		583.59		525.02		457.39		395.75		334.17
PIPE CHAINAGE		322.04		391.97		458.3		528.17		589.81		651.4

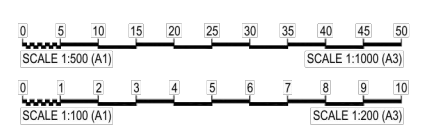
LINE No. 100

LDC These plans are referred to in certificate no. **15992** approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1
 Land Development Certificates
 www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

FILE: H:\15-001115-CSR-HORSLEY PARK\15-001115-12-STAGE 1\DRAWINGS\15-001115-12-CC-04-DWG LAST SAVED BY PETER SPADARO

Rev	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD DRAGG
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

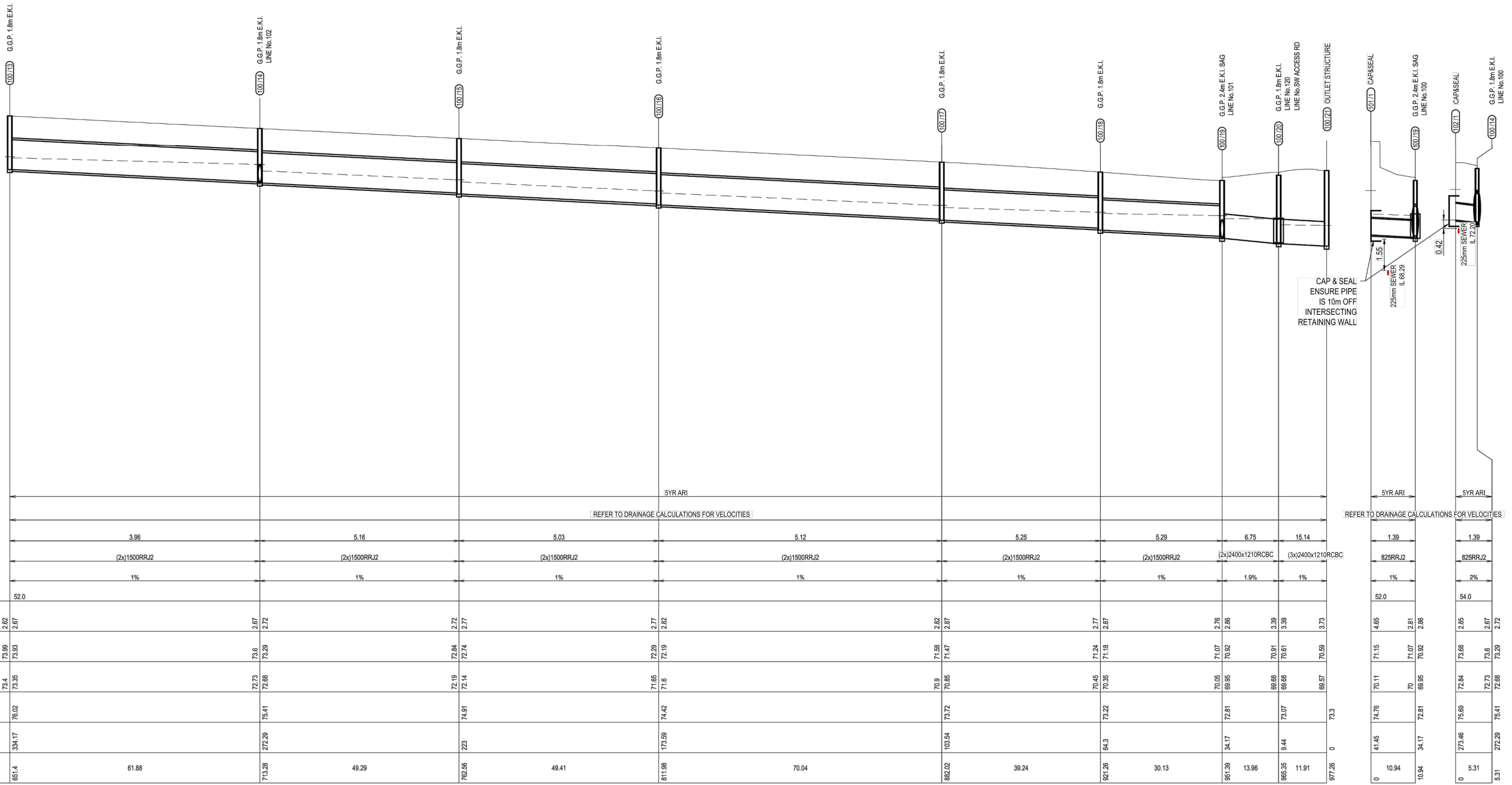
Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIE Aust. CP Eng NER
 SIGN: *[Signature]*
 DATE: 12/7/20

Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS

calibre
 ©2020 calibregroup.com

Drawing Title: DRAINAGE LONG SECTIONS				
SHEET 02 OF 10				
Project No.:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	804	13

FILE: H:\1915100115-CSR HORSLEY PARK\15100115-12-STAGE 1\DRAWINGS\CD\15100115-12-CD-860.DWG LAST SAVED BY PETER SPAARDRO



CAP & SEAL ENSURE PIPE IS 10m OFF INTERSECTING RETAINING WALL

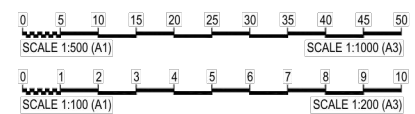
LINE No. 100

LINE No. 101 LINE No. 102

These plans are referred to in certificate no. 15992 approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1
Land Development Certificates
 www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

Revisions	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	~02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS



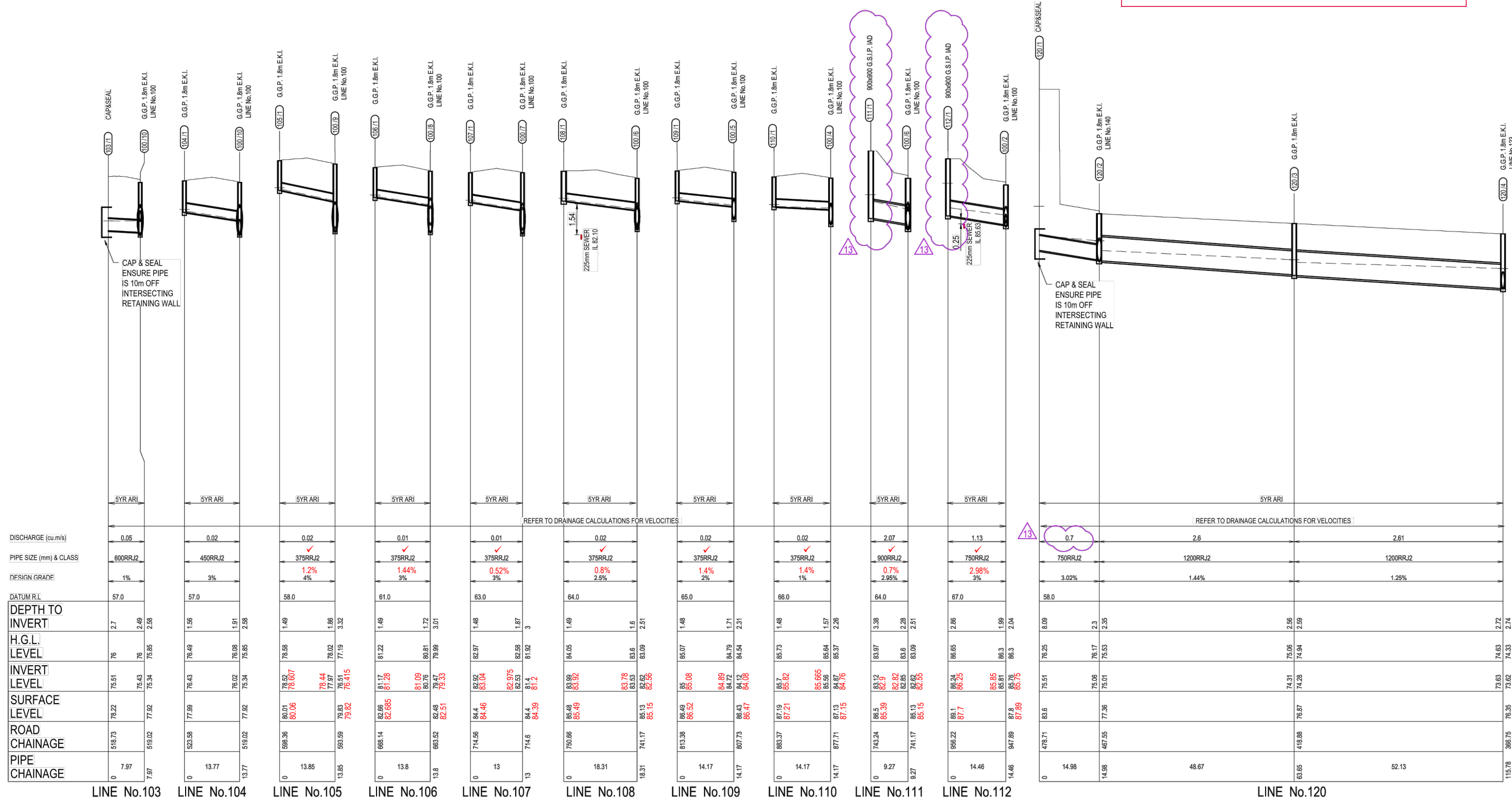
Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY, DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust, CPEng, NER
 SIGN:
 DATE: 12/7/20

Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS

Project No.:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	805	13

WORK AS EXECUTED SURVEY BY:
H. J. Murphy
 Registered Surveyor No. 1677
 Date: 16/07/2020



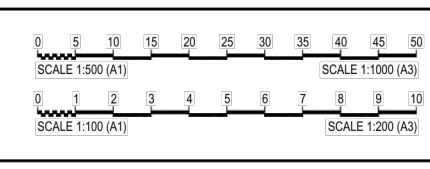
LINE No.	DISCHARGE (cu.m/s)	PIPE SIZE (mm) & CLASS	DESIGN GRADE	DATUM R.L.	DEPTH TO INVERT	H.G.L. LEVEL	INVERT LEVEL	SURFACE LEVEL	ROAD CHAINAGE	PIPE CHAINAGE
LINE No.103	0.05	600RRJ2	1%	57.0	2.7	76	76.51	78.22	516.73	7.97
LINE No.104	0.02	450RRJ2	3%	57.0	1.96	76.49	76.43	77.99	523.98	13.77
LINE No.105	0.02	375RRJ2	1.2% 4%	58.0	1.49	78.58	78.52 78.607	80.01 80.06	598.36	13.85
LINE No.106	0.01	375RRJ2	1.44% 3%	61.0	1.49	81.22	81.17 81.28	82.66 82.685	688.14	13.8
LINE No.107	0.01	375RRJ2	0.52% 3%	63.0	1.48	82.97	82.92 83.04	84.4 84.46	714.58	13
LINE No.108	0.02	375RRJ2	0.8% 2.9%	64.0	1.49	84.05	83.99 83.92	85.49 85.49	750.66	18.31
LINE No.109	0.02	375RRJ2	1.4% 2%	65.0	1.48	85.07	85 85.08	86.49 86.52	813.38	14.17
LINE No.110	0.02	375RRJ2	1.4% 1%	66.0	1.48	85.73	85.7 85.82	87.19 87.21	883.37	14.17
LINE No.111	2.07	900RRJ2	0.7% 2.95%	64.0	3.38	83.97	83.12 82.9	86.5 85.39	743.24	9.27
LINE No.112	1.13	750RRJ2	2.98% 3%	67.0	2.86	86.65	86.24 86.25	88.1 87.7	895.22	14.46
LINE No.120	2.6	1200RRJ2	3.02% 1.44% 1.25%	58.0	8.09	76.25	75.51 76.06 75.01	83.6 77.38 74.31	478.71	63.65

These plans are referred to in certificate no. 15992 approved by:
 Eric Hausteld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1
 Land Development Certificates
 www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

FILE: H:\15-001115-CSR HORSLEY PARK\15-001115-12-CC-ROAD.DWG LAST SAVED BY: VERONIQUE BELLER

Revisions	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS



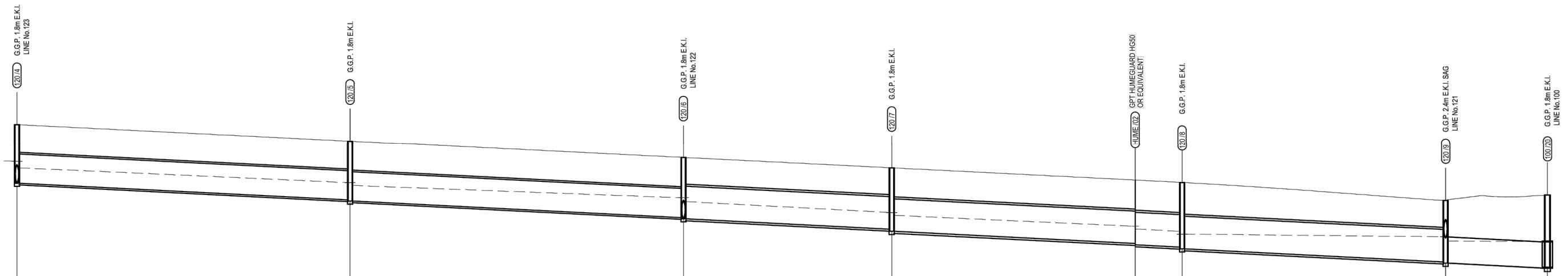
Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP Eng NER
 SIGN: *[Signature]*
 DATE: 12/7/20

Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



Drawing Title:				
DRAINAGE LONG SECTIONS SHEET 04 OF 10				
Project No:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	806	13



REFER TO ROAD ACT APPROVAL
No.292.1/2018 ISSUED BY
FAIRFIELD CITY COUNCIL

DISCHARGE (cu.m/s)	3.15		3.19		3.81		3.62		3.62		3.89		4.35			
PIPE SIZE (mm) & CLASS	1350RRJ2		1350RRJ2		1500RRJ2		1500RRJ2		1500RRJ2		(2x)1500RRJ2		2400x1210RCBC			
DESIGN GRADE	1%		1%		1%		1%		1%		1%		1%			
DATUM R.L.	53.0															
DEPTH TO INVERT	2.72	2.74	2.74	2.79	2.79	2.84	2.84	2.84	2.84	2.89	2.89	3.07	2.84	2.9	3.39	3.39
H.G.L. LEVEL	74.63	74.33	73.64	73.51	72.94	72.77	72.13	72.13	71.5	71.5	70.66	70.56	71.14	70.95	70.91	70.61
INVERT LEVEL	73.63	73.62	72.84	72.79	72.02	71.97	71.39	71.39	70.83	70.77	70.66	70.56	69.97	69.92	69.68	69.66
SURFACE LEVEL	75.35	75.35	75.58	75.58	74.81	74.81	74.33	74.33	73.76	73.76	73.65	73.65	72.82	72.82	73.07	73.07
ROAD CHAINAGE	367.75	367.75	269.63	269.63	212.47	212.47	164.27	164.27	101.59	101.59	97.05	97.05	36.08	36.08	9.44	9.44
PIPE CHAINAGE	115.78	115.78	192.9	192.9	270.06	270.06	48.19	48.19	318.26	318.26	56.36	56.36	60.98	60.98	470.01	470.01

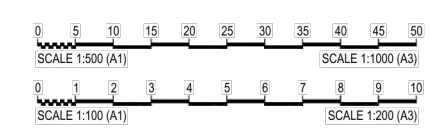
LINE No.120

LDC Land Development Certificates
www.LDC.com.au

These plans are referred to in certificate no **15992** approved by:
Eric Hausfeld
Accredited Certifier
Registration No: BPB 2416
Categories: B1,C1,C2,C3,C4,C6,C15 & D1

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		~02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

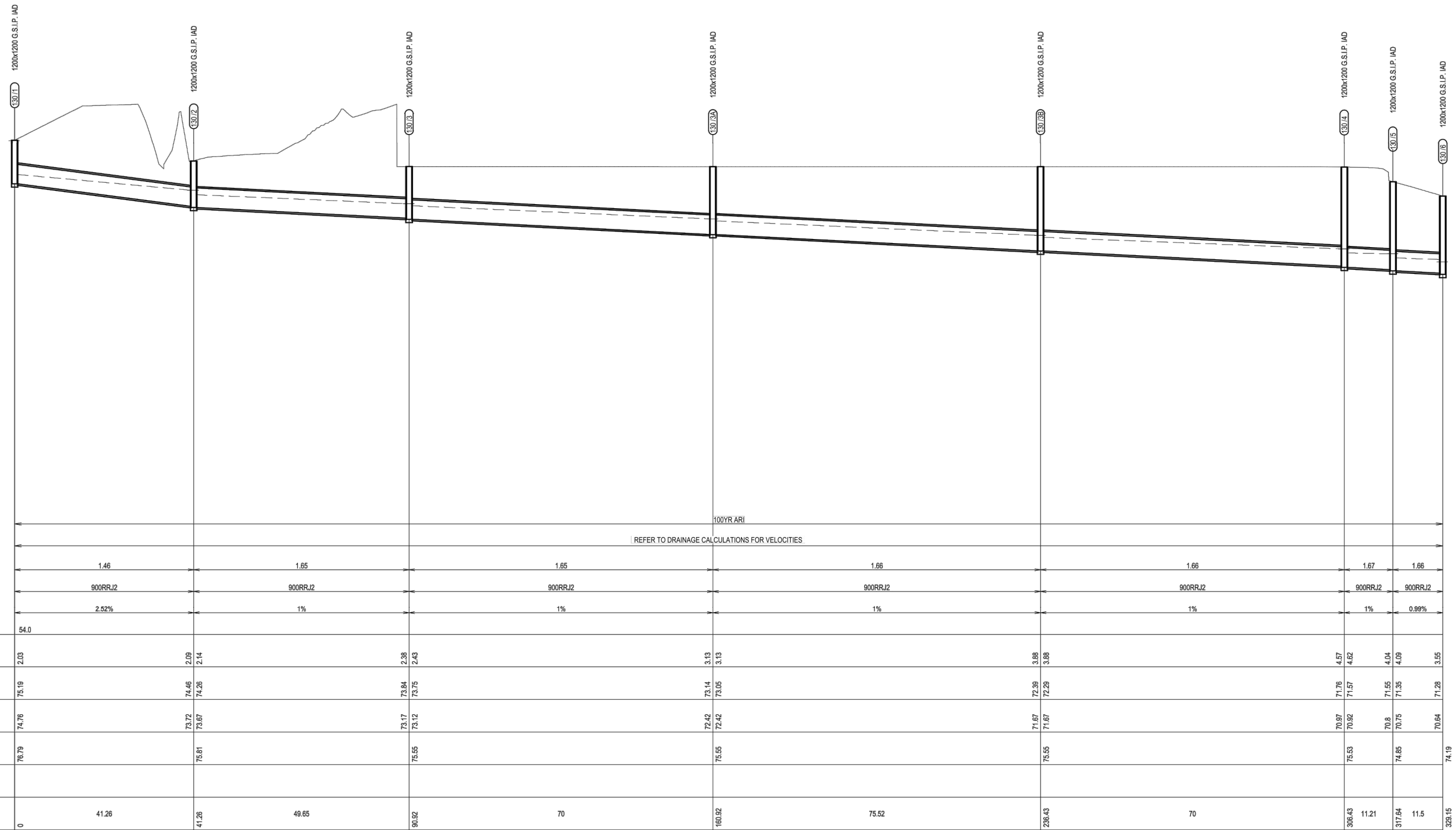
Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CP Eng NER
SIGN: *[Signature]*
DATE: 12/7/20

Client: **CSR LTD**
Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**



Drawing Title: DRAINAGE LONG SECTIONS SHEET 05 OF 10				
Project No: 15-001115.12	Stage: 1&2	Milestone: CC	Dwg No.: 807	Revision: 13

FILE: H:\15-001115-CSR HORSLEY PARK\15-001115.12 - STAGE 1 DRAINAGE\15-001115.12-02-307.DWG LAST SAVED BY: PETER SPAUARD



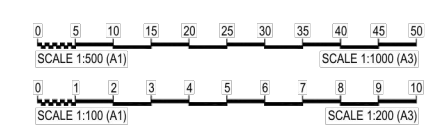
LINE No.130

These plans are referred to in certificate no. **15992** approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1
Land Development Certificates
 www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

FILE: H1515-01115_CSR_HORSLEY PARK15-01115.12 - STAGE 1 DRAWINGS/CD15-01115.12-02-30.DWG LAST SAVED BY: VERONIQUE BELLES

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



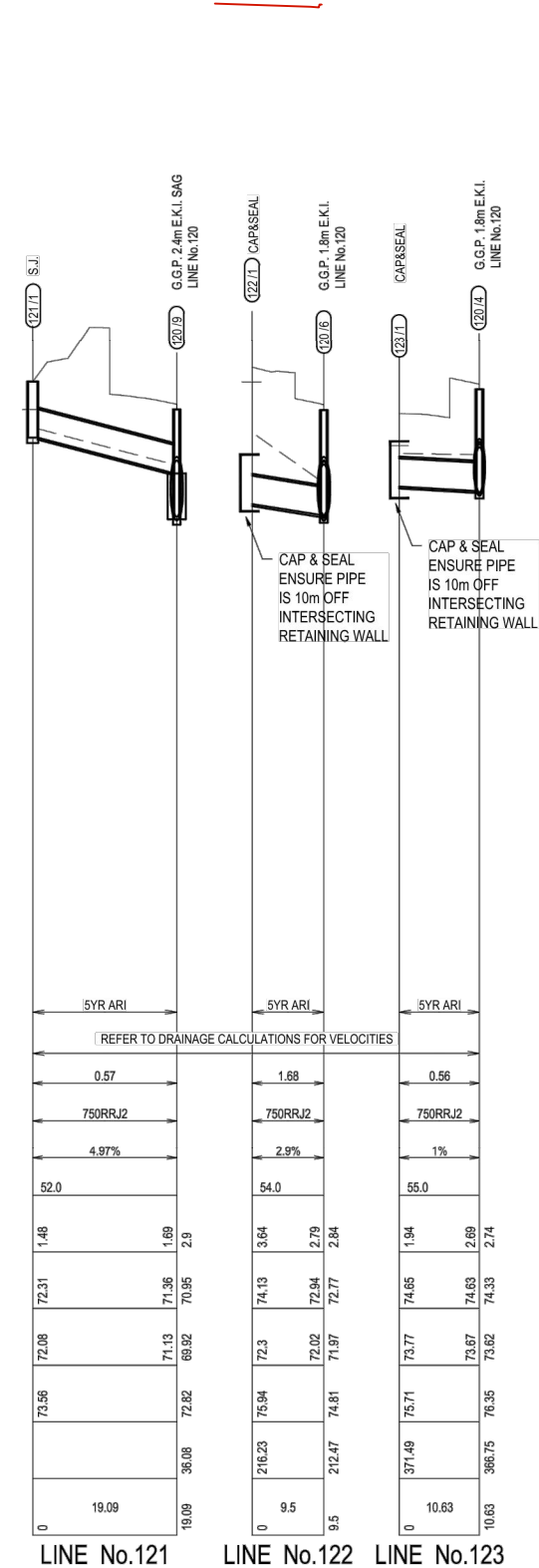
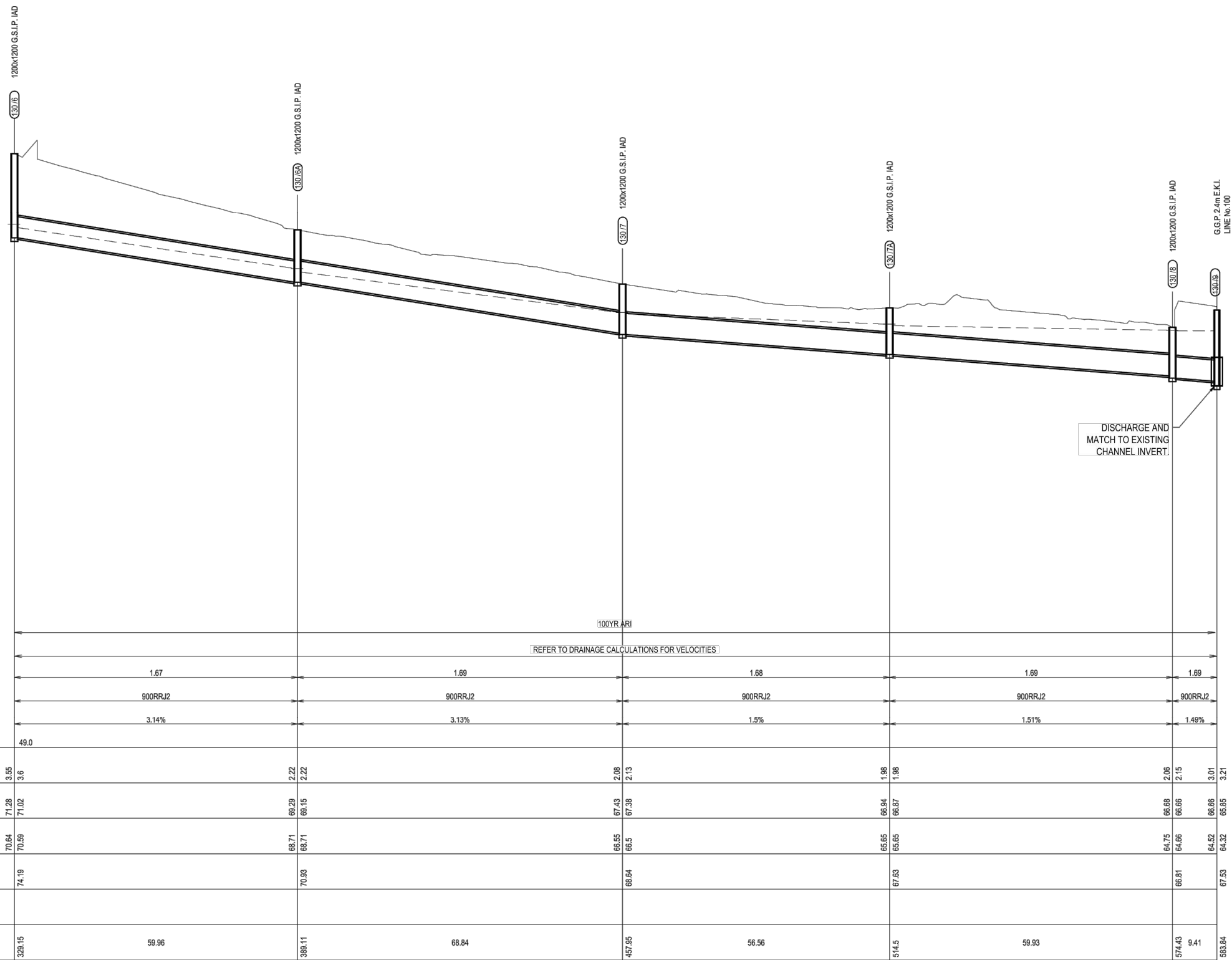
Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP Eng NER
 SIGN: *[Signature]*
 DATE: 12/7/20

Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



Drawing Title: DRAINAGE LONG SECTIONS SHEET 06 OF 10				
Project No.:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	808	13



LINE No.130

LINE No.121

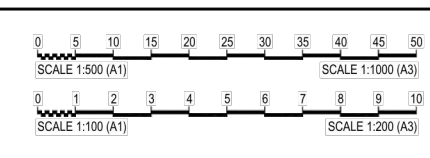
LINE No.122

LINE No.123


FOR CONSTRUCTION CERTIFICATE

FILE: H:\161610115 - CSR HORSLEY PARK\161610115_12 - STAGE 1\DRAWINGS\A-C\15-00115_12-02-800.DWG LAST SAVED BY: VERONIQUE BELLER

Revisions	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD DRAINAGE
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



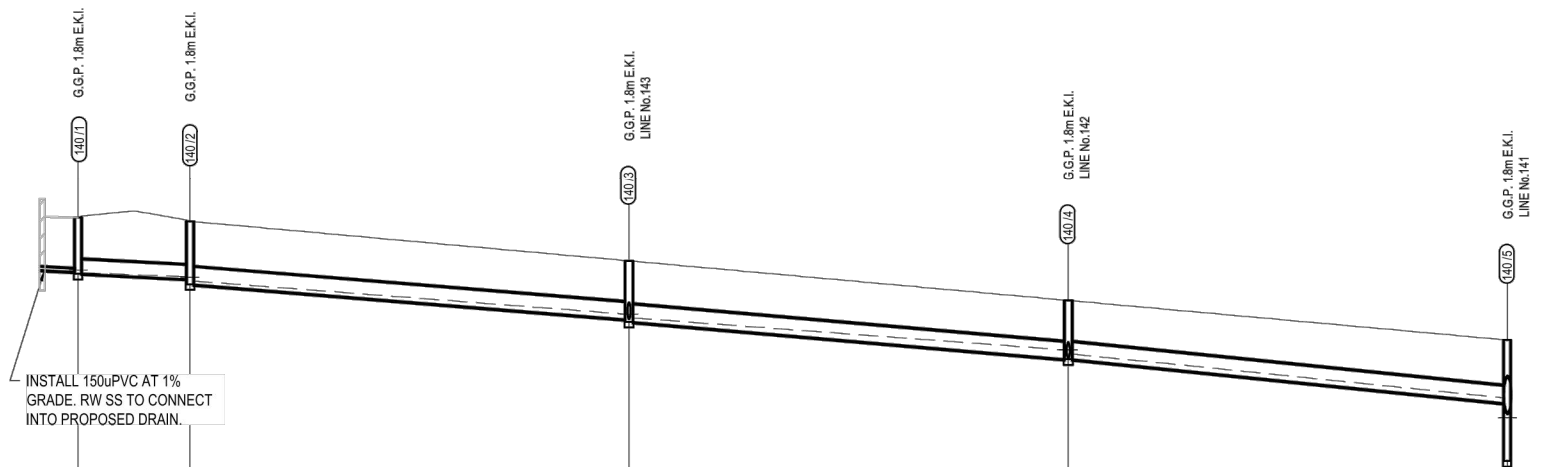
Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP Eng NER
 SIGN: 
 DATE: 12/7/20

Client: **CSR LTD**
 Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**



Drawing Title: **DRAINAGE LONG SECTIONS SHEET 07 OF 10**
 Project No.: 15-001115.12
 Stage: 1&2
 Milestone: CC
 Dwg No.: 809
 Revision: 13



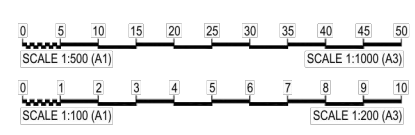
	5YR ARI			
	REFER TO DRAINAGE CALCULATIONS FOR VELOCITIES			
DISCHARGE (cu.m/s)	0.01	0.03	0.07	0.1
PIPE SIZE (mm) & CLASS	375RRJ2	450RRJ2	450RRJ2	450RRJ2
DESIGN GRADE	1%	1.6%	1.7%	2%
DATUM R.L.	66.0			
DEPTH TO INVERT	1.48	1.52	1.54	1.67
H.G.L. LEVEL	86.08	85.98	84.09	82.78
INVERT LEVEL	86.06	85.91	83.8	82.64
SURFACE LEVEL	87.54	87.43	85.35	84.31
ROAD CHAINAGE	1024.1	1031.09	1147.1	1205.1
PIPE CHAINAGE	0	14.76	58	188.77

LINE No.140


 These plans are referred to in certificate no. **15992** approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1
Land Development Certificates
 www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BF		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



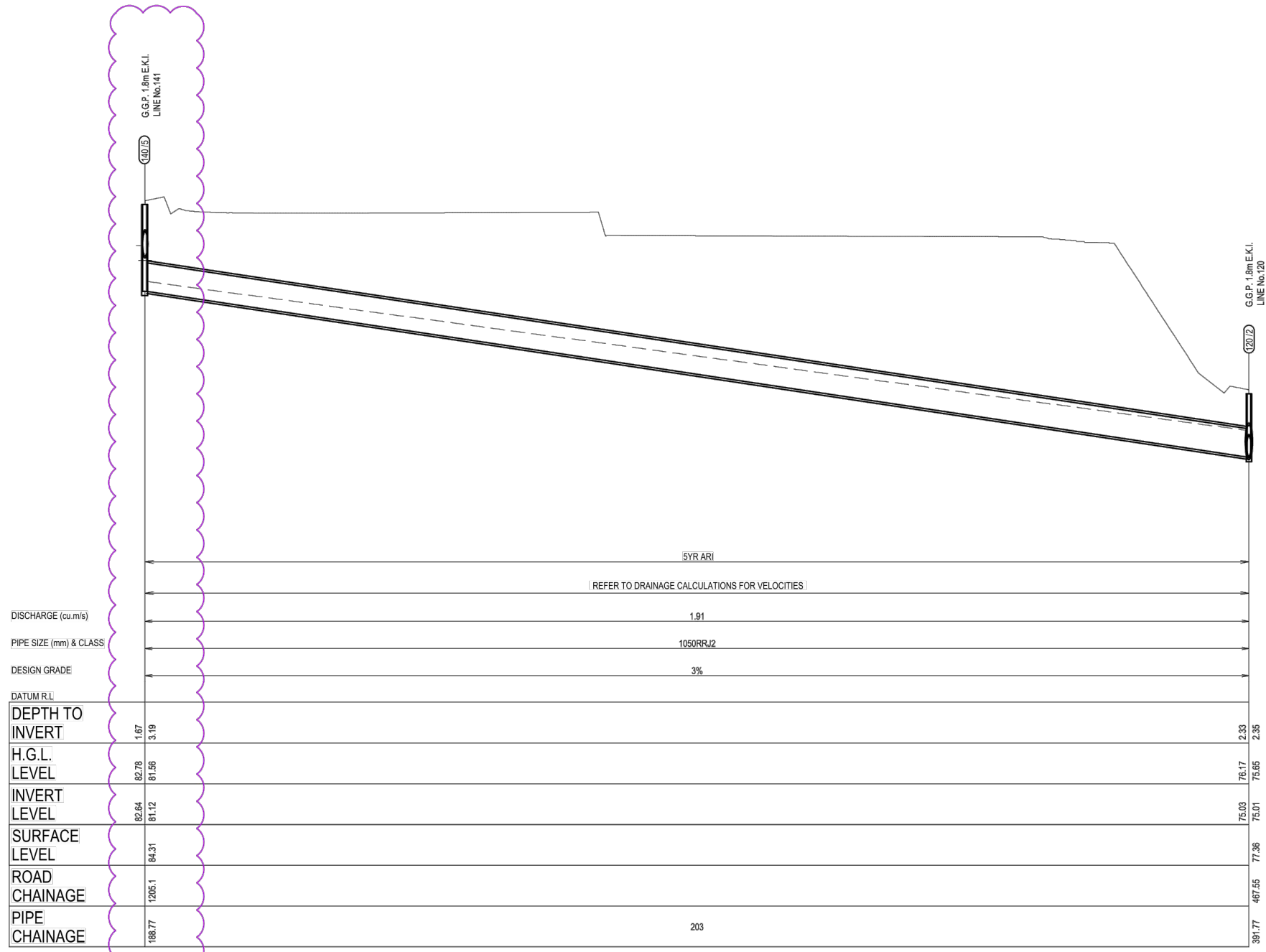
Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP Eng NER
 SIGN: 
 DATE: 12/7/20

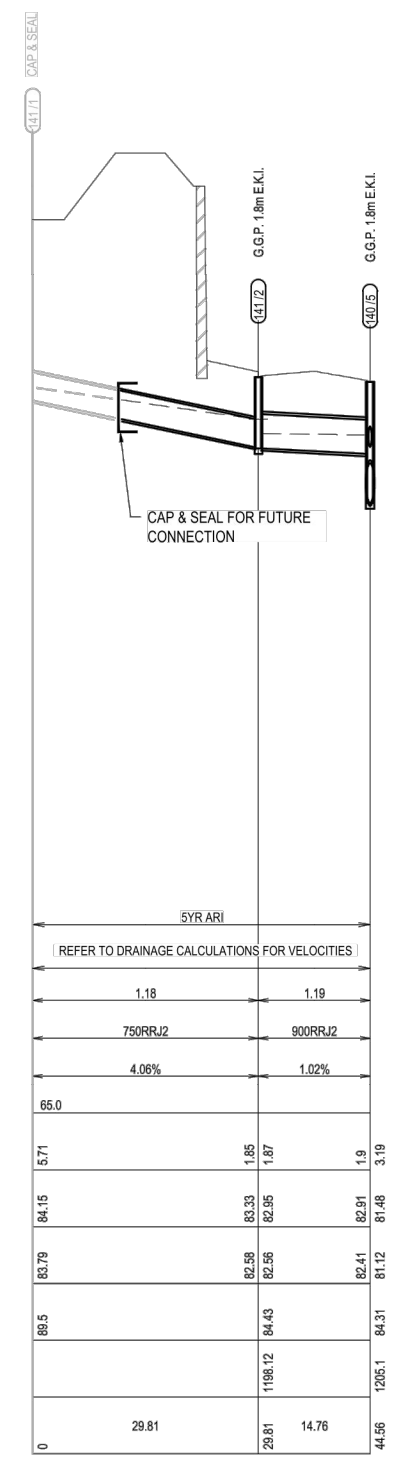
Client: **CSR LTD**
 Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**



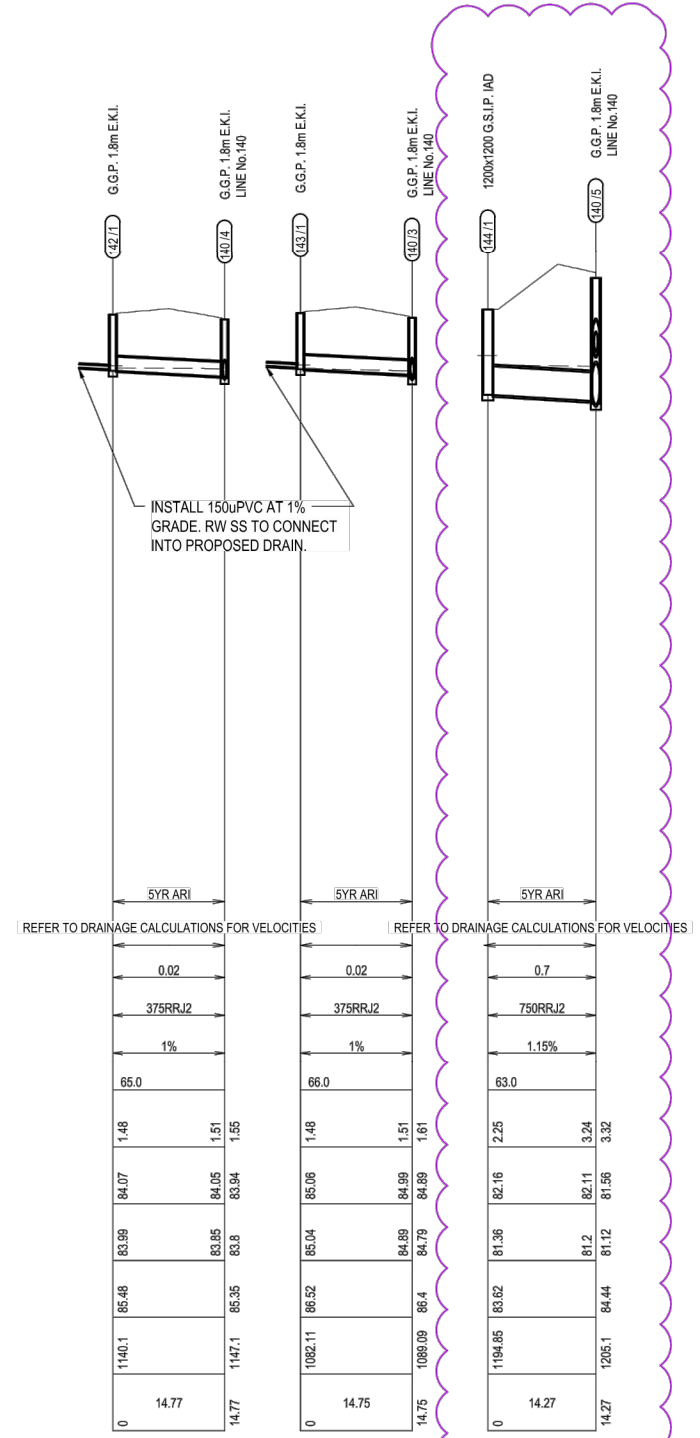
Drawing Title: DRAINAGE LONG SECTIONS				
SHEET 08 OF 10				
Project No:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	810	13



LINE No.140



LINE No.141



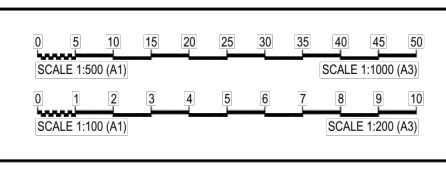
LINE No.142

LINE No.143

LINE No.144

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD DRAGING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS



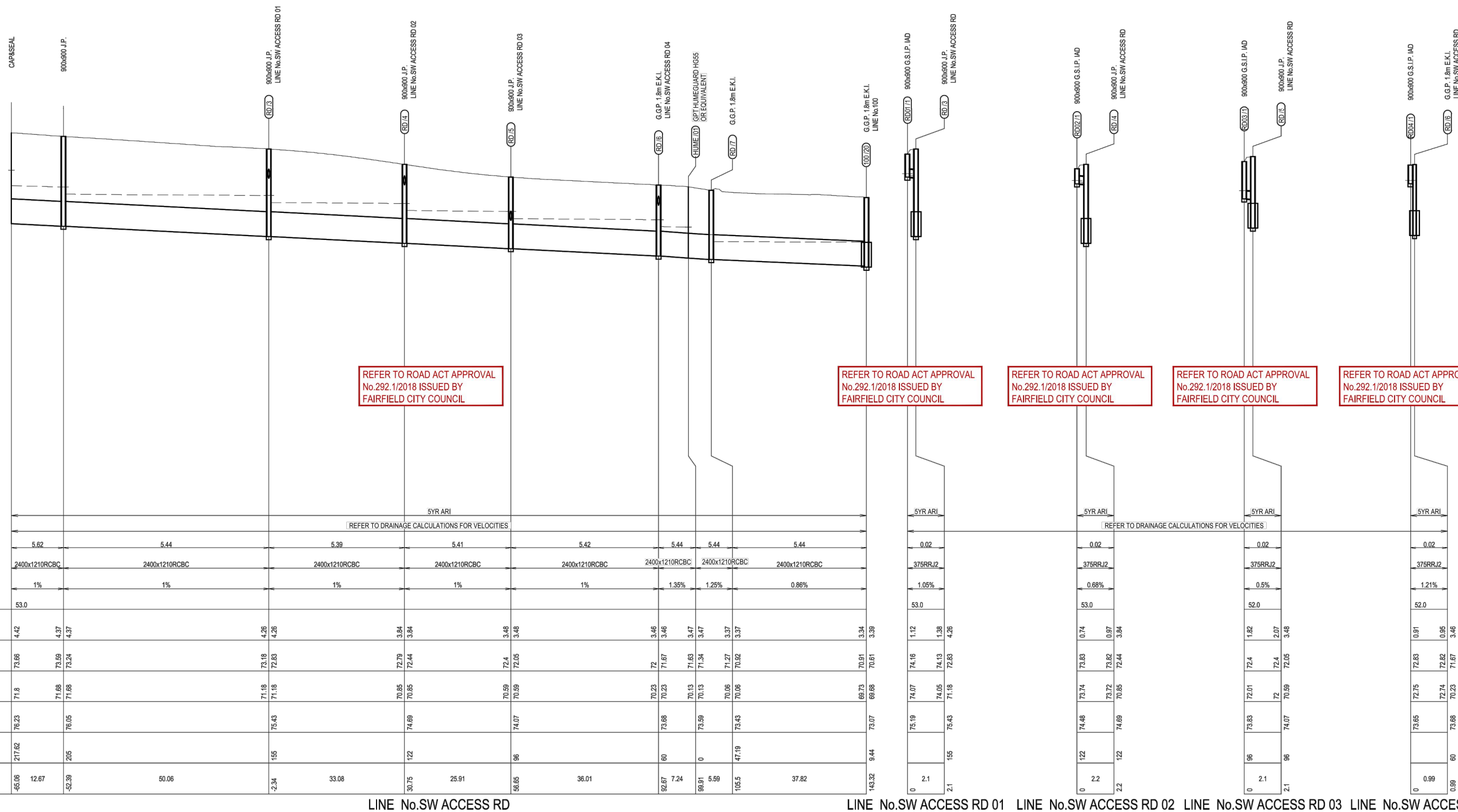
Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP(Eng) NER
 SIGN: 
 DATE: 12/7/20

Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



Drawing Title: DRAINAGE LONG SECTIONS				
SHEET 09 OF 10				
Project No.:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	811	13

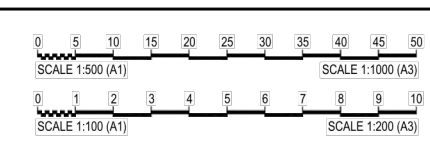


	LINE No.SW ACCESS RD										LINE No.SW ACCESS RD 01		LINE No.SW ACCESS RD 02		LINE No.SW ACCESS RD 03		LINE No.SW ACCESS RD 04							
DISCHARGE (cu.m/s)	5.62		5.44		5.39		5.41		5.42		5.44		5.44		5.44		0.02		0.02		0.02			
PIPE SIZE (mm) & CLASS	2400x1210RCBC		2400x1210RCBC		2400x1210RCBC		2400x1210RCBC		2400x1210RCBC		2400x1210RCBC		2400x1210RCBC		2400x1210RCBC		375RRJ2		375RRJ2		375RRJ2			
DESIGN GRADE	1%		1%		1%		1%		1%		1.35%		1.25%		0.86%		1.05%		0.68%		0.5%		1.21%	
DATUM R.L.	53.0																							
DEPTH TO INVERT	4.42				4.26	4.26	3.84	3.84	3.46	3.46	3.46	3.46	3.47	3.47	3.37	3.37	3.34					3.34	3.39	
H.G.L. LEVEL	73.86	73.59	73.24	73.18	72.83	72.83	72.79	72.44	72.4	72.05	72.4	72.05	72	71.67	71.63	71.34	71.34	71.27	70.92	70.91	70.61	70.61	70.91	70.91
INVERT LEVEL	71.8	71.68	71.68	71.18	71.18	70.85	70.85	70.85	70.85	70.59	70.59	70.59	70.59	70.23	70.13	70.13	70.13	70.06	70.06	69.73	69.68	69.68	69.68	69.68
SURFACE LEVEL	76.23	76.05	76.05	75.43	75.43	74.89	74.89	74.89	74.89	74.07	74.07	74.07	74.07	73.88	73.59	73.59	73.59	73.43	73.43	73.07	73.07	73.07	73.07	73.07
ROAD CHAINAGE	217.62	205	205	155	155	122	122	122	122	96	96	96	96	60	60	60	60	47.19	47.19	143.32	9.44	9.44	9.44	9.44
PIPE CHAINAGE	46.06	12.67	52.39			33.08				30.75	25.91			52.67	7.24	5.59		106.5		37.82				


FILE: H:\15-001115-CSR HORSLEY PARK\15-001115-12-STAGE 1\DRAWINGS\A-C\15-001115-12-02-R12.DWG LAST SAVED BY: PETER SPAJARO

FOR CONSTRUCTION CERTIFICATE

Revisions	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP Eng NER
 SIGN: 
 DATE: 12/7/20

Client: **CSR LTD**
 Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**



Drawing Title:				
DRAINAGE LONG SECTIONS SHEET 10 OF 10				
Project No:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	812	13

DRAINS - HYDROLOGY/HYDRAULIC CALCULATION SHEET
5 YEAR ARI MINOR STORM EVENT

Table with 10 columns: Name, Total approach, Bypass flow, Max D, Max Dx, Max Width, Max V, Due to Storm. Lists various pipe segments and flow characteristics.

Table with 10 columns: Name, Max Q, Max V, Max U/S, Max D/S, HGL (m), Due to Storm. Lists pipe details including flow rates and pipe types.

Table with 7 columns: Name, Max HGL, Max Pond, Flow Surface, Min, Overflow. Lists pit and node details with associated flow and elevation data.

Table with 10 columns: Name, Max Flow Q, Max Pavd, Max Grassed, Max Tc, Max Tc, Due to Storm. Lists sub-catchment details with flow and time parameters.

LDC logo and text: 'These plans are referred to in certificate no. 15992 approved by: Eric Hausfeld Accredited Certifier'.

Table with 5 columns: No, AV, Design, Check, Date. Includes a revision history table with 13 entries.

Disclaimer and Copyright: ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.

Authorised for Issue: ENRIQUE FRANCO. Project: CSR LTD. CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS.

FOR CONSTRUCTION CERTIFICATE. Drawing Title: DRAINAGE CALCULATIONS SHEET 01 OF 03. Project No: 15-001115.12. Stage: 1&2. Milestone: CC. Dwg No.: 813. Revision: 13.

DRAINS - HYDROLOGY/HYDRAULIC CALCULATION SHEET

20 YEAR ARI MINOR STORM EVENT

Table with columns: Name, Total approach, Bypass flow, Max D, Max Dv, Max Width, Max V, Due to Storm. Contains data for various flow lines like F 1001, F 1002, etc.

Table with columns: Name, Max Q, Max V, Max U/S, Max D/S, Due to Storm. Contains data for various pipe sections like P 1001, P 1002, etc.

Table with columns: Name, Max HGL, Max Pond, Max Surface, Min, Overflow. Contains data for various pits/nodes like 1001, 1002, etc.

Table with columns: Name, Max Flow Q, Paved, Grassed, Paved, Grassed, Due to Storm. Contains data for various sub-catchments like C 1001, C 1002, etc.

Vertical text on the left margin: REVISIONS: 08 AV AV CK SAG 02/02/18 RE-ISSUE TO SUIT CERTIFIER'S COMMENTS

Table with columns: First Issue, Drawn, Design, Check, Appd., Date. Contains revision details for the drawing.

Disclaimer and Copyright: ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.

Authorised for Issue: ENRIQUE FRANCO BE(Hons) MIEAust, CPEng, NER. Includes a signature and date.

Client: CSR LTD. Project: CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS.

Logos for LDC (Land Development Certificates) and Calibre (Accredited Certifier).

Table with columns: Project No., Stage, Milestone, Dwg No., Revision. Contains project identification information.

FOR CONSTRUCTION CERTIFICATE

DRAINS - HYDROLOGY/HYDRAULIC CALCULATION SHEET

100 YEAR ARI MAJOR STORM EVENT

Table with 12 columns: Name, Total approach, Bypass flow, Max D, Max Dv, Max Width, Max V, Due to Storm. Contains data for various flow points (F 1001 to F 1231).

Table with 12 columns: Name, Max Q, Max V, Max US, Max DIS, HGL (m), Due to Storm. Contains data for various pipe segments (P 1001 to P 1111).

Table with 8 columns: Name, Max HGL, Max Pond, Max Surface, Min, Freeboard, Overflow. Contains data for various pit/node details (1001 to 1111).

Table with 12 columns: Name, Max Flow Q, Max Paved, Max Grassed, Paved, Grassed, Tc, Due to Storm. Contains data for various sub-catchment details (C 1001 to C 1111).

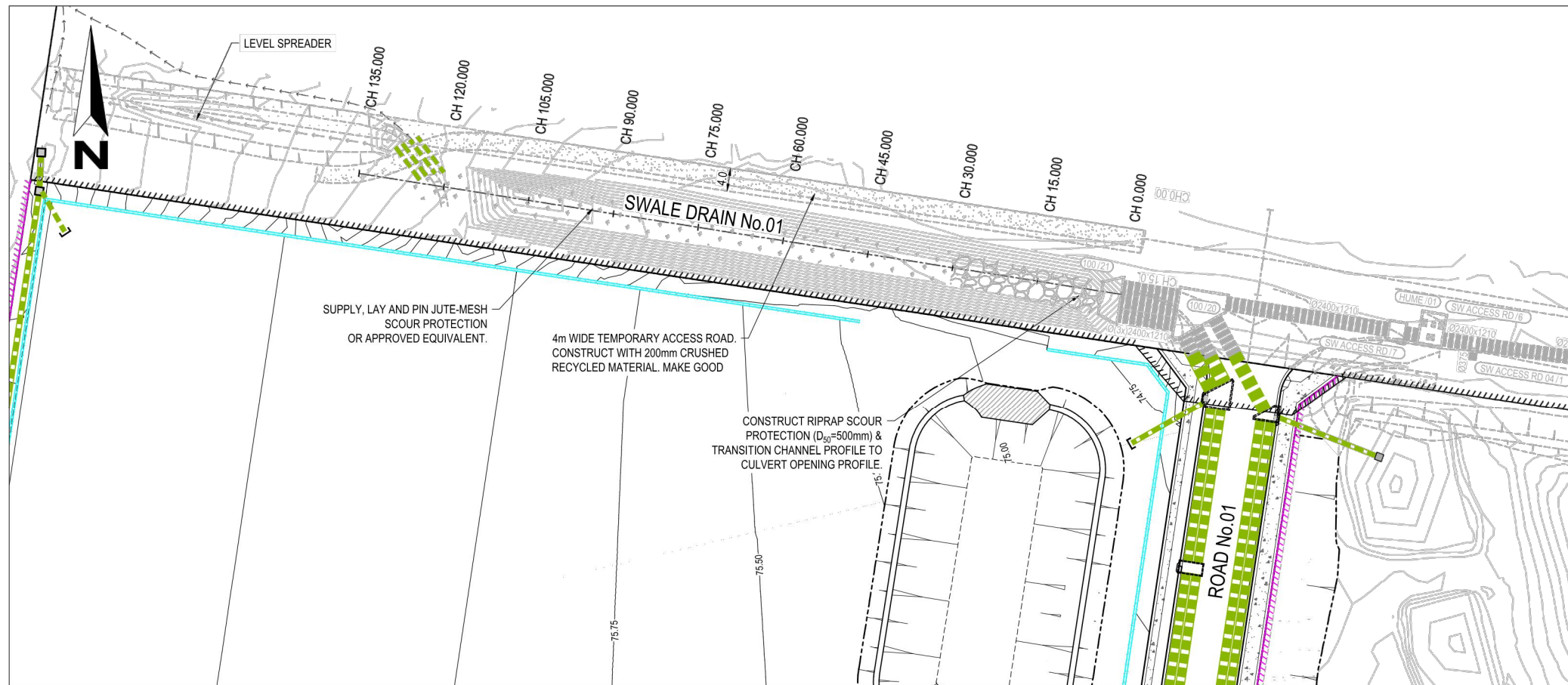
Table with 5 columns: Revisions, Date, Appd., Date, Revision Details. Lists project milestones and approvals.

Disclaimer and Copyright: ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR... Authorised for Issue: ENRIQUE FRANCO... DATE: 12/7/20

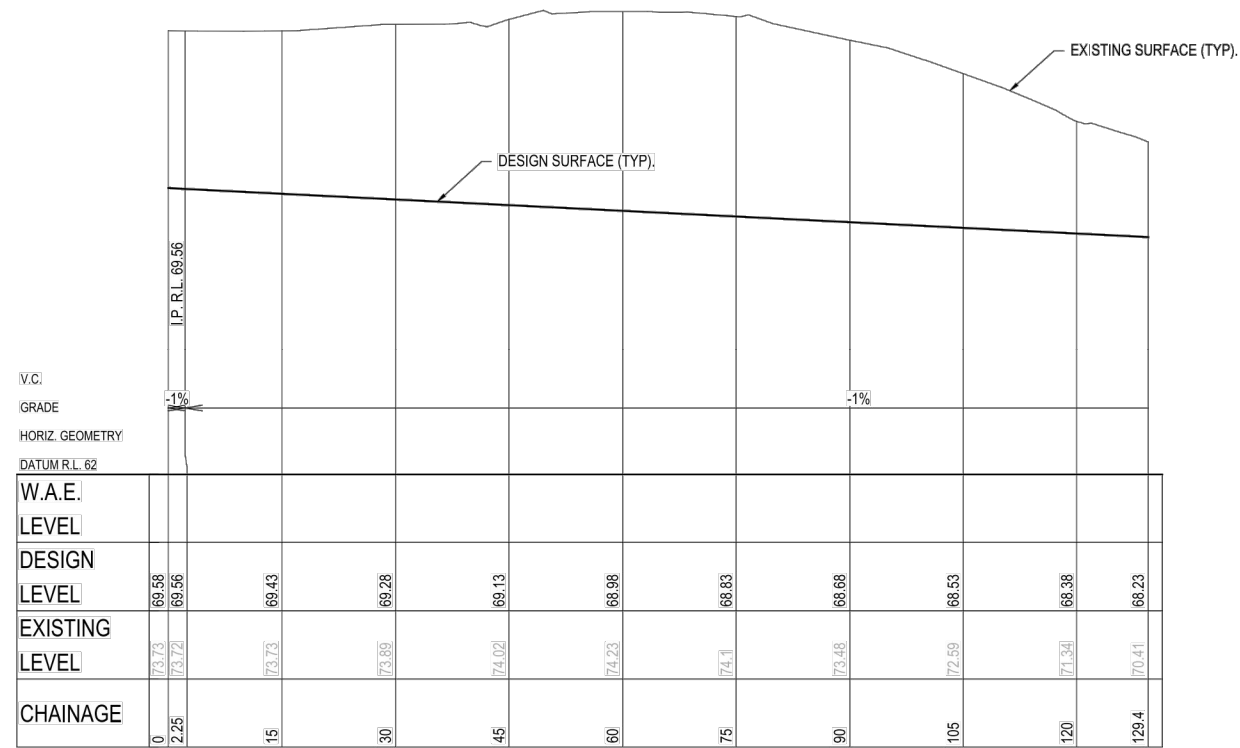
Client: CSR LTD. Project: CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



FOR CONSTRUCTION CERTIFICATE. Drawing Title: DRAINAGE CALCULATIONS SHEET 03 OF 03. Project No: 15-001115.12. Stage: R&T. Milestone: CC. Dwg No.: 815. Revision: 13.



TEMPORARY SWALE DRAIN No.01
SCALE 1:500

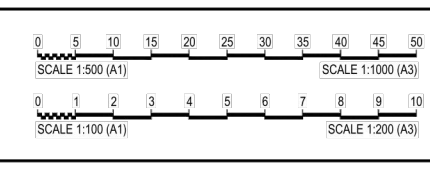


LONGITUDINAL SECTION CENTRELINE - TEMPORARY SWALE DRAIN No.01
SCALE 1:500 (H)
SCALE 1:100 (V)

FOR CONSTRUCTION CERTIFICATE

I:\15\15-001115-12 - STAGE 1 DRAWINGS\15-001115-12-02-820.DWG LAST SAVED BY VERONIQUE BELLES

Revisions	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



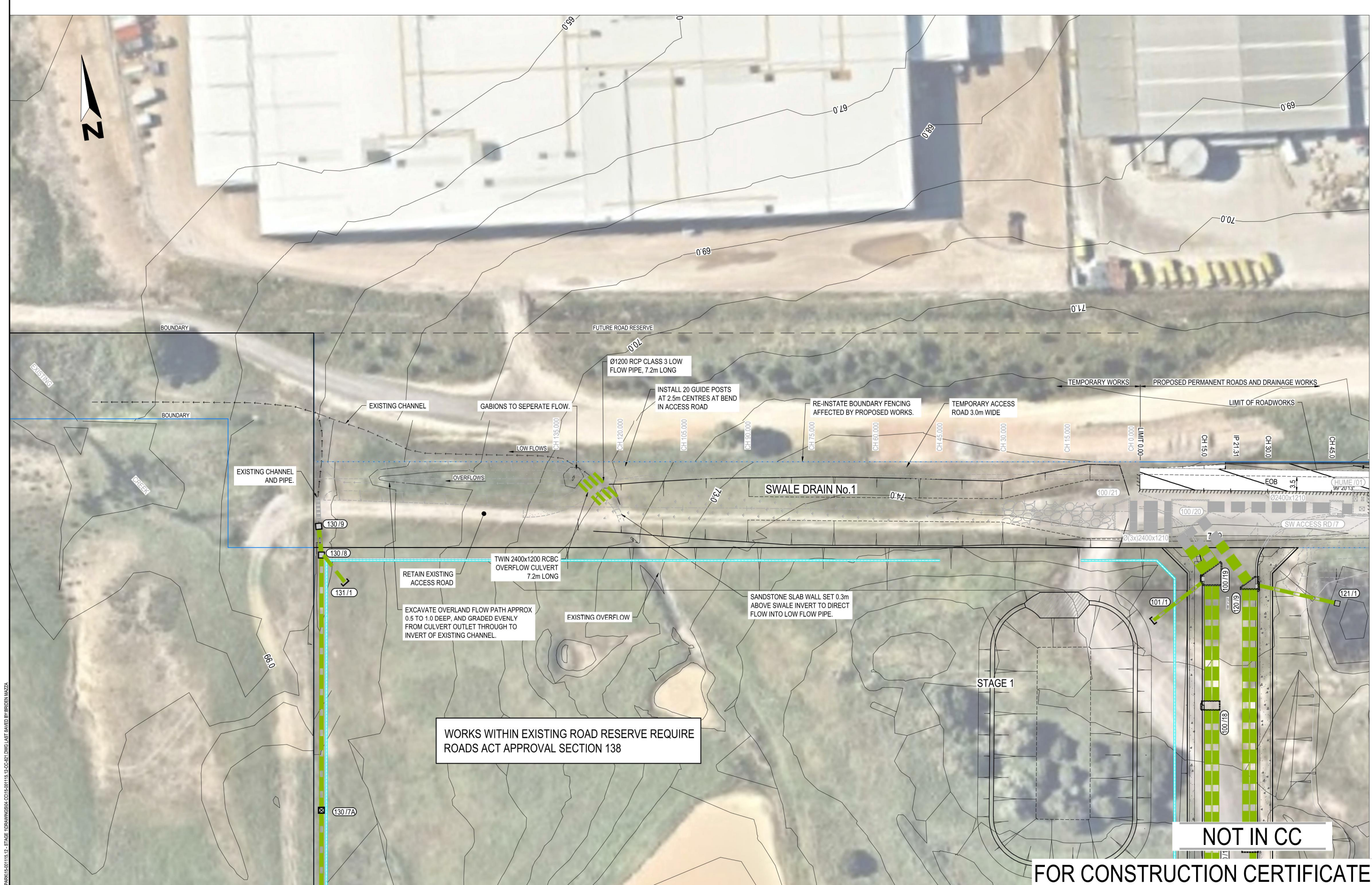
Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CP(Eng) NER
SIGN: *[Signature]*
DATE: 12/7/20

Client:
CSR LTD
Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



Drawing Title:				
TEMPORARY SWALE DRAIN No.01 PLAN AND LONGSECTION				
Project No.:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	820	13

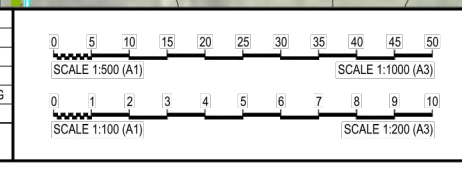


WORKS WITHIN EXISTING ROAD RESERVE REQUIRE ROADS ACT APPROVAL SECTION 138

NOT IN CC

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
13	AV	AV	LF	EF		11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

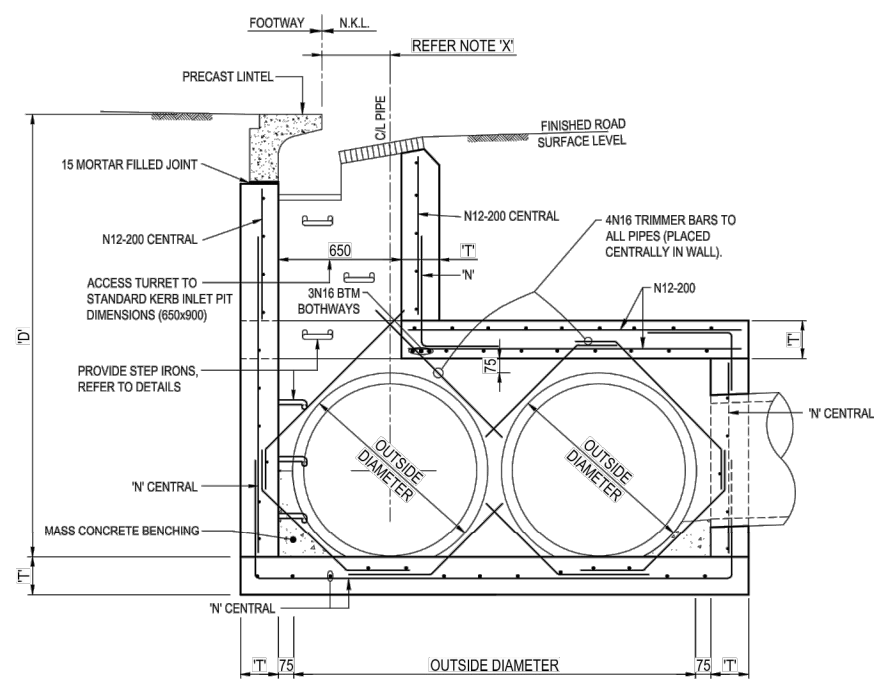
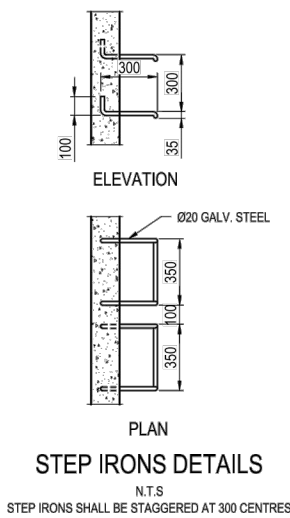
Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust, CPEng NER
SIGN: *[Signature]*
DATE: 12/7/20

Client: **CSR LTD**
Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**



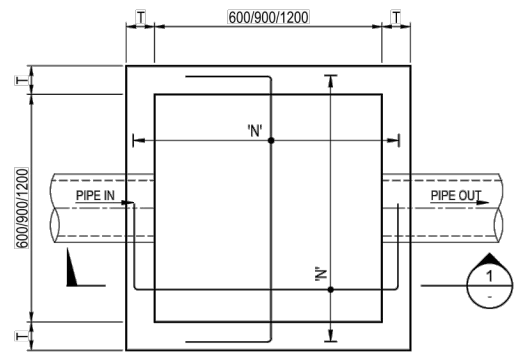
Project No:	15-001115.12	Stage:	1&2	Milestone:	CC	Dwg No.:	821	Revision:	13
-------------	--------------	--------	-----	------------	----	----------	-----	-----------	----

FILE: H:\15\001115 - CSR HORSLEY PARK\15-001115.12 - STAGE 1\DRAWINGS\A1\15-001115.12-CC-821.DWG LAST SAVED BY: BRUDEN MAZZA



STANDARD GRATED KERB INLET PIT FOR TWIN PIPES FROM Ø750 TO Ø1200
(ENLARGED CHAMBER)
SCALE: 1:20

PIT DEPTH D'mm	WALLS & BASE T'mm	REO N'	LAP LENGTH L'
MAX 3000	150	N12-200	450
MAX 4000	200	N16-200	600

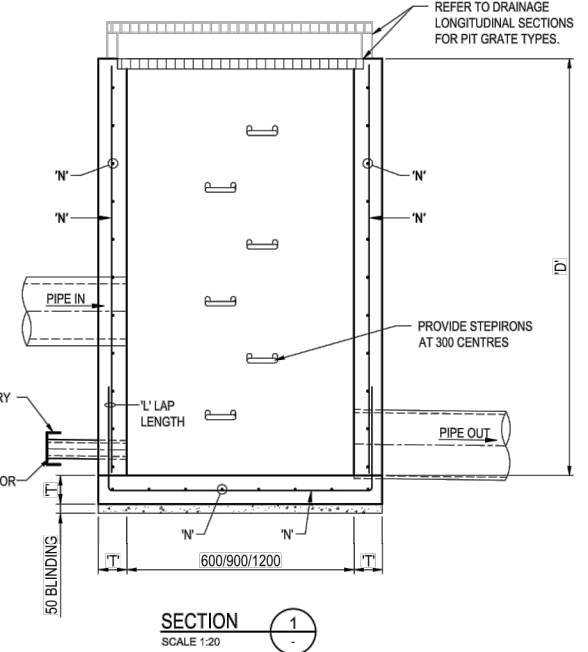


TYPICAL SURFACE INLET PIT BASE
SCALE: 1:20

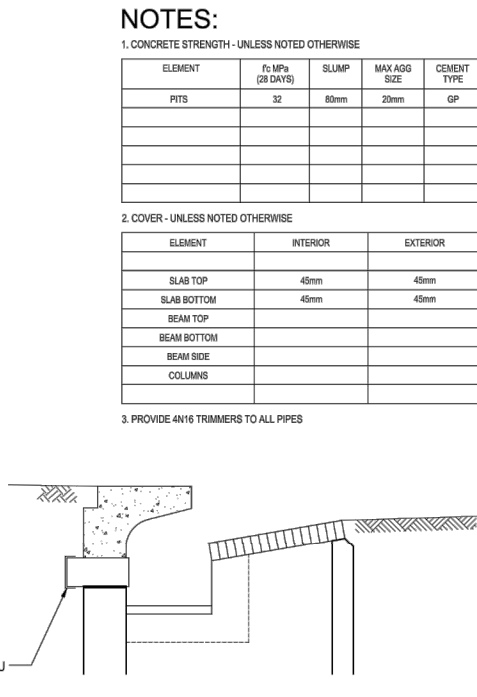
PIT DEPTH D'mm	WALLS & BASE T'mm	REO N'	LAP LENGTH L'
MAX 3000	150	N12-200	450
MAX 4700	200	N16-200	600

These plans are referred to in certificate no. **15992** approved by:

LDC
Eric Hausfeld
Accredited Certifier
Registration No: BPB 2416
Categories: B1, C1, C2, C3, C4, C6, C15 & D1
Land Development Certificates
www.LDC.com.au



SECTION 1
SCALE: 1:20



ROOF WATER CONNECTION TO REAR OF LINTEL
SCALE: N.T.S

NOTES:

1. CONCRETE STRENGTH - UNLESS NOTED OTHERWISE

ELEMENT	f _c MPa (28 DAYS)	SLUMP	MAX AGG SIZE	CEMENT TYPE
PITS	32	80mm	20mm	GP

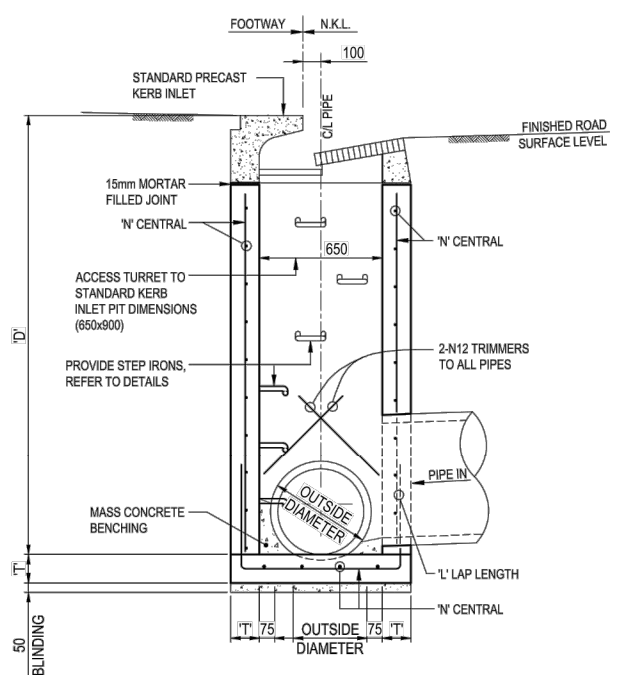
2. COVER - UNLESS NOTED OTHERWISE

ELEMENT	INTERIOR	EXTERIOR
SLAB TOP	45mm	45mm
SLAB BOTTOM	45mm	45mm
BEAM TOP		
BEAM BOTTOM		
BEAM SIDE		
COLUMNS		

3. PROVIDE 4N16 TRIMMERS TO ALL PIPES

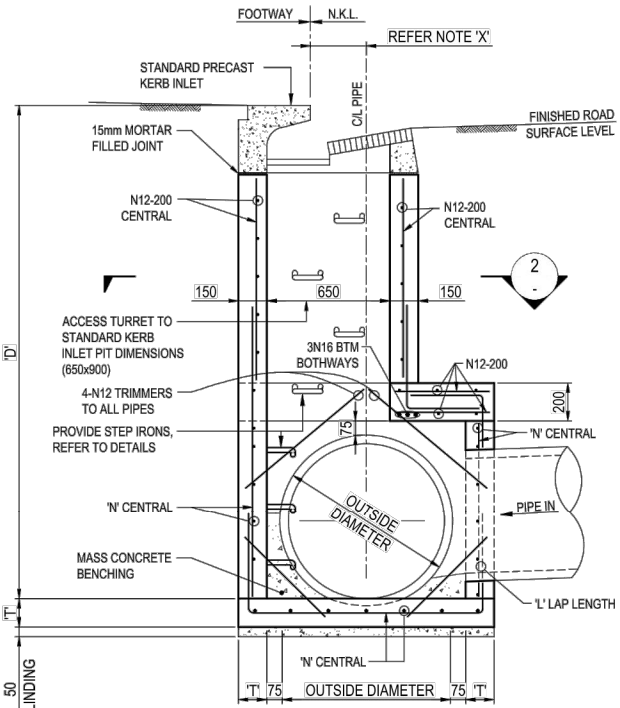


- NOTES:**
- FOR PIT SIZE REFER TO TABLE (900 MIN LONG).
 - REINFORCING MESH IS TO BE BENT TO LAP 300 AROUND ALL CORNERS. VERTICAL BARS ARE NOT TO BE CUT. ALTERNATIVELY PROVIDE N12 "L" BARS (500x500) AT 400 VERTICAL CTS.
 - COMPRESSIVE STRENGTH (F_c) FOR CAST IN SITU CONCRETE SHALL BE A MINIMUM 32 MPa AT 28 DAYS.
 - TOP OF BENCHING SHALL BE ½ OF OUTLET PIPE DIAMETER.
 - 100mm SUBSOIL DRAINAGE PIPE 3000 LONG WRAPPED IN FABRIC SOCK TO BE PROVIDE ADJACENT TO INLET PIPES.
 - ALL PITS SHALL BE PROVIDED WITH A LOCKING CLIP.
 - PIT GRATE TO BE 'WELDLOK' GULLY GRATE GG-42D (INDUSTRIAL/COMMERCIAL) OR APPROVED EQUIVALENT. GG-50D (RESIDENTIAL) OR APPROVED EQUIVALENT.
 - DURING INSTALLATION OF GRATE AND FRAME CONTRACTOR IS TO ENSURE CLEARANCE BETWEEN LINTEL AND OPENED GRATE (REFER TO INSTALLATION TOLERANCE).
 - PROVIDE STEP IRONS AS INDICATED FOR PITS DEEPER THAN 1200. REFER TO FAIRFIELD CITY COUNCIL STANDARD DRAWINGS.
 - N12-200 CENTRAL MAY BE USED IN LIEU OF MESH. LAP 500 AT CORNERS.
 - FOR PITS UP TO 2m DEEP. REFER TO FAIRFIELD CITY COUNCIL STANDARD DRAWINGS.
 - FOR PITS MORE THEN 2m DEEP, REFER TO DETAILS TO THE RIGHT.
 - INSTALL MASS BENCHING IN ALL PITS APPLICABLE TO PROVIDE GRADE BETWEEN INLET AND OUTLET PIPE'S.



STANDARD GRATED KERB INLET PIT FOR PIPES UP TO Ø525
(ENLARGED CHAMBER)
SCALE: 1:20

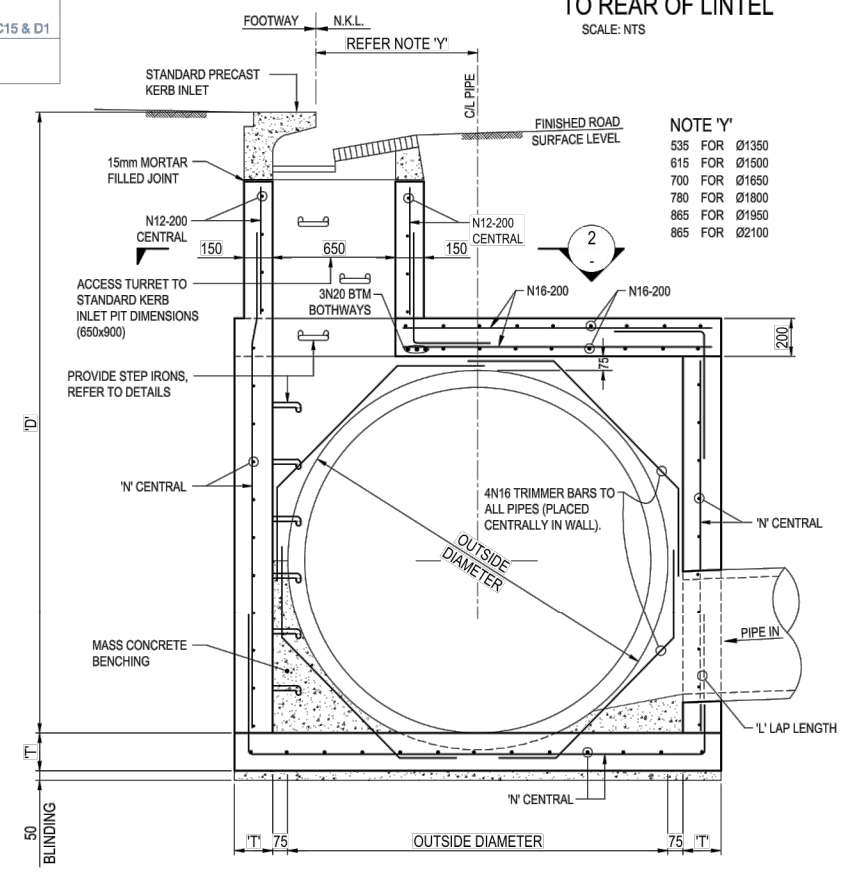
PIT DEPTH D'mm	WALLS & BASE T'mm	REO N'	LAP LENGTH L'
MAX 3000	150	N12-200	450
MAX 4000	200	N16-200	600



STANDARD GRATED KERB INLET PIT FOR PIPES FROM Ø600 TO Ø1200
(ENLARGED CHAMBER)
SCALE: 1:20

PIT DEPTH D'mm	WALLS & BASE T'mm	REO N'	LAP LENGTH L'
MAX 3000	150	N12-200	450
MAX 4000	200	N16-200	600

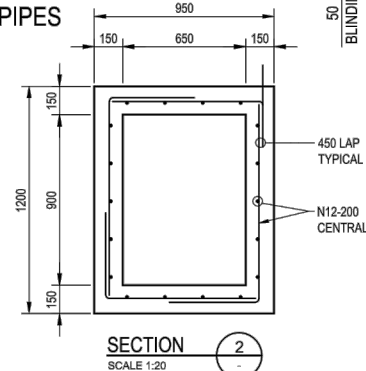
- NOTE 'X'**
- 150 FOR Ø600
 - 180 FOR Ø675
 - 220 FOR Ø750
 - 255 FOR Ø825
 - 295 FOR Ø900
 - 370 FOR Ø1050
 - 445 FOR Ø1200



STANDARD GRATED KERB INLET PIT FOR PIPES FROM Ø1350 TO Ø2100
(ENLARGED CHAMBER)
SCALE: 1:20

PIT DEPTH D'mm	WALLS & BASE T'mm	REO N'	LAP LENGTH L'
MAX 3000	200	N16-200	600
MAX 4000	200	N16-200	600

- NOTE 'Y'**
- 535 FOR Ø1350
 - 615 FOR Ø1500
 - 700 FOR Ø1650
 - 780 FOR Ø1800
 - 865 FOR Ø1950
 - 865 FOR Ø2100



SECTION 2
SCALE: 1:20

FOR CONSTRUCTION CERTIFICATE

Authorised for Issue:
BY: **RAYMOND WU**
BE MIE(Aust. CPEng, NPER(Structural))
SIGN: *[Signature]*
DATE: **10/04/18**

FILE: H15-01115 - CSR HORSLEY PARK/15-01115.12 - STAGE 1 DRAINAGE/15-01115.12-02-01.DWG LAST SAVED BY: PETER SPADARO

Rev	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIE(Aust. CPEng NER)
SIGN: *[Signature]*
DATE: **12/7/20**

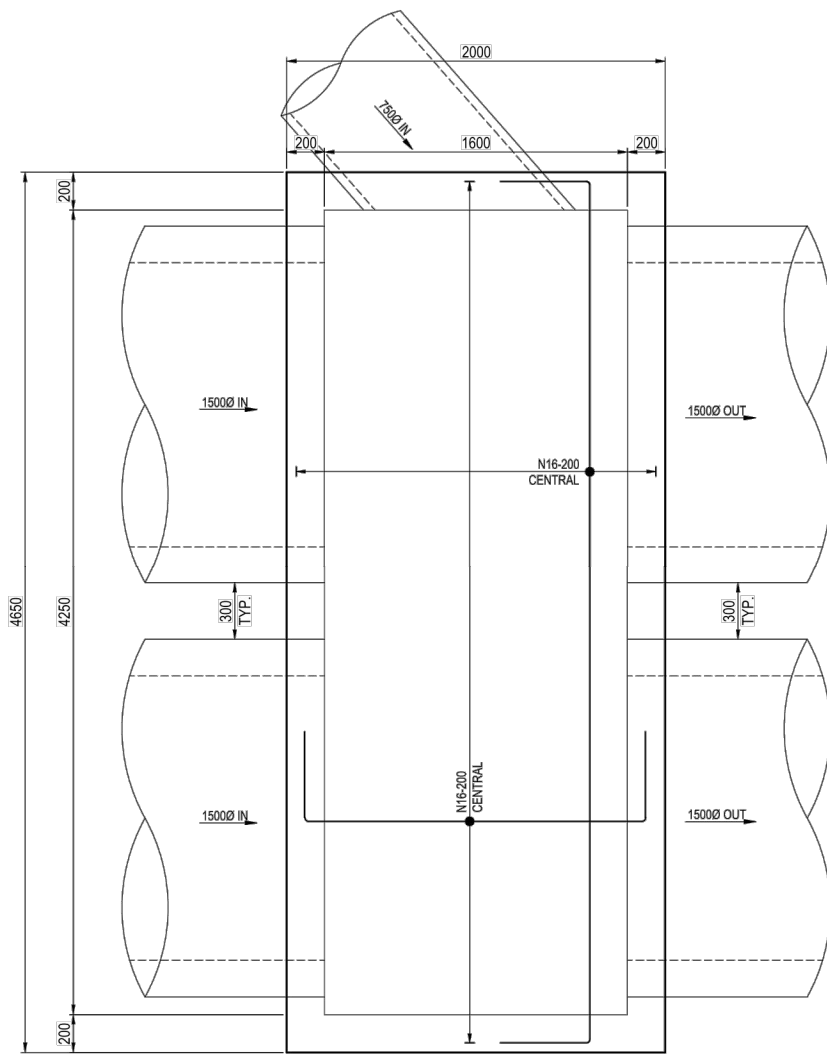
Client: **CSR LTD**

Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**

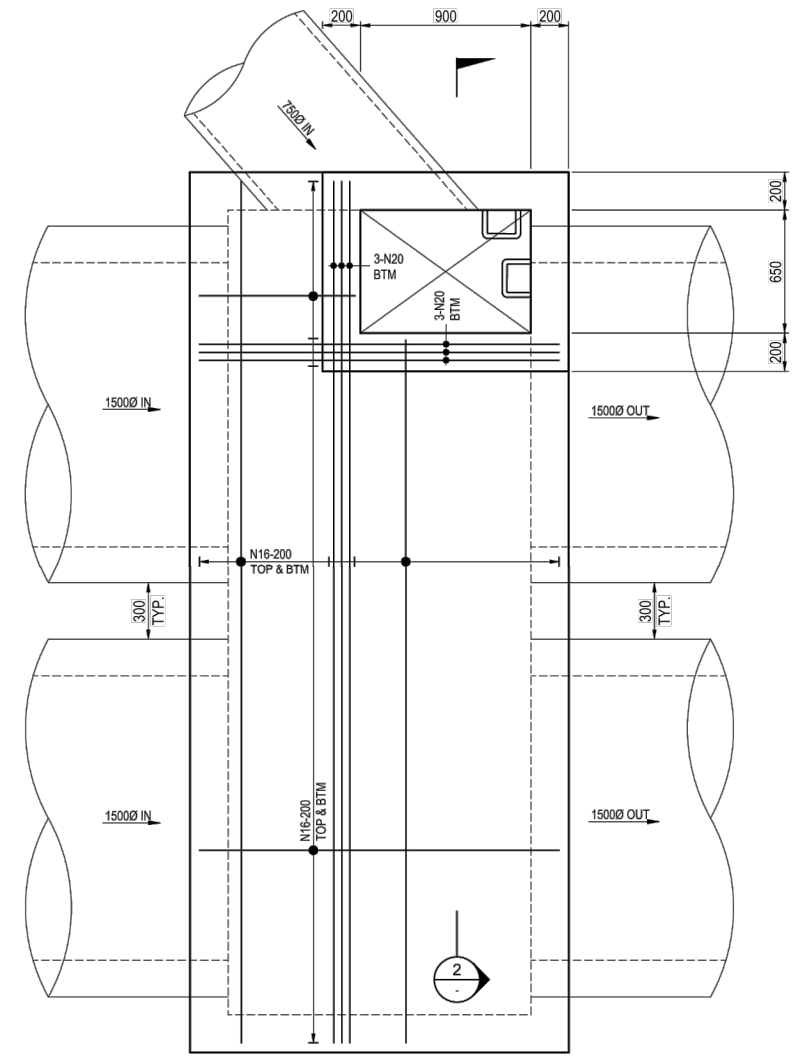
calibre
©2020
calibregroup.com.au | calibreconsulting.co

Drawing Title: **STRUCTURAL TYPICAL PIT DETAILS SHEET 01 OF 02**

Project No.:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	901	13



TYPICAL PIT (2xØ1500) BASE - 200 THICK



TYPICAL PIT (2xØ1500) ROOF - 200 THICK

NOTES:

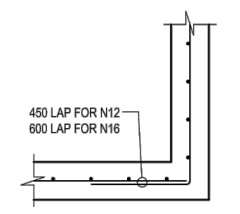
1. CONCRETE STRENGTH - UNLESS NOTED OTHERWISE

ELEMENT	f _c MPa (28 DAYS)	SLUMP	MAX AGG SIZE	CEMENT TYPE
PITS	32	80mm	20mm	GP

2. COVER - UNLESS NOTED OTHERWISE

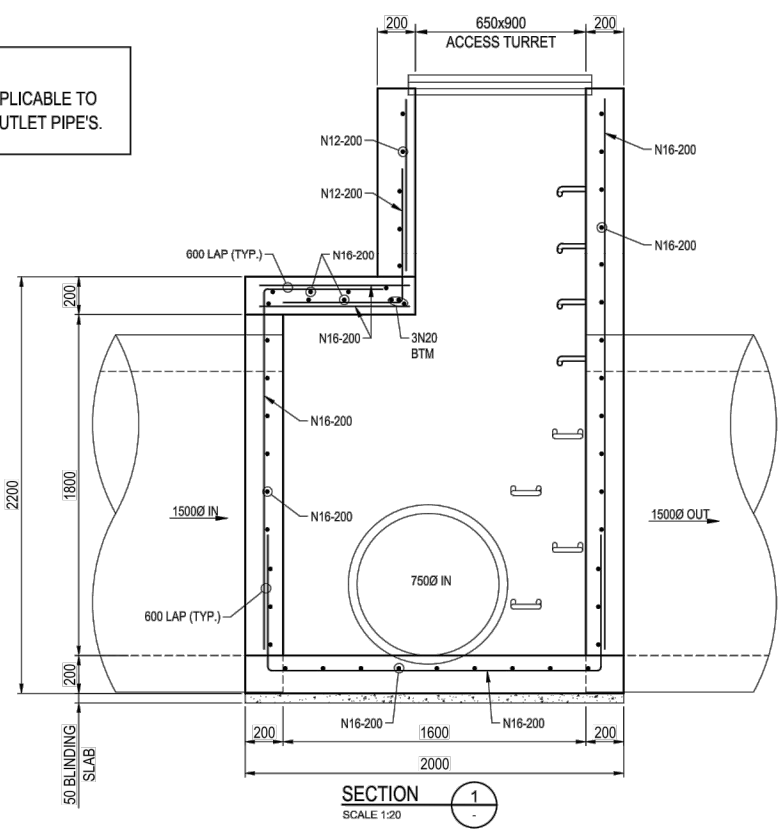
ELEMENT	INTERIOR	EXTERIOR
SLAB TOP	45mm	45mm
SLAB BOTTOM	45mm	45mm
BEAM TOP		
BEAM BOTTOM		
BEAM SIDE		
COLUMNS		

3. PROVIDE 4N16 TRIMMERS TO ALL PIPES

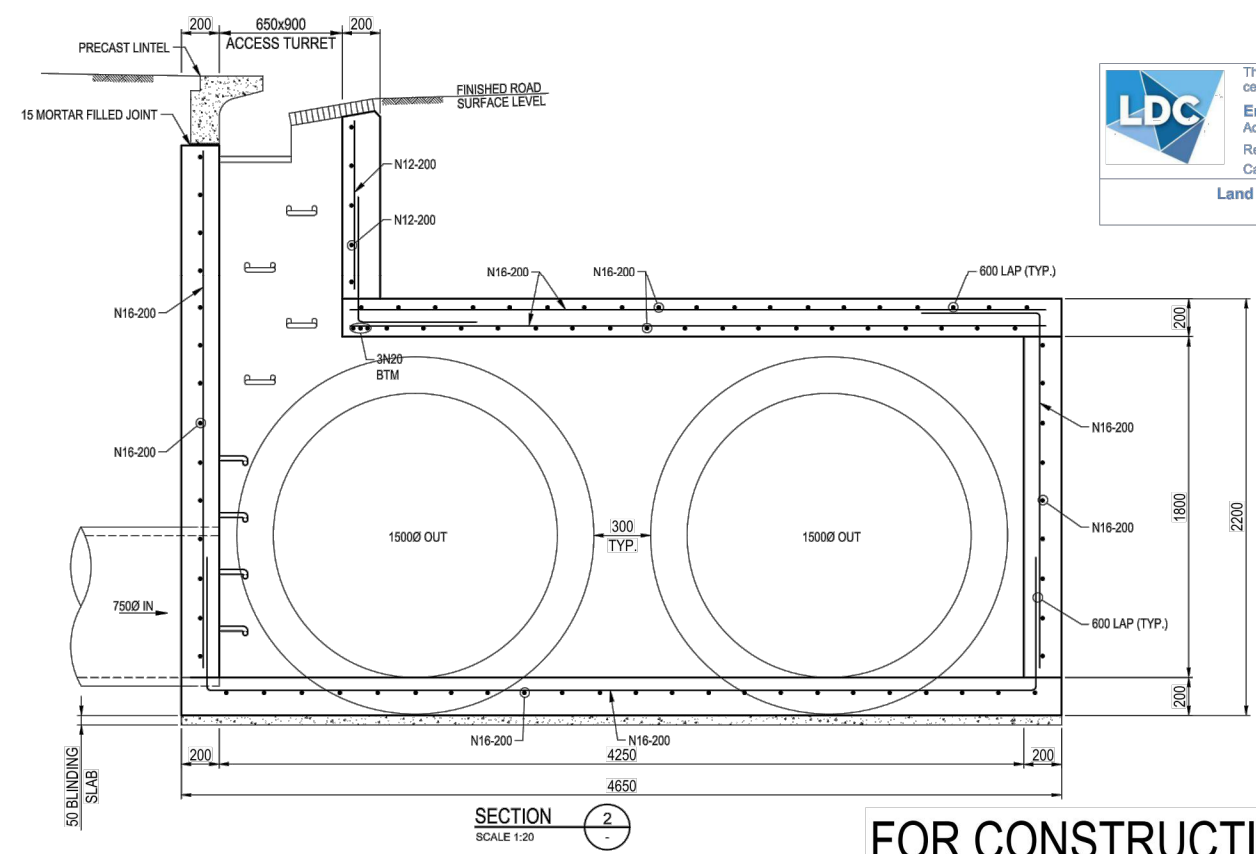


TYPICAL CORNER DETAIL
SCALE 1:20

NOTE:
INSTALL MASS BENCHING IN ALL PITS APPLICABLE TO PROVIDE GRADE BETWEEN INLET AND OUTLET PIPE'S.



SECTION 1
SCALE 1:20



SECTION 2
SCALE 1:20

These plans are referred to in certificate no. **15992** approved by:

Eric Hausfeld
Accredited Certifier
Registration No: B1B 2416
Categories: B1,C1,C2,C3,C4,C6,C15 & D1

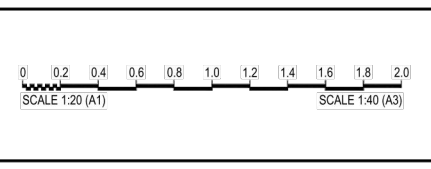
Land Development Certificates
www.LDC.com.au

Authorised for Issue:
BY: **RAYMOND WU**
BE MIEAust. CPEng, NPER(Structural)
SIGN: *[Signature]*
DATE: **10/04/18**

FOR CONSTRUCTION CERTIFICATE

LE:161616-00115 - CSR HORSLEY PARK/15-00115-12 - STAGE 1 DRAWINGS/15-00115-12-02-002.DWG LAST SAVED BY ADAM WARD

Revisors	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

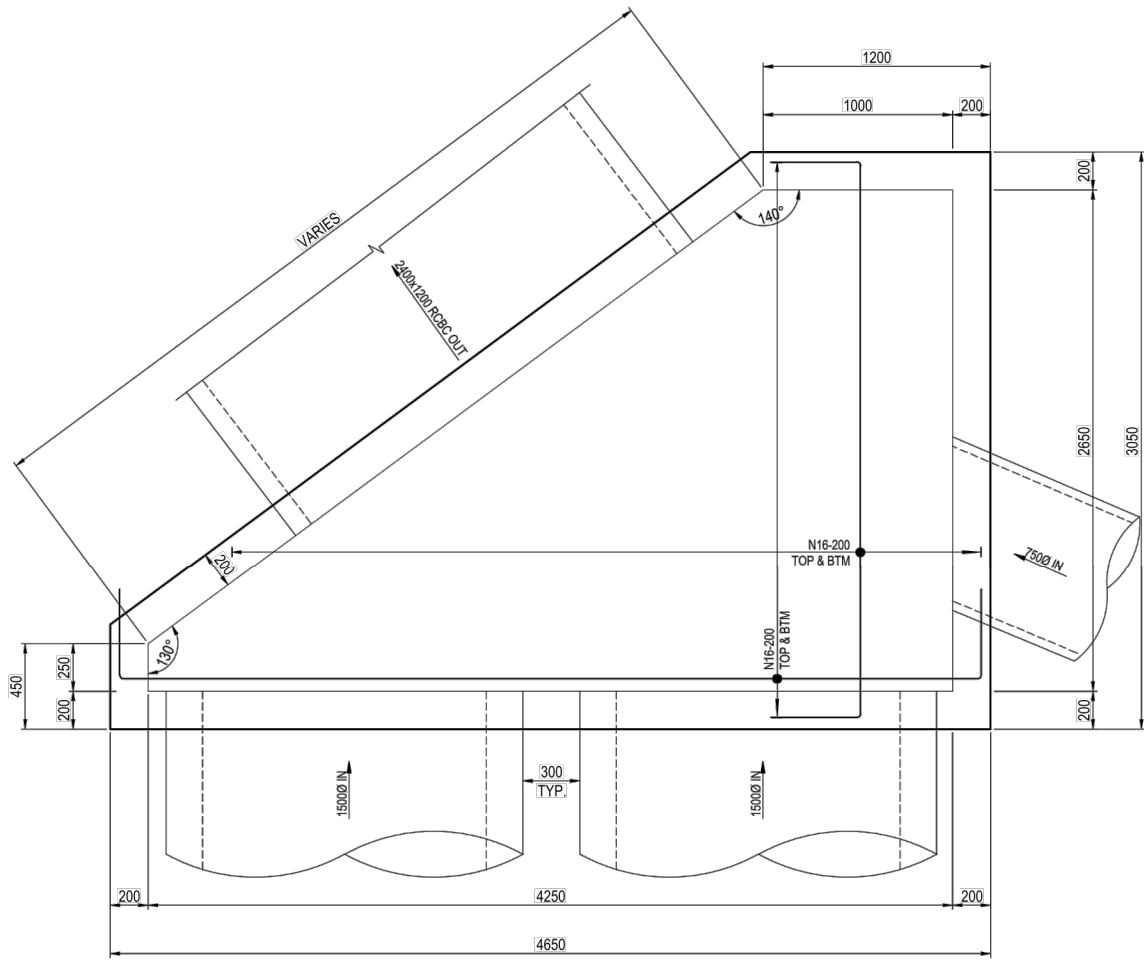
Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CPEng NER
SIGN: *[Signature]*
DATE: **12/7/20**

Client:
CSR LTD
Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS

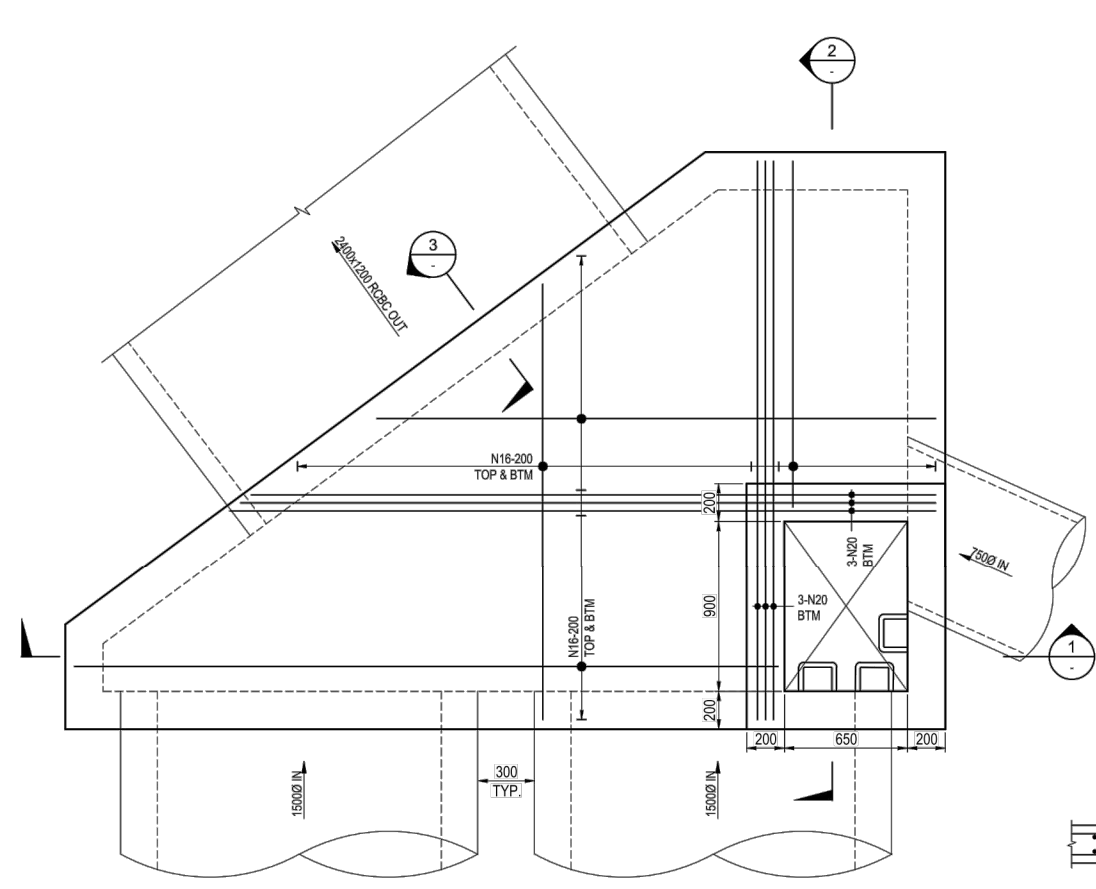
calibre
©2020 calibregroup.com.au calibreconsulting.co

Drawing Title:
STRUCTURAL TYPICAL PIT DETAILS SHEET 02 OF 02

Project No.	Stage	Milestone	Dwg No.	Revision
15-00115.12	1&2	CC	902	13



PIT 120/9 BASE - 250 THICK
SCALE 1:20



PIT 120/9 ROOF - 200 THICK
SCALE 1:20

NOTES:

1. CONCRETE STRENGTH - UNLESS NOTED OTHERWISE

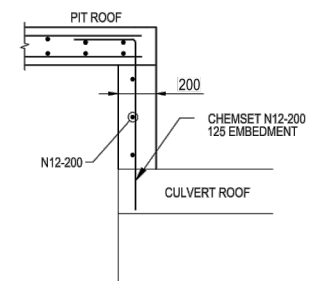
ELEMENT	f _c MPa (28 DAYS)	SLUMP	MAX AGG SIZE	CEMENT TYPE
PITS	32	80mm	20mm	GP

2. COVER - UNLESS NOTED OTHERWISE

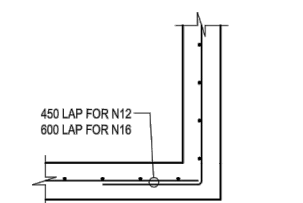
ELEMENT	INTERIOR	EXTERIOR
SLAB TOP	45mm	45mm
SLAB BOTTOM	45mm	45mm
BEAM TOP		
BEAM BOTTOM		
BEAM SIDE		
COLUMNS		

3. PROVIDE 4N16 TRIMMERS TO ALL PIPES

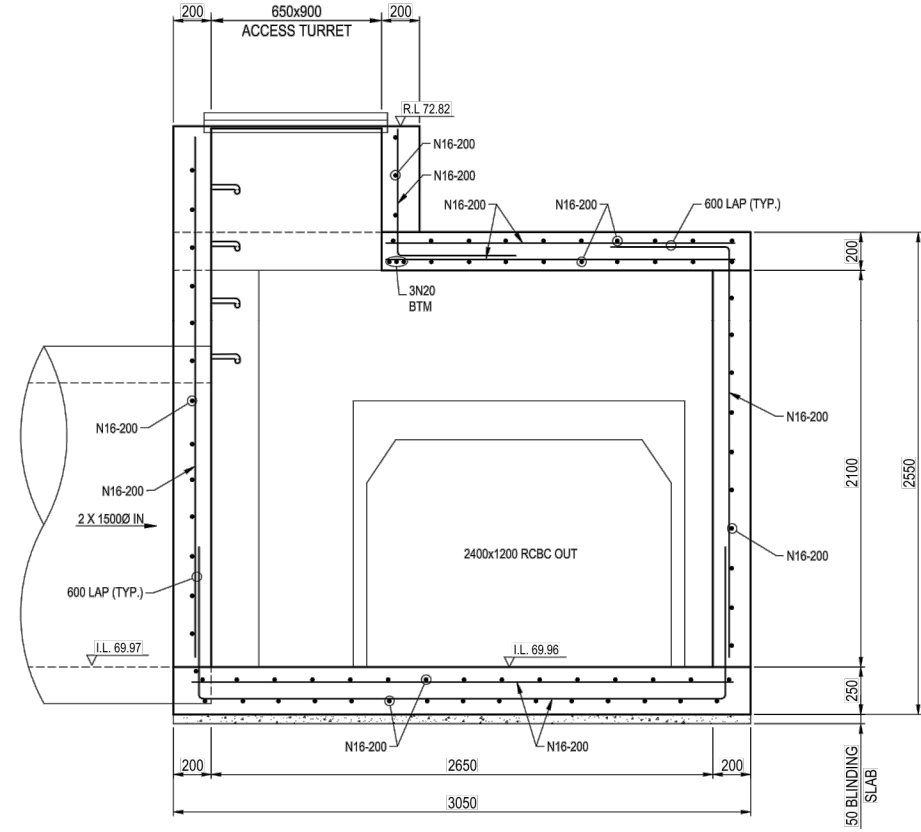
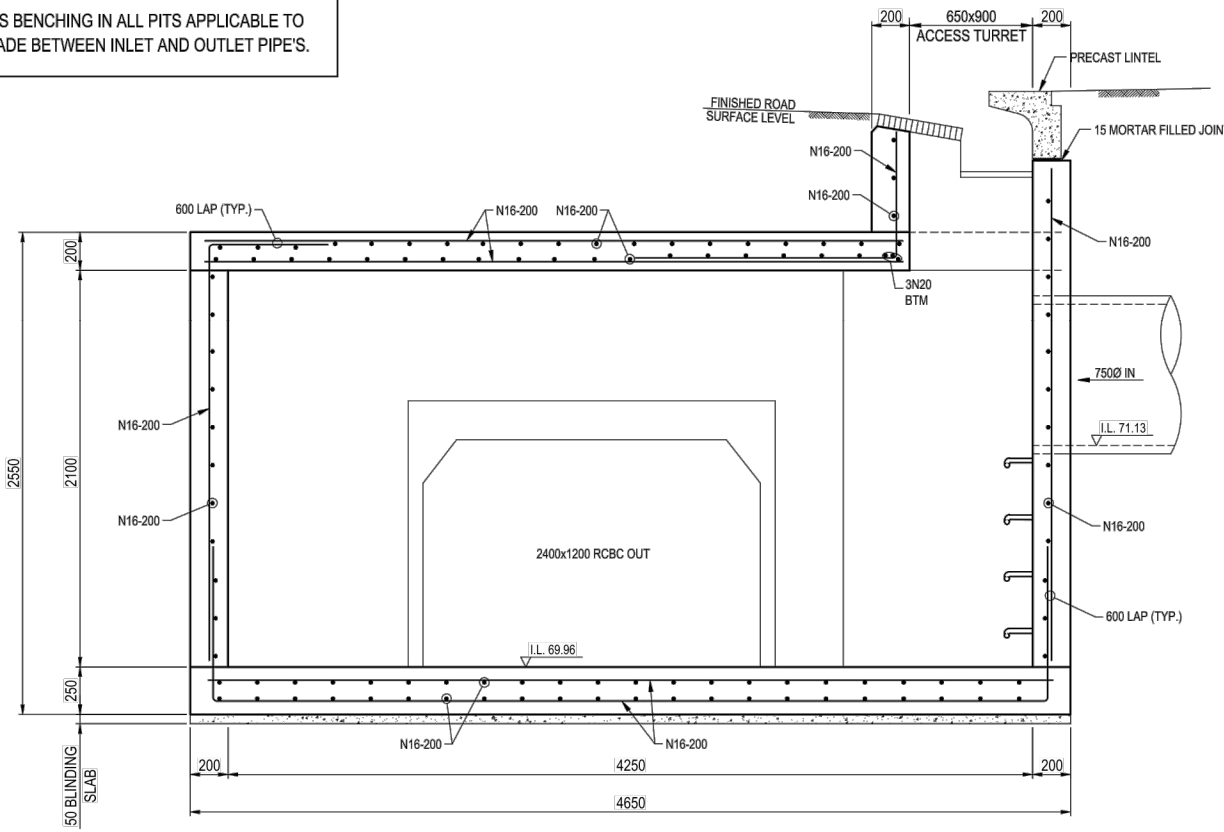
NOTE:
INSTALL MASS BENCHING IN ALL PITS APPLICABLE TO PROVIDE GRADE BETWEEN INLET AND OUTLET PIPE'S.



SECTION 3
SCALE 1:20



TYPICAL CORNER DETAIL
SCALE 1:20

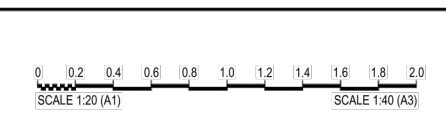


Authorised for Issue:
BY: RAYMOND WU
BE MIEAust. CPEng. NPER(Structural)
SIGN: *[Signature]*
DATE: 10/04/18

NOT IN CC

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CPEng. NER
SIGN: *[Signature]*
DATE: 12/7/20

Client:
CSR LTD
Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



Project No.	Stage	Milestone	Dwg No.	Revision
15-001115.12	1&2	CC	903	13

NOTES:

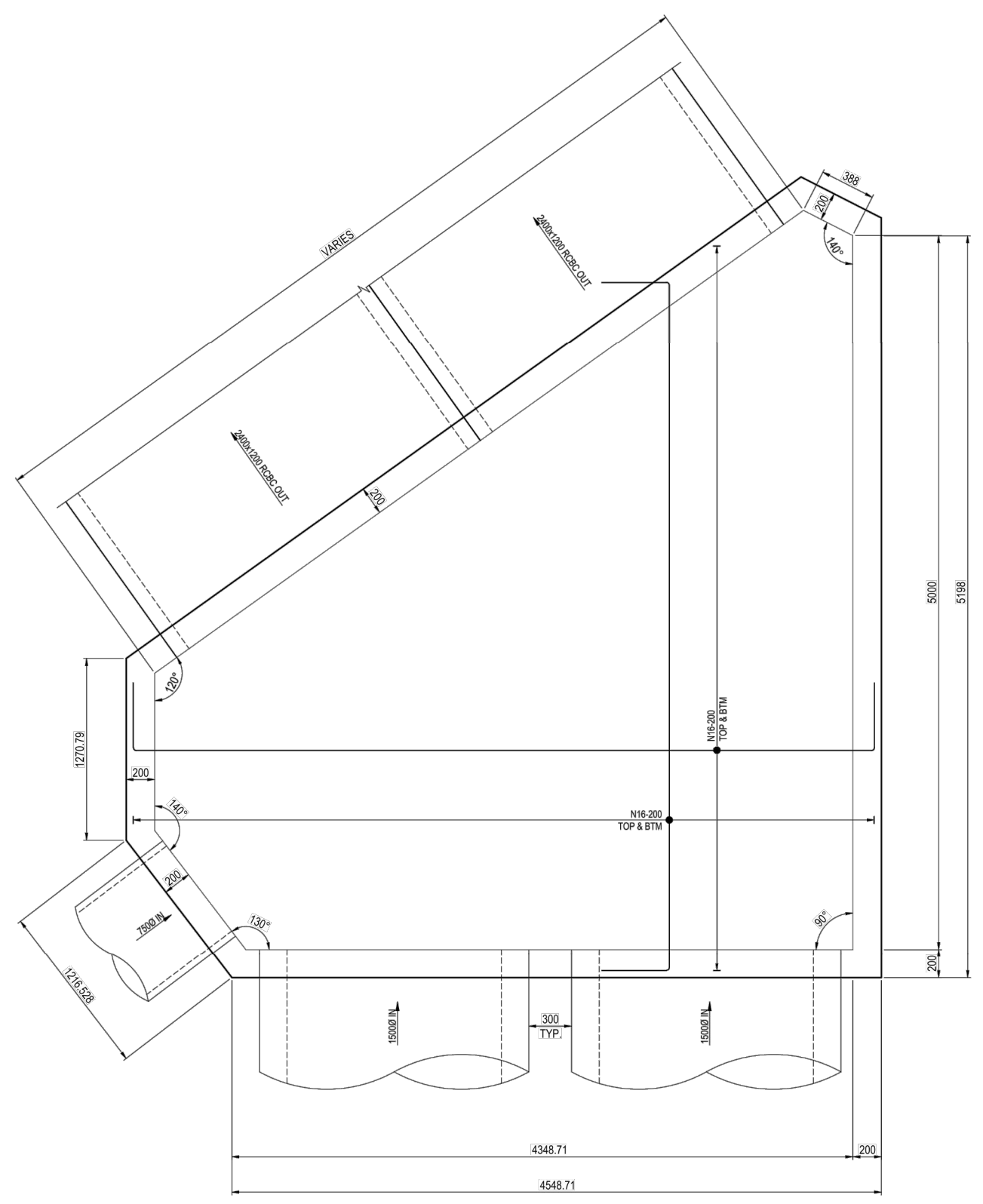
1. CONCRETE STRENGTH - UNLESS NOTED OTHERWISE

ELEMENT	f _c MPa (28 DAYS)	SLUMP	MAX AGG SIZE	CEMENT TYPE
PITS	32	80mm	20mm	GP

2. COVER - UNLESS NOTED OTHERWISE

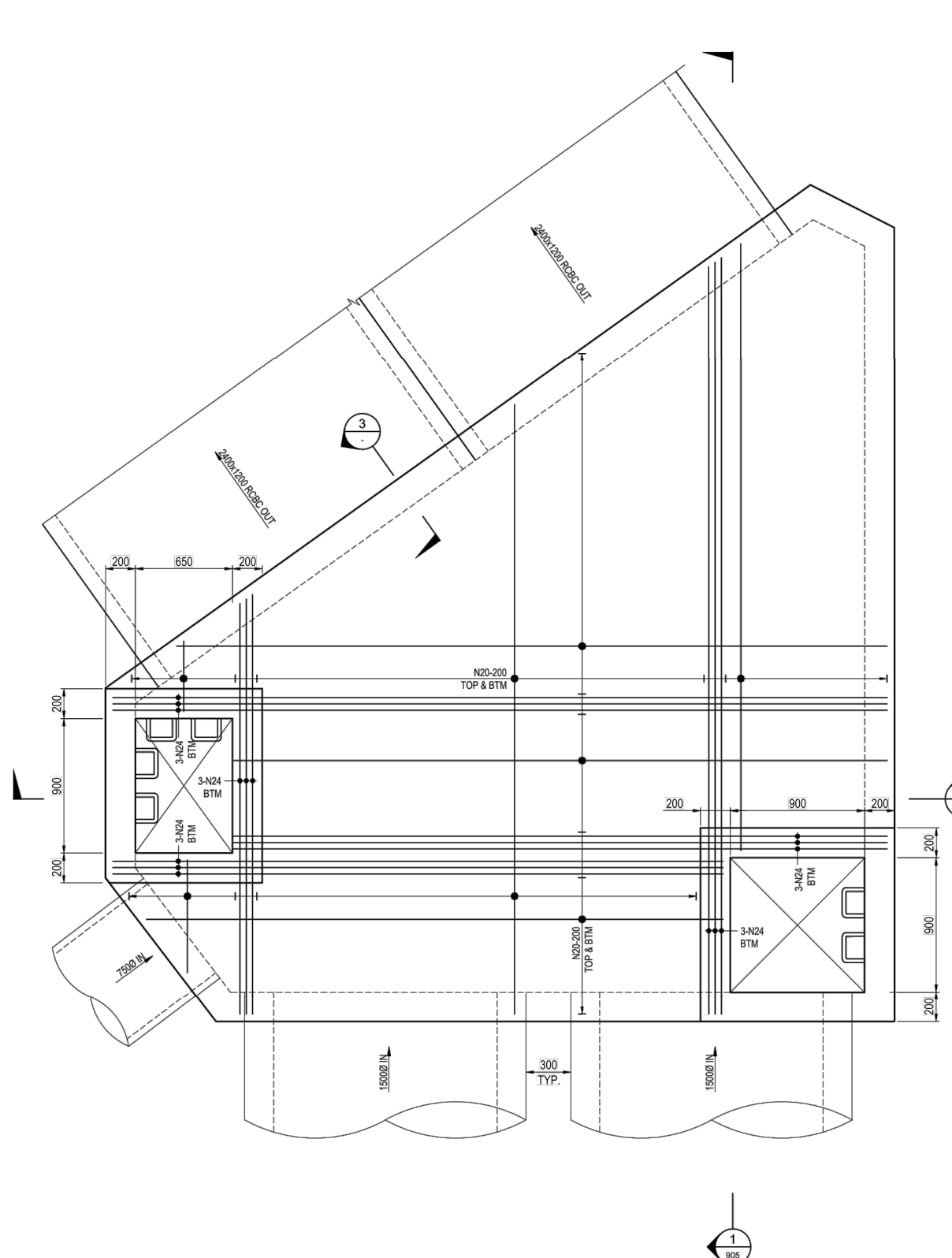
ELEMENT	INTERIOR	EXTERIOR
SLAB TOP	45mm	45mm
SLAB BOTTOM	45mm	45mm
BEAM TOP		
BEAM BOTTOM		
BEAM SIDE		
COLUMNS		

3. PROVIDE 4N16 TRIMMERS TO ALL PIPES

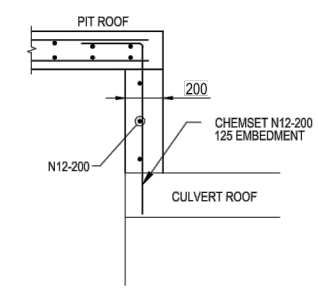


PIT 101/19 BASE - 250 THICK
SCALE 1:20

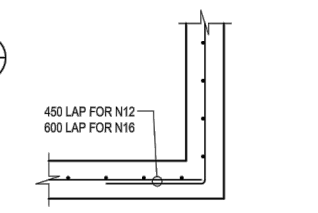
NOTE:
INSTALL MASS BENCHING IN ALL PITS APPLICABLE TO PROVIDE GRADE BETWEEN INLET AND OUTLET PIPE'S.



PIT 101/19 ROOF - 250 THICK
SCALE 1:20



SECTION 3
SCALE 1:20



TYPICAL CORNER DETAIL
SCALE 1:20

REFER TO ROAD ACT APPROVAL
No. 292. 1/2018 ISSUED BY
FAIRFIELD CITY COUNCIL

Authorised for Issue:
BY: **RAYMOND WU**
BE MIEAust. CP Eng, NPER (Structural)
SIGN: *[Signature]*
DATE: 10/04/18

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE (Hons) MIEAust. CP Eng NER
SIGN: *[Signature]*
DATE: 12/7/20

Client:
CSR LTD
Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



Project No.	Stage	Milestone	Dwg No.	Revision
15-001115.12	1&2	CC	904	13

LE: H:\15-001115 - CSR HORSLEY PARK\15-001115.12 - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS\15-001115.12-02-04-DWG LAST SAVED BY ERICEN MAZZA

NOTES:

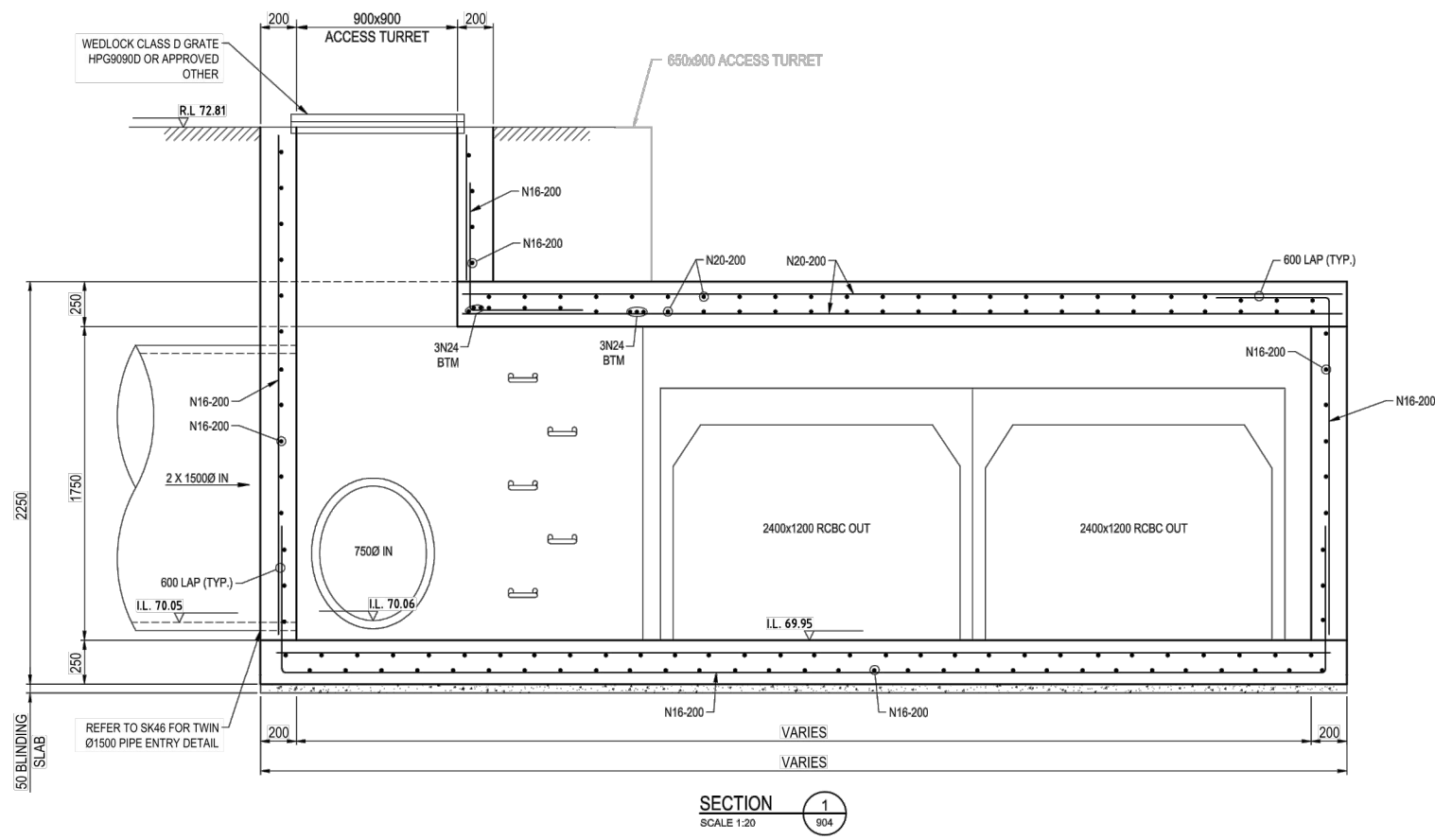
1. CONCRETE STRENGTH - UNLESS NOTED OTHERWISE

ELEMENT	f _c MPa (28 DAYS)	SLUMP	MAX AGG SIZE	CEMENT TYPE
PITS	32	80mm	20mm	GP

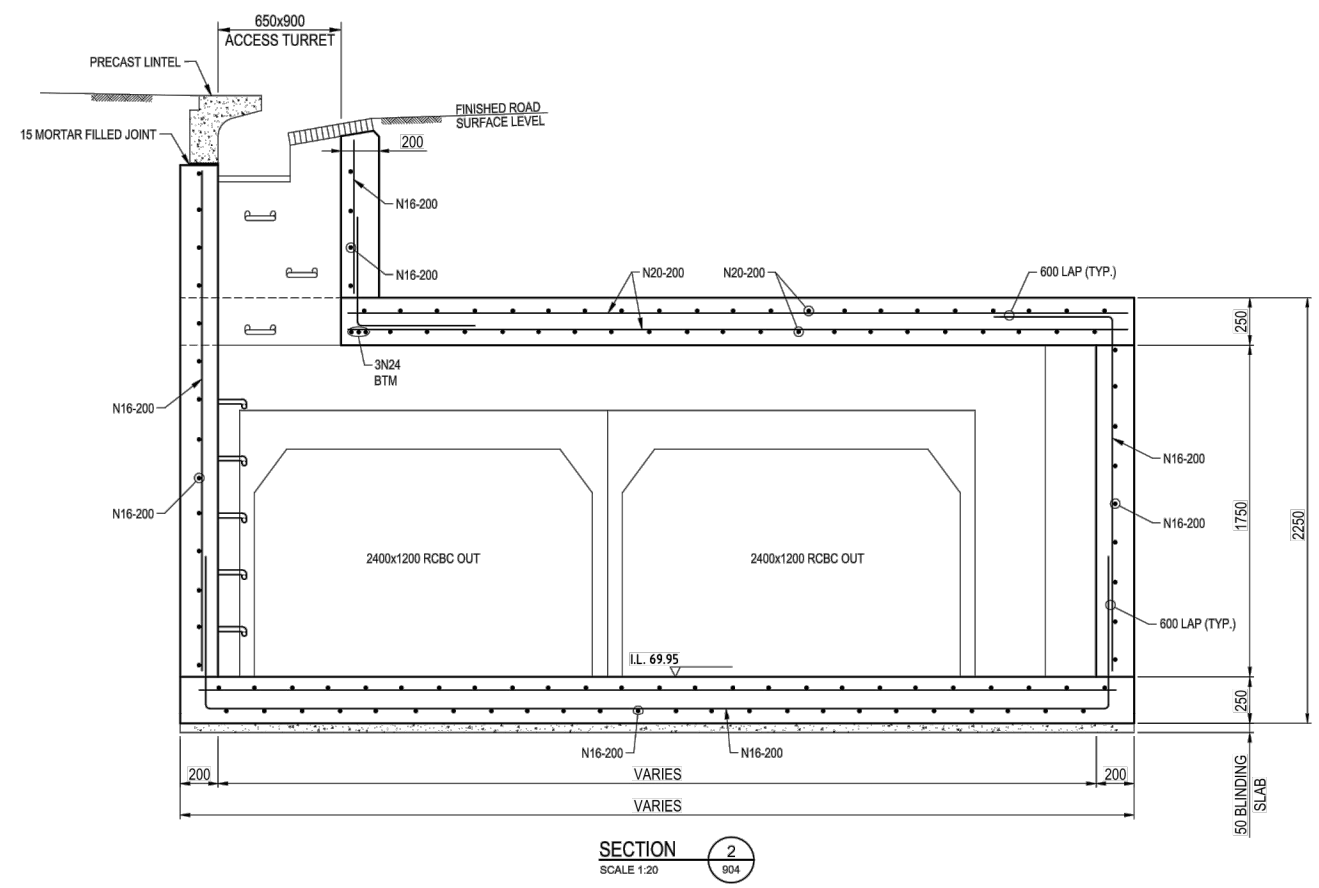
2. COVER - UNLESS NOTED OTHERWISE

ELEMENT	INTERIOR	EXTERIOR
SLAB TOP	45mm	45mm
SLAB BOTTOM	45mm	45mm
BEAM TOP		
BEAM BOTTOM		
BEAM SIDE		
COLUMNS		

3. PROVIDE 4N16 TRIMMERS TO ALL PIPES



SECTION 1
SCALE 1:20



SECTION 2
SCALE 1:20

REFER TO ROAD ACT APPROVAL
No.292.1/2018 ISSUED BY
FAIRFIELD CITY COUNCIL

NOTE:
INSTALL MASS BENCHING IN ALL PITS APPLICABLE TO PROVIDE GRADE BETWEEN INLET AND OUTLET PIPE'S.

Authorised for Issue:
BY: RAYMOND WU
BE MIEAust. CPEng, NPER(Structural)
SIGN: *[Signature]*
DATE: 10/04/18

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
13	AV	AV	LF	PD	SAG	11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

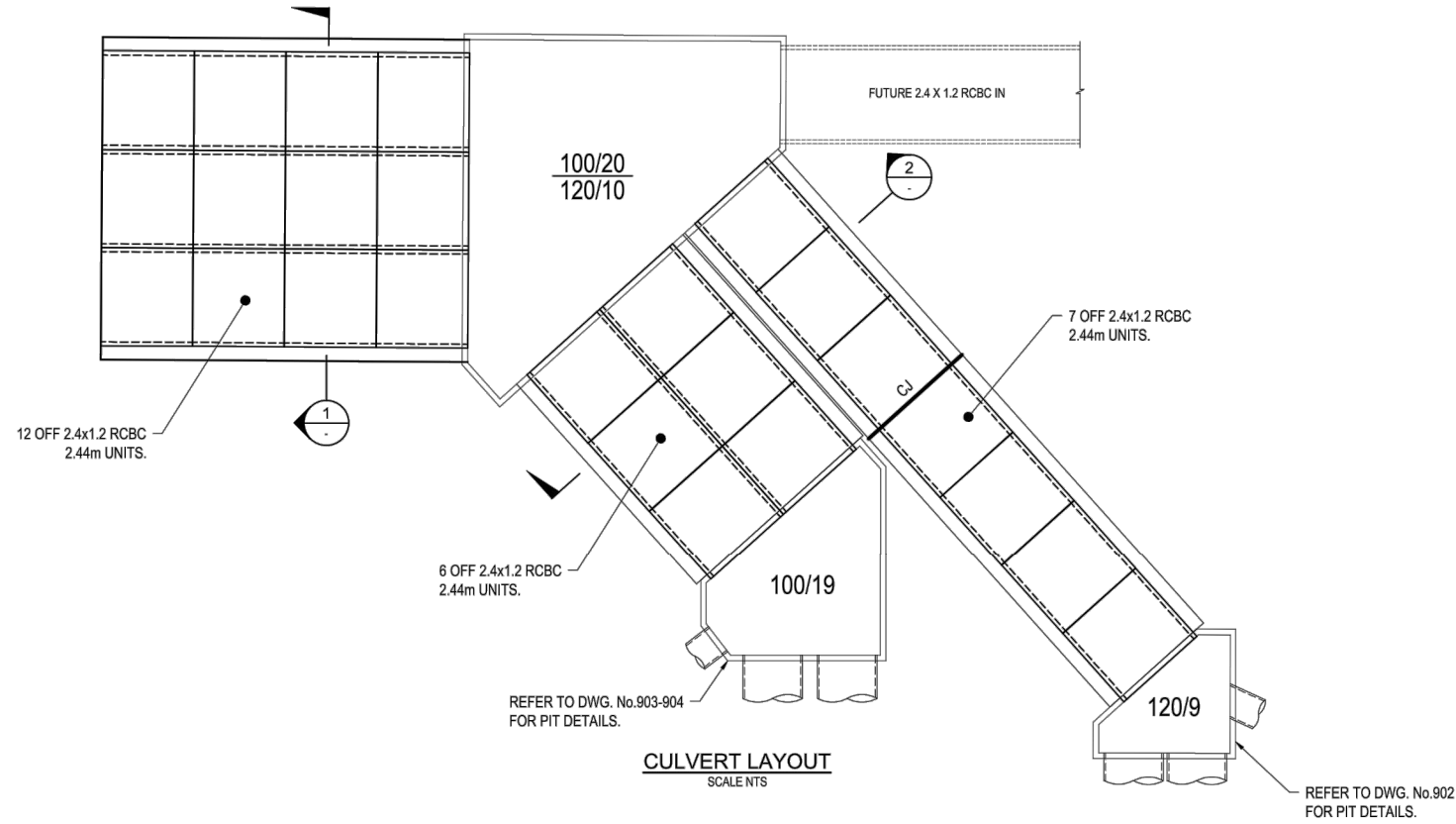
Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CPEng NER
SIGN: *[Signature]*
DATE: 12/7/20

Client:
CSR LTD
Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



Drawing Title:
STRUCTURAL PIT 100-19 SECTIONS
Project No.: 15-001115.12
Stage: 1&2
Milestone: CC
Dwg No.: 905
Revision: 13

I:\15-001115-CSR HORSLEY PARK\15-001115.12-STAGE 1&2\DRAWINGS\CD\15-001115.12-02-660.DWG LAST SAVED BY BRIDEN MAZZA



NOTE:
INSTALL MASS BENCHING IN ALL PITS APPLICABLE TO PROVIDE GRADE BETWEEN INLET AND OUTLET PIPE'S.

NOTE:
CULVERT BASE HAVE BEEN DESIGNED FOR A ALLOWABLE BEARING PRESSURE OF 150 KPa, TO BE VERIFIED BY A GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION

NOTES:

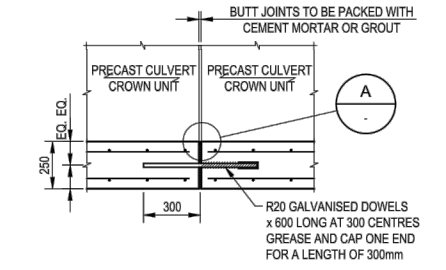
1. CONCRETE STRENGTH - UNLESS NOTED OTHERWISE

ELEMENT	f _c MPa (28 DAYS)	SLUMP	MAX AGG SIZE	CEMENT TYPE
CULVERT BASE	32	80mm	20mm	GP

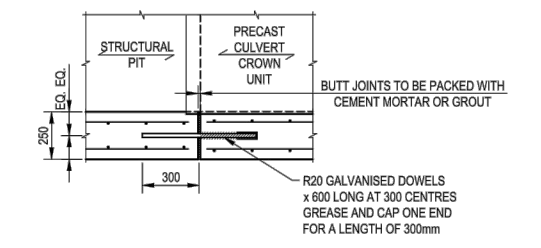
2. COVER - UNLESS NOTED OTHERWISE

ELEMENT	INTERIOR	EXTERIOR
SLAB TOP	45mm	45mm
SLAB BOTTOM	45mm	45mm
BEAM TOP		
BEAM BOTTOM		
BEAM SIDE		
COLUMNS		

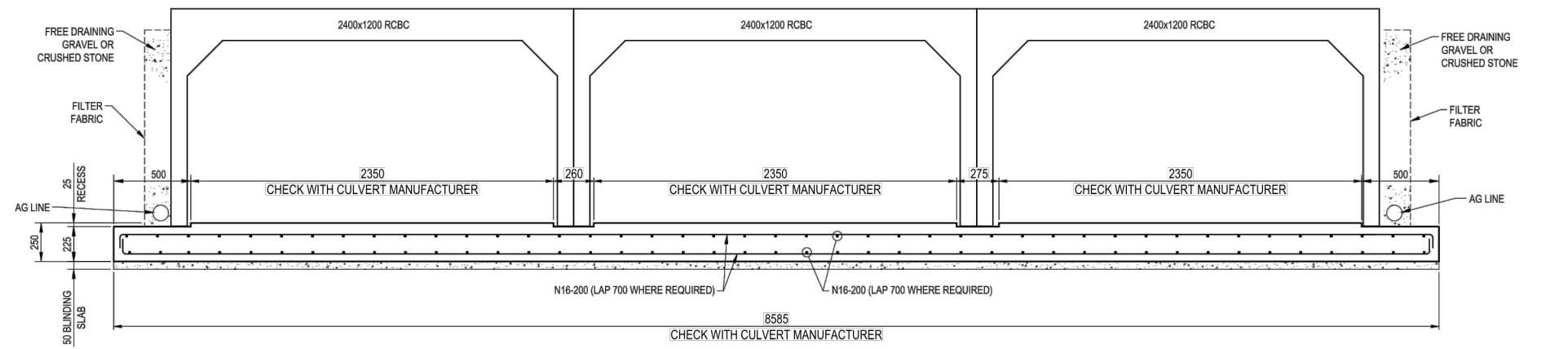
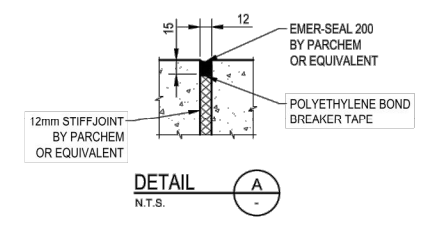
3. PROVIDE 4N16 TRIMMERS TO ALL PIPES



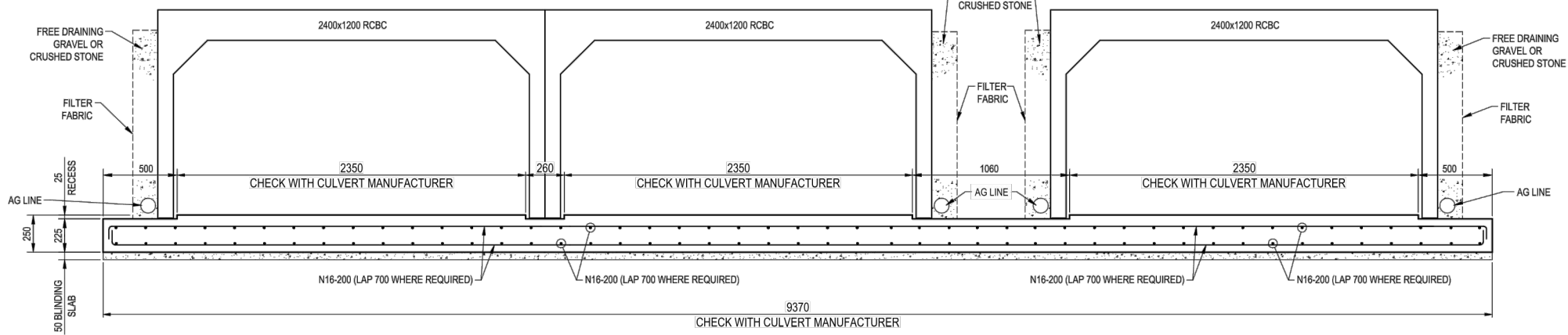
TYPICAL CULVERT CONSTRUCTION JOINT
SCALE 1:20
NOTE: JOINT TO ALIGN WITH JOINT IN CROWN UNIT



TYPICAL CULVERT-PIT DOWEL JOINT
SCALE 1:20
NOTE: JOINT TO ALIGN WITH JOINT IN CROWN UNIT



SECTION 1
SCALE 1:20



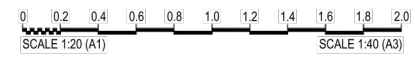
SECTION 2
SCALE 1:20

Authorised for Issue:
BY: RAYMOND WU
BE MIEAust. CPEng, NPER(Structural)
SIGN: *[Signature]*
DATE: 10/04/18

FOR CONSTRUCTION CERTIFICATE

FILE: H1519-01115-CSR HORSLEY PARK15-01115.12 - STAGE 1 DRAWINGS/CDM C1515-01115.12-02-000.DWG LAST SAVED BY: VERONIQUE BELLER

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



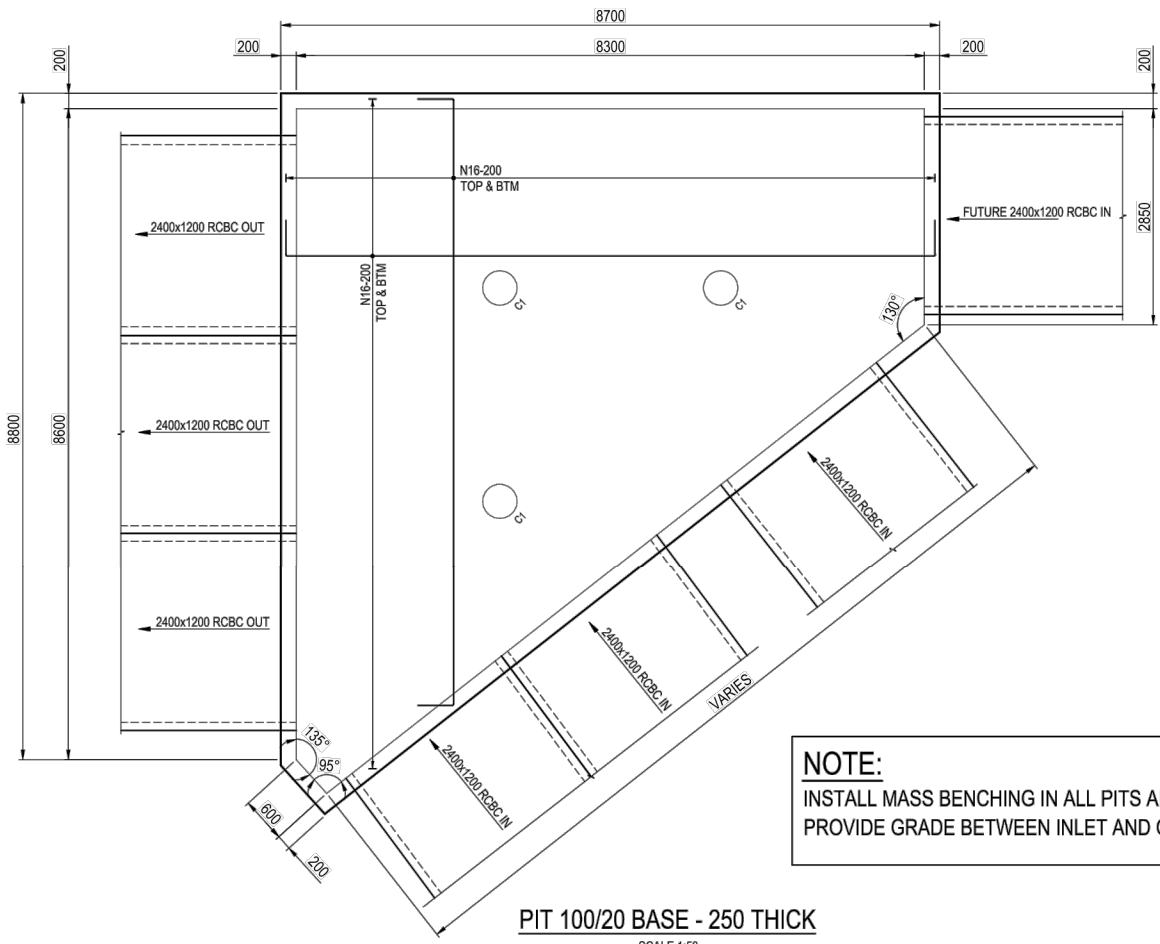
Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CPEng NER
SIGN: *[Signature]*
DATE: 12/7/20

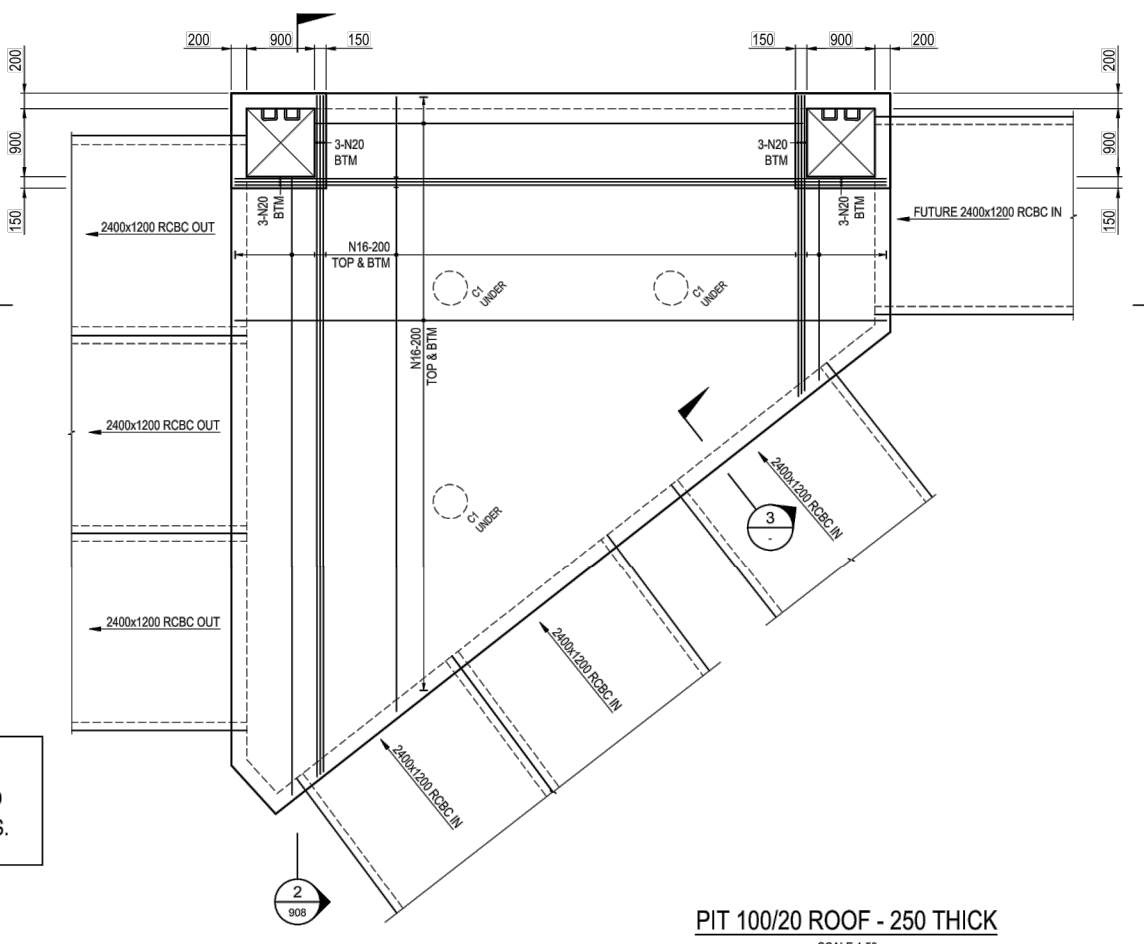
Client:
CSR LTD
Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



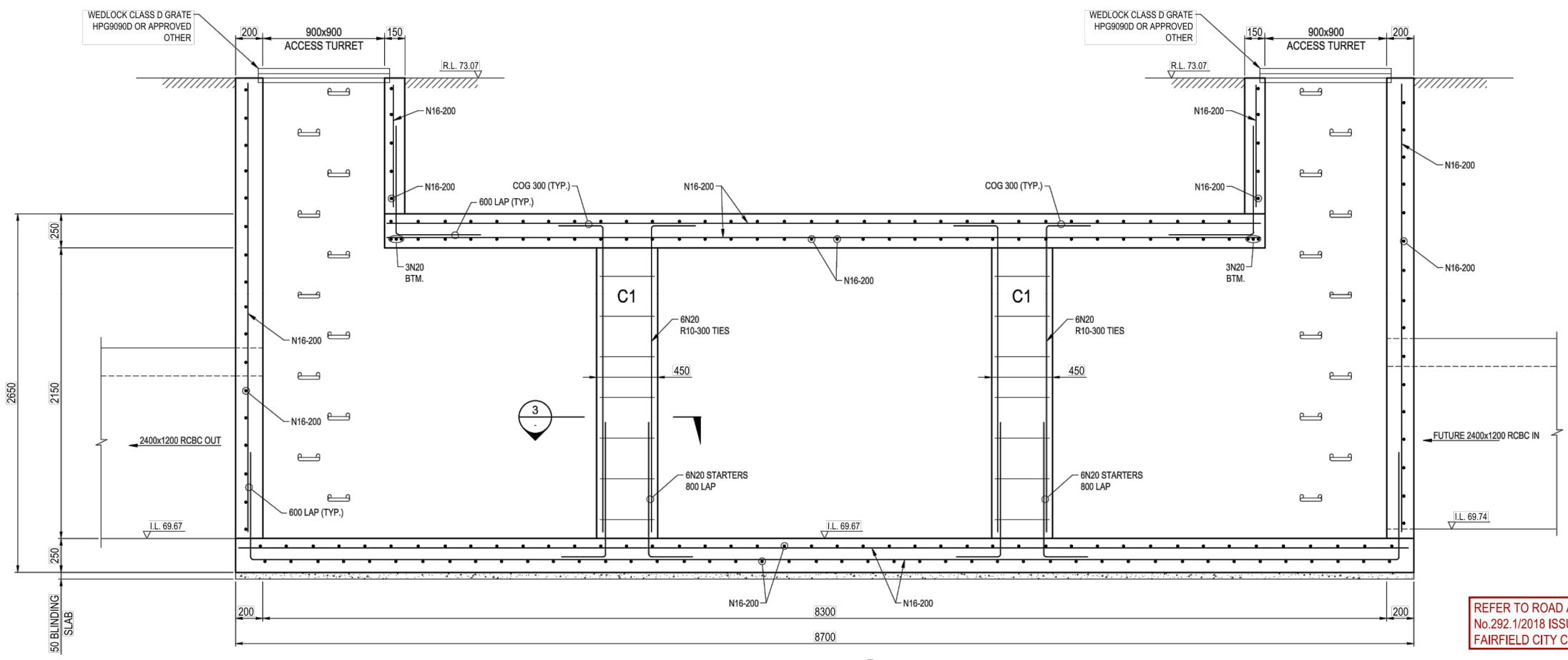
Project No.	Stage	Milestone	Dwg No.	Revision
15-001115.12	1&2	CC	906	13



PIT 100/20 BASE - 250 THICK
SCALE 1:50



PIT 100/20 ROOF - 250 THICK
SCALE 1:50



SECTION 1
SCALE 1:20

NOTES:

1. CONCRETE STRENGTH - UNLESS NOTED OTHERWISE

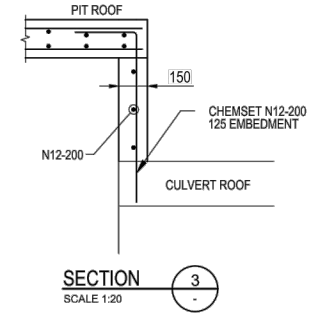
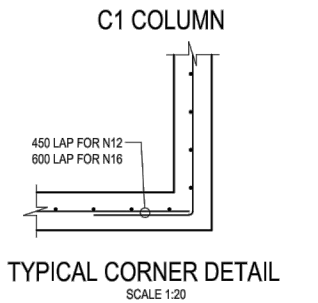
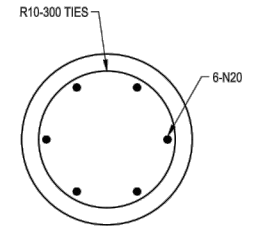
ELEMENT	Fc (MPa) (28 DAYS)	SLUMP	MAX AGG. SIZE	CEMENT TYPE
CULVERT BASE	32	80mm	20mm	GP

2. COVER - UNLESS NOTED OTHERWISE

ELEMENT	INTERIOR	EXTERIOR
SLAB TOP	45mm	45mm
SLAB BOTTOM	45mm	45mm
BEAM TOP		
BEAM BOTTOM		
BEAM SIDE		
COLUMNS		

3. PROVIDE 4N16 TRIMMERS TO ALL PIPES

NOTE:
FOR PIT 100/20, SUPERINTENDENT TO BE NOTIFIED BEFORE ANY CONSTRUCTION BEGINS. ALTERNATIVE CONSTRUCTION METHODS NEED TO BE APPROVED PRIOR TO ANY WORKS.



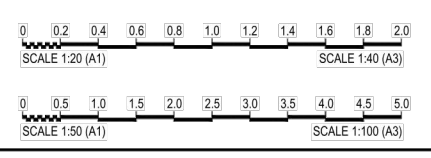
REFER TO ROAD ACT APPROVAL No.292.1/2018 ISSUED BY FAIRFIELD CITY COUNCIL

Authorised for Issue:
BY: RAYMOND WU
BE MIEAust. CPEng, NPER(Structural)
SIGN: [Signature]
DATE: 10/04/18

FOR CONSTRUCTION CERTIFICATE

LE: 15161910115 - CSR HORSLEY PARK 1510115.12 - STAGE 1 DRAWINGS/CD 1510115.12-02-007.DWG LAST SAVED BY: BRIDEN MAZZA

Revisions	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CPEng NER
SIGN: [Signature]
DATE: 12/7/20

Client: CSR LTD
Project: CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



Project No.	Stage	Milestone	Dwg No.	Revision
15-001115.12	1&2	CC	907	13

NOTE:
FOR PIT 100/20, SUPERINTENDENT TO BE NOTIFIED BEFORE ANY CONSTRUCTION BEGINS. ALTERNATIVE CONSTRUCTION METHODS NEED TO BE APPROVED PRIOR TO ANY WORKS.

NOTES:

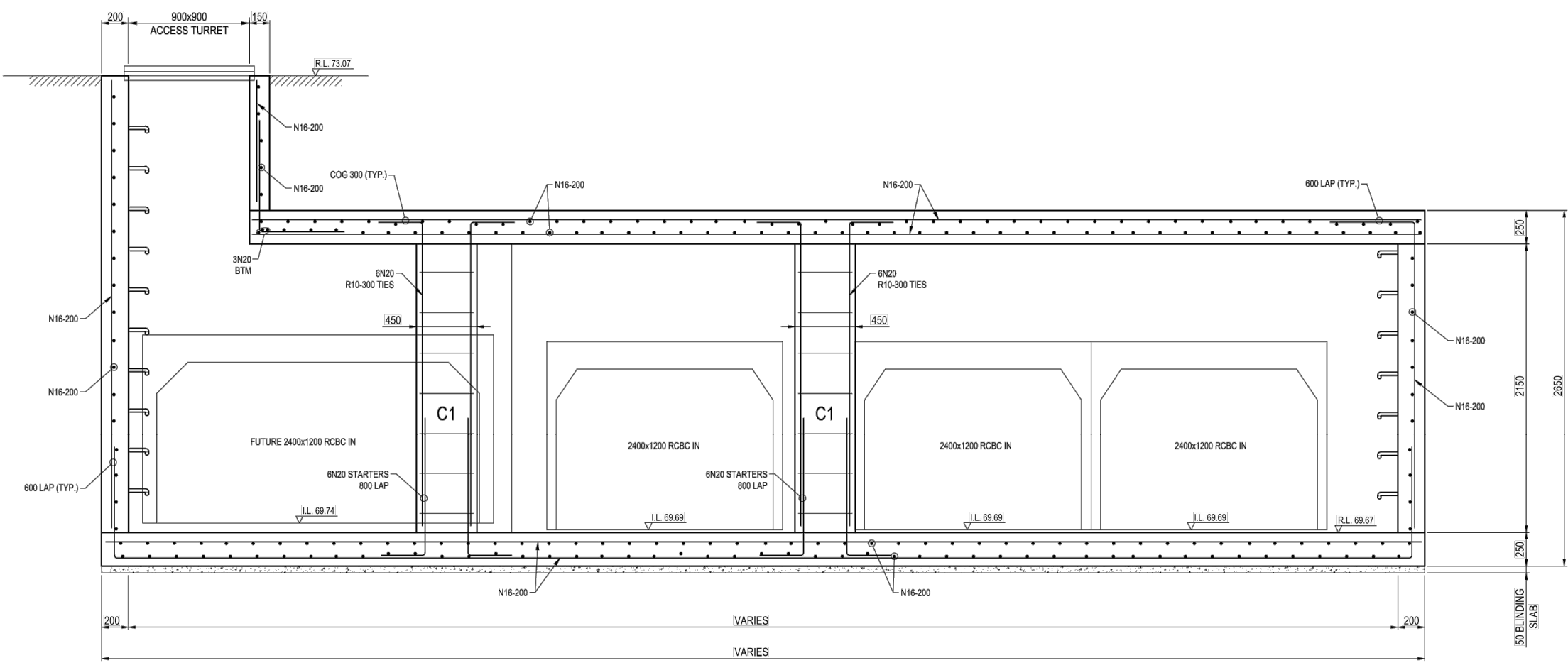
1. CONCRETE STRENGTH - UNLESS NOTED OTHERWISE

ELEMENT	f _c MPa (28 DAYS)	SLUMP	MAX AGG SIZE	CEMENT TYPE
CULVERT BASE	32	80mm	20mm	GP

2. COVER - UNLESS NOTED OTHERWISE

ELEMENT	INTERIOR	EXTERIOR
SLAB TOP	45mm	45mm
SLAB BOTTOM	45mm	45mm
BEAM TOP		
BEAM BOTTOM		
BEAM SIDE		
COLUMNS		

3. PROVIDE 4N16 TRIMMERS TO ALL PIPES



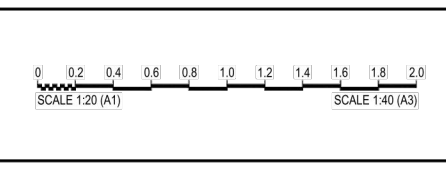
SECTION 2
SCALE 1:20

NOTE:
INSTALL MASS BENCHING IN ALL PITS APPLICABLE TO PROVIDE GRADE BETWEEN INLET AND OUTLET PIPE'S.

Authorised for Issue:
BY: RAYMOND WU
BE MIEAust. CP Eng, NPER (Structural)
SIGN: *[Signature]*
DATE: 10/04/18

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18		RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-02/18		ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18		AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19		AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20		ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20		ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16		



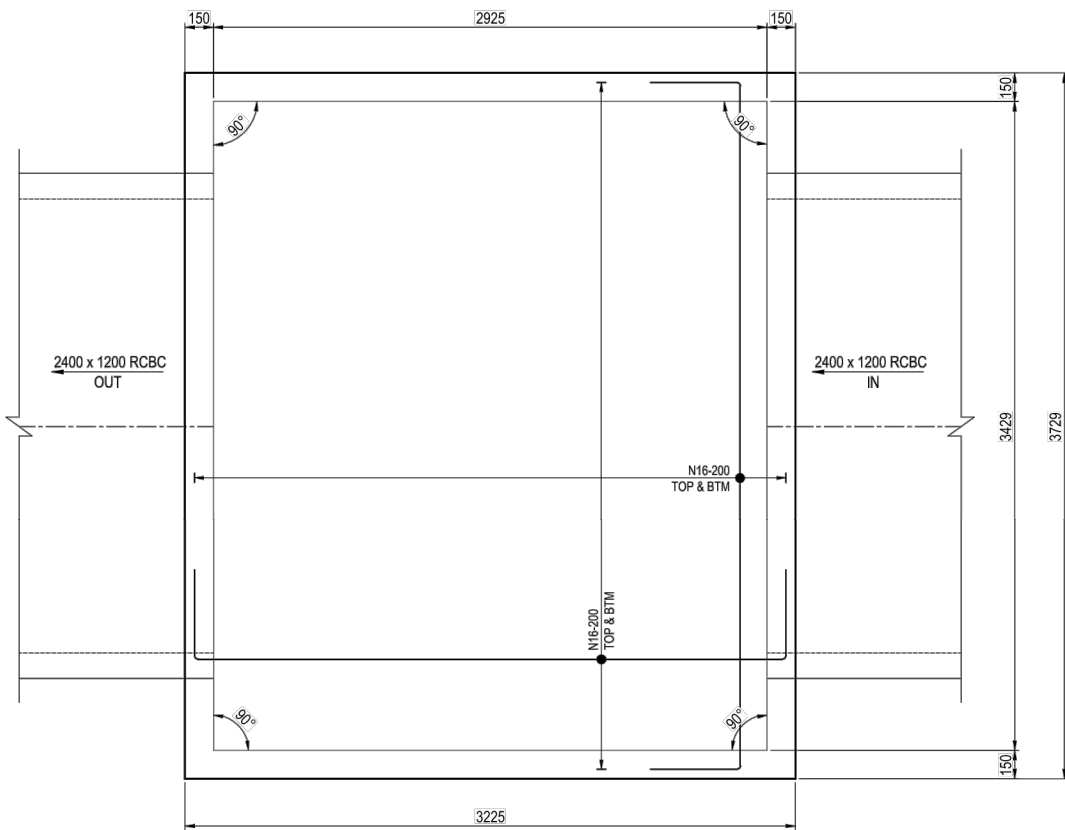
Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE (Hons) MIEAust. CP Eng NER
SIGN: *[Signature]*
DATE: 12/7/20

Client:
CSR LTD
Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS

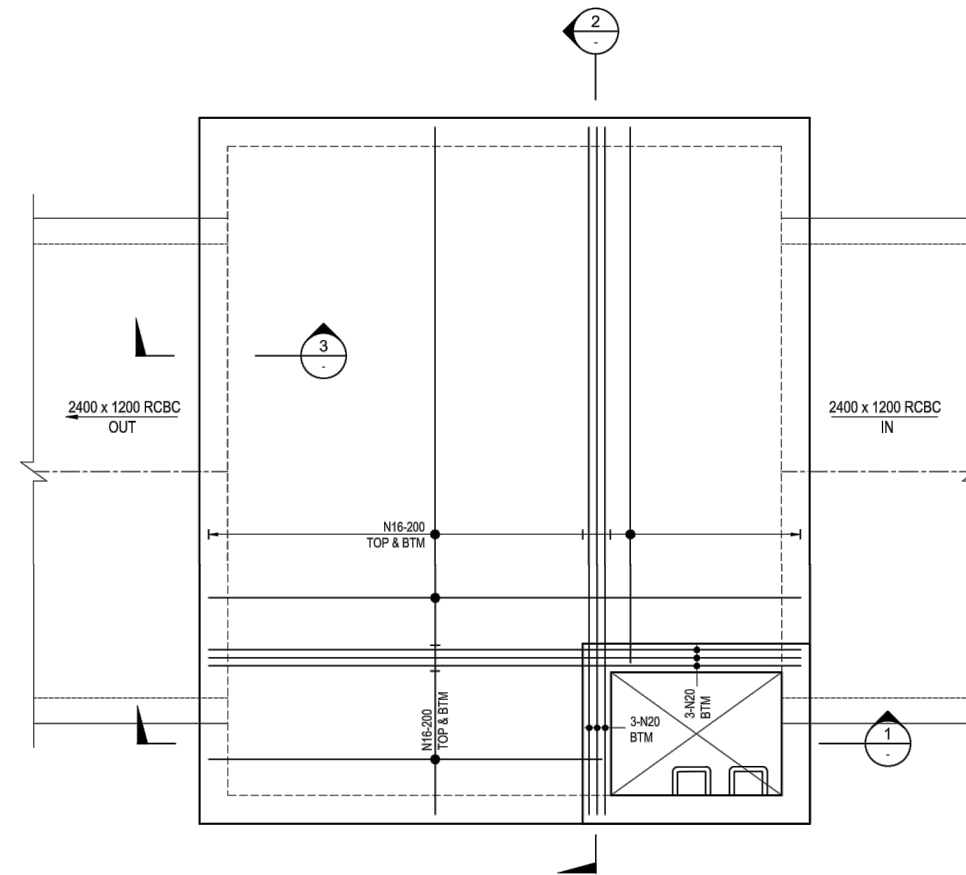


Project No.	Stage	Milestone	Dwg No.	Revision
15-001115.12	1&2	CC	908	13



PIT SW ACCESS RD/7 BASE - 250 THICK

SCALE 1:20



PIT SW ACCESS RD/7 ROOF - 200 THICK

SCALE 1:20

NOTES:

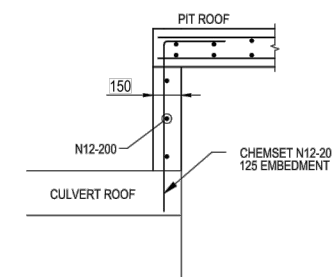
1. CONCRETE STRENGTH - UNLESS NOTED OTHERWISE

ELEMENT	f _c MPa (28 DAYS)	SLUMP	MAX AGG SIZE	CEMENT TYPE
PITS	32	85mm	20mm	GP

2. COVER - UNLESS NOTED OTHERWISE

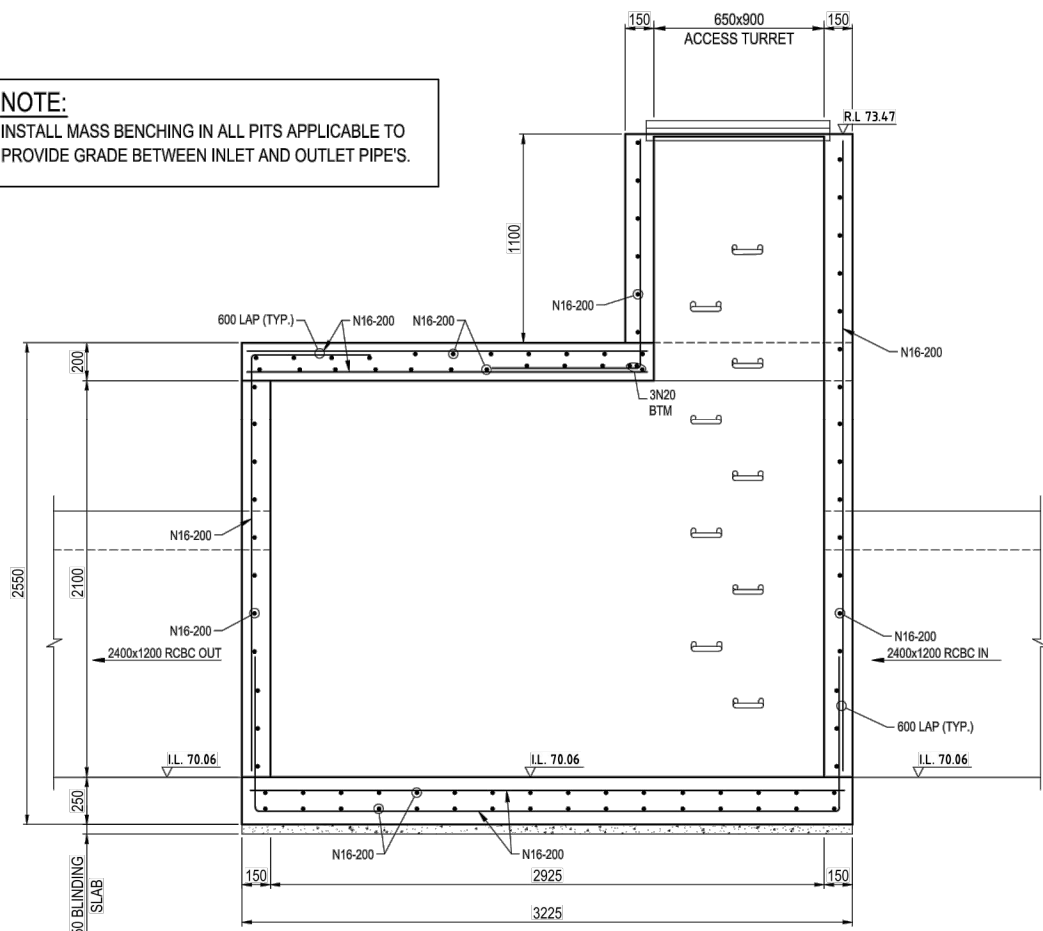
ELEMENT	INTERIOR	EXTERIOR
SLAB TOP	45mm	45mm
SLAB BOTTOM	45mm	45mm
BEAM TOP		
BEAM BOTTOM		
BEAM SIDE		
COLUMNS		

3. PROVIDE 4N16 TRIMMERS TO ALL PIPES

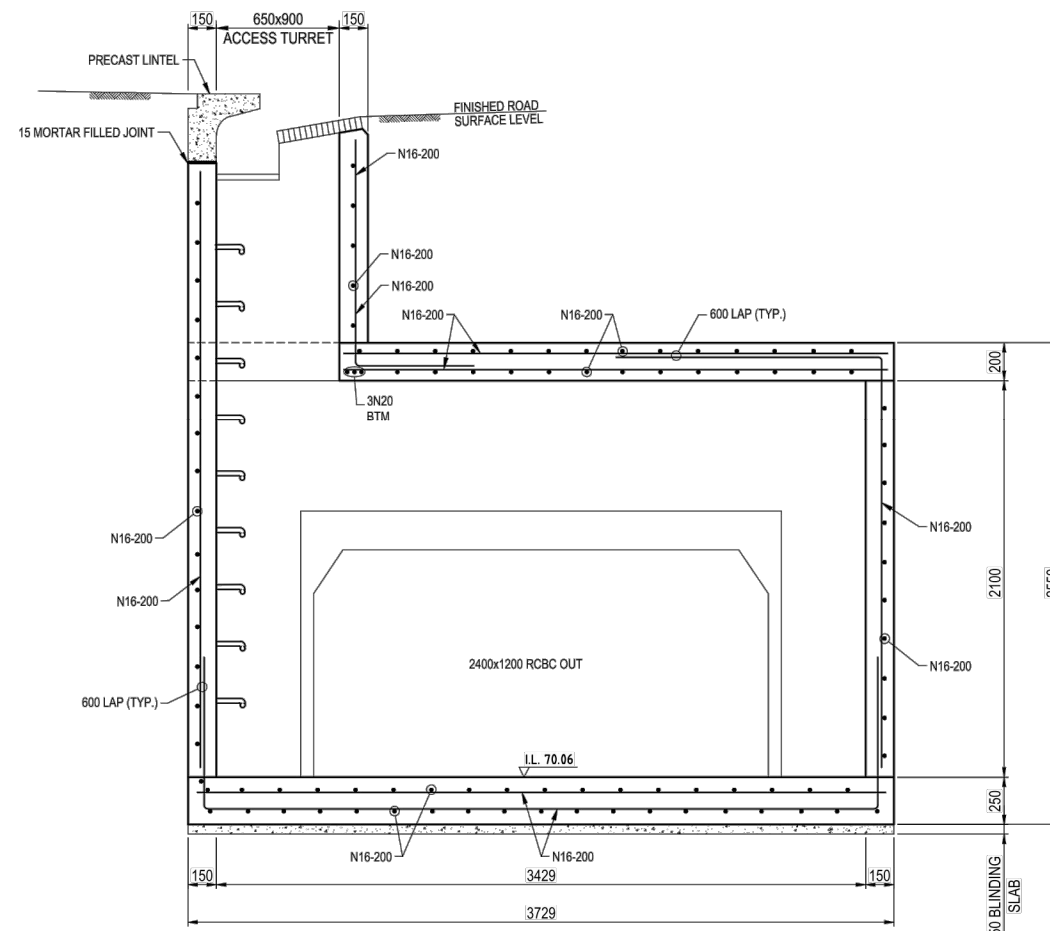


SECTION 3
SCALE 1:20

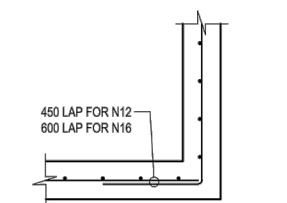
NOTE:
INSTALL MASS BENCHING IN ALL PITS APPLICABLE TO PROVIDE GRADE BETWEEN INLET AND OUTLET PIPE'S.



SECTION 1
SCALE 1:20



SECTION 2
SCALE 1:20



TYPICAL CORNER DETAIL
SCALE 1:20

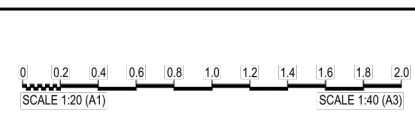
REFER TO ROAD ACT APPROVAL
No.292.1/2018 ISSUED BY
FAIRFIELD CITY COUNCIL

Authorised for Issue:
BY: RAYMOND WU
BE MIEAust. CPEng. NPER(Structural)
SIGN: [Signature]
DATE: 10/04/18

FOR CONSTRUCTION CERTIFICATE

LE: H1616-01115 - CSR HORSLEY PARK 15-01115.12 - STAGE 1 DRAINAGE CD15-01115.12-02-00-DWG LAST SAVED BY PETER SPADARO

Revisors	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



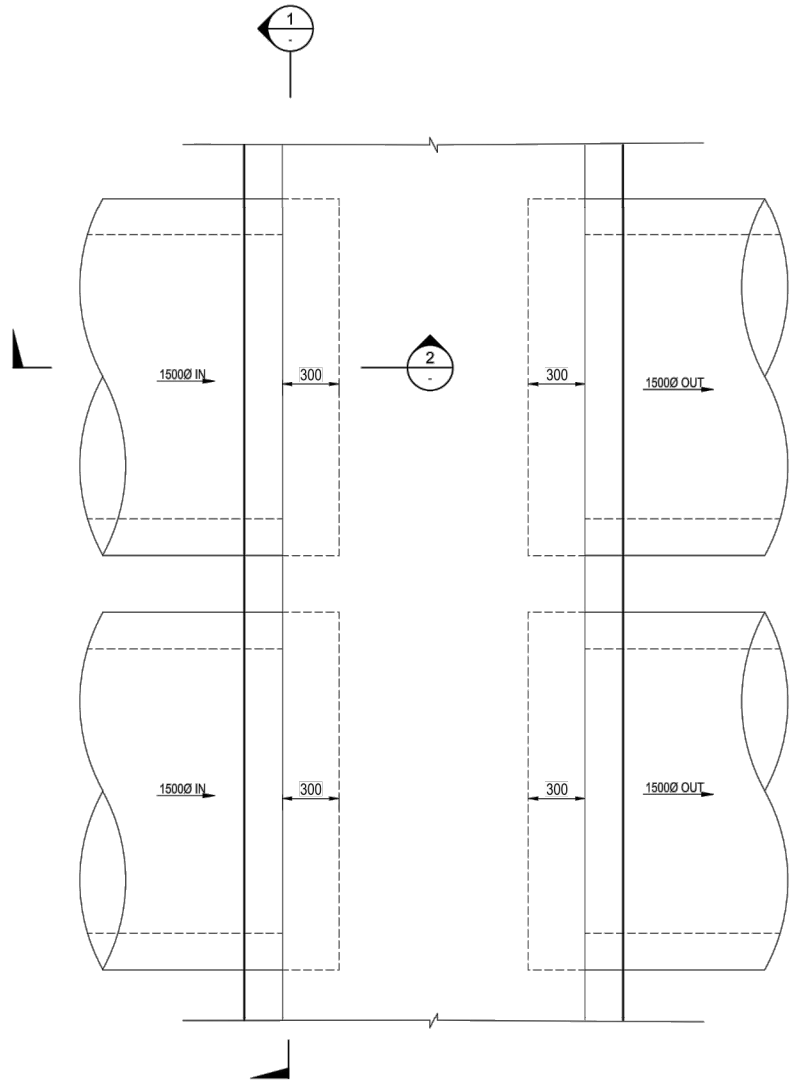
Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CPEng. NER
SIGN: [Signature]
DATE: 12/7/20

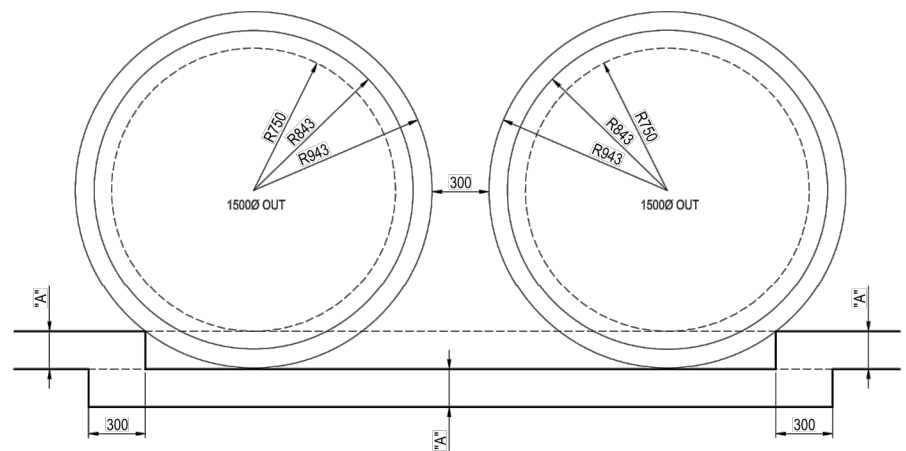
Client:
CSR LTD
Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



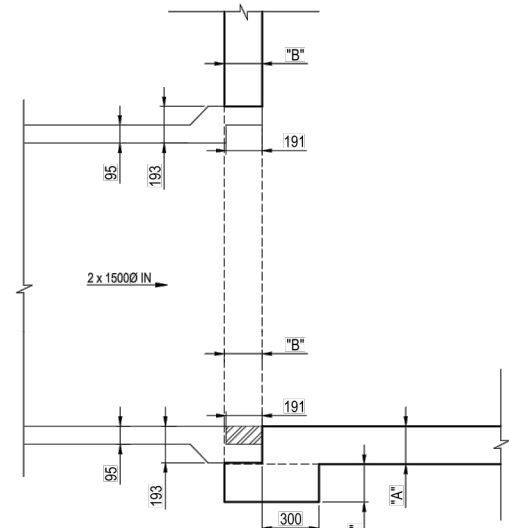
Project No.	Stage	Milestone	Dwg No.	Revision
15-001115.12	1&2	CC	909	13



TYPICAL PIT (2xØ1500) BASE



SECTION 1
SCALE 1:20



SECTION 2
SCALE 1:20

NOTE:
"A" REFER TO PIT DETAIL FOR BASE THICKNESS
"B" REFER TO PIT DETAIL FOR WALL THICKNESS

NOTE:
INSTALL MASS BENCHING IN ALL PITS APPLICABLE TO PROVIDE GRADE BETWEEN INLET AND OUTLET PIPE'S.

These plans are referred to in certificate no. **15992** approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1,C1,C2,C3,C4,C6,C15 & D1
Land Development Certificates
 www.LDC.com.au

Authorised for Issue:
 BY: **RAYMOND WU**
 BE MIEAust. CPEng, NPER(Structural)
 SIGN: *[Signature]*
 DATE: **10/04/18**

FOR CONSTRUCTION CERTIFICATE

LDC: 151919-00115 - CSR HORSLEY PARK 15-00115.12 - STAGE 1 DRAWINGS/CD 15-00115.12-02-RD.DWG LAST SAVED BY: VERONIQUE BELLES

Revisions	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CPEng NER
 SIGN: *[Signature]*
 DATE: **12/7/20**

Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS

calibre
 ©2020
 calibregroup.com.au | calibreconsulting.co

Project No.	Stage	Milestone	Dwg No.	Revision
15-00115.12	1&2	CC	910	13



TEMPORARY SWALE DRAIN No.01

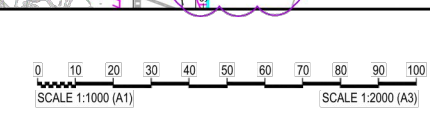
BURLEY ROAD (ACCESS ROAD)

REFER TO RETAINING WALL SOLUTIONS, RS-1280 DETAILS FOR RW No. 01, 02 AND 03

LDC These plans are referred to in certificate no. **15992** approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1,C1,C2,C3,C4,C5,C15 & D1
 Land Development Certificates
 www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



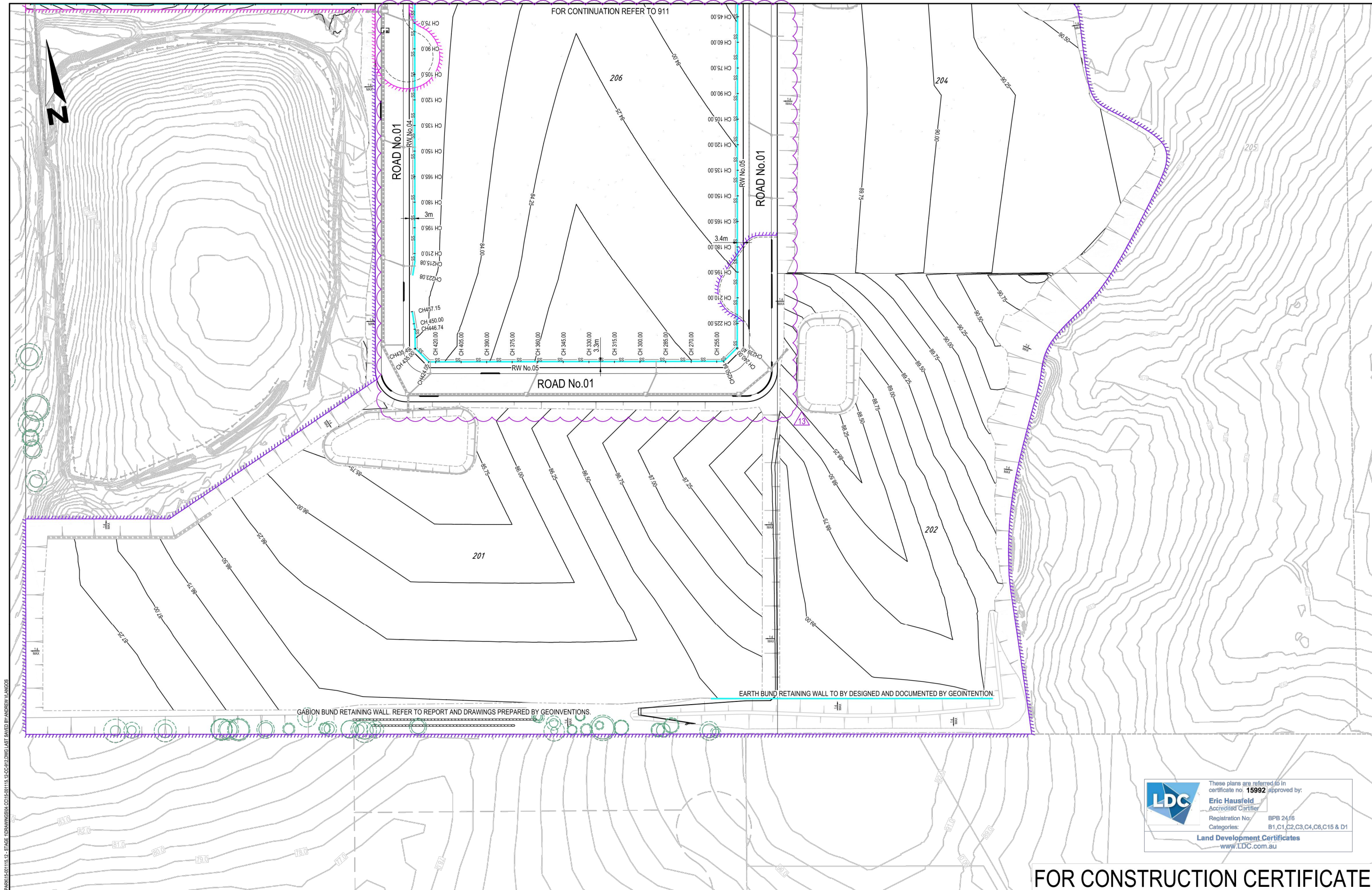
FOR CONTINUATION REFER TO 912
 Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust, CPEng NER
 SIGN: [Signature]
 DATE: 12/7/20

Client: **CSR LTD**
 Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**



Drawing Title: RETAINING WALL PLAN SHEET 01 OF 02				
Project No: 15-001115.12	Stage: 1&2	Milestone: CC	Dwg No.: 911	Revision: 13

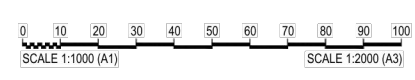


LE: 1510115 - CSR HORSLEY PARK 15-01115.12 - STAGE 1 DRAWING 02 OF 02 - 15-01115.12-02-02.DWG LAST SAVED BY ANDREW LANGOS


 These plans are referred to in certificate no. **15992** approved by:
Eric Hausfeld
 Accredited Certifier
 Registration No: BPB 2416
 Categories: B1, C1, C2, C3, C4, C6, C15 & D1
 Land Development Certificates
 www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



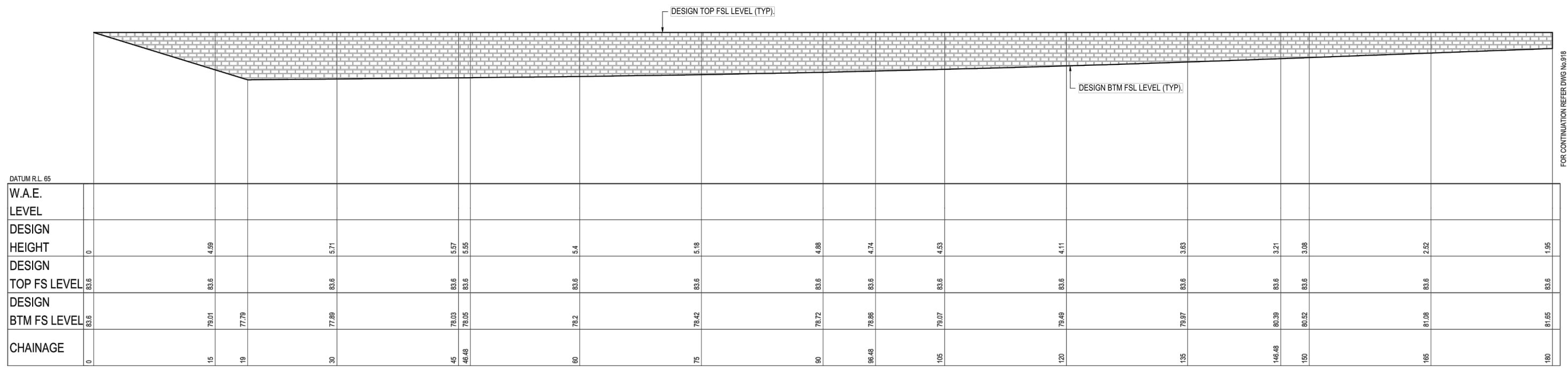
Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP Eng NER
 SIGN: 
 DATE: 12/7/20

Client: **CSR LTD**
 Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**


 ©2020 calibregroup.com.au calibreconsulting.co

Drawing Title: RETAINING WALL PLAN SHEET 02 OF 02				
Project No: 15-001115.12	Stage: 1&2	Milestone: CC	Dwg No.: 912	Revision: 13



LONGITUDINAL SECTION - RETAINING WALL No.04

SCALE 1:250 (H)
SCALE 1:250 (V)

NOTE:
ALL RETAINING WALLS DESIGN & CONSTRUCT BY CONTRACTOR.

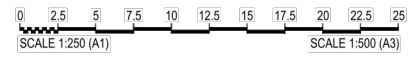
These plans are referred to in certificate no. **15992** approved by:

Eric Hausfeld
Accredited Certifier
Registration No: BPB 2416
Categories: B1,C1,C2,C3,C4,C6,C8,C15 & D1

Land Development Certificates
www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CP Eng NER

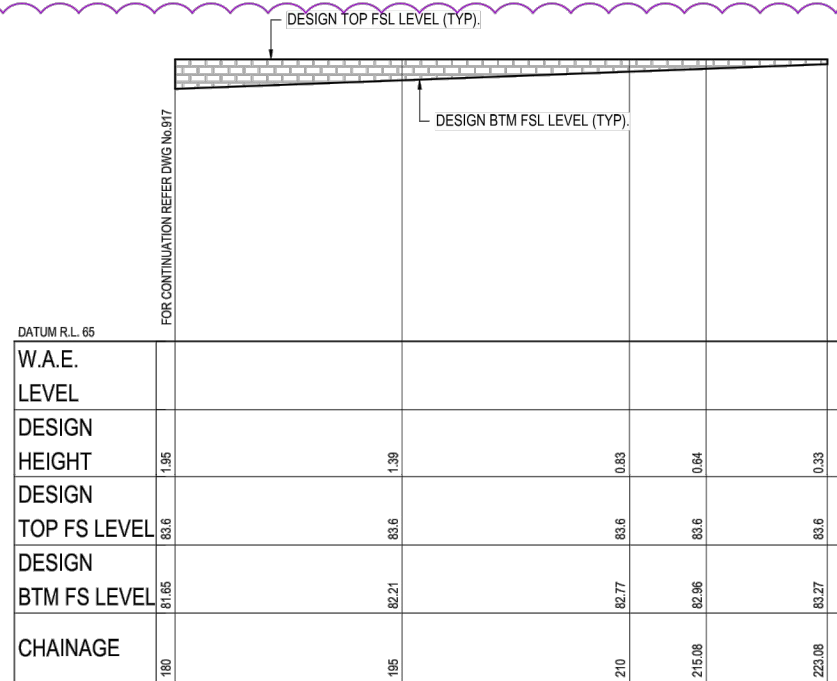
SIGN: *[Signature]*
DATE: 12/7/20

Client:
CSR LTD

Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS

calibre
©2020 calibregroup.com

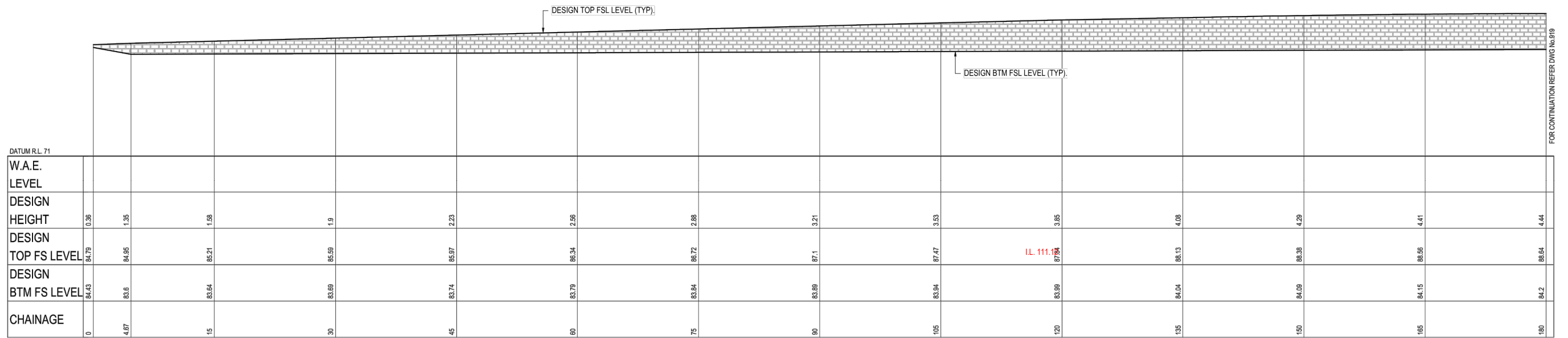
Project No.:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	917	13



LONGITUDINAL SECTION - RETAINING WALL No.04 CONTINUED
SCALE 1:250 (H)
SCALE 1:250 (V)

900x900 R.S.I.P.

I.L. 111.33



LONGITUDINAL SECTION - RETAINING WALL No.05
SCALE 1:250 (H)
SCALE 1:250 (V)

I.L. 111.13

NOTE:
ALL RETAINING WALLS DESIGN & CONSTRUCT BY CONTRACTOR.

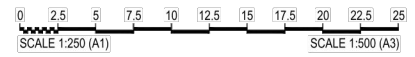
WORK AS EXECUTED SURVEY BY:
H. J. Murphy
Registered Surveyor No. 1677
Date:

www.LDC.com.au

WAE LEGEND
20YR FLOOD WATER LEVEL - R.L.113.338
100YR FLOOD WATER LEVEL - R.L. 113.547
FLOOD PLANNING LEVEL - R.L. 114.047
PMF - R.L. 115.75

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
13	DJW	LF	PD	SAG		11/04/16	



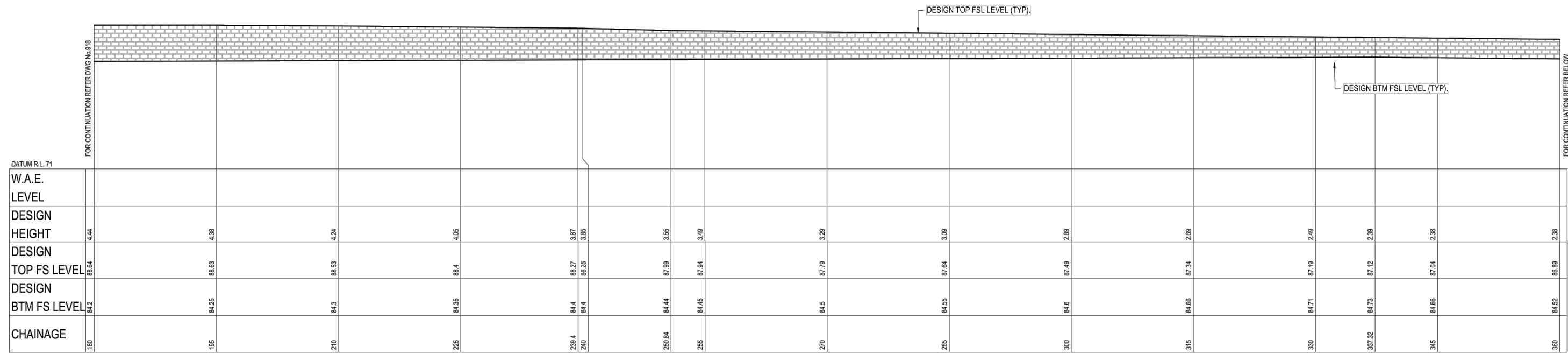
Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CP(Eng) NER
SIGN: *[Signature]*
DATE: 12/7/20

Client:
CSR LTD
Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS

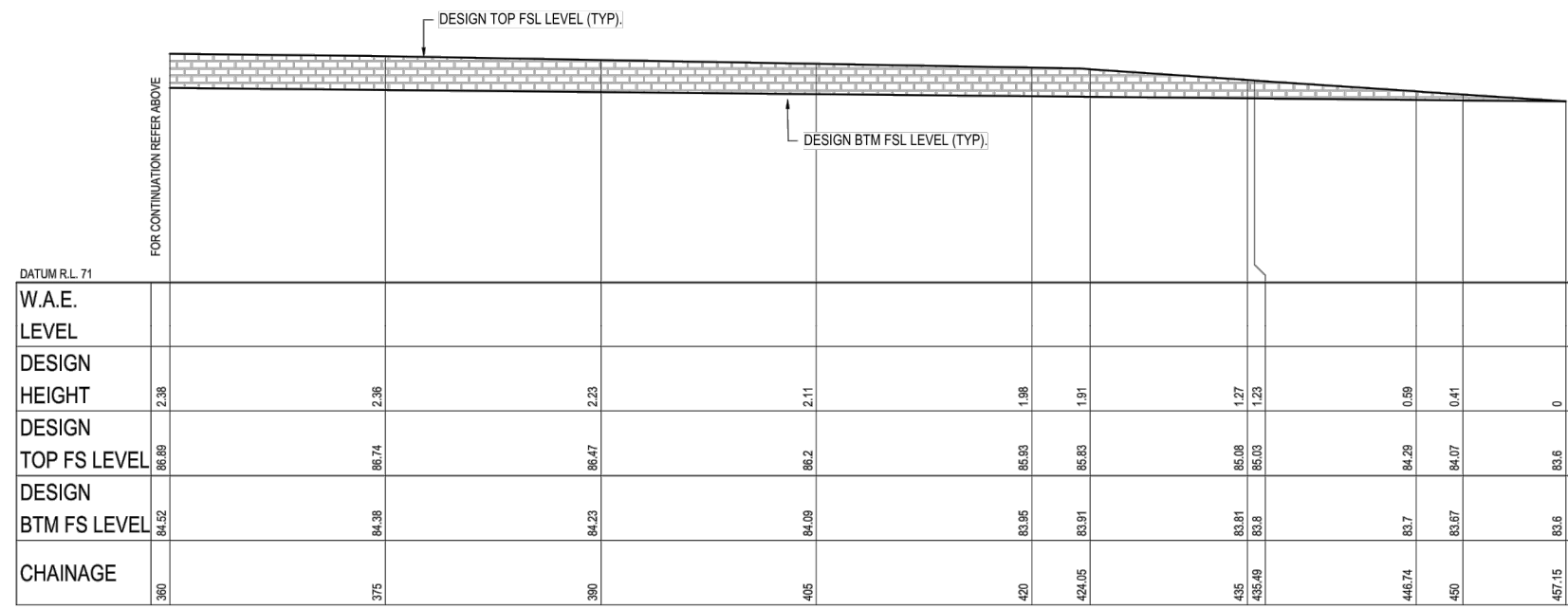


Drawing Title:				
RETAINING WALL LONG SECTIONS SHEET 02 OF 03				
Project No.:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	918	13



LONGITUDINAL SECTION - RETAINING WALL No.05 CONTINUED

SCALE 1:250 (H)
SCALE 1:250 (V)



LONGITUDINAL SECTION - RETAINING WALL No.05 CONTINUED

SCALE 1:250 (H)
SCALE 1:250 (V)

NOTE:
ALL RETAINING WALLS DESIGN & CONSTRUCT BY CONTRACTOR.

These plans are referred to in certificate no. **15992** approved by:
Eric Hausfeld
Accredited Certifier
Registration No: BPB 2416
Categories: B1,C1,C2,C3,C4,C6,C15 & D1
Land Development Certificates
www.LDC.com.au

FOR CONSTRUCTION CERTIFICATE

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	

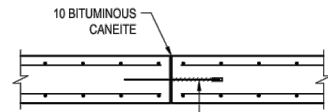


Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CP(Eng) NER
SIGN: *[Signature]*
DATE: 12/7/20

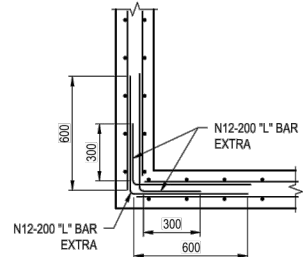
Client:
CSR LTD
Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS

Drawing Title: RETAINING WALL LONG SECTIONS SHEET 03 OF 03				
Project No.:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	919	13

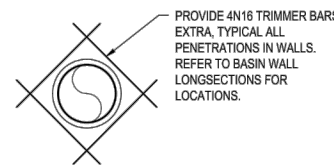


PLAN VIEW
RETAINING WALL VERTICAL CONTROL JOINT DETAILS TO JOINT

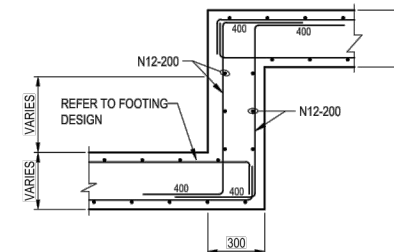
CONCRETE RETAINING WALL CONTROL JOINTS TO BE PROVIDED AT 20m CTS MAXIMUM



CONCRETE RETAINING WALL CORNER DETAIL REFER TO PLAN FOR ACTUAL WALL CONFIGURATION



CONCRETE RETAINING WALL PIPE PENETRATION DETAIL



TYPICAL SECTIONS - FOOTING STEP

NOTES:

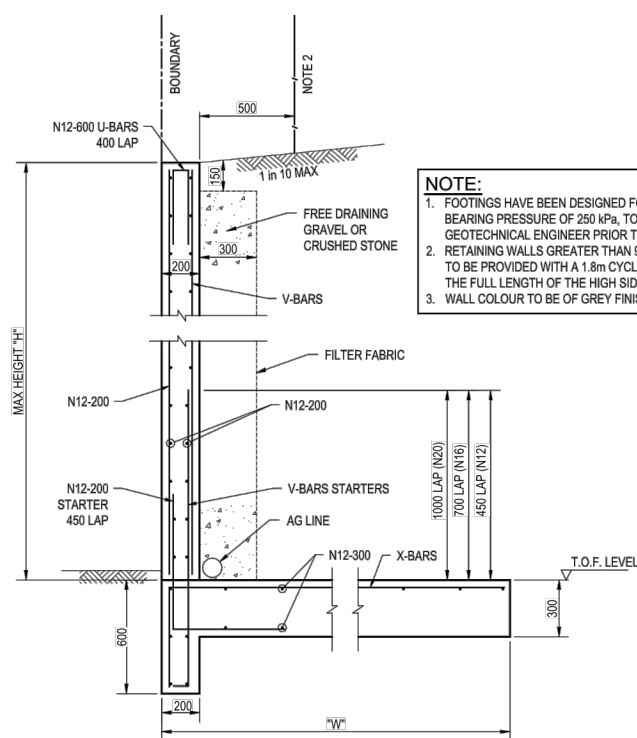
1. CONCRETE STRENGTH - UNLESS NOTED OTHERWISE

ELEMENT	F _c MPa (28 DAYS)	SLUMP	MAX AGG SIZE	CEMENT TYPE
FOOTINGS	40	80mm	20mm	GP
RC WALL	40	80mm	20mm	GP

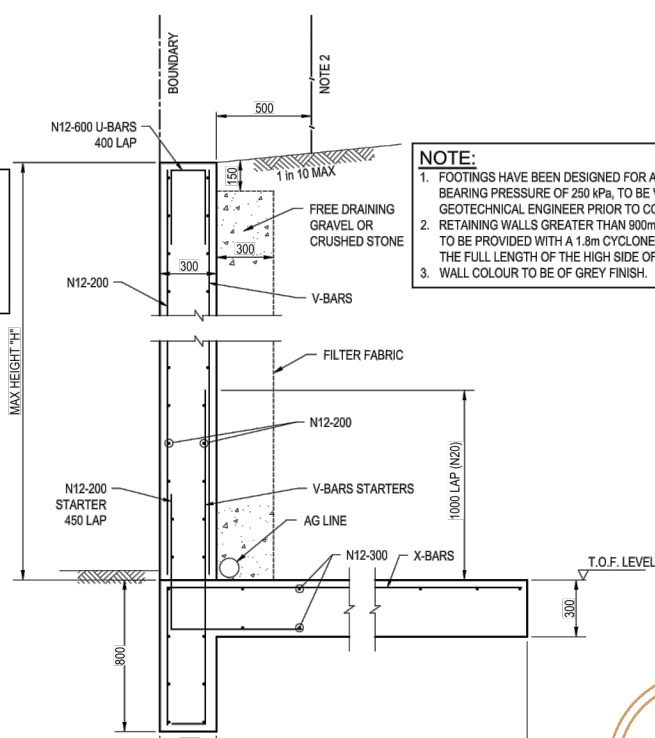
2. COVER - UNLESS NOTED OTHERWISE

ELEMENT	INTERIOR	EXTERIOR
WALLS		40mm
SLAB TOP		40mm
SLAB BOTTOM		40mm
BEAM TOP		40mm
BEAM BOTTOM		40mm
BEAM SIDE		
COLUMNS		

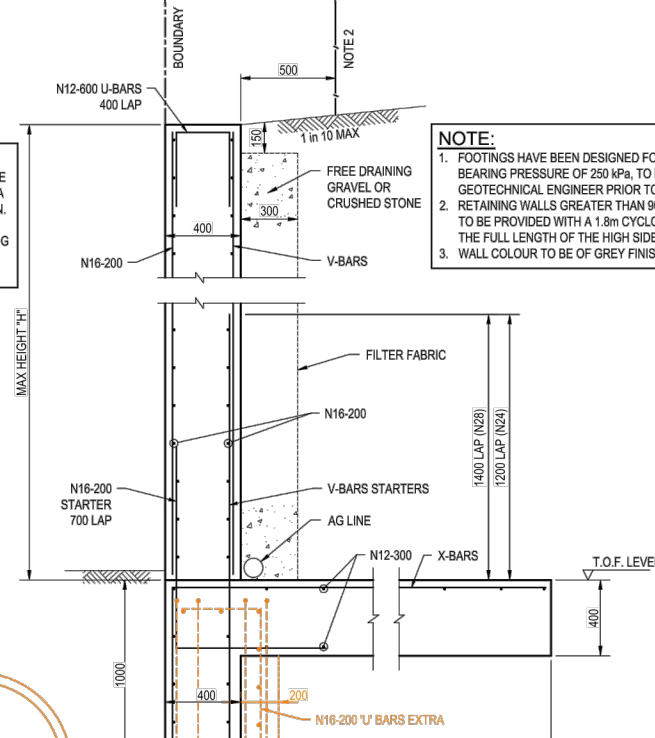
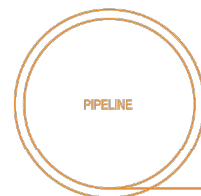
3. R-DENOTES 1-N16 BAR x 1000 LONG



NOTE:
1. FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 250 kPa, TO BE VERIFIED BY A GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION.
2. RETAINING WALLS GREATER THAN 900mm HIGH ARE TO BE PROVIDED WITH A 1.8m CYCLONE FENCE ALONG THE FULL LENGTH OF THE HIGH SIDE OF THE WALLS.
3. WALL COLOUR TO BE OF GREY FINISH.

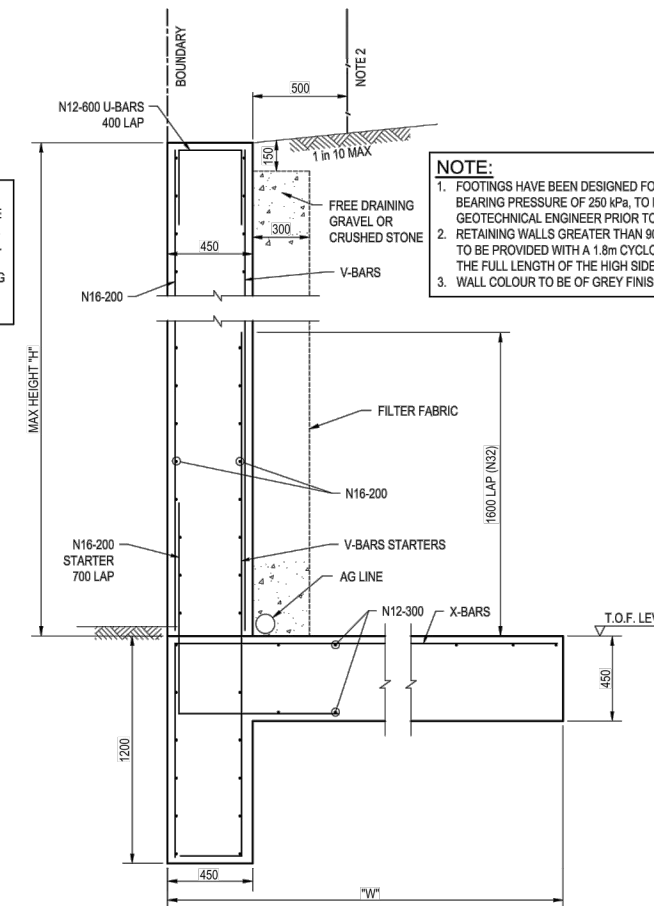


NOTE:
1. FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 250 kPa, TO BE VERIFIED BY A GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION.
2. RETAINING WALLS GREATER THAN 900mm HIGH ARE TO BE PROVIDED WITH A 1.8m CYCLONE FENCE ALONG THE FULL LENGTH OF THE HIGH SIDE OF THE WALLS.
3. WALL COLOUR TO BE OF GREY FINISH.



NOTE:
1. FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 250 kPa, TO BE VERIFIED BY A GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION.
2. RETAINING WALLS GREATER THAN 900mm HIGH ARE TO BE PROVIDED WITH A 1.8m CYCLONE FENCE ALONG THE FULL LENGTH OF THE HIGH SIDE OF THE WALLS.
3. WALL COLOUR TO BE OF GREY FINISH.

NOTE:
PIER & ENLARGED FOOTING TO BE USED ALONG ANY PIPELINE WITHIN ZONE OF INFLUENCE OF WALL.



NOTE:
1. FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 250 kPa, TO BE VERIFIED BY A GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION.
2. RETAINING WALLS GREATER THAN 900mm HIGH ARE TO BE PROVIDED WITH A 1.8m CYCLONE FENCE ALONG THE FULL LENGTH OF THE HIGH SIDE OF THE WALLS.
3. WALL COLOUR TO BE OF GREY FINISH.

RETAINING WALL 1000-3000 MAX HEIGHT SCALE 1:20

MAX HEIGHT H _{mm}	WIDTH W _{mm}	WALL TYPE	WALL SCHEDULE V-BARS X-BARS
1000	900	200 RC	N12-200 N12-200
2000	1600	INSITU	N16-200 N16-200
3000	2600		N20-200 N20-200

200 INSITU REINFORCED CONCRETE RETAINING WALL

RETAINING WALL 3000-5000 MAX HEIGHT SCALE 1:20

MAX HEIGHT H _{mm}	WIDTH W _{mm}	WALL TYPE	WALL SCHEDULE V-BARS X-BARS
4000	3800	300 RC	N20-200 N20-200
5000	4400	INSITU	N20-125 N20-125

300 INSITU REINFORCED CONCRETE RETAINING WALL

RETAINING WALL 5000-7000 MAX HEIGHT SCALE 1:20

MAX HEIGHT H _{mm}	WIDTH W _{mm}	WALL TYPE	WALL SCHEDULE V-BARS X-BARS
6000	5500	400 RC	N24-150 N24-150
7000	6600	INSITU	N28-125 N28-125

400 INSITU REINFORCED CONCRETE RETAINING WALL

RETAINING WALL 7000-8000 MAX HEIGHT SCALE 1:20

MAX HEIGHT H _{mm}	WIDTH W _{mm}	WALL TYPE	WALL SCHEDULE V-BARS X-BARS
8000	8000	450 RC	N32-125 N32-125

450 INSITU REINFORCED CONCRETE RETAINING WALL

These plans are referred to in certificate no. 15992 approved by:

Eric Hausfeld
Accredited Certifier
Registration No: BPB 2416
Categories: B1, C1, C2, C3, C4, C6, C15 & D1

Land Development Certificates
www.LDC.com.au

Authorised for issue:
BY: **RAYMOND WU**
BE MIEAust, CPEng, NPER(Structural)
SIGN: *[Signature]*
DATE: 10/04/18

FOR CONSTRUCTION CERTIFICATE

LE: 15/01/15 - CSR HORSLEY PARK/15-01115.12 - STAGE 1 DRAINAGE AND EARTHWORKS - DRAWING NO. 15-01115.12-02-022.DWG LAST SAVED BY PETER SPADARO

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

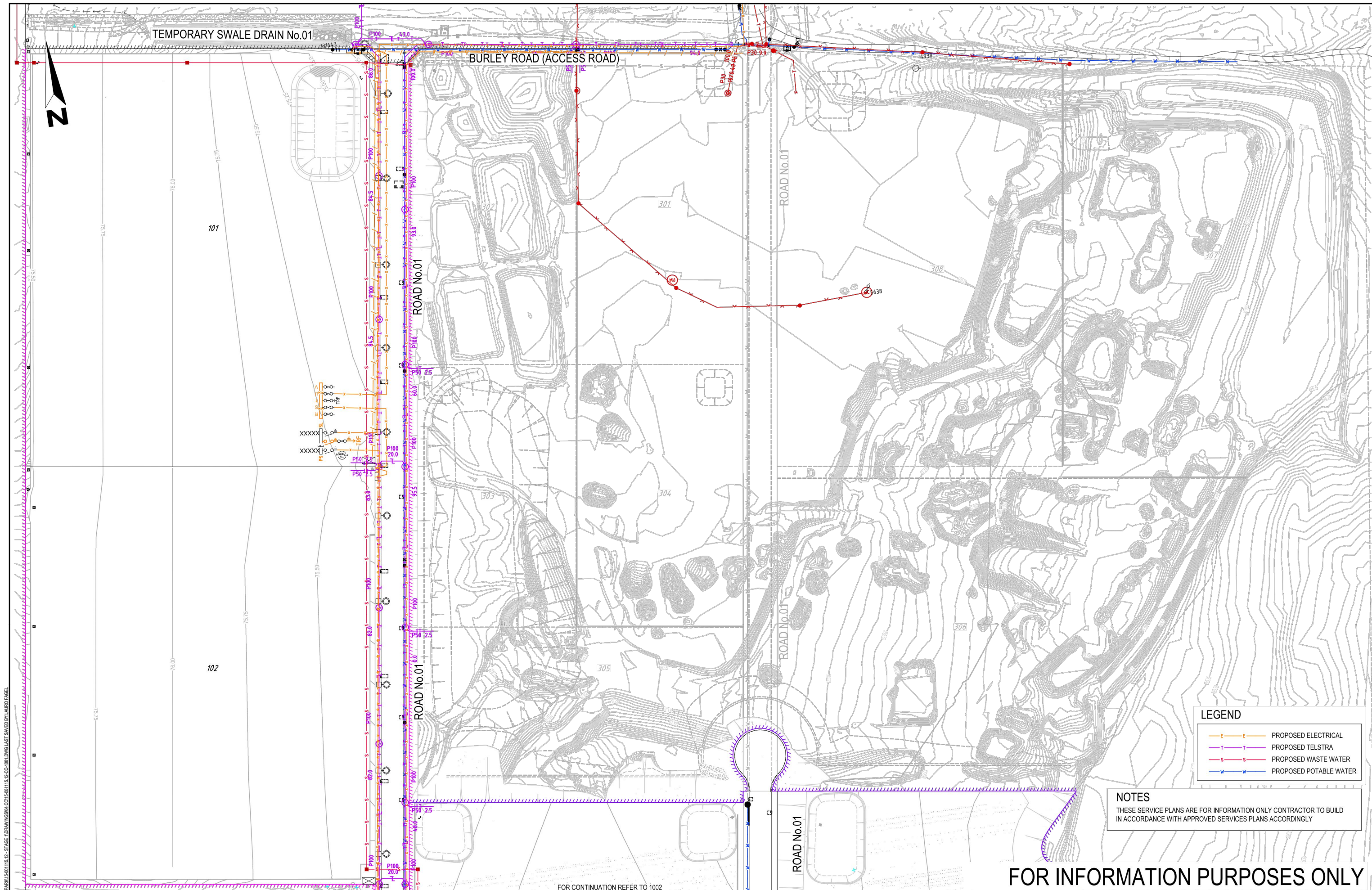
Authorised for issue:
ENRIQUE FRANCO
BE(Hons) MIEAust, CPEng, NER
SIGN: *[Signature]*
DATE: 12/7/20

Client: **CSR LTD**
Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**

calibre
calibregroup.com.au | calibreconsulting.co

Drawing Title: **INSITU REINFORCED CONCRETE RETAINING WALL DETAILS**

Project No:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	922	13



TEMPORARY SWALE DRAIN No.01

BURLEY ROAD (ACCESS ROAD)

ROAD No.01

ROAD No.01

ROAD No.01

ROAD No.01

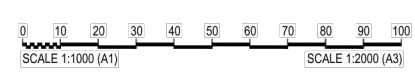
LEGEND

	PROPOSED ELECTRICAL
	PROPOSED TELSTRA
	PROPOSED WASTE WATER
	PROPOSED POTABLE WATER

NOTES
 THESE SERVICE PLANS ARE FOR INFORMATION ONLY CONTRACTOR TO BUILD IN ACCORDANCE WITH APPROVED SERVICES PLANS ACCORDINGLY

FOR INFORMATION PURPOSES ONLY

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD DRAGING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CP Eng NER
 SIGN:
 DATE: 12/7/20

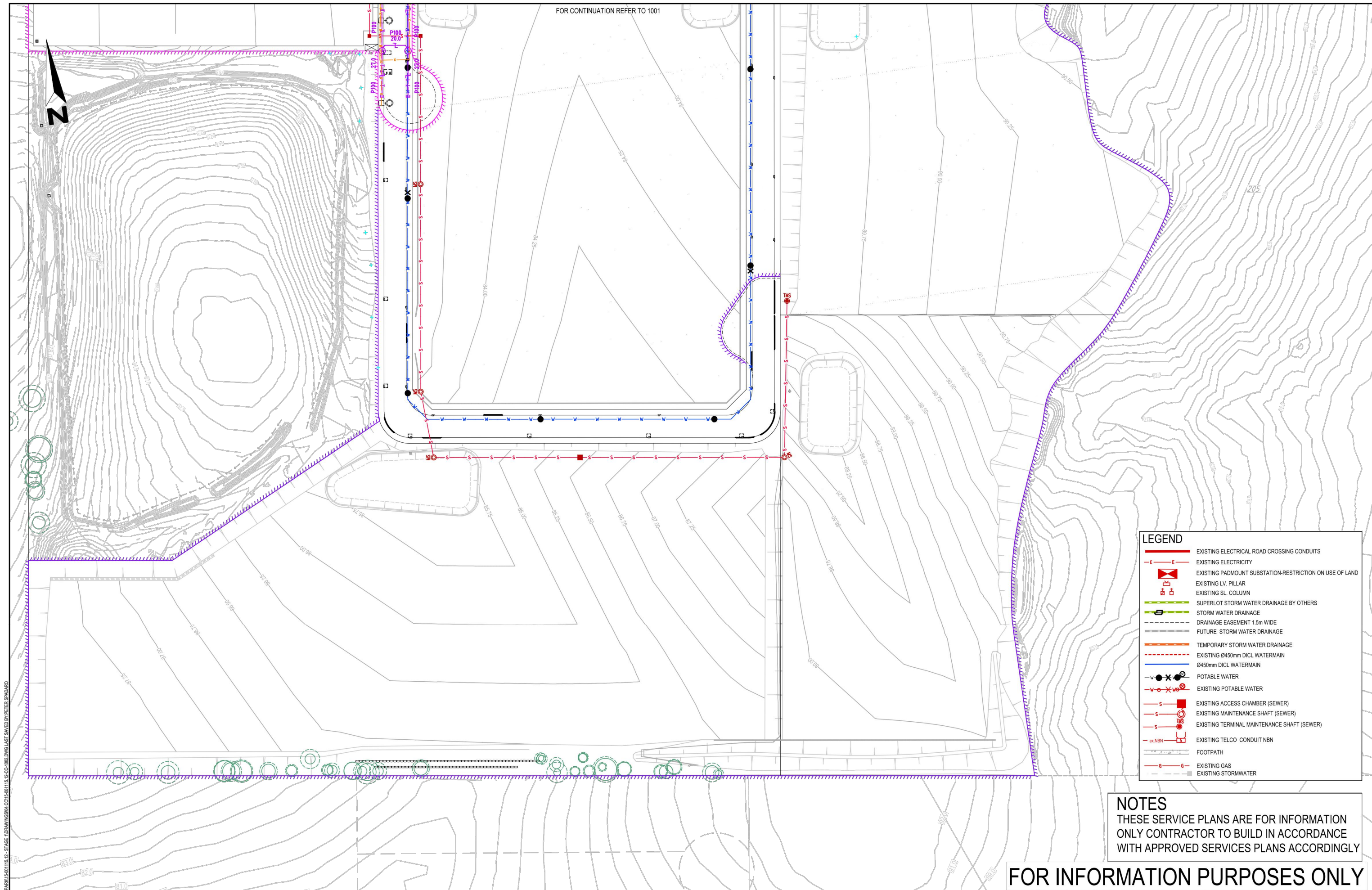
Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



Drawing Title: SERVICES PLAN 01 OF 02				
Project No: 15-001115.12	Stage: 1&2	Milestone: CC	Dwg No.: 1001	Revision: 13

LE: H1616-01115 - CSR HORSLEY PARK 15-001115.12 - STAGE 1&2 ROAD, DRAINAGE AND EARTHWORKS - LAST SAVED BY LAURO FASEL

FOR CONTINUATION REFER TO 1001

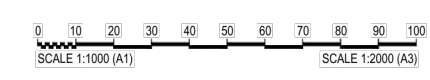


LEGEND	
	EXISTING ELECTRICAL ROAD CROSSING CONDUITS
	EXISTING ELECTRICITY
	EXISTING PADMOUNT SUBSTATION-RESTRICTION ON USE OF LAND
	EXISTING LV. PILLAR
	EXISTING SL. COLUMN
	SUPERLOT STORM WATER DRAINAGE BY OTHERS
	STORM WATER DRAINAGE
	DRAINAGE EASEMENT 1.5m WIDE
	FUTURE STORM WATER DRAINAGE
	TEMPORARY STORM WATER DRAINAGE
	EXISTING Ø450mm DI CL WATERMAIN
	Ø450mm DI CL WATERMAIN
	POTABLE WATER
	EXISTING POTABLE WATER
	EXISTING ACCESS CHAMBER (SEWER)
	EXISTING MAINTENANCE SHAFT (SEWER)
	EXISTING TERMINAL MAINTENANCE SHAFT (SEWER)
	EXISTING TELCO CONDUIT NBN
	FOOTPATH
	EXISTING GAS
	EXISTING STORMWATER

NOTES
 THESE SERVICE PLANS ARE FOR INFORMATION ONLY CONTRACTOR TO BUILD IN ACCORDANCE WITH APPROVED SERVICES PLANS ACCORDINGLY

FOR INFORMATION PURPOSES ONLY

Revisions	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD DRAGING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
 ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
 BE(Hons) MIEAust. CPEng NER
 SIGN:
 DATE: 1/27/20

Client:
CSR LTD
 Project:
CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS



Drawing Title: SERVICES PLAN 02 OF 02				
Project No.:	Stage:	Milestone:	Dwg No.:	Revision:
15-001115.12	1&2	CC	1002	13

LE: H161610115_CSR_HORSLEY PARK15-001115.12 - STAGE 1 DRAWING 02 OF 02 Dwg LAST SAVED BY PETER SPANARD

LEGEND	
	FUTURE STAGE 3
	STAGE 1
	STAGE 2A
	STAGE 2B
	STAGE 2C



LINE MARKING LEGEND

LINE TYPE	USE	DIMENSIONS (m) (FOR DIMENSIONS SHOWN * SEE MARKER SPACING COLUMN)	COLOUR	RAISED MARKER TYPE	MARKER SPACING (m)	
					NORMAL SPACING (A)	ALTERNATIVE SPACING (B)
DIVIDING (BARRIER) LINES						
BB	1. REPLACES DIVIDING (SEPARATION) LINE IF RESTRICTED SIGHT DISTANCE FOR BOTH DIRECTIONS OR 2. APPROACH TO MEDIAN ISLAND OR 3. APPROACHES TO A PEDESTRIAN CROSSING		WHITE		12	12
DIVIDING (SEPARATION) LINES						
S1	1. DIVIDING (SEPARATION) LINE ON 2 LANE ROADS		WHITE			
STOP LINES						
TB	GIVE WAY LINE (USED WITH SIGNS)		WHITE	NOT REQUIRED		
TB1	GIVE WAY LINE (USED OF RIGHT SIDE OF ROAD)		WHITE	NOT REQUIRED		

LEGEND:

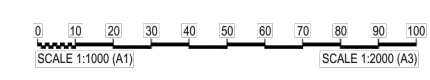
- SIGNPOST STREET
- SP STREET NAME SIGNS, REFER TO COUNCIL SPECIFICATION
- CONCRETE JERSEY KERB BARRIER FENCE

NOTE:

1. PROVIDE STREET NAME SIGNS TO COUNCIL SPECIFICATIONS.
2. ALL SIGNAGE & LINEMARKING TO BE IN ACCORDANCE WITH AS1742.2

15-001115.12 - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS - DRAWING NO. 01 OF 02 - LAST SAVED BY ANDREW VANDOS

Rev	Issue	Drawn	Design	Check	Appd.	Date	Revision Details
08	AV	AV	CK	SAG		02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG		-02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH		27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH		03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH		15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF		02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG		11/04/16	



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

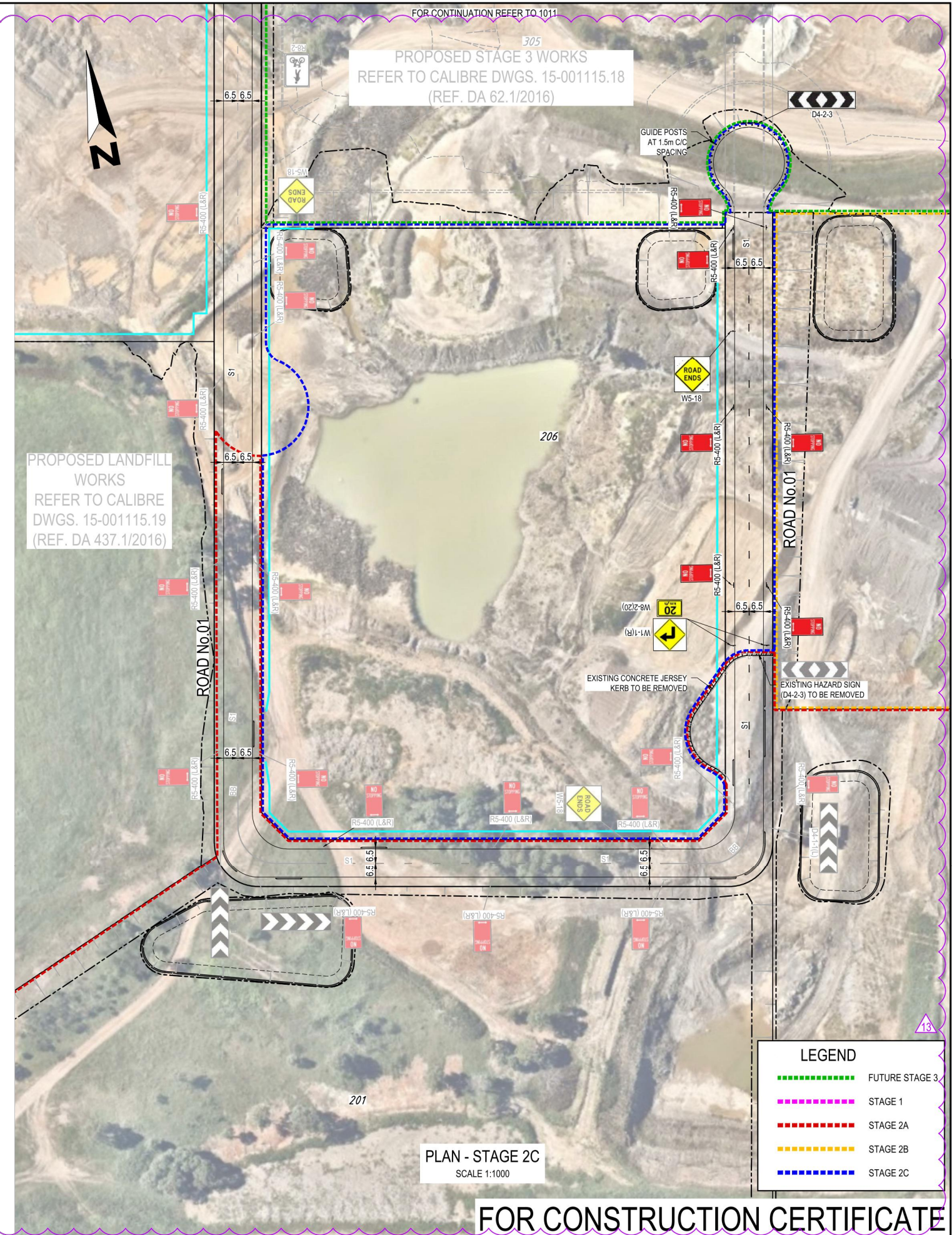
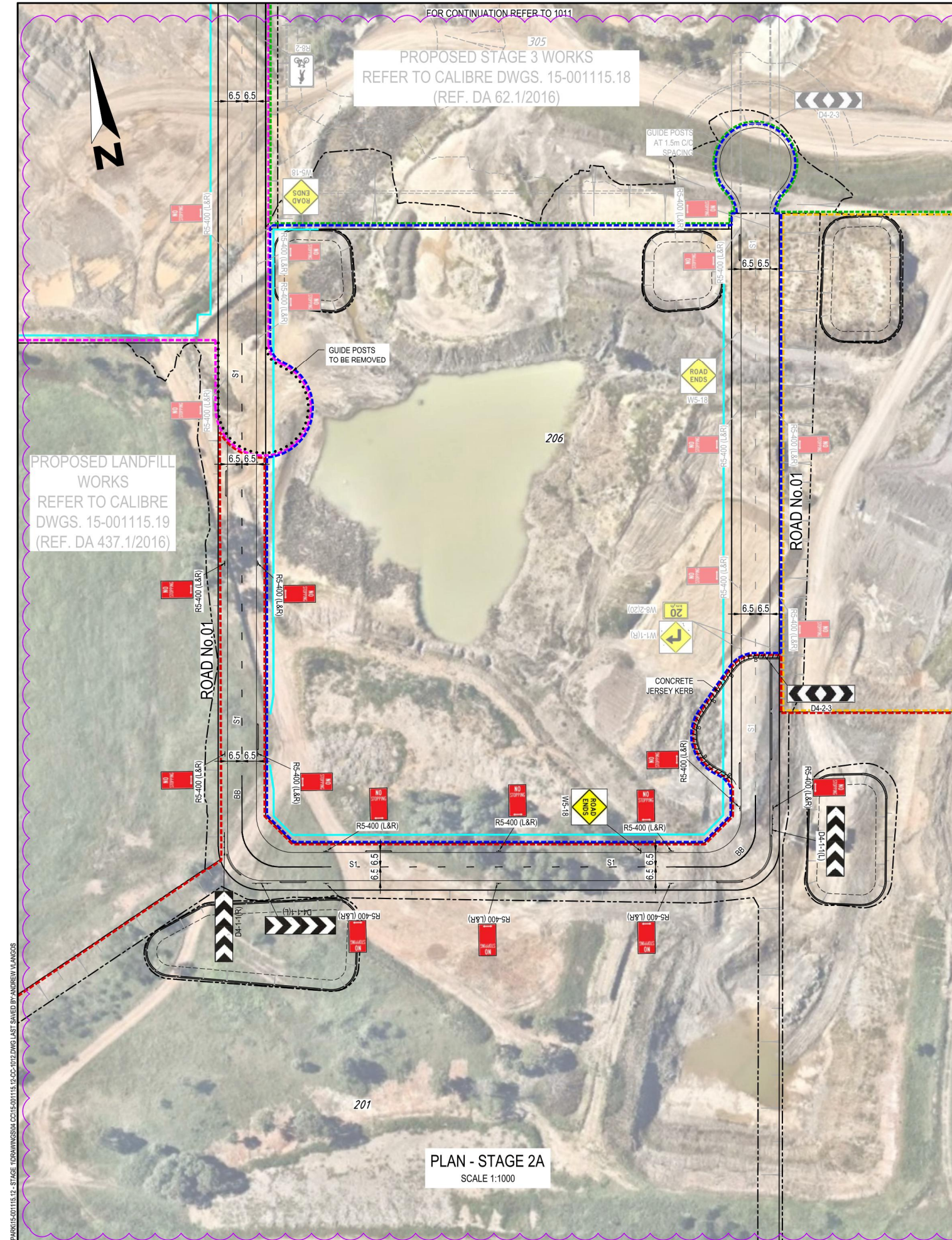
Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CPEng NER
SIGN:
DATE: 12/7/20

Client: **CSR LTD**
Project: **CSR HORSLEY PARK - STAGE 1 & 2 ROAD, DRAINAGE AND EARTHWORKS**

FOR CONSTRUCTION CERTIFICATE



Drawing Title: LINEMARKING & SIGNAGE PLAN 01 OF 02				
Project No: 15-001115.12	Stage: 1&2	Milestone: CC	Dwg No.: 1011	Revision: 13



LEGEND

- FUTURE STAGE 3
- STAGE 1
- STAGE 2A
- STAGE 2B
- STAGE 2C

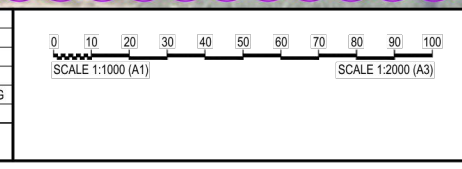
FOR CONSTRUCTION CERTIFICATE

Revisions

08	AV	AV	CK	SAG	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	CK	SAG	--/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	CK	BH	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	CK	BH	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	EF	BH	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	LF	EF	02/07/20	ISSUE TO SUIT LDC COMMENTS
First Issue	DJW	LF	PD	SAG	11/04/16	

Revision Details

Rev	By	Appd.	Date	Comments
08	AV	AV	02/02/18	RE-ISSUE TO SUIT CERTIFIER'S COMMENTS
09	AV	AV	--/02/18	ISSUED FOR CONSTRUCTION CERTIFICATE
10	VS/PS	AV/MC	27/08/18	AMENDMENTS AS PER CERTIFIER'S COMMENTS
11	VS	AV/MC	03/06/19	AMENDMENTS AS PER CERTIFIER'S COMMENTS
12	LH	LF	15/05/20	ISSUE FOR CONSTRUCTION CERTIFICATE FOR ADJUSTED FUTURE PAD GRADING
13	AV	AV	02/07/20	ISSUE TO SUIT LDC COMMENTS



Disclaimer and Copyright:
ALL DIMENSIONS TO BE CHECKED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION. USE WRITTEN DIMENSIONS ONLY. DO NOT SCALE.

NOT FOR CONSTRUCTION UNLESS STAMPED BY CERTIFYING AUTHORITY OR UNLESS OTHERWISE NOTED

Authorised for Issue:
ENRIQUE FRANCO
BE(Hons) MIEAust. CPEng NER

SIGN: *[Signature]*

DATE: 12/7/20

Client:
CSR LTD

Project:
**CSR HORSLEY PARK - STAGE 1 & 2
ROAD, DRAINAGE AND EARTHWORKS**



Drawing Title:
**LINEMARKING & SIGNAGE PLAN 02
OF 02**

Project No.: 15-001115.12 Stage: 1&2 Milestone: CC Dwg No.: 1012 Revision: 13