

Our Reference: NSW211526 Your Reference: HI21429 Suite 2, Level 1 33 Herbert Street ST LEONARDS NSW 2065

PO Box 292 ST LEONARDS NSW 1590

T 02 9438 5098 F 02 9438 5398

ENGINEERS

MANAGERS

INFRASTRUCTURE PLANNERS

DEVELOPMENT CONSULTANTS

28 October 2022

Health Infrastructure C/- CBRE Level 21, 363 George Street Sydney NSW 2000

Attention: Adrian Thompson

Dear Adrian

Re: Nepean Hospital, Total Asset Management Redevelopment – Review of Environmental Factors – Civil Works - R02

The REF works associated with the Civil works include:

- In-ground stormwater network to service the new building and external areas, including provision for capacity to accept stormwater discharge from the CAMHS site area.
- Site regrading and pavement works external to the building envelope, including proposed driveway on the eastern side of the building, and altered access to the existing carpark to the west
- Minor earthworks below the building where the floor level is below the existing natural surface.

The attached plans show the proposed stormwater and civil works.

The civil engineering components of the works will be designed in accordance with the following Australian Standards and guidelines:

- Australian Rainfall & Runoff 2019
- AS/NZS 3500.3:2018 Plumbing and Drainage: Stormwater Drainage
- Managing Urban Stormwater, Soils and Construction, Volume 1, 4th Edition, Landcom, March 2004
- Penrith City Council Development Control Plan 2014

Should you require any additional information please do not hesitate to contact the undersigned.

Yours faithfully,

ACOR Consultants Pty Ltd

Nathan Pearce

Associate Senior Civil Engineer

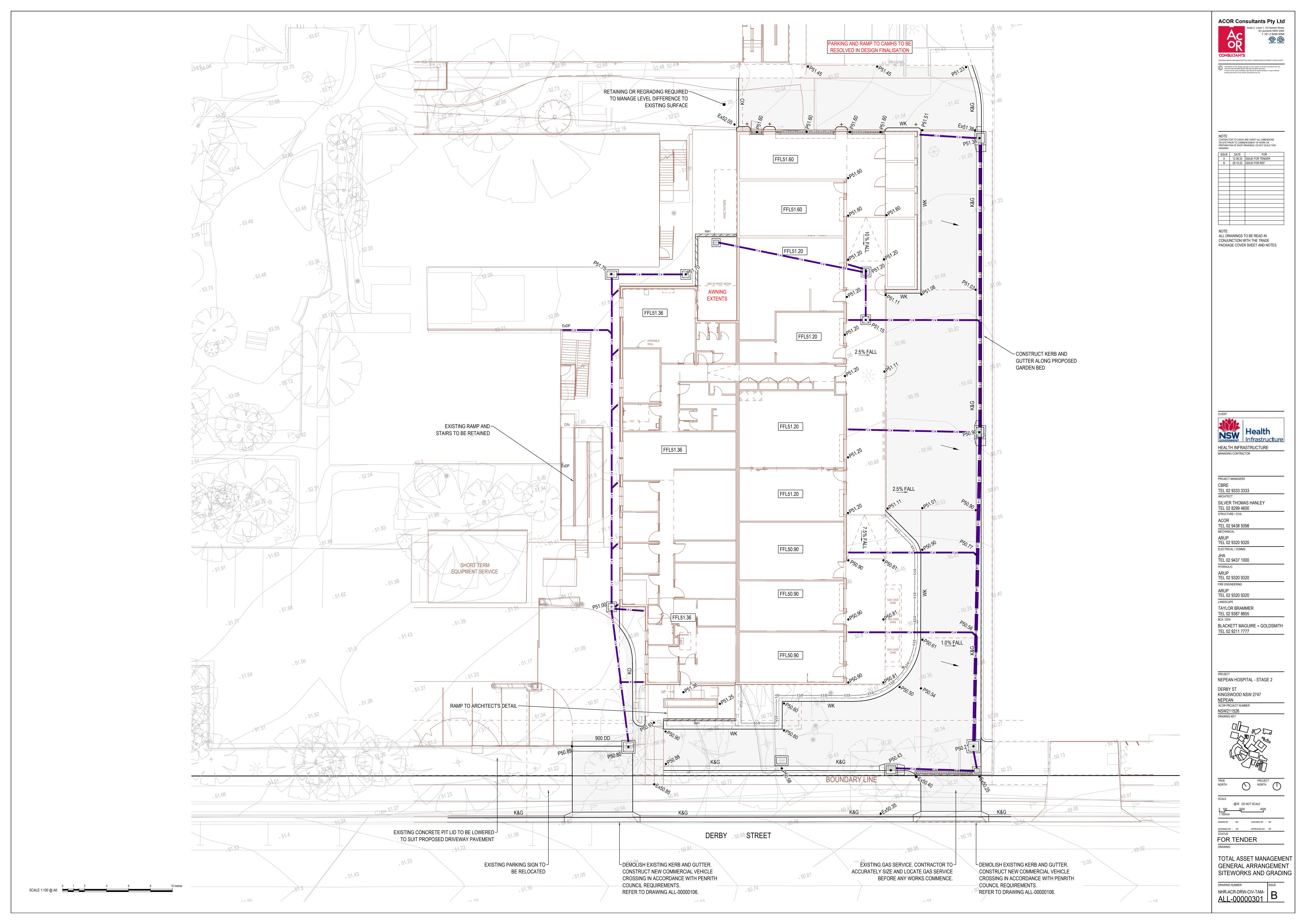
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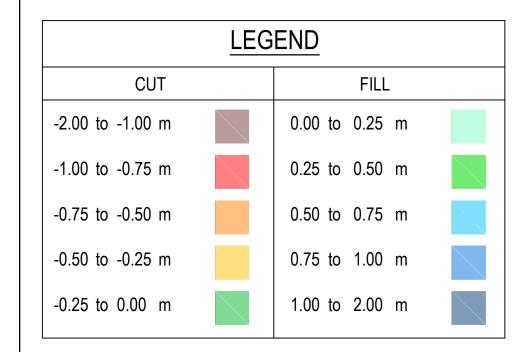


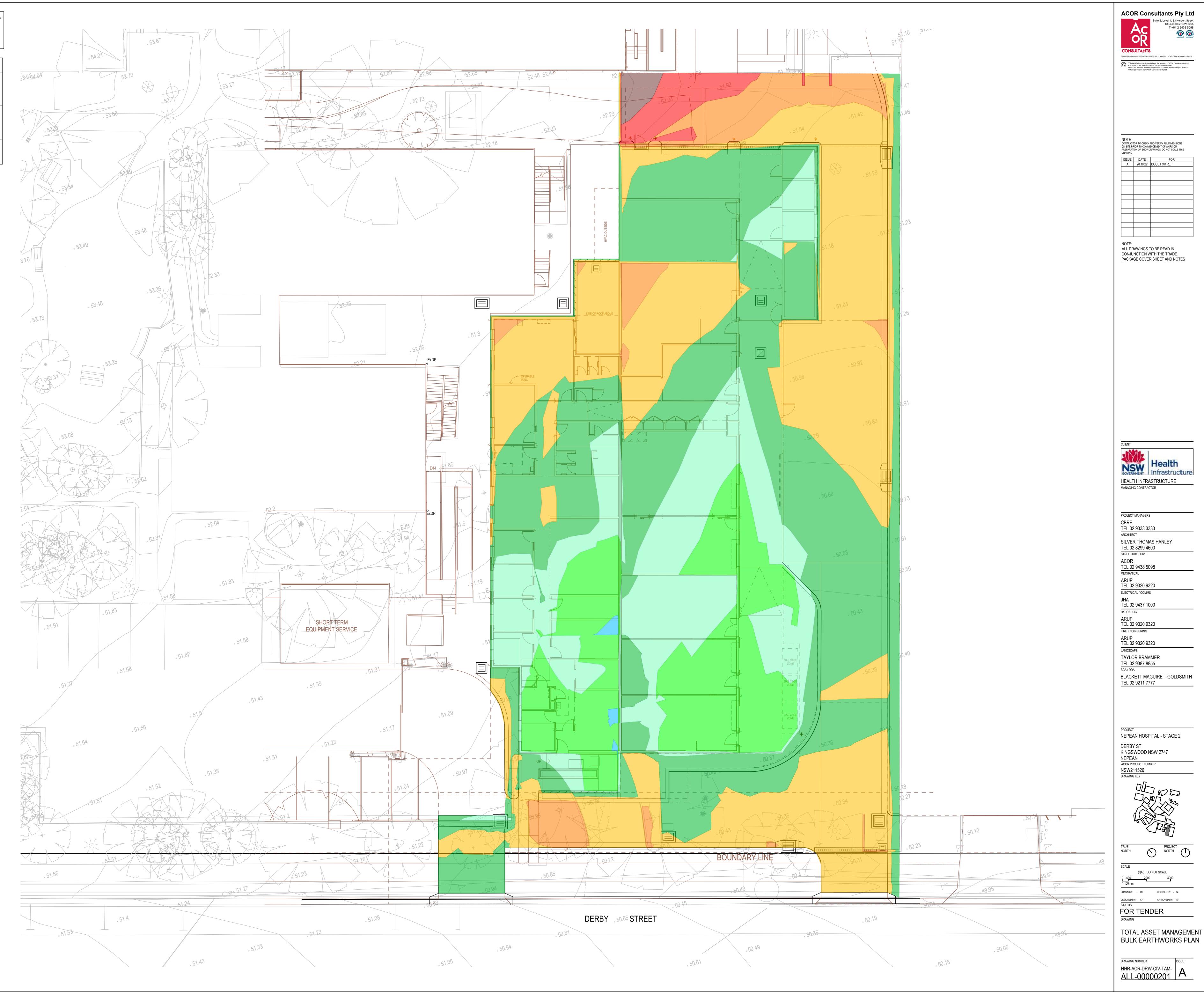
NOTE: ALL EARTHWORKS QUANTITIES ARE THEORETICAL AND INDICATIVE ONLY, BASED UPON ESTIMATED VOLUMES WITH NO ALLOWANCE FOR BULKING FACTORS. THE CONTRACTOR IS RESPONSIBLE FOR FINALISING EARTHWORKS CUT AND FILL QUANTITIES BASED ON SITE CONDITIONS ENCOUNTERED DURING EARTHWORKS OPERATIONS

CUT / FILL QUANTITIES	
TOTAL CUT (FROM EXISTING SURVEY OR MEL05 EARLY WORKS DESIGN BULK EARTHWORKS LEVELTO FINAL BULK EARTHWORKS LEVEL)	-415m³
TOTAL FILL (FROM FINAL BULK EARTHWORKS LEVEL TO EXISTING SURVEY OR MEL05 EARLY WORKS DESIGN BULK EARTHWORKS LEVEL)	120m³
CUT/FILL BALANCE	-295m³ (CUT)

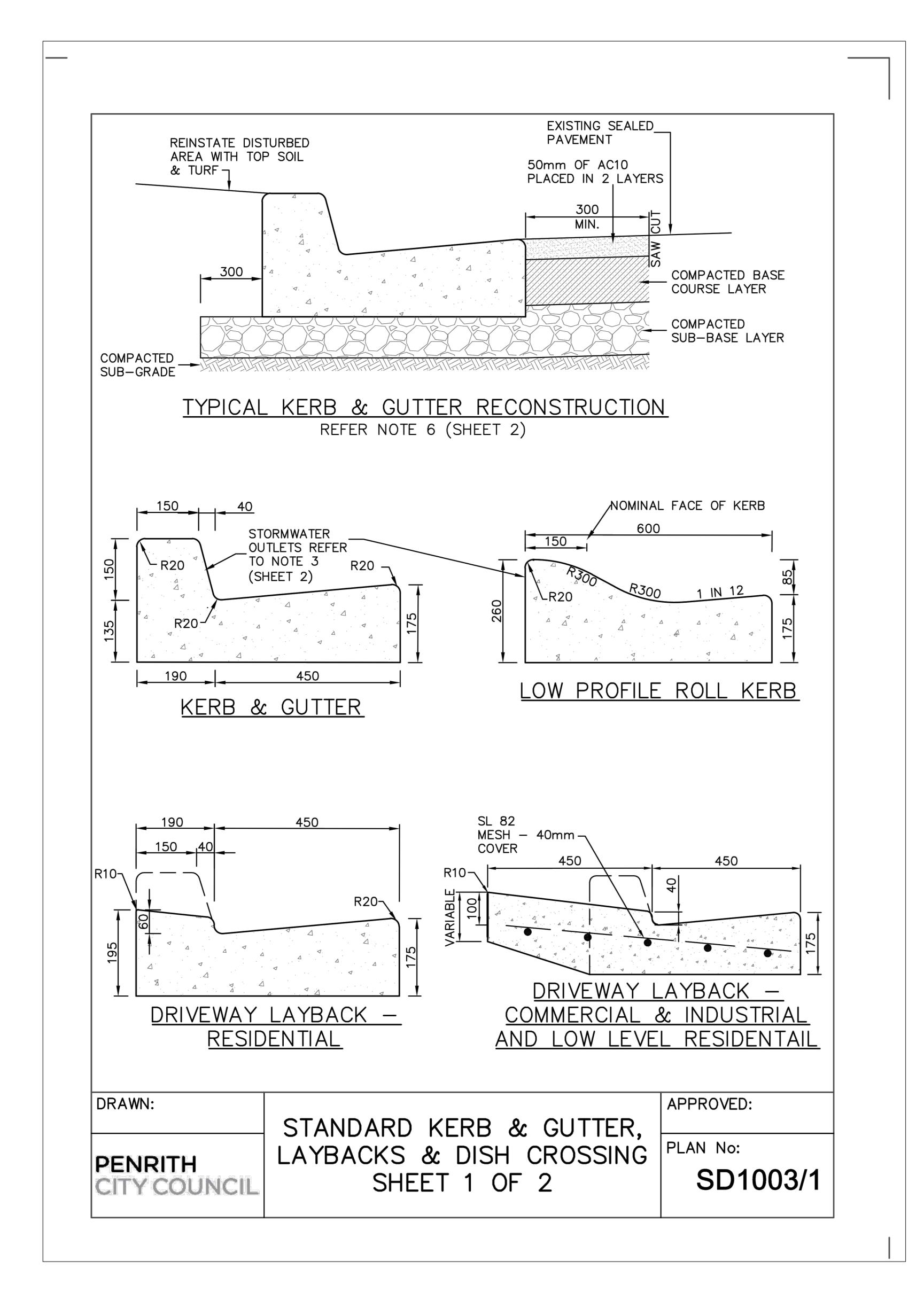
1. BULKING AND COMPACTION FACTORS HAVE NOT BEEN APPLIED TO THE

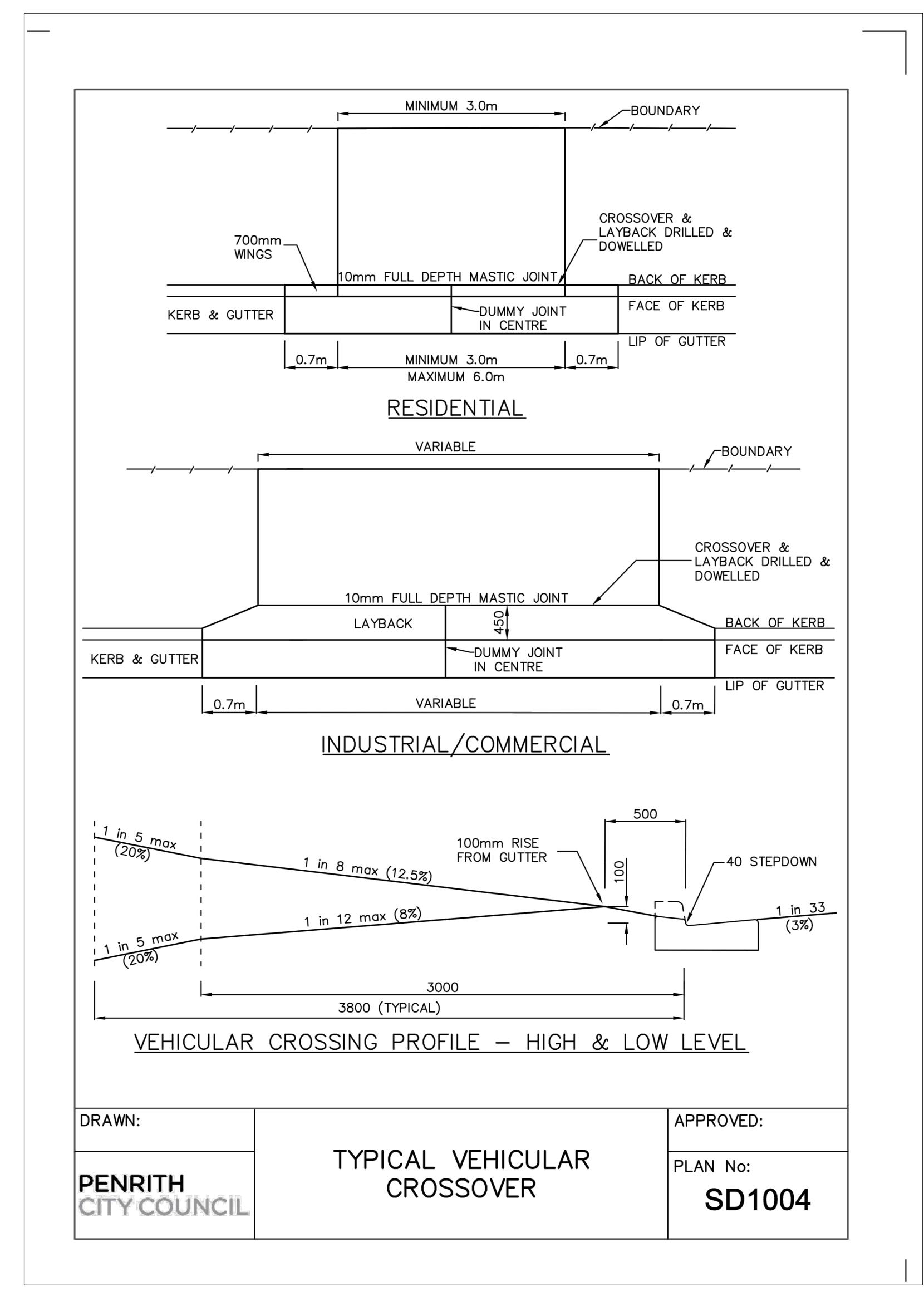
- CUT AND FILL QUANTITIES. 2. A BOXING OUT OF 150mm FOR THE BUILDING FLOOR SLAB HAS BEEN
- ALLOWED FOR IN THE CUT AND FILL CALCULATIONS. 3. A BOXING OUT OF 380mm FOR TYPE 1 CONCRETE PAVEMENTS HAS BEEN
- ALLOWED FOR IN THE CUT AND FILL CALCULATIONS. 4. A BOXING OUT OF 500mm HAS BEEN ALLOWED FOR ALL TYPE 3 ASPHALT
- PAVEMENT IN THE CUT AND FILL CALCULATIONS.
- 5. DETAILED BULKING AND CUT / FILL QUANTITIES FOR FOOTINGS, SERVICES TRENCHING AND THE LIKE HAS NOT BEEN INCLUDED IN THE CUT AND FILL ASSESSMENT





uite 2, Level 1, 33 Herbert Street
St Leonards NSW 2065
T +61 2 9438 5098







NOTE
CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS
ON SITE PRIOR TO COMMENCEMENT OF WORK OR
PREPARATION OF SHOP DRAWINGS. DO NOT SCALE THIS
DRAWING

NOTE: ALL DRAWINGS TO BE READ IN CONJUNCTION WITH THE TRADE PACKAGE COVER SHEET AND NOTES



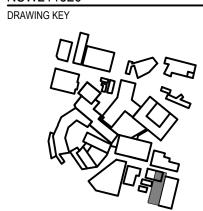
CBRE TEL 02 9333 3333 ARCHITECT SILVER THOMAS HANLEY
TEL 02 8299 4600
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ARUP TEL 02 9320 9320 FIRE ENGINEERING ARUP TEL 02 9320 9320 LANDSCAPE

TAYLOR BRAMMER TEL 02 9387 8855 BCA / DDA BLACKETT MAGUIRE + GOLDSMITH TEL 02 9211 7777

NEPEAN HOSPITAL - STAGE 2

KINGSWOOD NSW 2747 NEPEAN ACOR PROJECT NUMBER



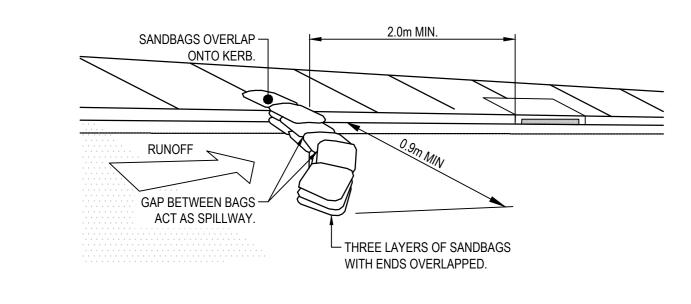
FOR TENDER

TOTAL ASSET MANAGEMENT

SHEET 2

NHR-ACR-DRW-CIV-TAM-ALL-00000106 B

SANDBAG KERB INLET SEDIMENT TRAP



— SANDBAGS OVERLAP —

ONTO KERB/PAVEMENT BOXING

SANDBAG SEDIMENT TRAP - AT KERB SAG PIT

SANDBAG SEDIMENT TRAP - AT OTHER THAN KERB SAG PIT

SANDBAG SEDIMENT TRAP DETAILS

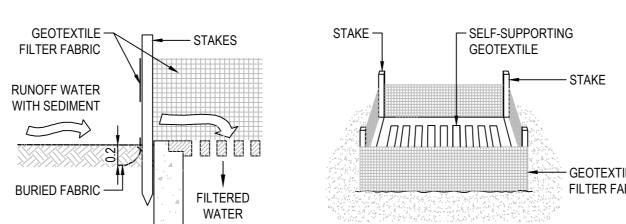
GAP BETWEEN BAGS -

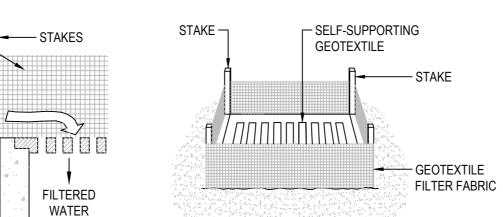
THREE LAYERS OF SANDBAGS WITH ENDS OVERLAPPED.

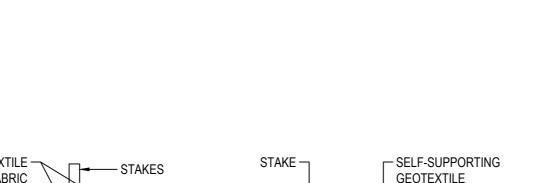
THREE LAYERS OF SANDBAGS

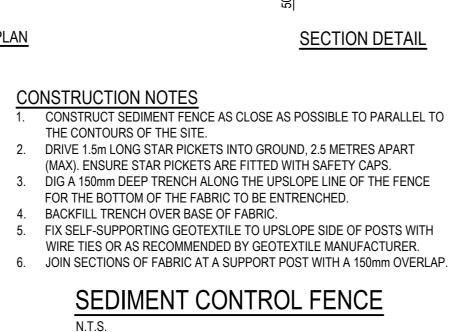
WITH ENDS OVERLAPPED.

GEOTEXTILE FILTER FABRIC DROP INLET SEDIMENT TRAP









1.5m STAR PICKETS AT —

MAXIMUM 2.5m CENTRES

2. DRIVE 1.5m LONG STAR PICKETS INTO GROUND, 2.5 METRES APART 3. DIG A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE 4. BACKFILL TRENCH OVER BASE OF FABRIC.

1.5m STAR PICKETS AT

MAXIMUM 2.5m CENTRES

DISTURBED AREA

UNDISTURBED AREA

(UNO ON SWMP/ESCP)

STAR PICKETS AT

MAXIMUM 2.5m SPACINGS

5. FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF POSTS WITH

/- SELF-SUPPORTING

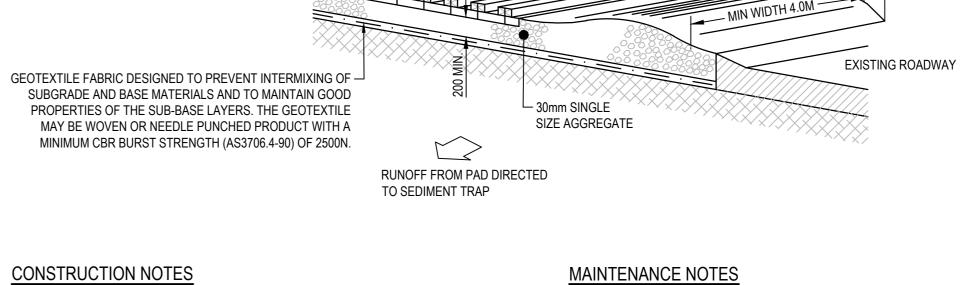
— ON SOIL, 150mm x 100mm

TRENCH WITH COMPACTED

BACKFILL AND ON ROCK, SET

INTO SURFACE CONCRETE

TEMPORARY STABILISED CONSTRUCTION EXIT



COVER AREA WITH NEEDLE-PUNCHED GEOTEXTILE.

TIMBER SLEEPER OR METAL ¬ GRID 100mm HIGH AND

SPACED AT 200mm CTS.

CONSTRUCTION SITE

ENSURE THAT ALL UTILITY ASSETS

ARE MAINTAINED AND PROTECTED

AT ALL TIMES IN THE VICINITY OF THE

TEMPORARY CONSTRUCTION EXIT

STRIP TOPSOIL AND LEVEL SITE.

30mm SINGLE SIZE AGGREGATE.

5. CONSTRUCT HUMP IMMEDIATELY WITHIN BOUNDARY TO

TRAP WHERE THE SEDIMENT IS COLLECTED AND REMOVED.

NOTE:
PITS TO BE INSPECTED DAILY &

FILTERED WATER

INLET TRAP

NOTE
TO BE USED IN PAVED AREAS WHERE
TRAFFIC ACCESS IS REQUIRED

N.T.S.

CAPTURED SEDIMENT TO BE REMOVED

WITH SEDIMENT

RUNOFF WATER

- NON-WOVEN GEOTEXTILE

FILTER FABRIC WIRE TIED

TO GRATE IN ALL 4

CORNERS & CENTRE

WITH SEDIMENT

COMPACT SUBGRADE.

4. CONSTRUCT 200mm THICK PAD OVER GEOTEXTILE USING DIVERT WATER TO A SEDIMENT FENCE OR OTHER SEDIMENT

MAINTENANCE NOTES
THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH PREVENTS SITE. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH

MIN HIGH

TRACKING OR FLOWING OF SEDIMENT OFF THE CONSTRUCTION ADDITIONAL GRAVEL AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED OFF THE CONSTRUCTION SITE MUST BE REMOVED IMMEDIATELY.



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PACKAGE COVER SHEET AND NOTES

CONSULTANTS

se 2, Level 1, 33 Herbert Street St Leonards NSW 2065 T +61 2 9438 5098

PROJECT MANAGERS

CBRE TEL 02 9333 3333 ARCHITECT SILVER THOMAS HANLEY

TEL 02 8299 4600 STRUCTURE / CIVIL ACOR

TEL 02 9438 5098 MECHANICAL ARUP TEL 02 9320 9320

ELECTRICAL / COMMS TEL 02 9437 1000

HYDRAULIC ARUP

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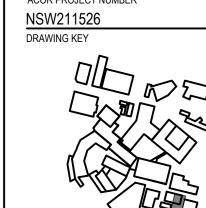
TAYLOR BRAMMER

TEL 02 9387 8855

BLACKETT MAGUIRE + GOLDSMITH TEL 02 9211 7777

NEPEAN HOSPITAL - STAGE 2

DERBY ST KINGSWOOD NSW 2747
NEPEAN
ACOR PROJECT NUMBER

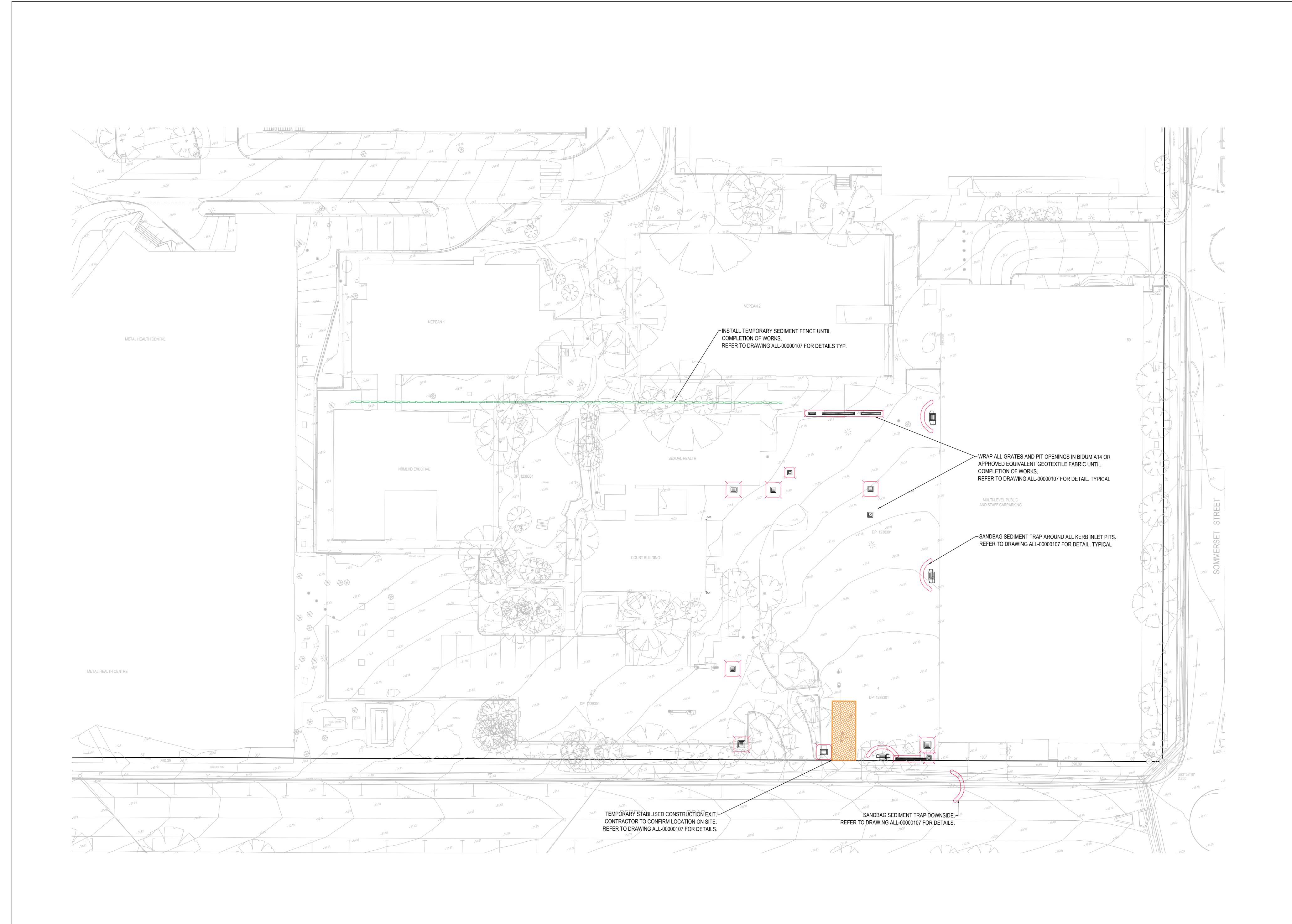


FOR TENDER

TOTAL ASSET MANAGEMENT **DETAILS**

DRAWING NUMBER NHR-ACR-DRW-CIV-TAM-ALL-00000107 B

SHEET 3



ACOR Consultants Pty Ltd

Suite 2, Level 1, 33 Herbert Street
St Leonards NSW 2065
T +61 2 9438 5098

T +61 2 9438 5098

CONSULTANTS

ENGINEERS | MANAGERS | INFRASTRUCTURE PLANNERS | DEVELOPMENT CONSULTANTS

ENGINEERS [MANAGERS] INFRASTRUCTURE PLANNERS | DEVELOPMENT CONSULTAL

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ISSUE DATE FOR
A 12.08.22 ISSUE FOR REF

NOTE:
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CLIENT

Health
Infrastructure

HEALTH INFRASTRUCTURE

MANAGING CONTRACTOR

PROJECT MANAGERS

CBRE
TEL 02 9333 3333

ARCHITECT

SILVER THOMAS HANLEY

TEL 02 8299 4600

STRUCTURE / CIVIL

ACOR

TEL 02 9438 5098

MECHANICAL

ARUP TEL 02 9320 9320 ELECTRICAL / COMMS

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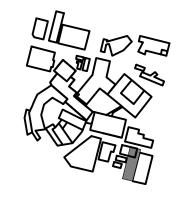
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PROJECT
NEPEAN HOSPITAL - STAGE 2

DERBY ST
KINGSWOOD NSW 2747
NEPEAN
ACOR PROJECT NUMBER
NSW211526
DRAWING KEY



NORTH PROJECT NORTH

©A0 DO NOT SCALE
0 1000 4000 8000
1:200mm

1:200mm

DRAWN BY: - RD CHECKED BY: - NP

DESIGNED BY: - CR APPROVED BY: - NP

STATUS

FOR TENDER
DRAWING

TOTAL ASSET MANAGEMENT SOIL EROSION AND SEDIMENT CONTROL PLAN

NHR-ACR-DRW-CIV-TAM-ALL-00000501