

Our Reference: NSW211526 Your Reference: HI21429

Suite 2, Level 1 33 Herbert Street ST LEONARDS NSW 2065

07 April 2022

PO Box 292 ST LEONARDS NSW 1590

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

T 02 9438 5098 F 02 9438 5398

Attention: Adrian Thompson

**ENGINEERS MANAGERS** 

**INFRASTRUCTURE** 

**PLANNERS DEVELOPMENT CONSULTANTS** 

Dear Adrian

Nepean Hospital, Child and Adolescent Mental Health Redevelopment – Review of Environmental Factors – Civil Works – R01

The REF works associated with the Civil works include:

- In-ground stormwater network including water quality treatment devices to service the new building and external areas
- Site regrading and pavement works external to the building envelope, including proposed parking bays and access pathways at the eastern end of the building
- Demolition of the existing building slabs and minor regrading below the building envelope to level the undercroft area and generally tie in with existing surrounding levels.

The attached plan shows 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







asharleane

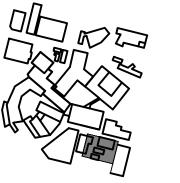
# LEGEND PROPOSED STORMWATER PIT PROPOSED GROSS POLLUTANT TRAP EAST BLOCK PROPOSED STORMWATER PIPE OVERLAND FLOW PATH PROPOSED CARPARK PAVEMENT ORAL HEALTH PROPOSED FOOTPATH PAVEMENT EXISTING PEDESTRIAN PAVEMENT OVERLAND FLOW PATH TO GENERALLY FOLLOW THE EXISTING OVERLAND FLOW AT THE SITE PEDESTRIAN PATH CARPARK PAVEMENT EXISTING GRADED DRAIN AT MULTIDECK CARPARK ENTRY TO BE RETAINED CHILD AND ADOLESCENT MENTAL HEALTH SERVICES MANAGING CONTRACTOR ADULT MENTAL HEALTH **BVN ARCHITECTURE** TEL 02 8297 7200 STRUCTURE / CIVIL STORMWATER SYSTEM TO DSICHARGE INTO TRUNK MAIN THROUGH TAMS ACOR PIT AND PIPE NETWORK TO COLLECT ROOF AND SURFACE DRAINAGE AND CONVERY IT TO THE STORMWATER NETWORK WITHIN TAM TEL 02 9438 5098 ARUP TEL 02 9320 9320 ELECTRICAL / COMMS JHA TEL 02 9437 1000 SEXUAL HEALTH ARUP TEL 02 9320 9320 NEPEAN HOSPITAL FIRE ENGINEERING **EXECUTIVE** ARUP TEL 02 9320 9320 ARCADIA TEL 02 8571 2900 BCA/DDA BLACKETT MAGUIRE + GOLDSMITH TEL 02 9211 7777 MULTIDECK CARPARK DERBY ST KINGSWOOD NSW 2747 NEPEAN ACOR PROJECT NUMBER COURT BUILDING **TOTAL ASSET** MANAGEMENT CONNECTION BEYOND TO DERBY STREET PROJECT NORTH @A0 DO NOT SCALE

**ACOR Consultants Pty Ltd** 2, Level 1, 33 Herbert Street St Leonards NSW 2065 T +61 2 9438 5098

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

HEALTH INFRASTRUCTURE

NEPEAN HOSPITAL - STAGE 2



DRAWN BY: - JK CHECKED BY: - NP

PRELIMINARY

GENERAL ARRANGEMENT SITEWORKS AND GRADING

CHILD & ADOLESCENT MENTAL HEALTH SERVICES

NSW211526\_CAMHS C3.01

### EROSION AND SEDIMENT CONTROL NOTES

#### GENERAL INSTRUCTIONS

- E1. THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ENGINEERING PLANS, AND ANY OTHER PLANS OR WRITTEN INSTRUCTIONS THAT MAY BE ISSUED AND RELATING TO DEVELOPMENT AT THE SUBJECT SITE.
- E2. CONTRACTORS TO ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE UNDERTAKEN AS INSTRUCTED IN THIS SPECIFICATION AND CONSTRUCTED FOLLOWING THE GUIDELINES OF "MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION", DEPT OF HOUSING, 2004 (BLUE BOOK).
- E3. ALL BUILDERS AND SUB-CONTRACTORS WILL BE INFORMED OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS.

#### CONSTRUCTION SEQUENCE

- E4. THE SOIL EROSION POTENTIAL ON THIS SITE SHALL BE MINIMISED. HENCE WORKS SHALL BE UNDERTAKEN IN THE FOLLOWING SEQUENCE:
  - a. INSTALL SEDIMENT FENCES, TEMPORARY CONSTRUCTION EXIT AND
  - SANDBAG KERB INLET SEDIMENT TRAP. UNDERTAKE SITE DEVELOPMENT WORKS IN ACCORDANCE WITH THE ENGINEERING PLANS. PHASE DEVELOPMENT SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF WORKABLE SIZE.

#### **EROSION CONTROL**

- E5. DURING WINDY CONDITIONS, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
- E6. FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.

#### **FENCING**

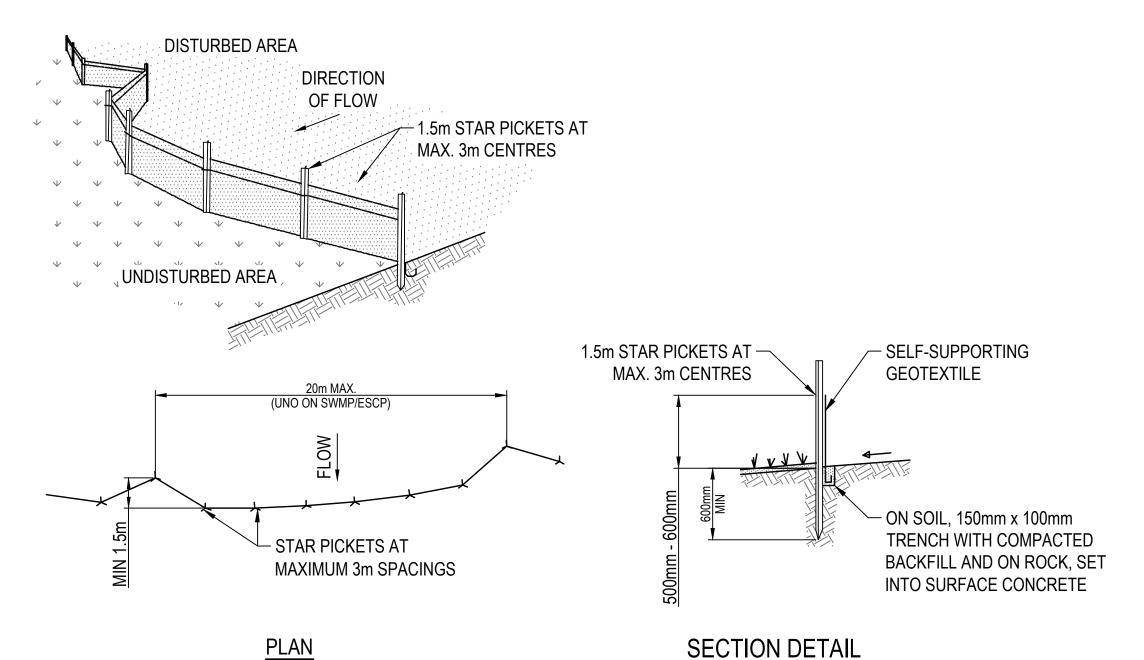
- E7. STOCKPILES WILL NOT BE LOCATED WITHIN 2 METRES OF HAZARD AREAS. INCLUDING LIKELY AREAS OF CONCENTRATED OR HIGH VELOCITY FLOWS SUCH AS WATERWAYS. WHERE THEY ARE BETWEEN 2 AND 5 METRES FROM SUCH AREAS, SPECIAL SEDIMENT CONTROL MEASURES SHOULD BE TAKEN TO MINIMISE POSSIBLE POLLUTION TO DOWNSLOPE WATERS, E.G. THROUGH INSTALLATION OF SEDIMENT FENCING.
- E8. ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) WILL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.
- E9. WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE, I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE.
- E10. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.

#### OTHER MATTERS

- E11. ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.
- E12. RECEPTORS FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER ARE TO BE EMPTIED AS NECESSARY. DISPOSAL OF WASTE SHALL BE IN A MANNER APPROVED BY THE SITE SUPERINTENDENT.

### SITE INSPECTION & MAINTENANCE

E13. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AFTER RAINFALL EVENTS TO ENSURE THAT THEY OPERATE EFFECTIVELY REPAIR AND OR MAINTENANCE SHALL BE UNDERTAKEN AS REQUIRED.



### CONSTRUCTION NOTES

- CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE.
- 2. DRIVE 1.5m LONG STAR PICKETS INTO GROUND, 3 METRES APART.

SANDBAGS OVERLAP

GAP BETWEEN BAGS

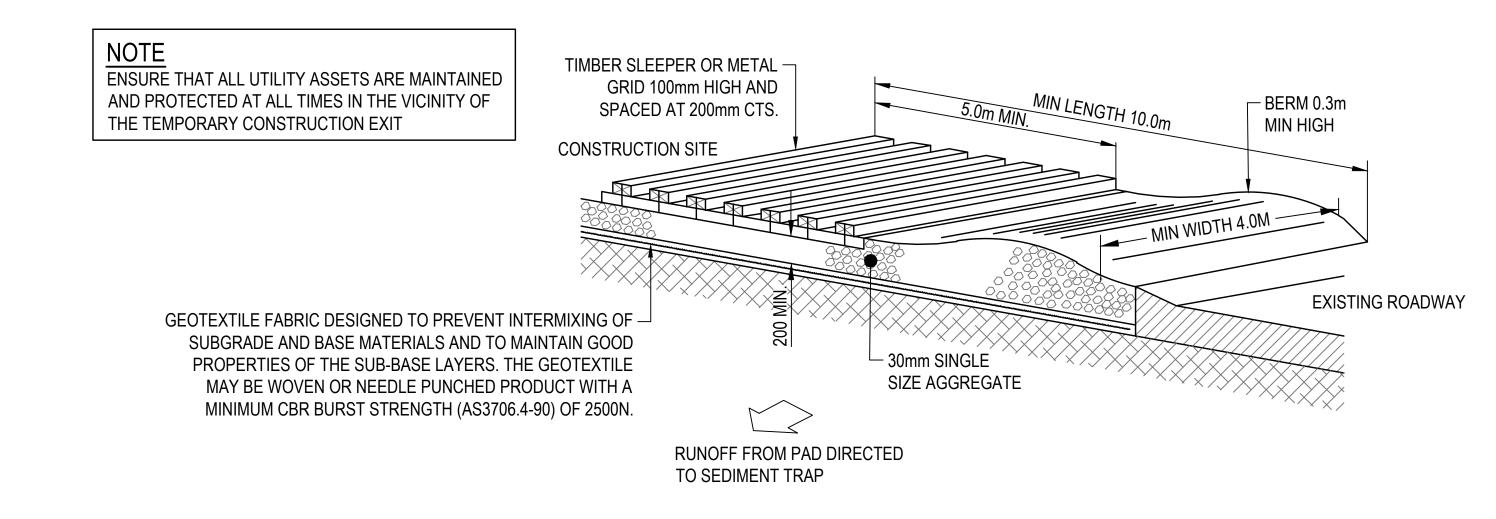
ACT AS SPILLWAY.

RUNOFF

ONTO KERB.

- 3. DIG A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
- 4. BACKFILL TRENCH OVER BASE OF FABRIC.
- 5. FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF POSTS WITH
- WIRE TIES OR AS RECOMMENDED BY GEOTEXTILE MANUFACTURER. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.

#### SEDIMENT CONTROL FENCE N.T.S.



#### **CONSTRUCTION NOTES**

STRIP TOPSOIL AND LEVEL SITE.

RUNOFF

THREE LAYERS OF SANDBAGS

WITH ENDS OVERLAPPED.

- COMPACT SUBGRADE. COVER AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
- CONSTRUCT 200mm THICK PAD OVER GEOTEXTILE USING
- 30mm SINGLE SIZE AGGREGATE. CONSTRUCT HUMP IMMEDIATELY WITHIN BOUNDARY TO DIVERT WATER TO A SEDIMENT FENCE OR OTHER SEDIMENT

TRAP WHERE THE SEDIMENT IS COLLECTED AND REMOVED.

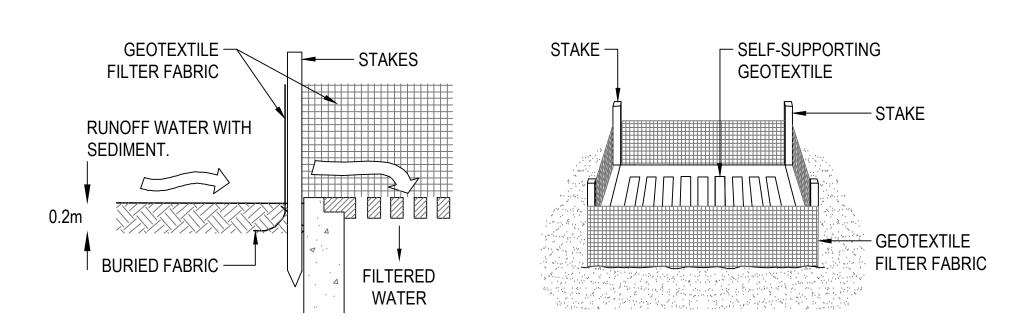
#### MAINTENANCE NOTES

THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH PREVENTS TRACKING OR FLOWING OF SEDIMENT OFF THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL GRAVEL AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL

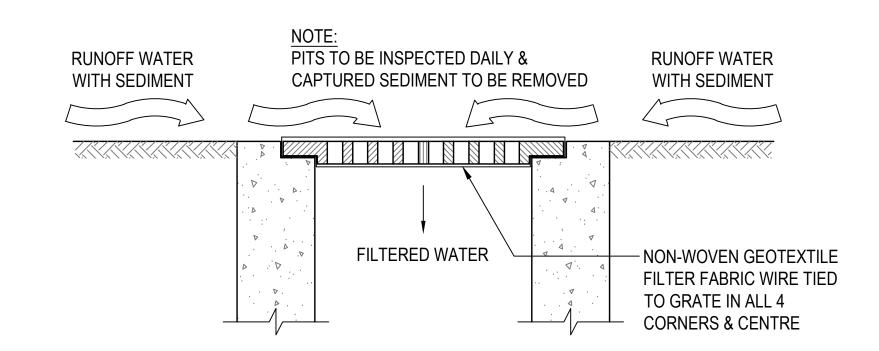
CONSTRUCTION SITE MUST BE REMOVED IMMEDIATELY.

SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED OFF THE

## TEMPORARY STABILISED CONSTRUCTION EXIT



# GEOTEXTILE FILTER FABRIC DROP INLET SEDIMENT TRAP.



# SANDBAG SEDIMENT TRAP - AT ON GRADE PIT

 ${}^{ldash}$  THREE LAYERS OF SANDBAGS WITH ENDS OVERLAPPED.

#### SANDBAG SEDIMENT TRAP - AT KERB SAG PIT

- SANDBAGS OVERLAP -

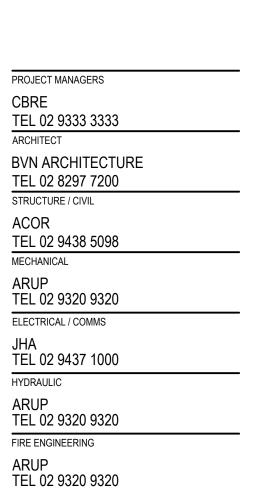
ONTO KERB/PAVEMENT

**BOXING** 

# SANDBAG SEDIMENT TRAP.

## **INLET TRAP** N.T.S.

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



HEALTH INFRASTRUCTURE

MANAGING CONTRACTOR

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ALL DRAWINGS TO BE READ IN

CONJUNCTION WITH THE TRADE

PACKAGE COVER SHEET AND NOTES

CONSULTANTS

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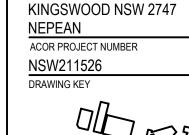
NEPEAN HOSPITAL - STAGE 2

BLACKETT MAGUIRE + GOLDSMITH

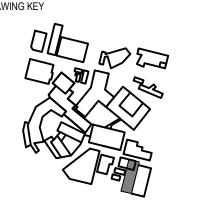
ARCADIA

TEL 02 8571 2900 BCA / DDA

TEL 02 9211 7777



DERBY ST



PROJECT NORTH @A0 DO NOT SCALE

CHILD AND ADOLESCENT

MENTAL HEALTH **DETAILS - SHEET 1** 

DRAWING NUMBER