

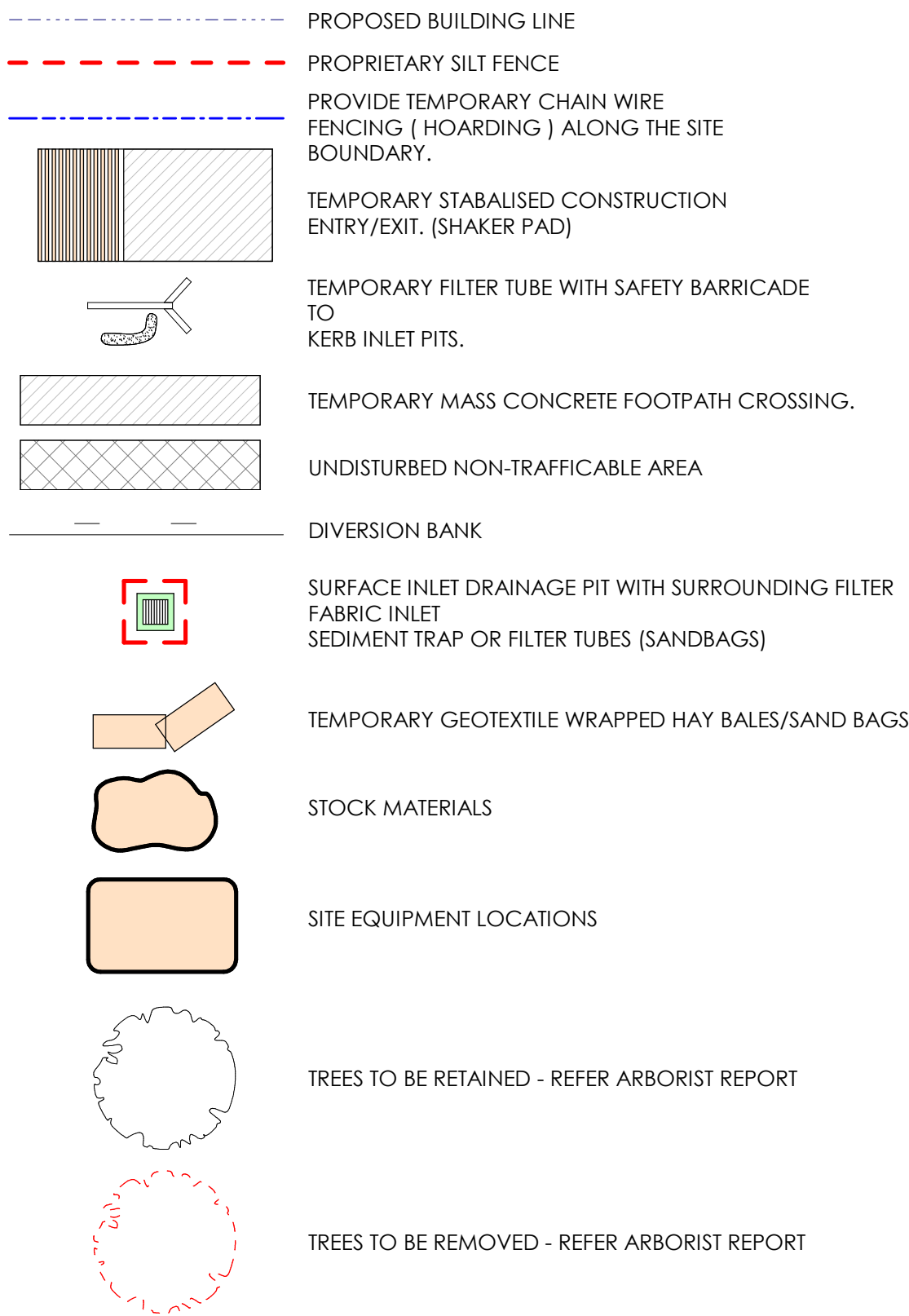
# SUTHERLAND SHIRE ENTERTAINMENT CENTRE

30 ETON ST, SUTHERLAND NSW 2232

Job No. 19010144

No	DATE	DESCRIPTION	BY
1	21.02.20	50% TENDER ISSUE	ELR
2	06.03.20	ISSUED FOR DA	ELR
3	10.03.20	ISSUED FOR DA	ELR

## ENVIRONMENTAL SITE MANAGEMENT LEGEND



## SAFETY IN DESIGN

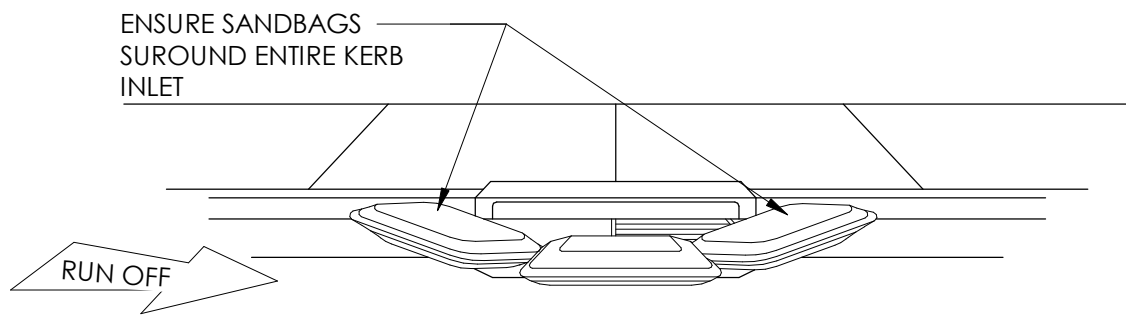
THERE ARE INHERENT RISKS WITH CONSTRUCTING, MAINTAINING, OPERATING, DEMOLISHING, DISMANTLING AND DISPOSING THIS DESIGN THAT ARE TYPICAL OF SIMILAR DESIGNS. AS FAR AS IS REASONABLY PRACTICABLE RISKS HAVE BEEN ELIMINATED OR MINIMISED THROUGH THE DESIGN PROCESS. HAZARD CONTROLS MUST STILL BE IMPLEMENTED BY THE CONTRACTOR, OWNER OR OPERATOR TO ENSURE THE SAFETY OF WORKERS.

- JN DO NOT CONSIDER THAT THERE ARE ANY UNIQUE RISKS ASSOCIATED WITH THE DESIGN OF THIS PROJECT.

## ENVIRONMENTAL SITE MANAGEMENT

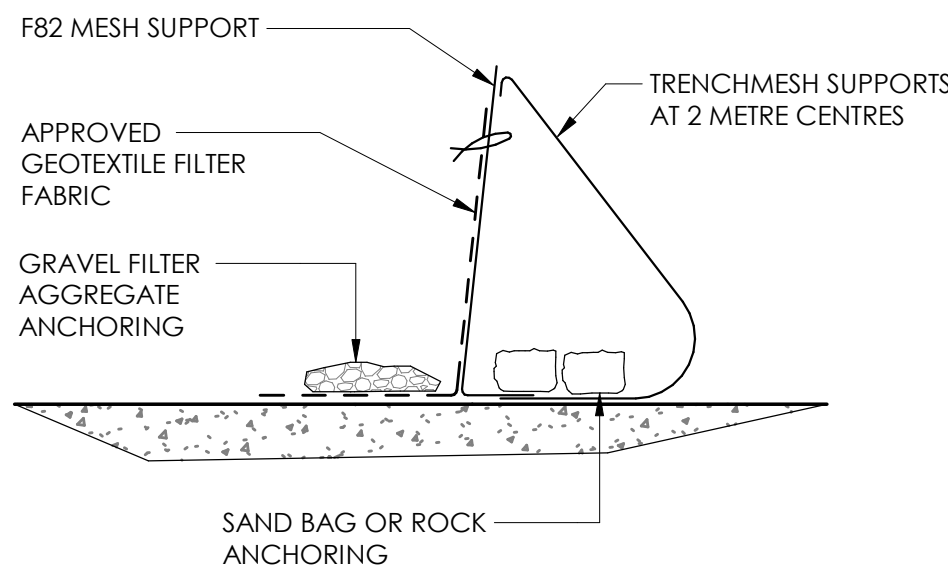
- EROSION & SEDIMENT CONTROLS TO BE INSTALLED IN ACCORDANCE WITH COUNCIL'S SPECIFICATION & THE NSW DEPARTMENT OF HOUSING "BLUE BOOK" - SOILS AND CONSTRUCTION - MANAGING URBAN STORMWATER, 2004. REFER TO THE BLUE BOOK FOR STANDARD DRAWINGS 'SD'
- SEDIMENT & EROSION CONTROLS MUST BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS OR DEMOLITION ACTIVITY. THE LOCATION OF SUCH DEVICES IS INDICATIVE ONLY AND FINAL POSITION SHOULD BE DETERMINED ON SITE.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL MEASURES ARE TAKEN DURING THE COURSE OF CONSTRUCTION TO PREVENT SEDIMENT EROSION AND POLLUTION OF THE DOWNSTREAM SYSTEM. SUPERVISING ENGINEER SHOULD BE CONTACTED IF IN DOUBT. ALL SEDIMENT CONTROL STRUCTURES TO BE INSPECTED AFTER EACH RAINFALL EVENT FOR STRUCTURAL DAMAGE AND ALL TRAPPED SEDIMENT TO BE REMOVED TO A NOMINATED SOIL STOCKPILE SITE.
- RETAIN ALL EXISTING GRASS COVER WHEREVER POSSIBLE. TOPSOIL FROM ALL AREAS THAT WILL BE DISTURBED TO BE STRIPPED AND STOCKPILED AT THE NOMINATED SITE. A SEDIMENT FENCE TO BE PLACED DOWNHILL OF STOCKPILE.
- AREAS OF SITE REGRADING ARE TO BE COMPLETED PROGRESSIVELY DURING THE WORKS AND STABILISED AS EARLY AS POSSIBLE. THE SUPERVISING ENGINEER MAY DIRECT THE CONTRACTOR TO HAVE AREAS OF DISTURBANCE COMPLETED AND STABILISED DURING THE COURSE OF THE WORKS.
- ALL DISTURBED AREAS ARE TO BE SEEDED & FERTILISED WITHIN 14 DAYS OF EXPOSURE.
- ALL EXISTING TREES TO BE RETAINED UNLESS SHOWN OTHERWISE ON APPROVED DRAWINGS. TREES RETAINED ARE TO BE PROTECTED WITH A HIGH VISIBILITY FENCE, PLUS FLAGGING TO INDIVIDUAL TREES AS NECESSARY. REFER ARBORIST REPORT FOR TREE PROTECTION MEASURES.
- INSTALL TEMPORARY SEDIMENT BARRIERS TO ALL INLET PITS LIKELY TO COLLECT SILT LADEN WATER. UNTIL SURROUNDING AREAS ARE PAVED OR REGRASSED. GRAVEL OR GEOTEXTILE INLET FILTERS TO SD6-11 & SD6-12.
- ALL SILT FENCES & BARRIERS ARE TO BE MAINTAINED IN GOOD ORDER & REGULARLY DESILTED DURING THE CONSTRUCTION PERIOD. SILT FENCES TO SD6-8 OR SD6-9.
- STOCKPILES OF LOOSE MATERIALS SUCH AS SAND, SOIL, GRAVEL MUST BE COVERED WITH GEOTEXTILE SILT FENCE MATERIAL. PLASTIC SHEETING OR MEMBRANE MUST NOT BE USED. SAFETY BARRICADING SHOULD BE USED TO ISOLATE STOCKPILES OF SOLID MATERIALS SUCH AS STEEL REINFORCING, FORMWORK AND SCAFFOLDING.
- WASTE MATERIALS ARE TO BE STOCKPILED OR LOADED INTO SKIP-BINS LOCATED ON SITE AS SHOWN ON PLAN.
- NO MORE THAN 150m OF TRENCHING TO BE OPEN AT ANY ONE TIME. IMMEDIATELY AFTER TRENCH BACKFILLING, PROVIDE SANDBAGS OR SAUSAGE FILTERS ACROSS EACH TRENCH AT MAXIMUM 20m SPACINGS. FILTERS TO REMAIN IN PLACE UNTIL REVEGETATION HAS OCCURRED.
- ALL VEHICLES LEAVING THE SITE MUST PASS OVER THE STABILISED SITE ACCESS BALLAST AREA (SIMILAR TO SD6-14) TO SHAKE OFF SITE CLAY AND SOIL. IF NECESSARY WHEELS AND AXLES ARE TO BE HOSED DOWN. BALLAST IS TO BE MAINTAINED & REPLACED AS NECESSARY DURING THE CONSTRUCTION PERIOD.
- THE HEAD CONTRACTOR IS TO INFORM ALL SITE STAFF AND SUB-CONTRACTORS OF THEIR OBLIGATIONS UNDER THE EROSION AND SEDIMENT CONTROL PLAN.
- ANY SEDIMENT DEPOSITED ON THE PUBLIC WAY, INCLUDING FOOTPATH RESERVE AND ROAD SURFACE, IS TO BE REMOVED IMMEDIATELY.
- PROVIDE BARRIERS AROUND ALL CONSTRUCTION WORKS WITHIN THE FOOTPATH AREA TO PROVIDE SAFE ACCESS FOR PEDESTRIANS.
- CONCRETE PUMPS AND CRANES ARE TO OPERATE FROM WITHIN THE BALLAST ENTRY DRIVEWAY AREA AND ARE NOT TO OPERATE FROM THE PUBLIC ROADWAY UNLESS SPECIFIC COUNCIL PERMISSION IS OBTAINED.
- TRUCKS REMOVING EXCAVATED / DEMOLISHED MATERIAL SHOULD TRAVEL ON STABILISED CONSTRUCTION PATHS. MATERIAL TO BE TAKEN TO THE TRUCK TO REDUCE TRUCK MOVEMENT ON SITE. TRUCKS TO BE LIMITED TO SINGLE UNIT HEAVY RIGID VEHICLES. ( NO SEMITRAILERS )
- ANY EXCAVATION WORK ADJACENT TO ADJOINING PROPERTIES OR THE PUBLIC ROADWAY IS NOT TO BE COMMENCED UNTIL THE STRUCTURAL ENGINEER IS CONSULTED AND SPECIFIC INSTRUCTIONS RECEIVED FROM THE ENGINEER.
- TOILET FACILITIES MUST BE EITHER A FLUSHING TYPE OR APPROVED PORTABLE CHEMICAL CLOSET. CHEMICAL CLOSETS ARE TO BE MAINTAINED & SERVICED ON A REGULAR BASIS SO THAT OFFENSIVE ODOUR IS NOT EMITTED.
- DURING TRENCH EXCAVATION ALL SPOIL SHALL BE MOUNDED ON THE UPHILL SIDE OF TRENCHES AND PLACEMENT IS TO COMPLY WITH THE SUPERINTENDENTS REQUIREMENT.
- DIVERSION BANKS SHOULD BE CONSTRUCTED BY MOUNDING STRIPPED TOPSOIL (MIN HEIGHT 600mm) WHERE DIRECTED. MATERIAL TO BE RESPAED ON FOOTWAYS AFTER FINAL TRIMMING.
- UNDISTURBED BUFFER ZONE AREAS ARE CLOSED TO ALL TRAFFIC MOVEMENTS UNLESS OTHERWISE NOTED BY THE SUPERINTENDENT AND ACCESS TO THE SEWER OR C.D.L. TRENCHING WILL BE AS SHOWN, OR HEAVY PENALTIES MAY BE IMPOSED.
- TRAFFIC MANAGEMENT MEASURES ARE REQUIRED TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION. IN ACCORDANCE WITH 'R.T.A. TRAFFIC CONTROL AT WORK SITES - CURRENT EDITION' AND AS 1742 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.'
- PEDESTRIAN CONTROL MEASURES ARE REQUIRED TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION. IN ACCORDANCE WITH AS 1742 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.'

ESM DRAWING LIST	
No.	SHEET NAME
ESM1	NOTES, LEGEND & DETAILS
ESM2	ESM SITE PLAN



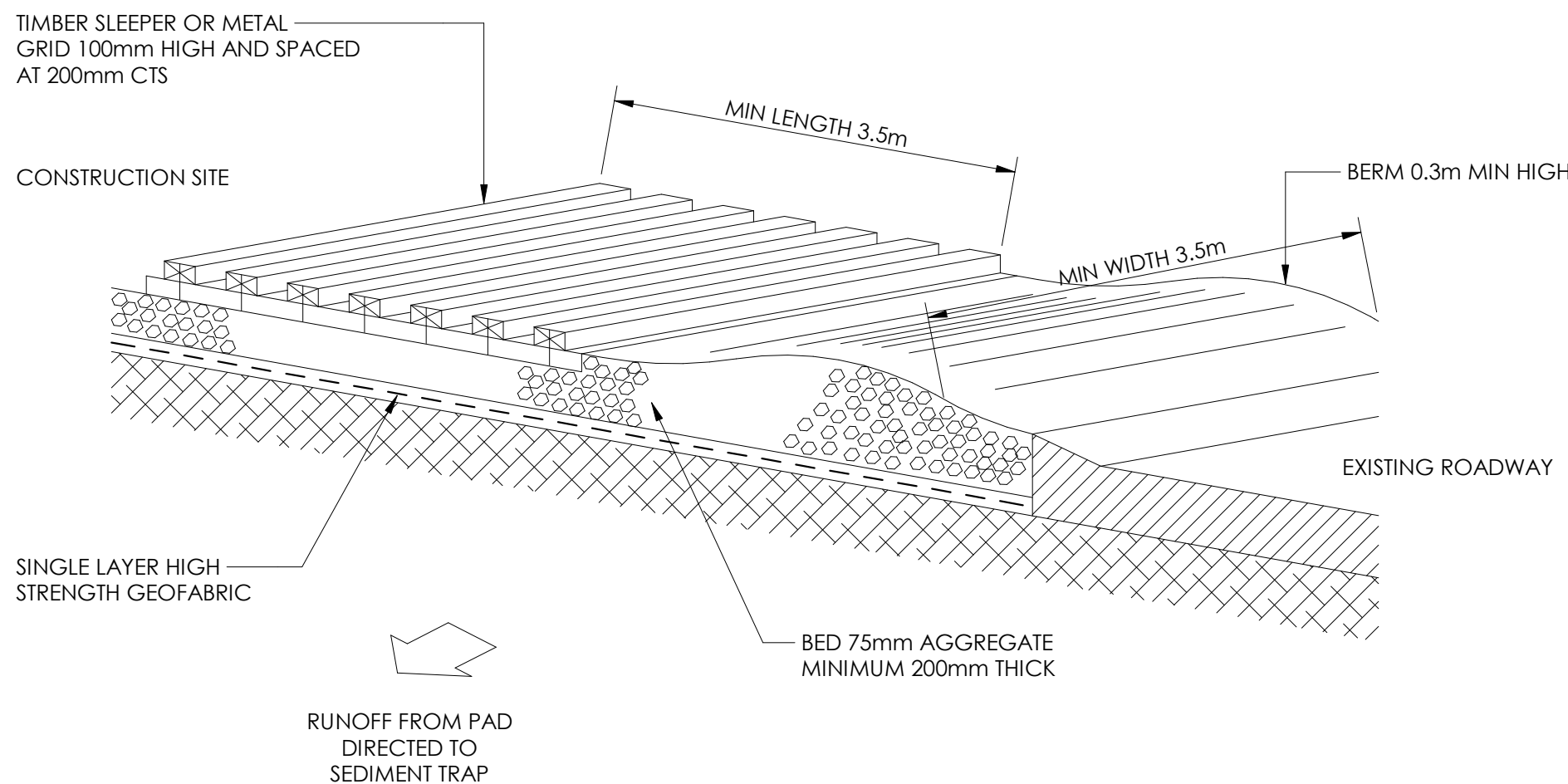
- NOTES:
- FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT.
  - FILL THE SLEEVE WITH 25mm TO 50mm GRAVEL.
  - FORM AN ELIPTICAL CROSS SECTION ABOUT 150mm HIGH X 400mm WIDE.
  - PLACE THE FILTER AT THE OPENING OF THE KERB INLET LEAVING A 100MM GAP AT THE TOP TO ACT AS AN EMERGENCY SPILL WAY.
  - MAINTAIN A CLEAR DISTANCE AWAY FROM THE PIT WITH SPACER BLOCKS.
  - FORM A SEAL WITH THE KERBING AND PREVENT SEDIMENT BYPASSING THE FILTER.
  - FIT TO ALL KERB INLETS AS SHOWN.

## SANDBAG SEDIMENT INLET TRAP

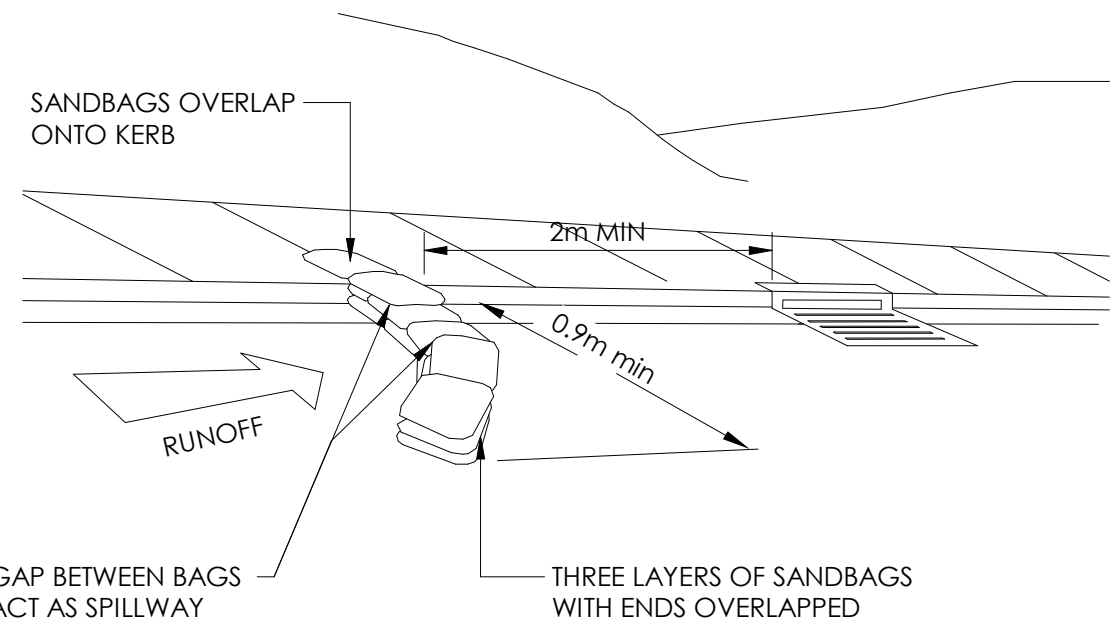


- GENERAL CONSTRUCTION NOTES:**
- CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE.
  - FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF POSTS WITH WIRE TIES OR AS RECOMMENDED BY GEOTEXTILE MANUFACTURER.
  - JOIN SECTIONS OF FABRIC AT A SUPPORT WITH A 150mm OVERLAP.
  - REFER TO DETAIL SD 6-9 'BLUE BOOK'

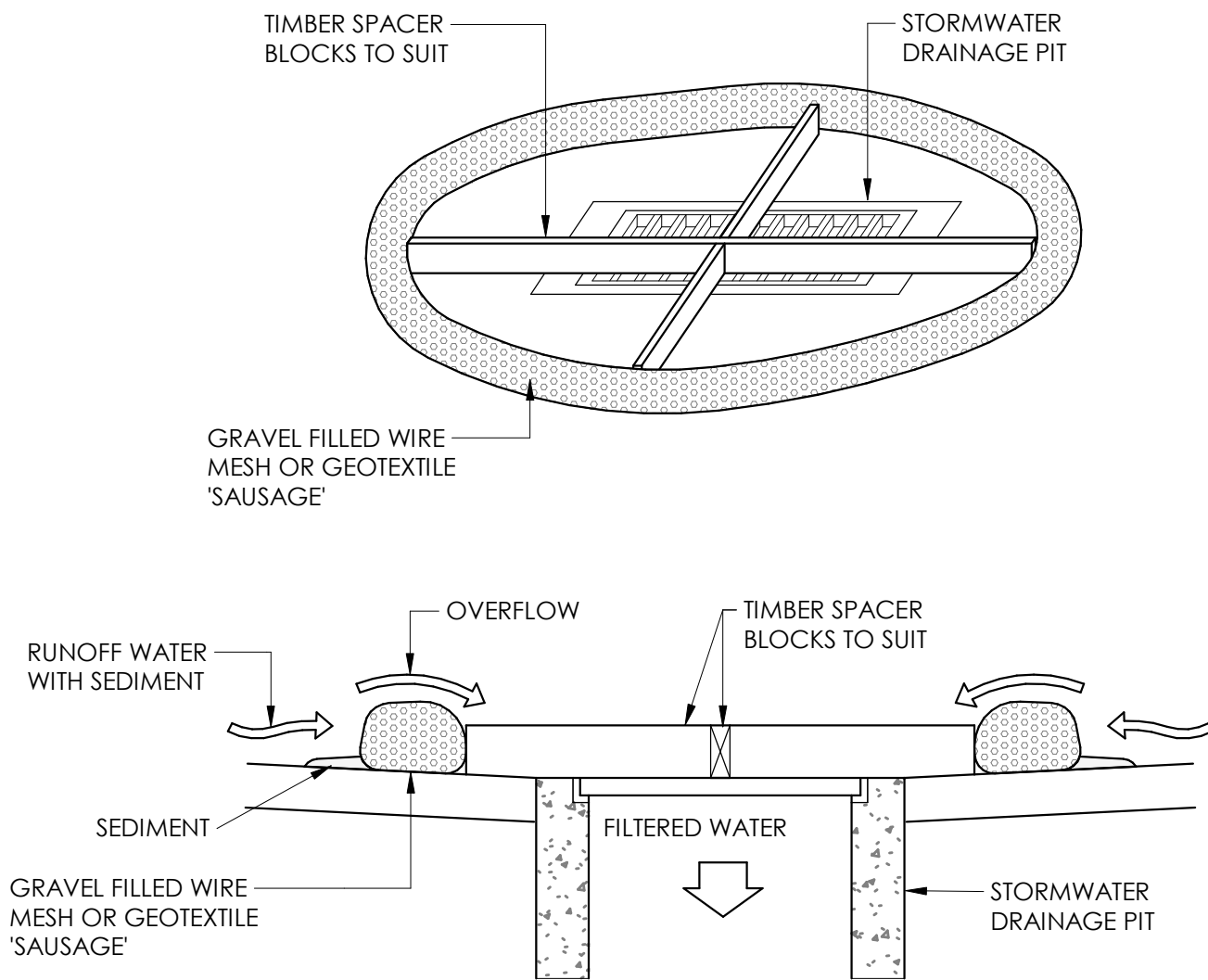
## SEDIMENT FENCE - ALTERNATIVE



## TEMPORARY CONSTRUCTION EXIT DETAIL - SHAKER



## SANDBAG SEDIMENT TRAP DETAIL



- FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH ON THE INLET PIT.
- FILL THE SLEEVE WITH 25mm TO 50mm GRAVEL.
- FORM AN ELIPTICAL CROSS SECTION ABOUT 150mm HIGH x 400mm WIDE.
- MAINTAIN A CLEAR DISTANCE AWAY FROM THE PIT WITH SPACER BLOCKS.

## SAUSAGE BARRIER DETAIL



SSC Ref. No 17700 *Responsive Engineering*

CLIENT  
SUTHERLAND SHIRE COUNCIL

STATUS  
PRELIMINARY

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DISCIPLINE  
CIVIL DESIGN

DRAWING TITLE  
NOTES, LEGEND & DETAILS

PROJECT  
SUTHERLAND SHIRE ENTERTAINMENT CENTRE

ADDRESS  
30 ETON ST, SUTHERLAND NSW 2232

PROJECT DETAILS  
DESIGN SD  
DRAWN ER  
DATE OCT'19  
DRG SIZE A1  
SCALE As indicated  
PROJECT MGR  
WWW.JN.COM.AU  
19010144  
ESM1 3



No	DATE	DESCRIPTION	BY
1	21.02.20	50% TENDER ISSUE	ELR
2	06.03.20	ISSUED FOR DA	ELR
3	10.03.20	ISSUED FOR DA	ELR

ENVIRONMENTAL SITE MANAGEMENT LEGEND

- PROPOSED BUILDING LINE
- PROPRIETARY SILT FENCE
- PROVIDE TEMPORARY CHAIN WIRE FENCING ( HOARDING ) ALONG THE SITE BOUNDARY.
- TEMPORARY STABILISED CONSTRUCTION ENTRY/EXIT. (SHAKER PAD)
- TEMPORARY FILTER TUBE WITH SAFETY BARRICADE TO KERB INLET PITS.
- TEMPORARY MASS CONCRETE FOOTPATH CROSSING.
- UNDISTURBED NON-TRAFFICABLE AREA
- DIVERSION BANK
- SURFACE INLET DRAINAGE PIT WITH SURROUNDING FILTER FABRIC INLET SEDIMENT TRAP OR FILTER TUBES (SANDBAGS)
- TEMPORARY GEOTEXTILE WRAPPED HAY BALES/SAND BAGS
- STOCK MATERIALS
- SITE EQUIPMENT LOCATIONS
- TREES TO BE RETAINED - REFER ARBORIST REPORT
- TREES TO BE REMOVED - REFER ARBORIST REPORT

TYPICAL NOTES

1. PROVIDE FILTER FABRIC SEDIMENT TRAP OR FILTER TUBES (SANDBAGS) AROUND ALL EXISTING AND PROPOSED INLET PITS.
2. PROVIDE FILTER FABRIC SEDIMENT TRAP OR FILTER TUBES (SANDBAGS) AROUND ALL GRATED DRAINS.
3. PROVIDE FILTER FABRIC SEDIMENT TRAP OR FILTER TUBES (SANDBAGS) AROUND ALL RWO'S.
4. PROVIDE TEMPORARY CHAIN WIRE FENCE (HOARDING) ALONG ENTIRE SITE BOUNDARY.
5. PROVIDE TEMPORARY SILT FENCE BARRIER TO LOW SIDE OF RUNOFF AREAS.
6. PROVIDE KERB SANDBAG SEDIMENT TRAPS AROUND ALL KERB INLET PITS.
7. AS DISTURBED SITE AREA IS LESS THAN 2500m², NO SEDIMENT BASIN IS NECESSARY TO MEET BLUEBOOK REQUIREMENTS.



SSC Ref. No 17700 *Responsive Engineering*

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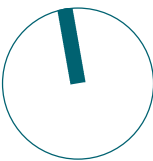
DRAWING TITLE  
ESM SITE PLAN

PROJECT  
SUTHERLAND SHIRE  
ENTERTAINMENT CENTRE

ADDRESS  
30 ETON ST, SUTHERLAND NSW 2232

PROJECT DETAILS  
DESIGN  
DRAWN  
DATE  
DRG SIZE  
SCALE  
PROJECT  
MGR  
WWW.JN.COM.AU

SD  
ER  
OCT'19  
A1  
As indicated  
ESM2 3  
19010144



ESM PLAN  
SCALE 1 : 150