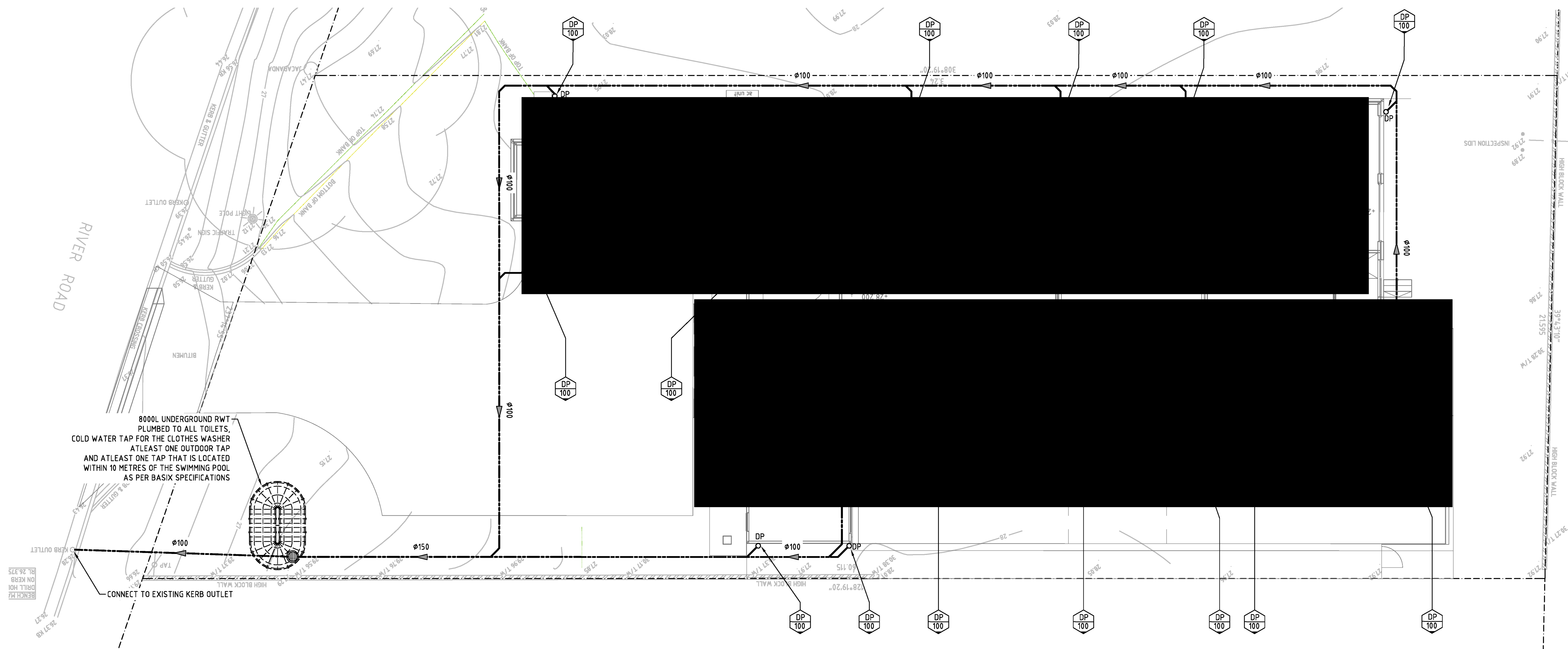


	PROPOSED STORMWATER DRAINAGE LINE AND PIPE SIZE
	SUBSOIL DRAINAGE
	STORMWATER FLOW ARROW
	ROOF DRAINAGE DOWNPIPE
	DROPPER
	SPREADER
	INSPECTION OPENING

1. ALL PIPE WORK SHALL BE INSTALLED AND TESTED TO AS3500.
2. ALL PIPE PENETRATIONS THROUGH CONCRETE STRUCTURAL ELEMENTS SHALL BE COORDINATED AND WHERE POSSIBLE CAST-IN PRIOR TO THE PLACEMENT OF CONCRETE. THE CONTRACTOR SHALL NOT CUT OR MOVE ANY STEEL REINFORCING BARS TO SUIT A PIPE PENETRATION UNLESS APPROVED IN WRITING BY THE BUILDER AND OR THE PROJECTS STRUCTURAL ENGINEER.
3. ALL CORE HOLE LOCATIONS SHALL BE APPROVED IN WRITING BY THE BUILDER AND OR THE PROJECTS STRUCTURAL ENGINEER PRIOR TO THE COMMENCEMENT OF ANY CORING ACTIVITIES.
4. THE CONTRACTOR SHALL PROVIDE AND REMOVE ON COMPLETION ALL TIMBERING AND SHORING AS NECESSARY TO CONSTRUCT THE PIPEWORK.
5. WHERE THE CLEARANCE FROM THE TOP OF PIPE WORK TO THE UNDERSIDE OF A FOOTING IS LESS THAN 150mm THEN THE CONTRACTOR SHALL INSTALL AN 80mm COMPRESSIBLE MATERIAL OVER THE PIPE WORK.
6. ALL DRAINS SHALL BE SUPPORTED ON FIRM GROUND. UPON EXCAVATION TO THE REQUIRED LEVELS, IF SOFT OR WATER CHARGED GROUND IS ENCOUNTERED, THEN THE CONTRACTOR SHALL NOTIFY THE BUILDER IMMEDIATELY AND AWAIT FURTHER DIRECTION PRIOR TO PROCEEDING WITH ANY PIPE LAYING.

1. STORMWATER DRAINAGE PIPES
 - DN100 OR SMALLER SHALL BE uPVC STORMWATER DRAINAGE PIPE TO AS2524
 - DN150 TO DN300 SHALL BE uPVC CLASS SN4 (SEWER HEAVY GRADE)
 - DN375 OR LARGER SHALL BE REINFORCED CONCRETE OR FIBRE REINFORCED CONCRETE PIPE

1. ALL EAVES GUTTERS SHALL BE HALF ROUND 150 OR EQUAL (MINIMUM CROSS SECTIONAL AREA OF 8,835sq.mm) UNLESS SPECIFIED OTHERWISE, WITH MATERIAL AND COLOUR AS SPECIFIED BY THE ARCHITECT.
2. ALL DOWNPIPES SHALL BE Ø100 UPVC, UNLESS NOTED OTHERWISE ON DRAWING COLOUR AS SPECIFIED BY THE ARCHITECT.
3. ALL STORMWATER DRAINAGE LINES THAT ARE CHARGED ARE TO BE UPVC CLASS SM10 WITH SOLVENT WELD JOINTS AND SEALED TO THE EAVES GUTTER CONNECTION.

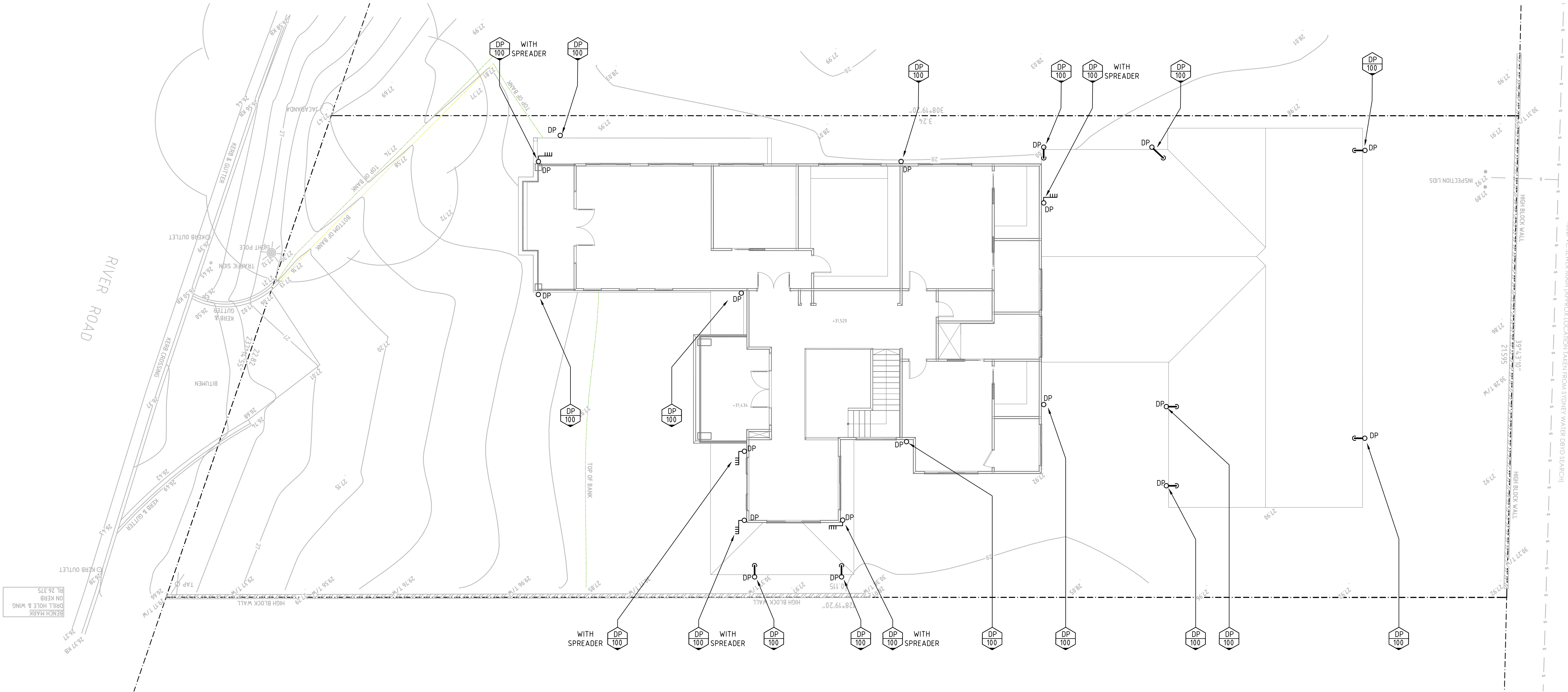


GROUND FLOOR PLAN

SCALE 1:100

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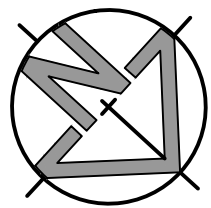
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UPPER LEVEL FLOOR PLAN
SCALE 1:100

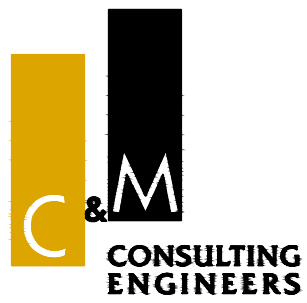
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REV.	DRN.	DATE	CHK.	DESCRIPTION
02	A.A.	11/06/2021	A.M.	UPDATED DESIGN AS PER NEW ARCHITECTURAL PLANS
01	A.A.	28/04/2021	A.M.	ISSUE FOR DEVELOPMENT APPLICATION



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CIVIL AND HYDRAULIC
ENGINEERING DESIGN AND
PROJECT MANAGEMENT

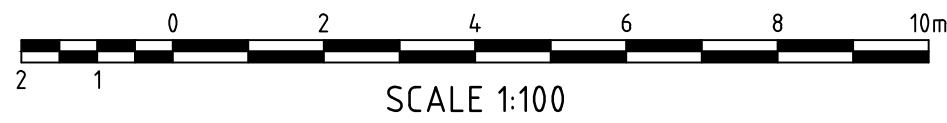
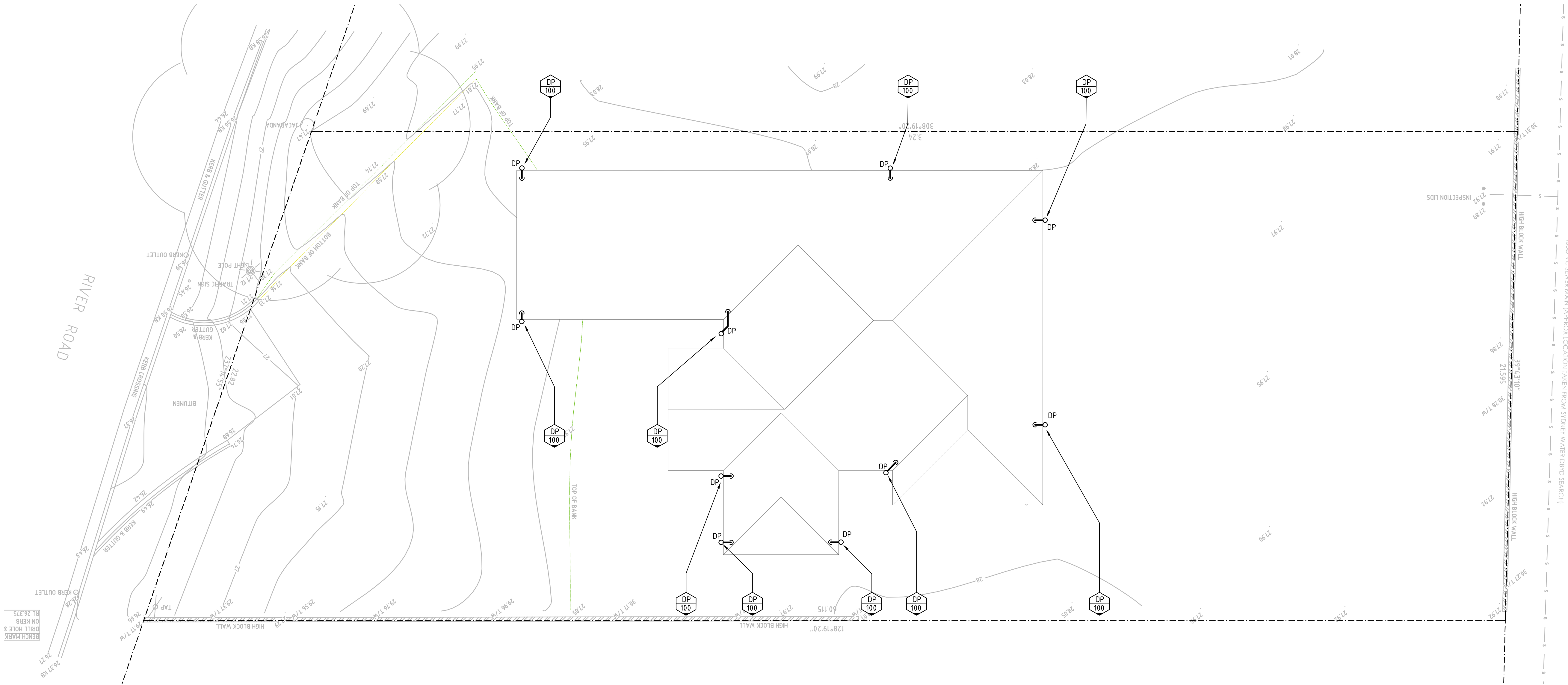
SUITE 26
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PHONE: (02) 9680 3100
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ABN 21 118 134 240

DRAWN	A.AGIUS	DATE 1st ISSUED	30/04/2021
DESIGNER	A.AGIUS	LGA	PENRITH
ENGINEER	A.MANCONE	SCALE @ A1	1:100
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92 RIVER ROAD, EMU PLAINS			
STORMWATER DRAINAGE- UPPER LEVEL FLOOR PLAN			
STATUS	DEVELOPMENT APPLICATION	DRAWING No.	02468__202
REVISION	02		

CAD FILENAME: Q:\C&M\Projects\02401-02500\NPL-02468 - LOT 12, 92 RIVER ROAD EMU PLAINS\ACAD\02468_201.dwg



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									DESIGNER A.AGIUS	LGA PENRITH	STORMWATER DRAINAGE- ROOF PLAN											
									ENGINEER A.MANCONE	SCALE @ A1 1:100												
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02	A.A.	11/06/2021	A.M.	UPDATED DESIGN AS PER NEW ARCHITECTURAL PLANS																		
01	A.A.	28/04/2021	A.M.	ISSUE FOR DEVELOPMENT APPLICATION																		
REV.	DRN.	DATE	CHK.	DESCRIPTION																		



MAKE SMOOTH CONNECTION
TO EXISTING KERB & GUTTER
AS PER PENRITH CITY
COUNCIL'S STANDARD
DRAWING SD1003

BOUNDARY



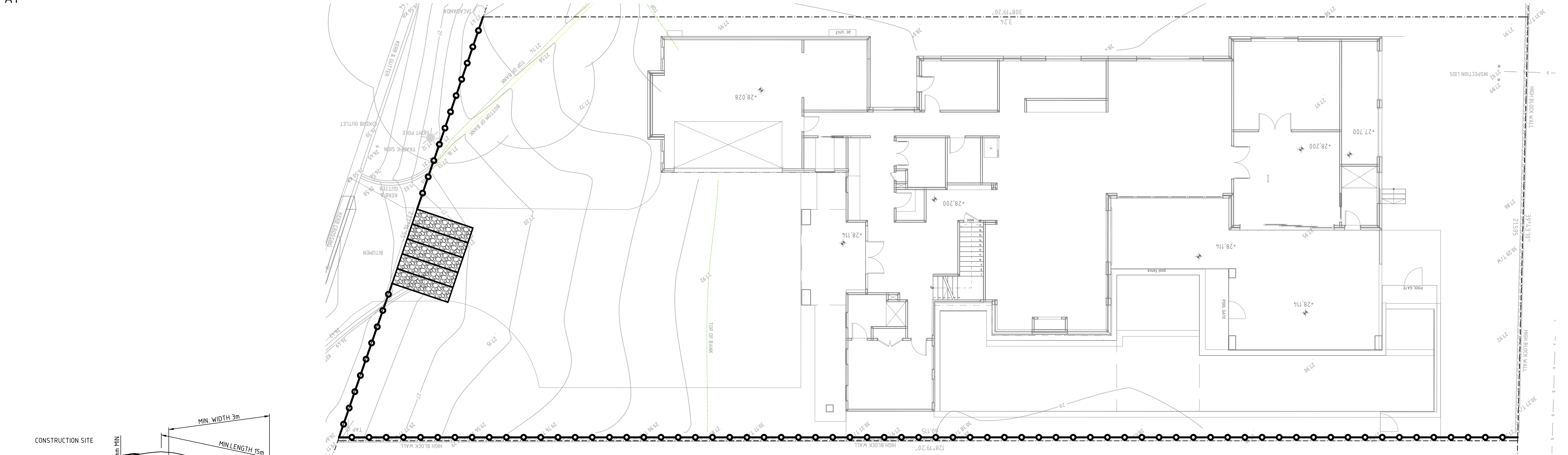
1. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH PENRITH CITY COUNCIL TECHNICAL SPECIFICATION.
2. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH PENRITH CITY COUNCIL STANDARD TECHNICAL DRAWINGS LISTED.
3. ALL NEW WORKS ARE TO MAKE A SMOOTH CONNECTION WITH EXISTING CONDITIONS.
4. THE CONTRACTOR IS TO VERIFY THE LOCATION OF ALL SERVICES WITH EACH RELEVANT AUTHORITY. ANY DAMAGE TO SERVICES SHALL BE RECTIFIED BY THE CONTRACTOR OR THE RELEVANT AUTHORITY AT THE CONTRACTORS EXPENSE. SERVICES SHOWN ON THESE PLANS ARE ONLY THOSE EVIDENT AT THE TIME OF SURVEY & FROM SERVICE DIAGRAMS.
5. SERVICES & ACCESSSES TO THE EXISTING PROPERTIES ARE TO BE MAINTAINED AT ALL TIMES.
6. MINIMUM GRADE OF SUBSOIL SHALL BE 0.5% FALL.
7. ALL SEDIMENT CONTROL DEVICES ARE TO BE CONSTRUCTED, PLACED AND MAINTAINED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION, SEDIMENT AND EROSION CONTROL PLAN AND SOIL & WATER MANAGEMENT PLAN.
8. ALL LINEMARKING INCLUDING LINEMARKING CHEVRONS TO BE THERMOPLASTIC.

	BOUNDARY
	KERB & GUTTER (K&G)
	VEHICULAR CROSSING (V.C.)
	EXISTING SURFACE CONTOUR
	FINISHED SURFACE LEVEL

CONTRACTOR TO CONFIRM LOCATION OF EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORKS ON SITE. ANY DISCREPANCIES SHALL BE REFERRED TO THE DESIGN ENGINEER IMMEDIATELY

NOT FOR CONSTRUCTION

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SEDIMENT EROSION CONTROL PLAN

SCALE 1:100

SEDIMENT AND EROSION CONTROL:

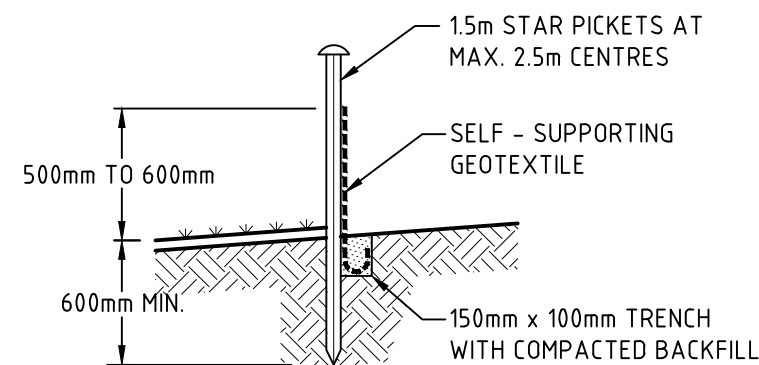
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED, PLACED AND MAINTAINED IN ACCORDANCE WITH THE DEPARTMENT OF HOUSING'S "MANAGING URBAN STORMWATER: SOILS AND CONSTRUCTION" MANUAL.
- NO CONSTRUCTION WORKS ARE TO COMMENCE ON SITE UNTIL ALL EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE AND HAVE BEEN INSPECTED AND APPROVED BY THE PRINCIPAL CERTIFYING AUTHORITY.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REGULARLY INSPECTED, IN PARTICULAR AFTER STORMS, AND REPAIRED OR MAINTAINED AS REQUIRED TO ENSURE THE MEASURES' CORRECT AND EFFICIENT FUNCTION THROUGHOUT THE DURATION OF THE WORKS, UNTIL SUCH TIME AS THE PRINCIPAL CERTIFYING AUTHORITY AUTHORISES THE REMOVAL OF SUCH MEASURES.
- ALL STOCKPILES SHALL BE CLEAR OF ALL TREES AND DRAINAGE LINES (INCLUDING OVERLAND FLOW PATHS) AND PROTECTED FROM EROSION.
- DUST CONTROL MEASURES SHALL BE IMPLEMENTED CONTINUOUSLY DURING CONSTRUCTION WORKS.

CONSTRUCTION NOTES:

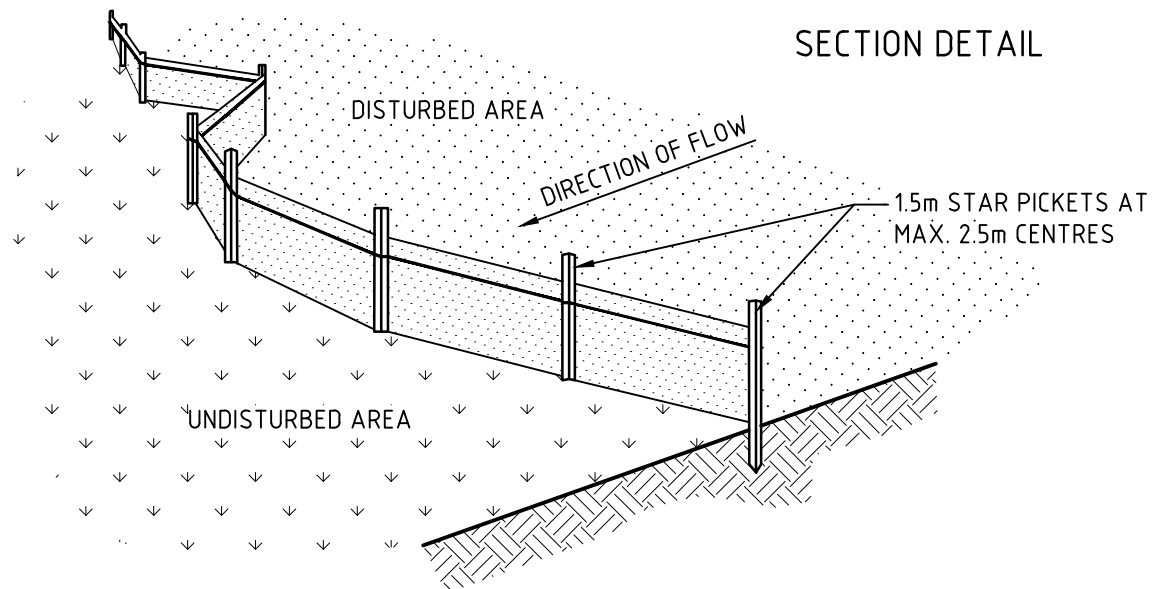
- STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.
- COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
- CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm AGGREGATE.
- ENSURE THE STRUCTURE IS AT LEAST 15m LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3m WIDE.
- WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMP IN THE STABILISED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE.

CONSTRUCTION NOTES:

- CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
- CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
- DRIVE 15 METRE LONG STAR PICKETS INTO THE GROUND AT 2.5 METRE INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
- FIX SELF SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
- JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150-mm OVERLAP.
- BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.



SECTION DETAIL



PLAN

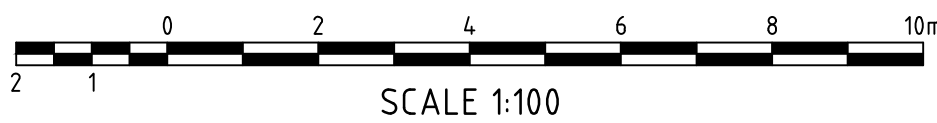
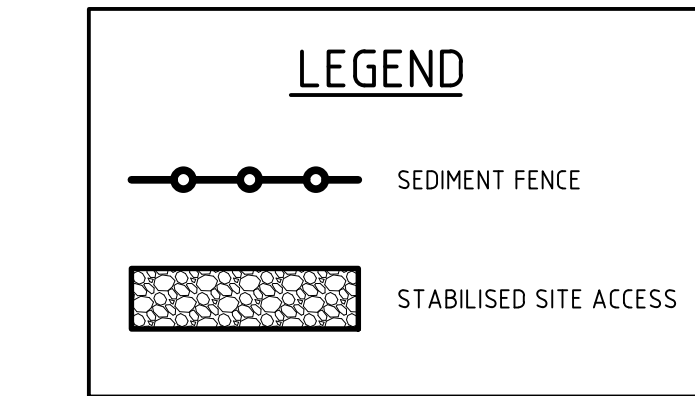
SEDIMENT FENCE DETAIL

NOT TO SCALE

STABILISED SITE ACCESS DETAIL

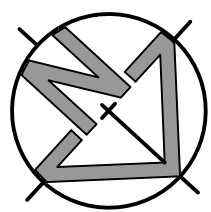
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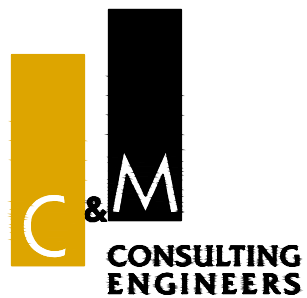
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92 RIVER ROAD, EMU PLAINS

SEDIMENT & EROSION CONTROL-
PLAN AND DETAILS

STATUS DEVELOPMENT APPLICATION DRAWING No. 02468_701 REVISION 02