

TWEED VALLEY HOSPITAL DEVELOPMENT

CUDGEN ROAD AUXILIARY LANE WORKS

DRAWING No.

DESCRIPTION

20 10748 C400	DRAWING REGISTER AND CONSTRUCTION NOTES
20 10748 C405	SEDIMENT AND EROSION CONTROL PLAN
20 10748 C441	AUXILIARY LANE CIVIL WORKS PLAN
20 10748 C442	AUXILIARY LANE STORMWATER DRAINAGE PLAN
20 10748 C450	AUXILIARY LANE STORMWATER DRAINAGE LONGITUDINAL SECTION
20 10748 C460	CIVIL WORKS AND STORMWATER DRAINAGE DETAILS
20 10748 C480	AUXILIARY LANE KERB CROSS SECTIONS
20 10748 C485	AUXILIARY LANE KERB LONGITUDINAL SECTIONS

GENERAL NOTES

- G1 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS OR SKETCHES AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE SUPERINTENDENT BEFORE PROCEEDING WITH WORK.
- G2 MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE SPECIFICATION, CURRENT SAA CODES, BUILDING REGULATIONS AND THE REQUIREMENTS OF ANY OTHER RELEVANT STATUTORY AUTHORITIES.
- G3 THESE DRAWINGS MUST NOT BE SCALED. ALL DIMENSIONS ARE IN METERS. ALL SET OUT DIMENSIONS AND LEVELS, INCLUDING THOSE SHOWN ON THESE DRAWINGS SHALL BE IN ACCORDANCE WITH THE ARCHITECT'S DRAWINGS AND VERIFIED ON SITE.
- G4 ALL SETOUT AND DIMENSIONS OF THE STRUCTURE INCLUDING KERBS AND RETAINING WALLS, AND BULK EARTHWORKS MUST BE TAKEN FROM THE ARCHITECT'S DRAWINGS, SETOUT OF THE STORMWATER PITS BY OTHERS. CONTRACTOR TO CONFIRM SETOUT OF SERVICE TRENCHING INCLUDING SUBSOIL ON SITE.
- G5 THE CONTRACTOR SHALL COMPLY WITH ALL REGULATIONS OF AUTHORITIES HAVING JURISDICTION OVER THE WORKS. REFER TO GEOTECHNICAL REPORT BY MORRISON GEOTECHNIC PTY LTD, REFERENCE: GE18/144 REV 2, DATED 28TH SEPTEMBER 2018.
- G6 ALL DIMENSIONS AND REDUCED LEVELS MUST BE VERIFIED ON SITE BEFORE THE COMMENCEMENT OF ANY WORK.
- G7 THE APPROVAL OF A SUBSTITUTION SHALL BE SOUGHT FROM THE SUPERINTENDENT BUT IS NOT AN AUTHORISATION OF A COST VARIATION. THE SUPERINTENDENT MUST APPROVE ANY COST VARIATION INVOLVED BEFORE ANY WORK STARTS.
- G8 ALL LEVELS SHOWN ARE TO THE AUSTRALIAN HEIGHT DATUM.
- G9 SERVICE INFORMATION SHOWN IS APPROXIMATE ONLY. PRIOR TO COMMENCEMENT OF ANY WORKS, THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND SERVICES AND COMPLY WITH ALL REQUIREMENTS OF THOSE AUTHORITIES.
- G10 EXISTING SURFACE CONTOURS, WHERE SHOWN, ARE INTERPOLATED AND MAY NOT BE ACCURATE.
- G11 UNLESS NOTED OTHERWISE, ALL VEGETATION SHALL BE STRIPPED TO A MINIMUM DEPTH OF 150mm UNDER ALL PROPOSED PAVEMENT AND BUILDING AREAS.
- G12 MAKE SMOOTH CONNECTION WITH ALL EXISTING WORKS.

SITWORKS NOTES

- S1 PRIOR TO THE PLACEMENT OF ANY PAVEMENTS, BUILDINGS OR DRAINS THE EXPOSED SUBGRADE SHALL BE COMPACTED TO A MINIMUM OF 98% STANDARD COMPACTION IN ACCORDANCE WITH TEST 'E1' OF A.S. 1289 FOR THE TOP 300mm. ANY SOFT SPOTS SHALL BE REMOVED AND REPLACED WITH GRANULAR FILL TO THE ENGINEERS APPROVAL AND COMPACTED IN ACCORDANCE WITH THE COMPACTION REQUIREMENTS SET OUT BELOW. ON HIGHLY REACTIVE CLAY AREAS SITE EXCAVATED MATERIAL MAY BE USED WITH THE PRIOR AUTHORISATION OF THE ENGINEER.
- S2 ALL FILL AND PAVEMENT MATERIALS SHALL BE COMPACTED IN ACCORDANCE WITH GEOTECHNICAL REPORT BY MORRISON GEOTECHNIC PTY LTD REFERENCE: GE18/144 REV 2 DATED 28TH SEPTEMBER 2018 MOISTURE CONTENT TO BE MAINTAINED AT +/- 2% OMC. MINIMUM COMPACTION REQUIREMENTS ARE DETAILED BELOW FOR (ALL REQUIREMENTS ARE TO BE VERIFIED BY A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER):
 - LANDSCAPED AREAS 95% STD.
 - FILL UNDER ANY FOOTINGS AND FLOOR SLABS FOR ANY STRUCTURE TO SUBGRADE LEVEL:
 - FINE CRUSHED ROCK 98% STD.
 - SELECTED FILL WITHOUT CONSPICUOUS CLAY CONTENT 98% STD.
 - BUILDING BASECOURSE 98% MOD
 - FILL UNDER ROAD PAVEMENTS:
 - TO WITHIN 500mm OF FINISHED SUBGRADE LEVEL 98% STD.
 - UP TO FINISHED SUBGRADE LEVEL 98% STD.
 - ROAD PAVEMENT MATERIALS:
 - SUB BASE 98% MOD.
 - BASE COURSE 98% MOD.

THE MAXIMUM COMPACTION IS TO BE NO GREATER THAN 4% ON TOP OF THE ABOVE MENTION VALUES.
- S3 GRADE EVENLY BETWEEN FINISHED SURFACE SPOT LEVELS. FINISHED SURFACE CONTOURS ARE SHOWN FOR CLARITY. WHERE FINISHED SURFACE LEVELS ARE NOT SHOWN, THE SURFACE SHALL BE GRADED SMOOTHLY SO THAT IT WILL DRAIN AND MATCH ADJACENT SURFACES OR STRUCTURES.
- S4 ALL DIMENSIONS GIVEN ARE TO FACE OF KERB, CENTER OF PIPE OR EXTERIOR FACE OF BUILDING UNLESS NOTED OTHERWISE.
- S5 ANY STRUCTURES, PAVEMENTS OR SURFACES DAMAGED, DIRTIED OR MADE UNSERVICABLE DUE TO CONSTRUCTION WORK SHALL BE REINSTATED TO THE SATISFACTION OF THE ENGINEER.
- S6 ANY FILL REQUIRED SHALL BE APPROVED BY THE ENGINEER / GEOTECHNICAL CONSULTANT
- S7 CONTRACTOR IS TO ENSURE THAT ALL EXCAVATIONS ARE MAINTAINED IN A DRY CONDITION WITH NO WATER ALLOWED TO REMAIN IN THE EXCAVATIONS.
- S8 ALL FINISHES AND COLOURS TO BE IN ACCORDANCE WITH ARCHITECTURAL SPECIFICATIONS.
- S9 REFER TO STRUCTURAL DRAWINGS FOR CONCRETE, REINFORCEMENT AND RETAINING WALL DETAILS.
- S10 GENERALLY FOR TRENCHING WORKS THE CONTRACTOR MUST:
 - A) COMPLY WITH THE GENERAL PROVISIONS OF PART 3.1 "MANAGING RISKS TO HEALTH AND SAFETY" OF NSW WORK AND HEALTH AND SAFETY REGULATION 2011
 - B) COMPLY PART 6.3 DIVISION 3 "EXCAVATION WORK" OF NSW WORK HEALTH AND SAFETY REGULATION NSW 2011
- S11 PRIOR TO THE EXCAVATION OF ANY TRENCH DEEPER THAN 15 METRES THE CONTRACTOR MUST:
 - A) NOTIFY THE OCCUPATIONAL HEALTH AND SAFETY AUTHORITY ON THE APPROPRIATE FORM.

STORMWATER DRAINAGE NOTES

- SW1 UNLESS NOTED OTHERWISE BY HYDRAULIC ENGINEERS DRAWINGS, ALL DOWNPIPES & GRATED INLETS SHALL BE CONNECTED TO PITS OR MAIN STORMWATER DRAINS WITH 150 DIA. UPVC PIPES LAID AT A MINIMUM GRADE OF 1 IN 100. FOR SYPHONIC ROOF DRAINAGE SYSTEMS ALL DOWNPIPES CONNECTION DRAIN SIZES TO BE CONNECTED INTO MAIN STORMWATER DRAINS SHALL BE IN ACCORDANCE WITH HYDRAULIC ENGINEERS DRAWINGS.
- SW2 ALL MAIN STORMWATER DRAINS SHALL BE CONSTRUCTED USING MATERIALS AS SPECIFIED ON THE DRAWINGS IN ACCORDANCE WITH THE APPROPRIATE A.S. IF NOT SPECIFIED THEN CLASS 4 RRJ RCP SHALL BE USED FOR DIAMETERS > 225mm. SEWER CLASS SEH UPVC IN ACCORDANCE WITH AS1260 SHALL BE USED FOR Ø225mm OR SMALLER.
- SW3 ALL PIPEWORK TO BE INSTALLED IN ACCORDANCE WITH AS3725 FOR RCP AND AS2032 FOR PVC. ALL BEDDING TO BE TYPE H2 UNLESS NOTED OTHERWISE.
- SW4 FOR ALL PITS > 12m DEEP, STEP IRONS SHALL BE INSTALLED.
- SW5 PRECAST PITS MAY BE USED EXTERNAL TO THE BUILDING SUBJECT TO APPROVAL BY BONACCI GROUP.
- SW6 ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED FITTINGS WHERE PIPES ARE LESS THAN 300 DIA.
- SW7 WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED UPVC SEWER GRADE PIPE IS TO BE USED.
- SW8 GRATES AND COVERS SHALL CONFORM WITH AS 3996 AND AS 1428.1 FOR ACCESS REQUIREMENTS.
- SW9 CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES ARE NOT TO BE REDUCED WITHOUT APPROVAL.
- SW10 AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.
- SW11 ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE TO BE INSPECTED AND CLEANED. DURING THIS PROCESS ANY PART OF THE STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT / ENGINEER FOR FURTHER DIRECTIONS.

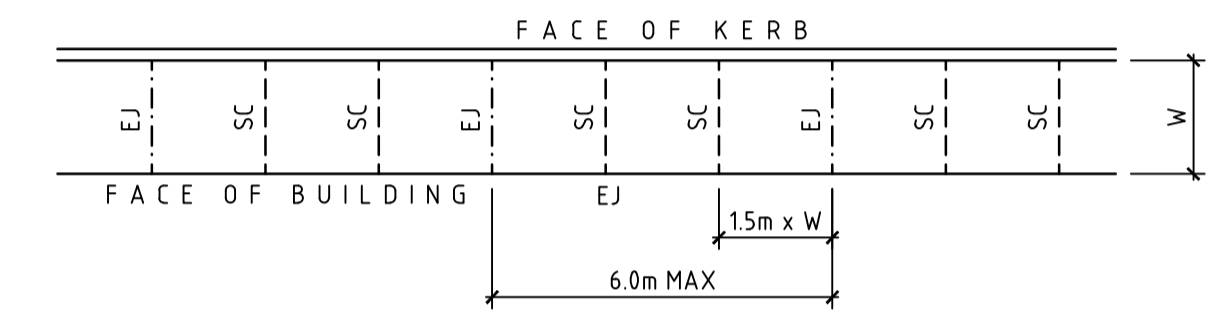
KERBING NOTES

- K1 ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 32 MPa U.N.O.
- K2 ALL KERBS, GUTTERS, DISH DRAINS AND CROSSINGS TO BE CONSTRUCTED ON 75mm GRANULAR BASECOURSE COMPACTED TO A MINIMUM 98% MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS1289 5.2.1.
- K3 EXPANSION JOINTS (EJ) TO BE FORMED FROM 10mm COMPRESSIBLE CORK FILLER BOARD FOR THE FULL DEPTH OF THE SECTION AND CUT TO PROFILE. EXPANSION JOINTS TO BE LOCATED AT DRAINAGE PITS, ON TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX 12m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE EXPANSION JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLAB.
- K4 WEAKENED PLANE JOINTS TO BE MIN 3mm WIDE AND LOCATED AT 3m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE WEAKENED PLANE JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLAB.
- K5 BROOMED FINISH TO ALL RAMPED AND VEHICULAR CROSSINGS. ALL OTHER KERBING OR DISH DRAINS TO BE STEEL FLOAT FINISHED.
- K6 IN THE REPLACEMENT OF KERBS-
 - EXISTING ROAD PAVEMENT IS TO BE SAWCUT 900mm U.N.O. FROM THE LIP OF GUTTER. UPON COMPLETION OF THE NEW KERB AND GUTTER, NEW BASECOURSE AND SURFACE TO BE LAID 600mm WIDE U.N.O.
 - EXISTING KERBS ARE TO BE COMPLETELY REMOVED WHERE NEW KERBS ARE SHOWN.

JOINTING NOTES

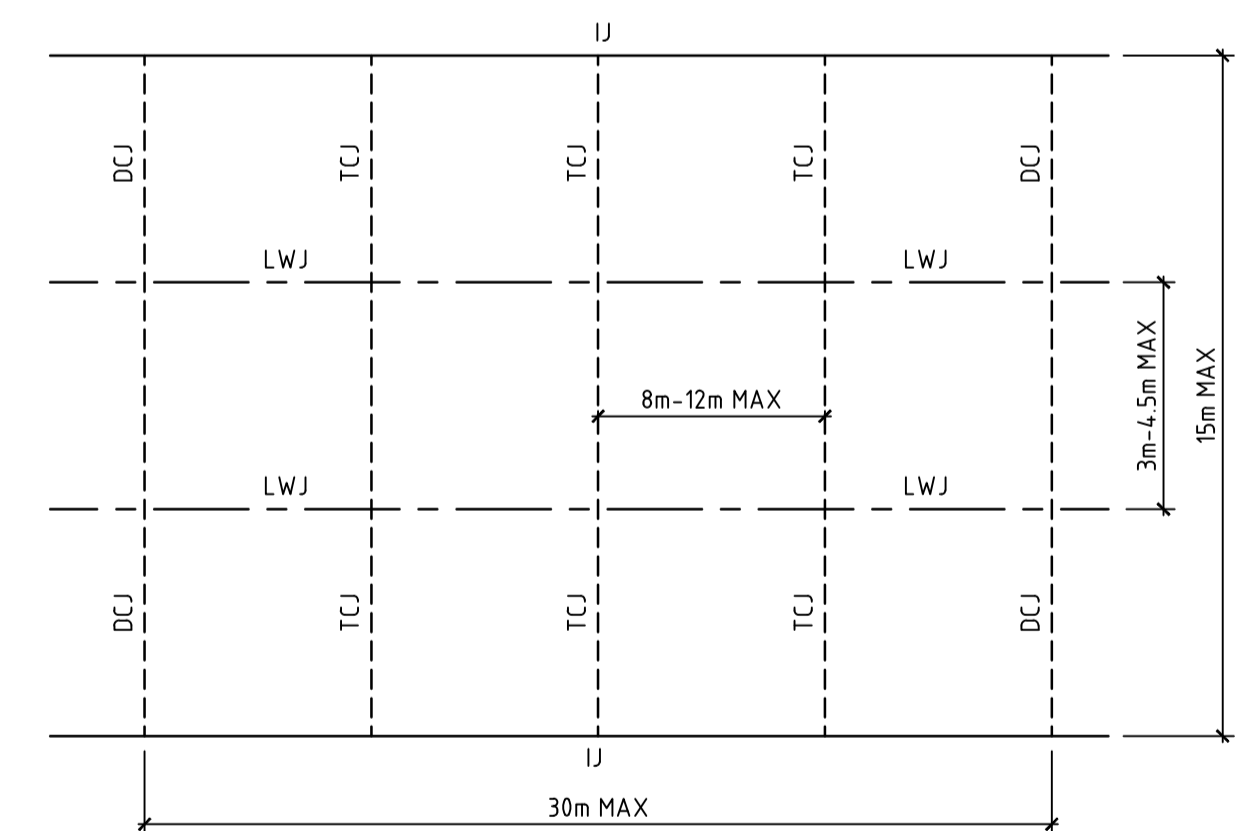
PEDESTRIAN FOOTPATH JOINTS

- J1 EXPANSION JOINTS (EJ) ARE TO BE LOCATED WHERE POSSIBLE AT TANGENT POINTS OF CURVES AND ELSEWHERE AT 6m CENTRES.
- J2 SAWCUT JOINTS (SC) ARE TO BE LOCATED AT A MAX 1.5m x WIDTH OF PAVEMENT. THE TIMING OF THE SAWCUT IS TO BE CONFIRMED BY THE CONTRACTOR ON SITE. SITE CONDITIONS WILL DETERMINE HOW MANY HOURS AFTER THE CONCRETE POUR BEFORE THE SAW CUTS ARE COMMENCED.
- J3 WHERE POSSIBLE JOINTS SHOULD BE LOCATED TO MATCH KERBING AND / OR ADJACENT PAVEMENT JOINTS.
- J4 PROVIDE 10mm WIDE FULL DEPTH EXPANSION JOINTS (EJ) BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVERS
- J5 ALL PEDESTRIAN FOOTPATH JOINTINGS AS FOLLOWS (U.N.O.).



VEHICULAR PAVEMENT JOINTS

- J6 ALL VEHICULAR PAVEMENTS TO BE JOINTED AS SHOWN ON DRAWINGS.
- J7 LONGITUDINAL WARPING JOINTS (LWJ) SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 3m TO 4.5m MAX CENTERS. ALL LWJ'S SHOULD BE TIED UP TO A MAXIMUM TOTAL WIDTH OF 30m.
- J8 TRANSVERSE CONTRACTION JOINTS (TCJ) SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 8m TO 12m MAX CENTERS. TCJ'S CAN BE SPACED AT SUITABLE INTERVALS UP TO A RECOMMENDED MAXIMUM LENGTH OF 15m.
- J9 TRANSVERSE DOWELLED CONSTRUCTION JOINTS (DCJ) TO BE PROVIDED FOR PLANNED INTERRUPTIONS SUCH AS AT THE END OF EACH DAY'S OPERATIONS (POUR BREAK), AT BLOCK OUTS FOR BRIDGES AND INTERSECTIONS OR FOR UNEXPECTED DELAYS WHEN THE SUSPENSION OF OPERATIONS IS LIKELY TO CREATE A JOINT.
- J10 ISOLATION JOINTS WITH SUB-GRADE BEAM (IJ) TO BE PROVIDED AT INTERSECTIONS OR AT THE JUNCTION OF A POUR BREAK.
- J11 ALL VEHICULAR PAVEMENTS TO BE JOINTED IN ACCORDANCE WITH AUSTRROADS AGPT02-12 GUIDE TO PAVEMENT TECHNOLOGY PART 2 STRUCTURAL PAVEMENT DESIGN AND SUPPLEMENT AP-T36-06 PAVEMENT DESIGN FOR LIGHT TRAFFIC
- J12 VEHICULAR PAVEMENT JOINTING AS FOLLOWS (U.N.O.)



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P1	ISSUED FOR DRAFT TENDER	02.11.18	PA -

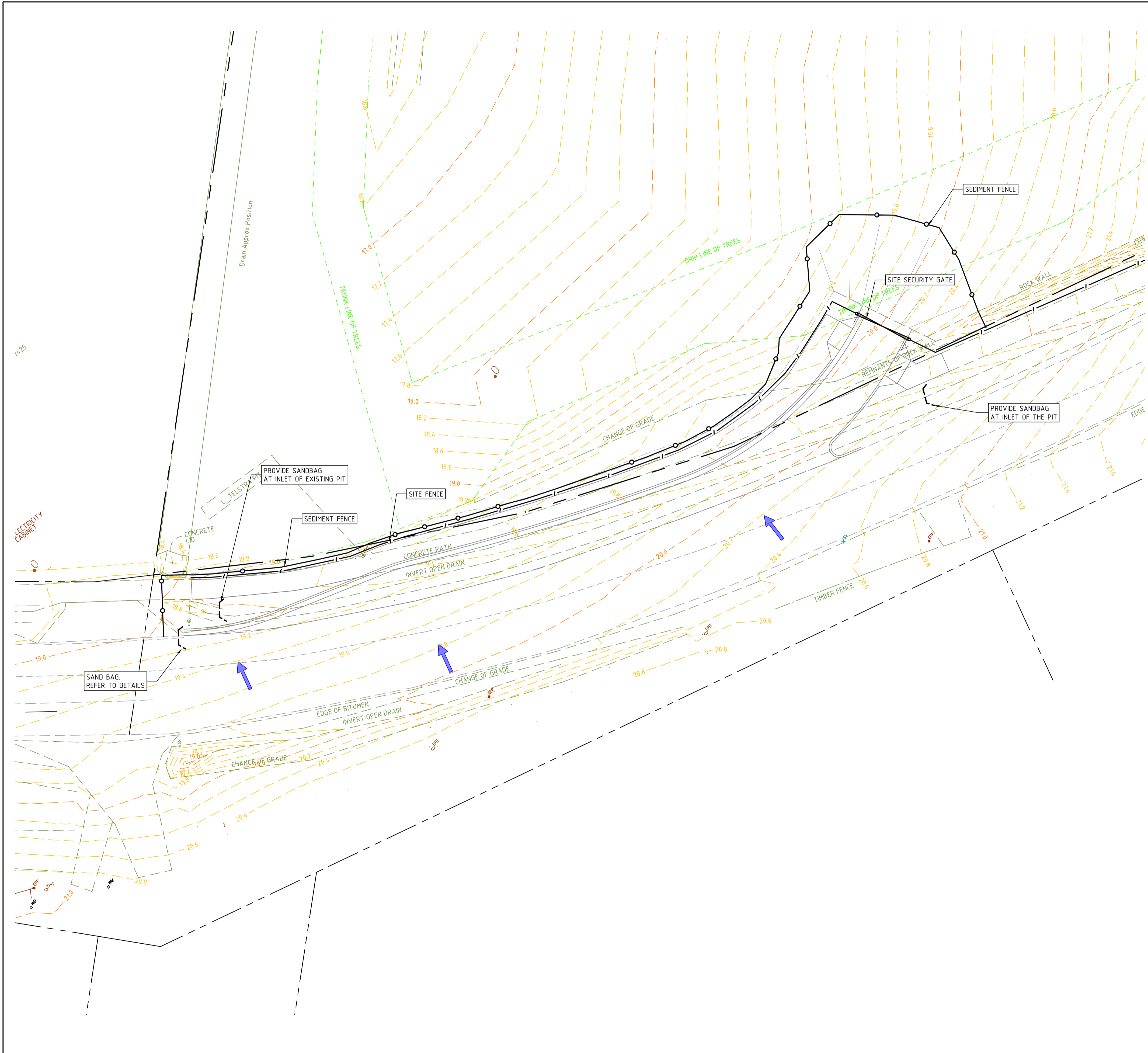
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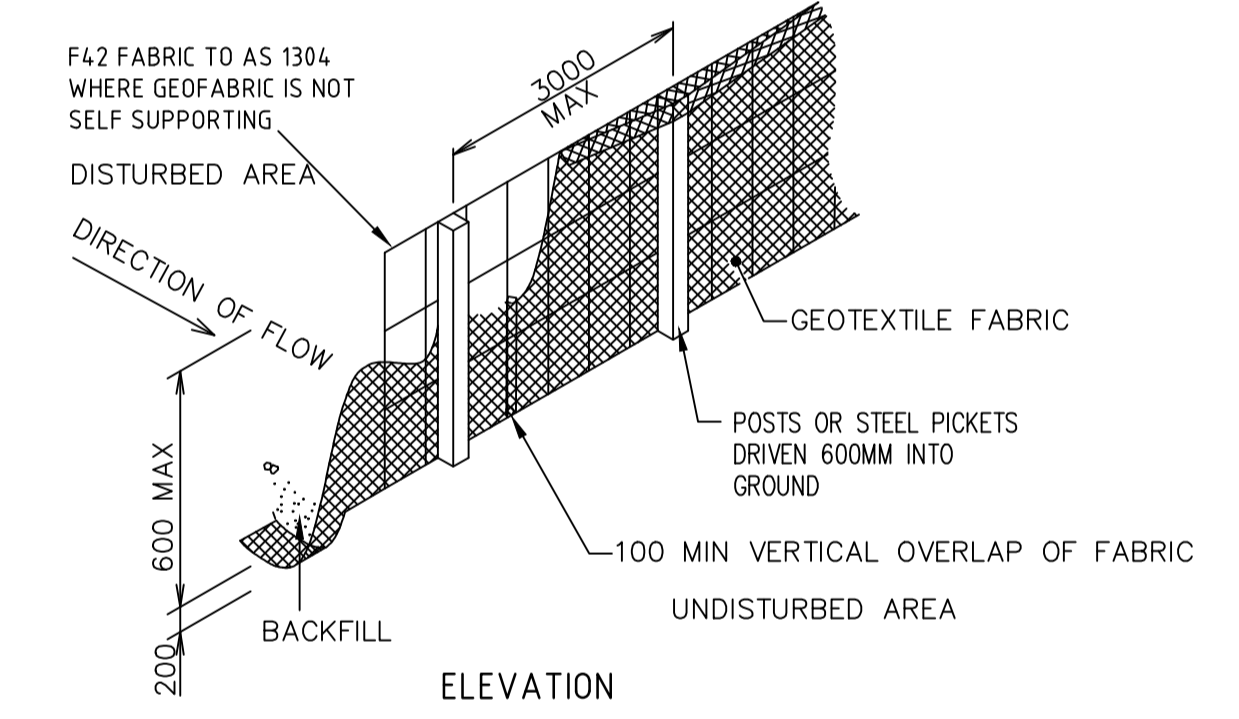
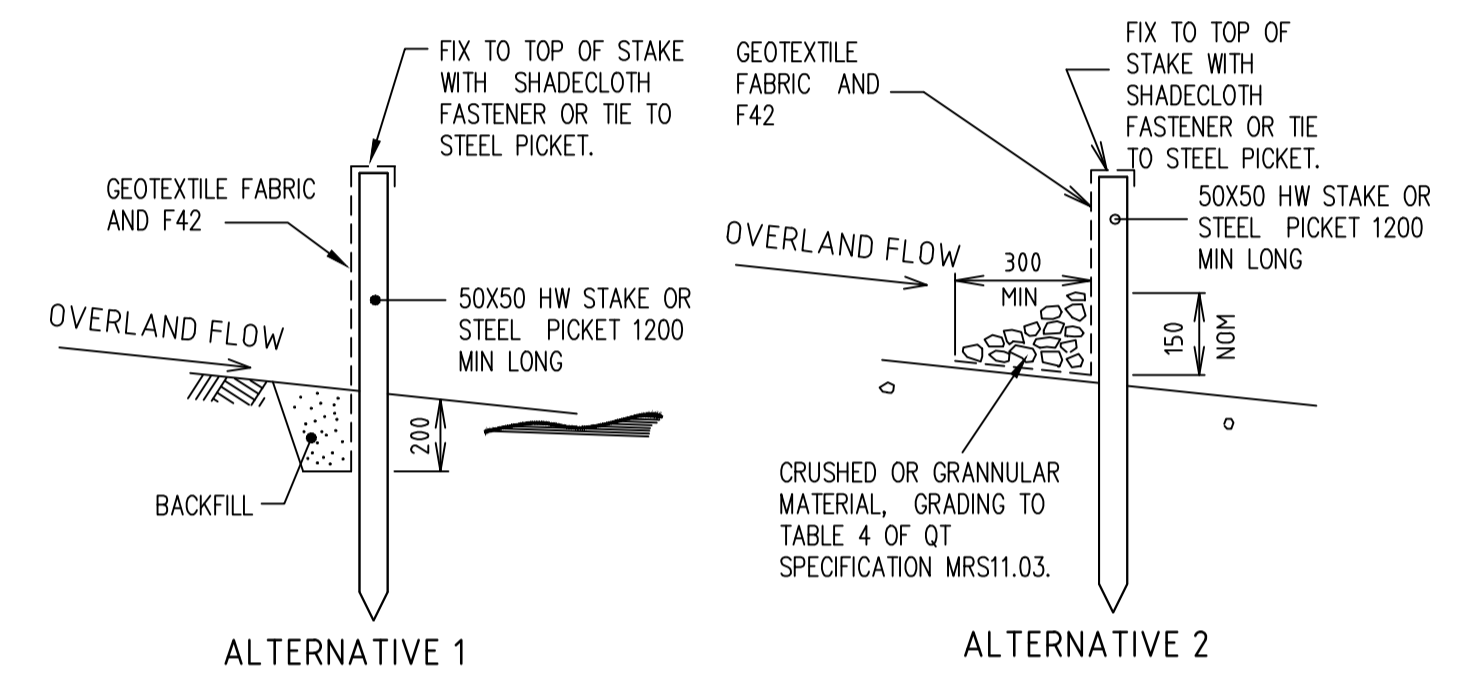
Project Name	TWEED VALLEY HOSPITAL CUDGEN ROAD AUXILIARY LANE WORKS		
Drawing Title	DRAWING REGISTER AND CONSTRUCTION NOTES		

TENDER			
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Drawn	PA		North
Scale	NTS	Project Ref	Drawing No
Date	3.10.2018	20 10748 01	C400
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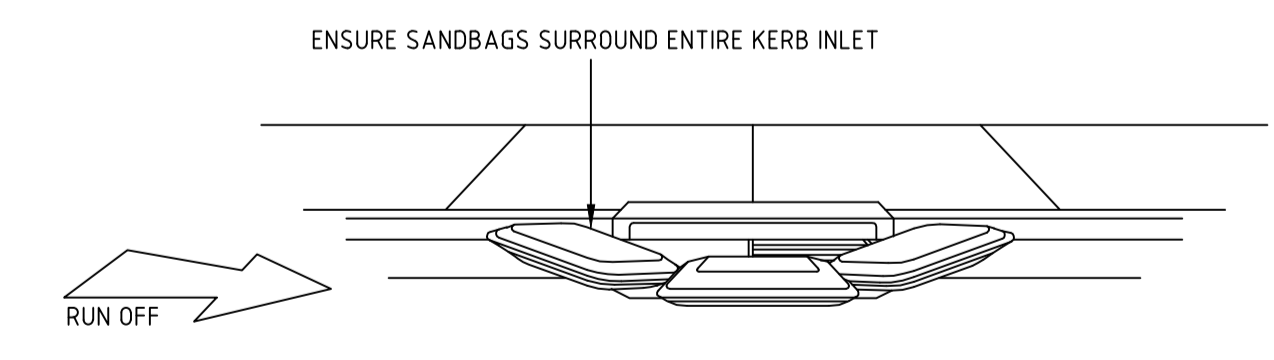


LEGEND

- SITE BOUNDARY
- INDICATIVE DIRECTION OF OVERLAND FLOW PATH
- SEDIMENT FENCE REFER TO DETAILS
- SITE FENCE
- SANDBAG REFER TO DETAILS
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR

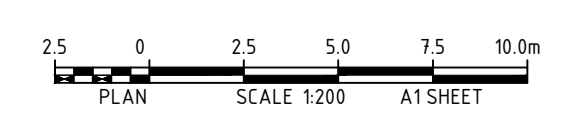


SEDIMENT FENCE
 NOT TO SCALE



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Project Name
 TWEED VALLEY HOSPITAL
 CUDGEN ROAD AUXILIARY
 LANE WORKS

Drawing Title
 SEDIMENT AND EROSION
 CONTROL PLAN

TENDER

Designed	CS	Project Director Approved	Date	North
Drawn	PA			
Scale	1:200	Project Ref	Drawing No	Rev
Date	3.10.2018	20 10748 01	C405	P2
Sheet	A1			

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LEGEND

- INDICATIVE DIRECTION OF OVERLAND FLOW PATH
- INTRAPAVEMENT DRAINAGE. REFER RMS DETAIL
- SUBSOIL DRAINAGE. REFER TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.012 FOR DETAIL
- NEW STORMWATER PIPE
- NEW STANDARD GULLY PIT. REFER TWEED SHIRE COUNCIL STORMWATER STANDARDS DRAWING NO. S.D.104 FOR DETAILS
- NEW GRATED INLET PIT. REFER TWEED SHIRE COUNCIL STORMWATER STANDARDS DRAWING NO. S.D.106 DETAILS
- NEW JUNCTION PIT. REFER TWEED SHIRE COUNCIL STORMWATER STANDARDS DRAWING NO. S.D.106 DETAILS
- CONCRETE ENCASUREMENT. REFER DRAWING C460 FOR DETAILS
- BARRIER KERB AND GUTTER. REFER TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.007 FOR DETAIL
- KERB ONLY. REFER TYPICAL DETAIL ON DRAWING NO. 460
- KERB RAMP. REFER TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.014 FOR DETAIL
- PAVEMENT TYPE 1 HEAVY DUTY ASPHALT PAVEMENT. REFER TO DRAWING C460 FOR DETAILS
- CONCRETE FOOTPATH. REFER TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.013 FOR DETAIL
- PAVEMENT REINSTATEMENT. REFER DRAWING C460 FOR DETAILS
- RETAINING WALL. REFER TO DRAWING C460 FOR DETAILS
- NEATLY MATCH TO EXISTING SURFACE LEVELS
- SITE FENCE
- LIMIT OF WORKS
- EXISTING SEWER
- EXISTING OVERHEAD LINES
- EXISTING TELSTRA
- EXISTING STORMWATER
- EXISTING WATER
- EXISTING OPTICAL FIBRE

Non Standard conditions 2, 3 and 5 to address pedestrians:

2. RMS approved pedestrian fencing is to be installed adjacent to the ancillary lane for Access A to ensure that pedestrians cross at the pram ramp.

3. Appropriate cyclist/pedestrian chicanes to be installed as per RMS/Austrroads requirements, on the shared user path approaches to Access A

5. Signage to be installed on the shared user path advising pedestrians/cyclists that a road is ahead on the approaches to Access A

Condition USENS03 to address structures over private land as per below:

#The creation of Easements for services, Rights Of Carriageway and Restrictions as to user (including restrictions associated with planning for bushfire) as may be applicable under Section 88B of the Conveyancing Act including (but not limited to) the following:

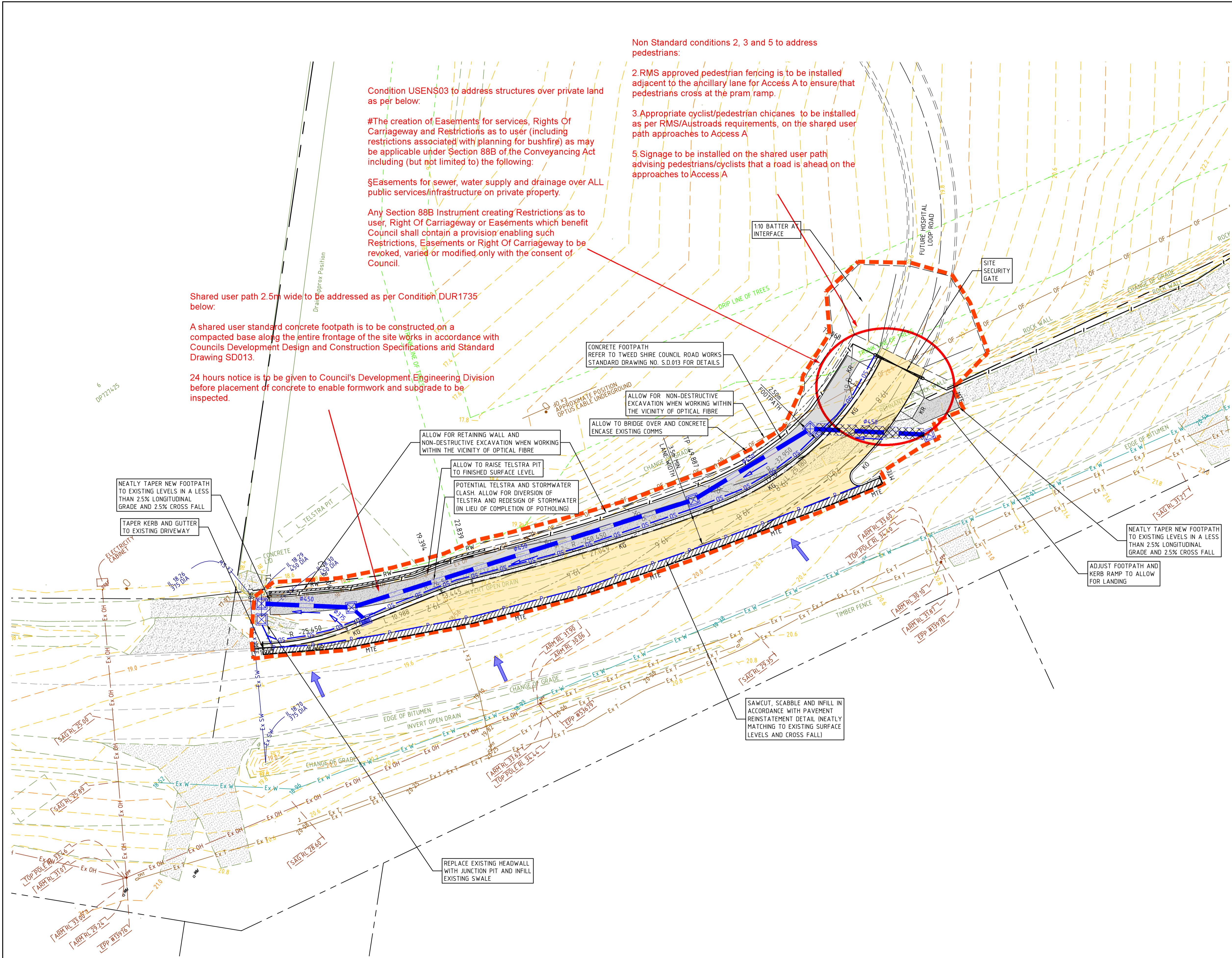
§Easements for sewer, water supply and drainage over ALL public services/infrastructure on private property.

Any Section 88B Instrument creating Restrictions as to user, Right Of Carriageway or Easements which benefit Council shall contain a provision enabling such Restrictions, Easements or Right Of Carriageway to be revoked, varied or modified only with the consent of Council.

Shared user path 2.5m wide to be addressed as per Condition DUR1735 below:

A shared user standard concrete footpath is to be constructed on a compacted base along the entire frontage of the site works in accordance with Councils Development Design and Construction Specifications and Standard Drawing SD013.

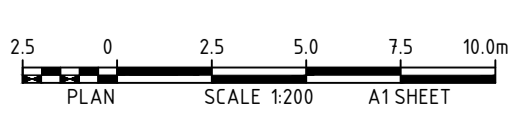
24 hours notice is to be given to Council's Development, Engineering Division before placement of concrete to enable formwork and subgrade to be inspected.



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Project Name: TWEED VALLEY HOSPITAL CUDGEN ROAD AUXILIARY LANE WORKS
 Drawing Title: AUXILIARY LANE CIVIL WORKS PLAN

TENDER			
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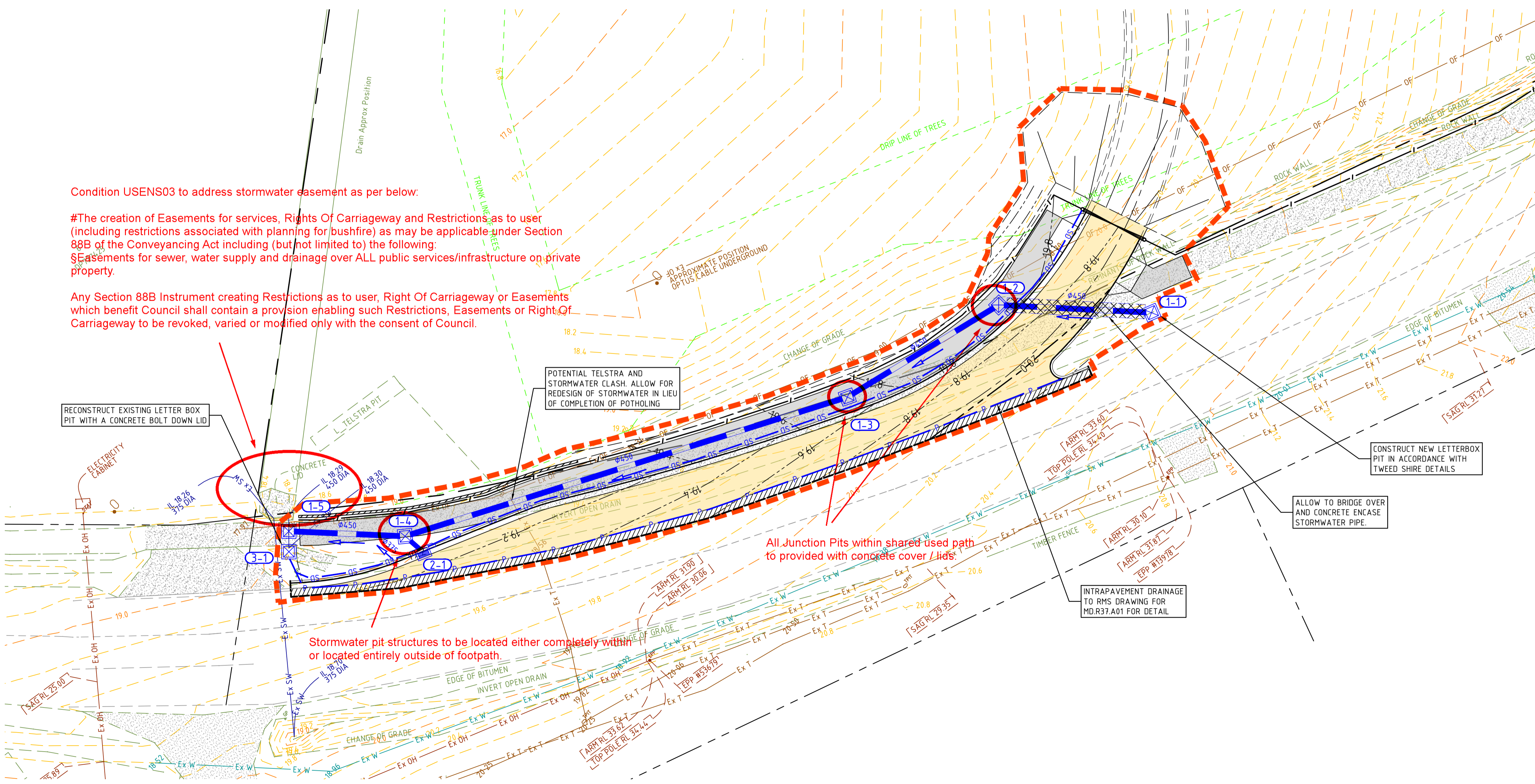
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PIT SCHEDULE

Pit Name	TYPE	EASTING	NORTHING	INTERNAL WD	LEN	INLET DIA	INV LEV	OUTLET DIA	INV LEV	PIT SETOUT RL	DEPTH	REMARKS
1-1	LETTER BOX INLET PIT - REFER DETAIL ON DRG 460	555414.109	6873115.864	0.9	0.9			450	18.969	20.23	1.262	
1-2	TSC STD JUNCTION PIT - REFER STD DRG S.D.106	555401.359	6873116.504	0.9	0.9	450	18.675	450	18.656	19.865	1.209	
1-3	TSC STD JUNCTION PIT - REFER STD DRG S.D.106	555388.740	6873108.826	0.9	0.9	450	18.582	450	18.562	19.742	1.18	
1-4	TSC STD JUNCTION PIT - REFER STD DRG S.D.106	555351.852	6873097.222	0.9	0.9	450	18.369	450	18.349	19.259	0.911	
1-5	TSC STD JUNCTION PIT - REFER STD DRG S.D.106	555342.153	6873097.638	0.9	0.9	450	18.3			19.021	0.721	
Pit Name	TYPE	EASTING	NORTHING	INTERNAL WD	LEN	INLET DIA	INV LEV	OUTLET DIA	INV LEV	PIT SETOUT RL	DEPTH	REMARKS
1-4	TSC STD GULLY PIT WITH 2.4m LINTEL - REFER STD DRG S.D.104	555353.314	6873095.939	0.9	0.9			375	18.398	19.061	0.663	
1-5	TSC STD JUNCTION PIT - REFER STD DRG S.D.106	555351.852	6873097.222	0.9	0.9	375	18.389			19.259	0.911	CONNECT INTO EXTG 450 DIA. PIPE
Pit Name	TYPE	EASTING	NORTHING	INTERNAL WD	LEN	INLET DIA	INV LEV	OUTLET DIA	INV LEV	PIT SETOUT RL	DEPTH	REMARKS
3-1	TSC STD JUNCTION PIT - REFER STD DRG S.D.106	555342.158	6873095.931	0.9	0.9	375	18.389			19.259	0.911	REPLACE EXISTING HEADWALL WITH JUNCTION PIT AND INFILL EXISTING SWALE

LEGEND

- INDICATIVE DIRECTION OF OVERLAND FLOW PATH
- INTRAPAVEMENT DRAINAGE. REFER RMS DETAIL
- SUBSOIL DRAINAGE. REFER TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.012 FOR DETAIL
- NEW STORMWATER PIPE
- NEW STANDARD GULLY PIT. REFER TWEED SHIRE COUNCIL STORMWATER STANDARDS DRAWING NO. S.D.104 FOR DETAILS
- NEW GRATED INLET PIT. REFER TWEED SHIRE COUNCIL STORMWATER STANDARDS DRAWING NO. S.D.106 DETAILS
- NEW JUNCTION PIT. REFER TWEED SHIRE COUNCIL STORMWATER STANDARDS DRAWING NO. S.D.106 DETAILS
- CONCRETE ENCASUREMENT. REFER DRAWING C460 FOR DETAILS
- BARRIER KERB AND GUTTER. REFER TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.007 FOR DETAIL
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- PAVEMENT REINSTATEMENT. REFER DRAWING C460 FOR DETAILS
- RETAINING WALL. REFER TO DRAWING C460 FOR DETAILS
- NEATLY MATCH TO EXISTING SURFACE LEVELS
- SITE FENCE
- LIMIT OF WORKS
- Ex S - EXISTING SEWER
- Ex OH - EXISTING OVERHEAD LINES
- Ex T - EXISTING TELSTRA
- Ex SW - EXISTING STORMWATER
- Ex W - EXISTING WATER
- Ex OF - EXISTING OPTICAL FIBRE
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR

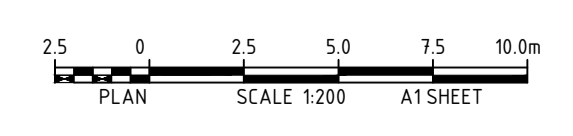


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PI	ISSUED FOR TENDER	05.11.18	PA	
Rev	Description	Date	By	App

Rev	Description	Date	By	App
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 sydney@bonaccigroup.com
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Project Name
TWEED VALLEY HOSPITAL DEVELOPMENT, CUDGEN ROAD AUXILIARY LANE WORKS

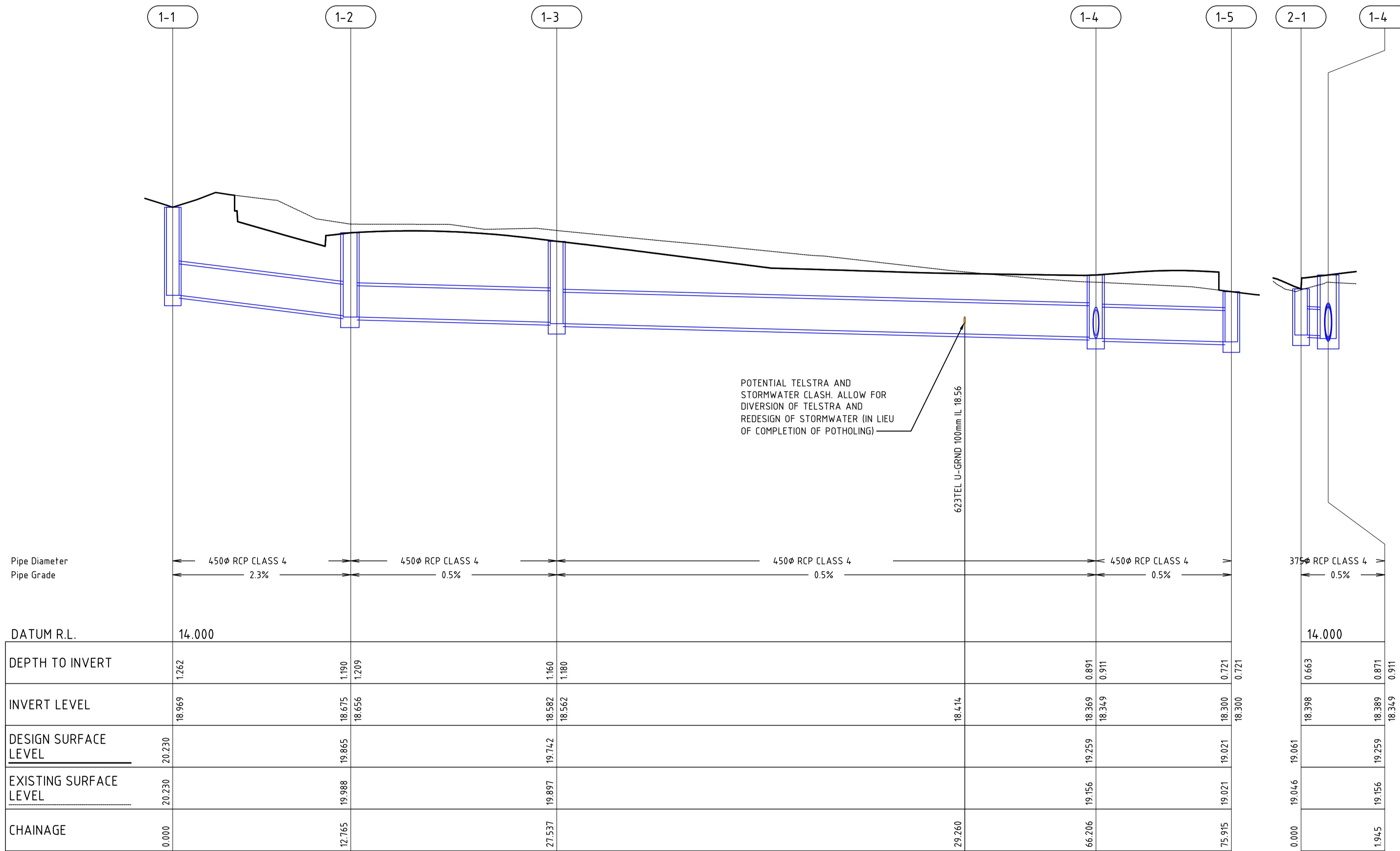
Drawing Title
AUXILIARY LANE STORMWATER DRAINAGE PLAN

TENDER

Designed	CS	Project Director Approved	Date	North
Drawn	PA			
Scale	1:200	Project Ref	Drawing No	Rev
Date	05.11.18	20 10748 01	C442	P1
Sheet	A1			

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Rev	Description	Date	By	App
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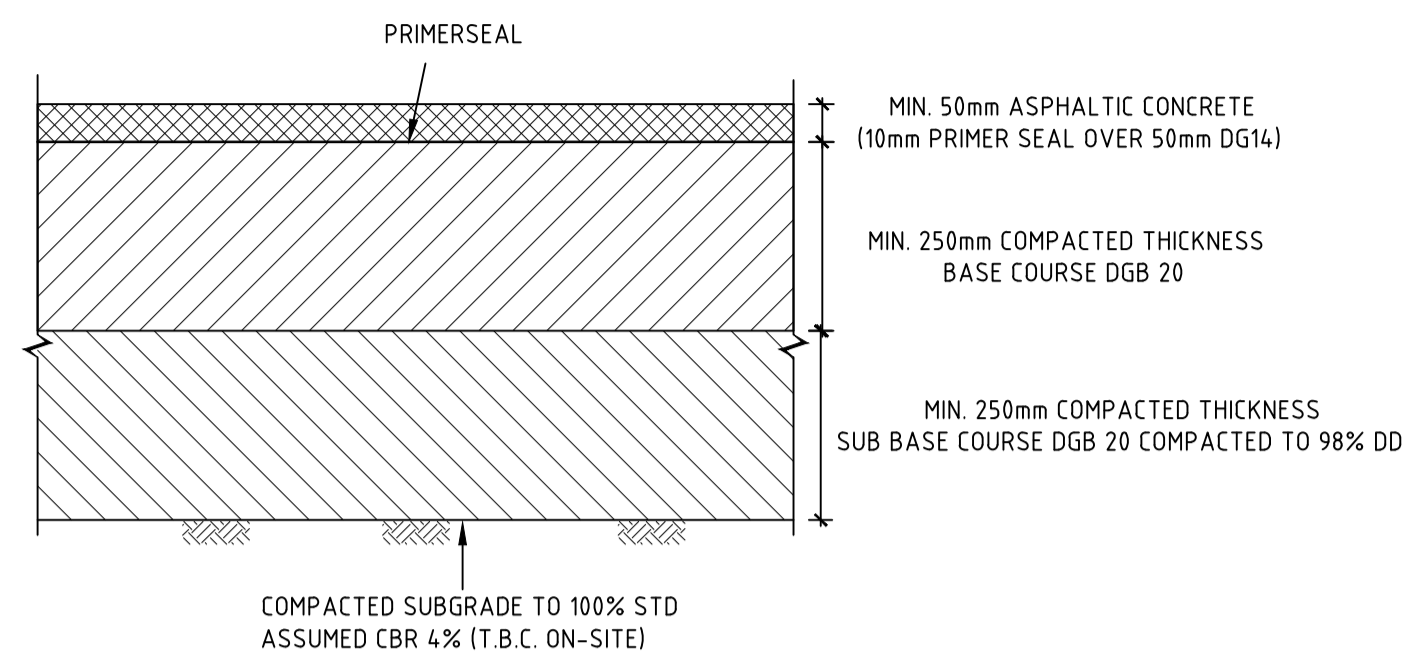
Rev	Description	Date	By	App

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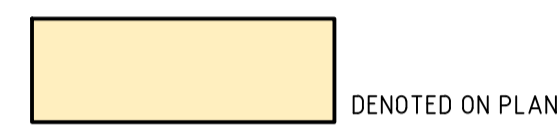
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Designed		Project Director Approved		Date	North
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Scale: NOTED		Project Ref: 20 10748 01		Drawing No: C450	Rev: P1
Date: 05.11.18	Sheet: A1				

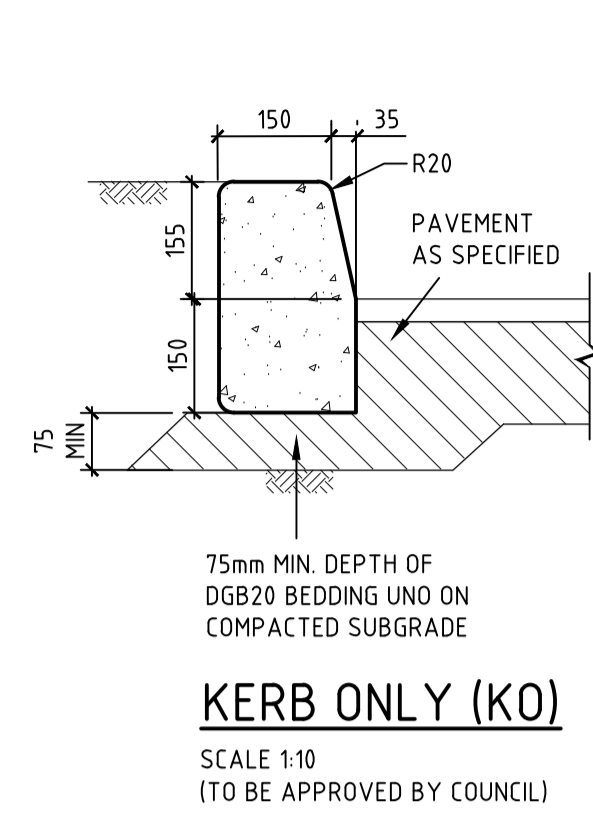


**PAVEMENT TYPE P1
HEAVY DUTY ASPHALT PAVEMENT**

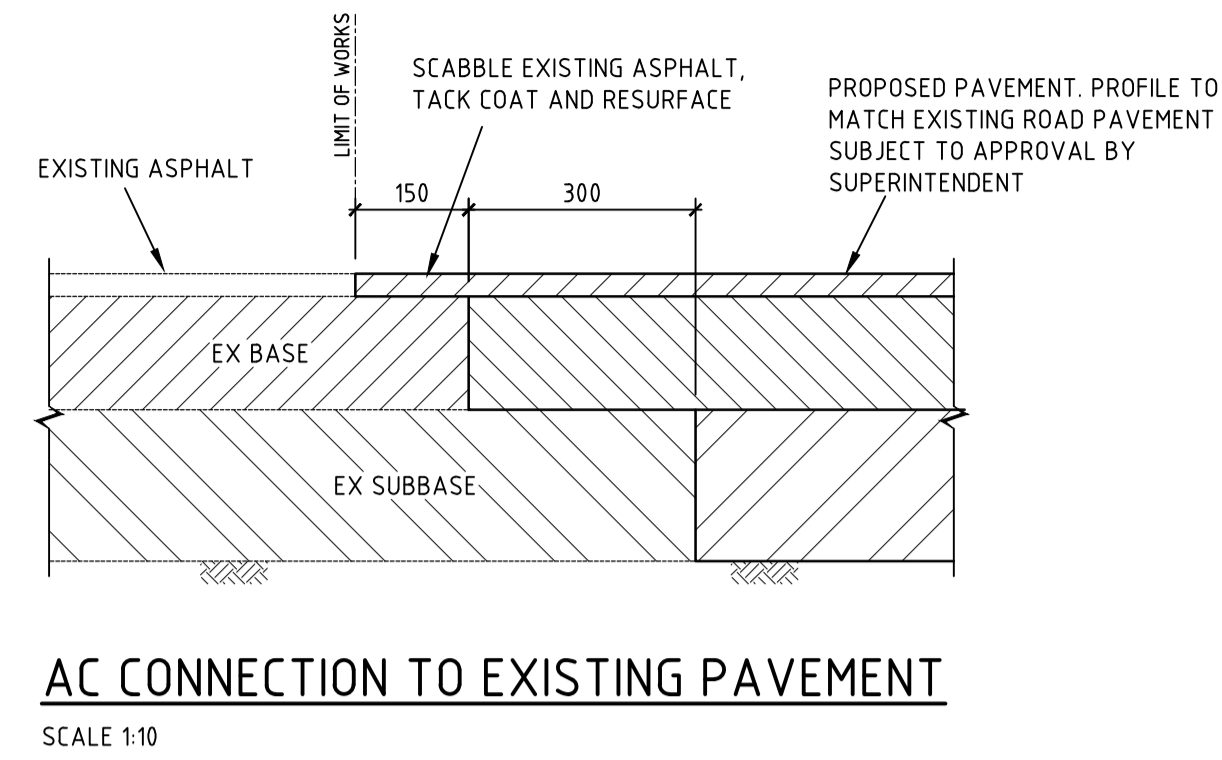
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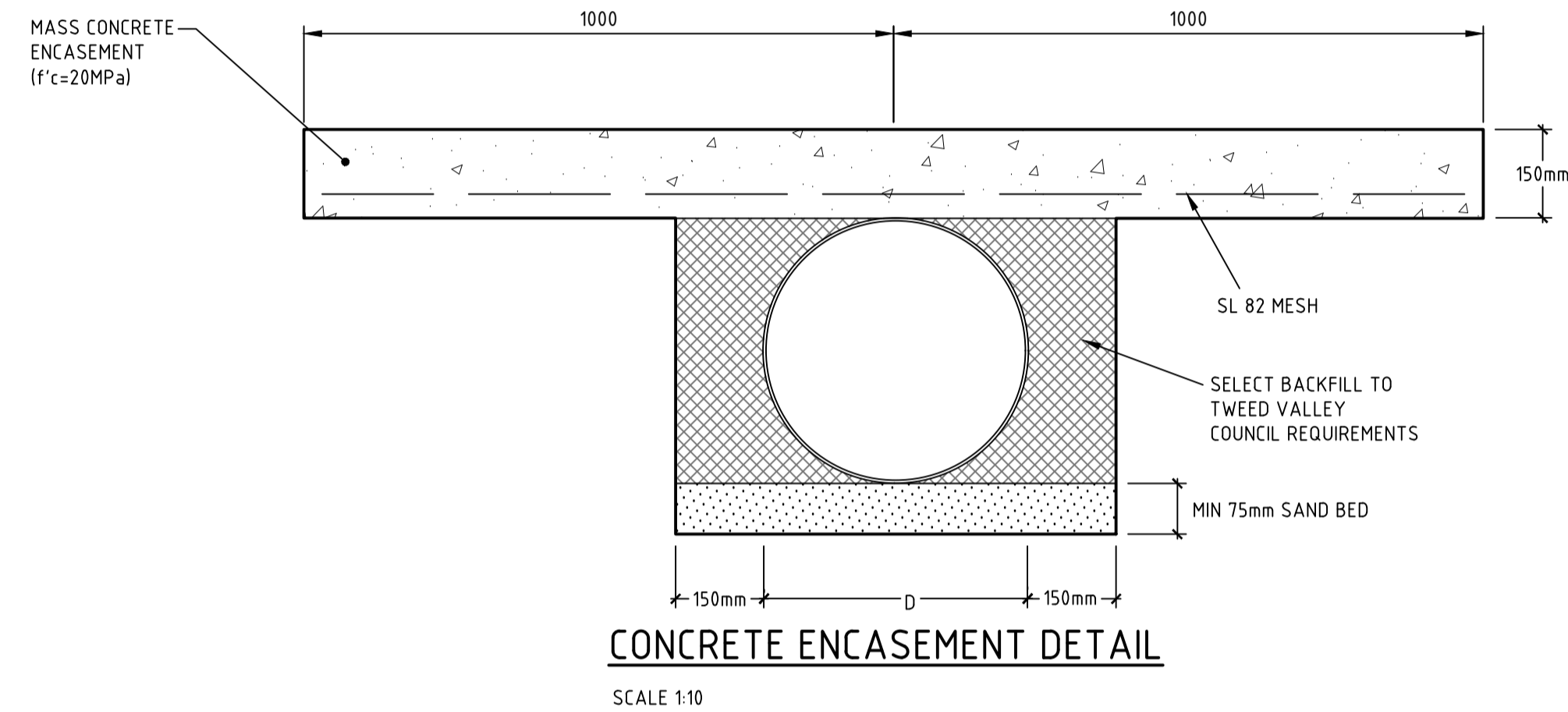
ROAD DESIGN PARAMETERS (FLEXIBLE)	
DESIGN TRAFFIC 1.5 X 10 ⁶ (ESA's OR HVAG)	
ASSUMPTIONS:	
• TWEED SHIRE COUNCIL PAVEMENT DESIGN TABLE D2.2 ARTERIAL DISTRIBUTOR, SHOPPING STRIP ACCESS, INDUSTRIAL, DESIGN PERIOD 25 YEAR.	
• CBR 4.0%	
• PREPARE SUBGRADE AND SELECT FILL IN ACCORDANCE WITH (MORRISON GEOTECH, REFERENCE NO. GE18/144-REV 1)	



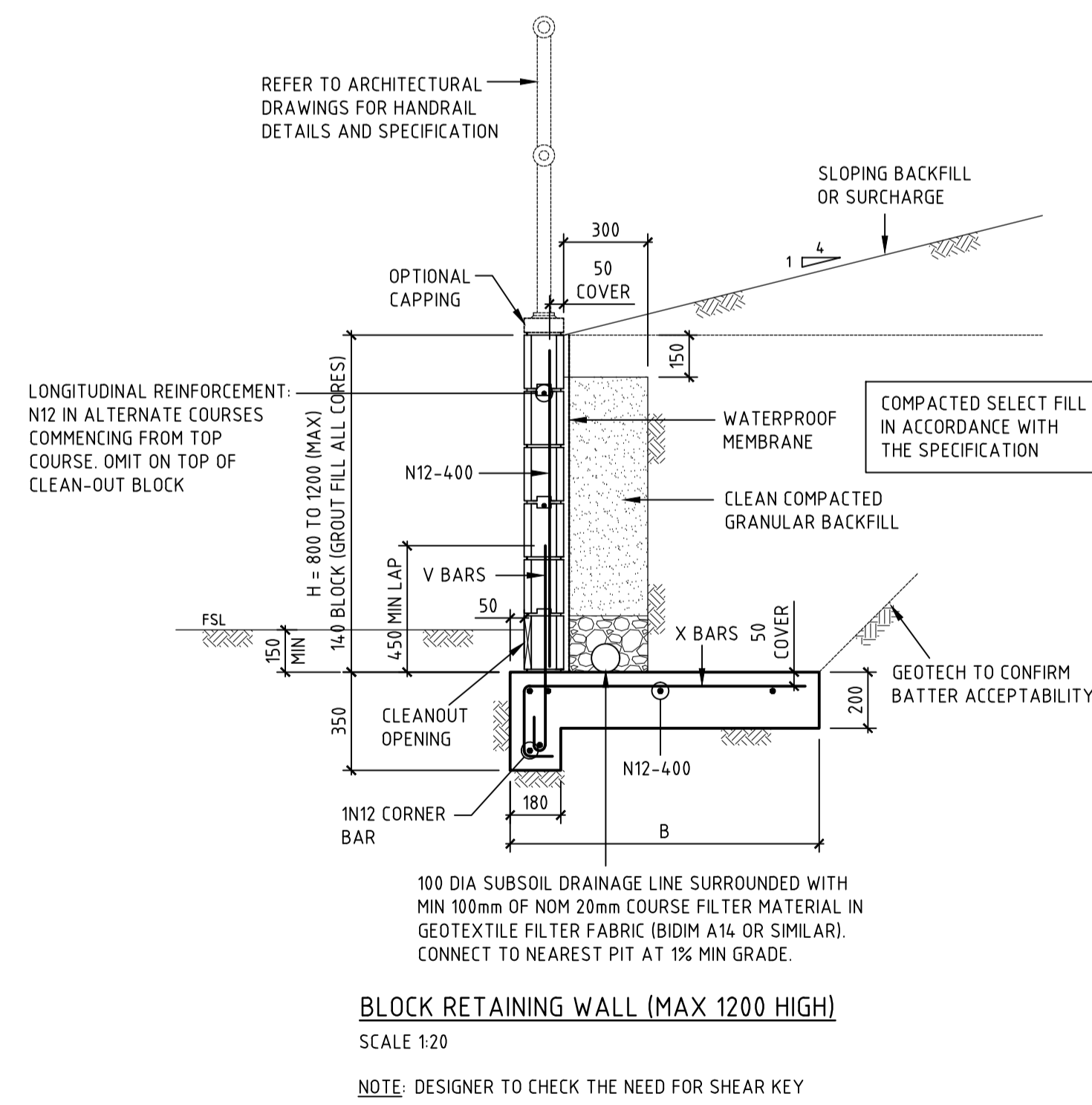
KERB ONLY (KO)
SCALE 1:10
(TO BE APPROVED BY COUNCIL)



AC CONNECTION TO EXISTING PAVEMENT
SCALE 1:10



CONCRETE ENCASEMENT DETAIL
SCALE 1:10



BLOCK RETAINING WALL (MAX 1200 HIGH)
SCALE 1:20
NOTE: DESIGNER TO CHECK THE NEED FOR SHEAR KEY

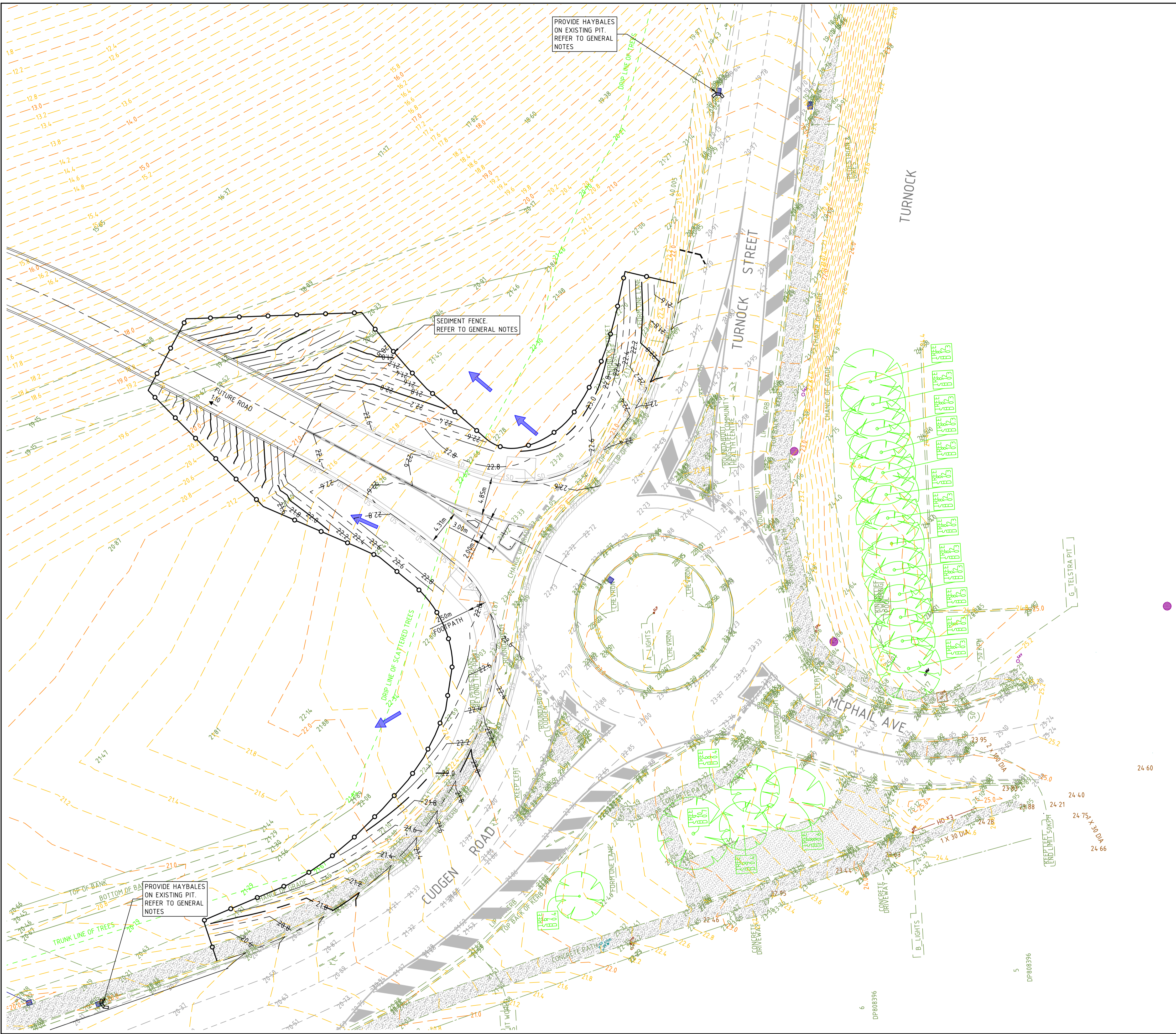
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P2	ISSUED FOR TENDER	05.11.18	PA	-					
P1	ISSUED FOR DRAFT TENDER	02.11.18	PA	-					

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Project Name	TWEED VALLEY HOSPITAL CUDGEN ROAD AUXILIARY LANE WORKS		
Drawing Title	CIVIL WORKS AND STORMWATER DRAINAGE DETAILS		

TENDER			
Designed	CS	Project Director Approved	Date
Drawn	PA		North
Scale	NOTED	Project Ref	Drawing No
Date	05.11.18		Rev
Sheet	A1	20 10748 01	C460 P2



LEGEND

- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- INDICATIVE DIRECTION OF OVERLAND FLOW PATH
- SEDIMENT FENCE REFER TO DRAWING C560 FOR DETAILS
- SANDBAG SEDIMENT TRAP REFER TO DETAIL SHEET C507

GENERAL NOTES:
 1. ALL EROSION & SEDIMENT CONTROL SHALL BE IN ACCORDANCE WITH TWEED SHIRE COUNCILS DEVELOPMENT DESIGN SPECIFICATIONS D7-STORMWATER QUALITY, & ITS ANNEXURE A - CODE OF PRACTICE FOR SOIL AND WATER MANAGEMENT ON CONSTRUCTION SITES.

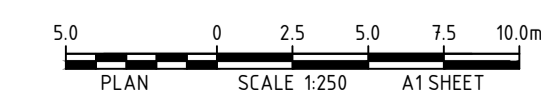
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P1	ISSUED FOR DRAFT TENDER	02/11/18	PA	-

Rev	Description	Date	By	App



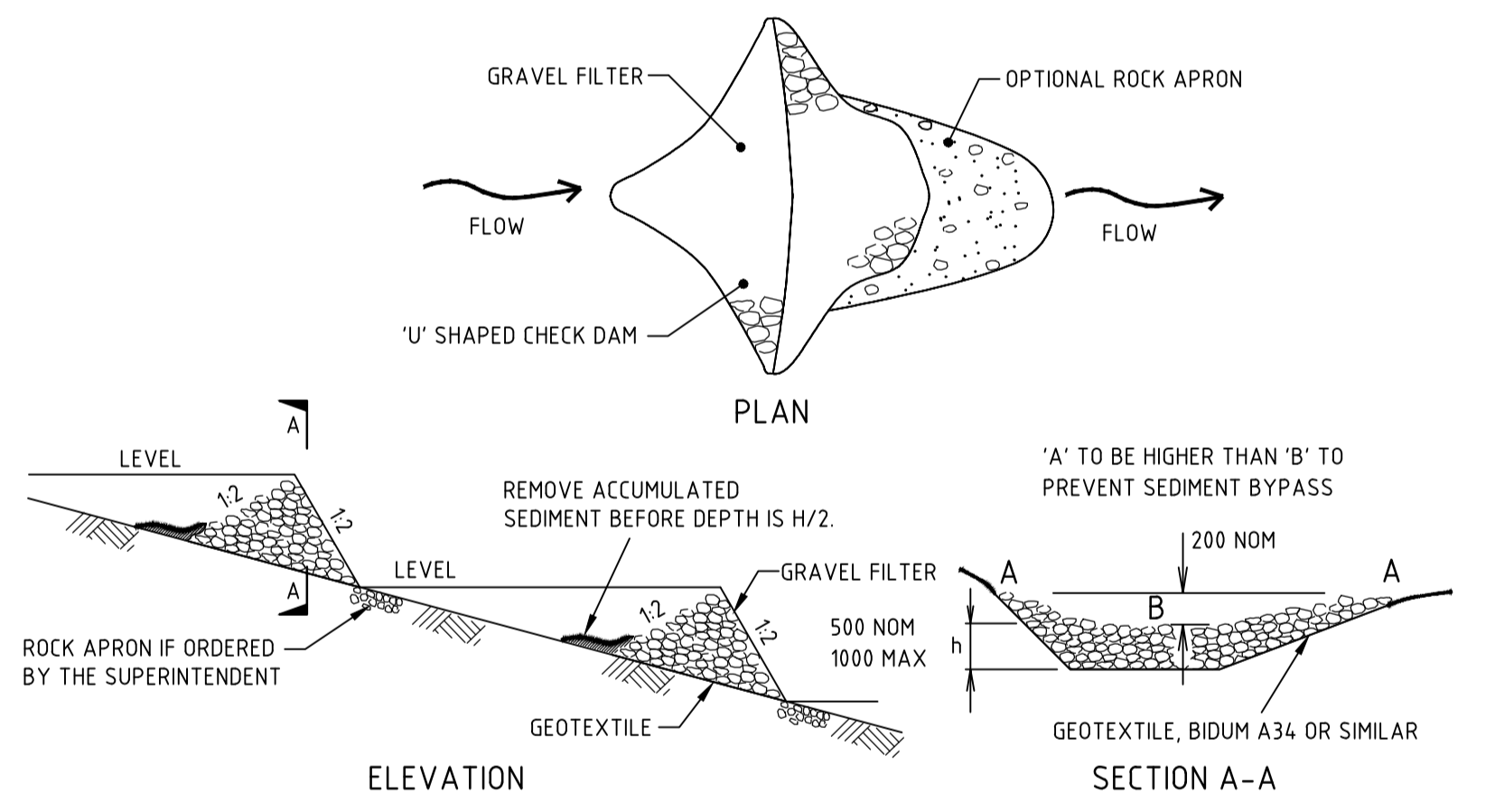
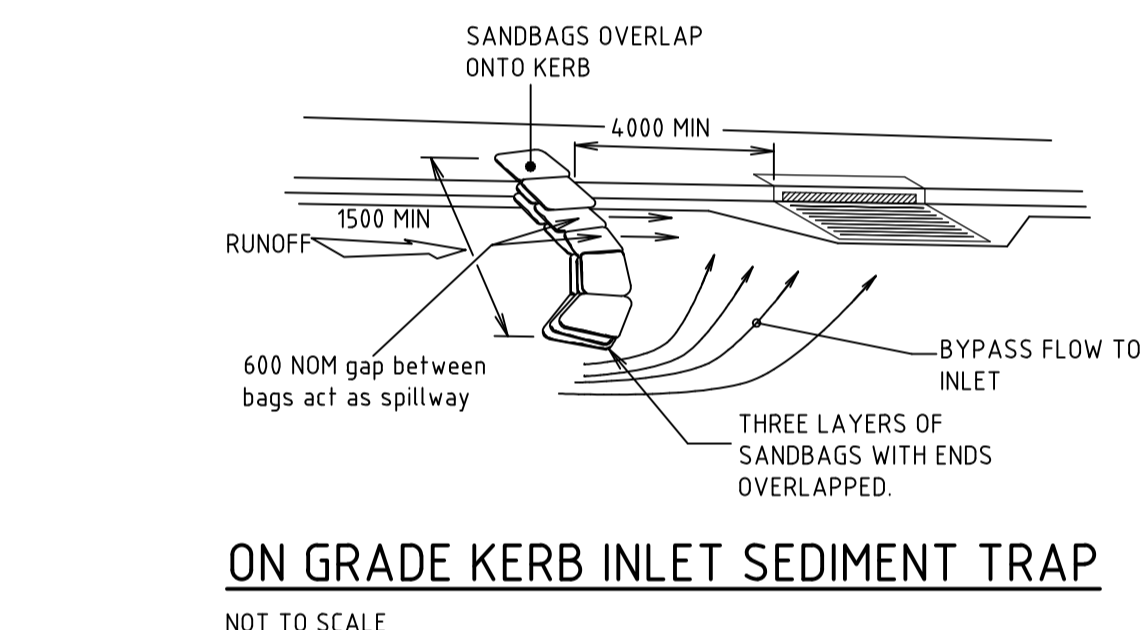
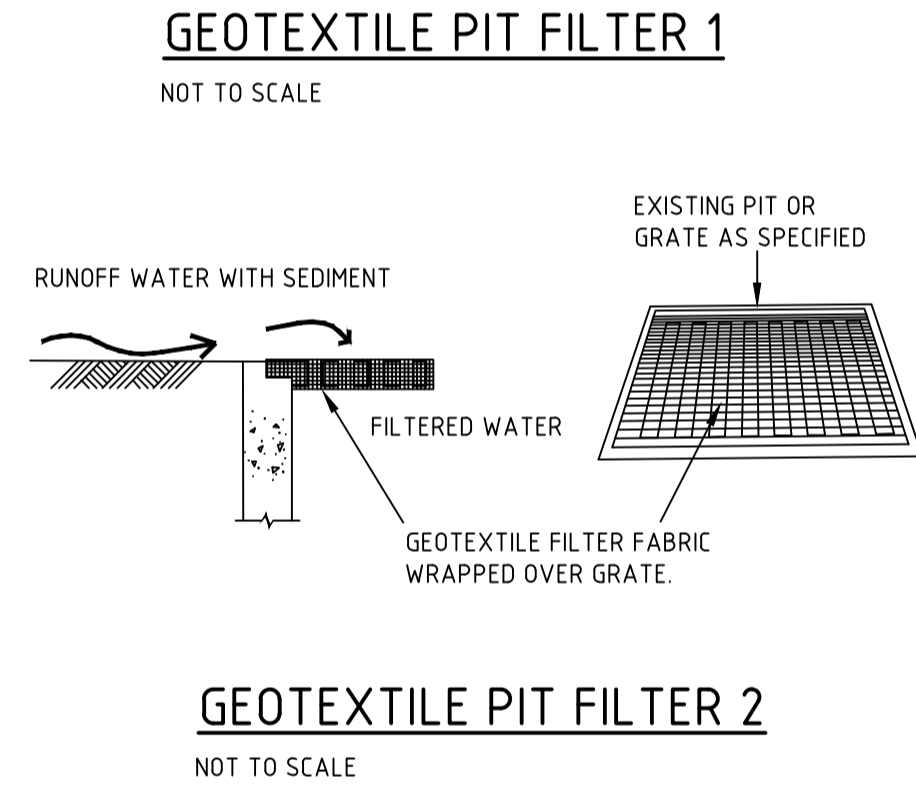
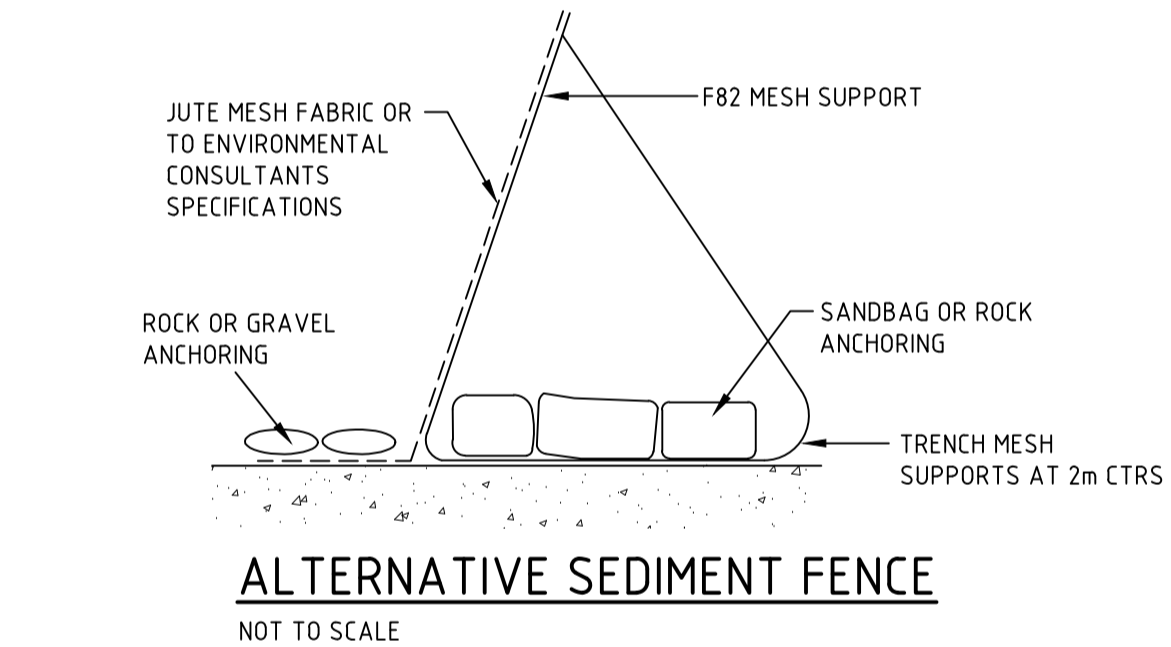
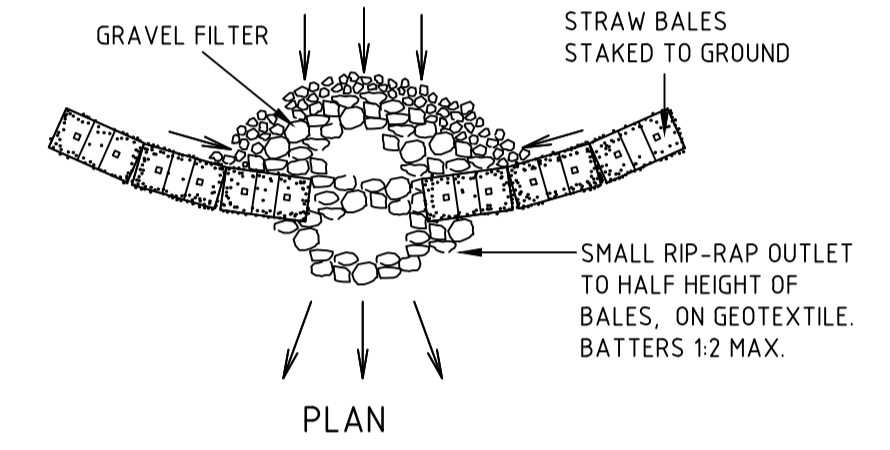
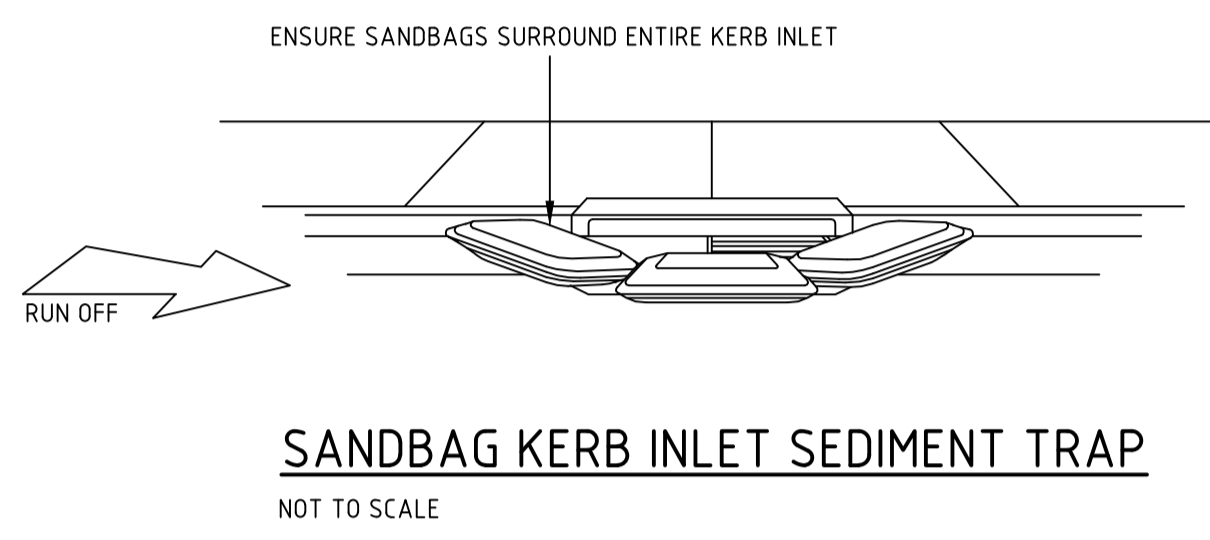
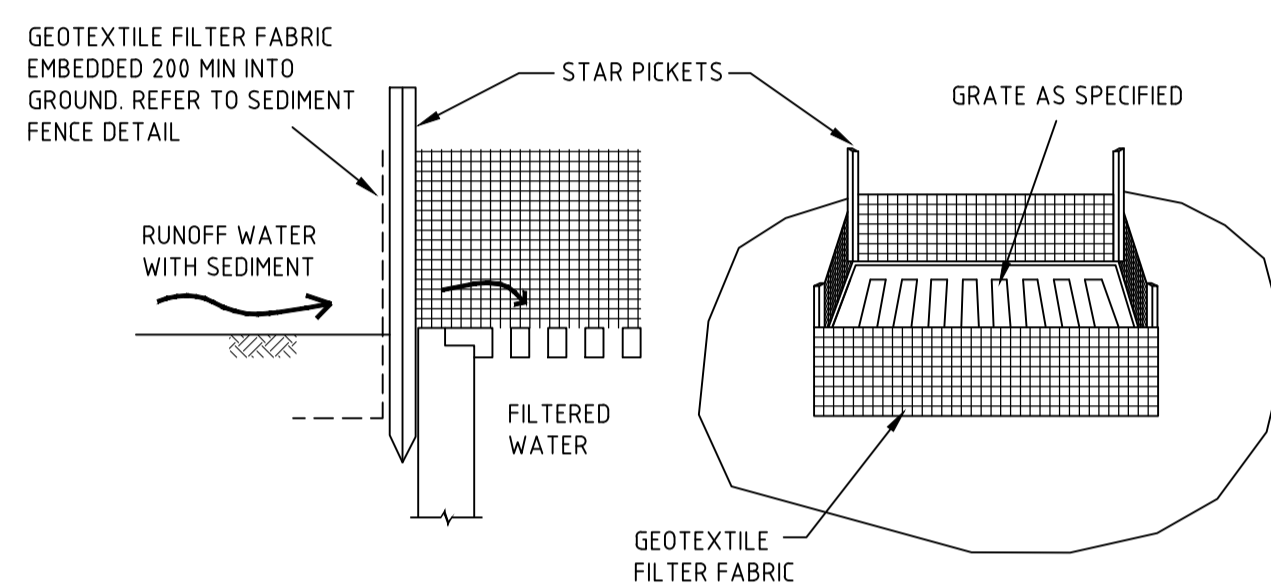
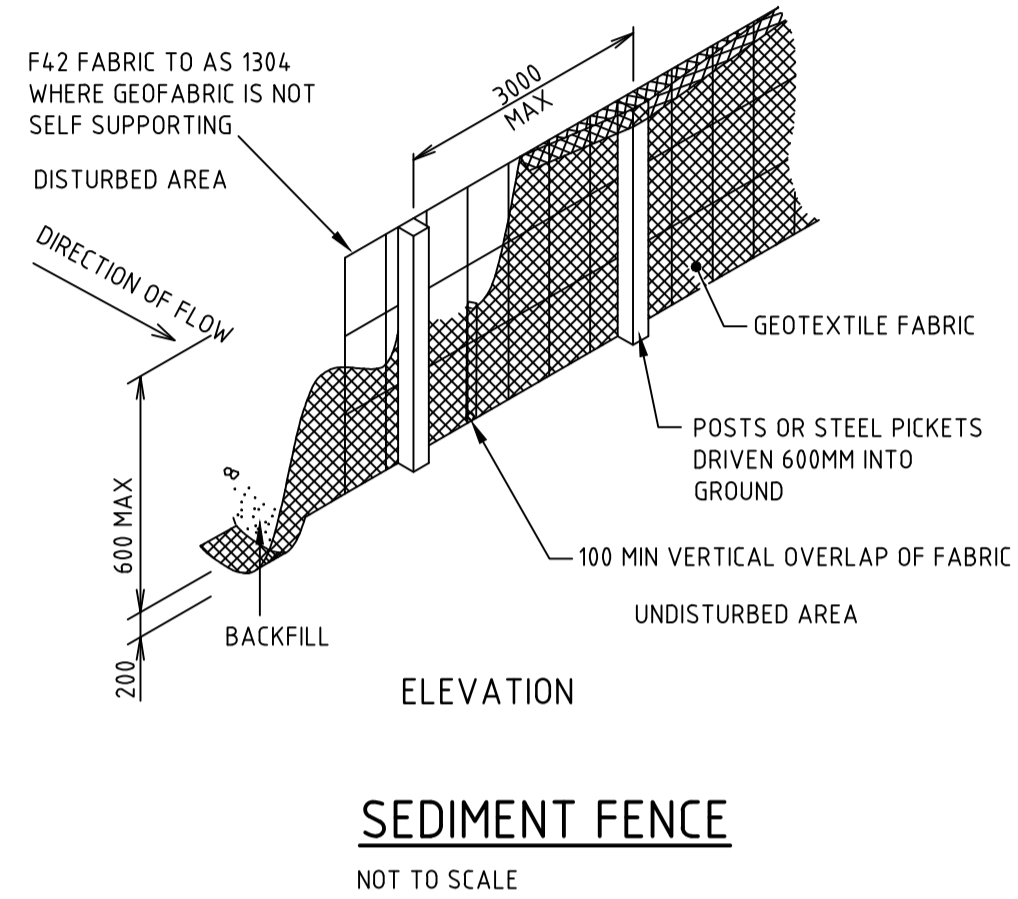
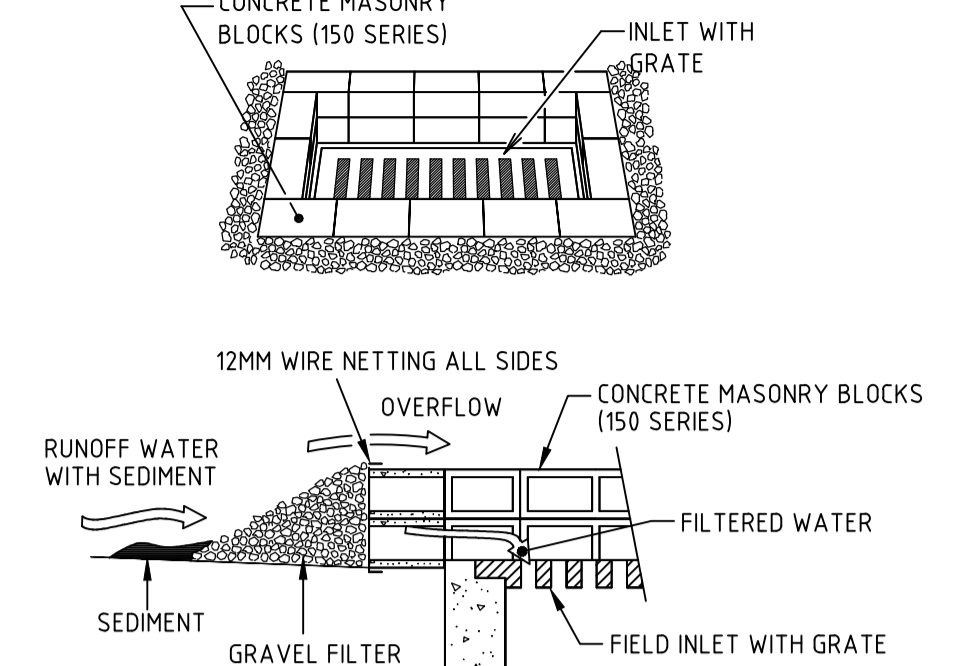
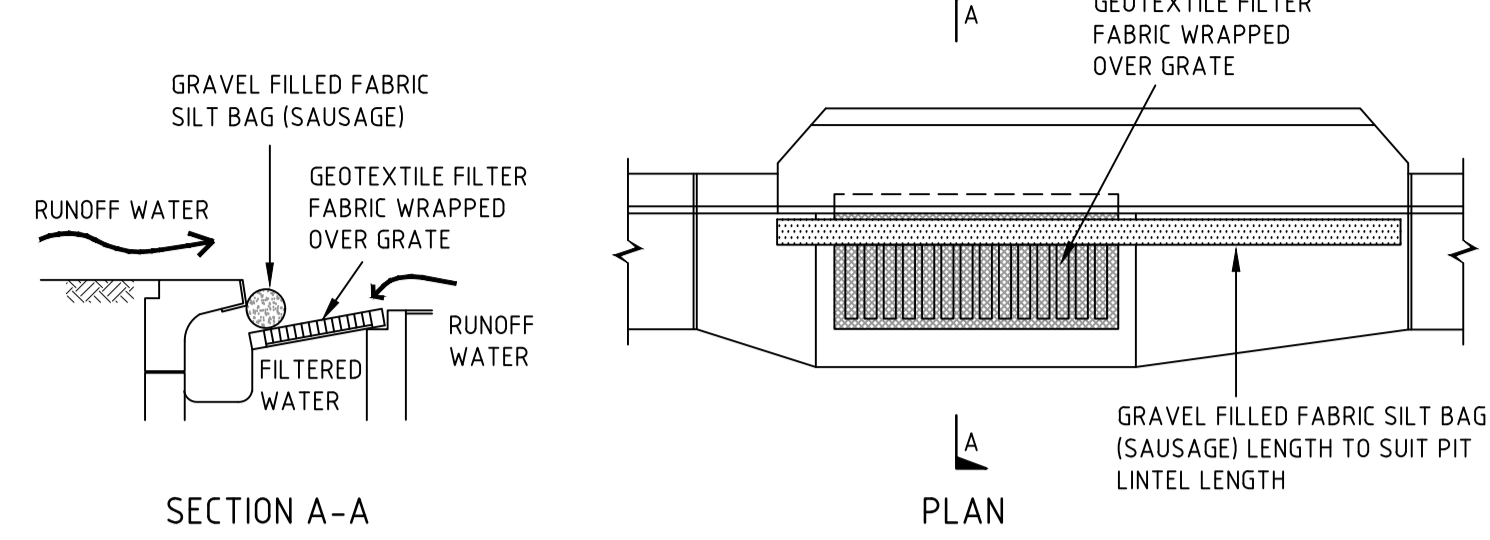
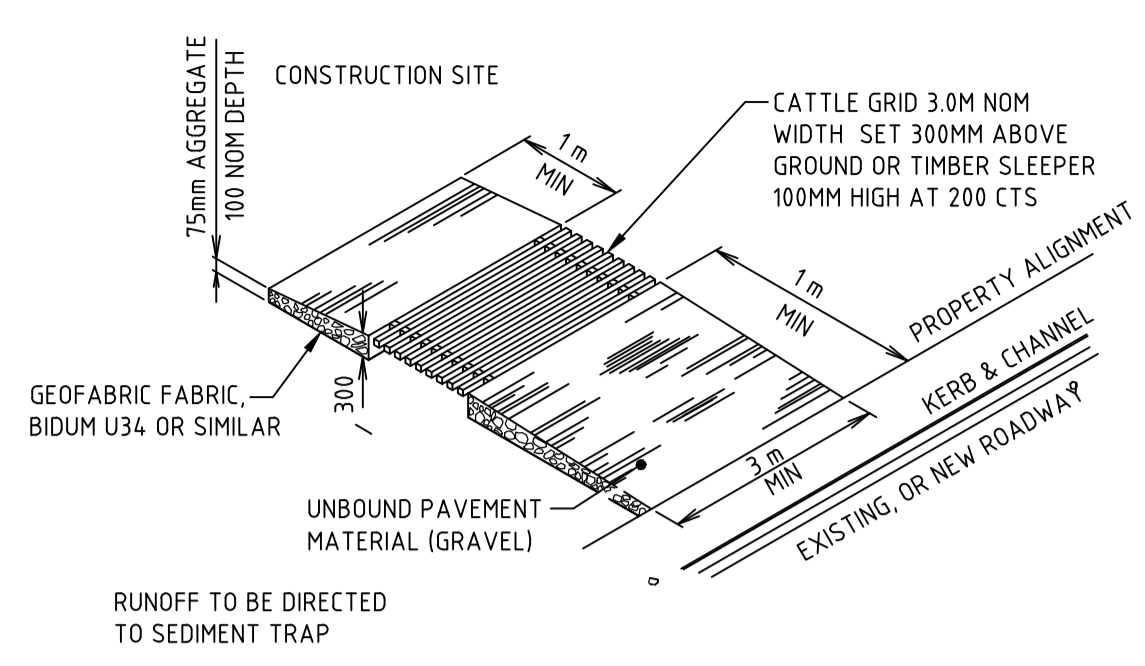
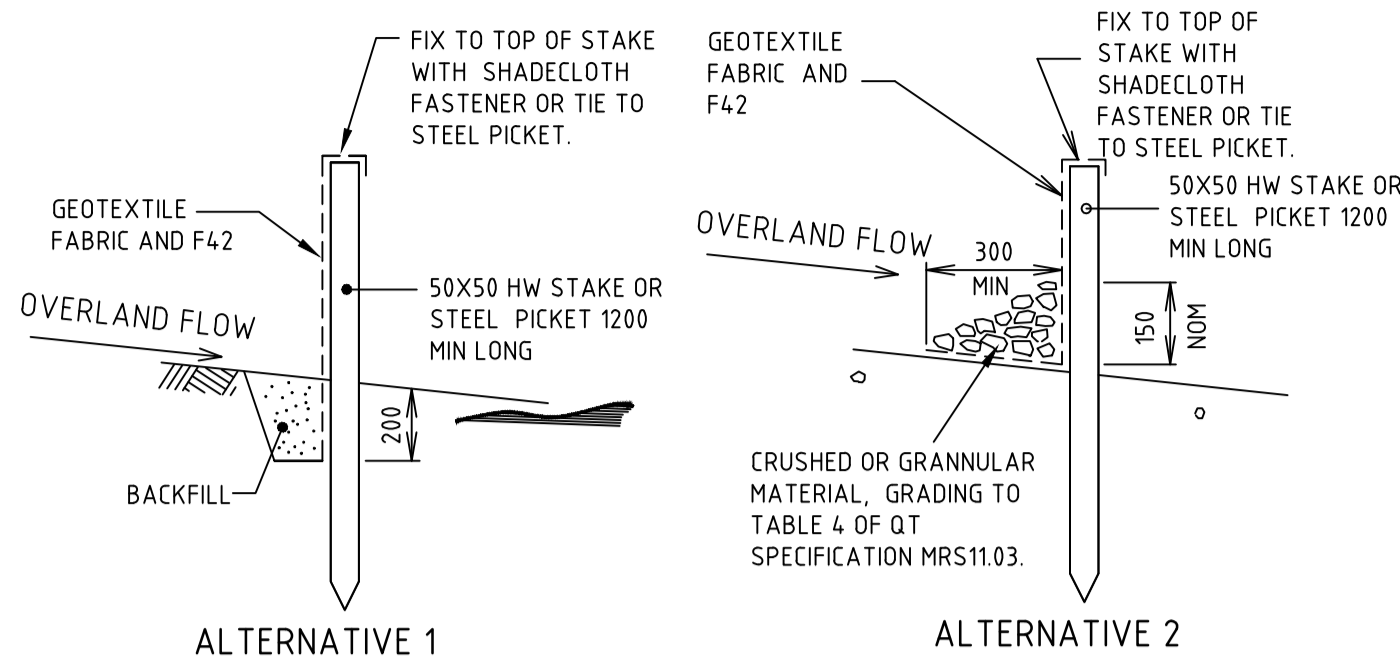
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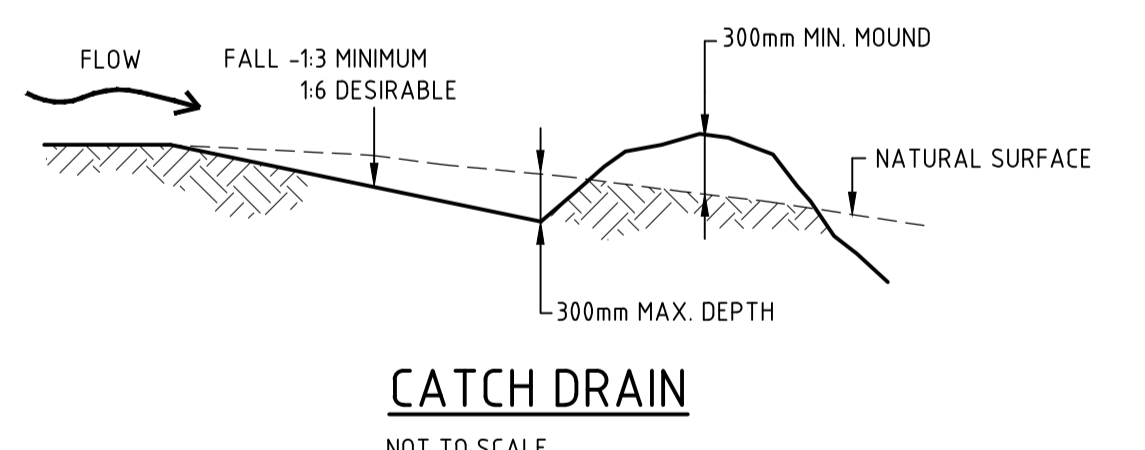
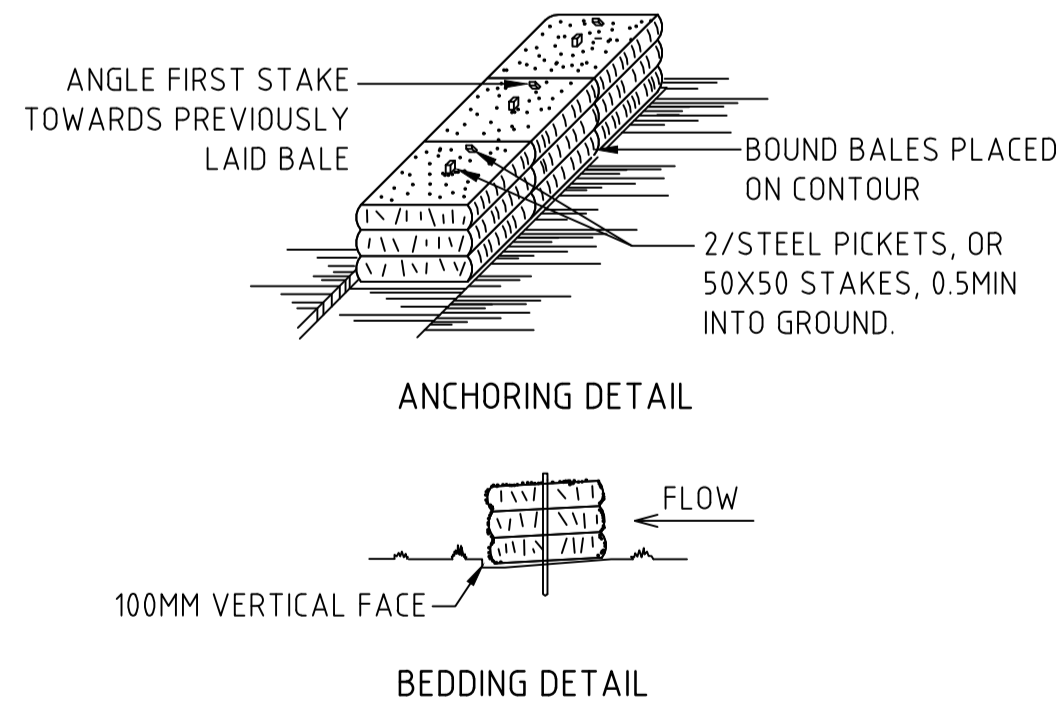
Project Name: **TWEED VALLEY HOSPITAL DEVELOPMENT, TURNOCK STREET ROUNDABOUT WORKS**

Drawing Title: **SEDIMENT AND EROSION CONTROL PLAN**

Designed CS		Project Director Approved		Date	North
Drawn PA		Date		North	
Scale NTS		Project Ref		Drawing No	Rev
Date 3.10.2018		20 10748 01		C505	P2
Sheet A1					



- ALTERNATIVE SEDIMENT FENCE NOTES**
- INSTALL THIS TYPE OF SEDIMENT FENCE WHEN USE OF SUPPORT POSTS IS NOT DESIRABLE OR NOT POSSIBLE. SUCH CONDITIONS MIGHT APPLY, FOR EXAMPLE, WHERE APPROVAL IS GRANTED FROM THE APPROPRIATE AUTHORITIES TO PLACE THESE FENCES IN HIGHLY SENSITIVE ESTUARINE AREAS.
 - USE BENT TRENCH MESH TO SUPPORT THE F82 WELDED MESH FACING AS SHOWN ON THE DRAWING ABOVE. ATTACH THE JUTE MESH TO THE WELDED MESH FACING USING UV-RESISTANT CABLE TIES.
 - STABILISE THE WHOLE STRUCTURE WITH SANDBAG OR ROCK ANCHORING OVER THE TRENCH MESH AND THE LEADING EDGE OF THE JUTE MESH. THE ANCHORING SHOULD BE SUFFICIENTLY LARGE TO ENSURE STABILITY OF THE STRUCTURE IN THE DESIGN STORM EVENT, USUALLY THE 10 YEAR EVENT.



Rev	Description	Date	By	App	Rev	Description	Date	By	App
P1	ISSUED FOR TENDER ISSUE	05.11.18	PA						

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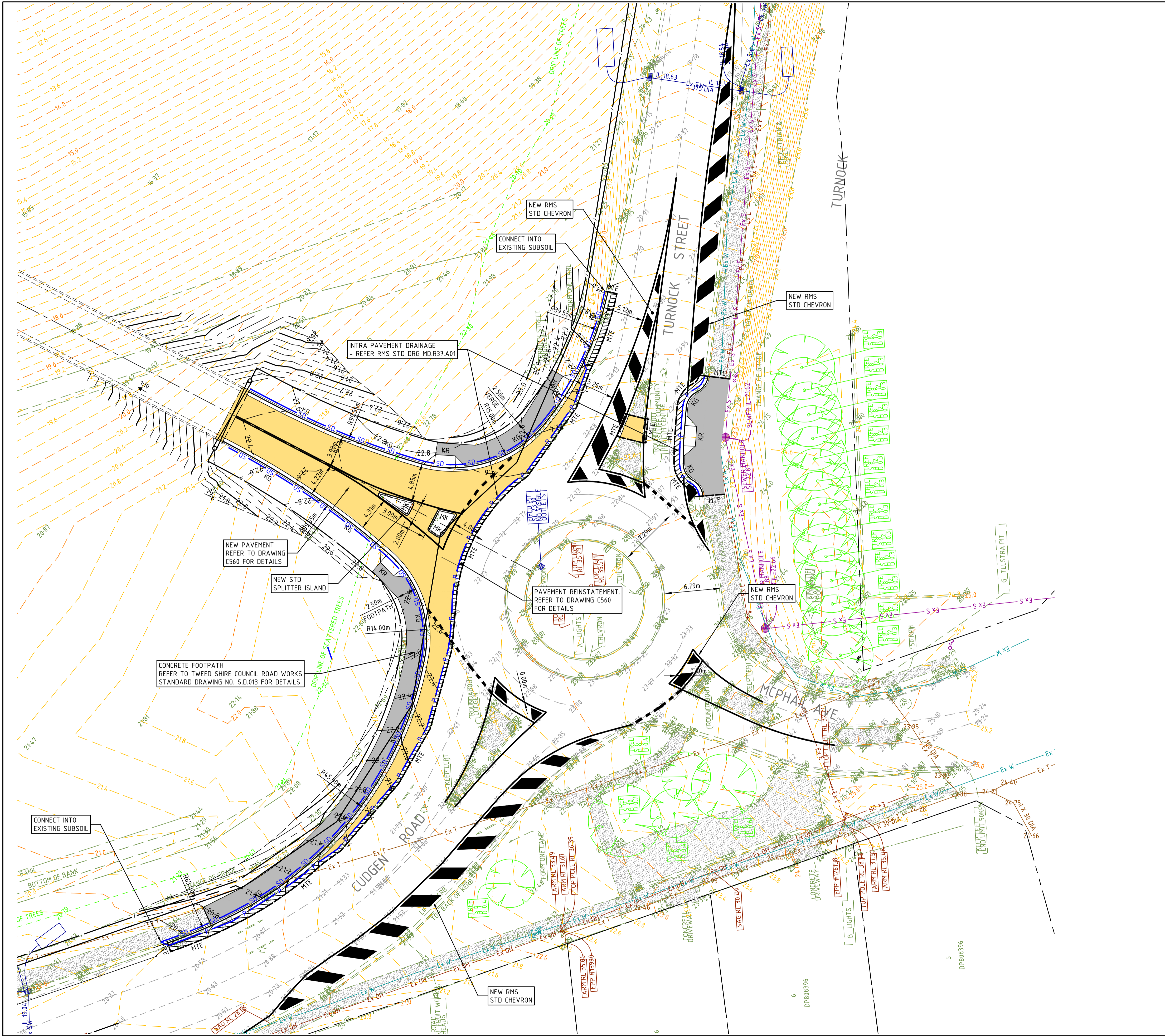
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 sydney@bonaccigroup.com
 www.bonaccigroup.com

Project Name: **TWEED VALLEY HOSPITAL DEVELOPMENT, TURNOCK STREET ROUNDABOUT WORKS**

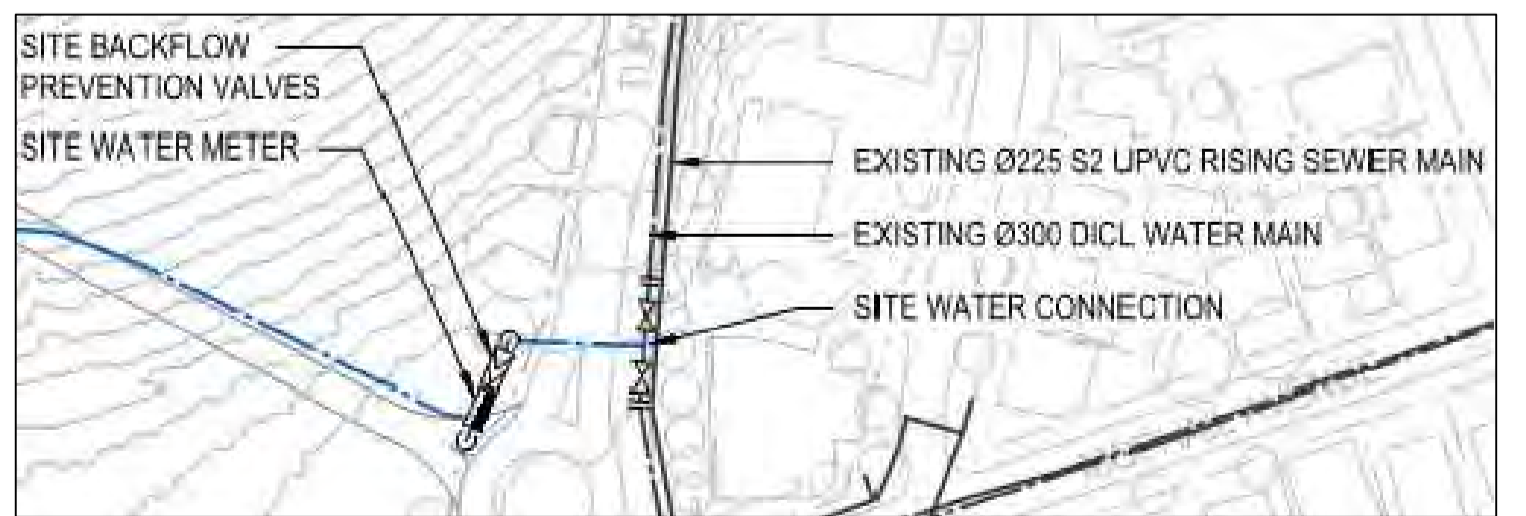
Drawing Title: **SOIL AND WATER MANAGEMENT DETAILS**

TENDER			
Designed	PA	Project Director Approved	Date
Drawn	PA		North
Scale	-	Project Ref	Drawing No
Date	02.10.18	20 10748 01	C507
Sheet	A1		P1

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- ### LEGEND
- EXISTING MINOR CONTOUR
 - EXISTING MAJOR CONTOUR
 - Ex S EXISTING SEWER
 - Ex OH EXISTING OVERHEAD LINES
 - Ex T EXISTING TELSTRA
 - EXISTING STORMWATER
 - Ex W EXISTING WATER
 - 19.0 DESIGN MINOR CONTOUR
 - 20.0 DESIGN MAJOR CONTOUR
 - KG KERB AND GUTTER
REFER TO TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.007 FOR DETAILS
 - KO KERB ONLY
REFER TO TYPICAL DETAILS AT DRAWING NO. 560
 - MK MOUNTABLE KERB
REFER TO TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.007 FOR DETAILS
 - KR KERB RAMP
REFER TO TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.014 FOR DETAILS
 - PAVEMENT TYPE 1
HEAVY DUTY ASPHALT PAVEMENT.
REFER TO DRAWING C560 FOR DETAILS
 - CONCRETE FOOTPATH
REFER TO TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.013 FOR DETAILS
 - PAVEMENT REINSTATEMENT
REFER TO DRAWING C560 FOR DETAILS
 - MTE MATCH TO EXISTING PAVEMENT
 - SD SUBSOIL DRAINAGE
- REFER TO TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D. 012 FOR DETAIL (UNO)
 - P INTRA PAVEMENT DRAINAGE
- REFER RMS STD DRG MD.R37.A01
 - FENCE LINE
 - BOUNDARY



PROPOSED FUTURE POTABLE WATER CONNECTION BY TWEED SHIRE COUNCIL
NOT TO SCALE

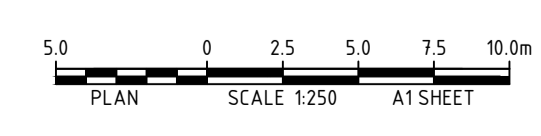
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P2	ISSUED FOR TENDER	05.11.18	PA	-
P1	ISSUED FOR DRAFT TENDER	02.11.18	PA	-

Rev	Description	Date	By	App

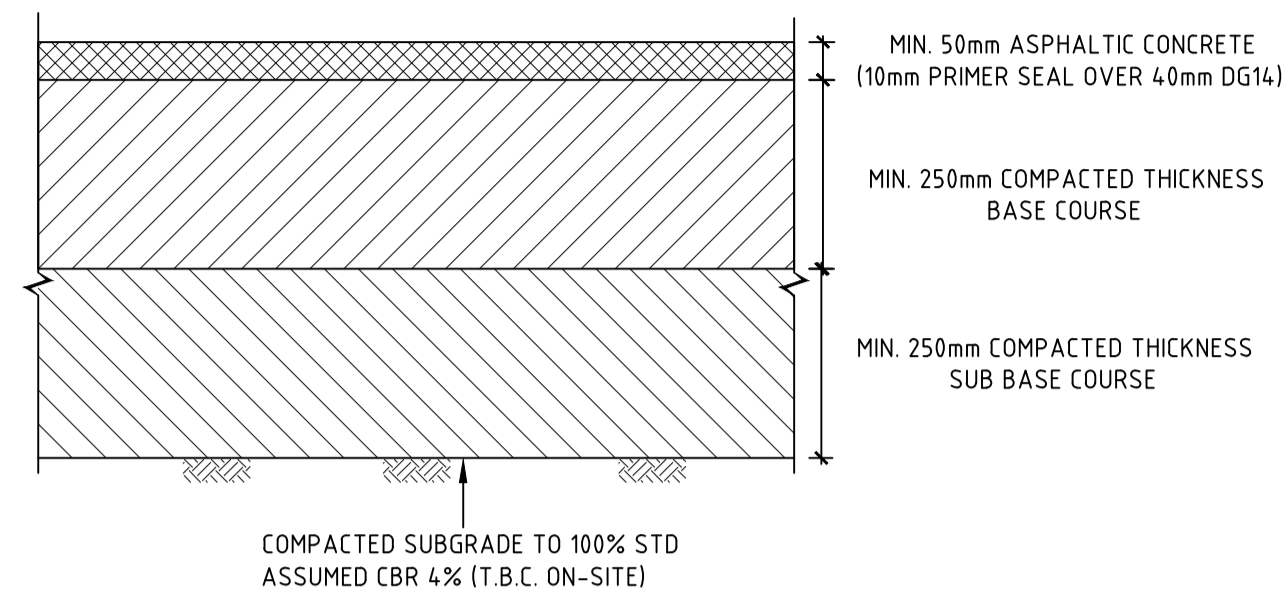


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Project Name	TWEED VALLEY HOSPITAL DEVELOPMENT, TURNOCK STREET ROUNDABOUT WORKS		
Drawing Title	EXTERNAL WORKS INTERSECTION PLAN		

TENDER			
Designed	CS	Project Director Approved	Date
Drawn	PA		
Scale	1:250	Project Ref	Drawing No
Date	3.10.2018		Rev
Sheet	A1	20 10748 01	C540 P3



**PAVEMENT TYPE P1
HEAVY DUTY ASPHALT PAVEMENT**

SCALE 1:10

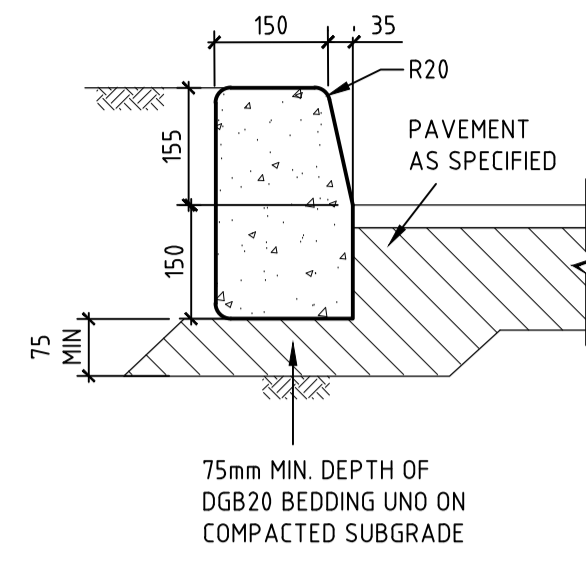


ROAD DESIGN PARAMETERS (FLEXIBLE)

DESIGN TRAFFIC 1.5 X 10⁶ (ESA'S OR HVAG)

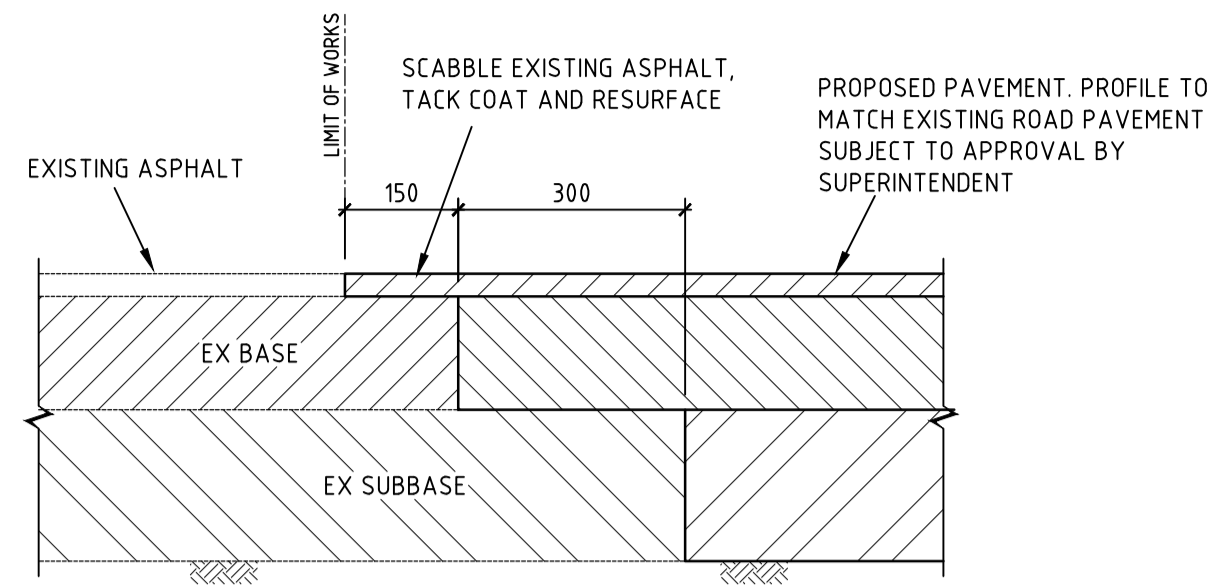
ASSUMPTIONS:

- TWEED SHIRE COUNCIL PAVEMENT DESIGN TABLE D2.2 ARTERIAL DISTRIBUTOR, SHOPPING STRIP ACCESS, INDUSTRIAL, DESIGN PERIOD 25 YEAR.
- CBR 4.0%
- PREPARE SUBGRADE AND SELECT FILL IN ACCORDANCE WITH (MORRISON GEOTECH, REFERENCE NO. GE18/144-REV 1)



KERB ONLY (KO)

SCALE 1:10



AC CONNECTION TO EXISTING PAVEMENT

SCALE 1:10

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P1	ISSUED FOR DRAFT TENDER	02.11.18	PA	-

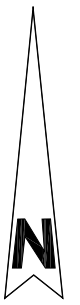
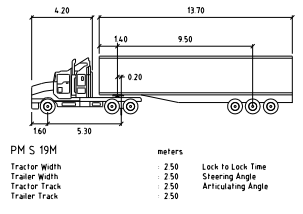
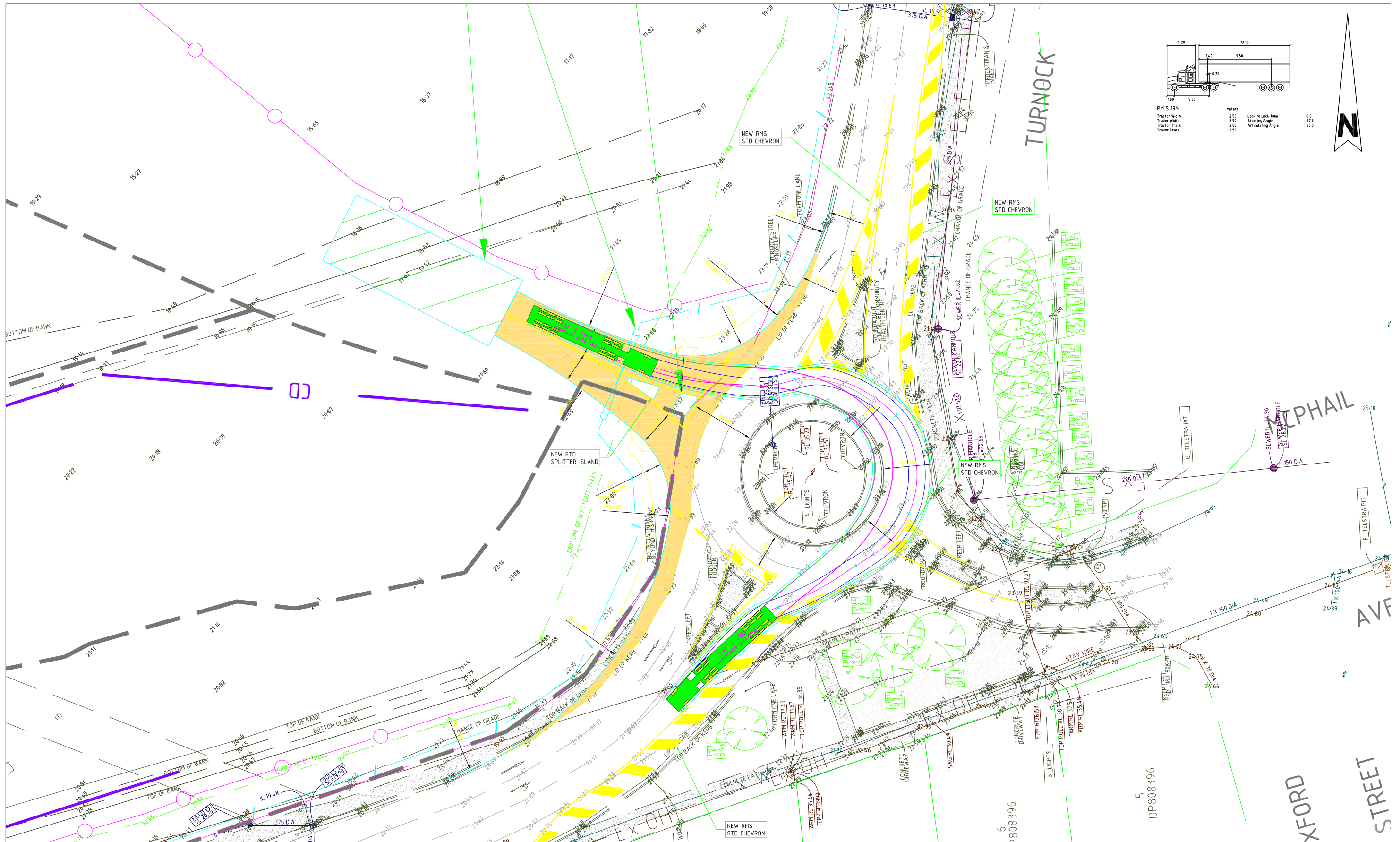
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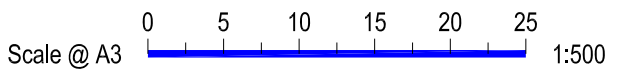
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Project Name	TWEED VALLEY HOSPITAL DEVELOPMENT, TURNOCK STREET ROUNDABOUT WORKS		
Drawing Title	CIVIL WORKS DETAILS		

TENDER			
Designed	CS	Project Director Approved	Date
Drawn	PA	North	
Scale	NOTED	Project Ref	Drawing No
Date	3.10.2018	20 10748 01	C560
Sheet	A1		P2



Issue	Revisions/Descriptions	Drawn	Date
001	Version 1	JWG	05/11/17
002	Version 2	JWG	21/11/17



Project	Tweed Valley Hospital	
Title	Turnnock Street - Cudgen Road Swept Paths 19m AV	

FOR TENDER	
Project Number	Date
P3378	21/11/2018
Sheet Number	Issue
2	002

