

OPAL BAYVIEW GARDENS

ANNAM ROAD, BAYVIEW NSW 2104

CIVIL DESIGN DRAWINGS



IMAGE COURTESY OF SIX-MAPS.

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PRELIMINARY ISSUE
NOT FOR CONSTRUCTION

ISSUE	DESCRIPTION	APPROVED	DATE
P2	FOR SDDA ISSUE		30.09.25
P1	PRELIMINARY ISSUE		25.08.25

ARCHITECT
CALDERFLOWER
architecture

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PROJECT
OPAL BAYVIEW GARDENS
ANNAM ROAD BAYVIEW NSW

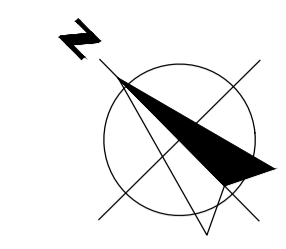
TITLE
COVER SHEET

SCALES	DATE
N/A @ A1	AUG' 2025

DRAWN	DESIGN	VERIFIED	APPROVED
C.KE	G.K	C.M	

ISSUE	PROJECT No.	DRAWING No.
P2	9449	C.0000

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GENERAL NOTES:

1. THIS PLAN IS A CONCEPT PLAN ONLY FOR CONSTRUCTION OF SEDIMENT & EROSION CONTROL. IT IS NOT SUITABLE FOR CONSTRUCTION. THIS PLAN SHOULD BE ADAPTED BY THE BUILDER DURING DEMOLITION, EXCAVATION & CONSTRUCTION PHASES TO ENSURE ADEQUATE PERFORMANCE.
2. ALL DRAINAGE LAYOUT & DETAILS ARE DIAGRAMMATIC & INDICATIVE ONLY. ACTUAL LOCATION, SIZES, LEVELS & GRADES MAY CHANGE LATER WHEN DETAIL DESIGN WORKS ARE DOCUMENTED.

EROSION & SEDIMENTATION CONTROL NOTES

1. CONTRACTOR SHALL PROVIDE SEDIMENT FENCING MATERIAL DURING CONSTRUCTION TO THE LOW SIDE OF THE WORKS. THE SEDIMENT FENCING MATERIAL TO CYCLONE WIRE SECURITY FENCE SEDIMENT CONTROL FABRIC SHALL BE AN APPROVED MATERIAL (e.g. HUMES PROPEX SILT STOP) STANDING 300mm ABOVE GROUND & EXTENDING 150mm BELOW GROUND.
2. EXISTING DRAINS LOCATED WITHIN THE SITE SHALL ALSO BE ISOLATED BY SEDIMENT FENCING MATERIAL.
3. NO PARKING OR STOCKPILING OF MATERIAL IS PERMITTED ON THE LOWER SIDE OF THE SEDIMENT FENCE.
4. GRASS VERGES SHALL BE MAINTAINED AS MUCH AS PRACTICAL TO PROVIDE A BUFFER ZONE TO THE CONSTRUCTION SITE.
5. CONSTRUCTION ENTRY/EXIT SHALL BE VIA THE LOCATION NOTED ON THE DRAWING. CONTRACTOR SHALL ENSURE ALL DROPPABLE SOIL & SEDIMENT IS REMOVED PRIOR TO CONSTRUCTION TRAFFIC EXITING THE SITE. CONTRACTOR SHALL ENSURE ALL CONSTRUCTION TRAFFIC ENTERING & LEAVING THE SITE DO SO IN A FORWARD DIRECTION.
6. MAINTENANCE AND AUDITING OF SEDIMENT AND EROSION CONTROL SHALL BE IN ACCORDANCE WITH THE BLUE BOOK AND ANY RELEVANT CONSENT CONDITIONS.
7. LOW POINTS OF EXCAVATION SHALL BE PUMPED TO THE SEDIMENT BASIN WHERE PROVIDED.
8. PROVIDE WIND, AND DUST CONTROL IN ACCORDANCE WITH THE BLUE BOOK.
9. PROVIDE BUNDS AND CATCH DRAINS AT THE TOP OF ALL BATTERS SO BATTERS ARE NOT ERODED WITH OVERLAND FLOW STORMWATER RUNOFF.

SOIL EROSION AND SEDIMENT CONTROL LEGEND

DENOTES SEDIMENT CONTROL FENCE IN ACCORDANCE WITH SD6-8 OF THE BLUE BOOK

DENOTES GEOTEXTILE INLET FILTER IN ACCORDANCE WITH SD6-11 OR SD6-12 OF THE BLUE BOOK

DENOTES TEMPORARY CONSTRUCTION STABILISED SITE ACCESS POINT IN ACCORDANCE WITH SD6-14 OF THE BLUE BOOK (SHAKEDOWN CATTLE GRID AT ACCESS POINT NOT SHOWN FOR CLARITY)

DENOTES STOCKPILE SHOWN INDICATIVE, MANAGED AND CONSTRUCTED IN ACCORDANCE WITH SD4-1 OF THE BLUE BOOK

SITE BOUNDARY

DENOTES PROPOSED BUILDING EXTENT

EXISTING TO BE DEMOLISHED

PROPOSED HAY BALE FILTER IN ACCORDANCE WITH SD6-7 OF THE BLUE BOOK

PROPOSED SANDBAG OR GEOTEXTILE SOCK FILLED WITH GRAVEL AT INVERT OF GUTTER

PRELIMINARY ISSUE NOT FOR CONSTRUCTION

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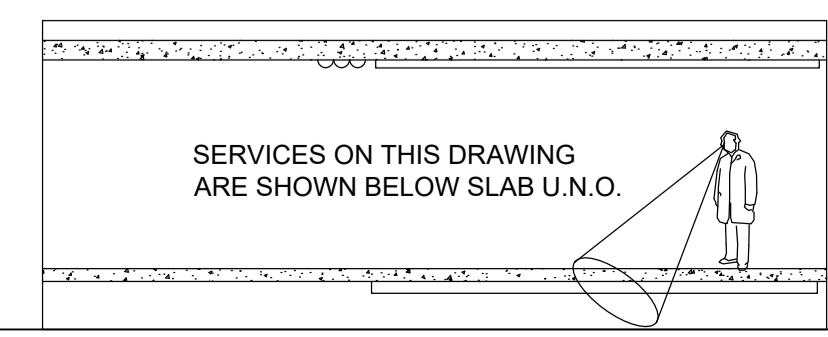
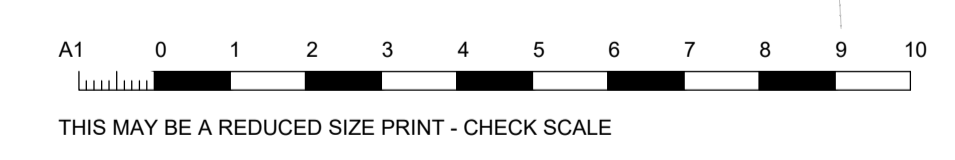
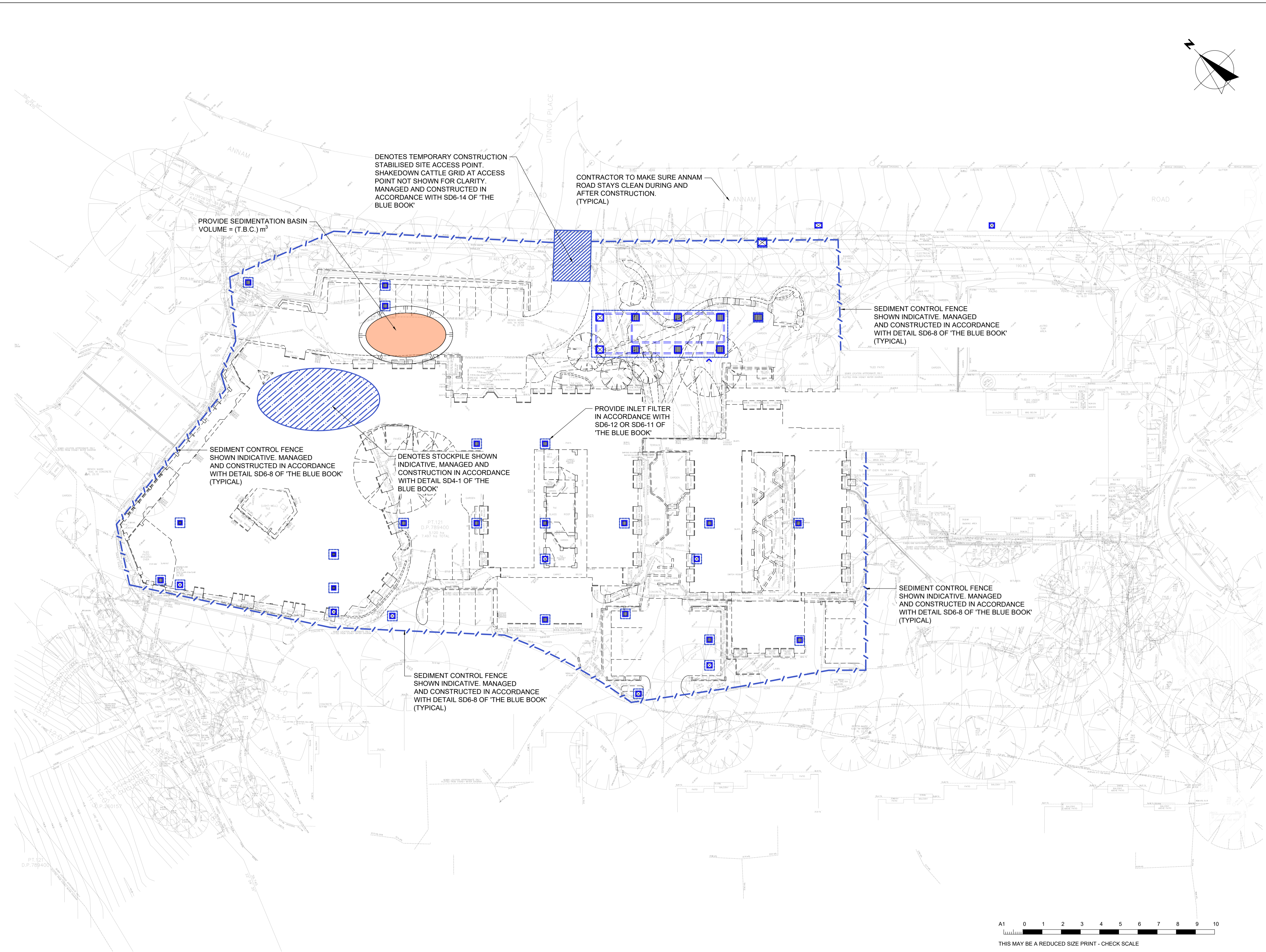
PROJECT

OPAL BAYVIEW GARDENS
ANNAM ROAD BAYVIEW NSW

TITLE

SOIL EROSION AND SEDIMENT CONTROL PLAN

SCALES	1:300 @ A1	DATE	AUG' 2025
DRAWN	DESIGN	VERIFIED	APPROVED
C.K.E	G.K	C.M	
ISSUE	PROJECT No.	DRAWING No.	
P2	9449	C.0100	

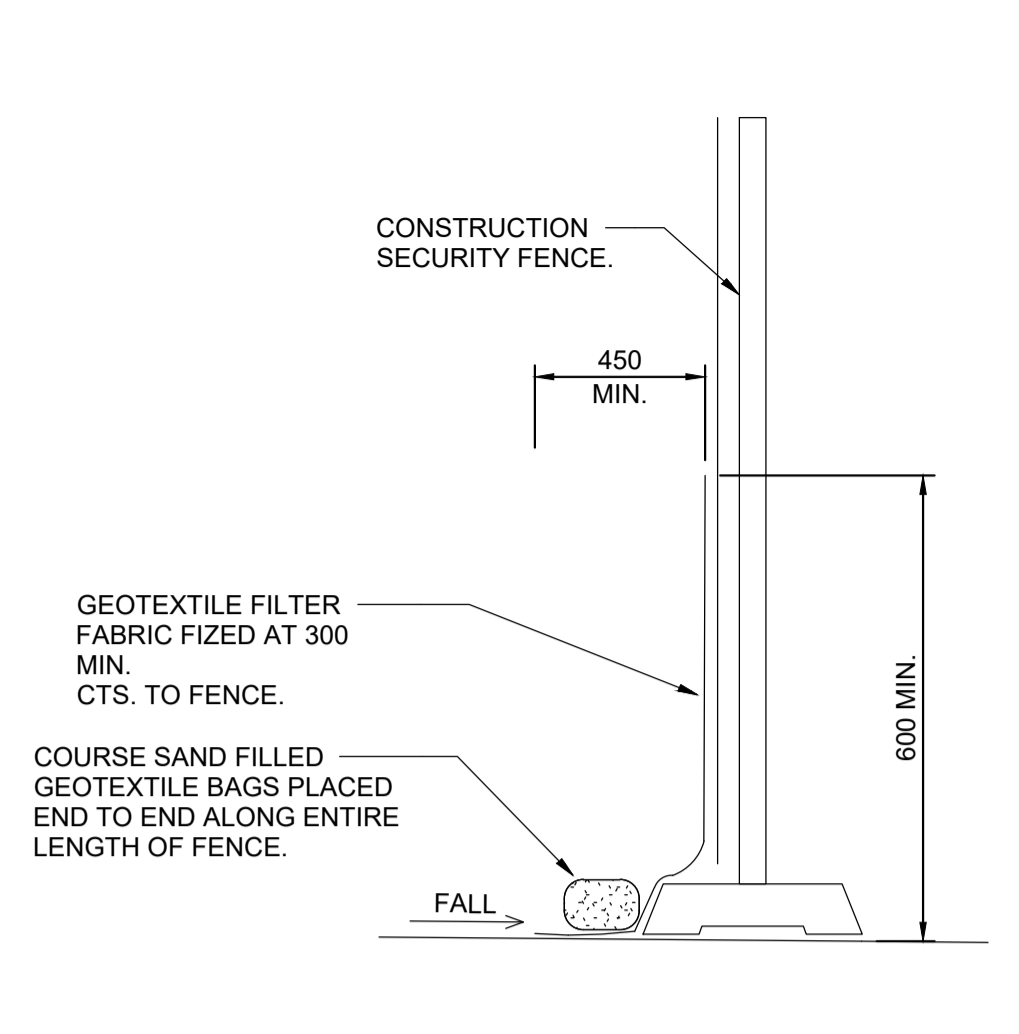


DIAL BEFORE YOU DIG

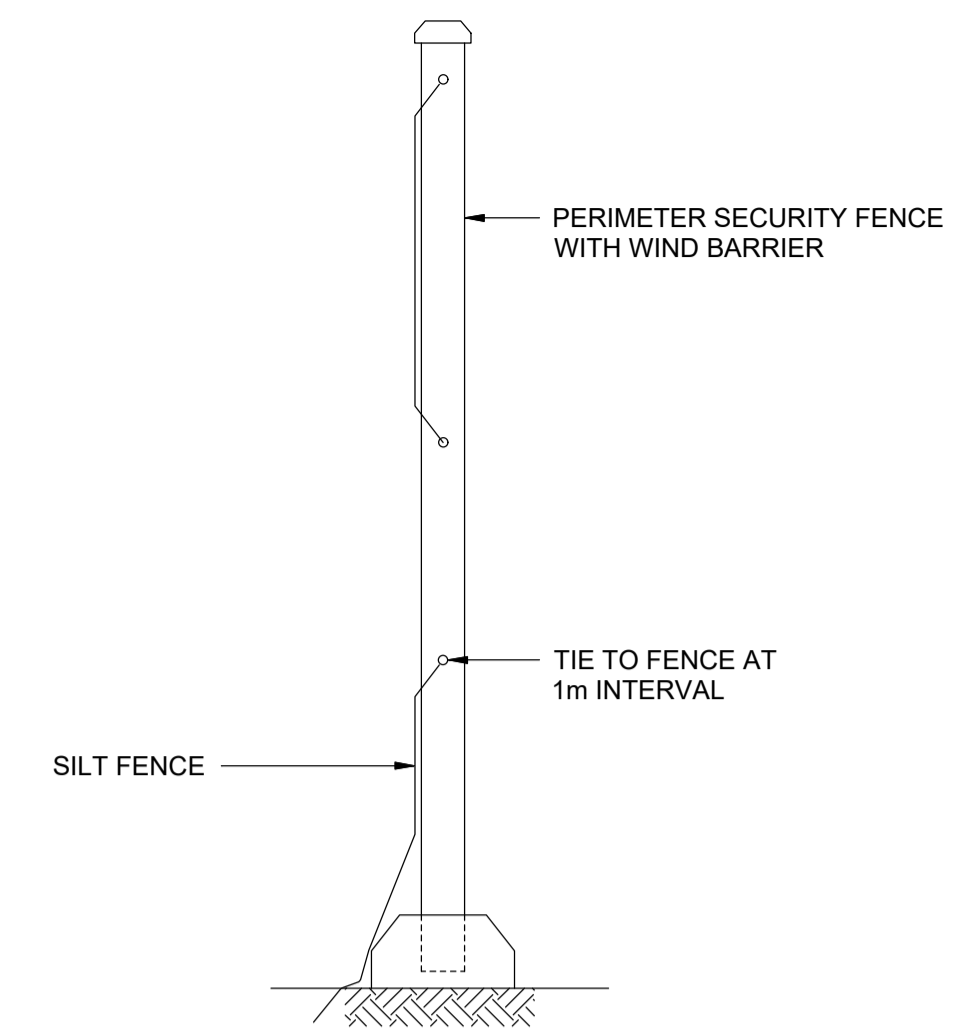


IMPORTANT: THE CONTRACTOR IS TO MAINTAIN A CURRENT SET OF "DIAL BEFORE YOU DIG" DRAWINGS ON SITE AT ALL TIMES.

PRINT IN COLOUR

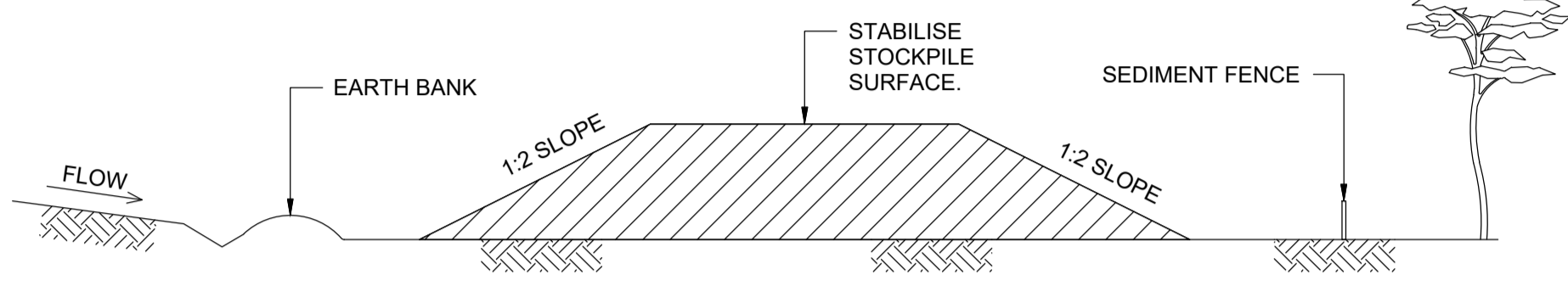


SEDIMENT FENCE ON PAVED SURFACE
(NOT TO SCALE)

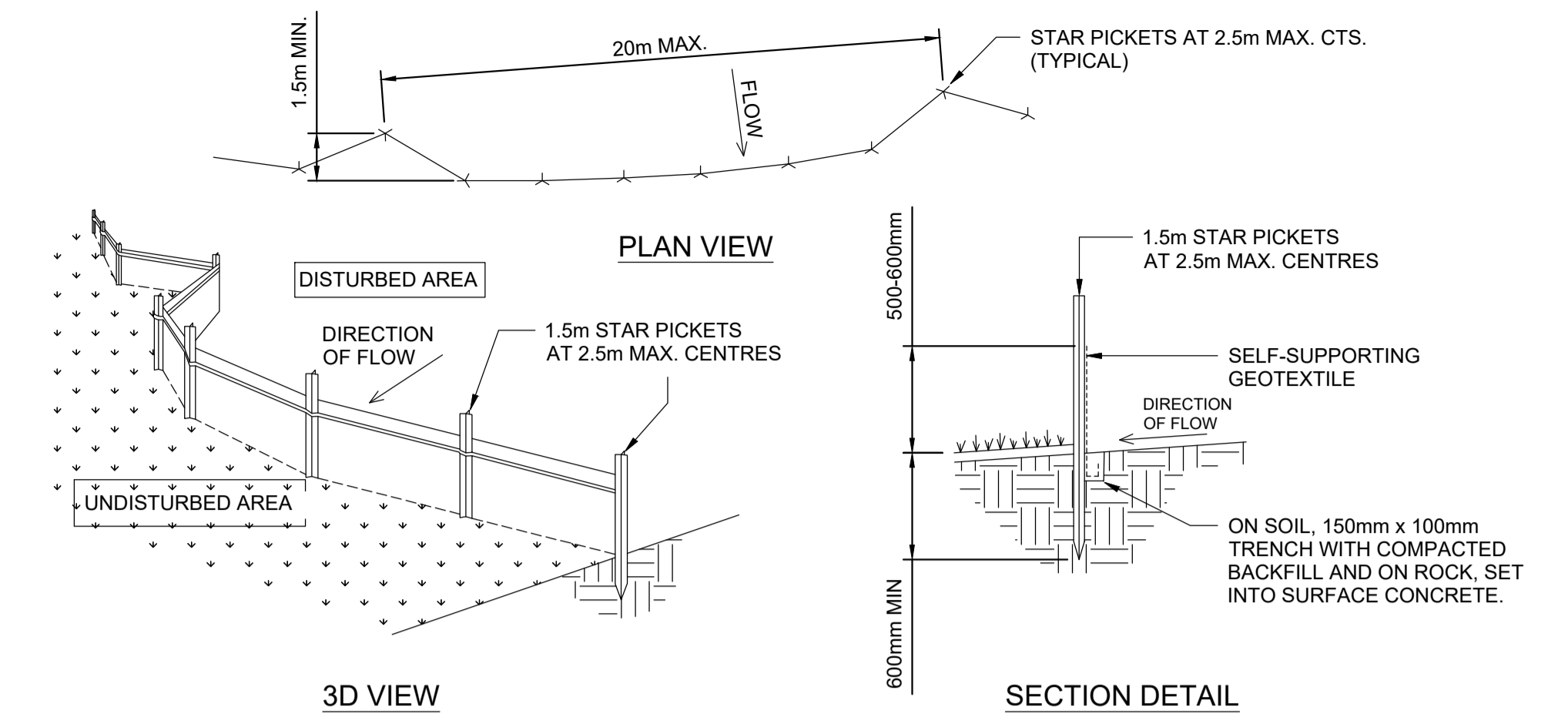


PERIMETER SECURITY FENCE WITH WIND BARRIER & SILT FENCE DETAIL
(NOT TO SCALE)

- STOCKPILE CONSTRUCTION NOTES:**
1. PLACE STOCKPILES MORE THAN 2 (PREFERABLY 5) METRES FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
 2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
 3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2 METRES IN HEIGHT.
 4. WHERE THEY ARE TO BE PLACED FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED E.S.C.P. OR S.W.M.P. TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
 5. CONSTRUCT EARTH BANKS ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES 1 - 2 METRES DOWNSLOPE.

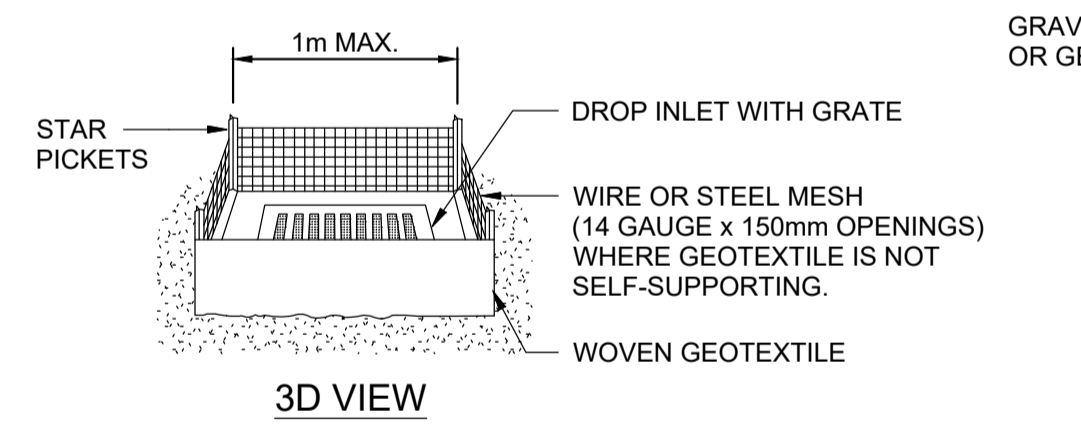
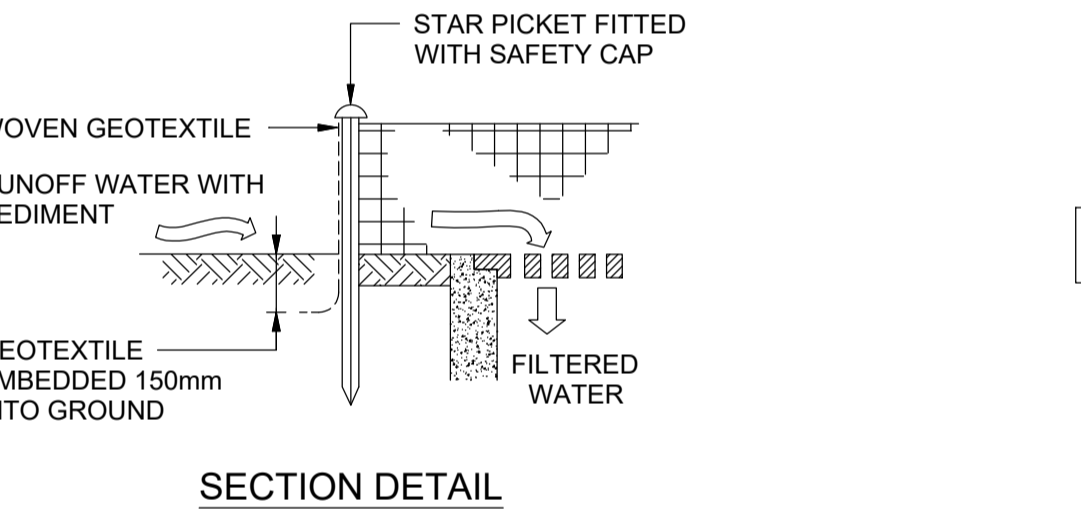
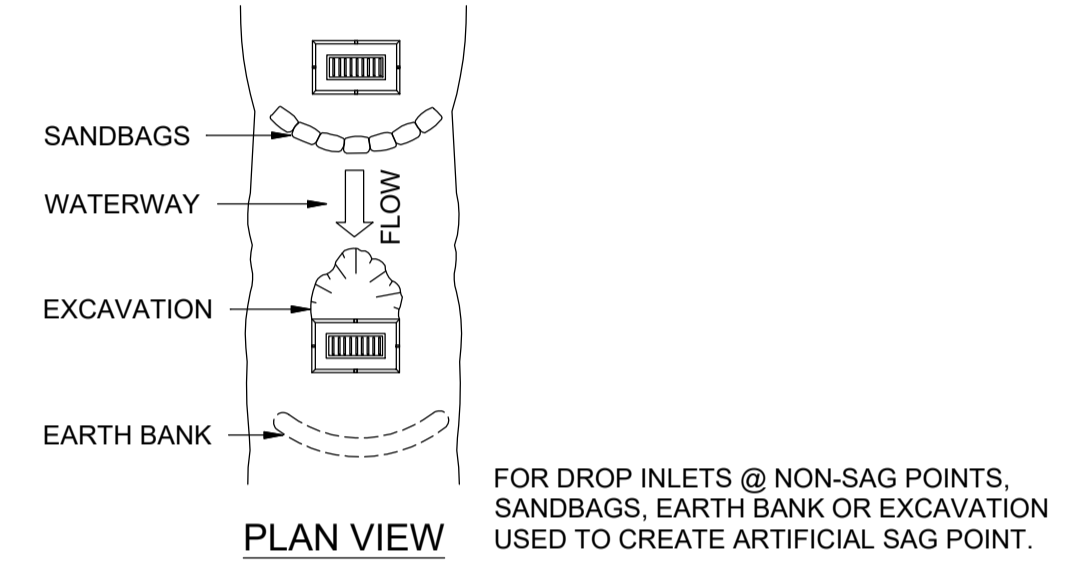


STOCKPILES DETAIL
(NOT TO SCALE)



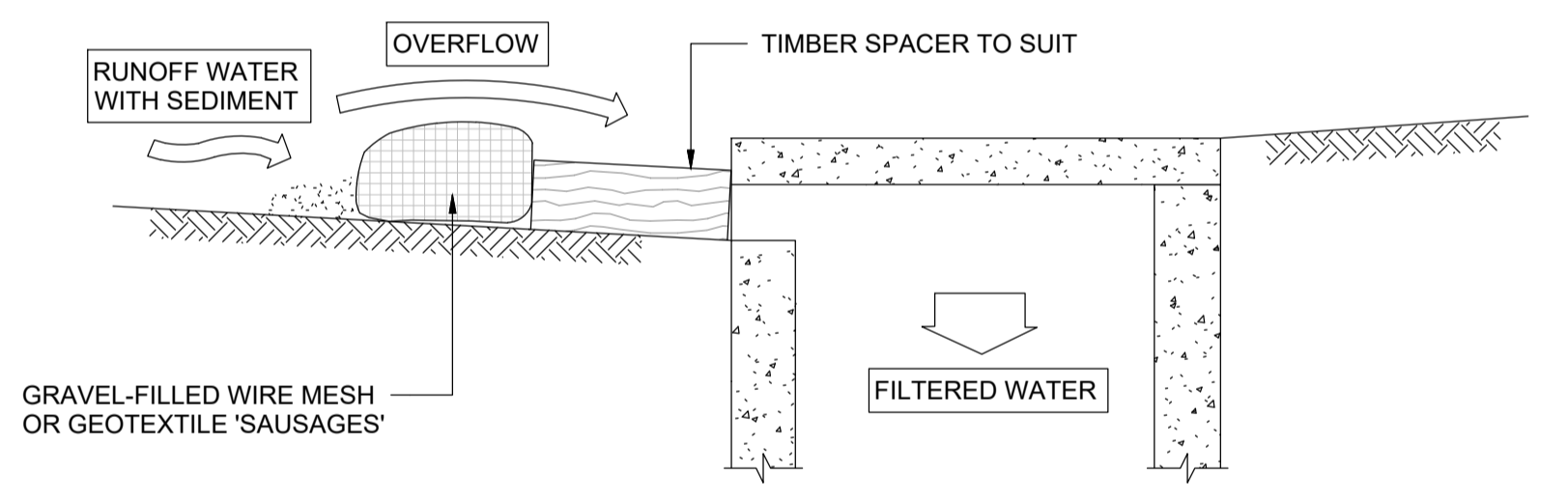
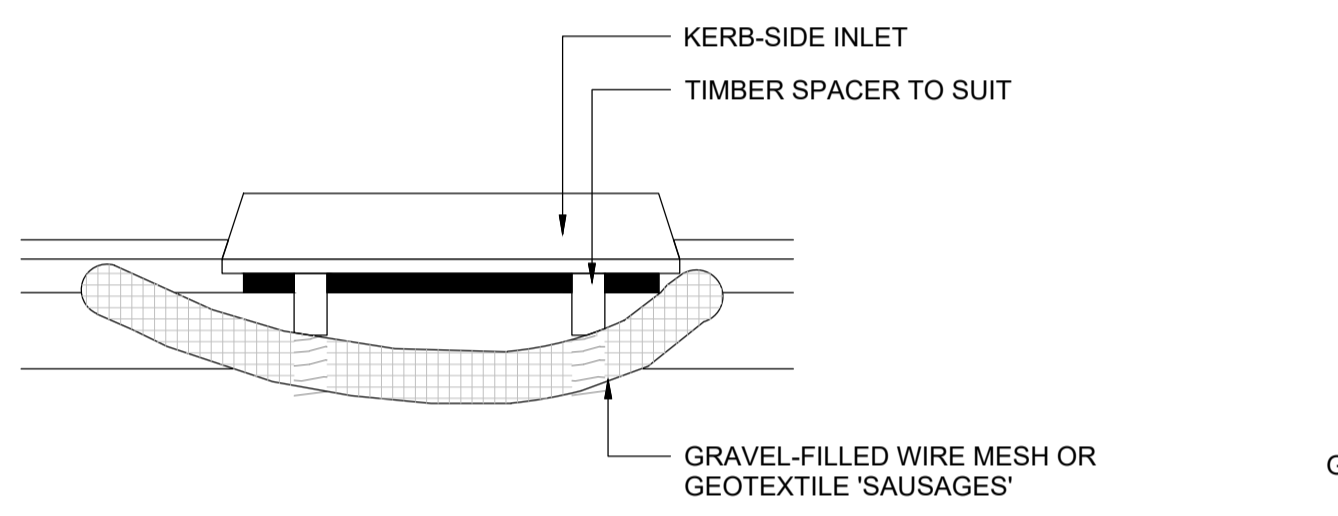
SEDIMENT FENCE DETAILS
(NOT TO SCALE)

- SEDIMENT FENCE CONSTRUCTION NOTES:**
1. 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.
 2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
 3. DRIVE 1.5m LONG STAR PICKETS INTO GROUND AT 2.5m INTERVALS (MAX.) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
 4. 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.
 5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
 6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.



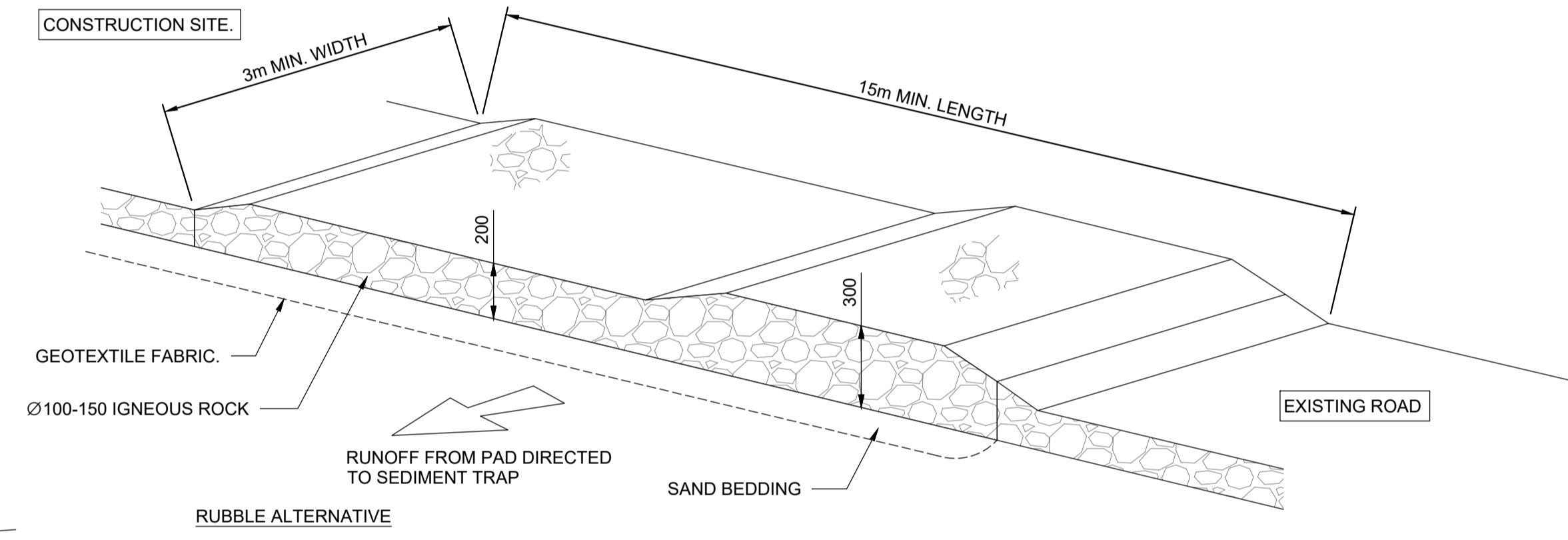
GEOTEXTILE INLET FILTER DETAILS
(NOT TO SCALE)

- GEOTEXTILE INLET FILTER CONSTRUCTION NOTES:**
1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE.
 2. PICKET SPACING TO BE MAXIMUM 1m.
 3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
 4. DO NOT COVER THE INLET WITH GEOTEXTILES UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

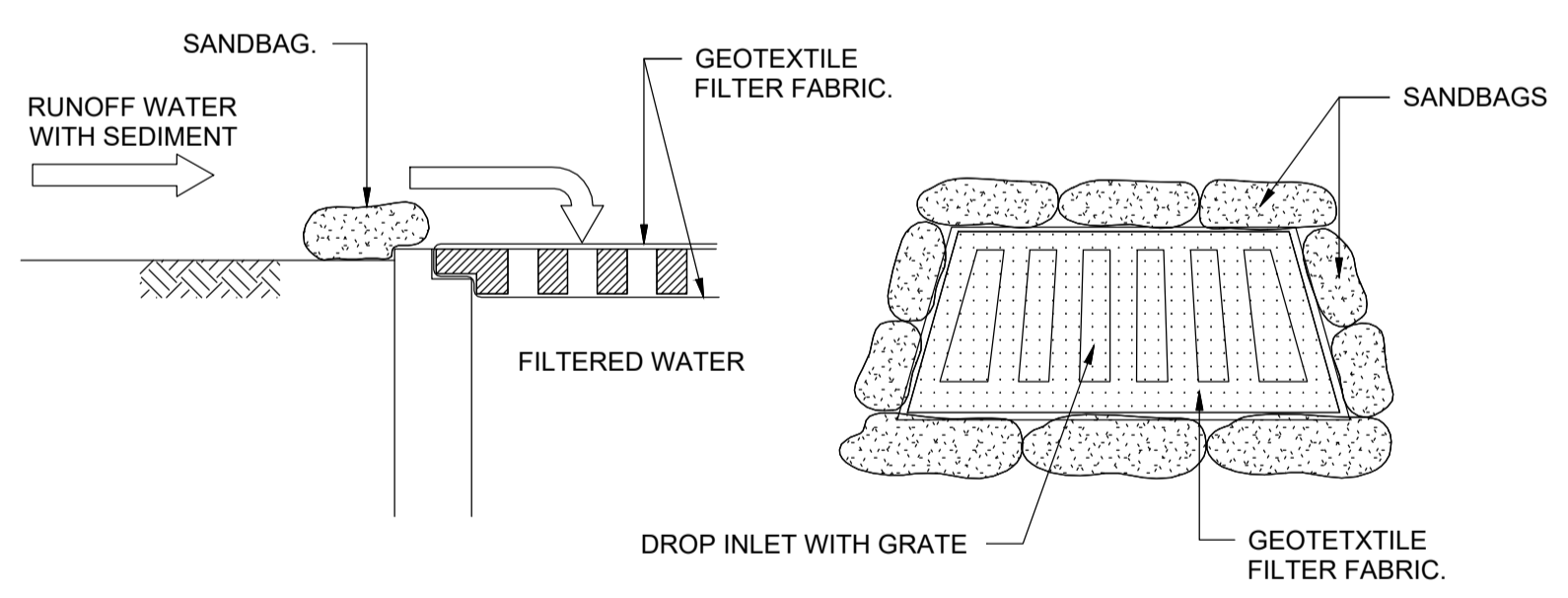


MESH & GRAVEL INLET FILTER DETAILS.
(NOT TO SCALE)

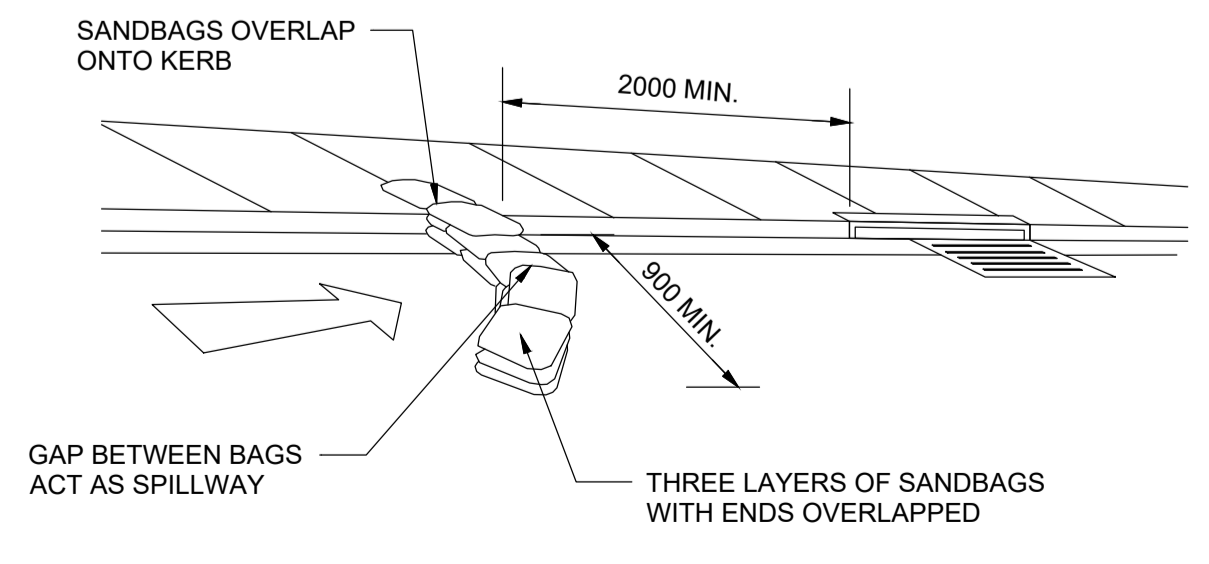
- MESH & GRAVEL INLET FILTER CONSTRUCTION NOTES:**
1. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25-50mm GRAVEL.
 2. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
 3. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH TIMBER SPACER BLOCKS.
 4. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
 5. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE, PROVIDING THEY ARE PLACED SO THAT THEY CAN FIRMLY ABUT EACH OTHER AND SEDIMENT LADEN WATERS CANNOT PASS BETWEEN.



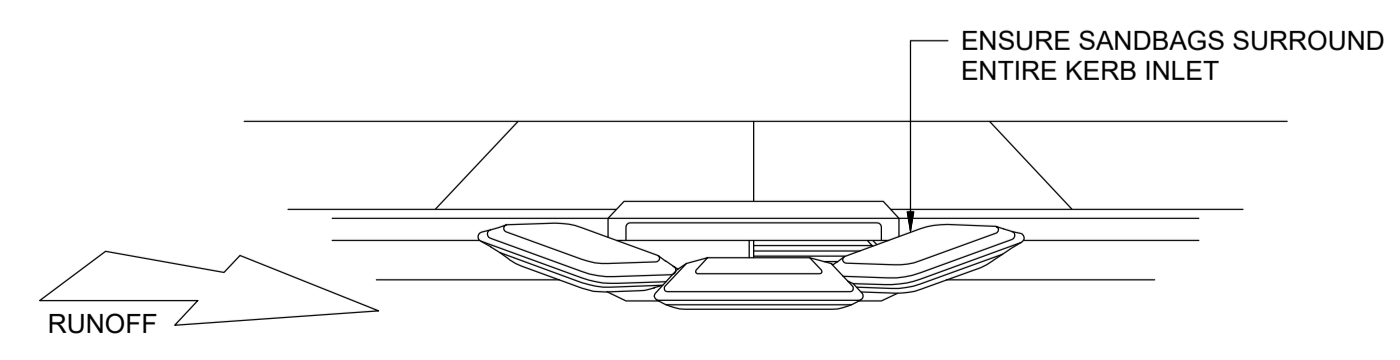
TEMPORARY CONSTRUCTION EXIT
(NOT TO SCALE)



GEOTEXTILE FILTER FABRIC DROP INLET SEDIMENT TRAP
(NOT TO SCALE)



SANDBAG SEDIMENT TRAP FOR KERB INLET ON GRADE
(NOT TO SCALE)



SANDBAG KERB INLET SEDIMENT TRAP DETAIL
(NOT TO SCALE)

PRELIMINARY ISSUE
NOT FOR CONSTRUCTION

ISSUE	DESCRIPTION	APPROVED	DATE
P2	FOR SDA ISSUE		30.09.25
P1	PRELIMINARY ISSUE		25.08.25

ARCHITECT
CALDERFLOWER
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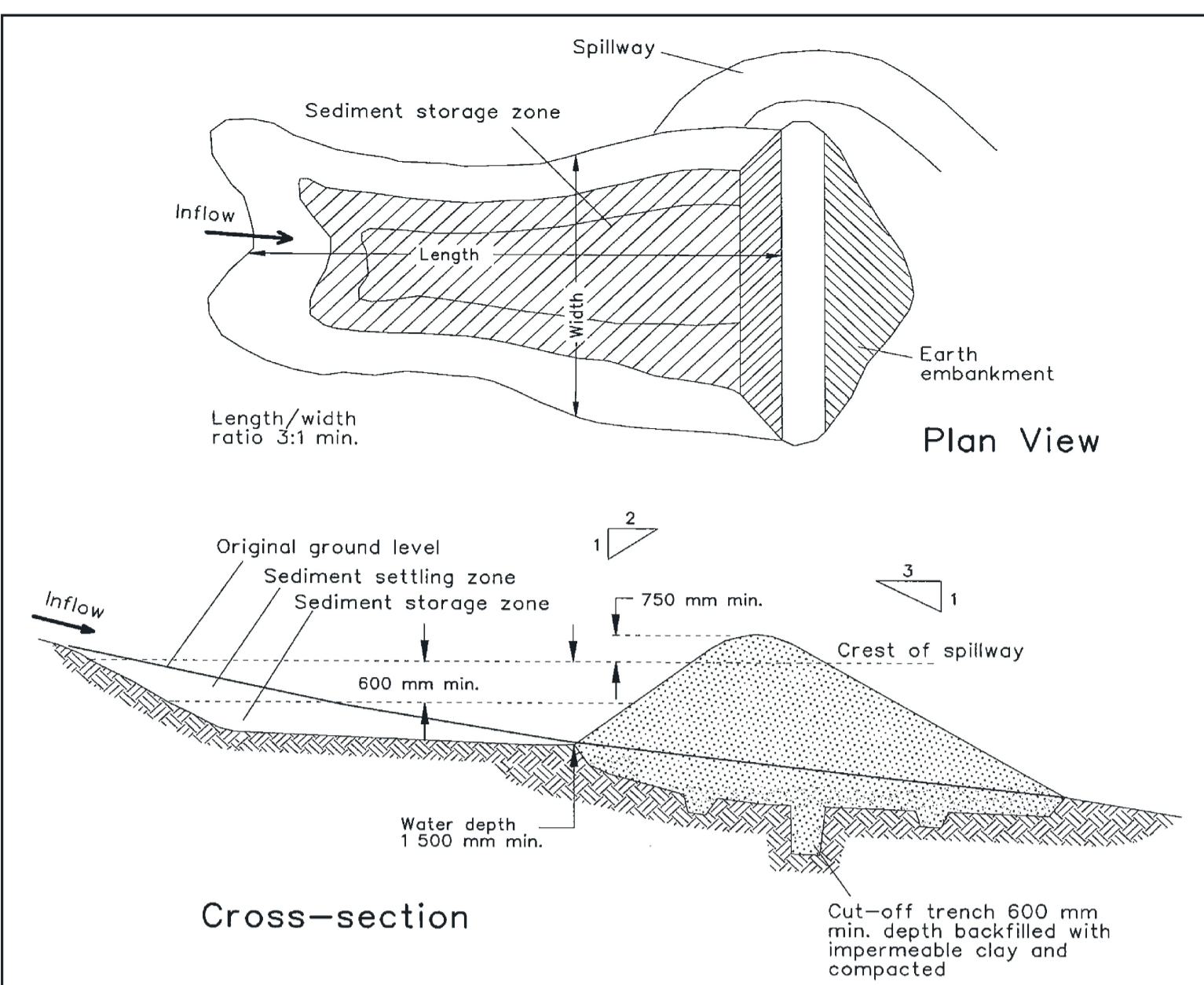
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PROJECT
OPAL BAYVIEW GARDENS
ANNAM ROAD BAYVIEW NSW

TITLE
SOIL EROSION AND SEDIMENT CONTROL DETAILS - SHEET 01

SCALE	N/A @ A1	DATE	AUG' 2025
DRAWN	DESIGN	VERIFIED	APPROVED
C.KE	G.K	C.M	
ISSUE	PROJECT No.	DRAWING No.	
P2	9449	C.0150	

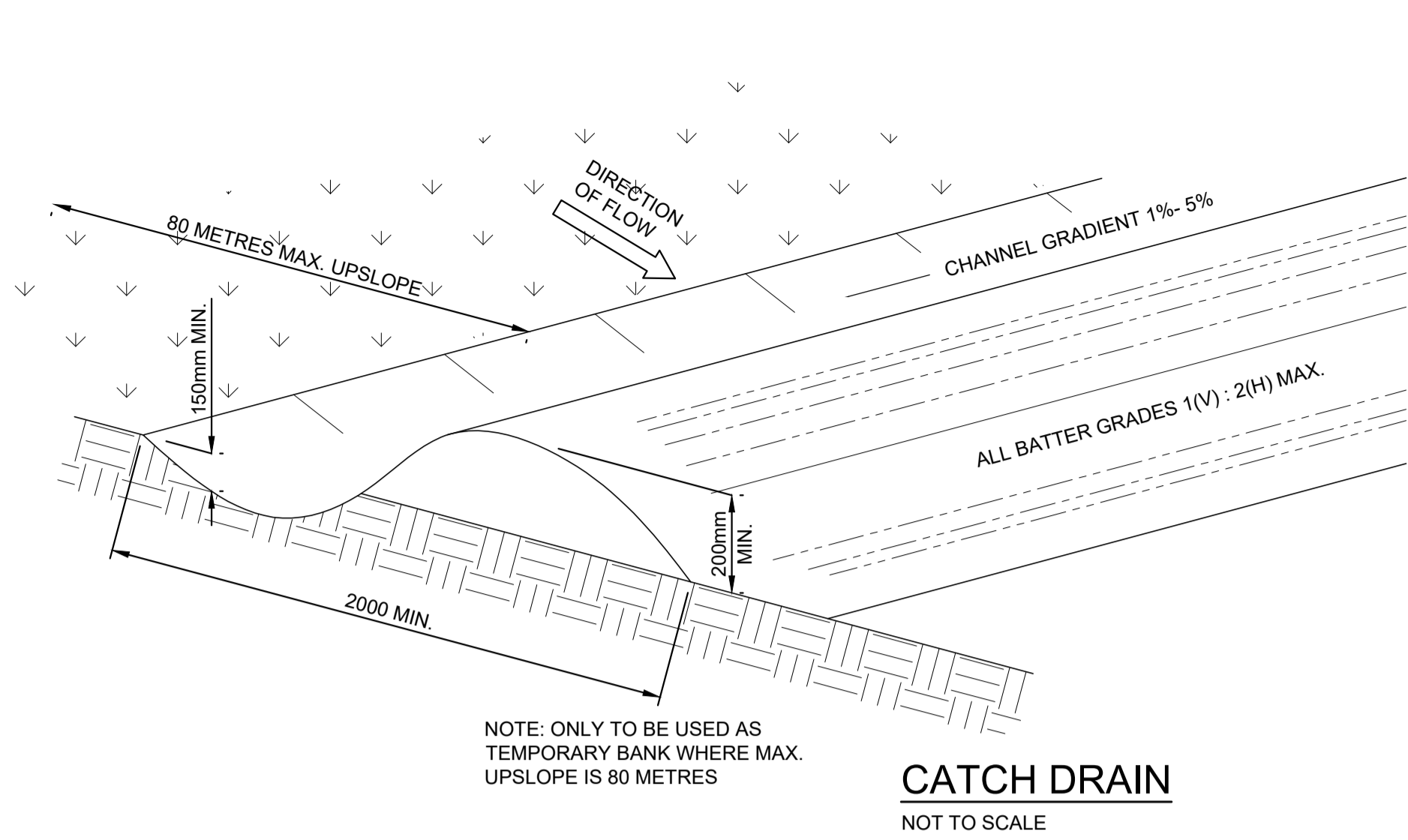
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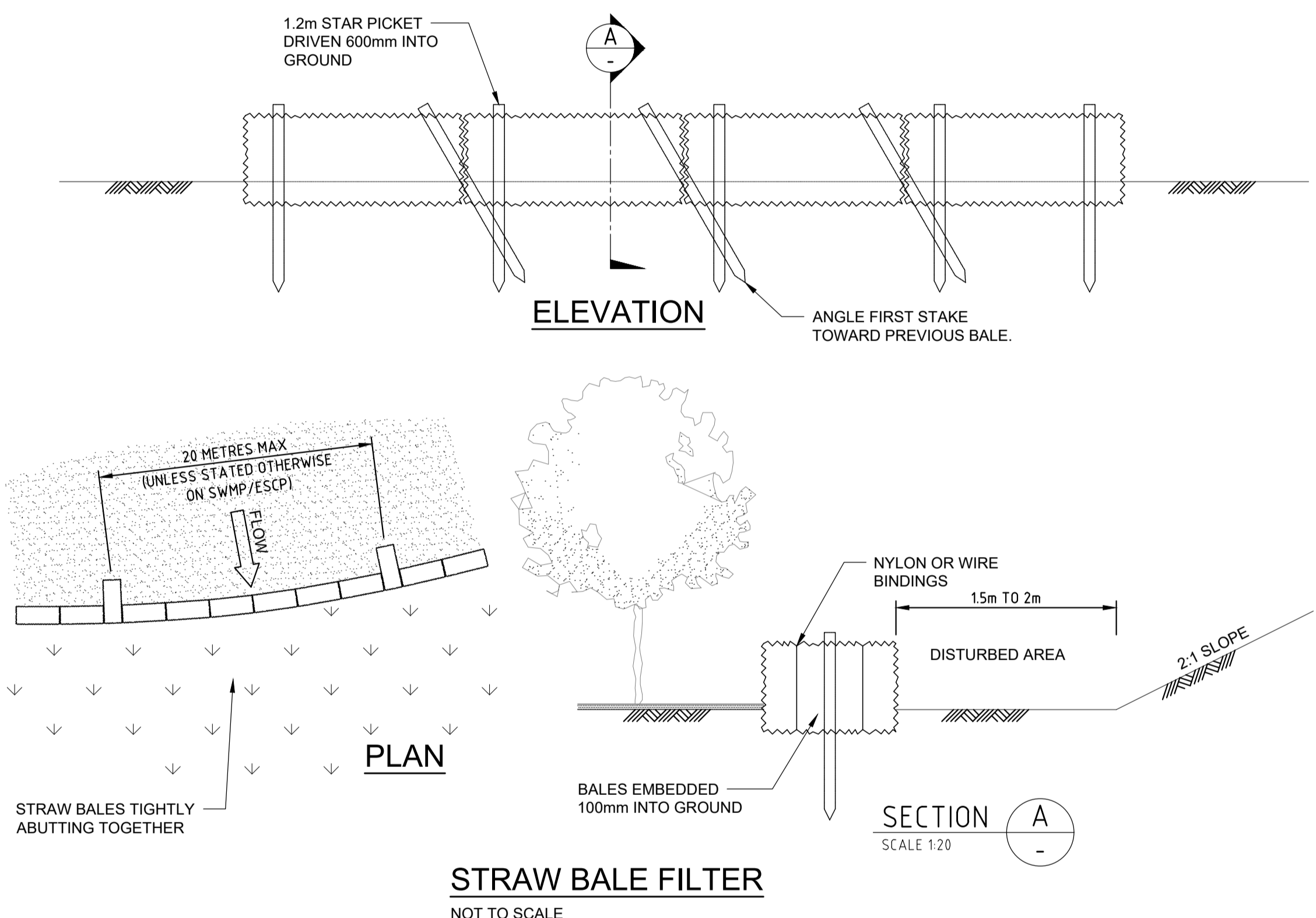
- Construction Notes**
1. Remove all vegetation and topsoil from under the dam wall and from within the storage area.
 2. Construct a cut-off trench 500 mm deep and 1,200 mm wide along the centreline of the embankment extending to a point on the gully wall level with the riser crest.
 3. Maintain the trench free of water and recompact the materials with equipment as specified in the SWMP to 95 per cent Standard Proctor Density.
 4. Select fill following the SWMP that is free of roots, wood, rock, large stone or foreign material.
 5. Prepare the site under the embankment by ripping to at least 100 mm to help bond compacted fill to the existing substrate.
 6. Spread the fill in 100 mm to 150 mm layers and compact it at optimum moisture content following the SWMP.
 7. Construct the emergency spillway.
 8. Rehabilitate the structure following the SWMP.

EARTH BASIN - WET
(APPLIES TO 'TYPE D' AND 'TYPE F' SOILS ONLY)

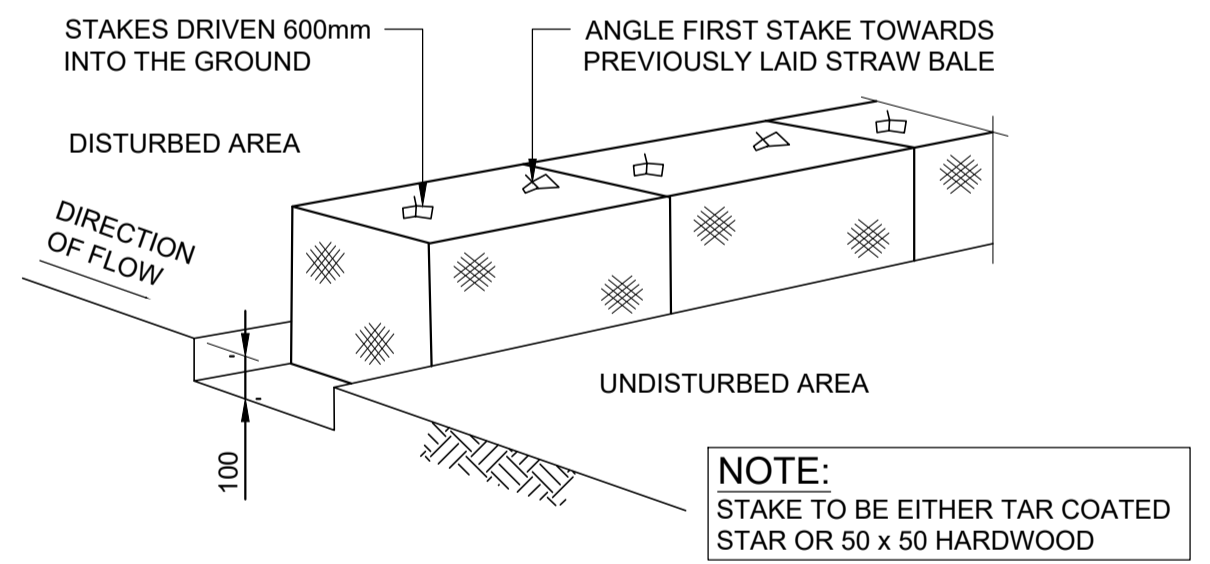
SD 6-4



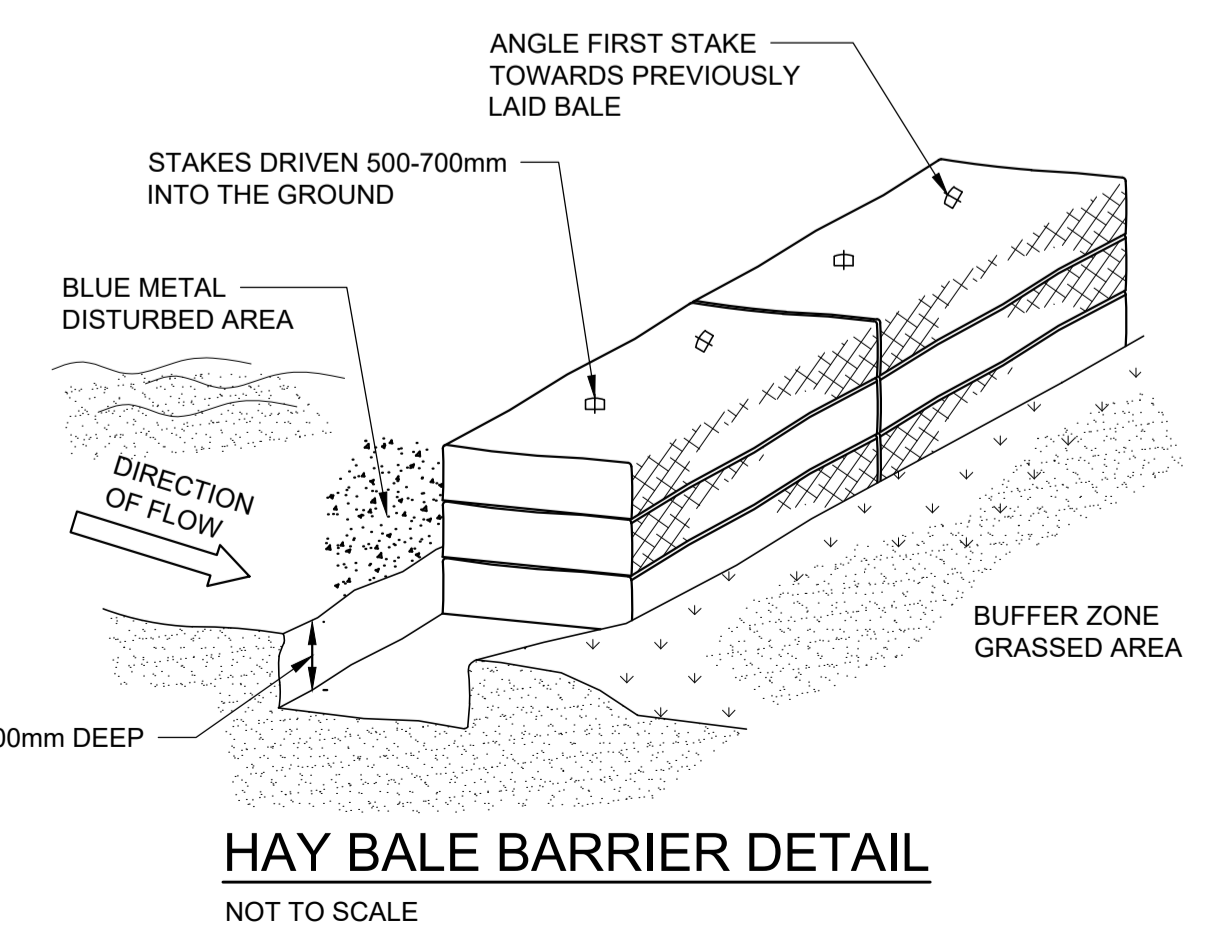
- CATCH DRAIN CONSTRUCTION NOTES:**
1. CONSTRUCT ALONG GRADIENT AS SPECIFIED.
 2. MAXIMUM SPACING BETWEEN BANKS SHALL BE 80 METRES.
 3. DRAINS TO BE OF PARABOLIC OR TRAPEZOIDAL CROSS SECTION NOT V-SHAPED.
 4. EARTH BANKS TO BE ADEQUATELY COMPACTED IN ORDER TO PREVENT FAILURE.
 5. CONSTRUCTION OF A TEMPORARY NATURE AND SHALL BE COMPACTED AT THE END A DAYS WORK OR IMMEDIATELY PRIOR RAIN.
 6. ALL OUTLETS FROM DISTURBED LANDS ARE TO FEED INTO SEDIMENT BASIN OR SIMILAR.
 7. DISCHARGE RUNOFF COLLECTED FROM UNDISTURBED LANDS ONTO EITHER A STABILISED OR AN UNDISTURBED DISPOSAL SITE WITHIN THE SAME SUBCATCHMENT AREA FROM WHICH THE WATER ORIGINATED.
 8. COMPACT WITH A SUITABLE IMPLEMENT IN SITUATIONS WHERE THEY ARE REQUIRED TO FUNCTION FOR MORE THAN 5 DAYS.
 9. EARTH BANKS TO BE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT WILL IMPEDE NORMAL FLOW.



- STRAW BALE FILTER CONSTRUCTION NOTES:**
1. CONSTRUCT THE STRAW BALE FILTER AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE.
 2. PLACE BALES LENGTHWISE IN A ROW WITH ENDS TIGHTLY ABUTTING. USE STRAW TO FILL ANY GAPS BETWEEN BALES. STRAWS ARE TO BE PLACED PARALLEL TO GROUND.
 3. ENSURE THAT THE MAXIMUM HEIGHT OF THE FILTER IS ONE BALE.
 4. EMBED EACH BALE IN THE GROUND 75mm TO 100mm AND ANCHOR WITH TWO 1.2 METRE STAR PICKETS OR STAKES. ANGLE THE FIRST STAR PICKET OR STAKE IN EACH BALE TOWARDS THE PREVIOUSLY LAID BALE. DRIVE THEM 600mm INTO THE GROUND AND, IF POSSIBLE, FLUSH WITH THE TOP OF THE BALES. WHERE STAR PICKETS ARE USED AND THEY PROTRUDE ABOVE THE BALES, ENSURE THEY ARE FITTED WITH SAFETY CAPS.
 5. WHERE A STRAW BALE FILTER IS CONSTRUCTED DOWNSLOPE FROM A DISTURBED BATTER, ENSURE THE BALES ARE PLACED 1 TO 2 METRES DOWNSLOPE FROM THE TOE.
 6. ESTABLISH A MAINTENANCE PROGRAM THAT ENSURES THE INTEGRITY OF THE BALES IS RETAINED - THEY COULD REQUIRE REPLACEMENT EACH TWO TO FOUR MONTHS.



STRAW BALE SEDIMENT FILTER DETAIL
(NOT TO SCALE)



HAY BALE BARRIER DETAIL
NOT TO SCALE

PRELIMINARY ISSUE
NOT FOR CONSTRUCTION

ISSUE	DESCRIPTION	APPROVED	DATE
P1	FOR SSSA ISSUE		30.09.25

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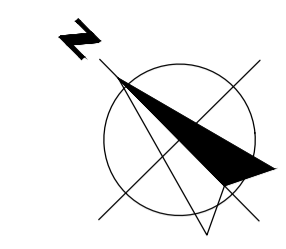
PROJECT
OPAL BAYVIEW GARDENS
ANNAM ROAD BAYVIEW NSW

TITLE
SOIL EROSION AND SEDIMENT CONTROL DETAILS - SHEET 02

SCALES	N/A @ A1	DATE	JUL' 2025
DRAWN	DESIGN	VERIFIED	APPROVED
C.KE	G.K	C.M	

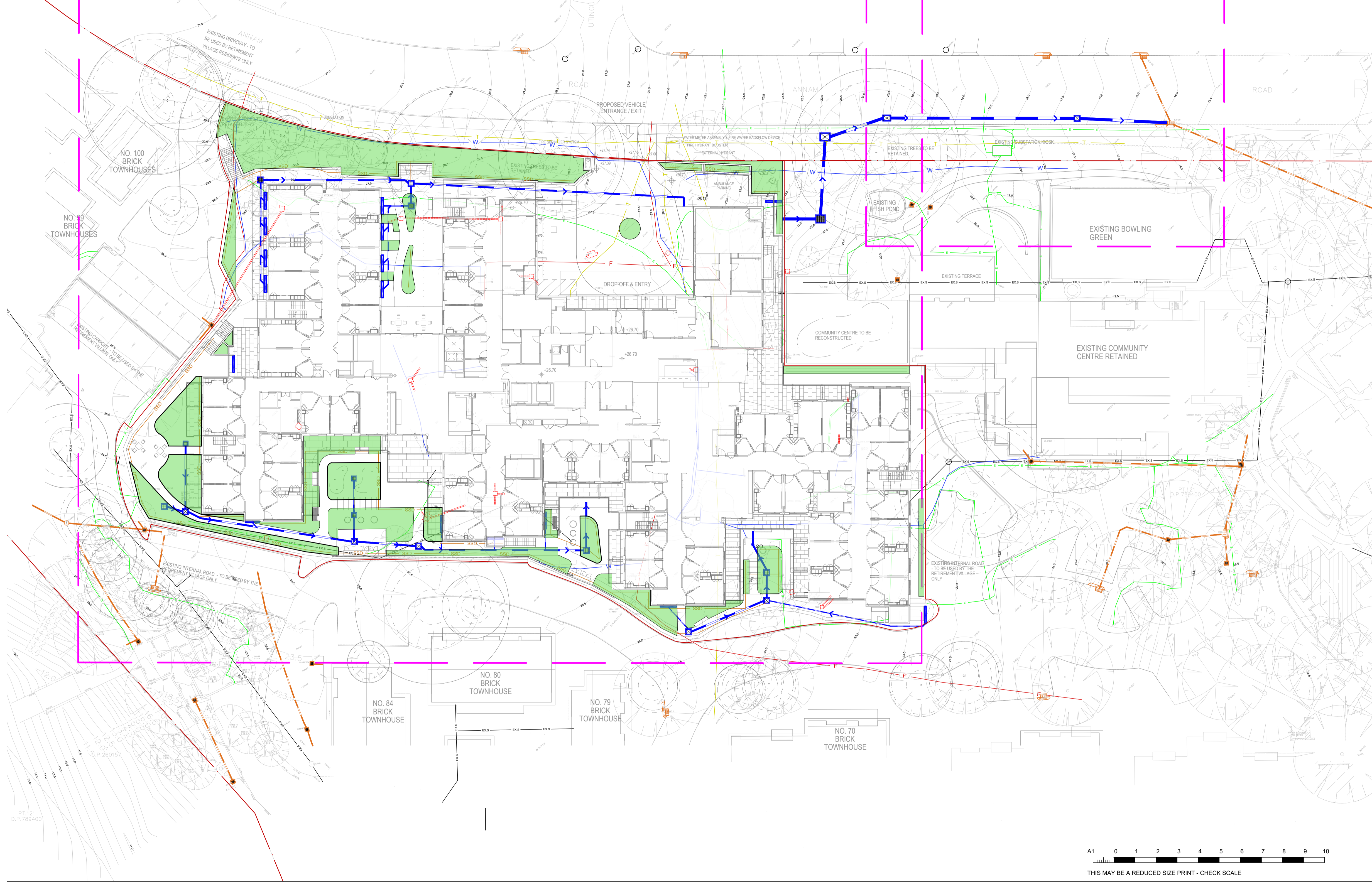
ISSUE	PROJECT No.	DRAWING No.
P1	9449	C.0151

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REFER TO DWG: C.0220

REFER TO DWG: C.0220 - PART PLAN



LEGEND:

PROPERTY BOUNDARY	
PROPOSED CONTOUR	
EXISTING CONTOUR	
ARCHITECTURAL DESIGN	
PROPOSED CIVIL DESIGN	
EXISTING SURVEY	
DEMOLISH LINE	
SUBSOIL DRAINAGE LINE	
STORMWATER LINE (GRAVITY)	
STORMWATER LINE (CHARGED)	
EXISTING STORMWATER LINE	
GRATED STORMWATER PIT	
EXISTING STORMWATER PIT	
KERB INLET PIT	
DOWN PIPE	
EXISTING DOWN PIPE	
FLOOR WASTE	
CLEAR OUT	
NEW GRATED DRAIN	
OVERLAND FLOW	
RAINWATER TANK	
RAIN WATER OUTLET	
GRASS SWALE	
	DENOTES DRIVEWAY PAVEMENT. REFER TO DRAWING C.0600 FOR LAYOUT.
	DENOTES PITS WITH ATLAN STORMSACK

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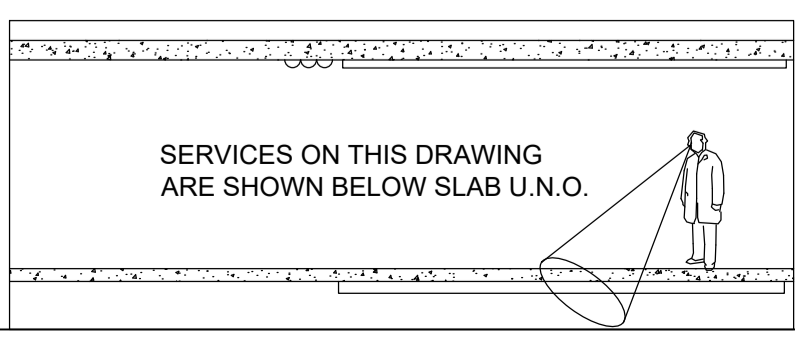
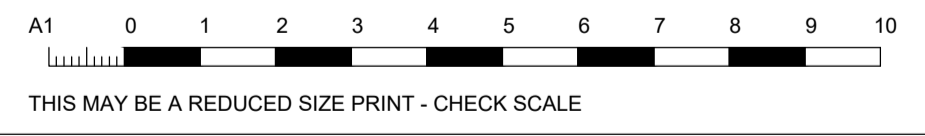
ARCHITECT
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PROJECT
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ANNAM ROAD BAYVIEW NSW

TITLE
STORMWATER DRAINAGE PLAN
- OVERALL SITE PLAN

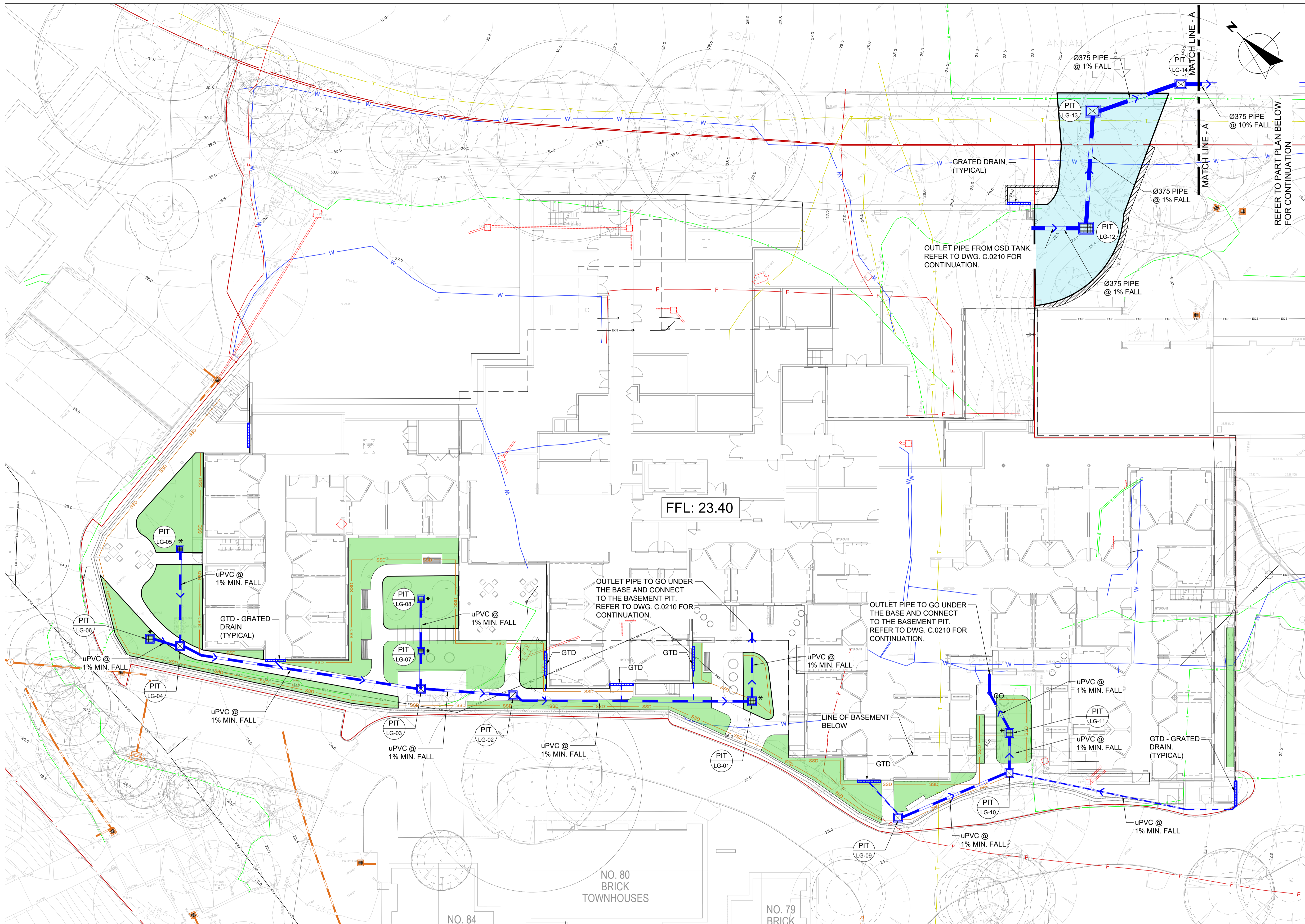
SCALES	1:300 @ A1	DATE	AUG' 2025
DRAWN	C.K.E	DESIGN	G.K
VERIFIED	C.M	APPROVED	
ISSUE	P2	PROJECT No.	9449
DRAWING No.	C.0200		



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IMPORTANT: THE CONTRACTOR IS TO MAINTAIN A CURRENT SET OF "DIAL BEFORE YOU DIG" DRAWINGS ON SITE AT ALL TIMES.

PRINT IN COLOUR



LEGEND:

- PROPERTY BOUNDARY ---
- PROPOSED CONTOUR ---
- EXISTING CONTOUR ---
- ARCHITECTURAL DESIGN ---
- PROPOSED CIVIL DESIGN ---
- EXISTING SURVEY ---
- DEMOLISH LINE - - -
- SUBSOIL DRAINAGE LINE --- SSD --- SSD
- STORMWATER LINE (GRAVITY) ---
- STORMWATER LINE (CHARGED) ---
- EXISTING STORMWATER LINE --- EX. SW --- EX. SW --- EX. SW
- GRATED STORMWATER PIT PIT
- EXISTING STORMWATER PIT PIT
- KERB INLET PIT KIP
- DOWN PIPE ● DP
- EXISTING DOWN PIPE ○ Ex. DP.
- FLOOR WASTE ● FW
- CLEAR OUT ○ CO
- NEW GRATED DRAIN GTD
- OVERLAND FLOW >
- RAINWATER TANK RWT
- RAIN WATER OUTLET ✕ RWO
- GRASS SWALE ---
- DENOTES DRIVEWAY PAVEMENT. REFER TO DRAWING C.0600 FOR LAYOUT.
- ✕ DENOTES PITS WITH ATLAN STORMSACK

PRELIMINARY ISSUE
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P2	FOR SDDA ISSUE	30.09.25
P1	PRELIMINARY ISSUE	25.08.25
ISSUE	DESCRIPTION	APPROVED DATE

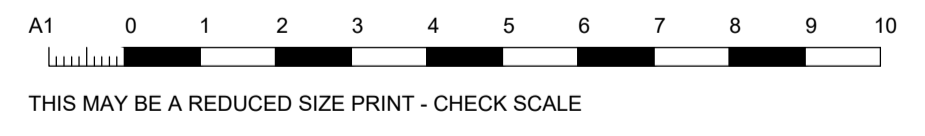
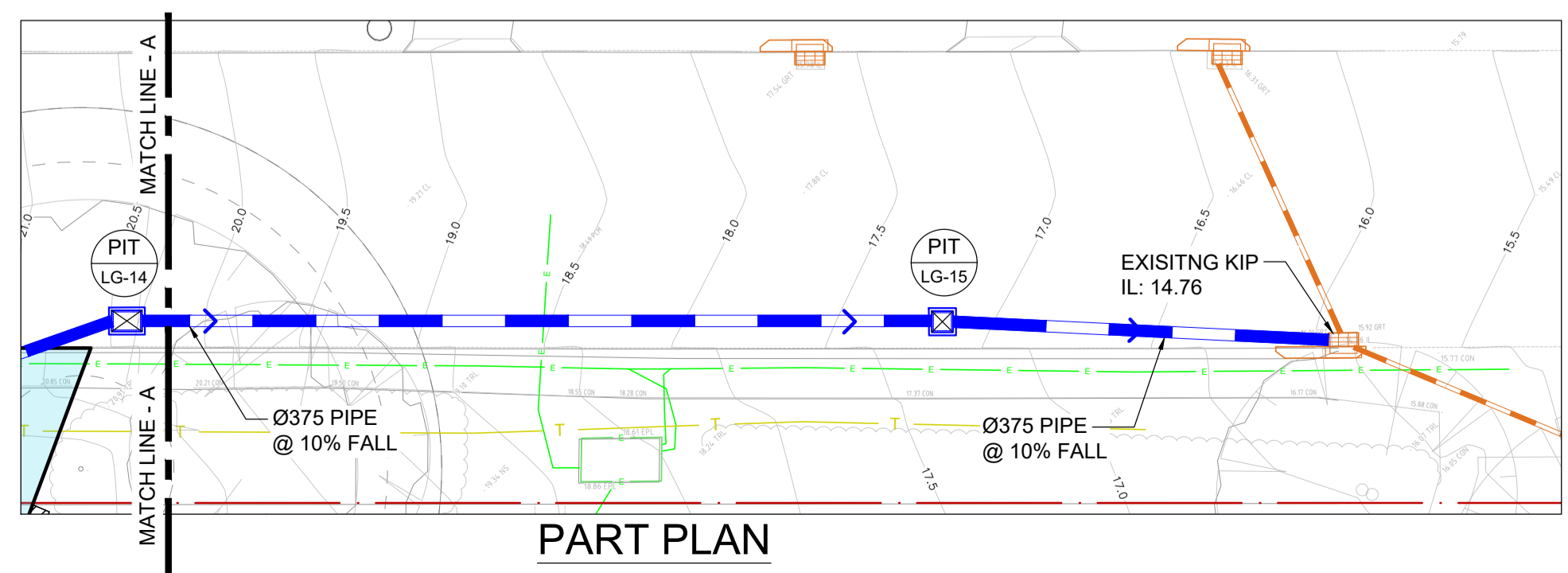
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PROJECT
OPAL BAYVIEW GARDENS
ANNAM ROAD BAYVIEW NSW

TITLE
STORMWATER DRAINAGE PLAN
- LOWER GROUND FLOOR PLAN

SCALES	1:200 @ A1	DATE	JUL' 2025
DRAWN	C.KE	DESIGN	G.K
ISSUE	P2	VERIFIED	C.M
PROJECT No.	9449	DRAWING No.	C.0220

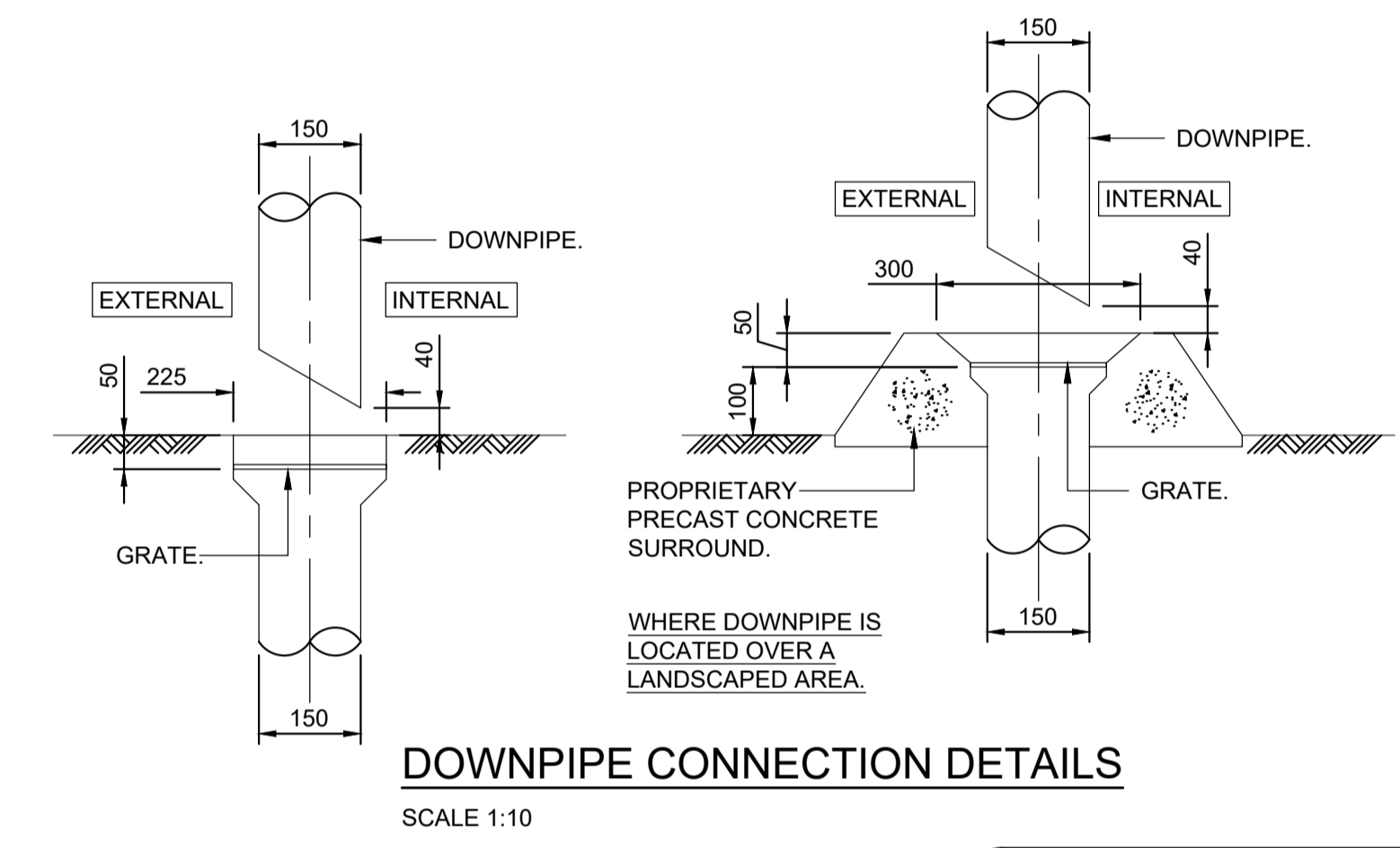
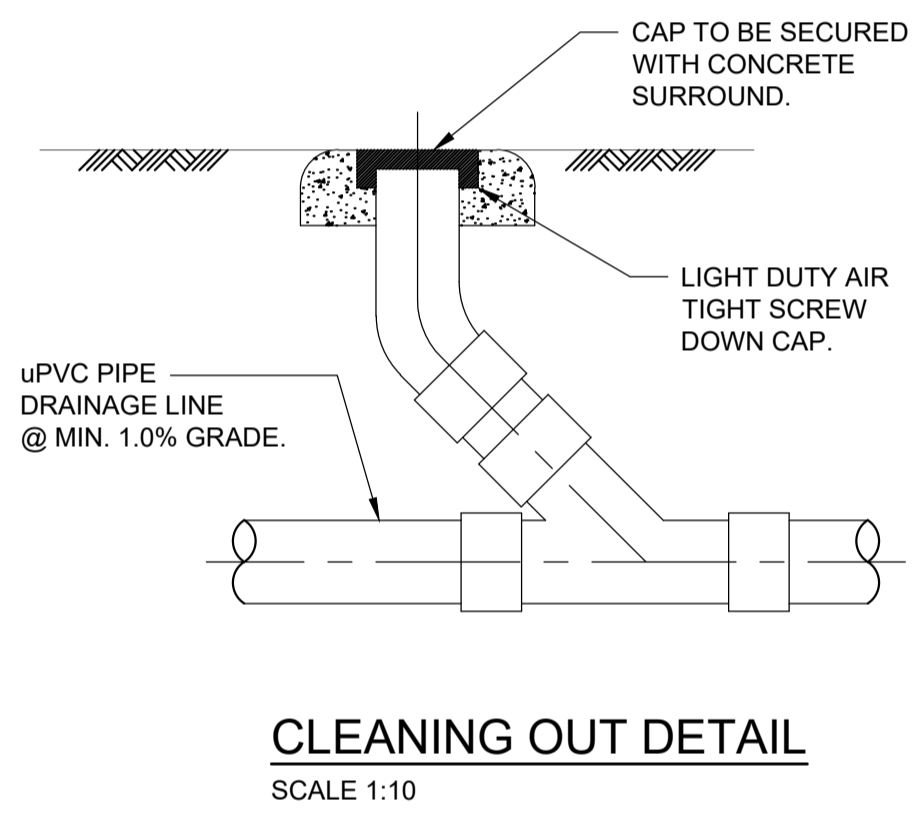
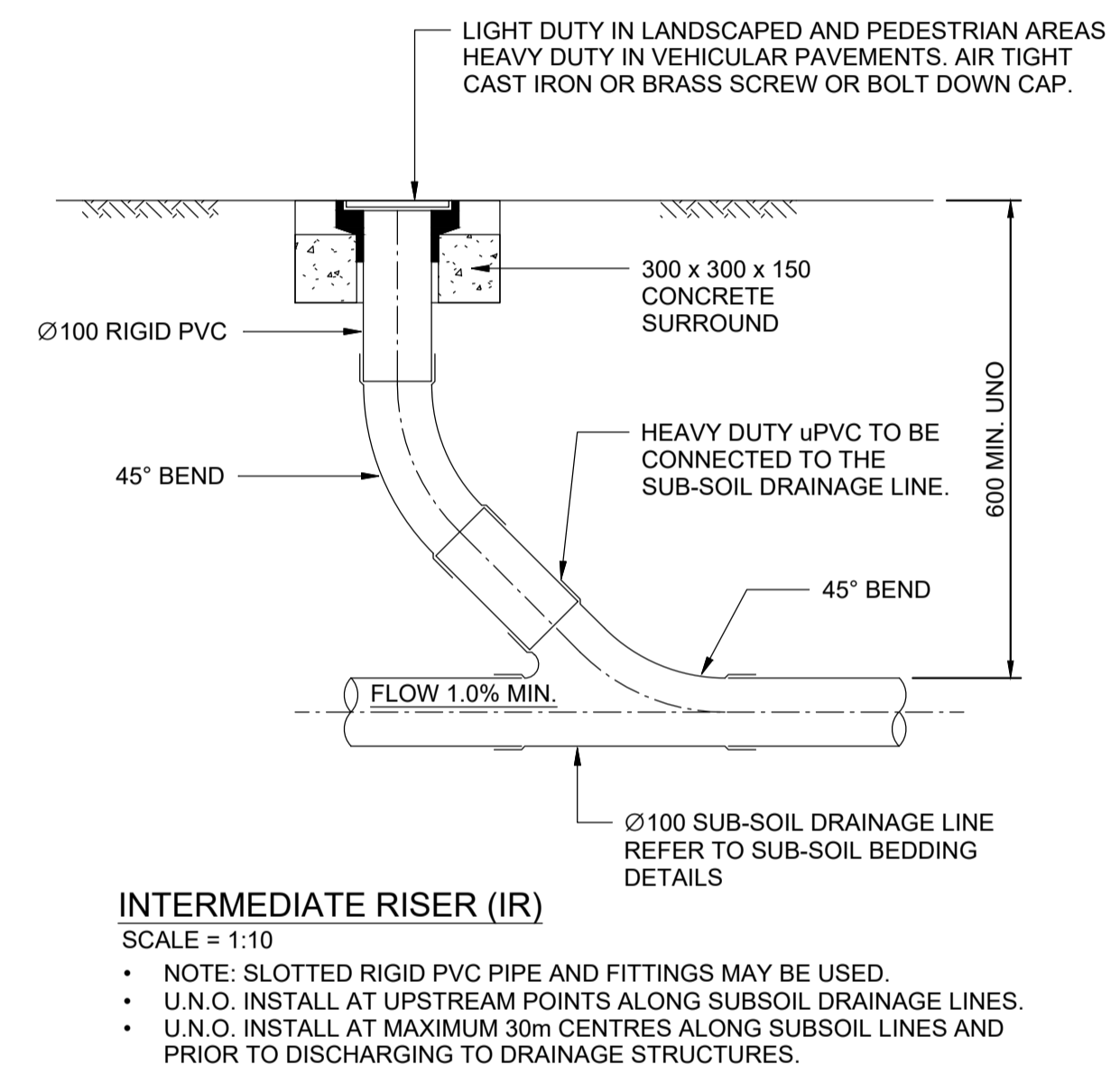
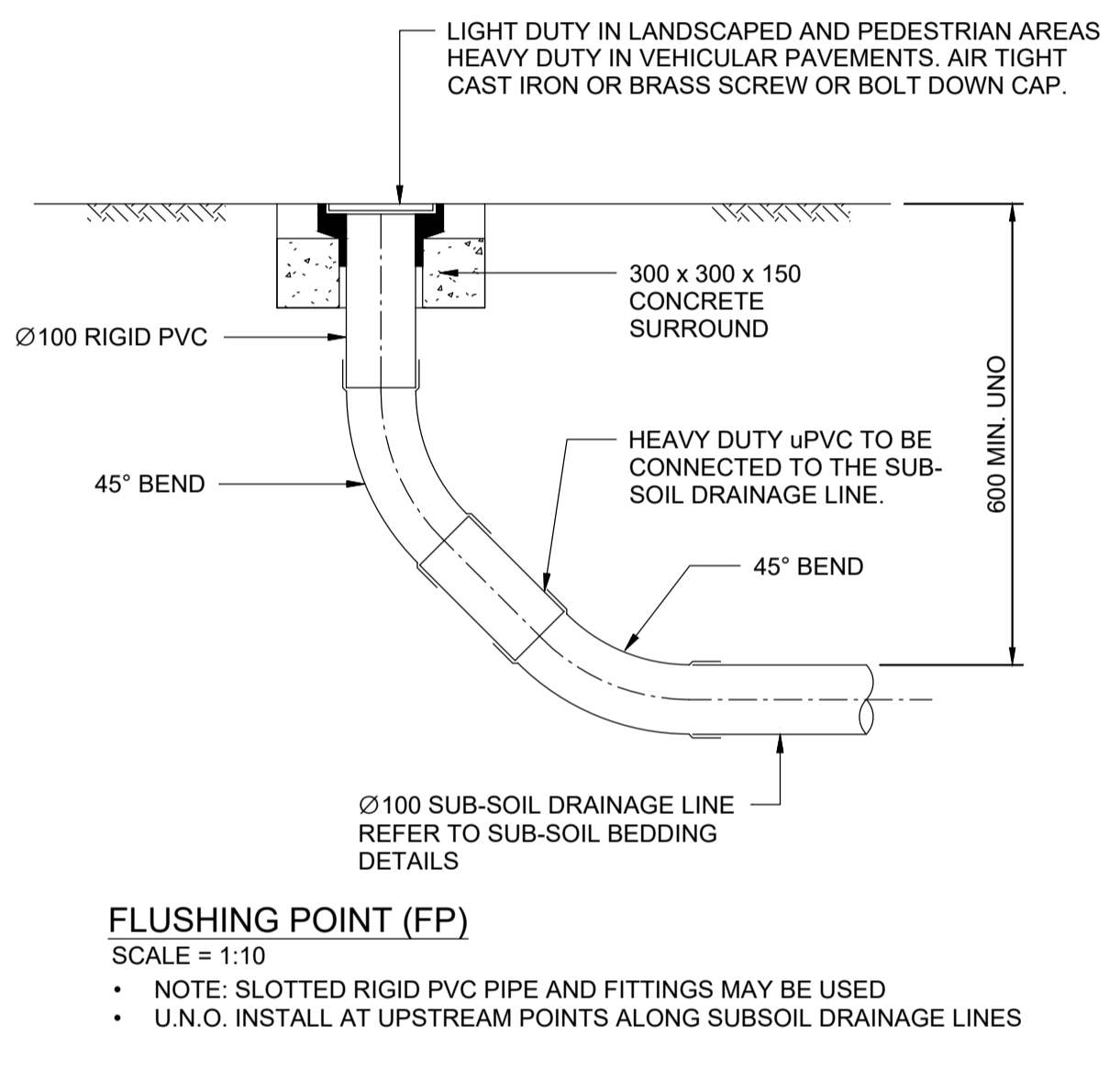
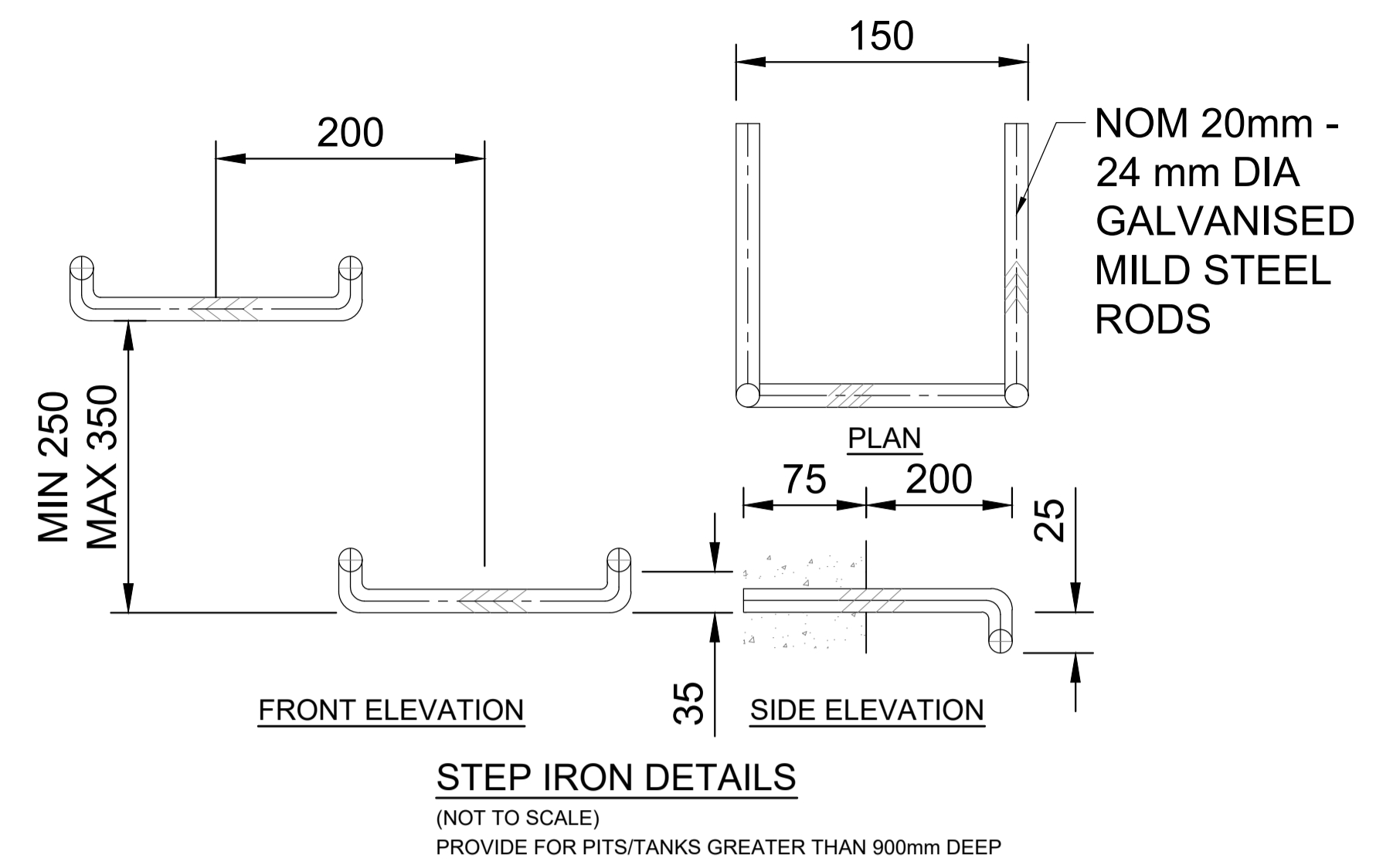
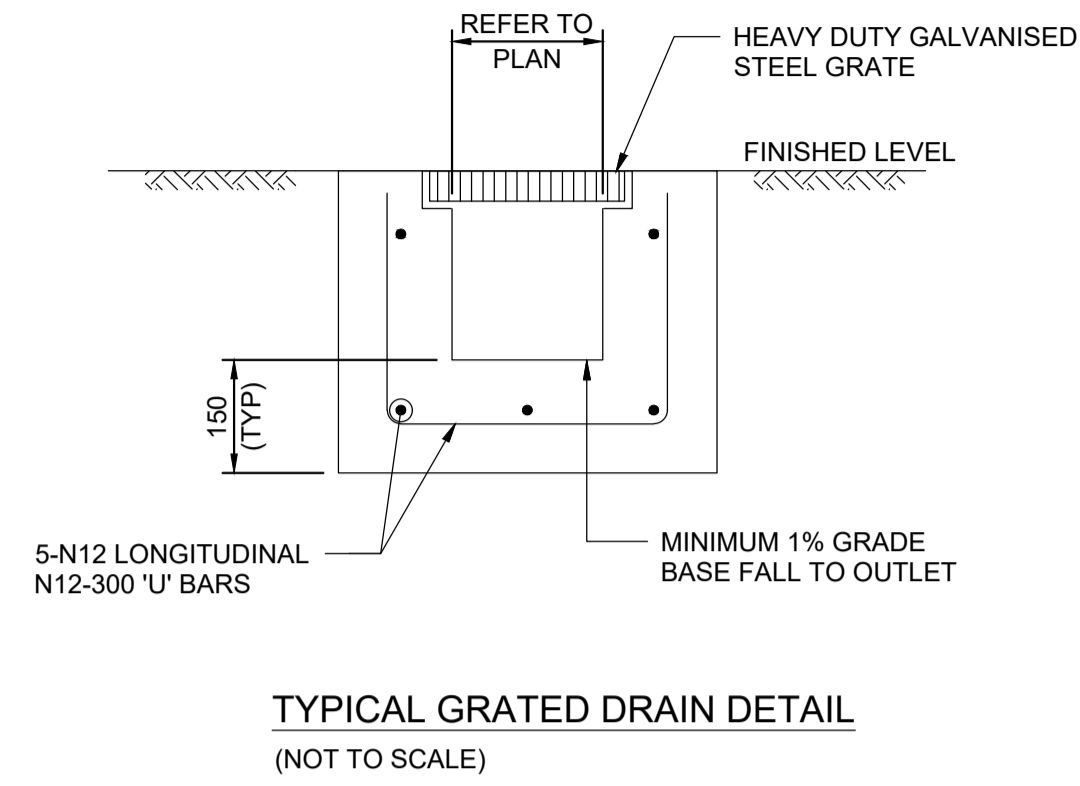
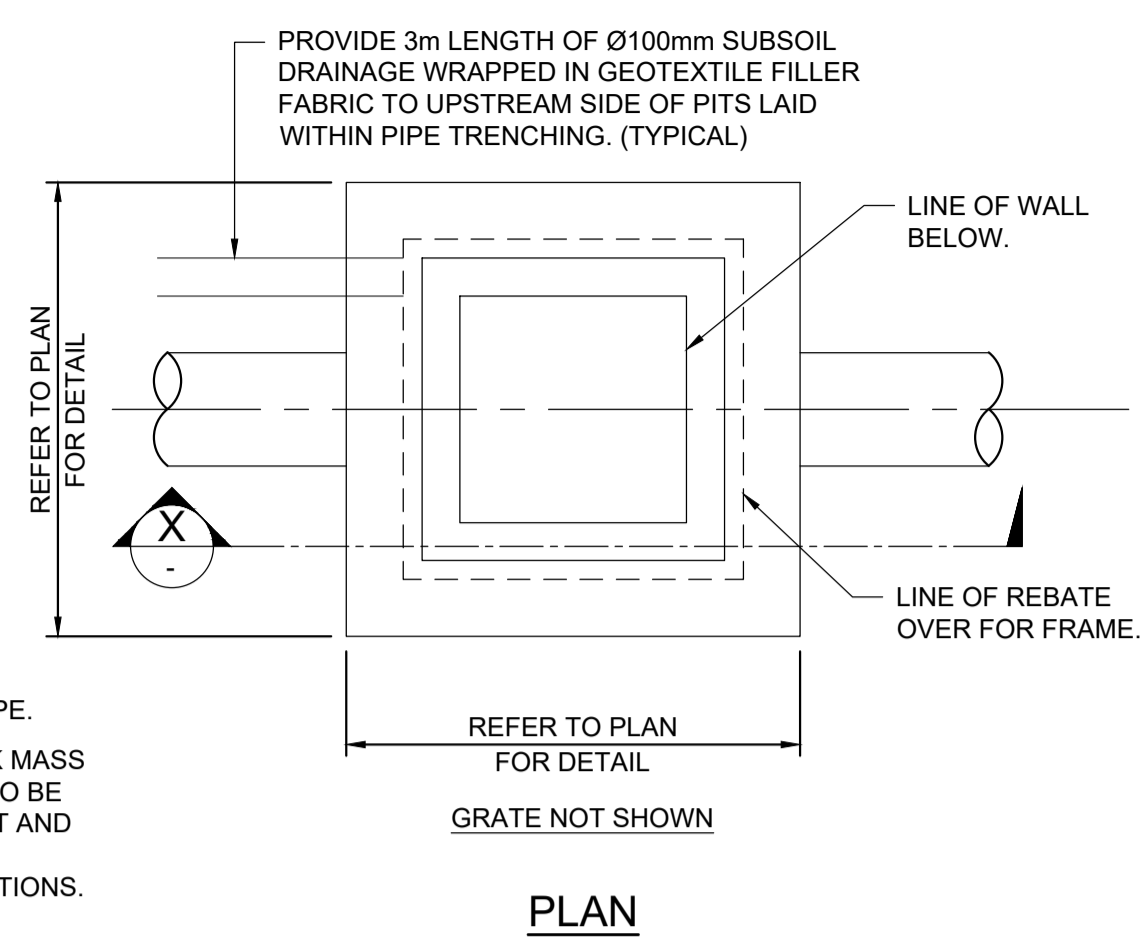
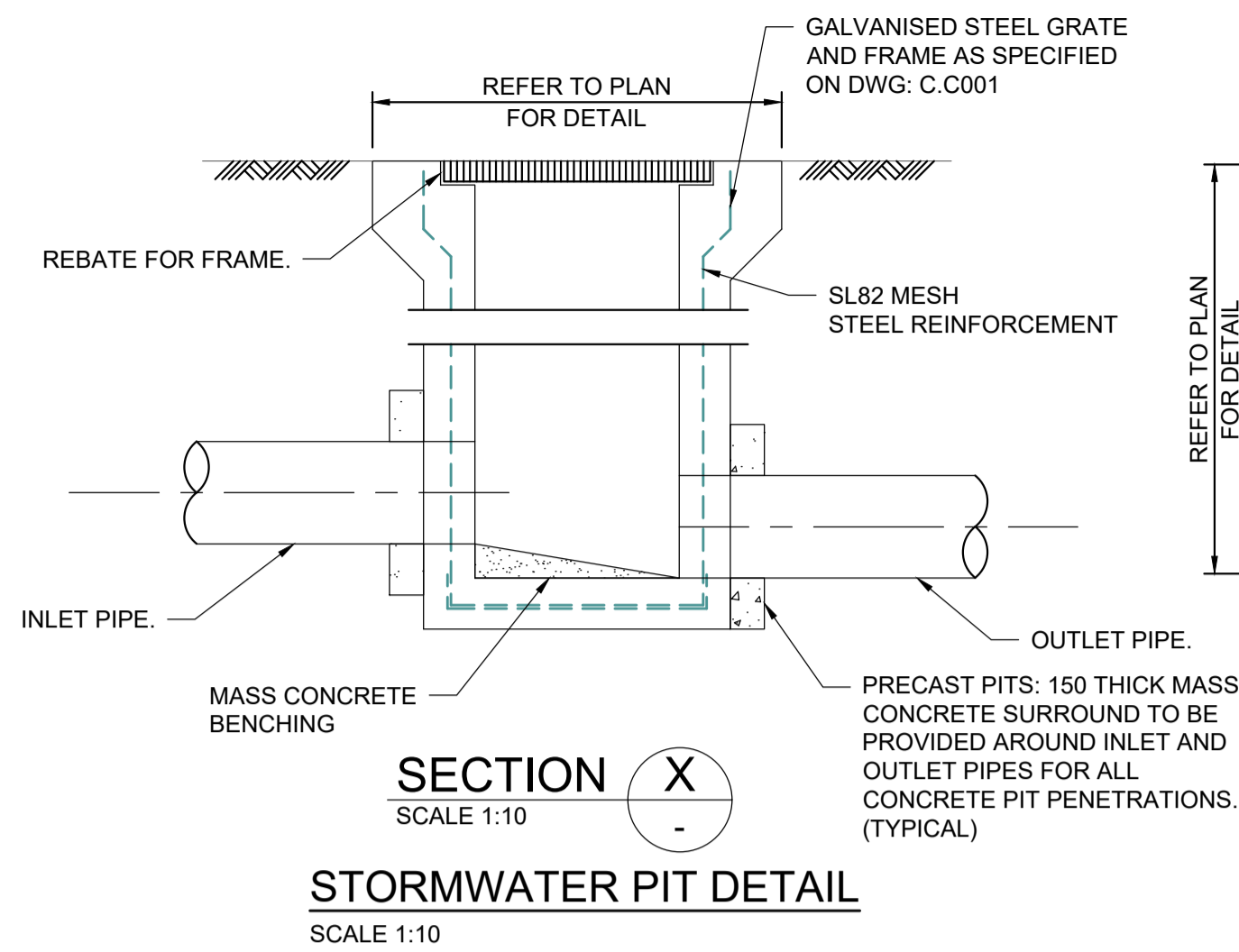


SERVICES ON THIS DRAWING
ARE SHOWN BELOW SLAB U.O.

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IMPORTANT: THE CONTRACTOR IS TO MAINTAIN A CURRENT SET OF "DIAL BEFORE YOU DIG" DRAWINGS ON SITE AT ALL TIMES.

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PROJECT
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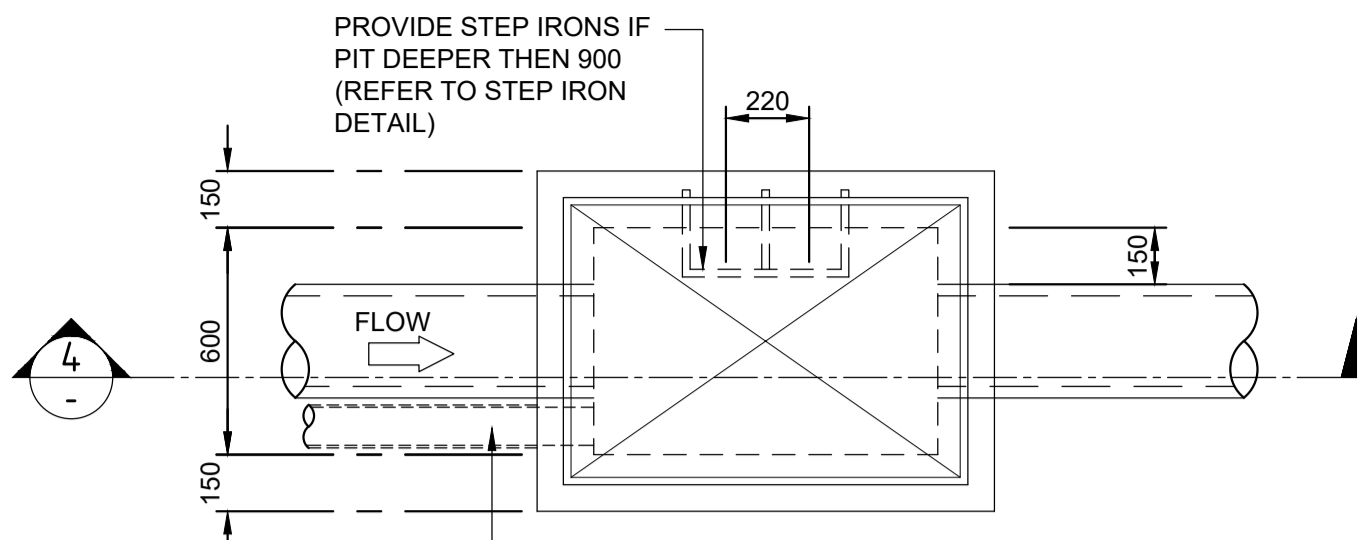
TITLE
STORMWATER DRAINAGE DETAILS
- SHEET 01

SCALES	DATE
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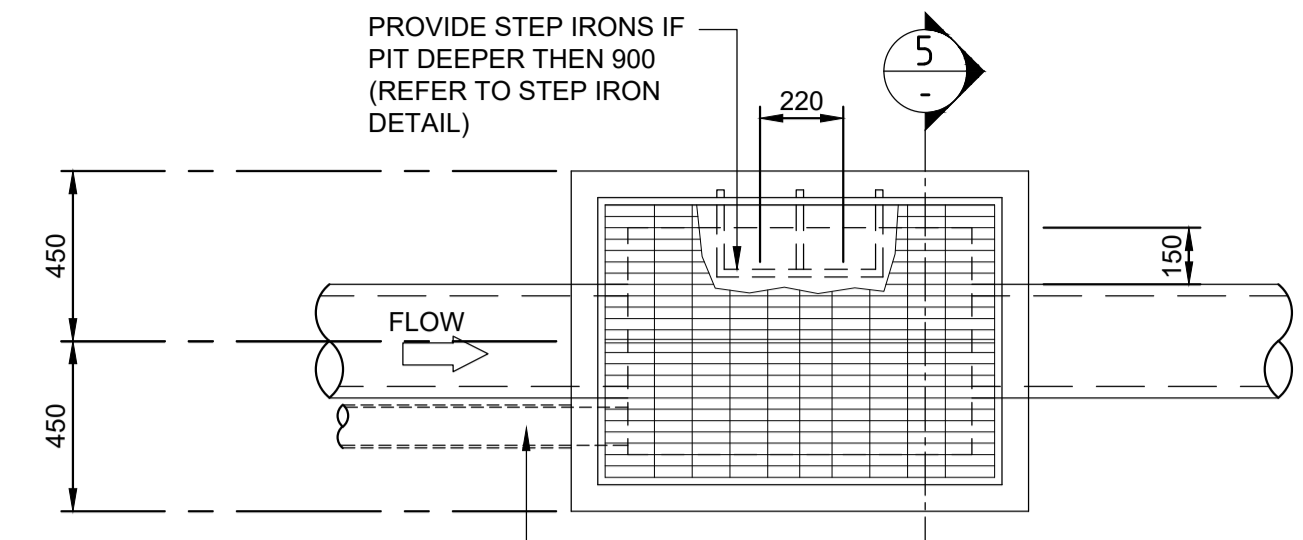
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ISSUE	PROJECT No.	DRAWING No.
P2	9449	C.0260

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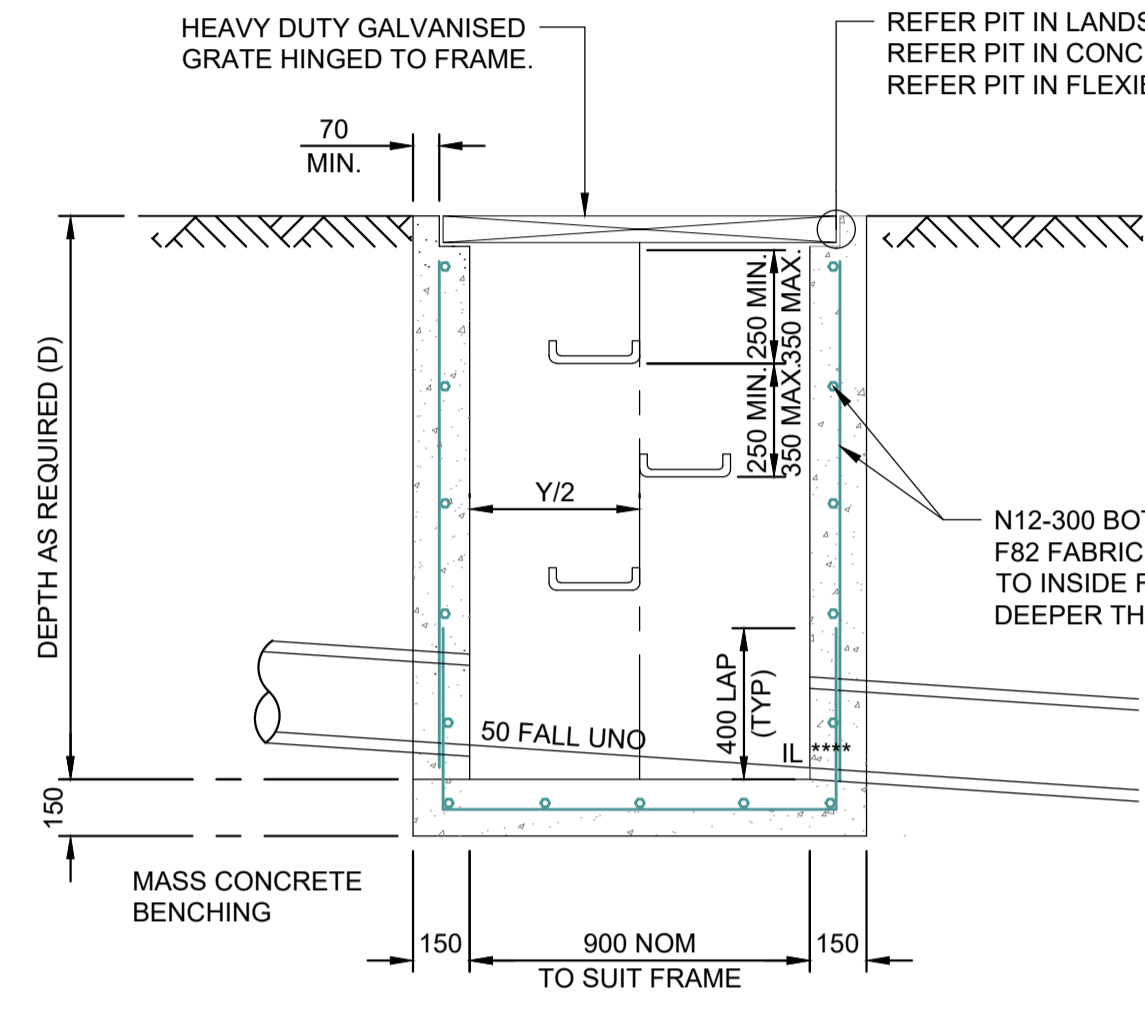
ON PLAN



ON PLAN

PROVIDE 3.0m LENGTH OF Ø100 SUBSOIL WRAPPED IN GEOFABRIC SOCK TO ALL INCOMING LINES.

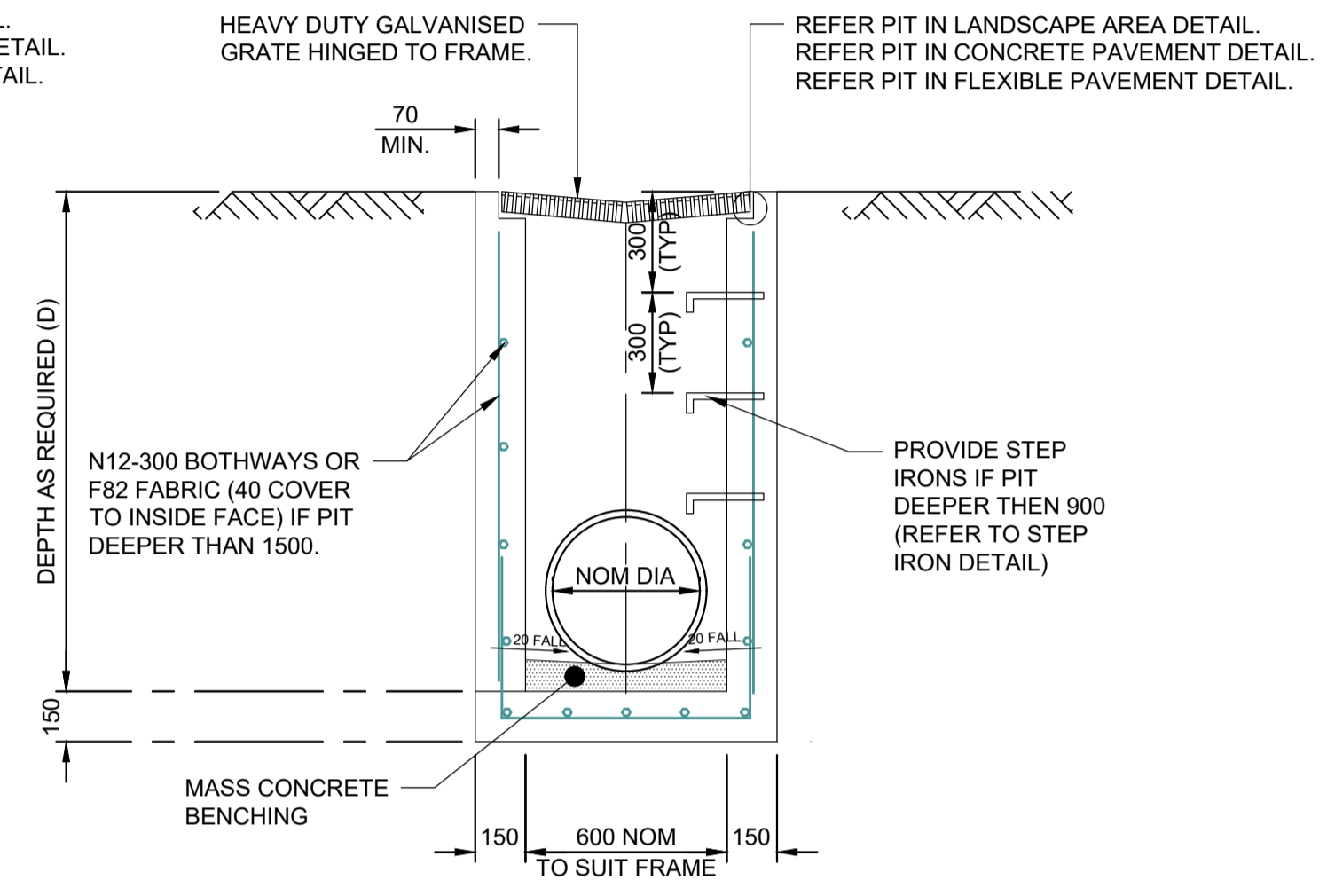
PROVIDE 3.0m LENGTH OF Ø100 SUBSOIL WRAPPED IN GEOFABRIC SOCK TO ALL INCOMING LINES.



SECTION 4

GRADED INLET/JUNCTION PIT DETAIL

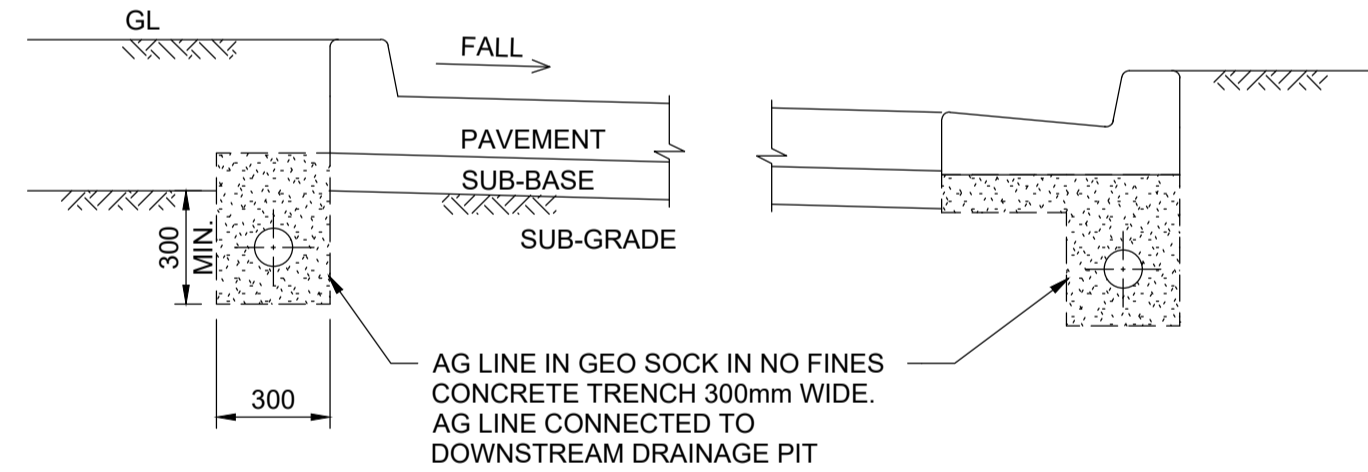
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SECTION 5

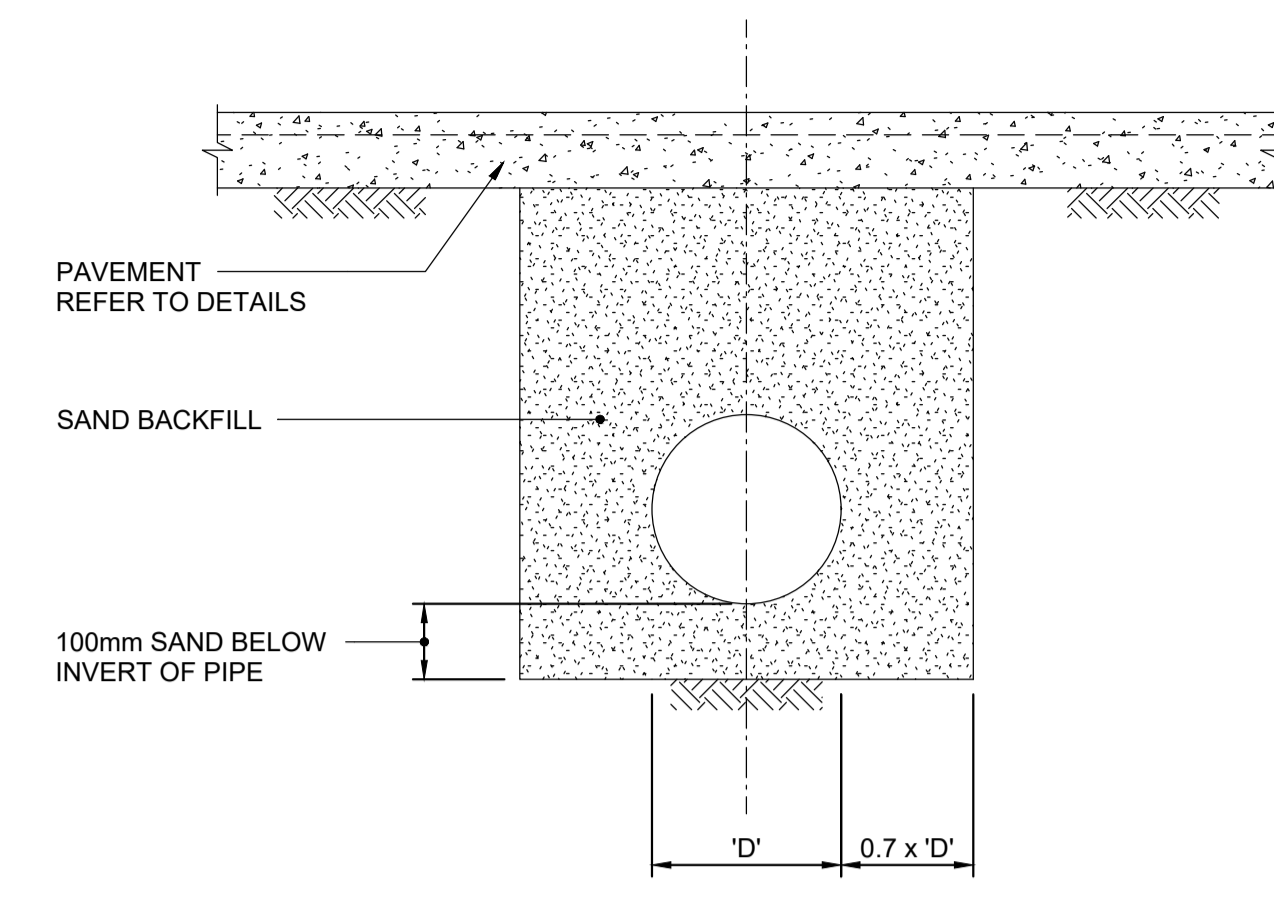
GRADED INLET/JUNCTION PIT DETAIL

N.T.S.

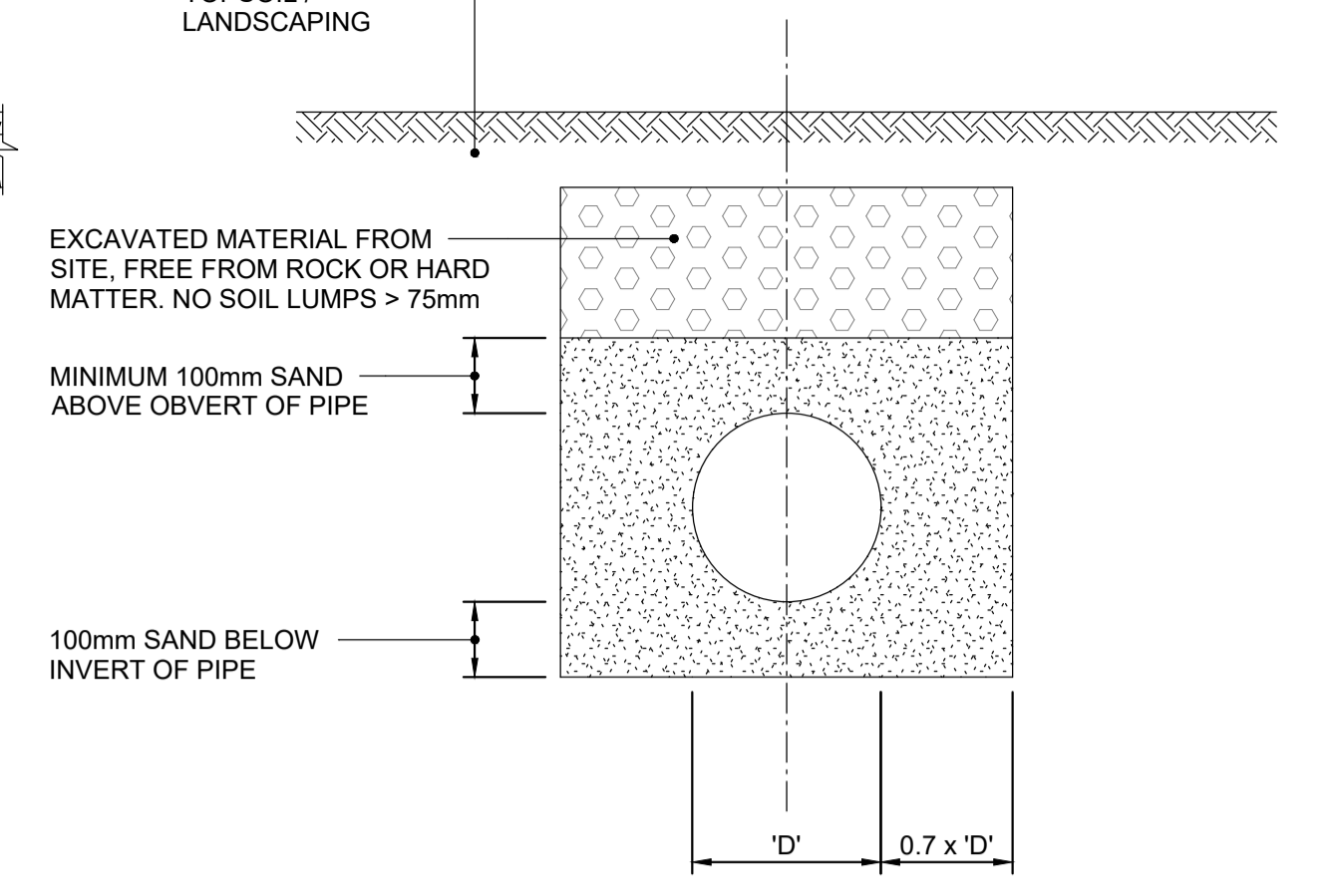


TRAFFICABLE PAVEMENT SUBSOIL DRAINAGE DETAIL

(NOT TO SCALE)

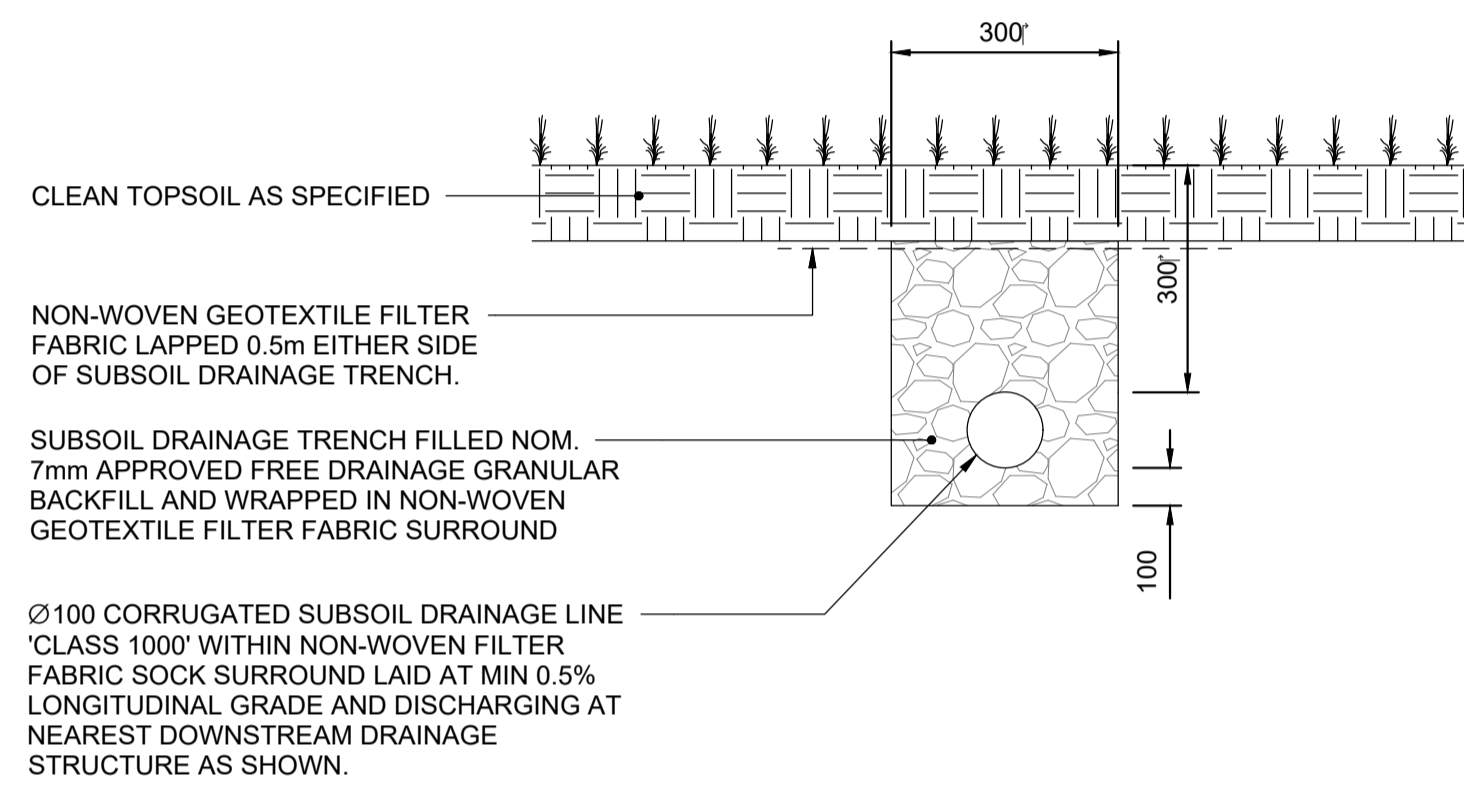


NON-TRAFFICABLE PAVED AREAS



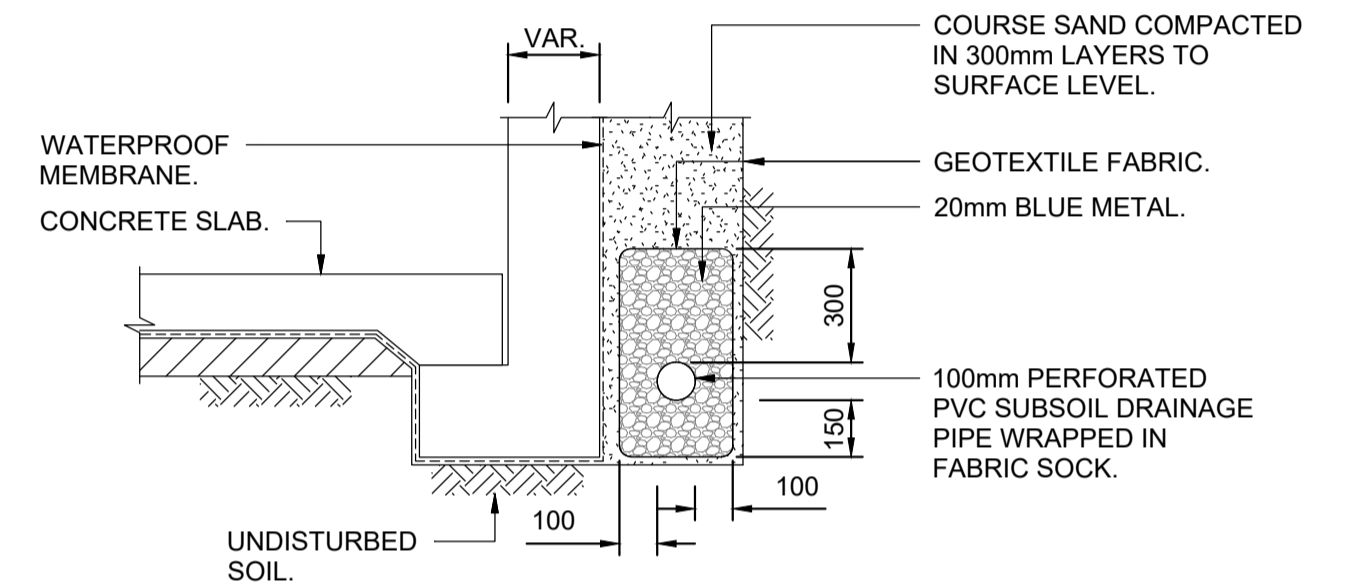
LANDSCAPED AREAS

PIPE BACKFILLING DETAILS
NOT TO SCALE



SUBSOIL DRAINAGE TRENCH - LANDSCAPING 'SSD'

(NOT TO SCALE)
CLEAROUT TO BE INSTALLED AT MAX. 30m CENTRES AND DISCHARGING TO DRAINAGE STRUCTURES AT MAX. 60m CENTRES.



TYPICAL SUBSOIL DRAINAGE DETAIL

SCALE = 1:20

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PROJECT

OPAL BAYVIEW GARDENS
ANNAM ROAD BAYVIEW NSW

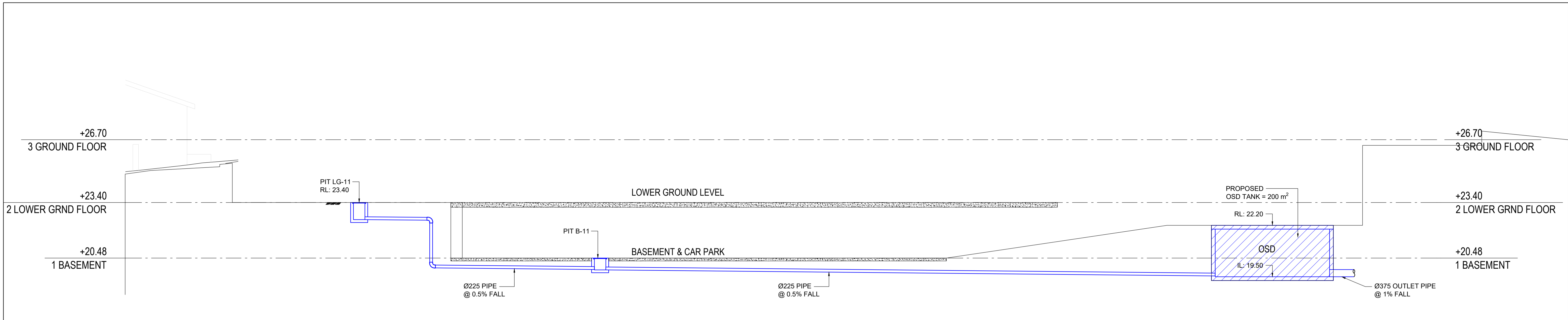
TITLE

STORMWATER DRAINAGE DETAILS
- SHEET 02

SCALES	N/A @ A1	DATE	JUN' 2025
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C.KE	G.K	C.M	

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ISSUE	PROJECT No.	DRAWING No.
P2	9449	C.0261



SECTION **A**
SCALE 1:100 C.0210

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PROJECT
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ANNAM ROAD BAYVIEW NSW

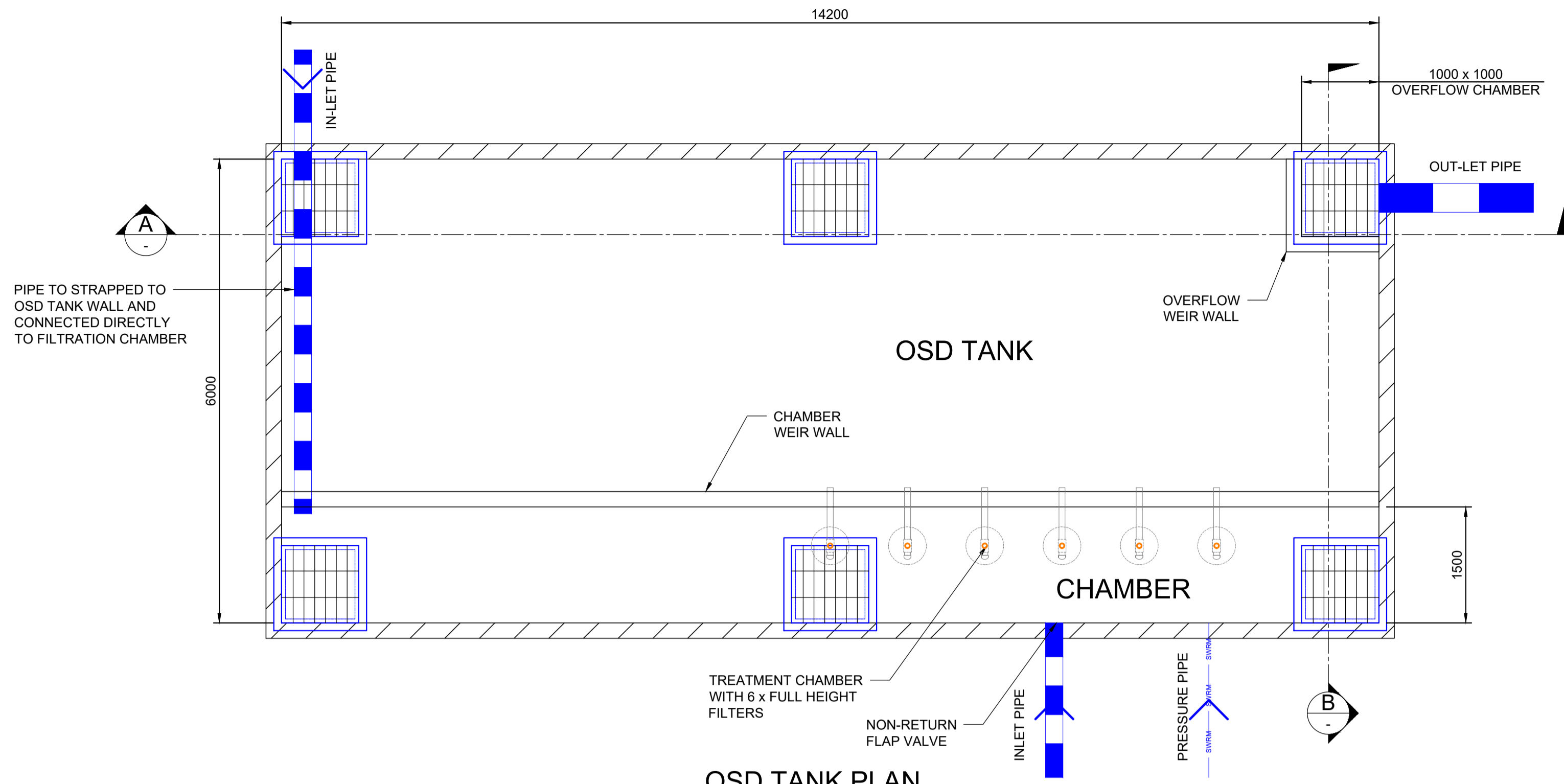
TITLE
STORMWATER DRAINAGE DETAILS
- SHEET 03

SCALES	DATE
N/A @ A1	JUL' 2025

DRAWN	DESIGN	VERIFIED	APPROVED
C.KE	G.K	C.M	

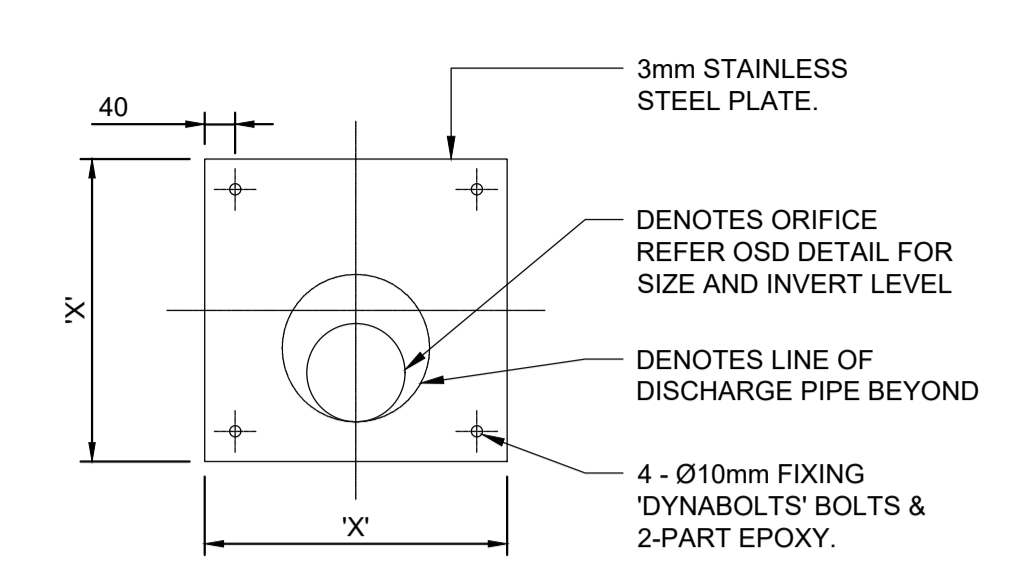
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ISSUE	PROJECT No.	DRAWING No.
P1	9449	C.0261

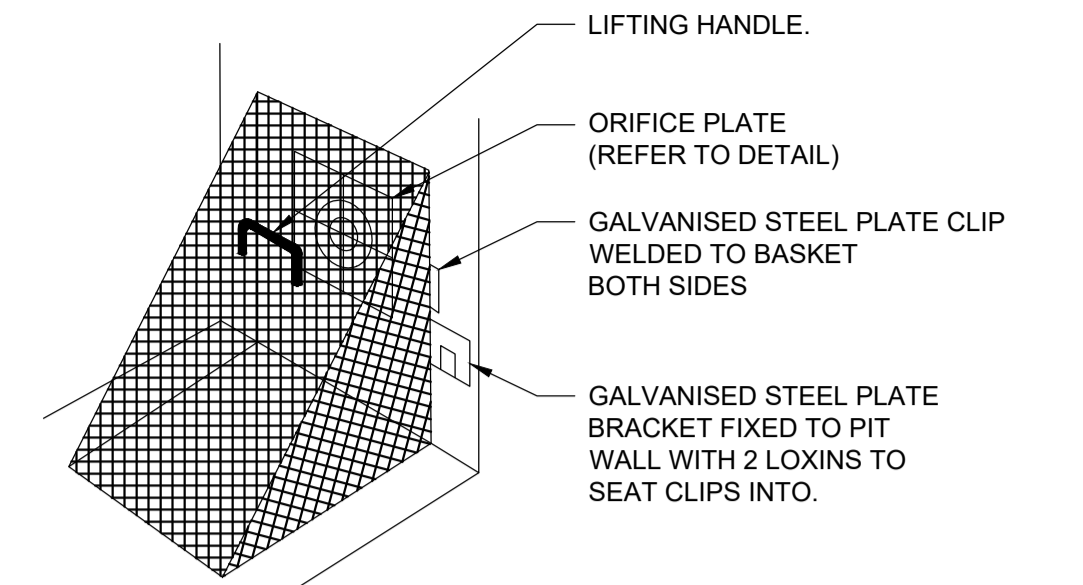


OSD TANK PLAN
SCALE 1:50

OSD TANK
CAPACITY = 200 m³

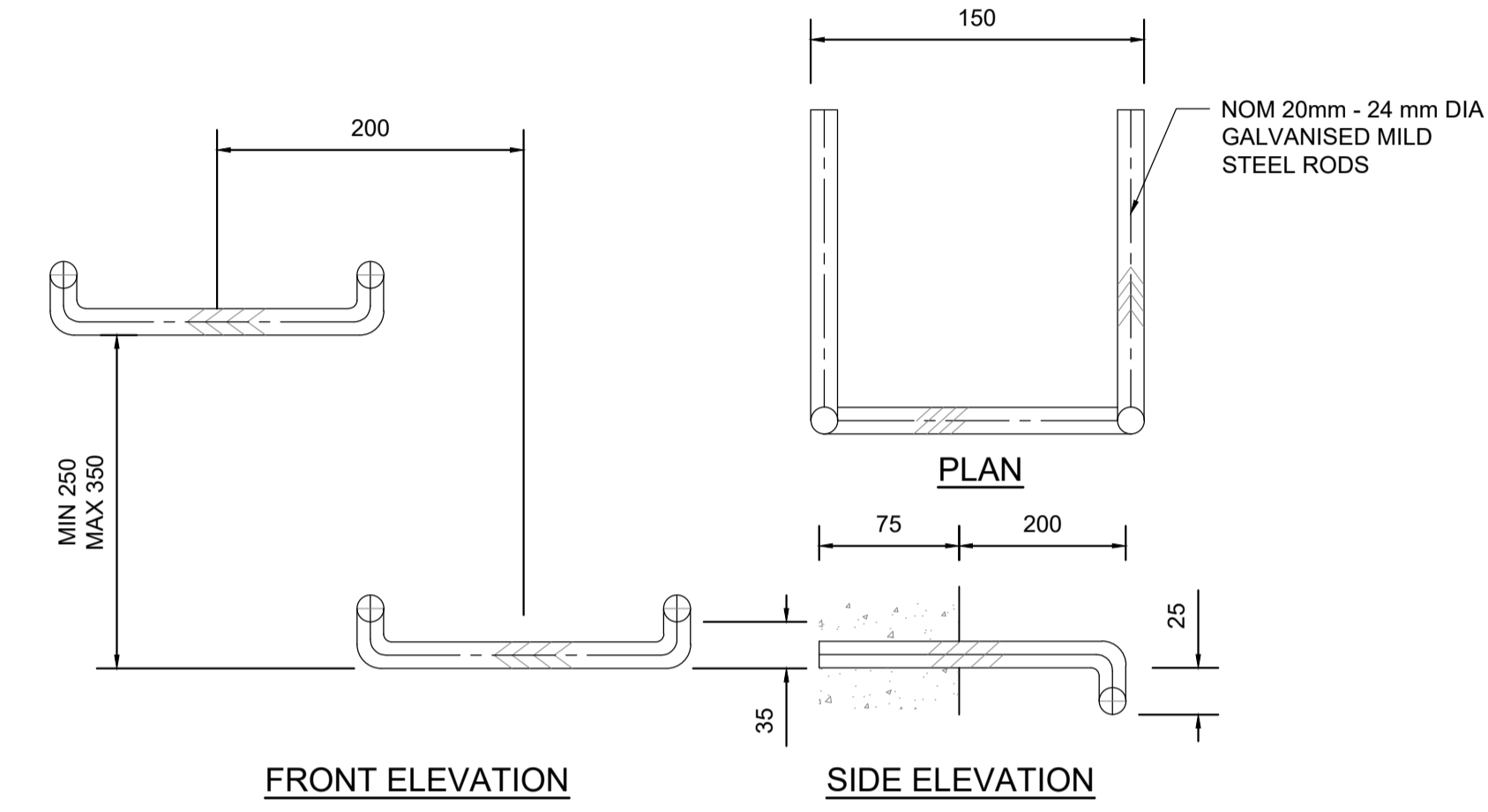


ORIFICE PLATE DETAIL
SCALE 1:10



TRASH/DEBRIS SCREEN DETAIL
(NOT TO SCALE)

- FOR OSD ORIFICE DIAMETERS:
- LESS THAN 150mm - PROVIDE MAXI-MESH TRASH SCREEN WITH SURFACE AREA 50 TIMES THAT OF THE ORIFICE OPENING.
 - GREATER THAN 150mm - PROVIDE WELDLOK F40/203 TRASH SCREEN WITH SURFACE AREA 20 TIMES THAT OF THE ORIFICE OPENING.

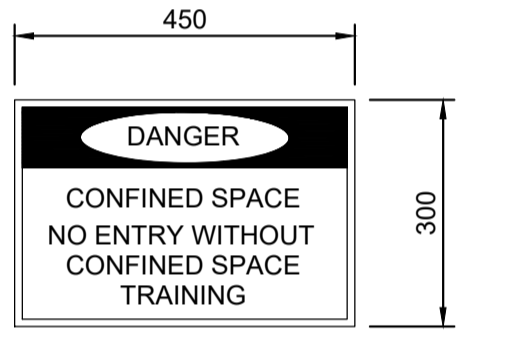


STEP IRON DETAILS
(NOT TO SCALE)

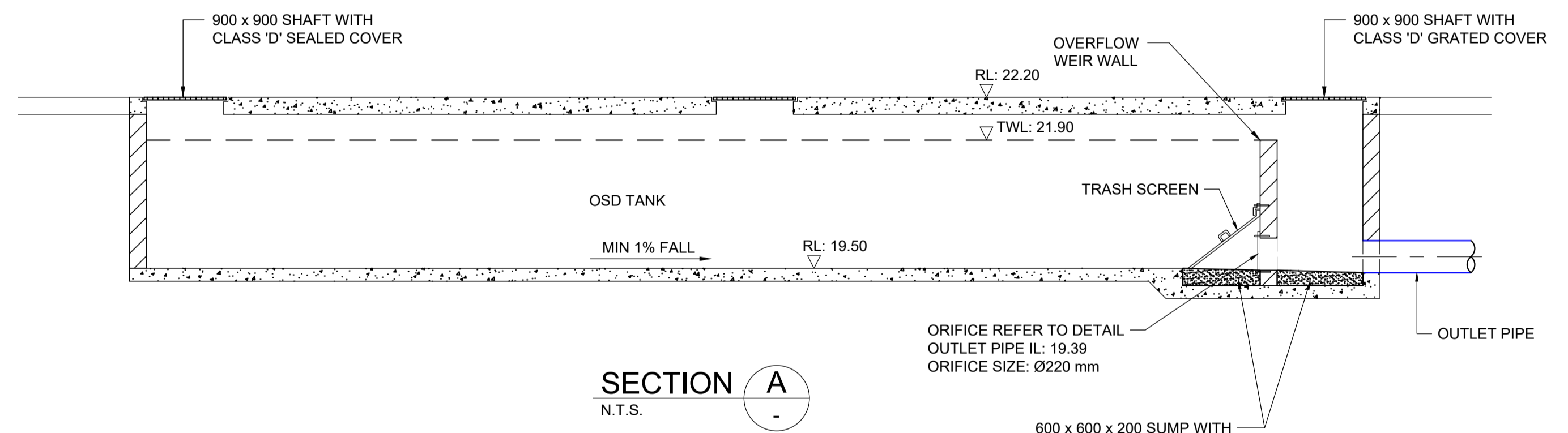
PROVIDE FOR PITS/TANKS GREATER THAN 900mm DEEP

THIS IS AN ORIFICE STORMWATER EXTENSION SYSTEM REQUIRED BY LOCAL COUNCIL. IT IS AN ORIFICE TO REDUCE THE VOLUME OF THE TANK OR BASIN OR TO REDUCE THE ORIFICE PLATE THAT CONTROLS THE OUTFLOW. THE BASE OF THE OUTFLOW CONTROL PIT AND THE ORIFICE SCREEN MUST BE CLEANED OF DEBRIS AND REPAIRS ORALREADY BASED BY THE OUTFLOW. THIS PLATE MUST NOT BE REMOVED.

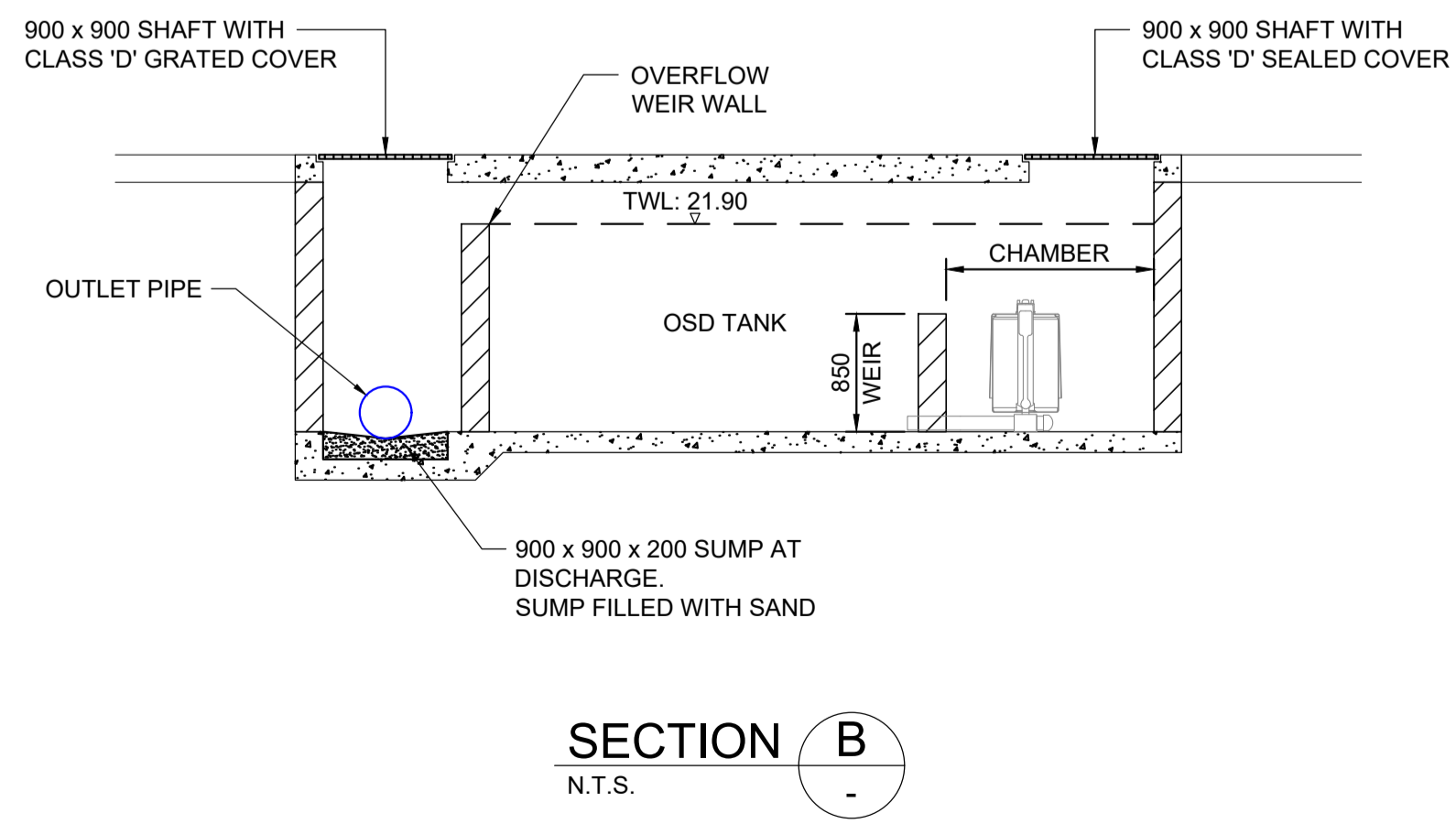
OSD SIGN DETAIL
(NOT TO SCALE)



CONFINED SPACE SIGN DETAIL
SCALE = 1:10



SECTION A
N.T.S.



SECTION B
N.T.S.

PRELIMINARY ISSUE
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ISSUE	DESCRIPTION	APPROVED	DATE
P2	FOR SSDA ISSUE		30.09.25
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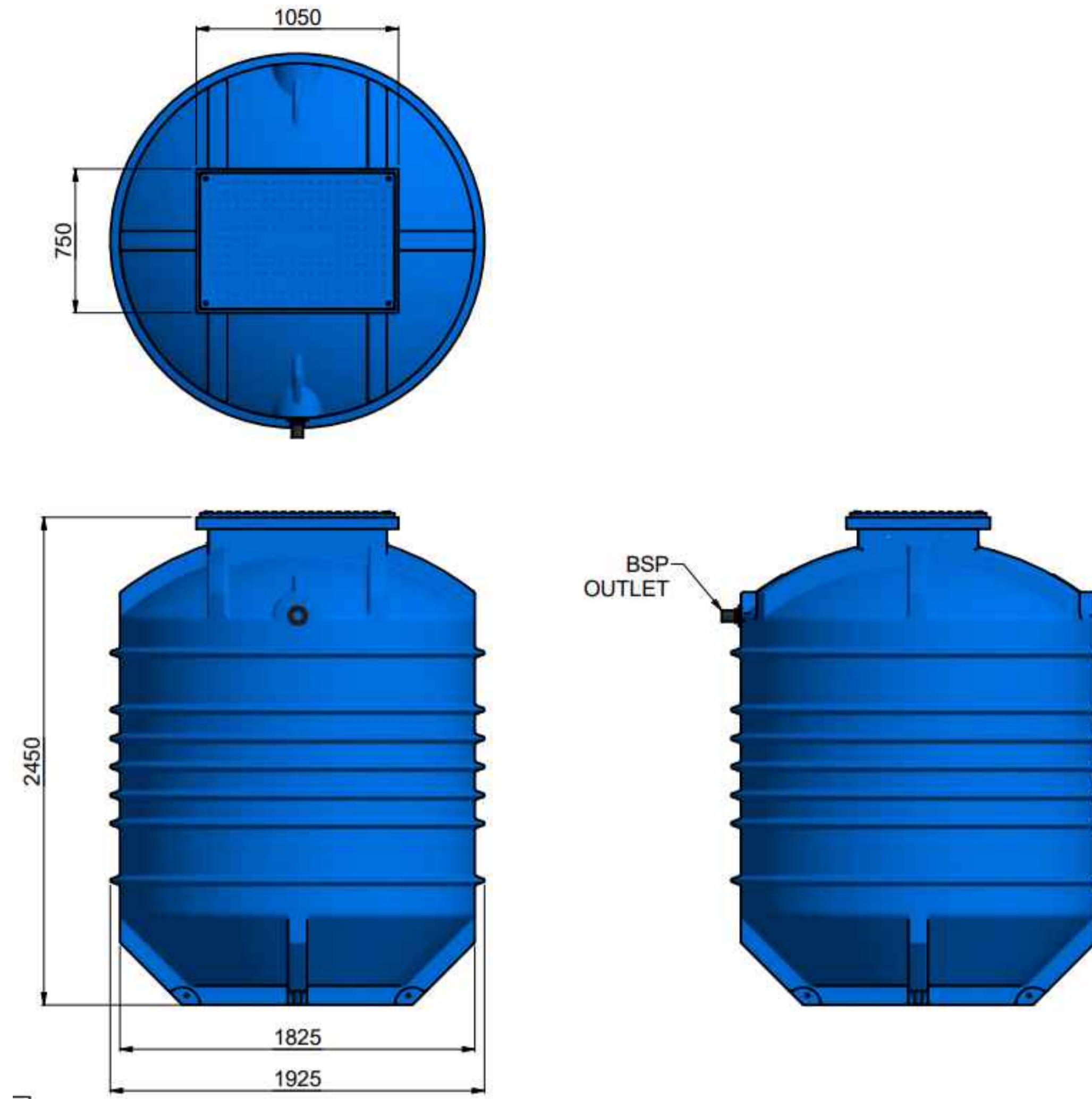
PROJECT
OPAL BAYVIEW GARDENS
ANNAM ROAD BAYVIEW NSW

TITLE
STORMWATER DRAINAGE
OSD TANK DETAILS

SCALES	N/A @ A1	DATE	AUG' 2025
DRAWN	DESIGN	VERIFIED	APPROVED
C.K.E	G.K	C.M	

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ISSUE	PROJECT No.	DRAWING No.
P2	9449	C.0275



ALINE PUMPING STATION '5000L' DETAIL
NOT TO SCALE

Type	Weight	Height	Access Dimensions	Tank Lip
Poly (pictured)	10kg	50mm	600x900mm	Compatible
Solid Top - Class B	52kg	55mm	600x900mm	Remove
Solid Top - Class D	100kg	105mm	600x900mm	Remove
Poly Riser 150mm	10kg	150mm	600x900mm	Remove
Poly Riser 300mm	15kg	300mm	600x900mm	Remove

Features & Benefits

- CONSTRUCTION**
- Polyethylene tank
 - Inlet pipe to be installed by plumber
 - All in-tank fittings incorporated in the packaged pump stations as follows:
 - Ball and non-return valves, barrel unions.
 - PVC interconnecting pipework

- LIQUID HANDLED**
- Raw sewage, Tradewaste, Effluent and Stormwater

- PUMP OPTIONS**
- Single, Dual or Triplex Pumps

- CONFIGURATION**
- Freestanding
 - Guide Rail

- APPLICATIONS**
- Large Houses
 - Caravan Parks
 - Amenities blocks
 - Shopping centres
 - Basement pump-away
 - Civil developments
 - Residential apartments
 - Industrial complexes

Specifications

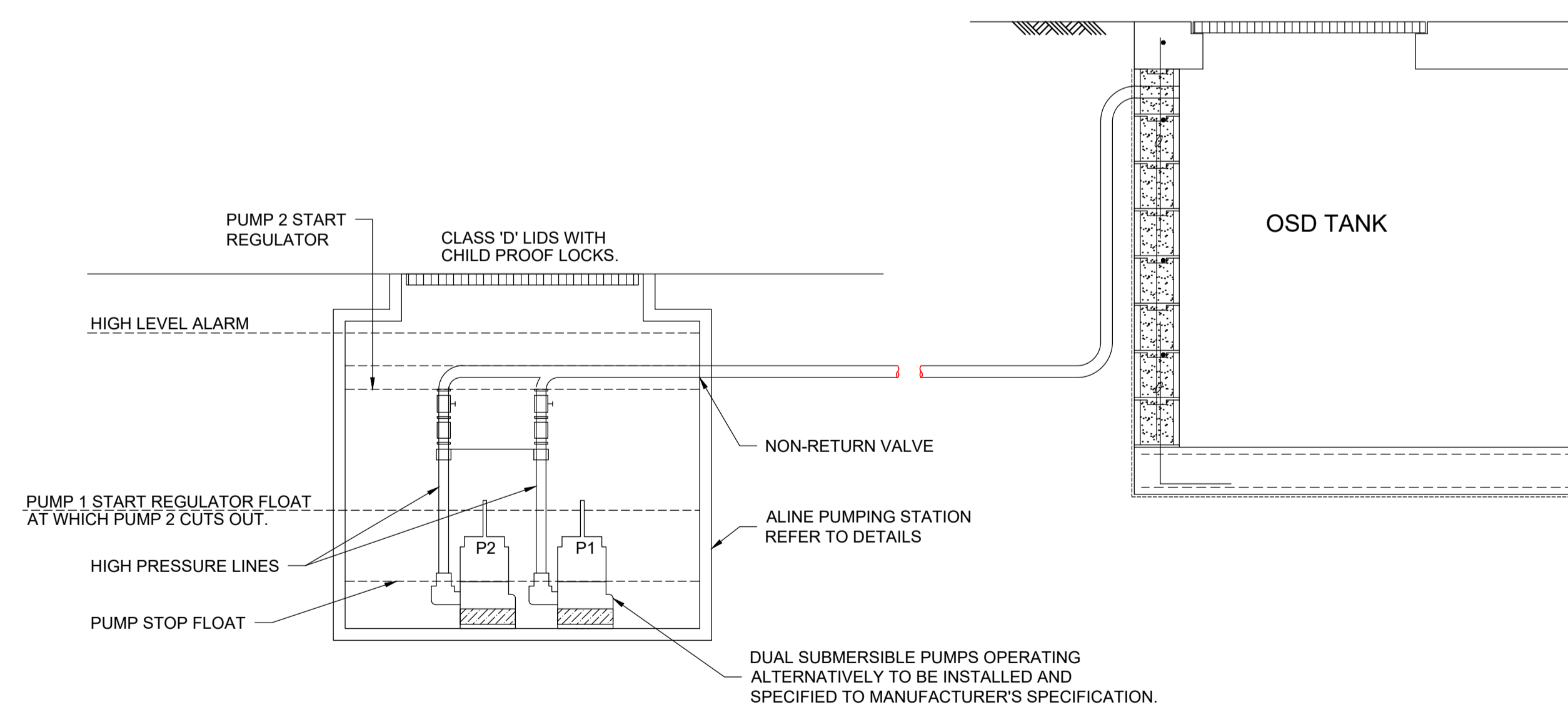
Specification	Value
Depth	2450mm
Outer Diameter	1925mm
Inner Diameter	1875mm
Nominal Litres	5000L
Approximate Weight (Excluding pump)	420kg
Access Cover	600mm x 900mm

PUMP STATIONS & TRJ

PUMP SIZE:
TWIN DAVEY DT55S REQUIRED.

PUMP NOTES:

- The pumps shall be programmed to work alternatively until high level alarm height.
- A low level float shall be provided to ensure that the minimum required water level is maintained within the sump area of the below ground tank. In this regard this float will function as the cut-out switch.
- In the event that a pump fails to operate when the water in the wet well reaches the pump start, the other pump shall be activated and a visible alarm flashing strobe & pump failure warning sign which are to be located at the driveway entrances initiated. In the event that both pumps fail to operate, an audible alarm shall be initiated.
- Pumping equipment shall be securely fixed to the wet well using corrosion resistant fixings.
- Pumps shall have flanges or unions to facilitate removal.
- A second float shall be provided at a higher level approx. 300mm above the minimum water level, where by one of the pumps will operate & drain the tank to the level of the low level float.
- Tank shown indicative only. Refer to plans for tank size.



PUMP OUT PIT DETAIL
NOT TO SCALE

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PROJECT
OPAL BAYVIEW GARDENS
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TITLE
PUMP-OUT TANK DETAILS

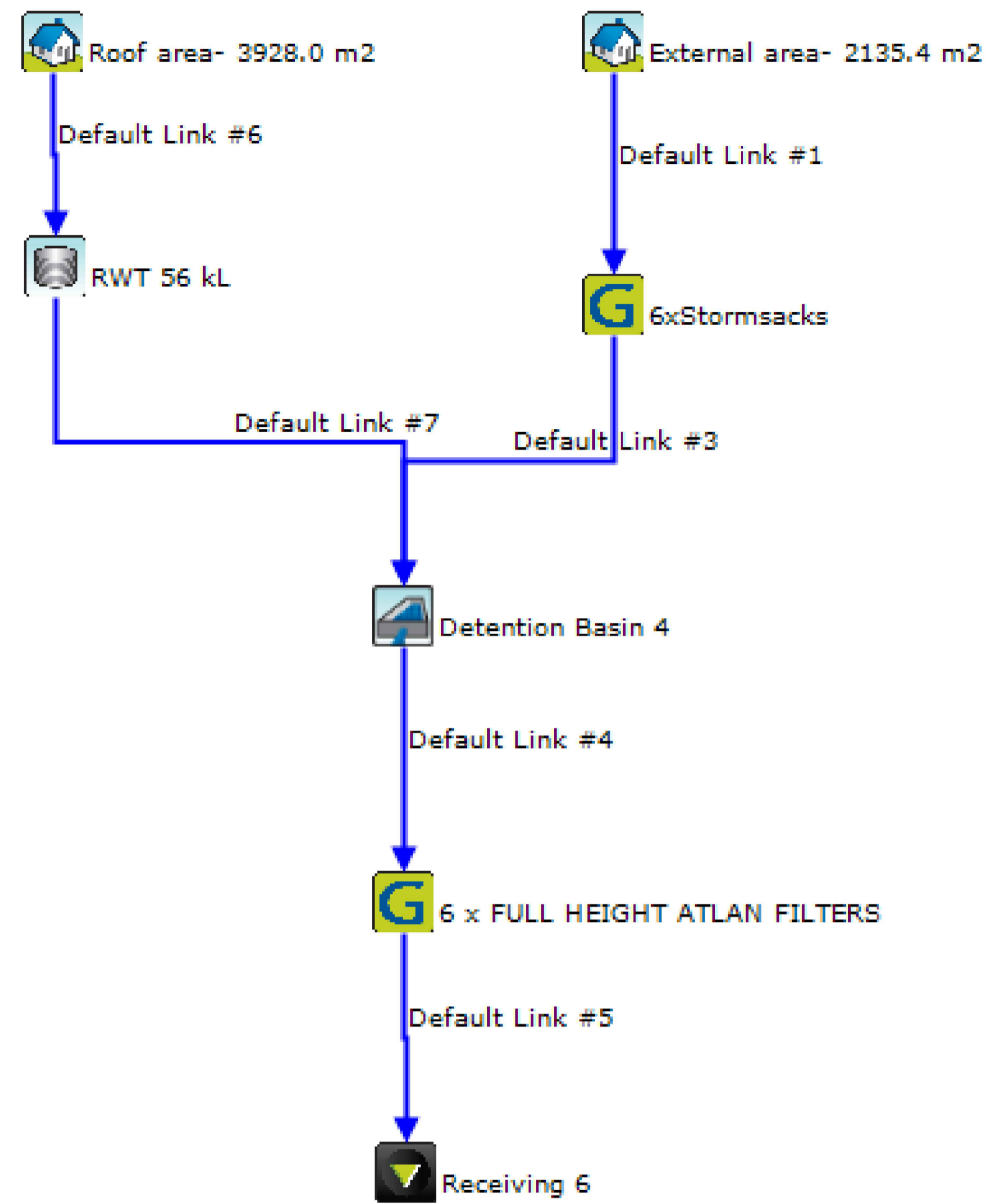
SCALES	DATE
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ISSUE	PROJECT No.	DRAWING No.
P2	9449	C.0275

MUSIC MODEL



MUSIC RESULTS

	Sources	Residual Load	% Reduction
Flow (ML/yr)	6.395	6.394	0.01014
Total Suspended Solids (kg/yr)	446.7	65.65	85.3
Total Phosphorus (kg/yr)	1.405	0.3416	75.69
Total Nitrogen (kg/yr)	15.14	6.073	59.88
Gross Pollutants (kg/yr)	142	0	100

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PROJECT
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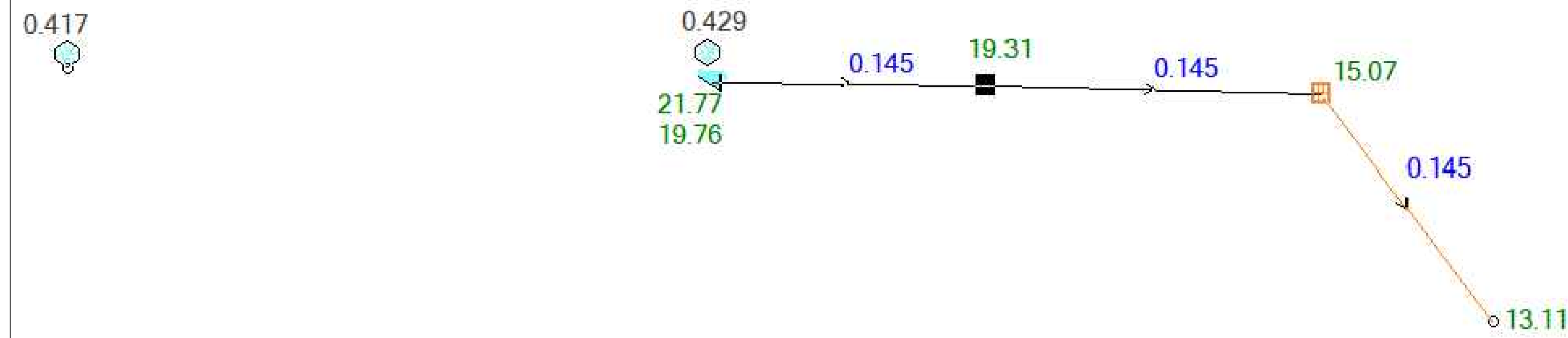
TITLE
MUSIC MODEL

SCALES	N/A @ A1	DATE	AUG' 2025
DRAWN	DESIGN	VERIFIED	APPROVED
C.KE	G.K	C.M	

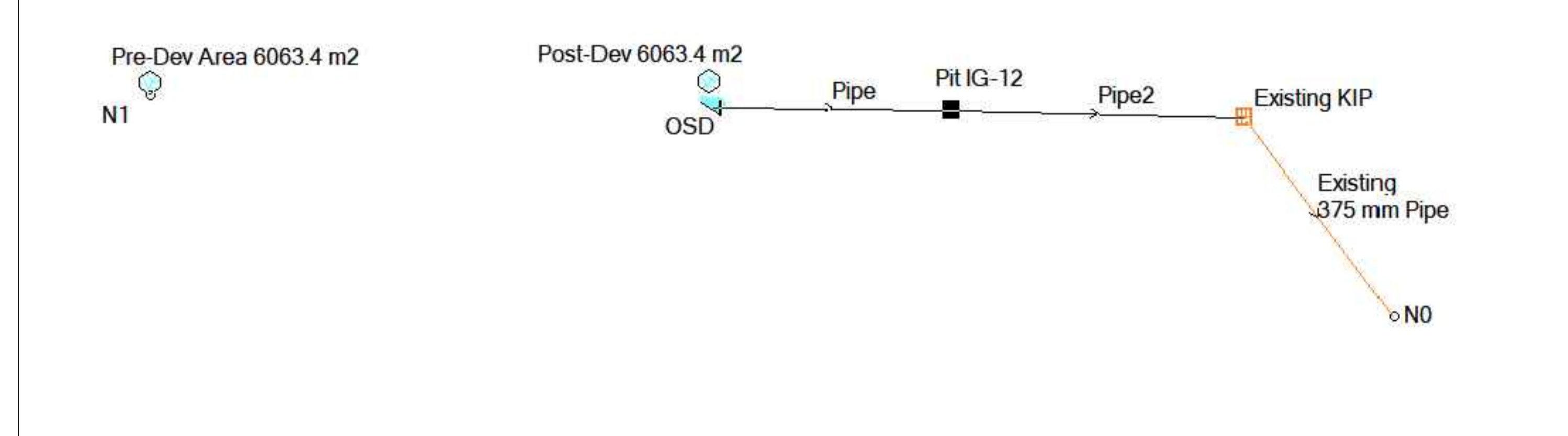
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ISSUE	PROJECT No.	DRAWING No.
P2	9449	C.0280

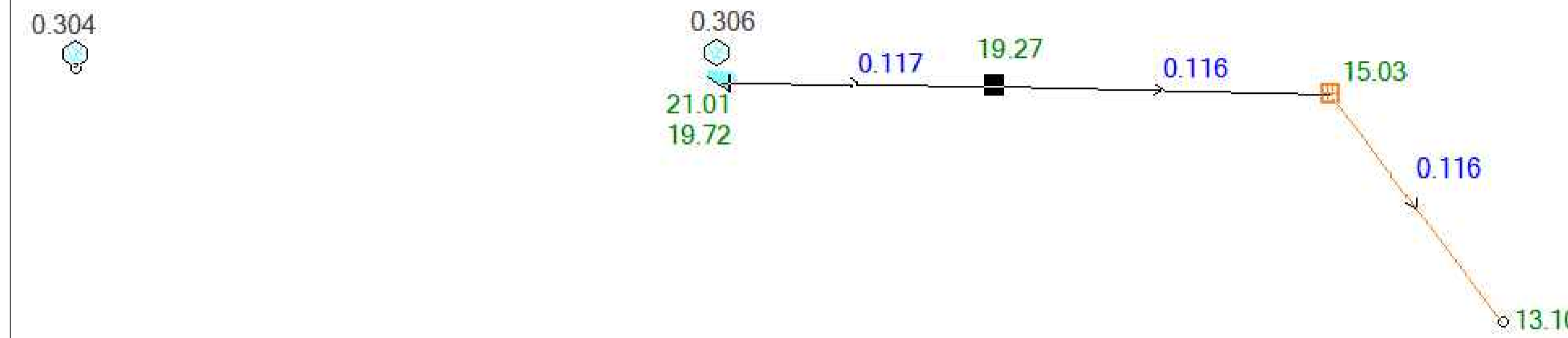
DRAINS RESULTS 1% AEP



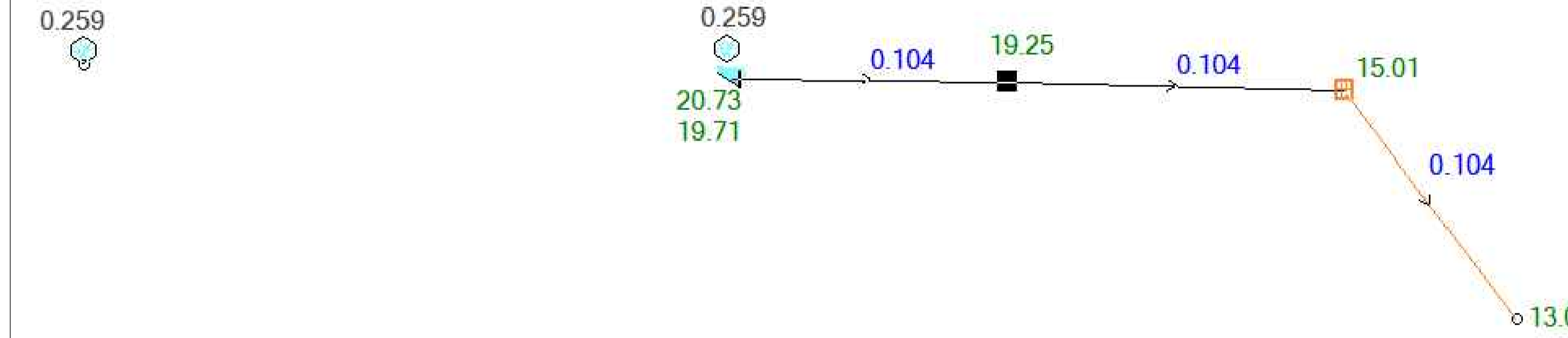
DRAINS MODEL



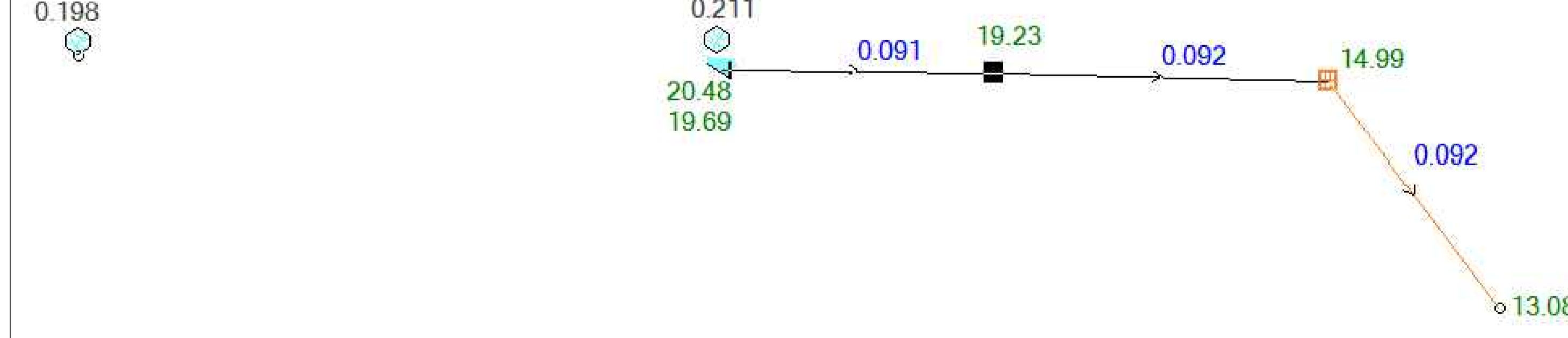
DRAINS RESULTS 5% AEP



DRAINS RESULTS 10% AEP



DRAINS RESULTS 20% AEP



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TITLE
DRAINS MODEL

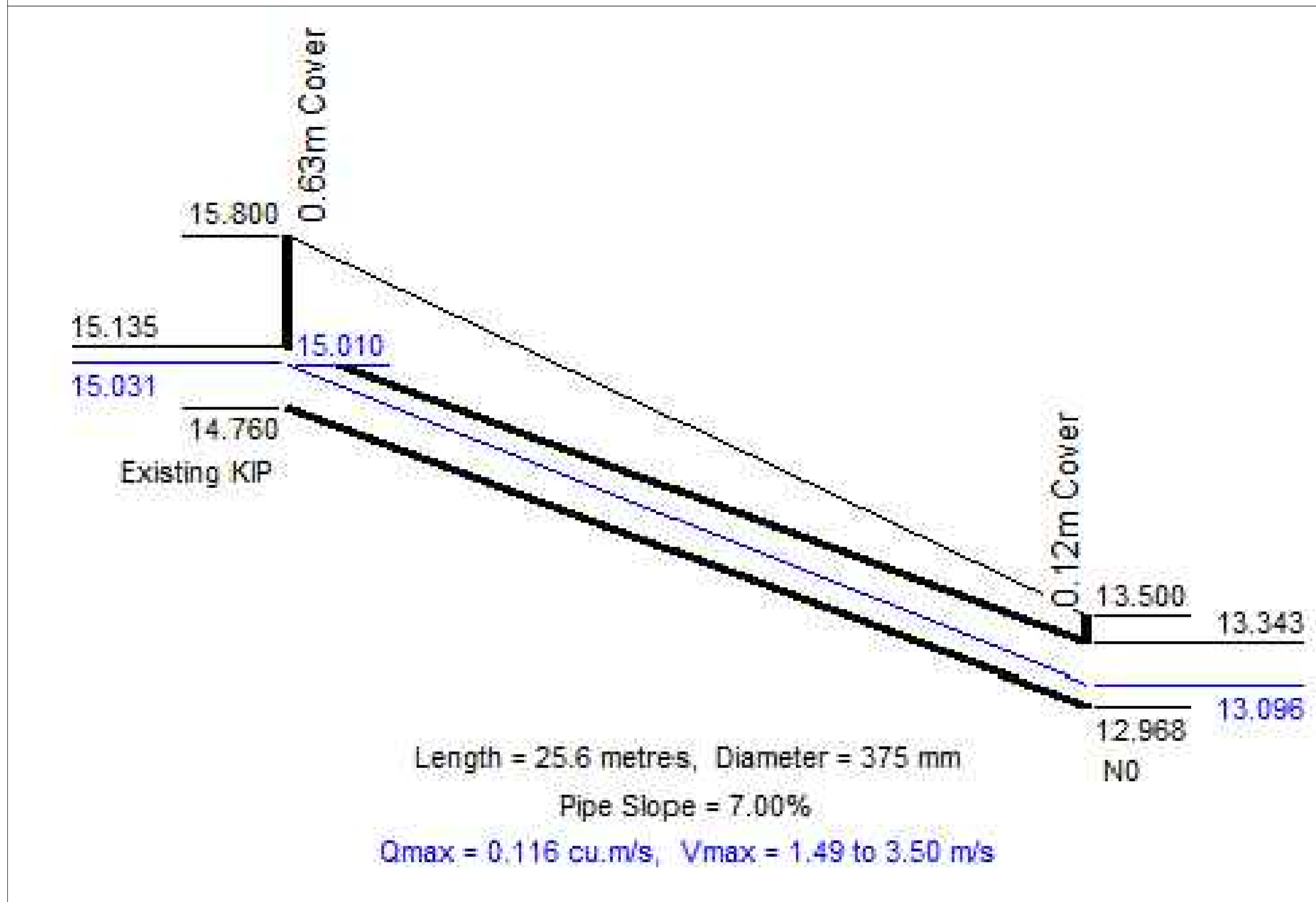
SCALES	DATE
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LONG SECTION OF THE EXISTING Ø375 PIPE ON STREET WHERE THE PROPOSED STORMWATER SYSTEM IS CONNECTED TO :



DESIGN NOTES:

BASED ON COUNCIL'S DESIGN GUIDE SECTION 6.4, COUNCIL'S UNDERGROUND DRAINAGE SYSTEM IS TO BE DESIGNED TO CATER ALL STORMS UP TO AND INCLUDING 5% AEP.

BASED ON FIGURE 5.4.11.2 OF AS3500, A Ø375mm PIPE AT GRADIENT OF 1:14 CAN TAKE 700 L/s. MAXIMUM DISCHARGE FROM THE DEVELOPED SITE AT 5% AEP IS 116 L/s (AS SHOWN ABOVE).

THEREFORE THE EXISTING Ø375mm PIPE CAN ACCOMMODATE ANY ADDITIONAL CATCHMENT FROM UPSTREAM DRAINING INTO THE EXISTING PIT (THE DIMENSION OF THE UPSTREAM CATCHMENT AT THE MOMENT IS AMBIGUOUS).

PRELIMINARY ISSUE
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ISSUE	DESCRIPTION	APPROVED	DATE
P2	FOR SDDA ISSUE	-	30.09.25
P1	PRELIMINARY ISSUE	-	25.08.25

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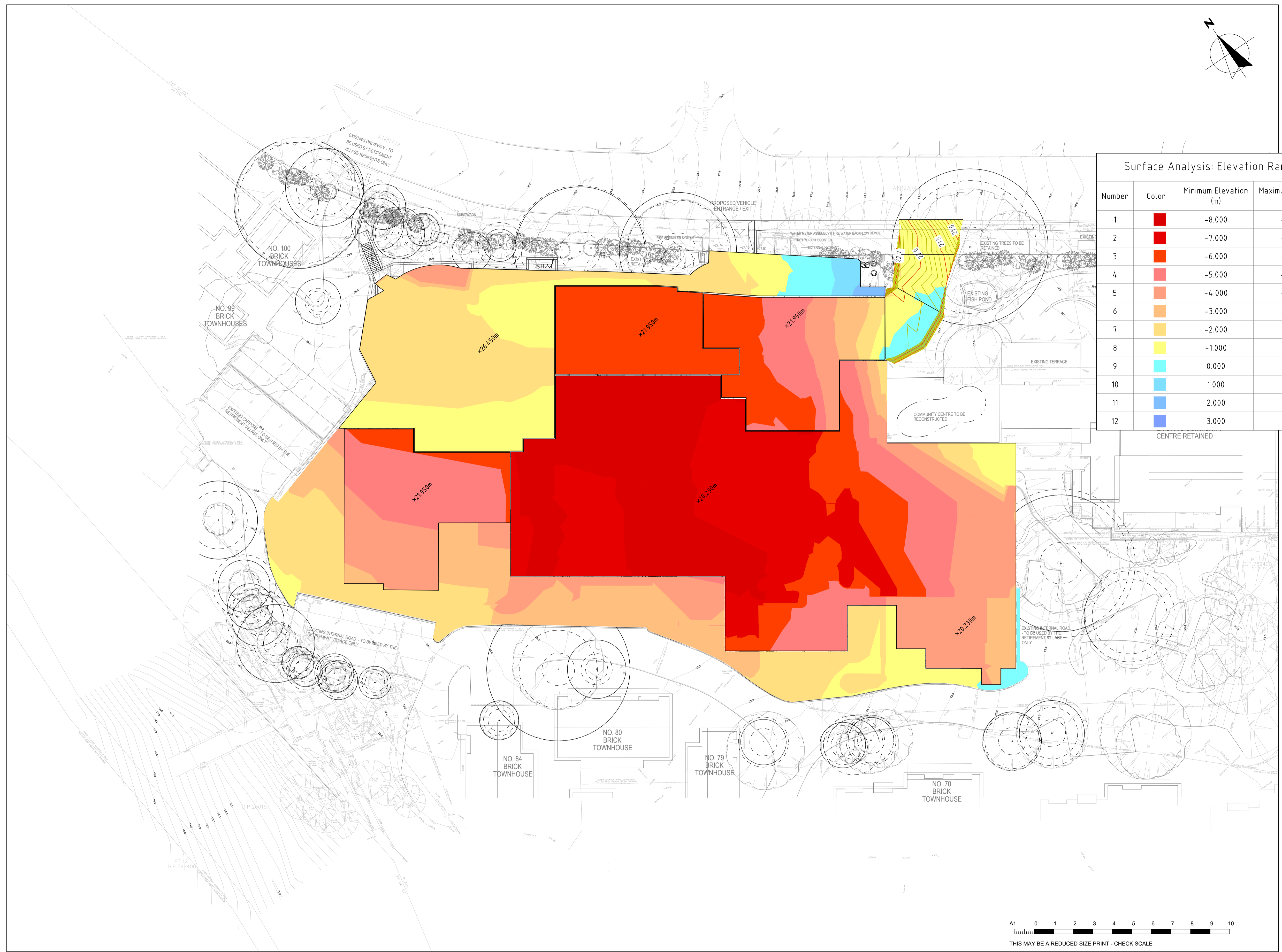
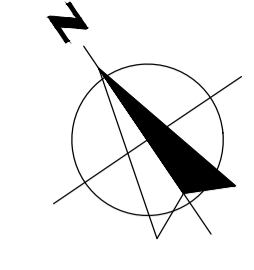
PROJECT
 OPAL BAYVIEW GARDENS
 ANNAM ROAD BAYVIEW NSW

TITLE
 STORMWATER DRAINAGE
 LONG SECTION

SCALES	1:100 @ A1	DATE	AUG' 2025
DRAWN	DESIGN	VERIFIED	APPROVED
C.KE	G.K	C.M	

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P2	9449	C.0290



Surface Analysis: Elevation Ranges

Number	Color	Minimum Elevation (m)	Maximum Elevation (m)
1	Red	-8.000	-7.000
2	Red	-7.000	-6.000
3	Orange	-6.000	-5.000
4	Light Orange	-5.000	-4.000
5	Light Orange	-4.000	-3.000
6	Yellow	-3.000	-2.000
7	Yellow	-2.000	-1.000
8	Light Yellow	-1.000	0.000
9	Cyan	0.000	1.000
10	Light Blue	1.000	2.000
11	Blue	2.000	3.000
12	Dark Blue	3.000	4.000

BULK EARTHWORKS NOTES:

- BULK EARTHWORKS LEVELS ARE BASE ON THE FOLLOWING PAVEMENT THICKNESS AND ALLOWANCES:
 - 180mm BUILDING PLATFORM
 - 280mm CONCRETE PAVEMENT
 - 450mm FLEXIBLE PAVEMENT
 LANDSCAPE LEVELS HAVE BEEN TAKEN FROM THE FINISHED SURFACE LEVELS AND ACCOUNT FOR NO CHANGE FROM EXISTING.
- THE EXISTING GROUND SURFACE IS NOT LOWERED TO ACCOUNT FOR ANY TOPSOIL/VEGETATION OR EXISTING PAVEMENTS. STRIPING VOLUME ASSESSMENT TO BE MADE BY CONTRACTOR.
- BULKING FACTOR OF 1.0 WAS USED FOR BOTH CUT & FILL.
- NO ALLOWANCE HAS BEEN MADE FOR DETAILED WORKS SUCH AS FOOTINGS, SET DOWN, LIFT PITS, SERVICE TRENCHES & STORMWATER/SUBSOIL TRENCHES, TEMP CONSTRUCTION PLATFORMS, STABILISATION, TEMP BATTERS, BENCHING, RETAINING WALL BACKFILL, REMOVAL OF HAZARDOUS MATERIAL OR TEMPORARY SEDIMENT BASINS, OR SOFT EXISTING UNSUITABLE MATERIAL, UPPER CARPARK OSD, PIPE AND PIT OSDs AND THE LOWER CARPARK PAVEMENT FOR ABOVE GROUND LEVELS TO BE ACHIEVED. DETAILED SUBGRADE EXCAVATION IS REQUIRED IN VICINITY OF OSD 2.
- THIS PLAN IS PREPARED FOR INFORMATION PURPOSES ONLY AND IS INDICATIVE ONLY. EARTH WORKS CONTRACTOR IS TO VERIFY ALL LEVELS AND QUANTITIES AND PERFORM THEIR OWN BULK EARTHWORK ASSESSMENT. SOME FILL AND CUT HAS BEEN SHOWN BASED ON ASSUMED LANDSCAPE PROFILING AND IS THE RESPONSIBILITY OF OTHERS

TOTAL CUT VOLUME	-6911.5 m ³
TOTAL FILL VOLUME	3037.5 m ³
EXCESS OF CUT OVER FILL	-3874 m ³
NOTE: VOLUMES ARE FROM EXISTING TO BULK EARTHWORKS LEVEL NO ALLOWANCE FOR THE REMOVAL OF TOPSOIL	
BULK ELEVATION LEVEL	±BEL xx.xxx

PRELIMINARY ISSUE
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P2	FOR SDDA ISSUE	30.09.25
P1	PRELIMINARY ISSUE	13.08.25
ISSUE	DESCRIPTION	APPROVED DATE

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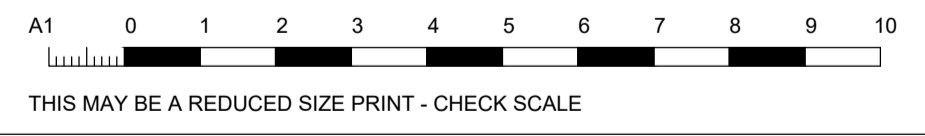
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PROJECT
OPAL BAYVIEW GARDENS
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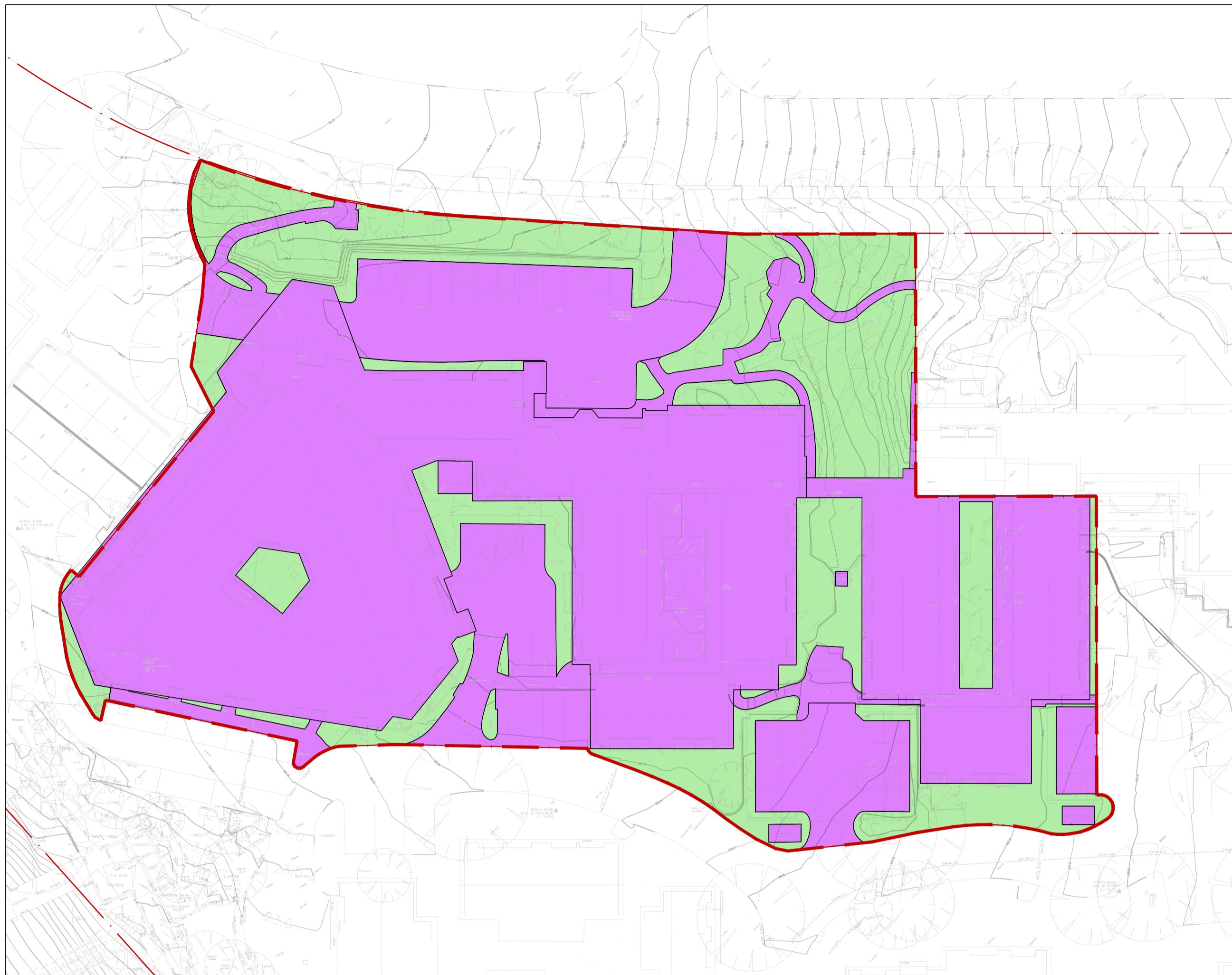
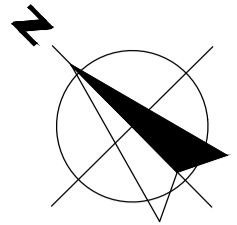
TITLE
BULK EARTHWORKS PLAN

SCALES	1:300 @ A1	DATE	JUL' 2025
DRAWN	DESIGN	VERIFIED	APPROVED
C.KE	H.F	C.M	

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P2	9449	C.0400



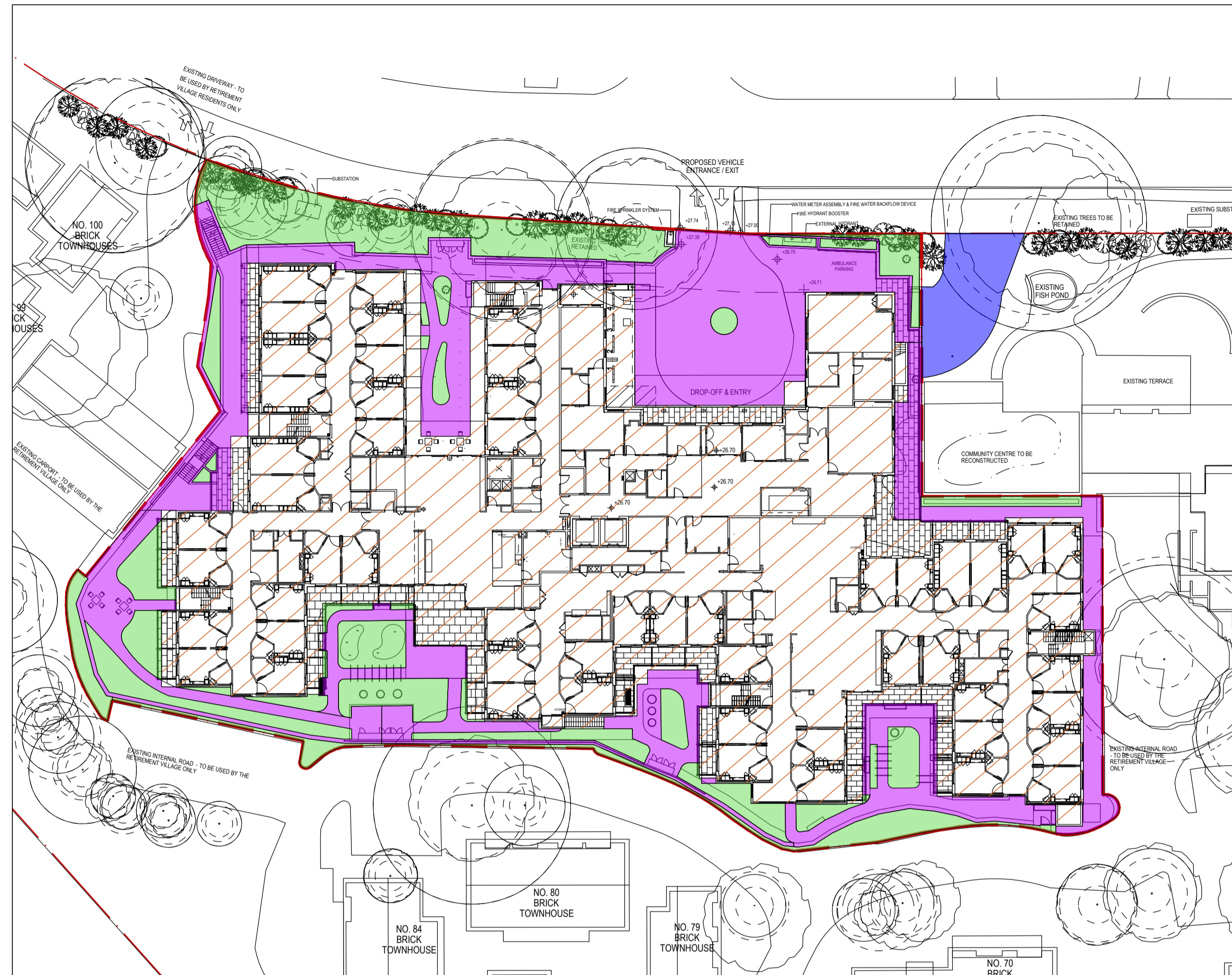
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**CATCHMENT PLAN -
PRE DEVELOPMENT**

SCALE 1:400

TOTAL SITE AREA = 6063.4 m ²		
LEGEND	AREA (m ²)	PERCENTAGE (%)
PERVIOUS AREA	1456.1 m ²	24.0 %
IMPERVIOUS GROUND AREA	4607.3	76.0 %



**CATCHMENT PLAN -
POST DEVELOPMENT**

SCALE 1:400

TOTAL SITE AREA = 6063.4 m ²		
LEGEND	AREA (m ²)	PERCENTAGE (%)
PERVIOUS AREA	896.4 m ²	14.8 %
IMPERVIOUS GROUND AREA	1239.0 m ²	20.4 %
ROOF AREA	3928.0 m ²	64.8 %
TOTAL PERVIOUS AREA	5167.0 m²	85.2 %
OSD BYPASS AREA	118.0 m ²	

PRELIMINARY ISSUE
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ISSUE	DESCRIPTION	APPROVED	DATE
P2	FOR SSDA ISSUE		30.09.25
P1	PRELIMINARY ISSUE		25.08.25

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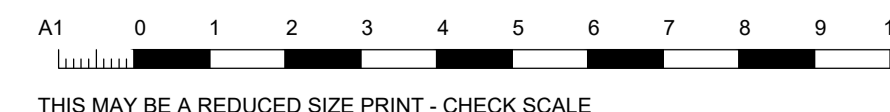
PROJECT
OPAL BAYVIEW GARDENS
ANNAM ROAD BAYVIEW NSW

TITLE
CATCHMENT PLAN

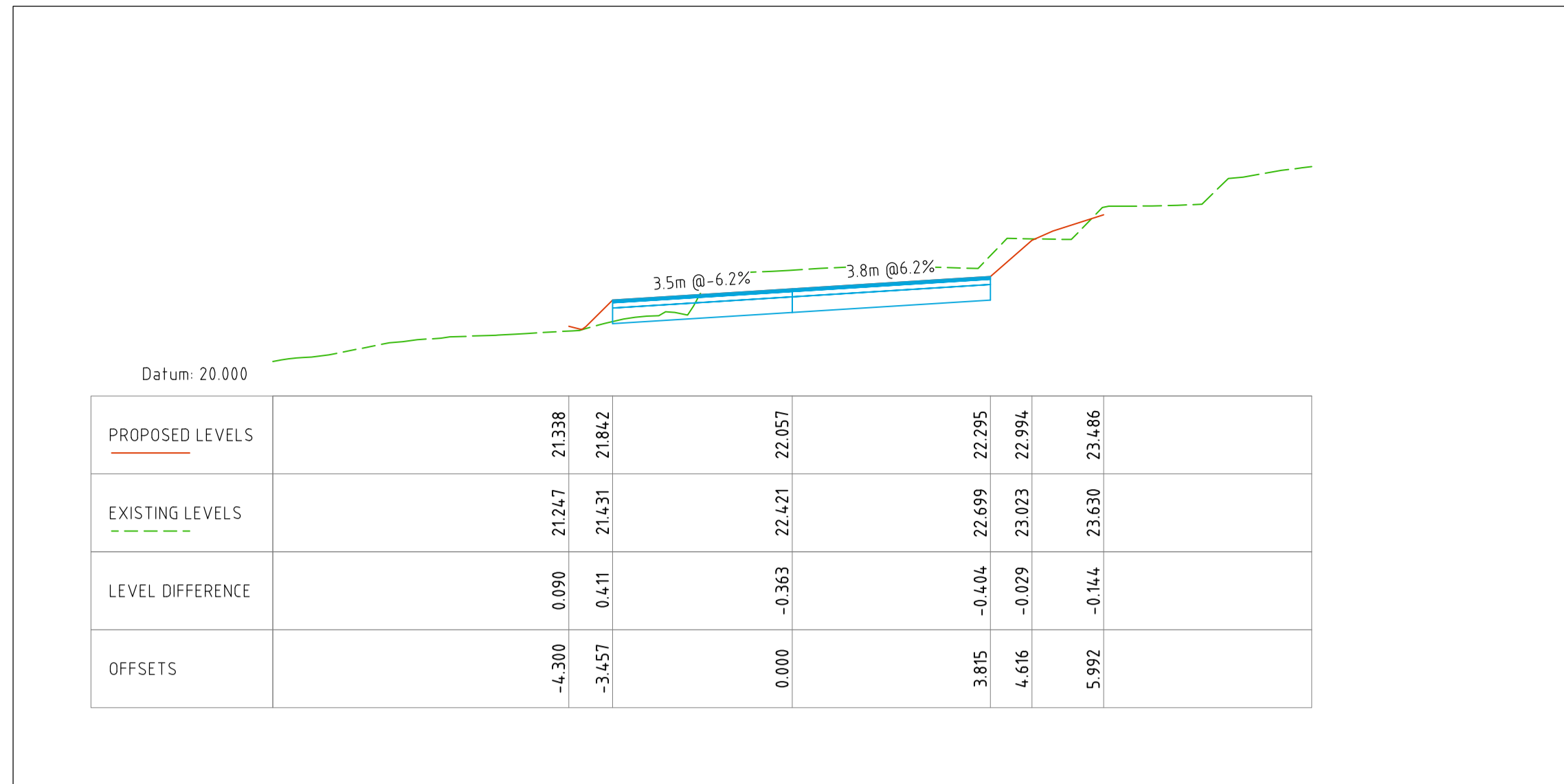
SCALES	DATE
1:400 @ A1	AUG' 2025
DRAWN J.M.	DESIGN G.K.
VERIFIED C.M.	APPROVED

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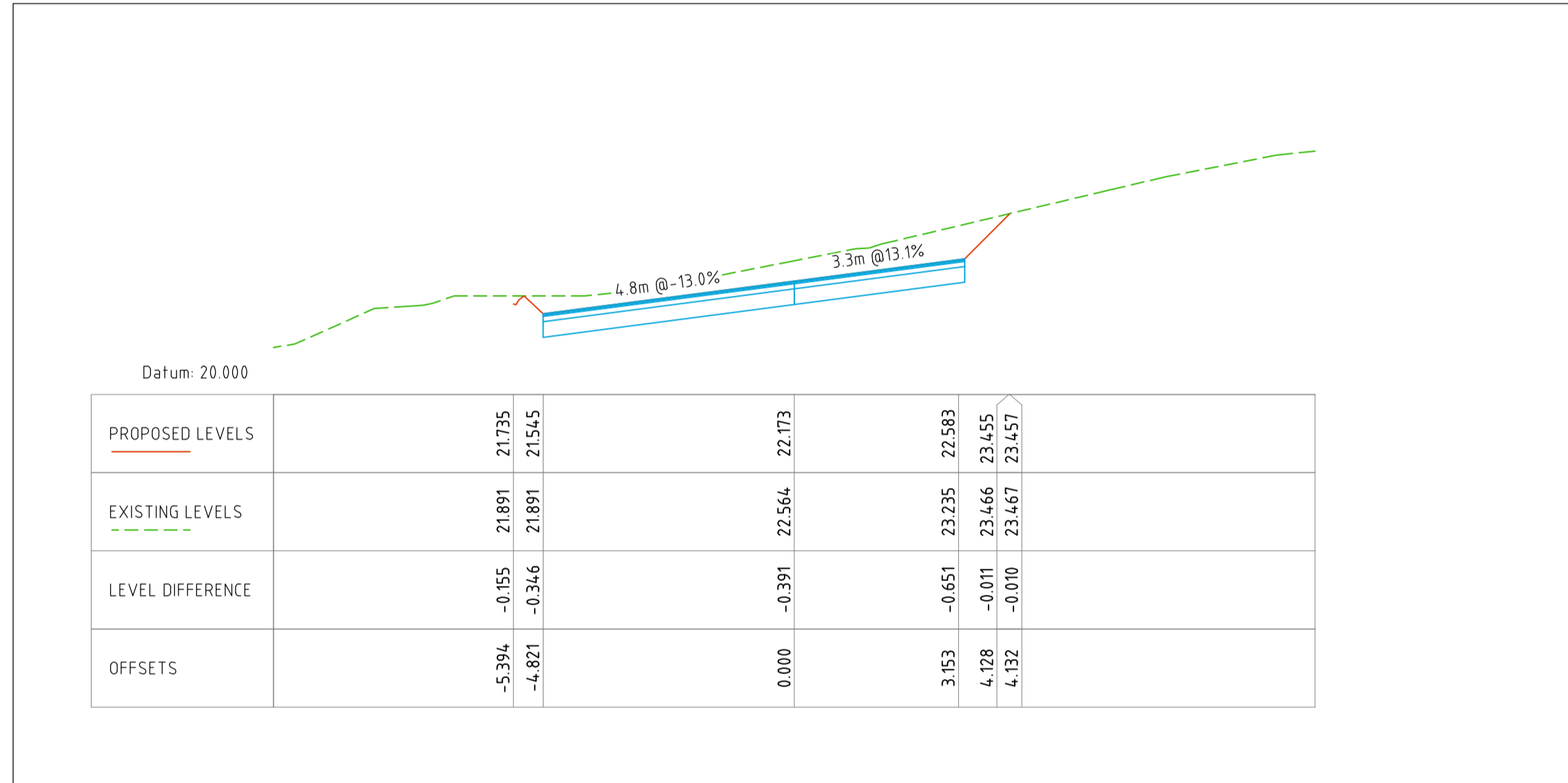
ISSUE	PROJECT No.	DRAWING No.
P2	9449	C.0500



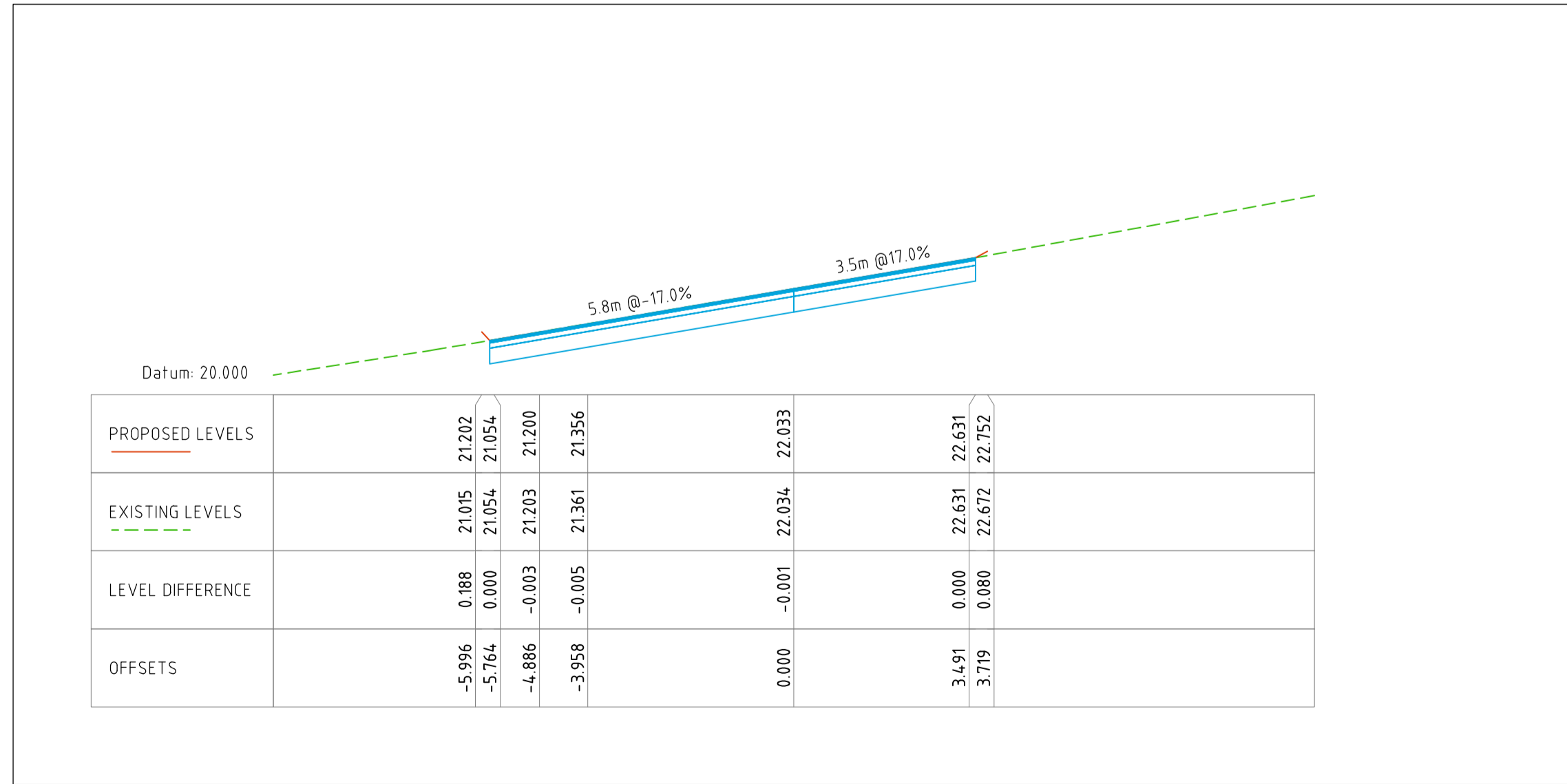
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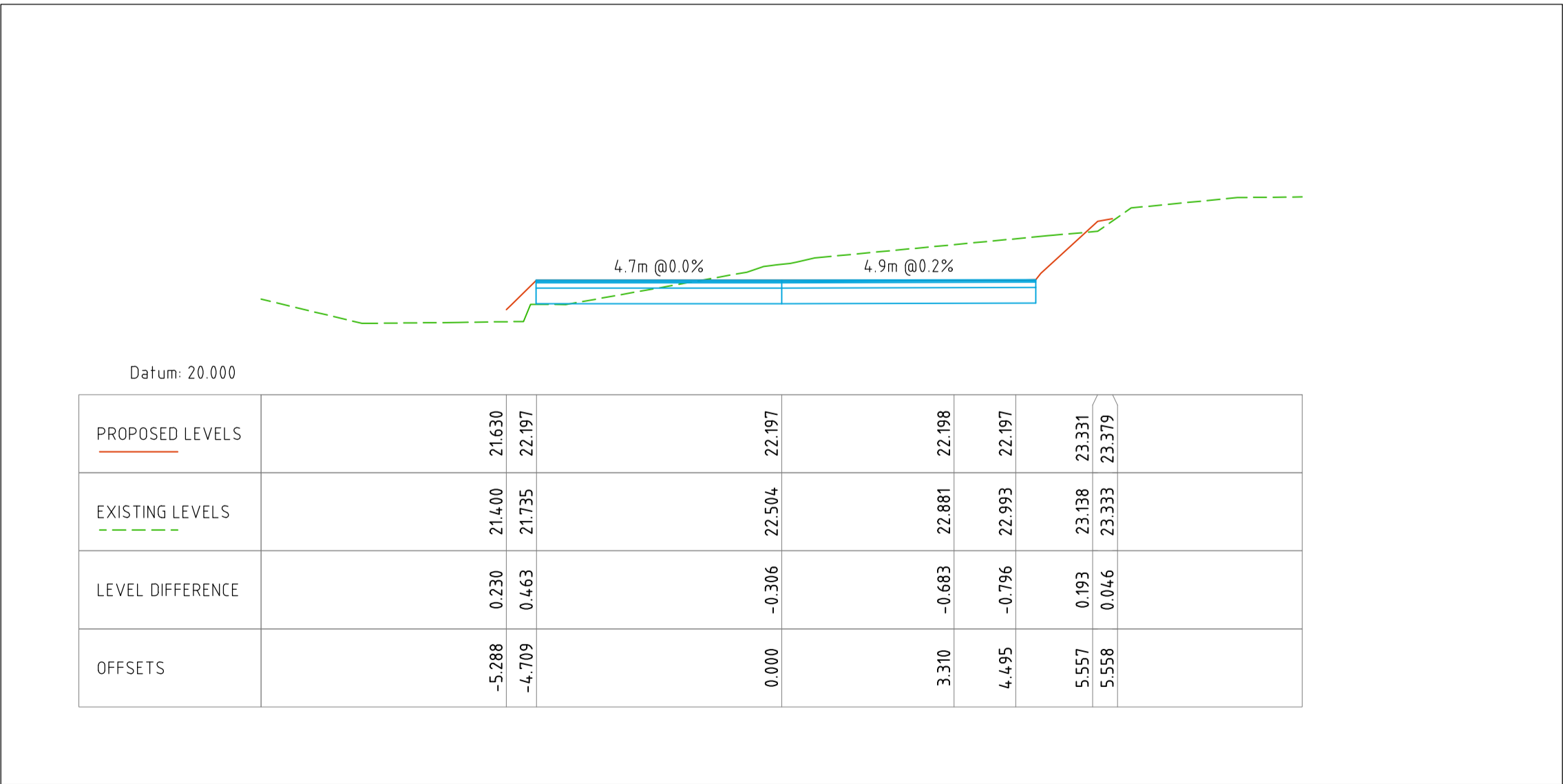
CROSS SECTION AT CHAINAGE 13.843
SCALE 1:100



CROSS SECTION AT CHAINAGE 08.665
SCALE 1:100



CROSS SECTION AT CHAINAGE 04.770
SCALE 1:100



CROSS SECTION AT CHAINAGE 23.165
SCALE 1:100

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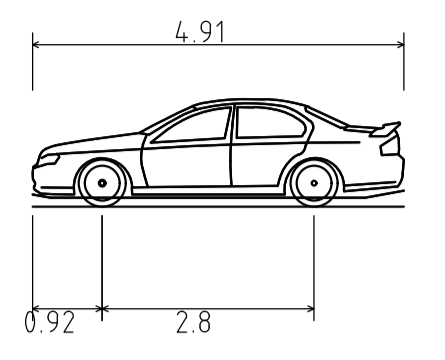
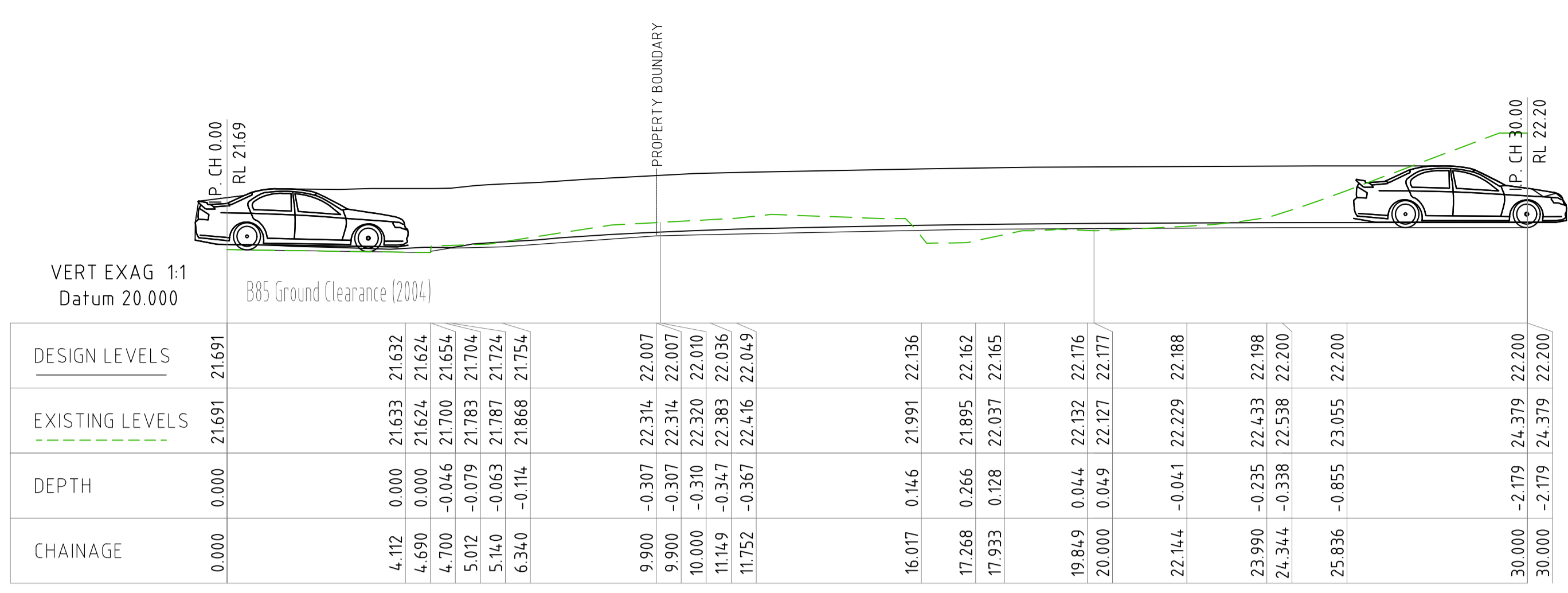
PROJECT
OPAL BAYVIEW GARDENS
ANNAM ROAD BAYVIEW NSW

TITLE
DRIVEWAY CROSS SECTIONS

SCALES		DATE	
1:100 @ A1		AUG' 2025	
DRAWN	DESIGN	VERIFIED	APPROVED
C.KE	H.F	C.M	
ISSUE	PROJECT No.	DRAWING No.	
P1	9449	C.0601	

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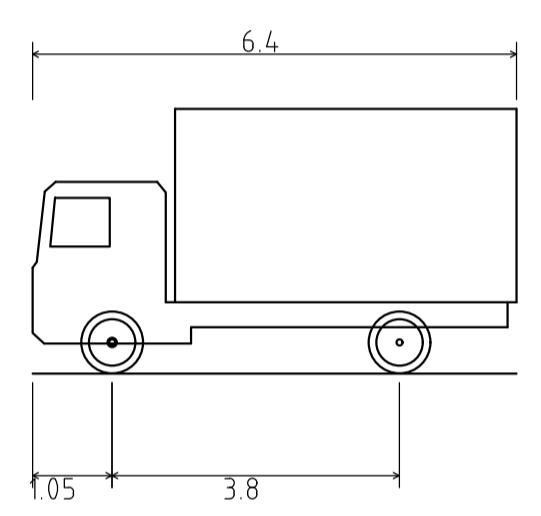
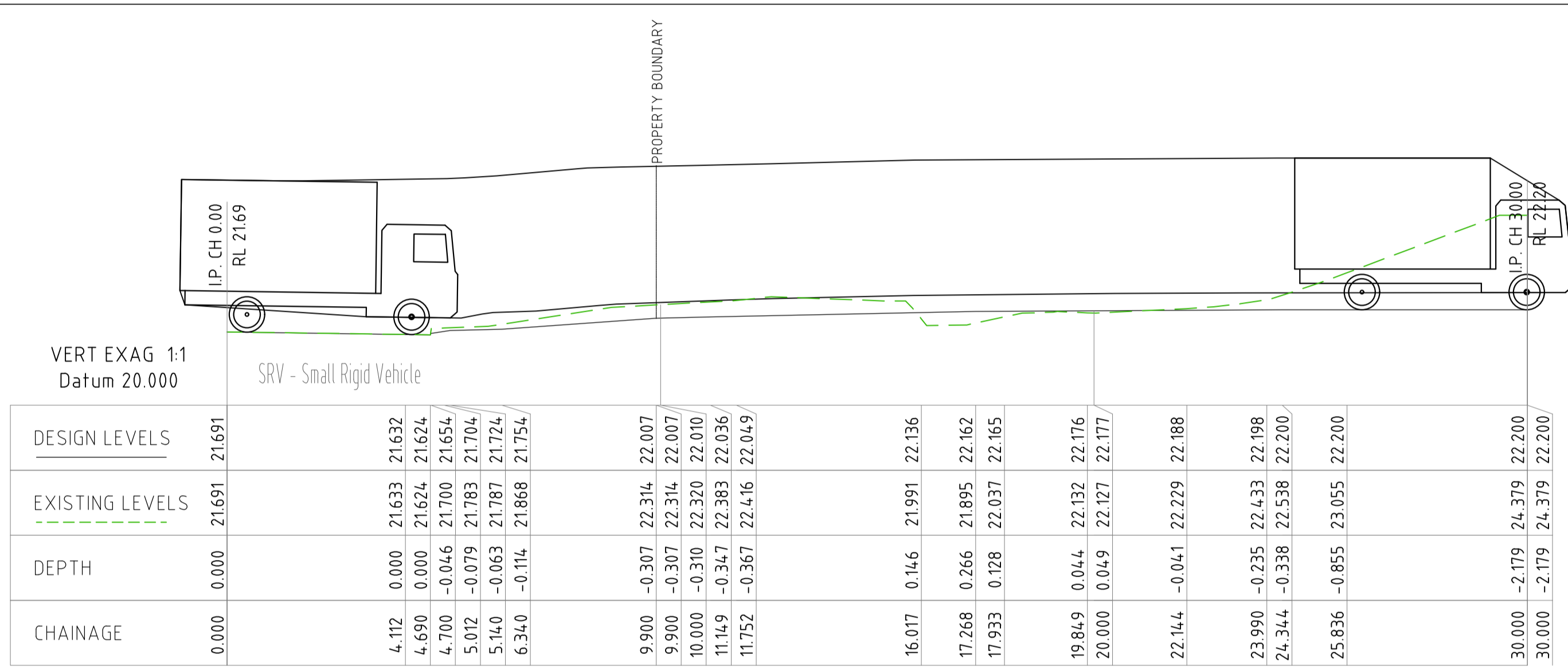
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B85 Ground Clearance (2004)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.120m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	8.000m

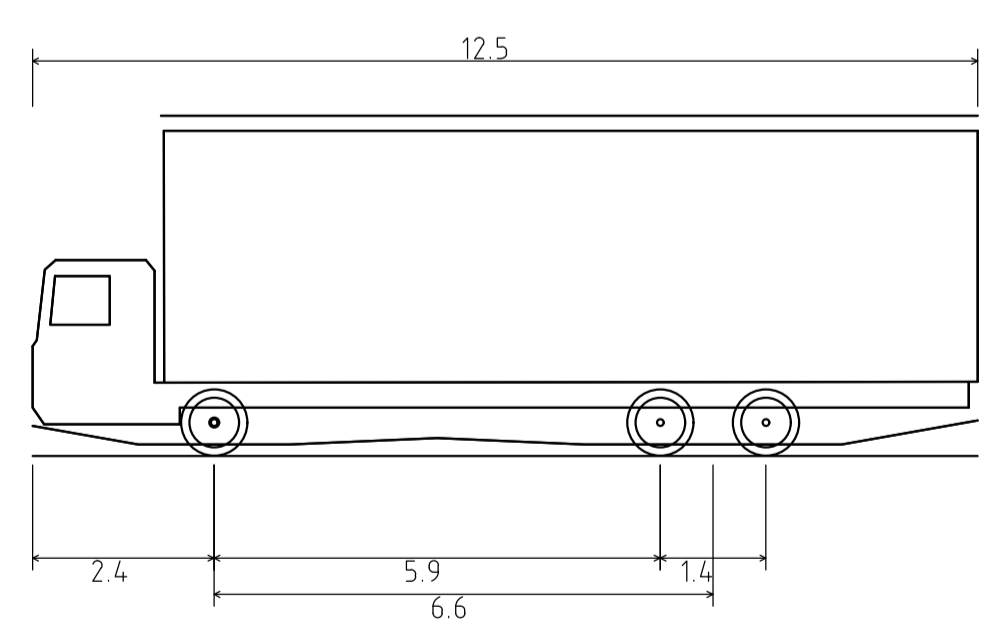
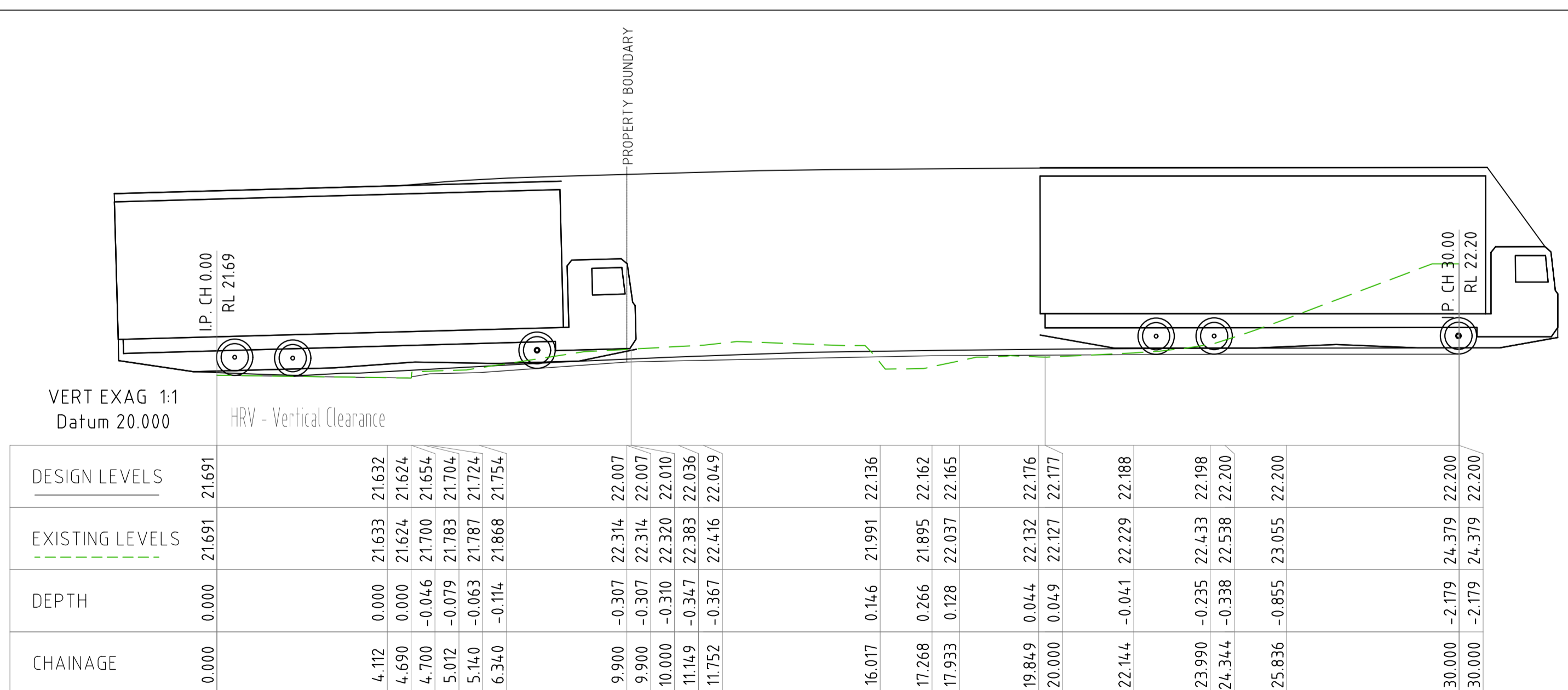
VERTICAL HEIGHT CLEARANCES - B85
SCALE 1:100



SRV - Small Rigid Vehicle

Overall Length	6.400m
Overall Width	2.330m
Overall Body Height	3.500m
Min Body Ground Clearance	0.398m
Track Width	2.330m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	7.100m

VERTICAL HEIGHT CLEARANCES - SRV
SCALE 1:100



HRV - Vertical Clearance

Overall Length	12.500m
Overall Width	2.500m
Overall Body Height	4.500m
Min Body Ground Clearance	0.150m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12.500m

VERTICAL HEIGHT CLEARANCES - HRV
SCALE 1:100

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ISSUE	DESCRIPTION	APPROVED	DATE
P1	FOR SDA ISSUE		30.09.25

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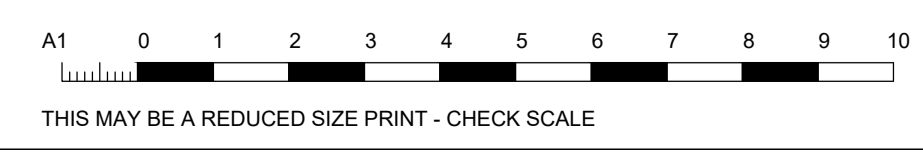
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PROJECT
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ANNAM ROAD BAYVIEW NSW

TITLE
DRIVEWAY VERTICAL HEIGHT CLEARANCES SECTIONS

SCALES	1:100 @ A1	DATE	AUG' 2025
DRAWN	C.KE	DESIGN	H.F
VERIFIED	C.M	APPROVED	
ISSUE	P1	PROJECT No.	9449
DRAWING No.	C.0610		

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