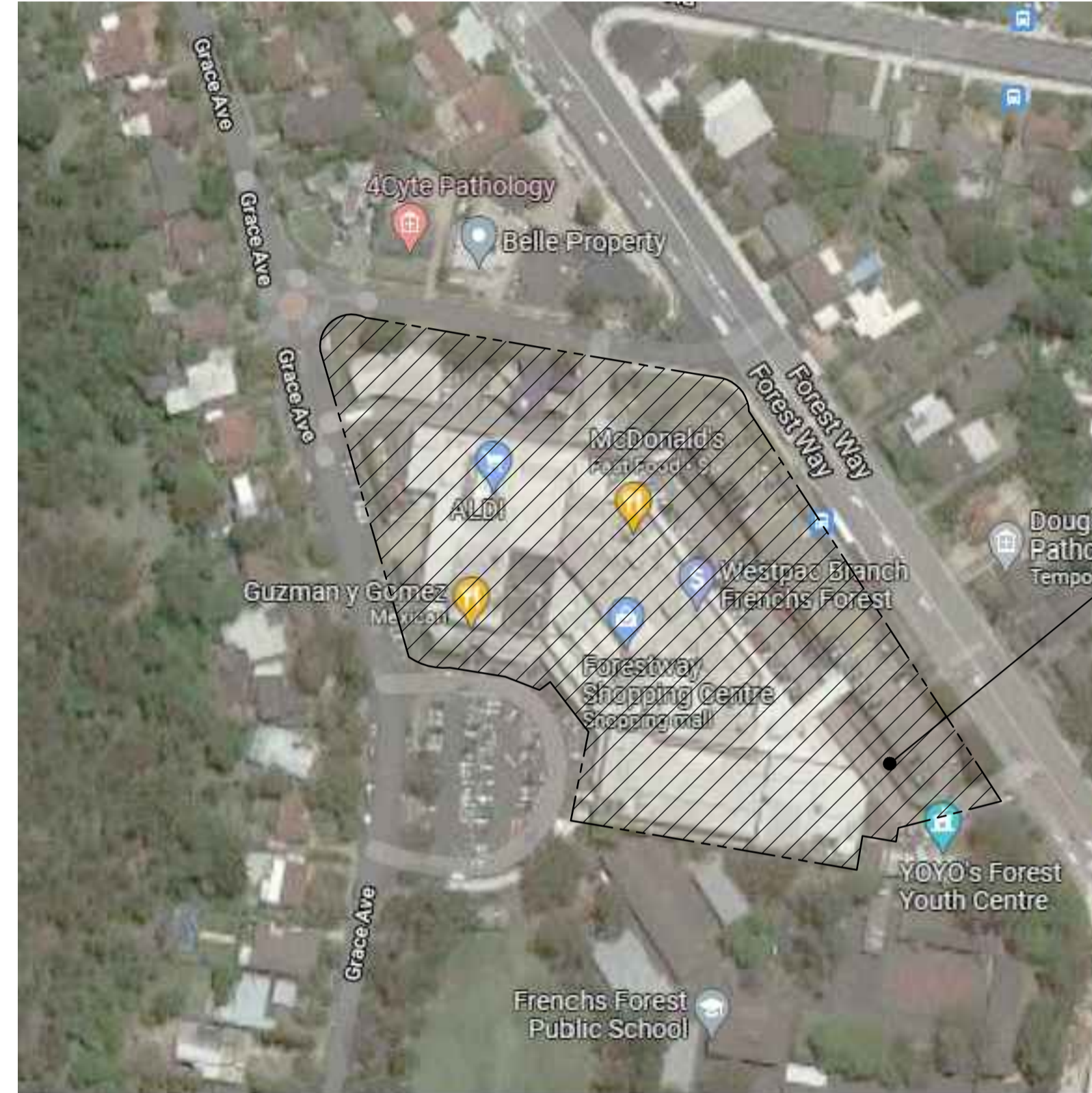
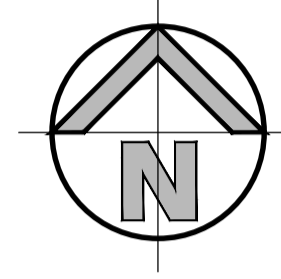


PROPOSED RETAIL DEVELOPMENT 22 FOREST WAY, FRENCHS FOREST, NSW CIVIL ENGINEERING WORKS

GENERAL NOTES:

- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH NORTHERN BEACHES COUNCIL SPECIFICATION. CONTRACTOR TO OBTAIN AND RETAIN A COPY ON SITE DURING THE COURSE OF THE WORKS.
- ALL NEW WORKS ARE TO MAKE A SMOOTH JUNCTION WITH EXISTING CONDITIONS AND MARRY IN A 'WORKMANLIKE' MANNER.
- 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 CONTRACTOR'S EXPENSE. SERVICES SHOWN ON THESE PLANS ARE ONLY THOSE EVIDENT AT THE TIME OF SURVEY OR AS DETERMINED FROM SERVICE DIAGRAMS. H & H CONSULTING ENGINEERS PTY. LTD CANNOT GUARANTEE THE INFORMATION SHOWN NOR ACCEPT ANY RESPONSIBILITY FOR INACCURACIES OR INCOMPLETE DATA.
- SERVICES & ACCESSSES TO THE EXISTING PROPERTIES ARE TO BE MAINTAINED IN WORKING ORDER AT ALL TIMES DURING CONSTRUCTION.
- ADJUST EXISTING SERVICE COVERS TO SUIT NEW FINISHED LEVELS TO RELEVANT AUTHORITY REQUIREMENTS WHERE NECESSARY.
- REINSTATE AND STABILISE ALL DISTURBED LANDSCAPED AREAS.
- MINIMUM GRADE OF SUBSOIL SHALL BE 0.5% (1:200) FALL TO OUTLETS.
- ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES ARE TO BE CONSTRUCTED, PLACED AND MAINTAINED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS, EROSION AND SEDIMENTATION CONTROL PLAN AND NORTHERN BEACHES COUNCIL REQUIREMENTS WHERE APPLICABLE.
- CONTRACTOR TO CHECK AND CONFIRM SITE DRAINAGE CONNECTIONS ACROSS THE VERGE PRIOR TO COMMENCEMENT OF SITE DRAINAGE WORKS.
- PROPERTIES AFFECTED BY THE WORKS ARE TO BE NOTIFIED IN ADVANCE WHERE DISRUPTION TO EXISTING ACCESS IS LIKELY.



PROPOSED SCOPE OF WORKS

LOCALITY SKETCH

SCALE: N.T.S.

DRAWING SCHEDULE

ID	Description
21J51_DA_C000	COVER SHEET, DRAWING SCHEDULE, NOTES AND LOCALITY SKETCH
21J51_DA_C100	GROUND FLOOR GENERAL ARRANGEMENT PLAN
21J51_DA_C101	GROUND FLOOR DETAIL PLAN, SHEET 1 OF 2
21J51_DA_C102	GROUND FLOOR DETAIL PLAN, SHEET 2 OF 2
21J51_DA_C103	BASEMENT DETAIL PLAN
21J51_DA_C200	STORMWATER MISCELLANEOUS DETAILS AND PIT LID SCHEDULE
21J51_DA_C201	OSD TANK DETAILS AND SECTIONS, SHEET 1 OF 2
21J51_DA_C202	OSD TANK DETAILS AND SECTIONS, SHEET 2 OF 2
21J51_DA_C250	STORMWATER CATCHMENT PLAN
21J51_DA_SE01	SEDIMENT AND EROSION CONTROL PLAN
21J51_DA_SE02	SEDIMENT AND EROSION CONTROL DETAILS

SITWORKS NOTES

- DATUM : A.H.D.
- ORIGIN OF LEVELS : REFER TO BENCH OR STATE SURVEY MARKS WHERE SHOWN ON PLAN.
- CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO THE COMMENCEMENT OF WORK.
- ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS & THE DIRECTIONS OF THE SUPERINTENDENT.
- EXISTING SERVICES UNLESS SHOWN ON THE SURVEY PLAN HAVE BEEN PLOTTED FROM SERVICES SEARCH PLANS AND AS SUCH THEIR ACCURACY CANNOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY.
- WHERE NEW WORKS ABOUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS ACHIEVED.
- THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR.
- CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATION IS TO BE UNDERTAKEN OVER TELSTRA OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS.
- CONTRACTOR TO OBTAIN AUTHORITY APPROVALS WHERE APPLICABLE.
- MAKE SMOOTH TRANSITION TO EXISTING SURFACES AND MAKE GOOD.
- THESE PLANS SHALL BE READ IN CONJUNCTION WITH APPROVED LANDSCAPE, ARCHITECTURAL, STRUCTURAL, HYDRAULIC AND MECHANICAL DRAWINGS AND SPECIFICATIONS OR WRITTEN INSTRUCTIONS THAT MAY BE ISSUED RELATING TO DEVELOPMENT AT THE SITE.
- TRENCHES THROUGH EXISTING ROAD AND CONCRETE PAVEMENTS SHALL BE SAWCUT TO FULL DEPTH OF CONCRETE AND A MINIMUM OF 50mm IN BITUMINOUS PAVING.
- ALL BRANCH GAS AND WATER SERVICES UNDER DRIVEWAYS AND BRICK PAVING SHALL BE LOCATED IN Ø80 uPVC SEWER GRADE CONDUITS EXTENDING A MINIMUM OF 500mm BEYOND EDGE OF PAVING.
- GRADES TO PAVEMENTS TO BE AS IMPLIED BY RL'S ON PLAN. GRADE EVENLY BETWEEN NOMINATED RL'S. AREAS EXHIBITING PONDING GREATER THAN 5mm DEPTH WILL NOT BE ACCEPTED UNLESS IN A DESIGNATED SAG POINT.
- ALL COVERS AND GRATES ETC TO EXISTING SERVICE UTILITIES ARE TO BE ADJUSTED TO SUIT NEW FINISHED SURFACE LEVELS WHERE APPLICABLE.

EXISTING SERVICES & FEATURES

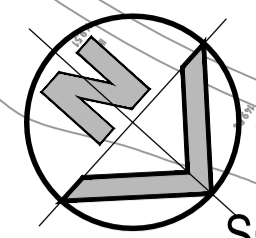
- THE CONTRACTOR SHALL ALLOW FOR THE CAPPING OFF, EXCAVATION AND REMOVAL (IF REQUIRED) OF ALL EXISTING SERVICES IN AREAS AFFECTED BY WORKS WITHIN THE CONTRACT AREA OR AS SHOWN ON THE DRAWINGS UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDENT.
- THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES SERVICES TO ALL BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED.
- PRIOR TO COMMENCEMENT OF ANY WORKS THE CONTRACTOR SHALL GAIN APPROVAL OF HIS PROGRAM FOR THE RELOCATION/ CONSTRUCTION OF TEMPORARY SERVICES.
- CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN SUPPLY TO EXISTING BUILDING REMAINING IN OPERATION DURING WORKS TO THE SATISFACTION AND APPROVAL OF THE SUPERINTENDENT. ONCE DIVERSION IS COMPLETE AND COMMISSIONED, THE CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD TO THE SATISFACTION OF THE SUPERINTENDENT.
- INTERRUPTION TO SUPPLY OF EXISTING SERVICES SHALL BE DONE SO AS NOT TO CAUSE ANY INCONVENIENCE TO THE PRINCIPAL. CONTRACTOR TO GAIN APPROVAL FROM THE SUPERINTENDENT FOR TIME OF INTERRUPTION.
- EXISTING SERVICES, BUILDINGS, EXTERNAL STRUCTURES AND TREES SHOWN ON THESE DRAWINGS ARE EXISTING FEATURES PRIOR TO ANY DEMOLITION WORKS.
- EXISTING SERVICES UNLESS SHOWN ON SURVEY PLAN HAVE BEEN PLOTTED FROM SERVICES SEARCH PLANS AND AS SUCH THEIR ACCURACY CANNOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLETE A 'DIAL BEFORE YOU DIG' SEARCH AND TO ESTABLISH THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY.
- ALL BRANCH GAS AND WATER SERVICES UNDER DRIVEWAYS AND BRICK PAVING SHALL BE LOCATED IN Ø80 uPVC SEWER GRADE CONDUITS EXTENDING A MINIMUM OF 500mm BEYOND EDGE OF PAVING.

SURVEY NOTES

THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY THE SURVEYOR SPECIFIED IN THE TITLE BLOCK. THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN. HENRY AND HYMAS PTY. LTD. DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUITABILITY AS A BASIS FOR CONSTRUCTION DRAWINGS. SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA, CONTACT HENRY AND HYMAS PTY. LTD. THE FOLLOWING NOTES HAVE BEEN TAKEN DIRECTLY FROM ORIGINAL SURVEY DOCUMENTS.

FOR DA ONLY

SURVEY INFORMATION				Client				Telephone				Project				Drawn				Designed				Date			
SURVEYED BY REAL SERVE				REVELOP				+61 2 9417 8400				PROPOSED RETAIL DEVELOPMENT				S.Chen				T.Chan				OCT 2021			
DATUM: AHD				Architect				+61 2 9417 8337				22 FOREST WAY, FRENCHS FOREST, NSW				Checked				Approved				Scale @A1			
ORIGIN OF LEVELS: PM 300				nettletontribe				www.henryandhymas.com.au				COVER SHEET, DRAWING SCHEDULE, NOTES AND LOCALITY SKETCH				T.Rozehnal				A.Francis				NTS			
REVISION				DRAWN				DESIGNED				DATE				Drawing number				Revision							
02 ISSUED FOR DA ONLY				AFe TC 25.09.2023												21J51_DA_C000				02							
01 PRELIMINARY ISSUE				SC TC 12.11.2021																							



SORLIE PLACE

NEW AWNINGS AND ROOFS TO CONNECT TO OSD 3. REFER TO C250

EXISTING BUILDING

PROPOSED OSD TANK 3 WITHIN PLANT ROOM S06. REFER TO BASEMENT PLAN C103 FOR MORE DETAILS

ALL EXISTING DOWNPIPES AND DRAINAGE LINES FROM EXISTING ROOF TO BE REROUTE PAST OSD TO EXISTING STREET DRAINAGE.

REPLACE REDUNDANT PORTION OF VEHICLE CROSSING WITH KERB AND GUTTER.

PROVIDE NEW VEHICLE CROSSING TO COUNCIL'S STANDARDS

PROVIDE NEW VEHICLE CROSSING TO COUNCIL'S STANDARDS

REFER TO HYDRAULIC ENGINEERS DRAWINGS FOR DRAINAGE CONNECTIONS FROM NEW AREA INTO OSD 2

PROPOSED OSD 2 REFER TO DWG C201 FOR MORE DETAILS

CONNECT TO EXISTING STORMWATER PIT

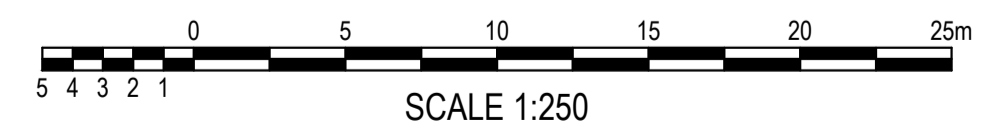
POTHOLE PRIOR CONSTRUCTION / CC STAGE FUTURE NO SERVICES CLASH

LEGEND

- EXISTING BOUNDARY
- PROPOSED BOUNDARY
- PROPOSED JUNCTION PITS
- PROPOSED SURFACE INLET PITS
- PROPOSED PIT TAG
- LINE LETTER PIT NUMBER
- STORMWATER UPSTREAM INVERT RL
- STORMWATER PIPE DIAMETER & CLASS
- STORMWATER PIPE LENGTH
- STORMWATER PIPE GRADE
- STORMWATER DOWNSTREAM INVERT RL
- EXISTING STORMWATER PIT
- EXISTING TELSTRA SERVICE PIT
- EXISTING STORMWATER PIPE
- PROPOSED STORMWATER PIPE
- EXISTING CONTOURS
- PROPOSED SPOT LEVEL
- EXISTING ELECTRICAL MAINS LINE
- EXISTING GAS LINE
- EXISTING SEWER LINE
- EXISTING TELSTRA LINES
- EXISTING WATER LINE
- EXISTING DRAINAGE LINE

FOR CONTINUATION REFER TO DWG. 21J51_DA_C101

GROUND FLOOR DETAIL PLAN
SCALE: 1:250



FOR DA ONLY

SURVEY INFORMATION		SURVEYED BY		REAL SERVE	
DATUM: AHD		ORIGIN OF LEVELS: PM 300			
REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION
02	PRELIMINARY ISSUE	MS	TC	25.09.2023	
01	PRELIMINARY ISSUE	SC	TC	12.11.2021	

Client
REVELOP

Architect
nettleontribe

This drawing and design remains the property of Henry & Hymas and may not be copied in whole or in part without the prior written approval of Henry & Hymas.

Suite 2.01
828 Pacific Highway
Gordon NSW 2072

Telephone
+61 2 9417 8400

Facsimile
+61 2 9417 8337

Email
email@hhconsuit.com.au

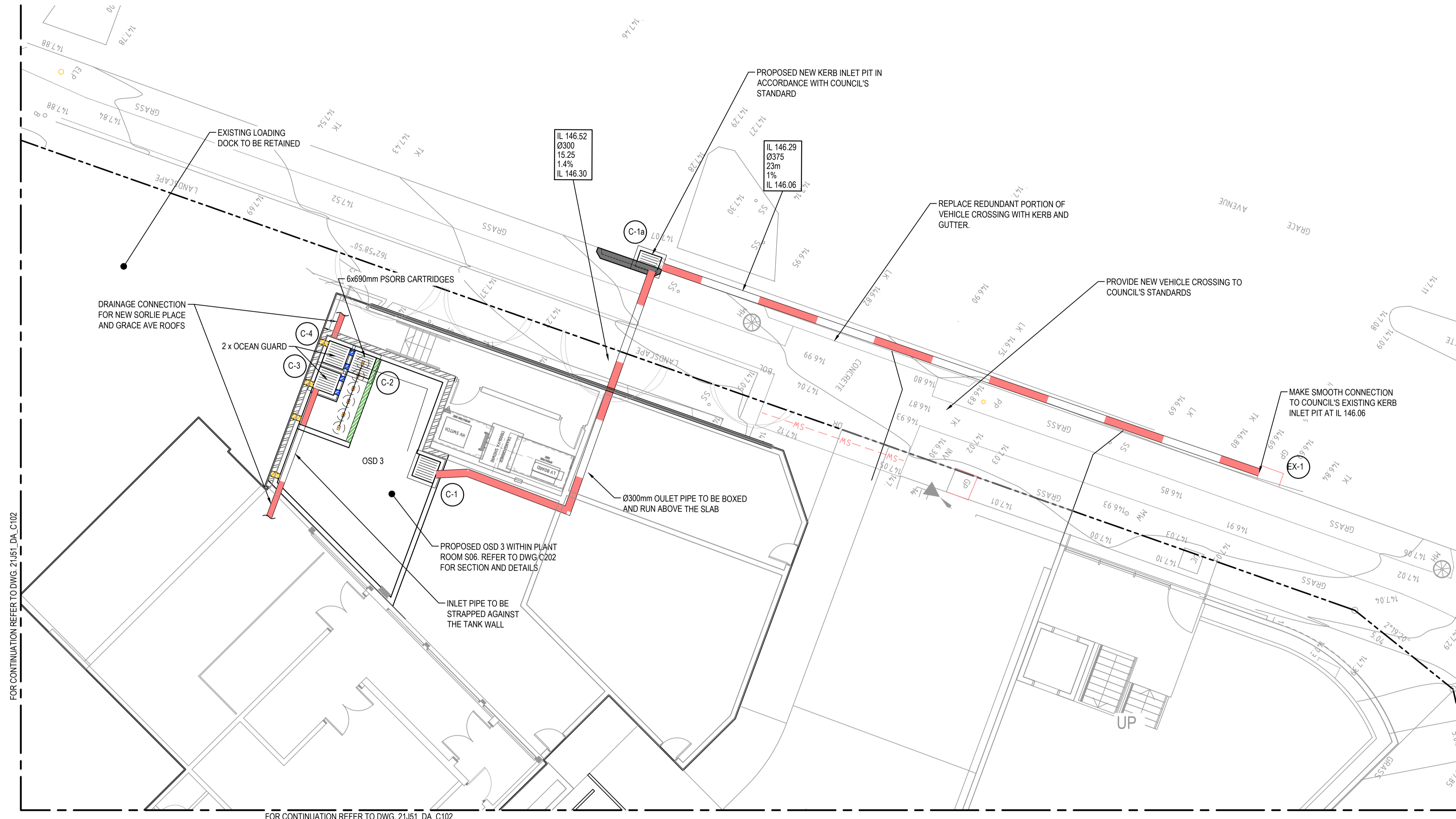
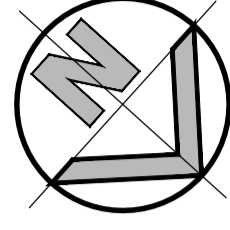
Web
www.henryandhymas.com.au



Project
**PROPOSED RETAIL DEVELOPMENT
22 FOREST WAY, FRENCHS FOREST, NSW**

Title
**GROUND FLOOR DETAIL PLAN
SHEET 2 OF 3**

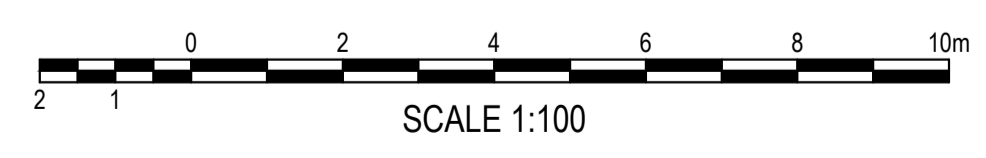
Drawn	Designed	Date
S.Chen	T.Chan	OCT 2021
Checked	Approved	Scale @A1
T.Rozehnal	A.Francis	1:250
Drawing number	Revision	
21J51_DA_C102	02	



LEGEND

	EXISTING BOUNDARY
	PROPOSED BOUNDARY
	PROPOSED JUNCTION PITS
	PROPOSED SURFACE INLET PITS
	PROPOSED PIT TAG
	LINE LETTER PIT NUMBER
	STORMWATER UPSTREAM INVERT RL
	STORMWATER PIPE DIAMETER & CLASS
	STORMWATER PIPE LENGTH
	STORMWATER PIPE GRADE
	STORMWATER DOWNSTREAM INVERT RL
	EXISTING STORMWATER PIT
	EXISTING TELSTRA SERVICE PIT
	EXISTING STORMWATER PIPE
	PROPOSED STORMWATER PIPE
	EXISTING CONTOURS
	PROPOSED SPOT LEVEL
	EXISTING ELECTRICAL MAINS LINE
	EXISTING GAS LINE
	EXISTING SEWER LINE
	EXISTING TELSTRA LINES
	EXISTING WATER LINE
	EXISTING DRAINAGE LINE

BASEMENT DETAIL PLAN
SCALE: 1:100



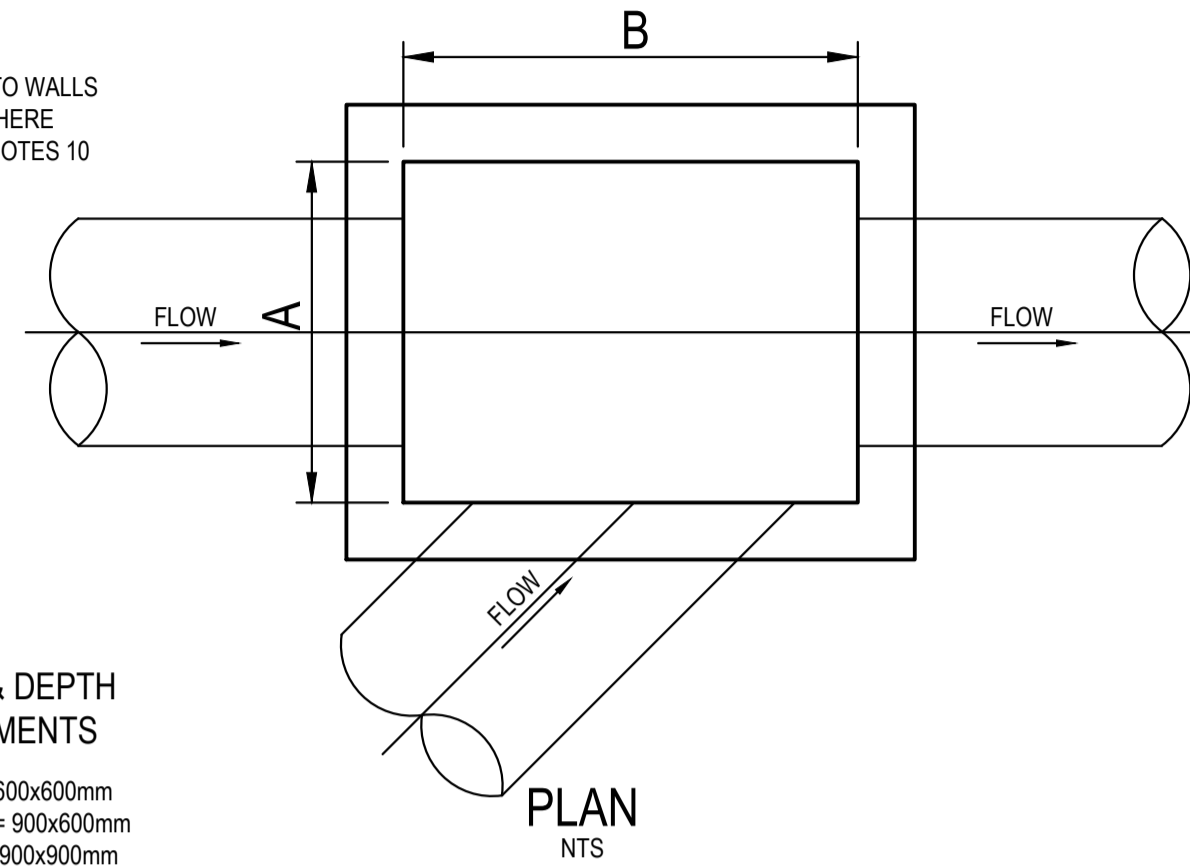
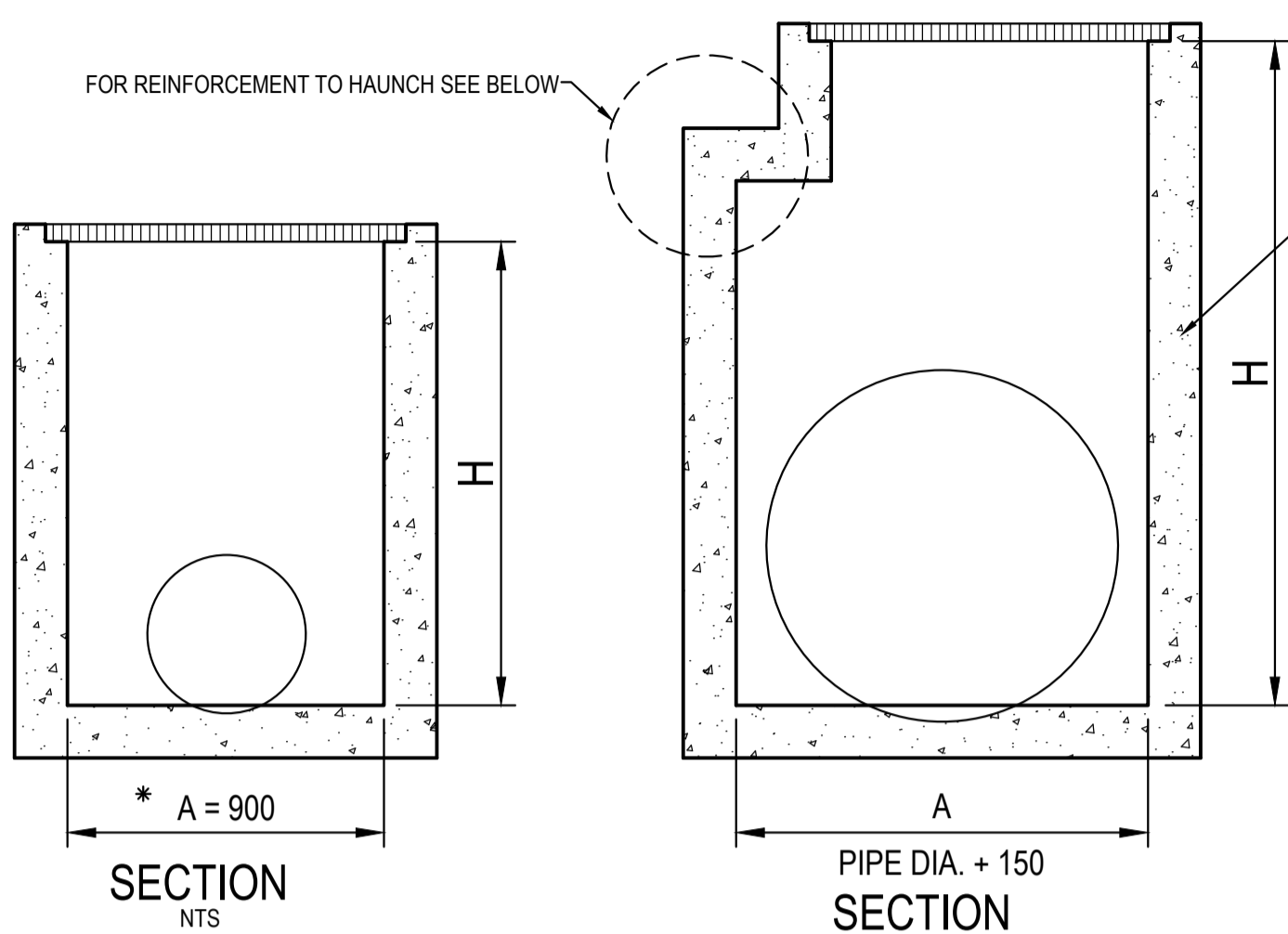
FOR DA ONLY

<p>SURVEY INFORMATION SURVEYED BY REAL SERVE</p> <p>DATUM: AHD ORIGIN OF LEVELS: PM 300</p>					<p>Client REVELOP</p> <p>Architect nettletontribe</p>				<p>Suite 2.01 828 Pacific Highway Gordon NSW 2072</p> <p>Telephone +61 2 9417 8400 Facsimile +61 2 9417 8337 Email email@hhconsuit.com.au Web www.henryandhymas.com.au</p>				<p>Project PROPOSED RETAIL DEVELOPMENT 22 FOREST WAY, FRENCHS FOREST, NSW</p> <p>Title BASEMENT DETAIL PLAN</p>				<p>Drawn S.Chen</p>		<p>Designed T.Chan</p>		<p>Date OCT 2021</p>													
	<table border="1"> <tr> <th>REVISION</th> <th>AMENDMENT</th> <th>DRAWN</th> <th>DESIGNED</th> <th>DATE</th> <th>REVISION</th> <th>AMENDMENT</th> <th>DRAWN</th> <th>DESIGNED</th> <th>DATE</th> </tr> <tr> <td>01</td> <td>ISSUED FOR DA ONLY</td> <td></td> <td></td> <td>25.09.2023</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	01	ISSUED FOR DA ONLY			25.09.2023						<p>This drawing and design remains the property of Henry & Hymas and may not be copied in whole or in part without the prior written approval of Henry & Hymas.</p>				<p>Checked T.Rozehnal</p> <p>Approved A.Francis</p>				<p>Drawing number 21J51_DA_C103</p>		<p>Scale @A1 1:100</p>		<p>Revision 01</p>
REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE																									
01	ISSUED FOR DA ONLY			25.09.2023																														

TYPICAL PIT CHAMBER SIZES
IT IS THE CONTRACTORS RESPONSIBILITY TO SELECT PIT CHAMBER SIZE WITH REGARDS TO PIPE SIZE, DEPTH TO INVERT AND SKEW ANGLE. REFER SKETCHES BELOW.

- SELECT PIT CHAMBER USING THE STEPS BELOW:
- SELECT PIT CHAMBER SIZE DEPENDING ON THE PIPE DIAMETERS.
- CHECK PIT CHAMBER SIZE TO SATISFY DEPTH TO INVERT REQUIREMENTS.
- CHECK PIT CHAMBER DIMENSIONS TO SATISFY THE SKEW ANGLE IN THE TABLE.

FOR B = 600mm - MAX. SIDE ENTRY PIPE AT 45° SKEW = 225mm
 FOR B = 900mm - MAX. SIDE ENTRY PIPE AT 45° SKEW = 375mm
 FOR B = 1200mm - MAX. SIDE ENTRY PIPE AT 45° SKEW = 600mm
 FOR B = 1500mm - MAX. SIDE ENTRY PIPE AT 45° SKEW = 825mm
 FOR B = 1900mm - MAX. SIDE ENTRY PIPE AT 45° SKEW = 1050mm



2 PIT SIZE & DEPTH REQUIREMENTS

H = 0-900mm - AxB = 600x600mm
 H = 900-1200mm - AxB = 900x600mm
 H = >1200mm - AxB = 900x900mm

3 PIT CHAMBER FOR SIDE ENTRY ON SKEW

FOR PIPES UP TO 600 DIA.

SIEVE SIZE (MM)	WEIGHT PASING (%)
75.0	100
9.5	100 TO 50
2.36	100 TO 30
0.60	50 TO 15
0.075	25 TO 0

SIEVE SIZE (MM)	WEIGHT PASING (%)
19.0	100
2.36	100 TO 50
0.60	90 TO 20
0.30	60 TO 10
0.15	25 TO 0
0.075	10 TO 0

SUPPORT TYPE	BED ZONE X	HAUNCH ZONE Y	BED AND HAUNCH ZONES COMPACTION	MAX BEDDING FACTOR
HS1		0.1D	50	2.0
HS2	100 IF D<=1500, OR 150 IF D>=1500	0.3D	60	2.5
HS3		0.3D	70	4.0

LIGHT DUTY IN LANDSCAPED AND PEDESTRIAN AREAS HEAVY DUTY IN VEHICULAR PAVEMENTS. AIR TIGHT CAST IRON OR BRASS SCREW OR BOLT DOWN CAP.

PIT LID SCHEDULE

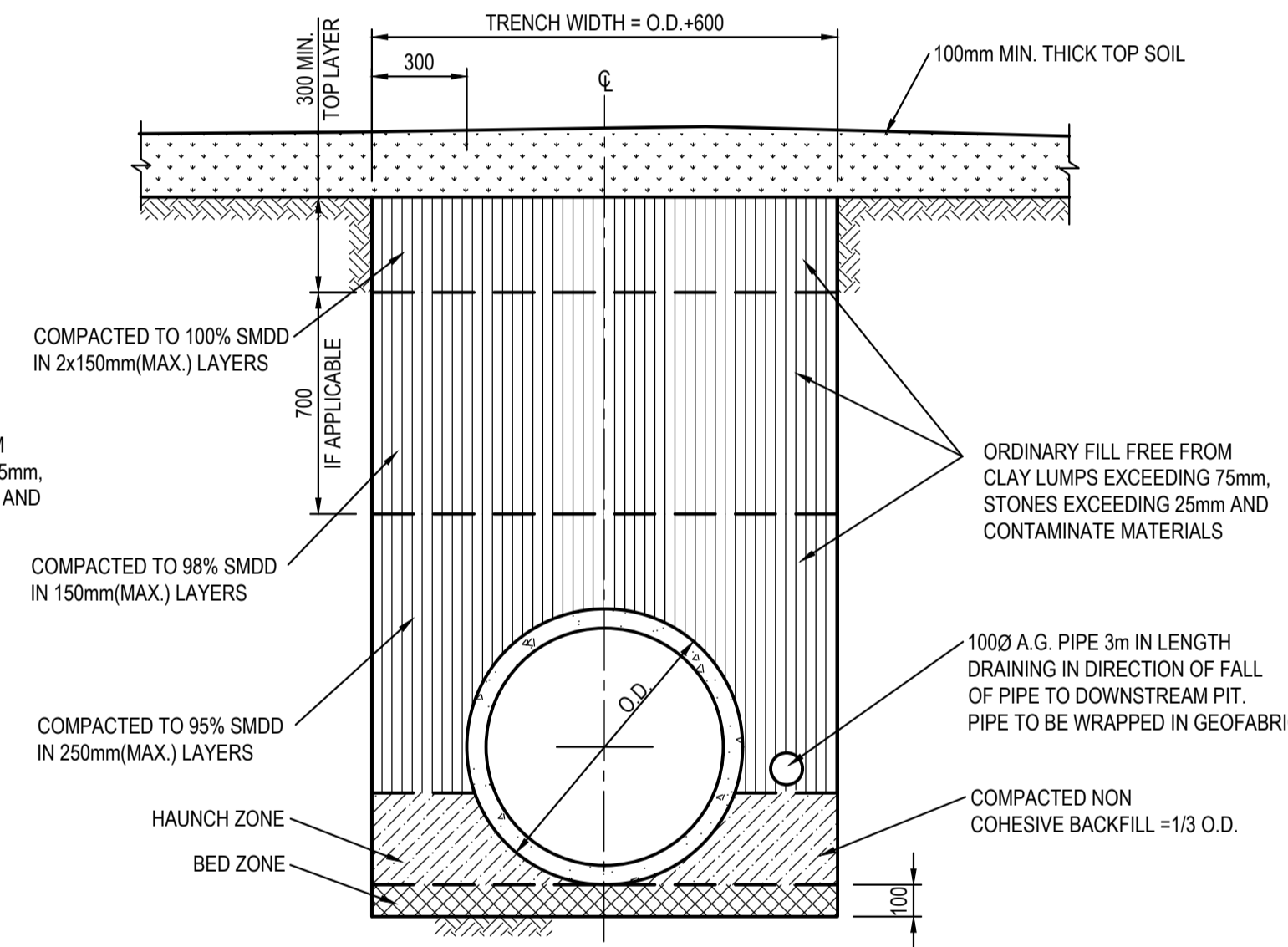
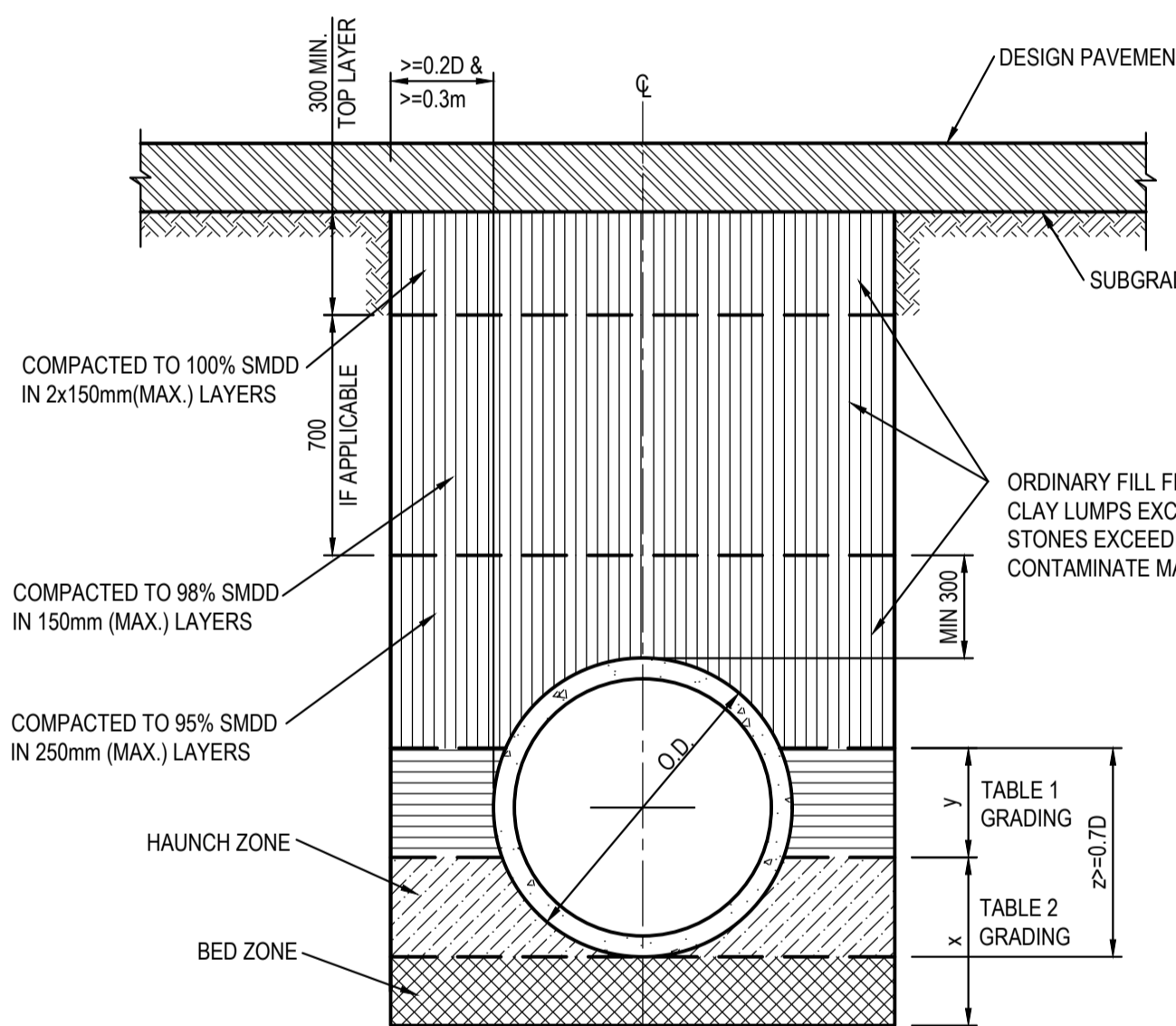
PIT/STRUCTURE NUMBER	DESCRIPTION
A-6, B-5, A-3, B-4, C-3	PROPOSED HINGED 900x900 MEDIUM DUTY GRATED LID CLASS 'C' WITHIN OSD TANK IN ACCORDANCE WITH NORTHERN BEACHES COUNCIL'S REQUIREMENTS AND TO BE FITTED WITH OCEANGUARD 200 MICRON BASKET PIT BASKET OR APPROVED EQUIVALENT.
A-1, A-2, A-4, A-5, B-1, B-2, B-3, C-1, C-2, C-4	PROPOSED HINGED 900x900 MEDIUM DUTY GRATED LID CLASS 'C' IN ACCORDANCE WITH NORTHERN BEACHES COUNCIL'S REQUIREMENTS.
6D-1, 6D-2	PROPOSED 200mm WIDE GRATED DRAIN MEDIUM DUTY CLASS 'C' IN ACCORDANCE WITH NORTHERN BEACHES COUNCIL'S REQUIREMENTS.
EX-1, EX-2, EX-3	CONNECT TO EXISTING PITS
D-1, D-2	PROPOSED SURFACE INLET PIT WITH HINGED 900x900 MEDIUM DUTY GRATED LID CLASS 'C' IN ACCORDANCE WITH NORTHERN BEACHES COUNCIL'S REQUIREMENTS AND TO BE FITTED WITH OCEANGUARD 200 MICRON BASKET PIT BASKET OR APPROVED EQUIVALENT.
C-1a	PROPOSED SURFACE INLET PIT WITH HINGED 900x900 HEAVY DUTY GRATED LID CLASS 'D' IN ACCORDANCE WITH NORTHERN BEACHES COUNCIL'S REQUIREMENTS.

* A = 600 FOR PIPES UP TO 375 DIA.

- PIT CHAMBER DIMENSIONS FOR PIPES UP TO 600 DIA.

- PIT CHAMBER FOR PIPES GREATER THAN 600 DIA.

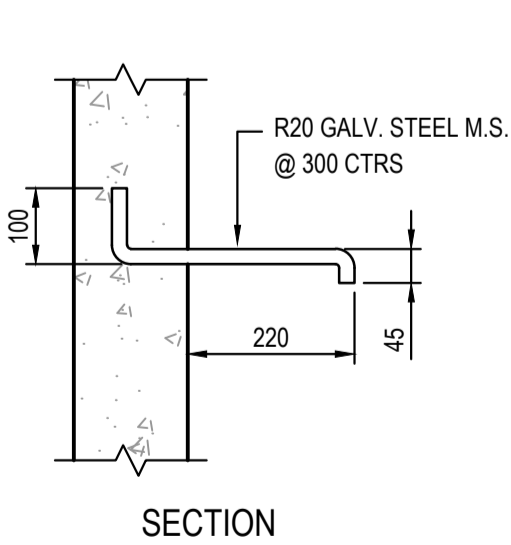
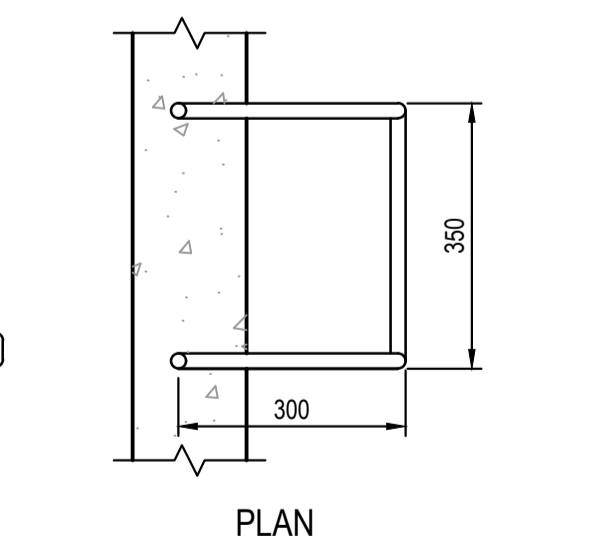
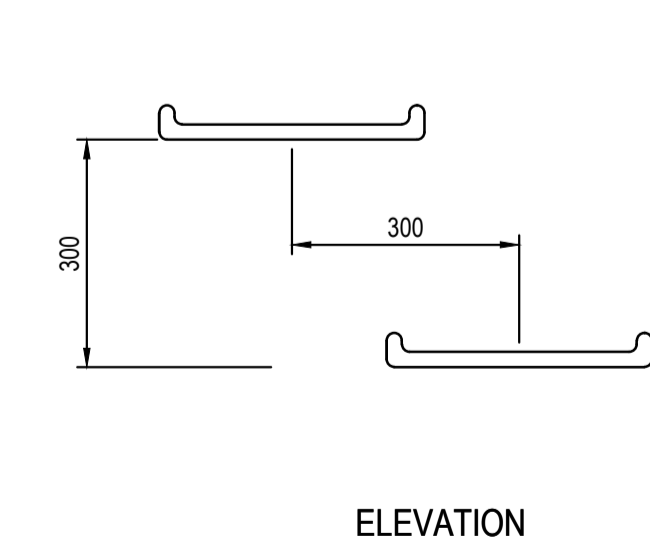
- PIT CHAMBER FOR SIDE ENTRY ON SKEW



PIPE TRENCH INSTALLATION BENEATH PAVEMENT
 (HS SUPPORT TO BE USED UNDER ROADWAY)
 SCALE 1:20

NOTE:
 TYPE HS2 TO BE USED AS A TYPICAL SUPPORT FOR TRENCHES UNDER ROADWAY UNLESS SPECIFIED SEPERATELY

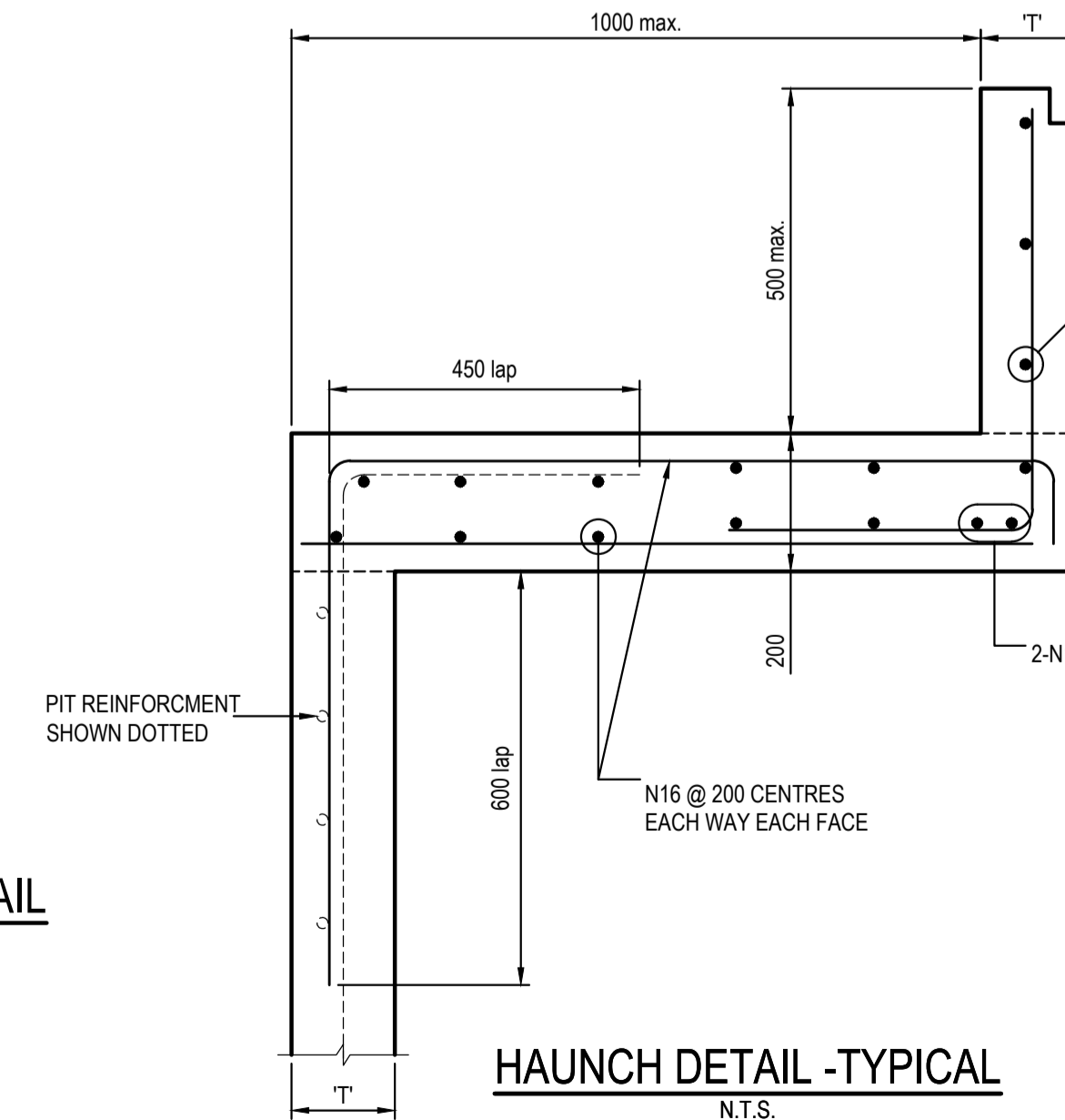
PIPE TRENCH INSTALLATION IN LANDSCAPE AREAS
 (H1 & H2 SUPPORT)
 SCALE 1:20



TYPICAL STEP IRON DETAIL
 SCALE 1:10

150 WALL - CORNER DETAIL
 SCALE 1:20

200 WALL - CORNER DETAIL
 SCALE 1:20



DRAINAGE NOTES:

- ALL STORMWATER WORK TO COMPLY WITH AS 3500 PART 3.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE MINIMUM COVER OF 600mm ON ALL PIPES.
- PROTECTION OF PIPES DUE TO LOADS EXCEEDING W7 WHEEL LOAD SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- BEDDING TYPE SHALL BE TYPE H2 FOR RCP. WHERE NECESSARY THE OVERLAY ZONE SHALL BE REDUCED TO ACCOMMODATE PAVEMENT REQUIREMENTS. REFER TO THIS DRAWING FOR DETAILS.
- MINIMUM COVER OVER EXISTING PIPES FOR PROTECTION DURING CONSTRUCTION SHALL BE 800mm.
- NO CONSTRUCTION LOADS SHALL BE APPLIED TO PLASTIC PIPES.
- FINISHED SURFACE LEVELS SHOWN ON LAYOUT PLAN DRGS TAKE PRECEDENCE OVER DESIGN DRAINAGE SURFACE LEVELS.
- ALL PIPES UP TO AND INCLUDING 300 DIA. SHALL BE SOLVENT OR RUBBER RING JOINTED PVC CLASS SH PIPE TO AS1260. ALL OTHER PIPES TO BE RCP USING CLASS 2 RUBBER RING JOINTED PIPE. HARDIES FRC PIPE MAY BE USED IN LIEU OF RCP IF DESIRED IN GROUND. ALL AERIAL PIPES TO BE PVC CLASS SH.
- ALL PITS IN NON TRAFFICABLE AREAS TO BE PREFABRICATED POLYESTER CONCRETE 'POLYCRETE' WITH 'LIGHT DUTY' CLASS B GALV. MILD STEEL GRATING AND FRAME. ALL PITS IN TRAFFICABLE AREAS (CLASS 'D' LOADING MAX) TO HAVE 150mm THICK CONCRETE WALLS AND BASE CAST IN-SITU f_c=32 MPa, REINFORCED WITH N12-200 BOTH LOADING WAYS CENTRALLY PLACE. U.N.O. ON SEPARATE DESIGN DRAWINGS IN THIS SET. GALV.MILD STEEL GRATING AND FRAME TO SUIT DESIGN LOADING. PRECAST PITS, RECTANGULAR OR CIRCULAR IN SHAPE, MAY BE USED IN LIEU AND SHALL COMPLY WITH RELEVANT AUSTRALIAN STANDARDS.
- ALL PITS, GRATINGS AND FRAMES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION AND TO BE IN ACCORDANCE WITH AS3500.3 AND AS3996.
- PIT CHAMBER DIMENSIONS ARE TO BE SELECTED TO SATISFY THE FOLLOWING:
 - PIPE SIZE
 - DEPTH TO INVERT
 - SKEW ANGLE
 REFER TYPICAL PIT CHAMBER DETAILS BELOW
 IF PIT LID SIZE IS SMALLER THAN THE PIT CHAMBER SIZE THEN THE PIT LID IS TO BE CONSTRUCTED ON THE CORNER OF THE PIT CHAMBER WITH THE STEP IRONS DIRECTLY BELOW. ALTERNATIVELY THE PIT LID TO BE USED, IS TO BE THE SAME SIZE AS THE PIT CHAMBER.
- FOR PIPE SIZES GREATER THAN Ø300mm, PIT FLOOR IS TO BE BENCHED TO FACILITATE FLOW.
- GALVANISED STEP IRONS SHALL BE PROVIDED AT 300 CTS FOR PITS HAVING A DEPTH EXCEEDING 1200mm. SUBSOIL DRAINAGE PIPE SHALL BE PROVIDED IN PIPE TRENCHES ADJACENT TO INLET PIPES. (MINIMUM LENGTH 3m).
- ALL SUBSOIL PIPES SHALL BE 100mm SLOTTED PVC IN A FILTER SOCK, UNO, WITH 3m INSTALLED UPSTREAM OF ALL PITS.
- ALL PIPEWORK SHALL HAVE MINIMUM DIAMETER 100.
- MINIMUM GRADE FOR ROOFWATER DRAINAGE LINES SHALL BE 1%.
- ALL PIPE JUNCTIONS AND TAPER UP TO AND INCLUDING 300 DIA. SHALL BE VIA PURPOSE MADE FITTINGS.
- ALL ROOF DRAINAGE TO BE INSTALLED IN ACCORDANCE WITH AS3500, PART 3. TESTING TO BE UNDERTAKEN AND REPORTS PROVIDED TO THE SUPERINTENDENT.
- LOCATION OF THE DIRECT DOWN PIPE CONNECTIONS MAY VARY ON SITE TO SUIT SITE CONDITIONS, WHERE CONNECTION SHOWN ON LONG SECTIONS CHAINAGES ARE INDICATIVE ONLY.
- PITS IN EXCESS OF 1.5 m DEEP TO HAVE WALL AND FLOOR THICKNESS INCREASED TO 200mm. REINFORCED WITH N12@200 CTS CENTRALLY PLACED BOTH WAYS THROUGHOUT U.N.O.ON SEPARATE DESIGN DRAWINGS IN THIS SET. IF DEPTH EXCEEDS 5m CONTACT ENGINEER.
- SUBSOIL DRAINAGE LINES FOR LANDSCAPE AREA NOT SHOWN ON THESE DRAWINGS. REFER TO LANDSCAPING PLANS FOR DETAILS.
- ALL STORMWATER PITS TO HAVE Ø100 uPVC SLOTTED SUBSOIL PIPES CONNECTED TO THEM. THESE SUBSOILS TO EXTEND 3m UPSTREAM OF THE PIT AT A MINIMUM GRADE.

FOR DA ONLY

SURVEY INFORMATION
 SURVEYED BY REAL SERVE
 DATUM: AHD
 ORIGIN OF LEVELS: PM 300

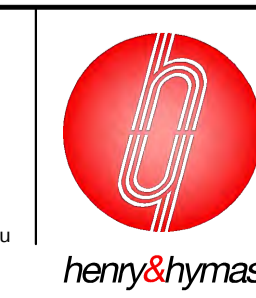
REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR DA ONLY	Afe	TC	25.09.2023					
01	PRELIMINARY ISSUE	SC	TC	12.11.2021					

Client
REVELOP
 Suite 2.01
 828 Pacific Highway
 Gordon NSW 2072

Background
nettletontribe

This drawing and design remains the property of Henry & Hymas and may not be copied in whole or in part without the prior written approval of Henry & Hymas.

Telephone
 +61 2 9417 8400
 Facsimile
 +61 2 9417 8337
 Email
 email@hhconsuit.com.au
 Web
 www.henryandhymas.com.au



Project
PROPOSED RETAIL DEVELOPMENT
 22 FOREST WAY, FRENCHS FOREST, NSW

Drawn
 S.Chen

Designed
 T.Chan

Date
 OCT 2021

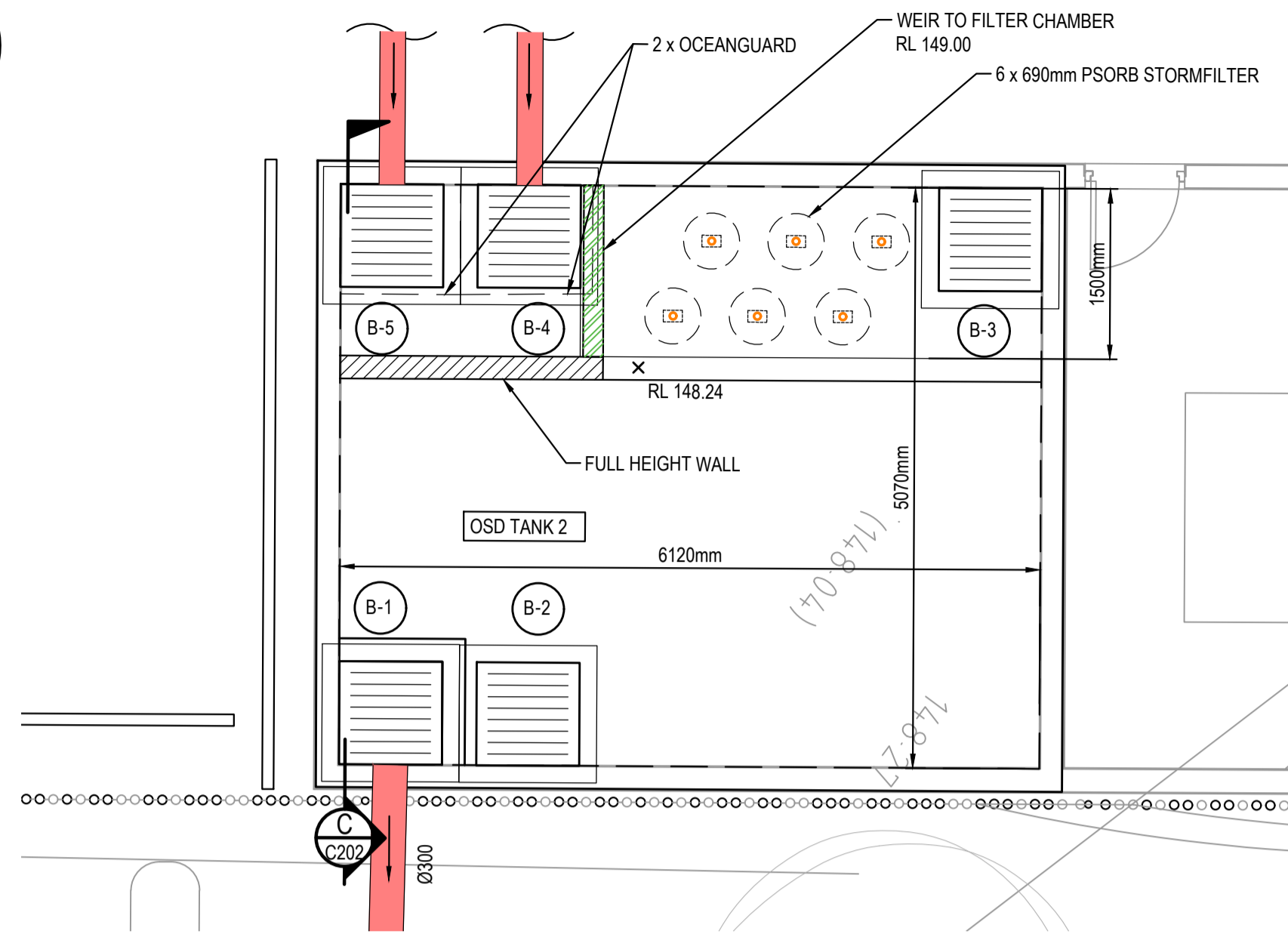
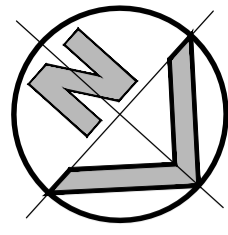
Checked
 T.Rozehnal

Approved
 A.Francis

Scale @A1
 AS NOTED

Drawing number
21J51_DA_C200

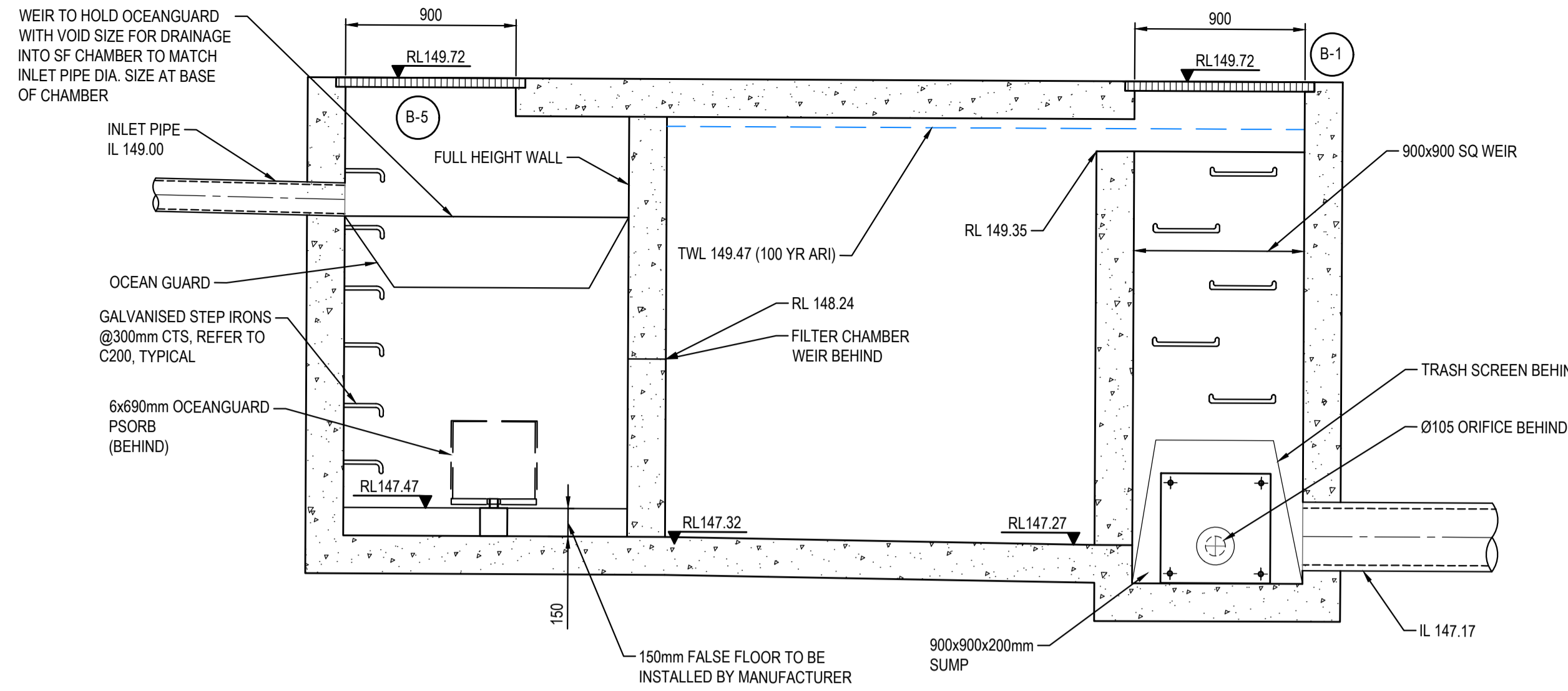
Revision
02



OSD TANK 2 PLAN

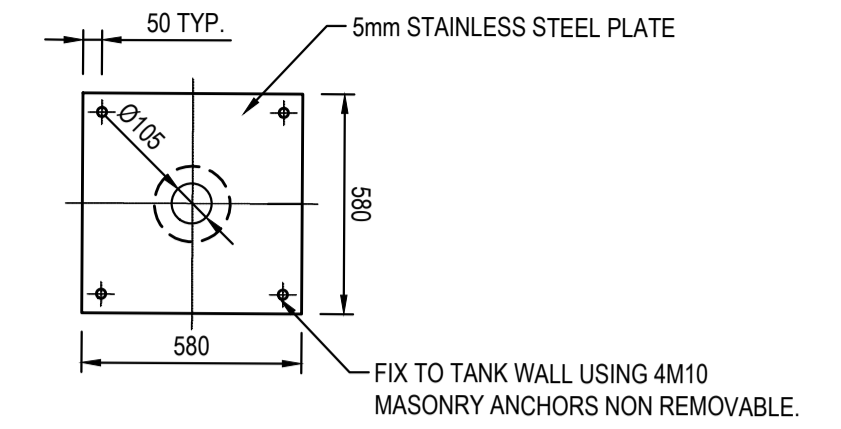
SCALE: 1:50

TOTAL AREA: 30m² (INTERNAL)
REQUIRED VOLUME: 64.3m³



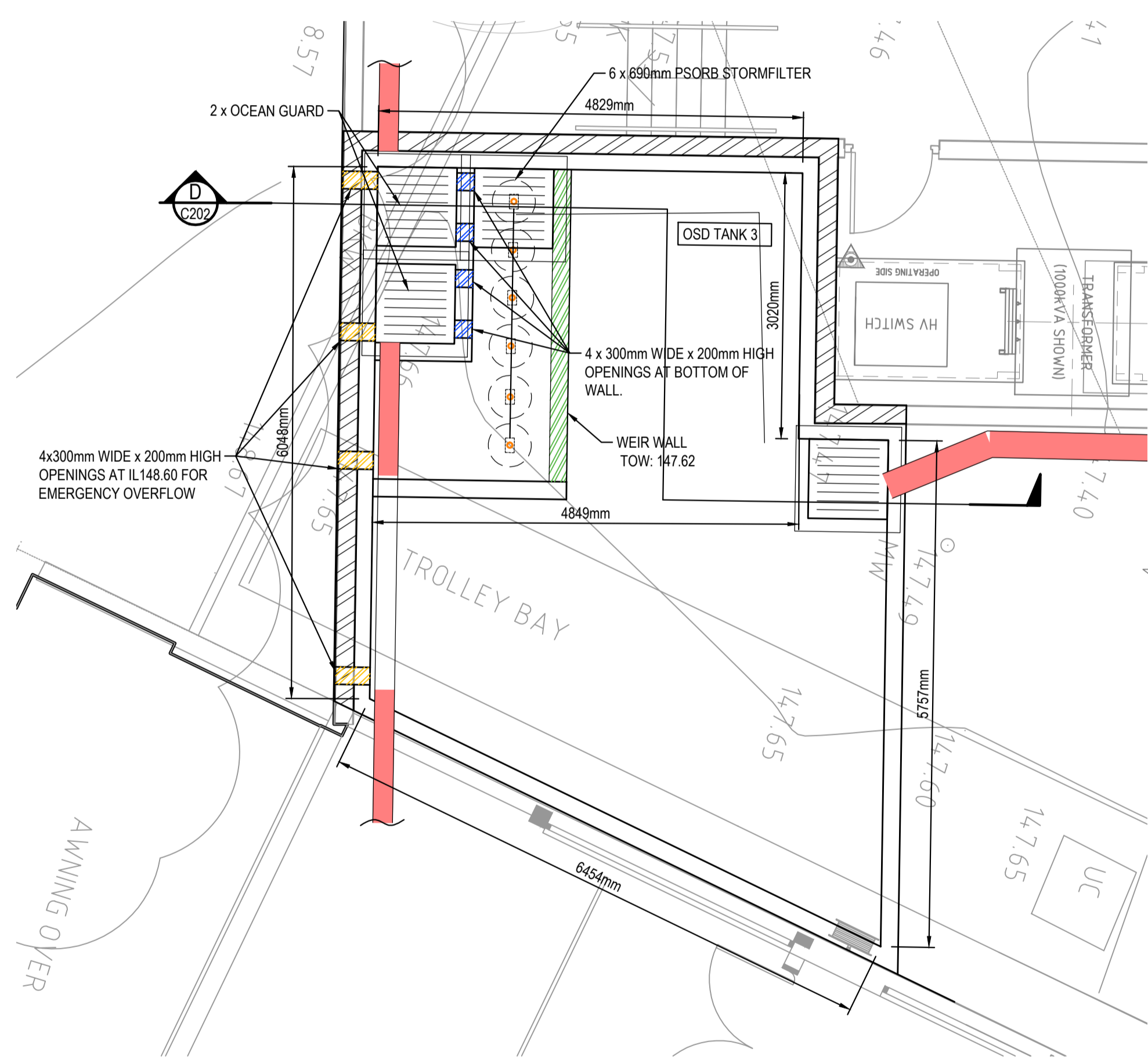
SECTION C

SCALE: 1:25



ORIFICE PLATE 2 DETAIL

SCALE 1:20



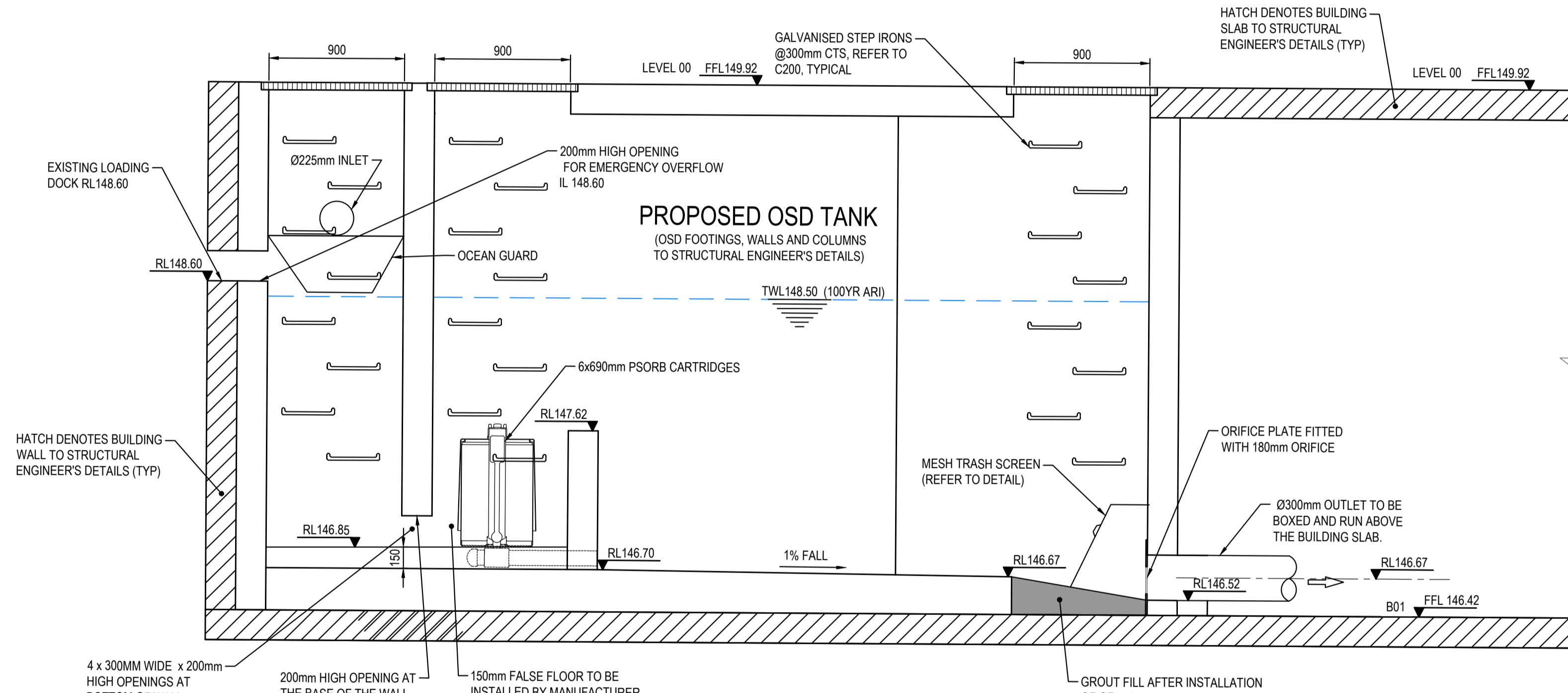
OSD TANK 3 PLAN

SCALE: 1:50

TOTAL AREA: 39.6m² (INTERNAL)
REQUIRED VOLUME: 64.5m³
PROVIDED VOLUME: 71.28m³

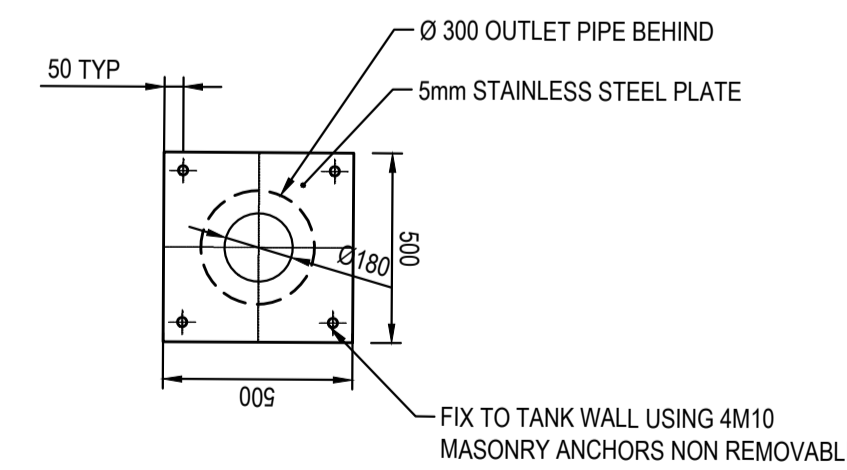
OSD TANK 3 CALCULATION SUMMARY SHEET

ARI	PRE-DEVELOPMENT FLOW (L/s)	POST-DEVELOPMENT FLOW(L/s)
5	53	53
20	85	67
100	123	82



SECTION D

SCALE: 1:25

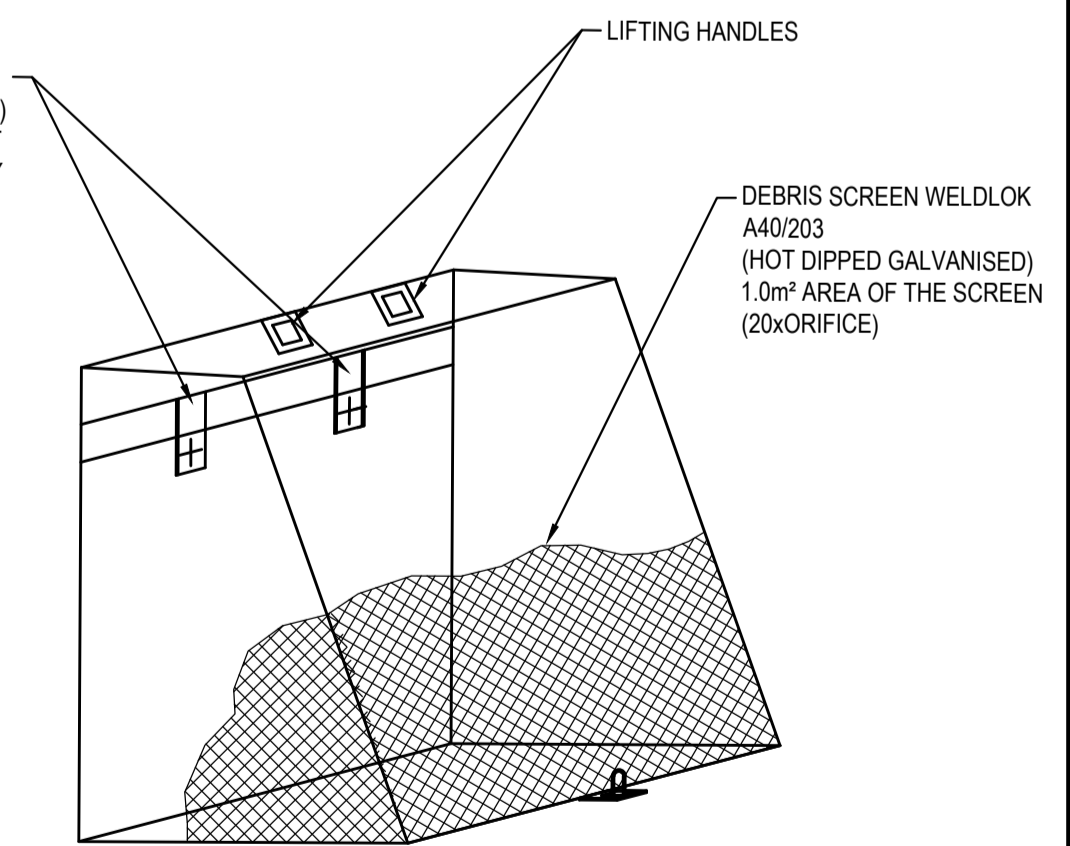


ORIFICE PLATE 3 DETAIL

SCALE 1:20

100 x 16 MOUNTING BAR WITH BRACKETS, SCREEN TO BE ATTACHED (GENERALLY ON A SLIDING MECHANISM) TO THE WALL, BUT SHOULD BE REMOVABLE (WITHOUT THE USE OF TOOLS) TO PERMIT CLEANSING AND EASY INSPECTION OF THE OUTLET CONTROL. ALL STEEL TO BE HOT DIPPED GALVANISED.

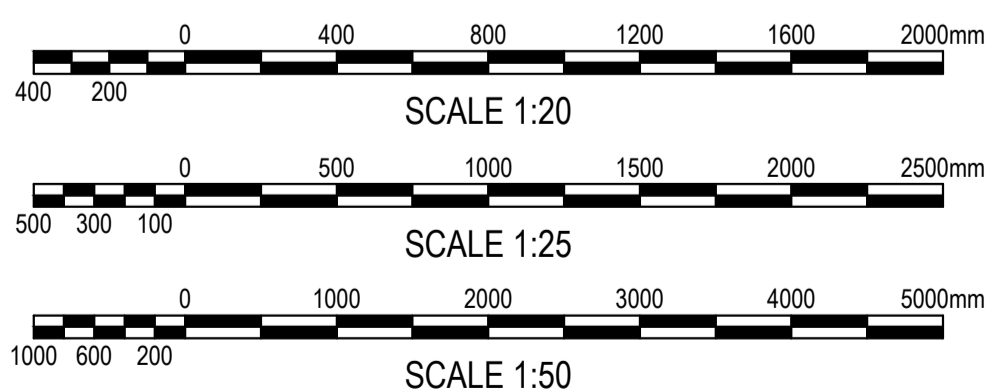
SCREEN TYPE WELDLOK A40/203 IS RECOMMENDED FOR ORIFICES LARGER THAN 150mm AND SCREEN AREA 20 x THE ORIFICE AREA FOR THAT TYPE OF SCREEN - REFER UPRT SECTION 4-13



DEBRIS SCREEN DETAIL

NOT TO SCALE
ALL STEEL TO BE HOT DIPPED GALVANISED

FOR DA ONLY



REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR DA ONLY	Afe	TC	25.09.2023					
01	PRELIMINARY ISSUE	SC	TC	12.11.2021					

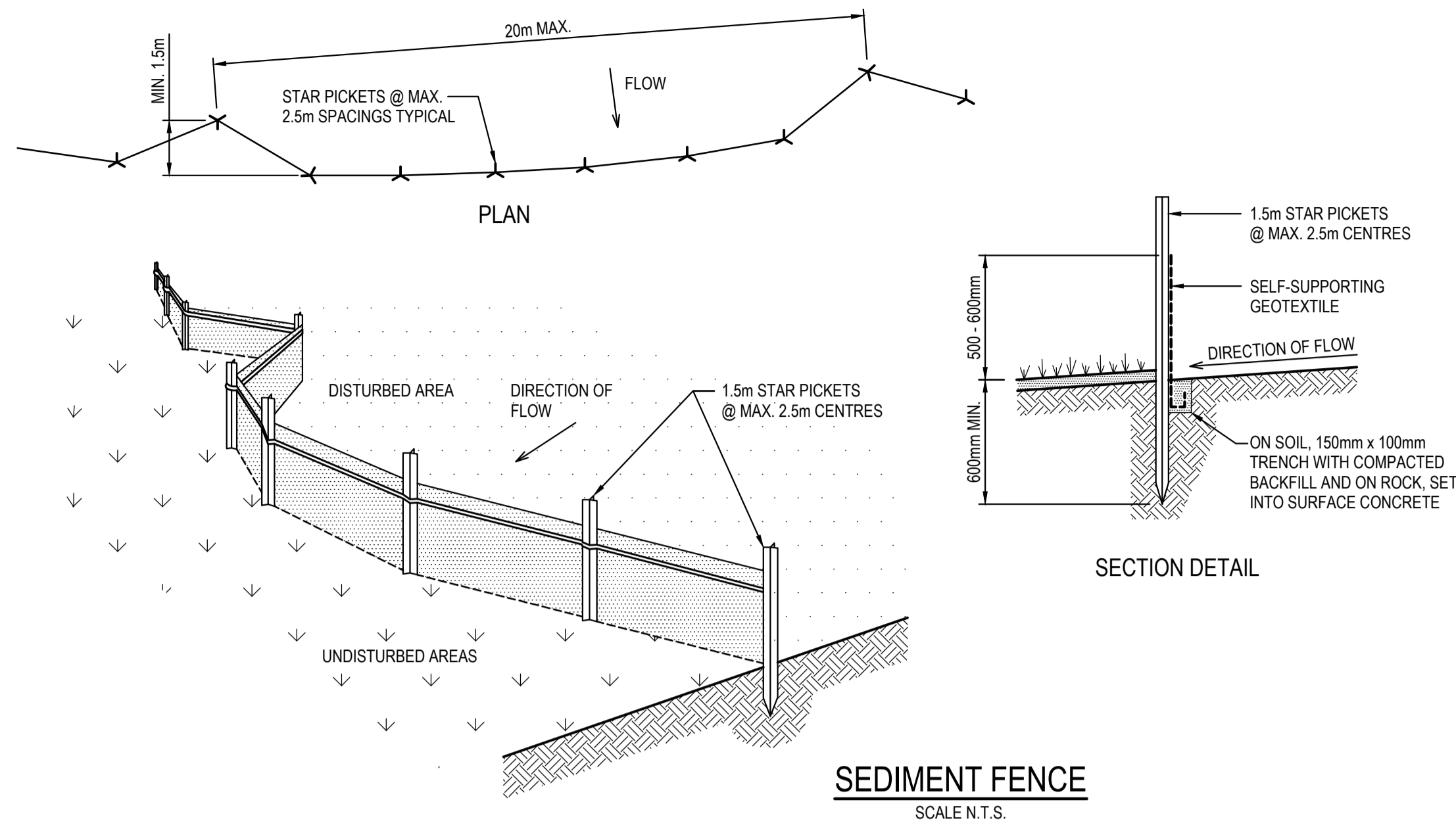
Client: **REVELOP**
 Architect: **nettletontribe**
 Suite 2.01, 828 Pacific Highway, Gordon NSW 2072
 Telephone: +61 2 9417 8400
 Facsimile: +61 2 9417 8337
 Email: email@hcnconsult.com.au
 Web: www.henryandhymas.com.au

This drawing and design remains the property of Henry & Hymas and may not be copied in whole or in part without the prior written approval of Henry & Hymas.



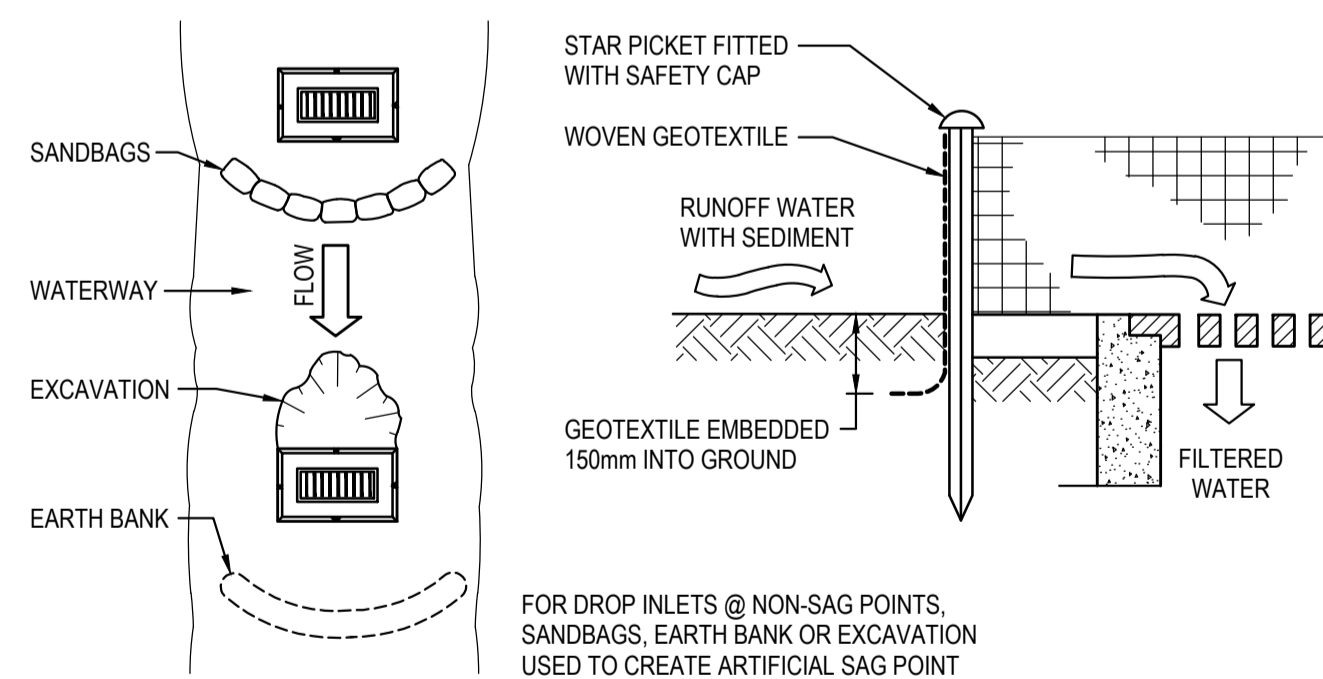
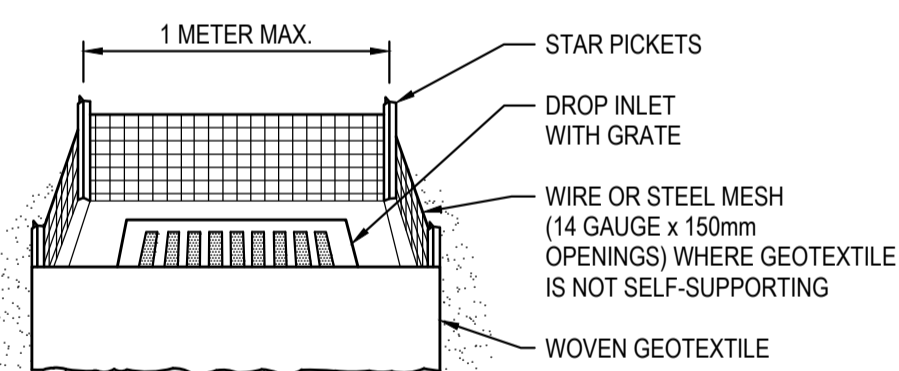
Project: **PROPOSED RETAIL DEVELOPMENT 22 FOREST WAY, FRENCHS FOREST, NSW**
 Title: **OSD TANK DETAILS AND SECTIONS SHEET 2 OF 2**

Drawn	Designed	Date
S.Chen	T.Chan	OCT 2021
Checked	Approved	Scale
T.Rozehnal	A.Francis	@A1 AS NOTED
Drawing number	Revision	
21J51_DA_C202	02	



SEDIMENT FENCE CONSTRUCTION NOTES:

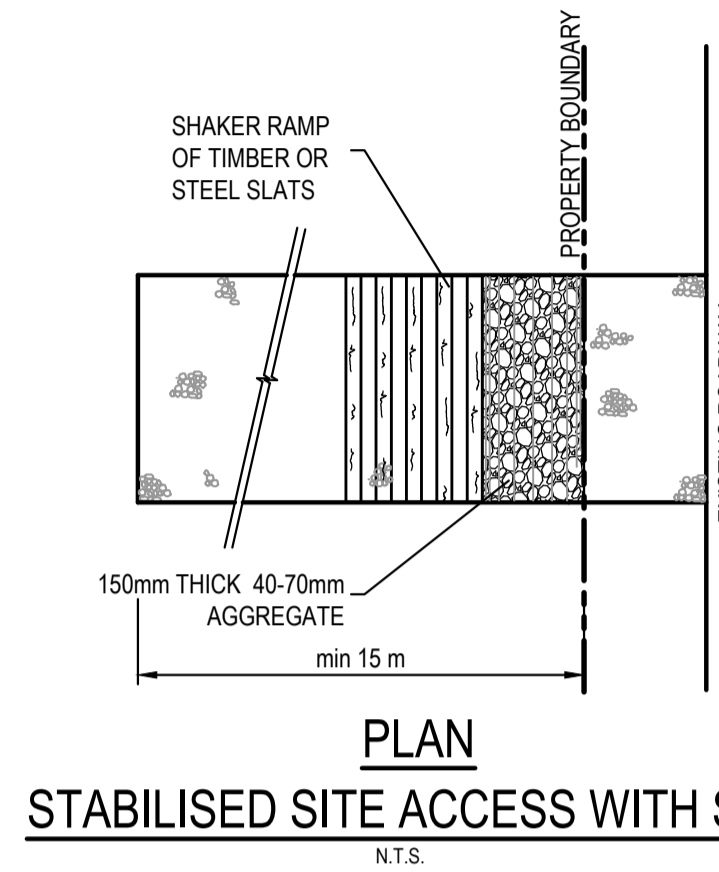
1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND 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 @ 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.



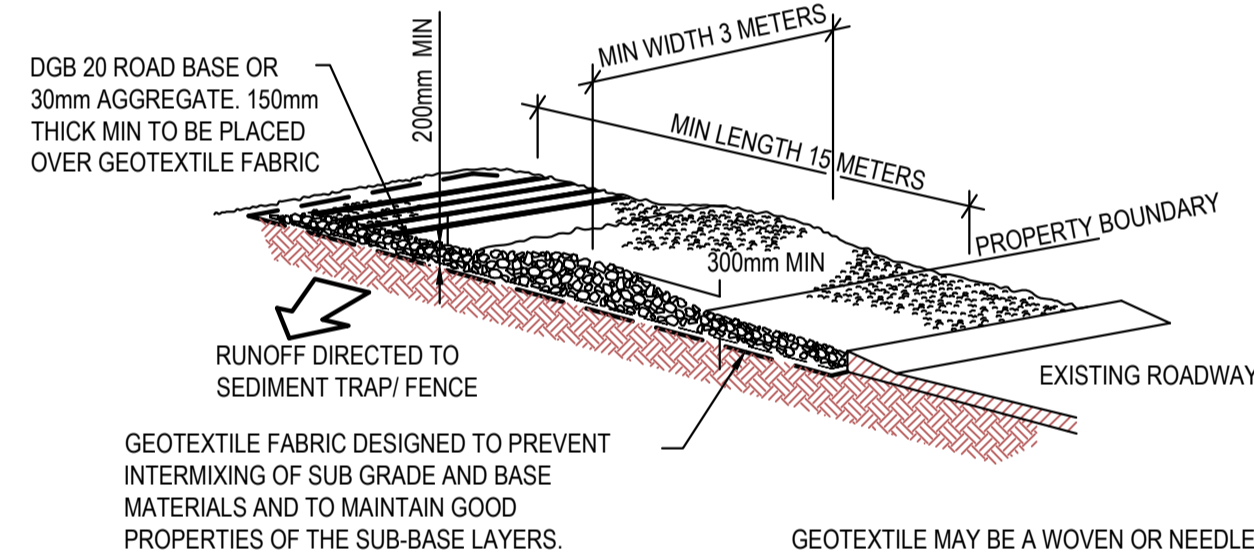
GEOTEXTILE INLET FILTER CONSTRUCTION NOTES:

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE.
2. PICKET SPACING TO BE MAXIMUM 1.0m.
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.

GEOTEXTILE INLET FILTER
SCALE N.T.S.



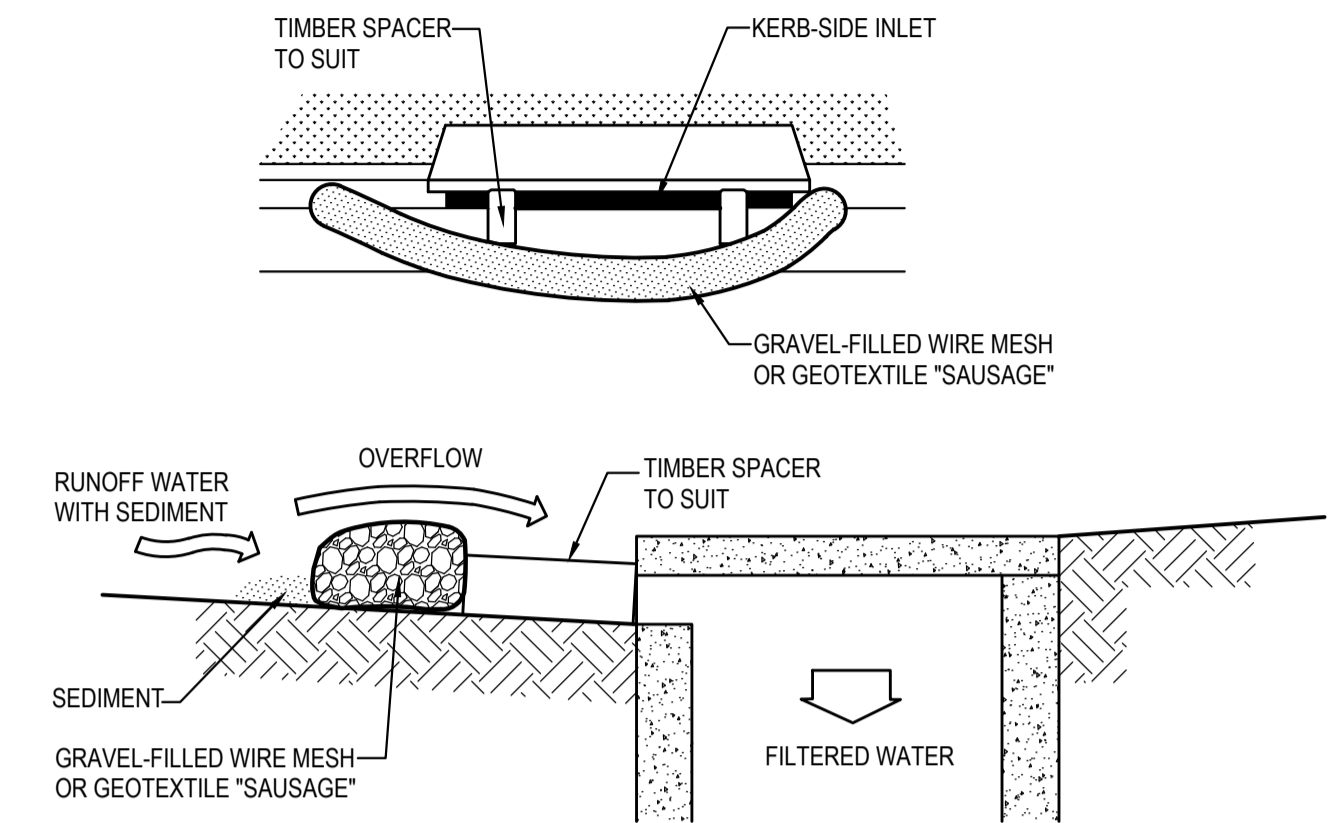
CONSTRUCTION SITE



STABILISED SITE ACCESS WITH SHAKER RAMP
N.T.S.

NOTES:

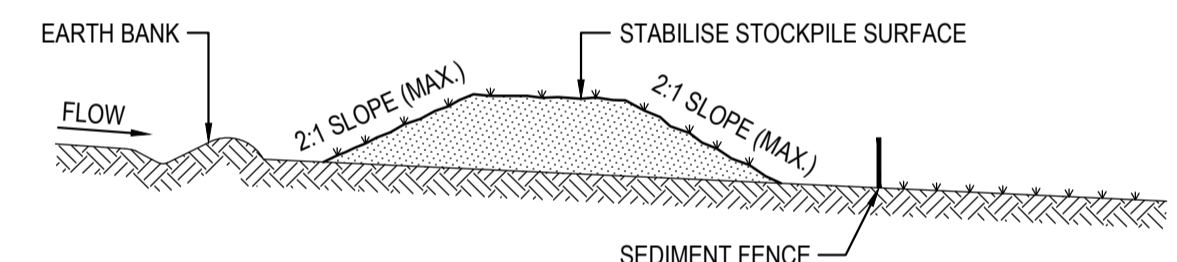
1. THIS DEVICE IS TO BE LOCATED AT ALL EXITS FROM CONSTRUCTION SITE.
2. THIS DEVICE IS TO BE REGULARLY CLEANED OF DEPOSITED MATERIAL SO AS TO MAINTAIN A 50mm DEEP SPACE BETWEEN PLANKS.
3. ANY UNSEALED ROAD BETWEEN THIS DEVICE AND NEAREST ROADWAY IS TO BE TOPPED WITH 100mm THICK 40-70mm SIZE AGGREGATE.
4. ALTERNATIVELY, THREE(3) PRECAST CONCRETE CATTLE GRIDS (AS MANUFACTURED BY *HUMES CONCRETE MAY BE USED. 1, 2 & 3 ABOVE ALSO APPLY.



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 25mm TO 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 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.

MESH & GRAVEL INLET FILTER
SCALE N.T.S.



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 TO 2 METRES DOWNSLOPE.

STOCKPILES
SCALE N.T.S.

FOR DA ONLY

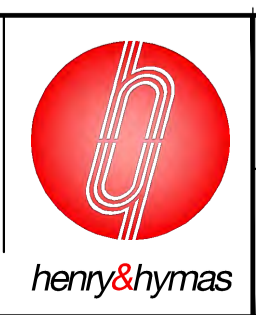
SURVEY INFORMATION
SURVEYED BY
REAL SERVE

DATUM: AHD
ORIGIN OF LEVELS: PM 300

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR DA ONLY	AFe	TC	25.09.2023					
01	PRELIMINARY ISSUE	SC	TC	12.11.2021					

Client	REVELOP
Architect	nettleontribe
This drawing and design remains the property of Henry & Hymas and may not be copied in whole or in part without the prior written approval of Henry & Hymas.	

Suite 2.01 828 Pacific Highway Gordon NSW 2072	Telephone +61 2 9417 8400 Facsimile +61 2 9417 8337 Email email@hhconsult.com.au Web www.henryandhymas.com.au
--	--



Project	PROPOSED RETAIL DEVELOPMENT 22 FOREST WAY, FRENCHS FOREST, NSW
Title	SEDIMENT AND EROSION CONTROL DETAILS

Drawn	S.Chen	Designed	T.Chan	Date	OCT 2021
Checked	T.Rozehnal	Approved	A.Francis	Scale	@A1 N.T.S.
Drawing number	21J51_DA_SE02			Revision	02