

STORAGE AND DISTRIBUTION WAREHOUSE LUDDENHAM ROAD, ORCHARD HILLS, NSW CIVIL ENGINEERING WORKS

GENERAL NOTES:

- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH PENRITH CITY 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 & ACCESSES 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 PENRITH CITY 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.

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.



LOCALITY SKETCH

SCALE: N.T.S.

DRAWING SCHEDULE

241745_DA_C000	COVER SHEET, DRAWING SCHEDULE, NOTES AND LOCALITY SKETCH
241745_DA_C100	GENERAL ARRANGEMENT PLAN
241745_DA_C101	DETAIL PLANS SHEET 1 OF 2
241745_DA_C102	DETAIL PLANS SHEET 2 OF 2
241745_DA_C110	SITE SECTIONS - SHEET 1 OF 2
241745_DA_C111	SITE SECTIONS - SHEET 2 OF 2
241745_DA_C200	STORMWATER MISCELLANEOUS DETAILS & PIT SCHEDULE
241745_DA_C201	EASTERN OSD TANK PLANS AND DETAILS
241745_DA_C202	WESTERN OSD TANK PLANS AND DETAILS
241745_DA_C210	STORMWATER LONGITUDINAL SECTIONS - SHEET 1 OF 2
241745_DA_C211	STORMWATER LONGITUDINAL SECTIONS - SHEET 2 OF 2
241745_DA_C250	STORMWATER CATCHMENT PLAN
241745_DA_BE01	BULK EARTHWORKS CUT FILL PLAN
241745_DA_SE01	SEDIMENT AND EROSION CONTROL PLAN
241745_DA_SE02	SEDIMENT AND EROSION CONTROL DETAILS

SITeworks NOTES

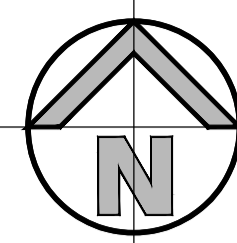
- DATUM : A.H.D.
- ORIGIN OF LEVELS : REFER TO BENCH OR STATE SURVEY MARKS WHERE SHOWN ON PLAN.
- CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO THE COMMENCEMENT OF WORK.
- ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS & THE DIRECTIONS OF 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.

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.

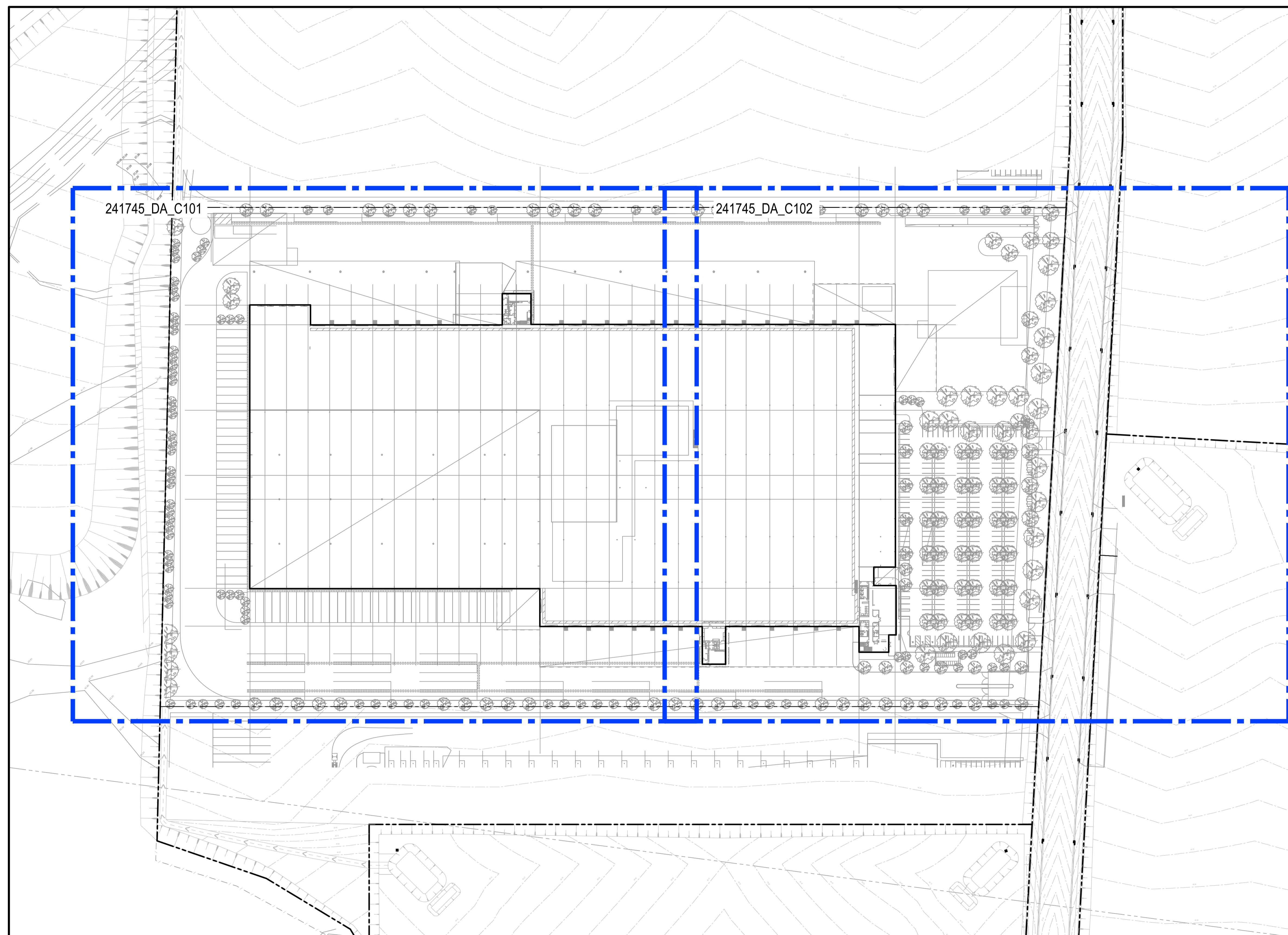
FOR DA ONLY

SURVEY INFORMATION				Client				Project		Drawn		Designed		Original issue date	
SURVEYED BY: WATSDON BUCHAN				HB&B PROPERTY PTY LTD				STORAGE AND DISTRIBUTION WAREHOUSE LUDDENHAM ROAD, ORCHARD HILLS, NSW		E. Formadero		S. Chen		Feb 2025	
DATUM: A.H.D.				Architect NETTLETONTRIBE				Title COVER SHEET, DRAWING SCHEDULE, NOTES AND LOCALITY SKETCH		Checked N. Heazlewood		Approved T. Rozehnal		Scale @A1 NTS	
ORIGIN OF LEVELS: SSM 22740 RL:41.10				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.				DRAWING TO BE PRINTED IN COLOUR		Drawing number 241745_DA_C000		Revision 2			
REVISION	AMENDMENT	AMENDMENT	AMENDMENT	AMENDMENT	AMENDMENT	AMENDMENT	AMENDMENT	AMENDMENT	AMENDMENT	AMENDMENT	AMENDMENT	AMENDMENT	AMENDMENT	AMENDMENT	AMENDMENT
2	ISSUED FOR DA ONLY	AFe	NH	10.04.2025											
1	ISSUED FOR DA ONLY	EF	NH	10.03.2025											



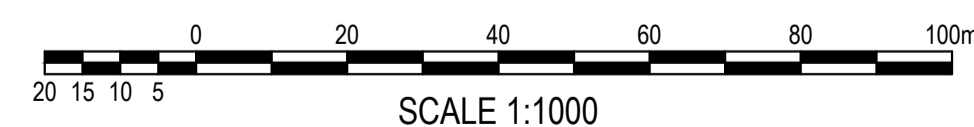
LEGEND

- PROPOSED BOUNDARY
- PROPOSED RIDGE LINE
- PROPOSED VALLEY LINE
- PROPOSED SUBSOIL LINE
- PROPOSED STORMWATER PIPE
- STORMWATER UPSTREAM INVERT RL.
STORMWATER PIPE DIAMETER & CLASS
STORMWATER PIPE LENGTH
STORMWATER PIPE GRADE
STORMWATER DOWNSTREAM INVERT RL.
- PROPOSED SURFACE INLET PITS
- PROPOSED JUNCTION PITS
- PROPOSED LINTEL ONGRADE & SAG PITS
- PROPOSED PIT TAG
- PROPOSED BATTER LINE
- PROPOSED KERB ONLY
- PROPOSED RETAINING WALL
- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROPOSED SPOT LEVEL
- TOP OF WALL LEVEL
- BOTTOM OF WALL LEVEL
- EXISTING SPOT LEVEL
- PROPOSED EASEMENT
- PROPOSED FALL
- PROPOSED HEIGHT OF WALL
- PROPOSED INTERMEDIATE RISER (IR)
- PROPOSED FLUSHING POINT (FP)
- PROPOSED DOWNPIPE (DP)
- PROPOSED HEADWALL
- PROPOSED SEDIMENT BASIN
- EXISTING STORMWATER
- EXISTING WATER LINE
- EXISTING ELECTRICAL LINE
- EXISTING GAS LINE
- EXISTING SEWER LINE



GENERAL ARRANGEMENT PLAN

SCALE: 1:1000



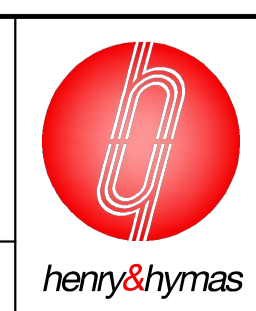
FOR DA ONLY

SURVEY INFORMATION	
SURVEYED BY: WATSDON BUCHAN	
DATUM: A.H.D.	
ORIGIN OF LEVELS: SSM 22740 RL:41.10	

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
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1	ISSUED FOR DA ONLY	EF	NH	10.03.2025

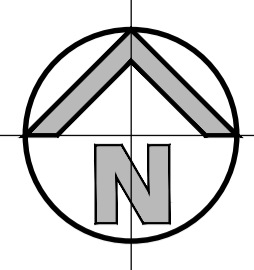
Client HB&B PROPERTY PTY LTD	Suite 2.01 828 Pacific Highway Gordon NSW 2072	Telephone +61 2 9417 8400 Facsimile +61 2 9417 8337 Email email@hbonsult.com.au Web www.henryandhymas.com.au
Architect NETTLETONTRIBE		
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Project STORAGE AND DISTRIBUTION WAREHOUSE LUDDENHAM ROAD, ORCHARD HILLS, NSW	Drawn E. Formadero	Designed S. Chen	Original issue date Feb 2025
Title GENERAL ARRANGEMENT PLAN	Checked N. Heazlewood	Approved T. Rozehnal	Scale @A1 NTS

Drawing number 241745_DA_C100	Revision 2
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CONNECT INTO EXISTING PIT
SURFACE RL 42.90
PIPE IL 40.12

PROPOSED STORMWATER
SYSTEM TO CONNECT TO
PROPOSED STORMWATER
EASEMENT AT IL 41.90

PROPOSED OSD TANK TO
PROVIDE 1600 m³ OF
STORAGE VOLUME. REFER TO
DWG C202 FOR DETAILS

3m WIDE PROPOSED
STORMWATER EASEMENT

PROPOSED BATTER
WITHIN LANDSCAPING
AREA AT MAX 1:3

3m WIDE PROPOSED
STORMWATER
EASEMENT

NORTH-WESTERN ROOF CATCHMENT TO
DISCHARGE TO RAINWATER TANK. TO BE
CO-ORDINATED WITH HYD ENG AT
DETAILED DESIGN STAGE.

80kL RAINWATER TANK. ROOF
AREA TO CONNECT DIRECTLY TO
TANK. WATER TO BE REUSED
FOR IRRIGATION PURPOSES.

SECONDARY OVERFLOW PIT
PROPOSED IN RECESSED
DOCK TO DISCHARGE FLOWS
IN CASE OF GD-1 BLOCKAGE

ROOF CATCHMENT TO CONNECT INTO
IN-GROUND STORMWATER DRAINAGE.
TO BE CO-ORDINATED WITH HYD ENG AT
DETAILED DESIGN STAGE.

PROPOSED 4 X 1.3m
RECESSED DOCKS



SCALE 1:500

DETAIL PLAN
SCALE: 1:500

REFER TO 241745_DA_C102 FOR CONTINUATION

FOR DA ONLY

SURVEY INFORMATION		SURVEYED BY:		WATSDON BUCHAN	
DATUM A.H.D.		AFe	NH	10.04.2025	
ORIGIN OF LEVELS:		EF	NH	10.03.2025	
SSM 22740 RL.41.10		MB	NH	20.02.2025	
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2	ISSUED FOR DA ONLY				
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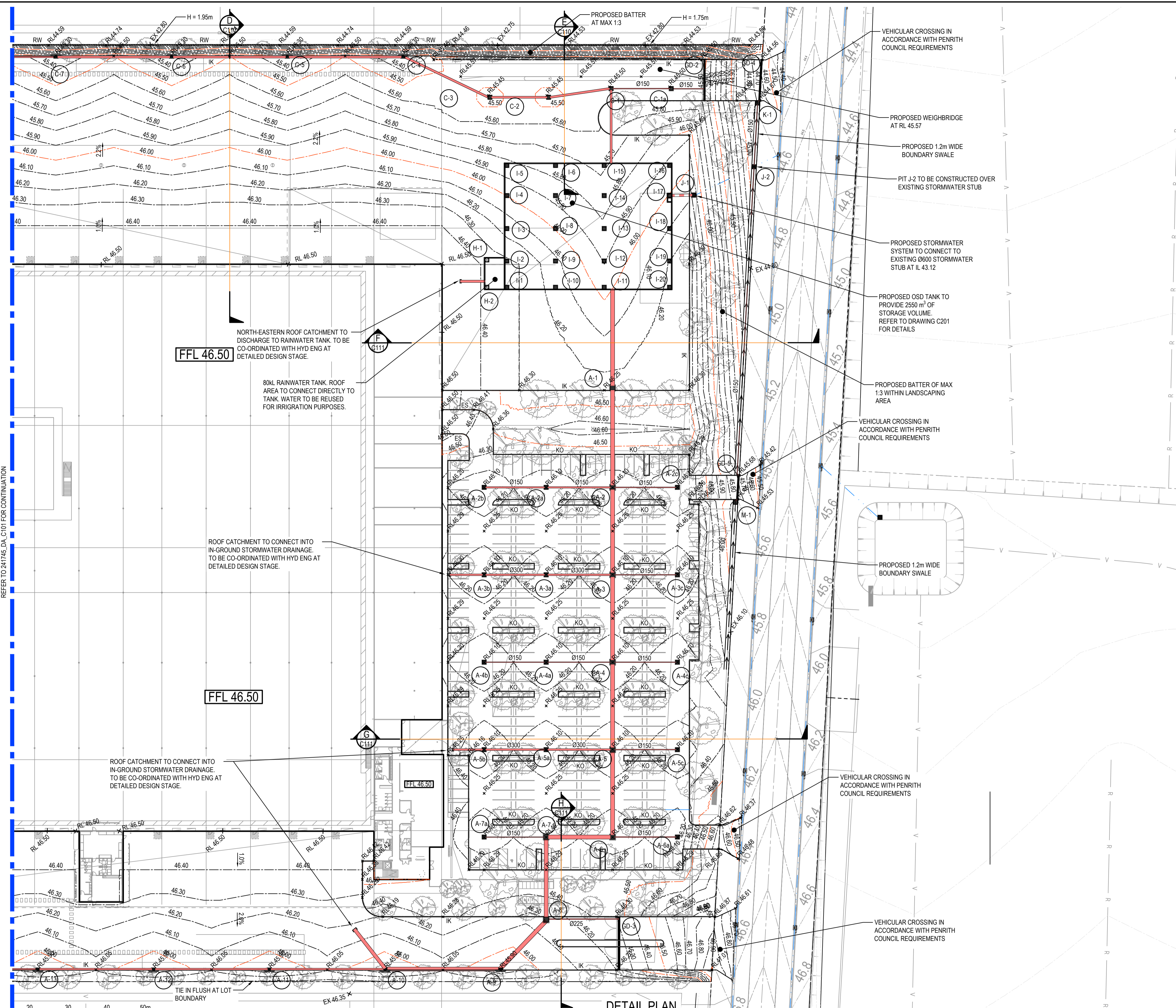
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Architect	NETTLETONTRIBE
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Project	STORAGE AND DISTRIBUTION WAREHOUSE LUDDENHAM ROAD, ORCHARD HILLS, NSW
Title	DETAIL PLANS SHEET 1 OF 2

Drawn	E. Formadero	Designed	S. Chen	Original issue date	Feb 2025
Checked	N. Heazlewood	Approved	T. Rozehnal	Scale	A1
Drawing number	241745_DA_C101			Revision	3



FFL 46.50

FFL 46.50

FFL 46.50

DETAIL PLAN
SCALE: 1:500

VEHICULAR CROSSING IN ACCORDANCE WITH PENRITH COUNCIL REQUIREMENTS

PROPOSED WEIGHBRIDGE AT RL 45.7

PROPOSED 1.2m WIDE BOUNDARY SWALE

PIT J-2 TO BE CONSTRUCTED OVER EXISTING STORMWATER STUB

PROPOSED STORMWATER SYSTEM TO CONNECT TO EXISTING 600mm STORMWATER STUB AT IL 43.12

PROPOSED OSD TANK TO PROVIDE 2550 m³ OF STORAGE VOLUME. REFER TO DRAWING C201 FOR DETAILS

PROPOSED BATTER OF MAX 1:3 WITHIN LANDSCAPING AREA

VEHICULAR CROSSING IN ACCORDANCE WITH PENRITH COUNCIL REQUIREMENTS

PROPOSED 1.2m WIDE BOUNDARY SWALE

VEHICULAR CROSSING IN ACCORDANCE WITH PENRITH COUNCIL REQUIREMENTS

VEHICULAR CROSSING IN ACCORDANCE WITH PENRITH COUNCIL REQUIREMENTS

REFER TO 241745_DA_C101 FOR CONTINUATION

SCALE 1:500

FOR DA ONLY

SURVEY INFORMATION		Client		Telephone	
SURVEYED BY: WATSDON BUCHAN		HB&B PROPERTY PTY LTD		+61 2 9417 8400	
DATUM: A.H.D.		Architect		+61 2 9417 8337	
ORIGIN OF LEVELS: SSM 22740 RL 41.10		NETTLETONTRIBE		Email email@hobson.com.au	
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3	ISSUED FOR DA ONLY	AFe	NH	10.04.2025	
2	ISSUED FOR DA ONLY	EF	NH	10.03.2025	
1	PRELIMINARY	MB	NH	20.02.2025	
	AMENDMENT				
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	DATE				
	REVISION				
	AMENDMENT				
	DRAWN				
	DESIGNED				
	DATE				

Client
HB&B PROPERTY PTY LTD

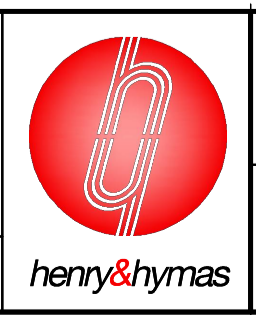
Architect
NETTLETONTRIBE

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DRAWING TO BE PRINTED IN COLOUR



Project
STORAGE AND DISTRIBUTION WAREHOUSE
LUDDENHAM ROAD, ORCHARD HILLS, NSW

Drawn
E. Formadero

Designed
S. Chen

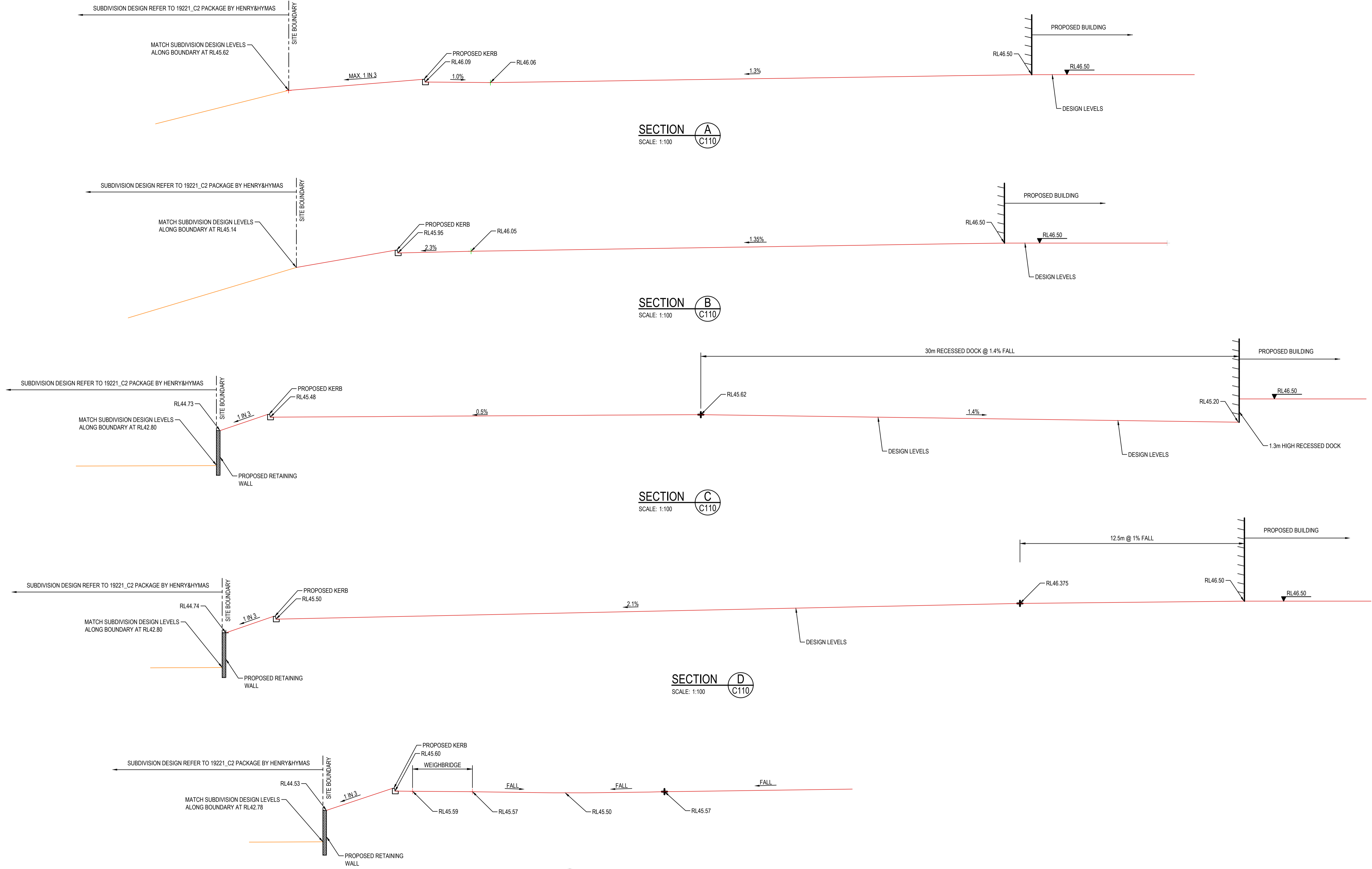
Checked
N. Heazlewood

Approved
T. Rozeznal

Title
DETAIL PLANS SHEET 2 OF 2

Original issue date Feb 2025	Scale @A1	Revision NTS
Drawing number 241745_DA_C102		Revision 3

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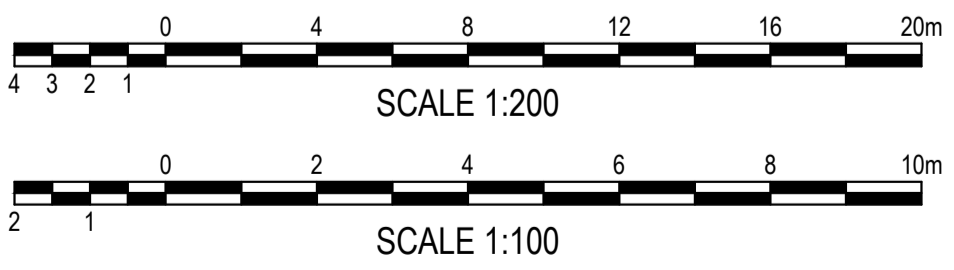
SECTION A
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C110

SECTION B
SCALE: 1:100
C110

SECTION C
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C110

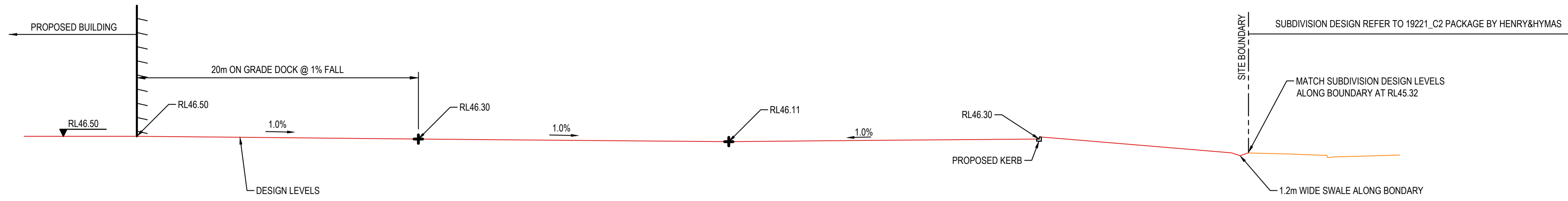
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SECTION E
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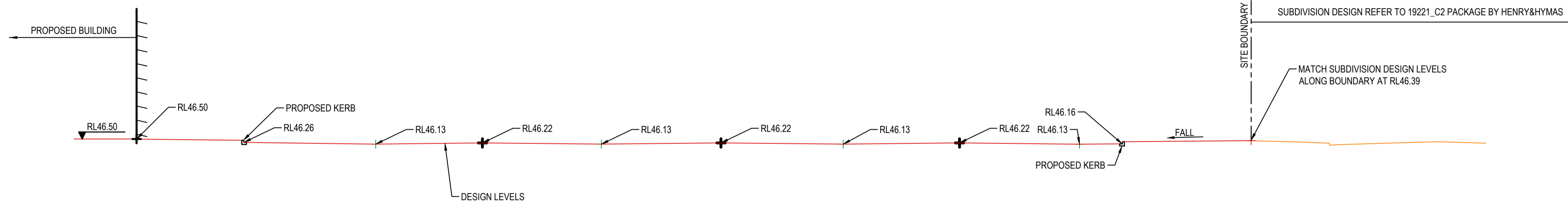


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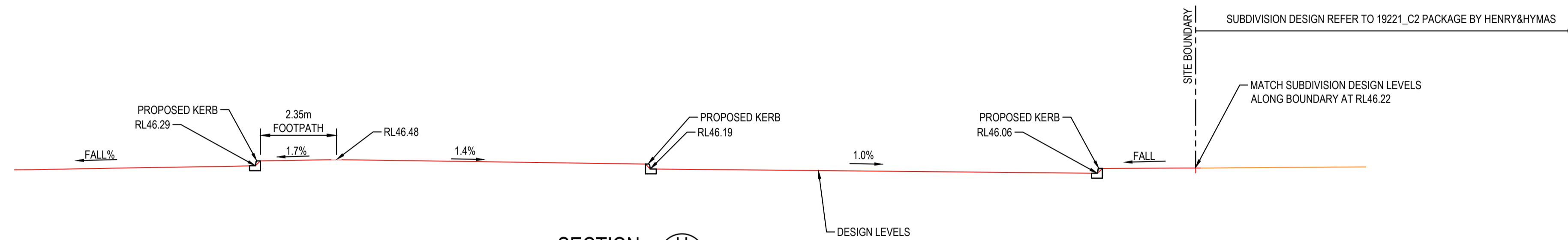
SURVEY INFORMATION				Client HB&B PROPERTY PTY LTD				Suite 2.01 828 Pacific Highway Gordon NSW 2072				Telephone +61 2 9417 8400 Facsimile +61 2 9417 8337 Email email@hiconsult.com.au Web www.henryandhymas.com.au				Project STORAGE AND DISTRIBUTION WAREHOUSE LUDDENHAM ROAD, ORCHARD HILLS, NSW				Drawn E. Formadero		Designed S. Chen		Original issue date Feb 2025	
SURVEYED BY: WATSDON BUCHAN				Architect NETTLETONTRIBE												Checked N. Heazlewood		Approved T. Rozehnal		Scale @A1 NTS					
DATUM: A.H.D.				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.				DRAWING TO BE PRINTED IN COLOUR				Title SITE SECTIONS - SHEET 1 OF 2				Drawing number 241745_DA_C110		Revision 1							
ORIGIN OF LEVELS: SSM 22740 RL-41.10				1 ISSUED FOR DA ONLY				Afe NH 10.04.2025				1				REVISION		AMENDMENT		DRAWN		DESIGNED		DATE	



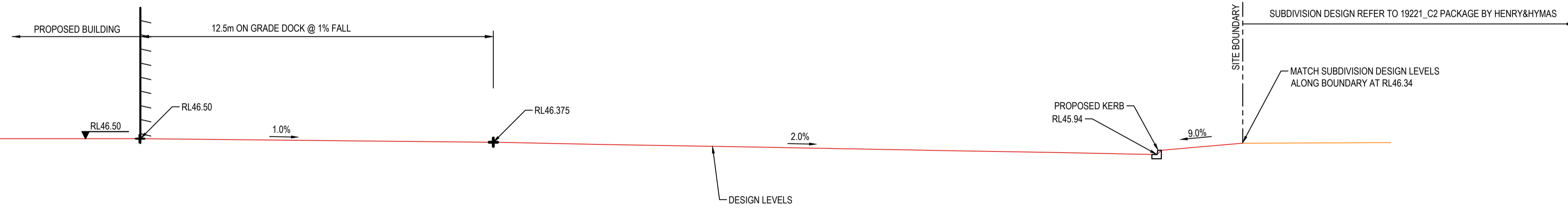
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C111



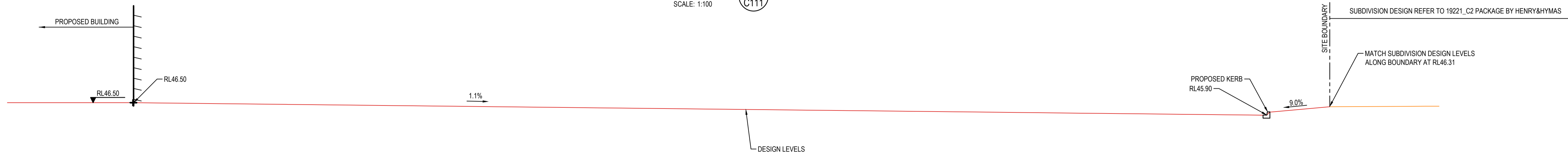
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SCALE: 1:200
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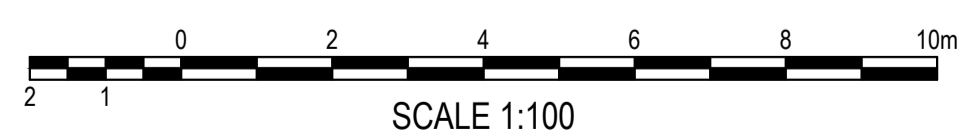
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SCALE: 1:100
C111



SECTION I
SCALE: 1:100
C111



SECTION J
SCALE: 1:100
C111



FOR DA ONLY

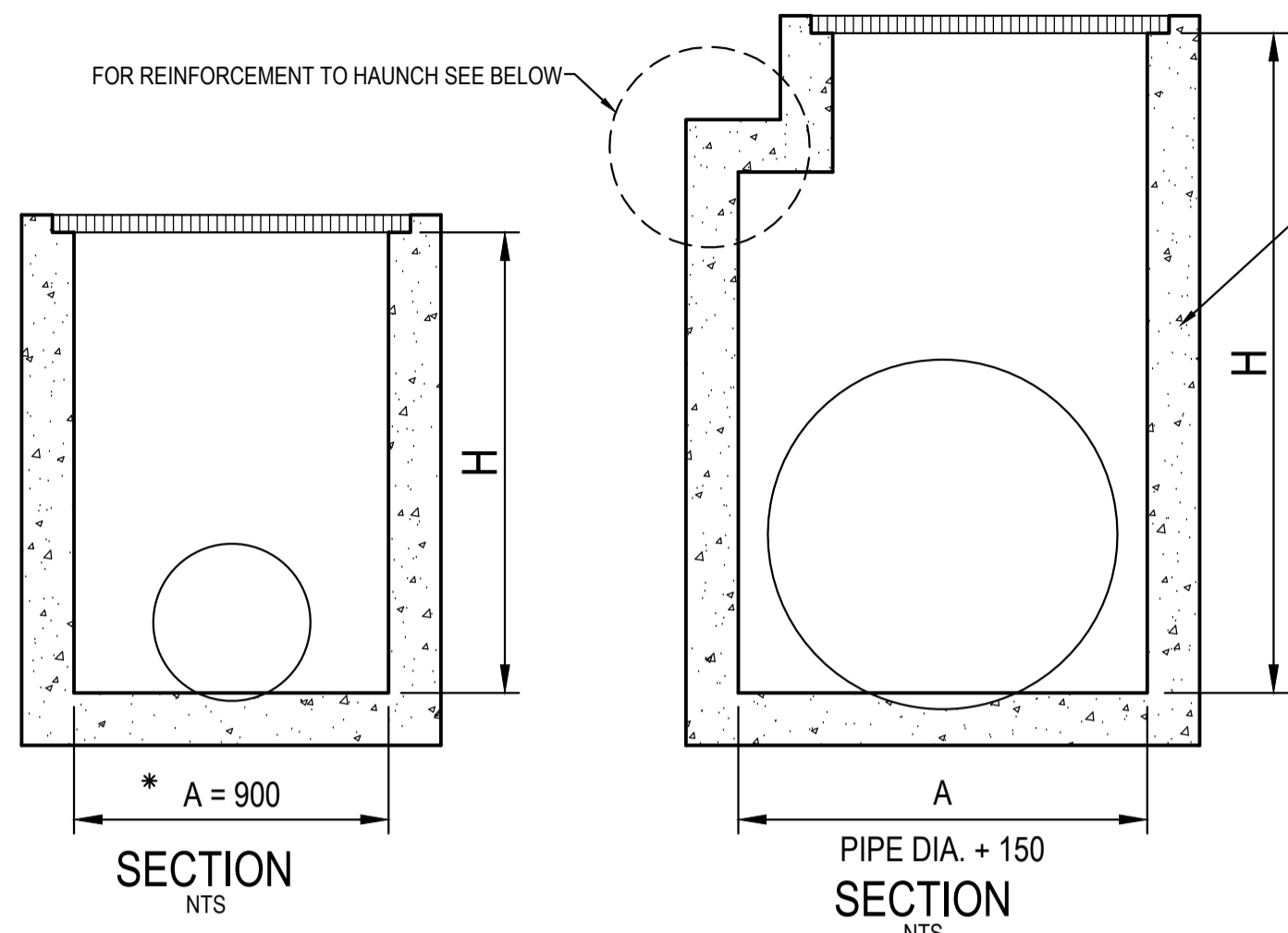
SURVEY INFORMATION				Client HB&B PROPERTY PTY LTD				Suite 2.01 828 Pacific Highway Gordon NSW 2072				Telephone +61 2 9417 8400 Facsimile +61 2 9417 8337 Email email@hbcosult.com.au Web www.henryandhymas.com.au				Project STORAGE AND DISTRIBUTION WAREHOUSE LUDDENHAM ROAD, ORCHARD HILLS, NSW				Drawn E. Formadero				Designed S. Chen				Original issue date Feb 2025			
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ORIGIN OF LEVELS: SSM 22740 RL-41.10				REVISION				AMENDMENT				DRAWN				DESIGNED				DATE											

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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.

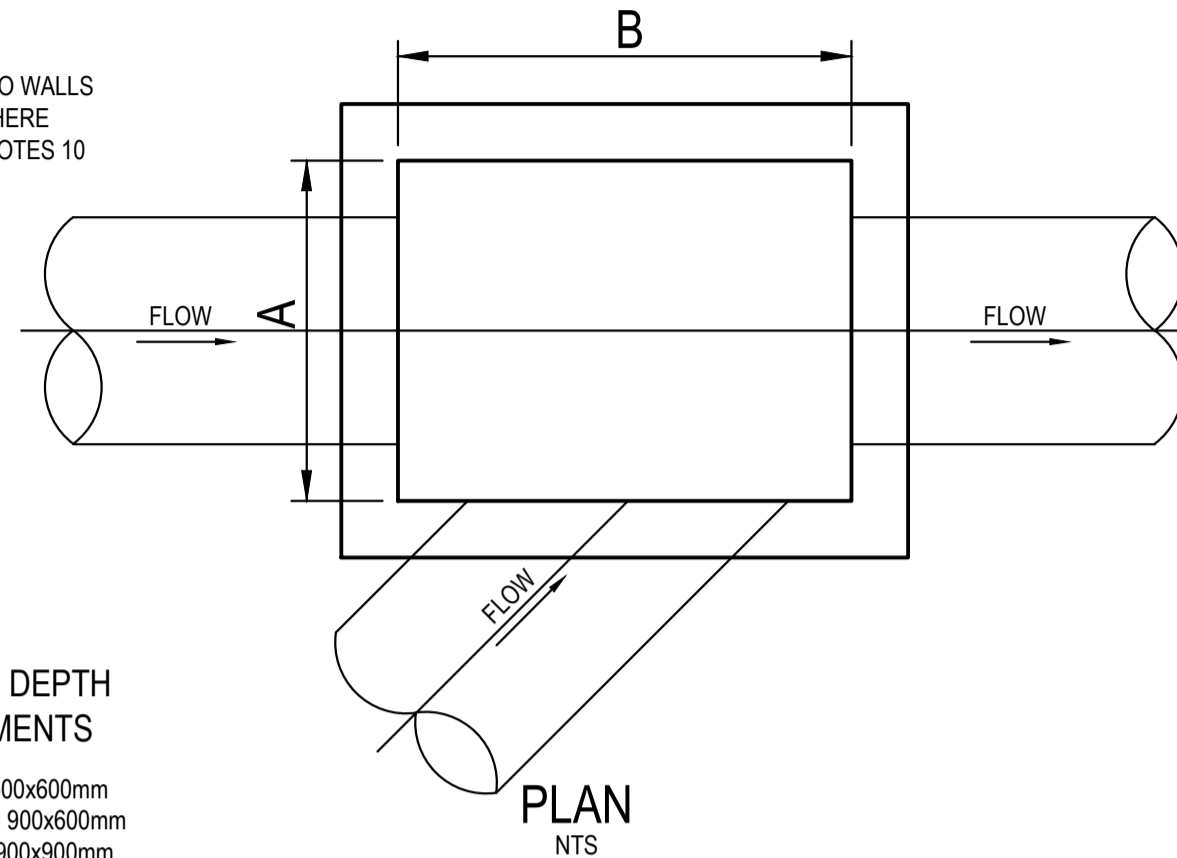
- SELECT PIT CHAMBER USING THE STEPS BELOW:
- SELECT PIT CHAMBER SIZE DEPENDING ON THE PIPE DIAMETERS.
- CHECK PIT CHAMBER SIZE TO SATISFY DEPTH TO INVERT REQUIREMENTS.
- CHECK PIT CHAMBER DIMENSIONS TO SATISFY THE SKEW ANGLE IN THE TABLE.

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



*A = 600 FOR PIPES UP TO 375 DIA.
1 PIT CHAMBER DIMENSIONS FOR PIPES UP TO 600 DIA.

1 PIT CHAMBER FOR PIPES GREATER THAN 600 DIA.



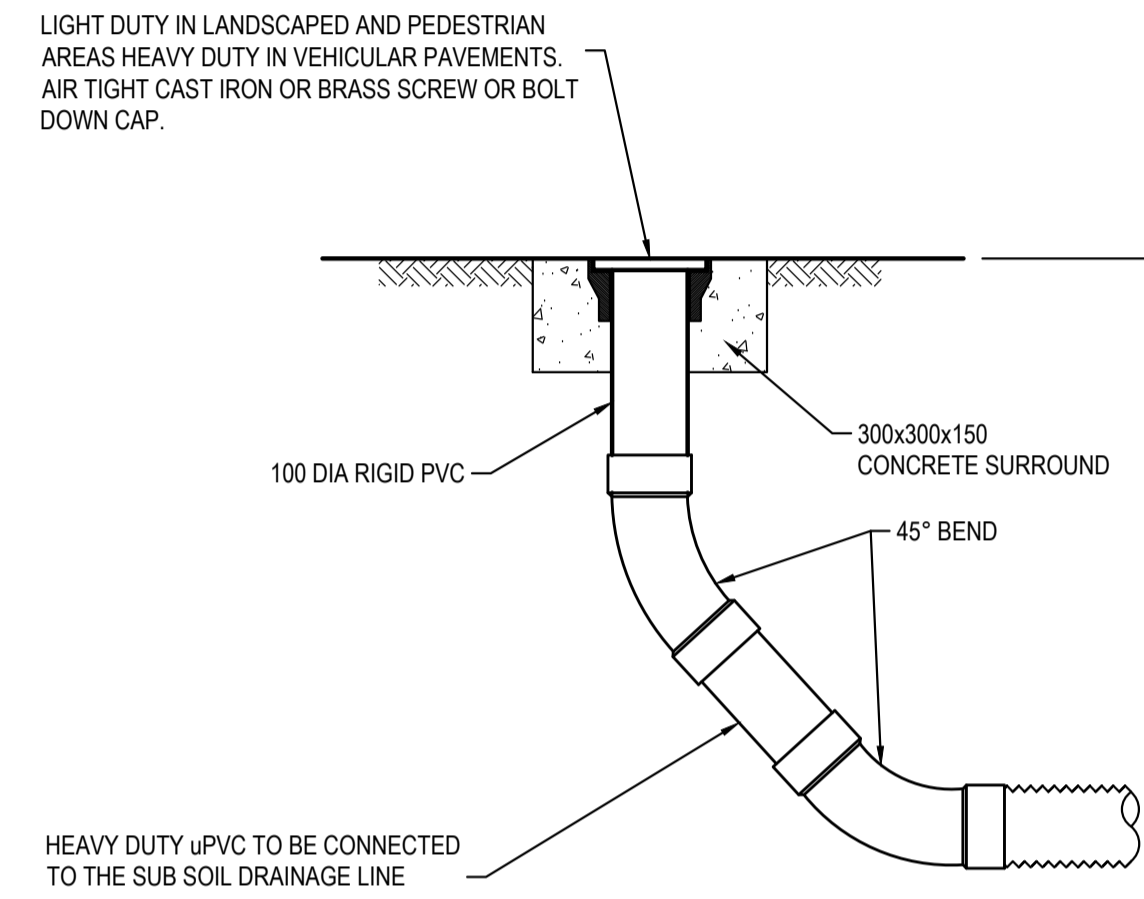
3 PIT CHAMBER FOR SIDE ENTRY ON SKEW

2 PIT SIZE & DEPTH REQUIREMENTS
 H = 0-900mm - AxB = 600x600mm
 H = 900-1200mm - AxB = 900x600mm
 H = >1200mm - AxB = 900x900mm

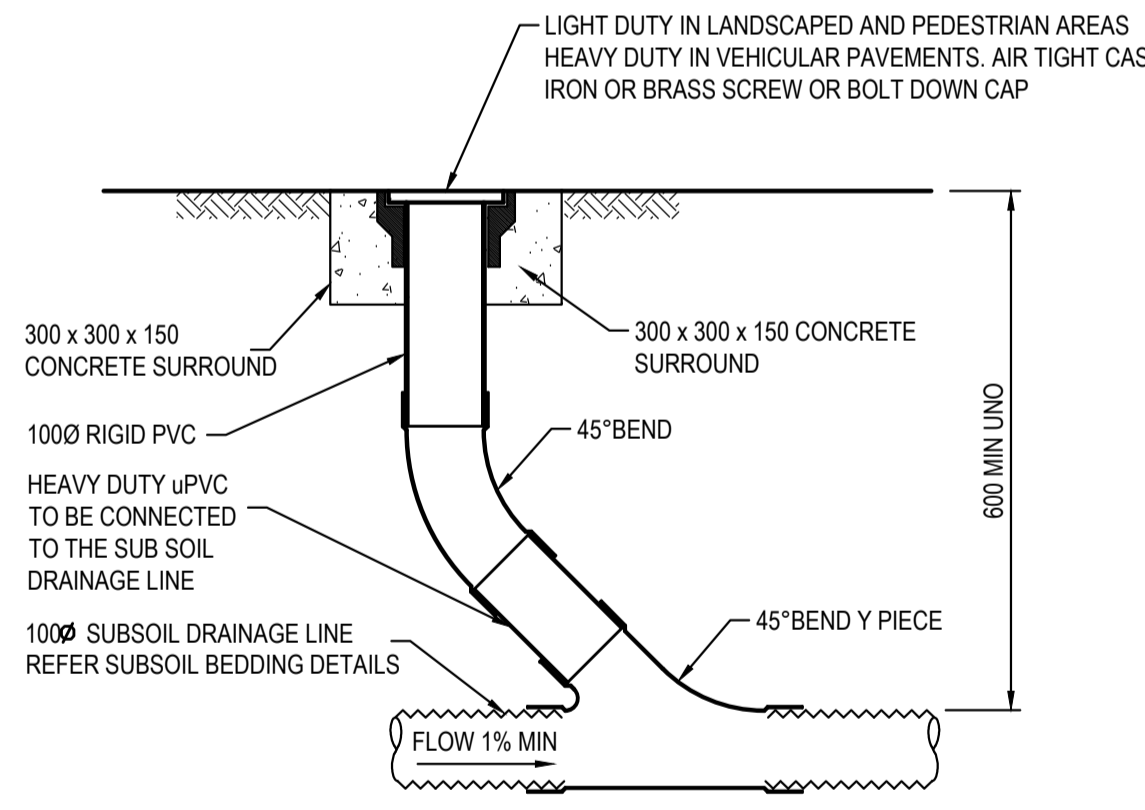
SIEVE SIZE (MM)	WEIGHT PASING (%)
75.0	100
9.5	100 TO 50
2.36	100 TO 30
0.60	50 TO 15
0.075	25 TO 0

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	100 IF D<=1500, OR 150 IF D>=1500	0.1D	50	2.0
HS2		0.3D	60	2.5
HS3		0.3D	70	4.0



FLUSHING POINT (FP)
 SCALE 1:10
 NOTE: SLOTTED RIGID PVC PIPE AND FITTINGS MAY BE USED



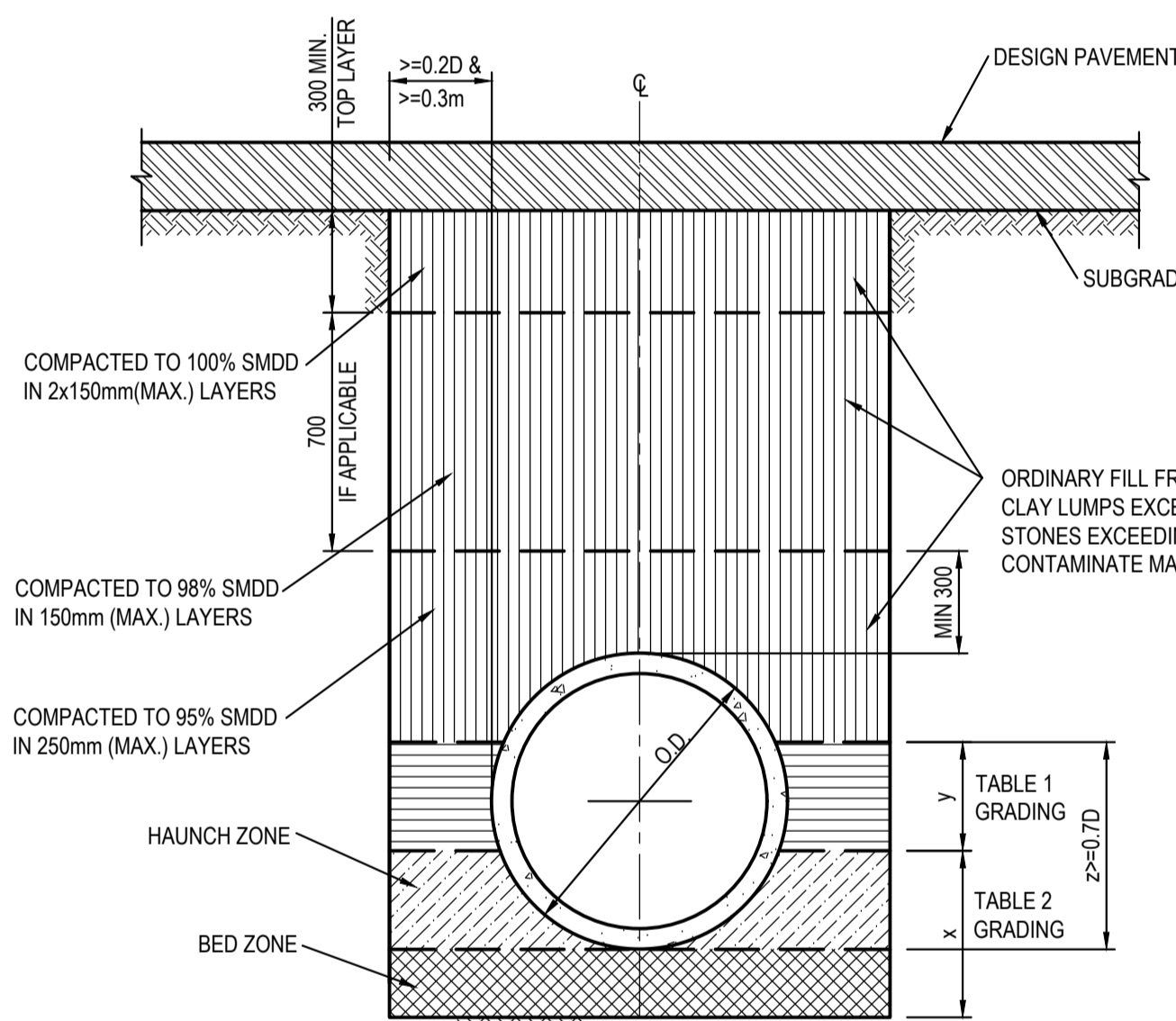
INTERMEDIATE RISER (IR)
 SCALE 1:10
 NOTE: SLOTTED RIGID PVC PIPE AND FITTINGS MAY BE USED

PIT LID SCHEDULE

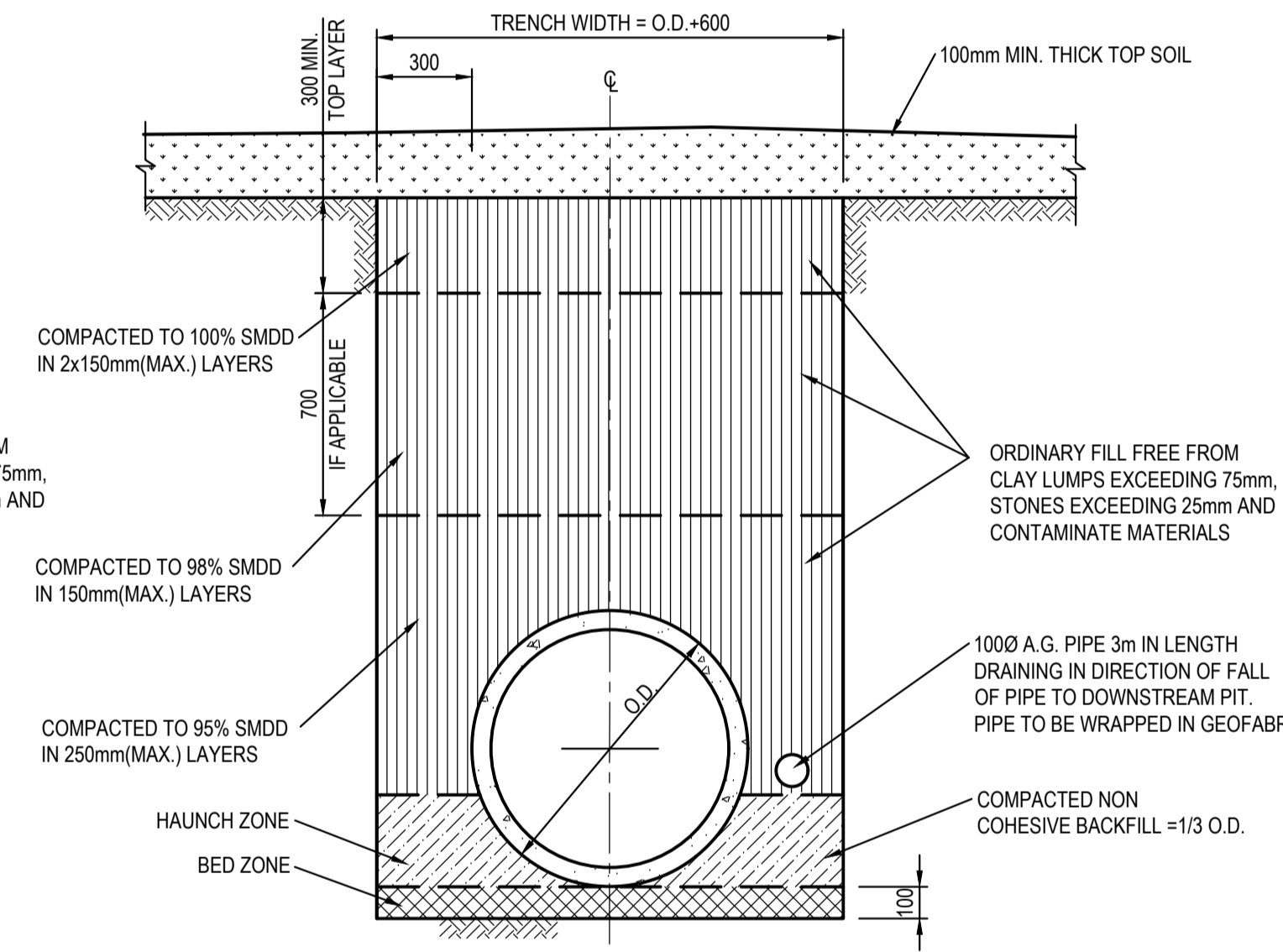
PIT/STRUCTURE NUMBER	DESCRIPTION
A-1 A-2 A-3 A-4 A-5 A-6 A-7 A-8 B-1 B-2 B-3 B-4 B-5 B-6 C-1 C-1a C-2 C-3 D-11 D-12 D-13 D-14 D-15 D-16 F-1 F-2 F-3 F-4 F-5 F-6 F-7 F-8 F-9 F-10 F-11 F-12 F-13 F-14 F-15 F-16 I-1 I-2 I-3 I-4 I-5 I-6 I-7 I-8 I-9 I-10 I-11 I-12 I-13 I-14 I-15 I-16 I-17 I-18 I-19 I-20	PROPOSED 900x900 SURFACE INLET PIT WITH HINGED GRATED LID HEAVY DUTY CLASS "D" IN ACCORDANCE WITH PENRITH CITY COUNCIL'S REQUIREMENTS.
GD-1 GD-2 GD-3	PROPOSED 250mm WIDE GRATED DRAIN HEAVY DUTY CLASS "D" IN ACCORDANCE WITH PENRITH CITY COUNCIL'S REQUIREMENTS.
G-1 G-2 H-1 H-2	PROPOSED JUNCTION PIT WITH 900x900 HEAVY DUTY SEALED LID CLASS "D" IN ACCORDANCE WITH PENRITH CITY COUNCIL'S REQUIREMENTS.
J-1	PROPOSED 1200x1200 SURFACE INLET PIT WITH HINGED GRATED LID HEAVY DUTY CLASS "D" IN ACCORDANCE WITH PENRITH CITY COUNCIL'S REQUIREMENTS.
A-2a A-2b A-2c A-3a A-3b A-3c A-4a A-4b A-4c A-5a A-5b A-5c A-6a A-7a	PROPOSED 600x600 WITH HEAVY DUTY CLASS "D" LID GRATED INLET IN ACCORDANCE WITH PENRITH CITY COUNCIL'S REQUIREMENTS.
A-9 A-10 A-11 A-12 A-13 A-14 B-7 B-8 B-9 B-10 B-11 C-4 C-5 C-6 C-7 C-8 E-1 E-2 E-3 E-4 E-5	PROPOSED 1.2m INLET INLET PIT WITH HINGED GRATED LID HEAVY DUTY CLASS "D" IN ACCORDANCE WITH PENRITH CITY COUNCIL'S REQUIREMENTS.

DRAINAGE NOTES:

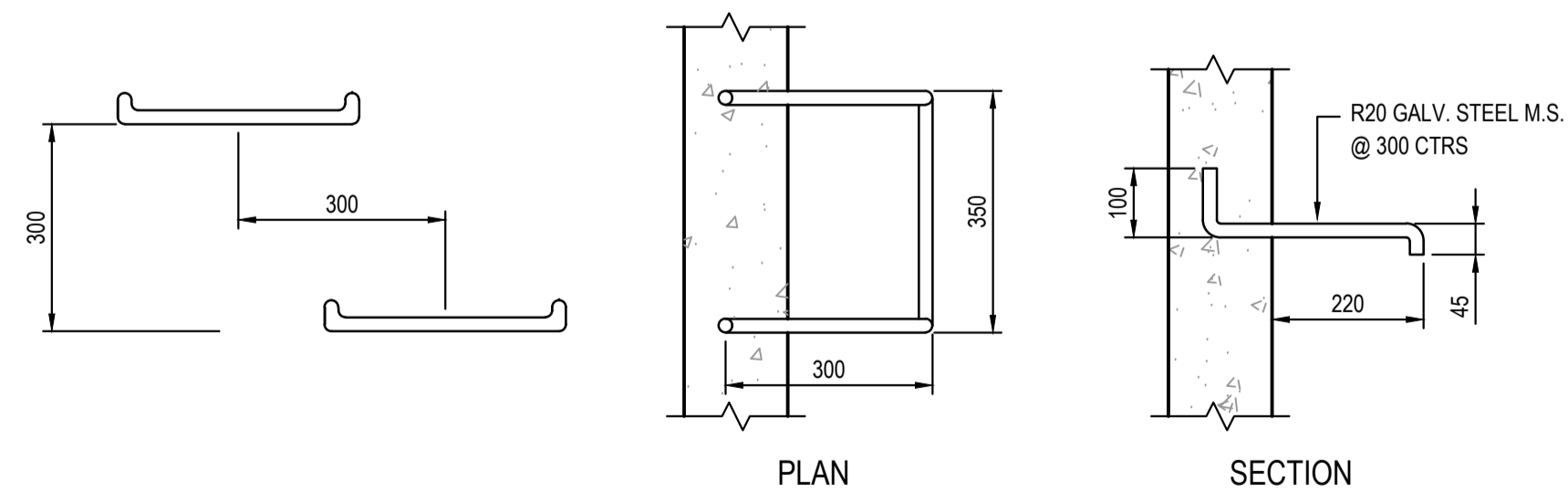
- ALL STORMWATER WORK TO COMPLY WITH AS 3500 PART 3.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE MINIMUM COVER OF 600mm ON ALL PIPES.
- PROTECTION OF PIPES DUE TO LOADS EXCEEDING W7 WHEEL LOAD SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- BEDDING TYPE SHALL BE TYPE H2 FOR RCP. WHERE NECESSARY 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 Fc=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 BENCH 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.



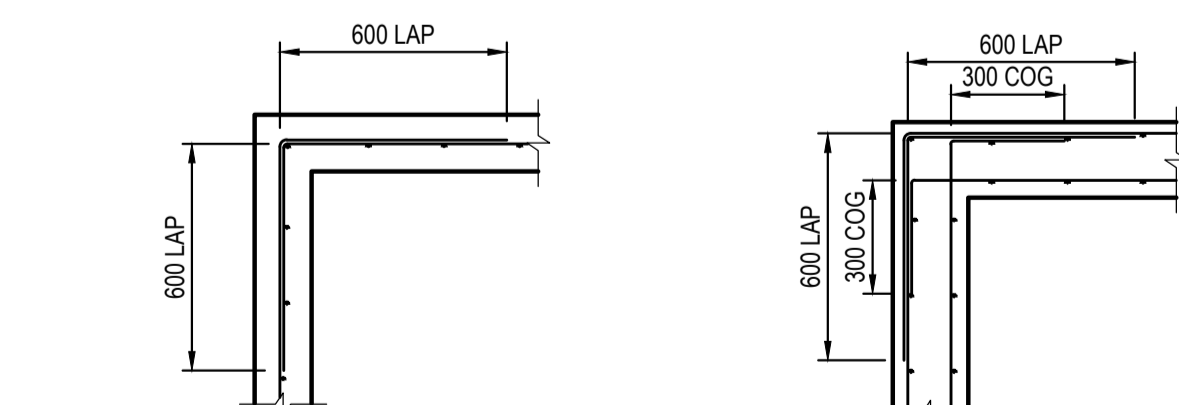
PIPE TRENCH INSTALLATION BENEATH PAVEMENT
 (HS SUPPORT TO BE USED UNDER ROADWAY)
 SCALE 1:20



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



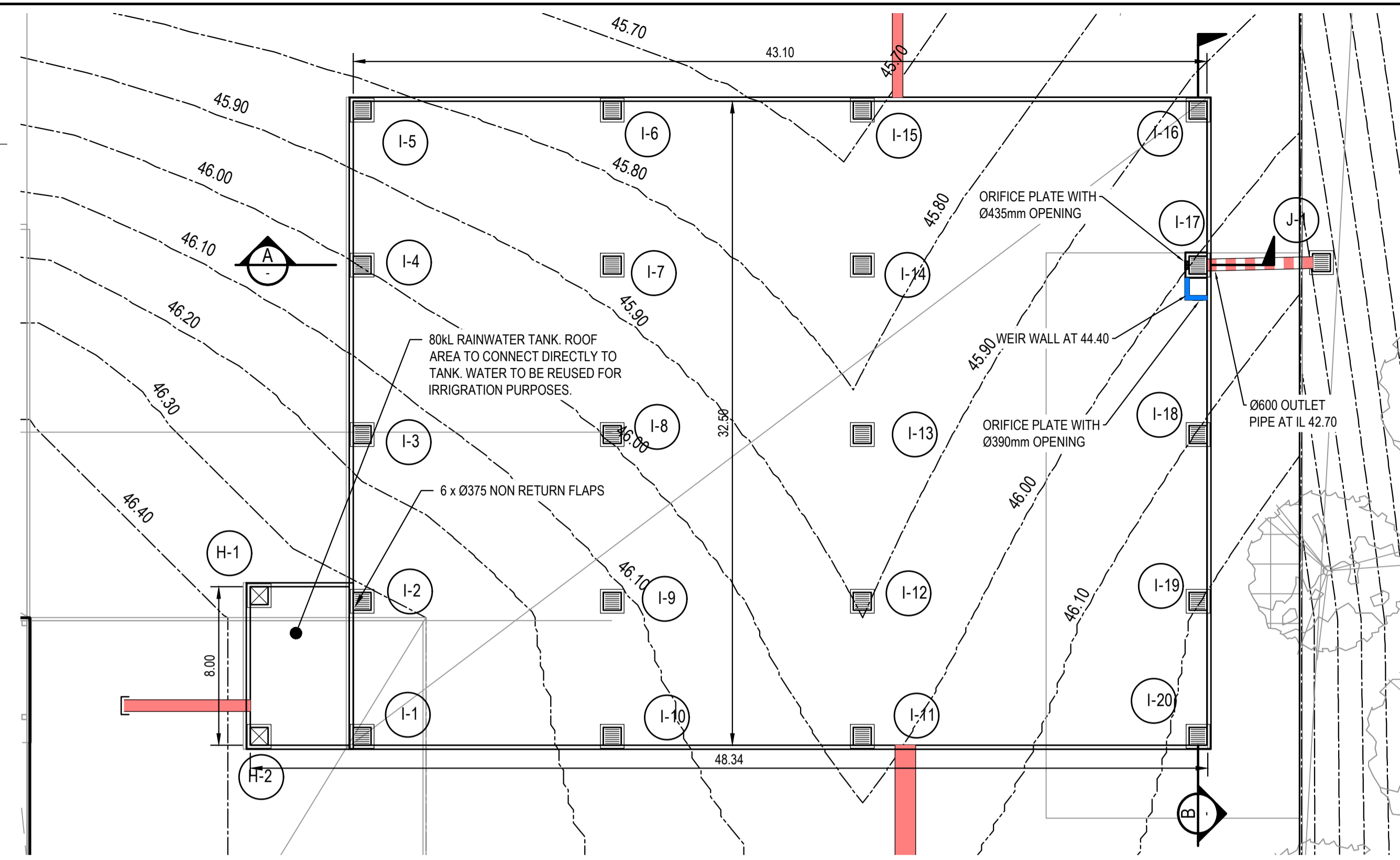
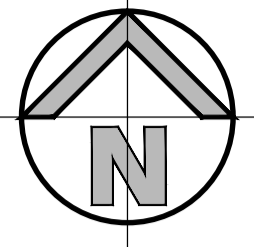
TYPICAL STEP IRON DETAIL
 SCALE 1:10



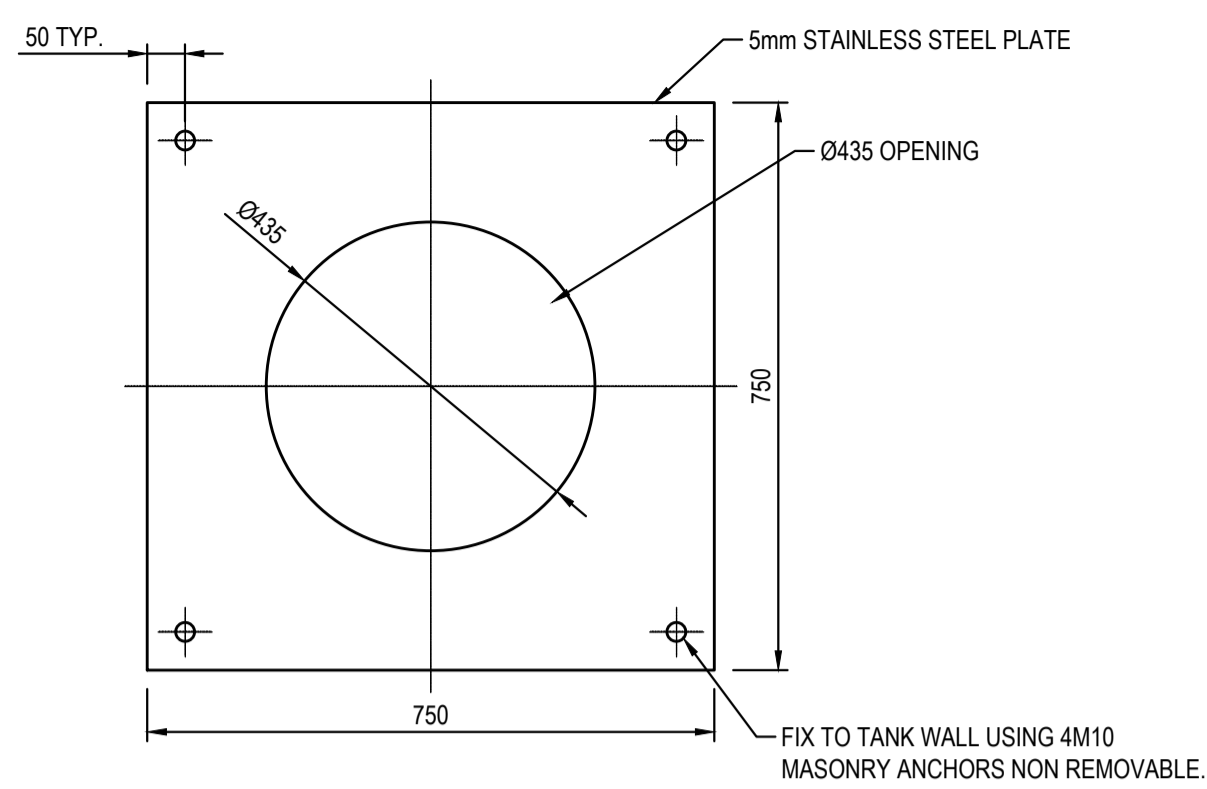
150 WALL - CORNER DETAIL
 SCALE 1:20

200 WALL - CORNER DETAIL
 SCALE 1:20

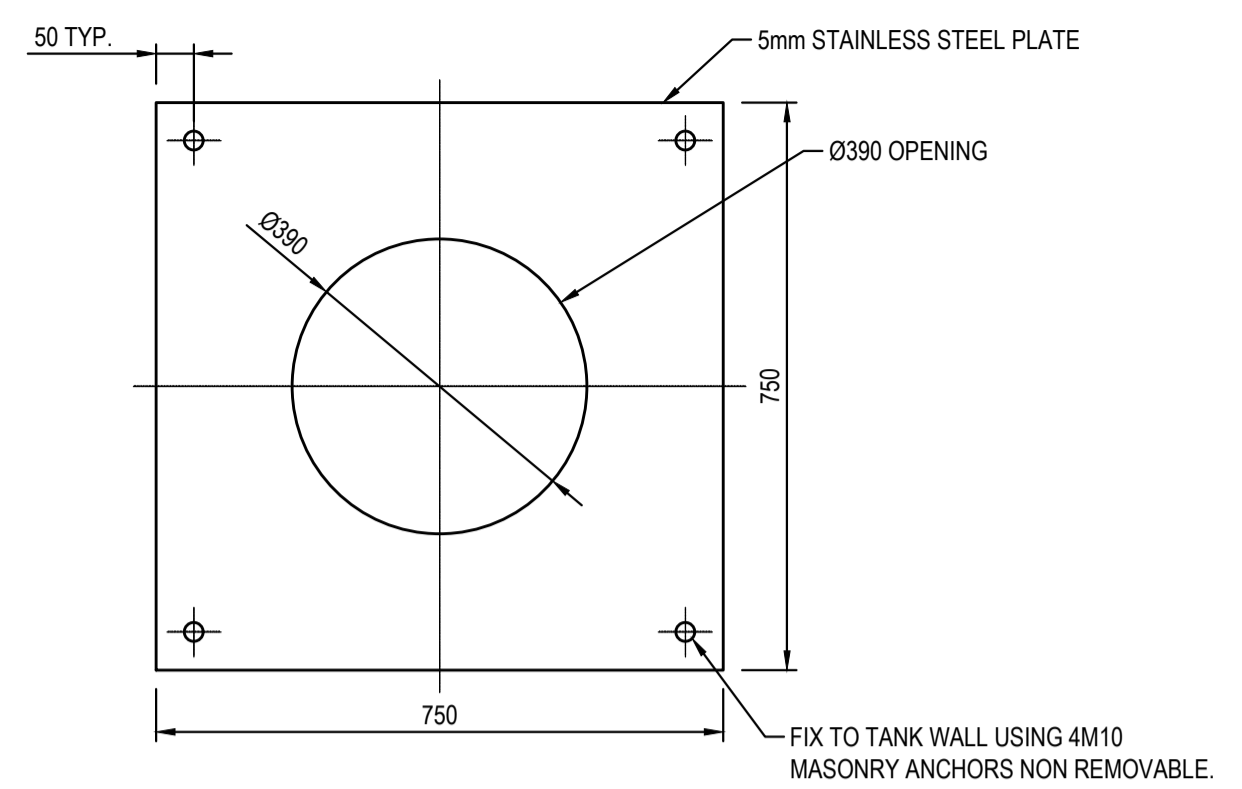
FOR DA ONLY



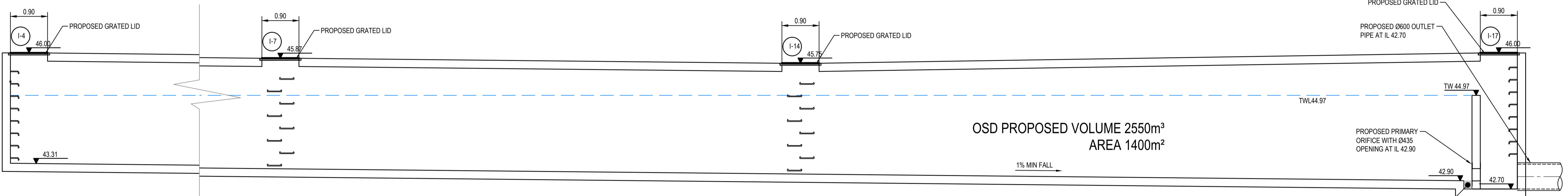
EASTERN OSD TANK PLAN
SCALE: 1:200



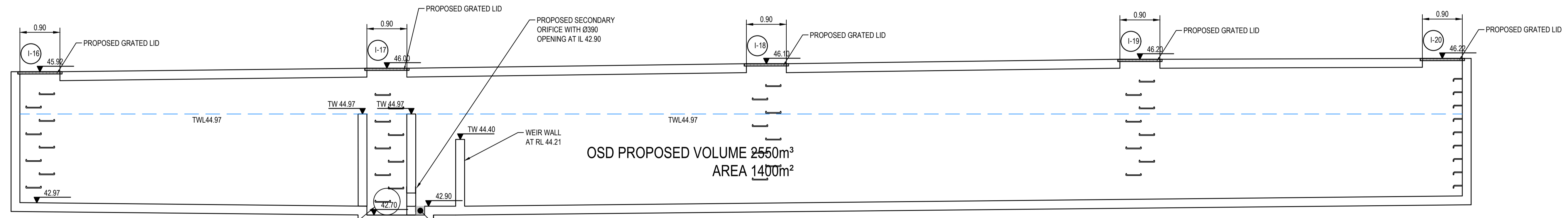
ORIFICE PLATE DETAIL
SCALE 1:10



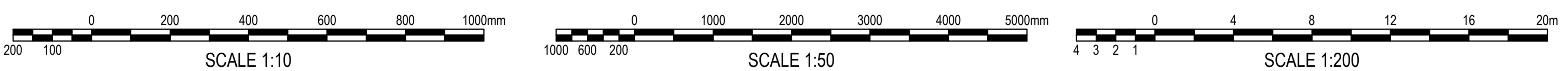
ORIFICE PLATE DETAIL
SCALE 1:10



SECTION A
SCALE: 1:50

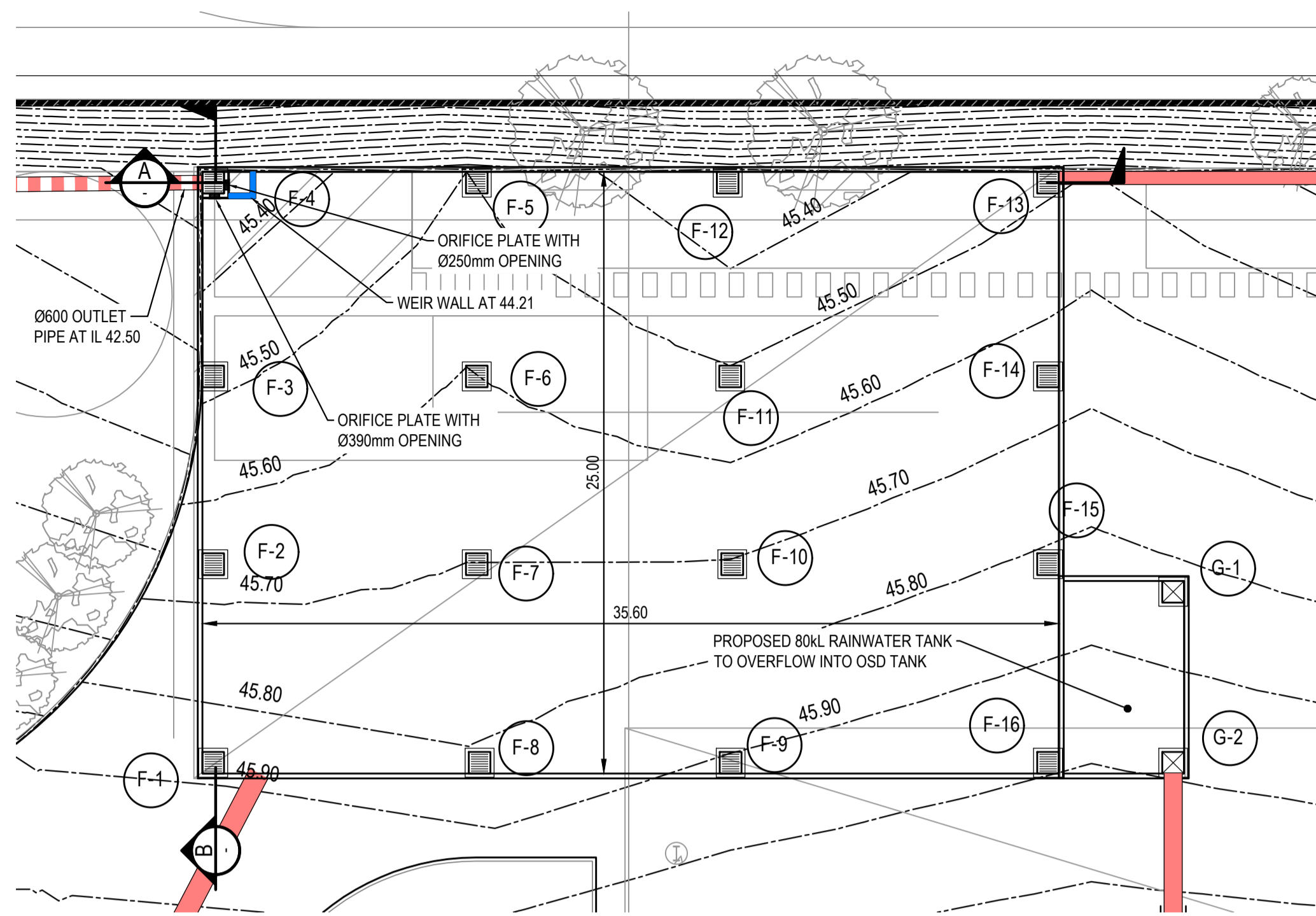
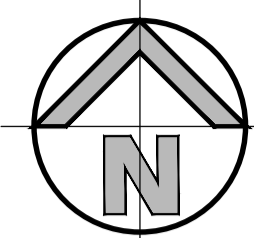


SECTION B
SCALE: 1:50



FOR DA ONLY

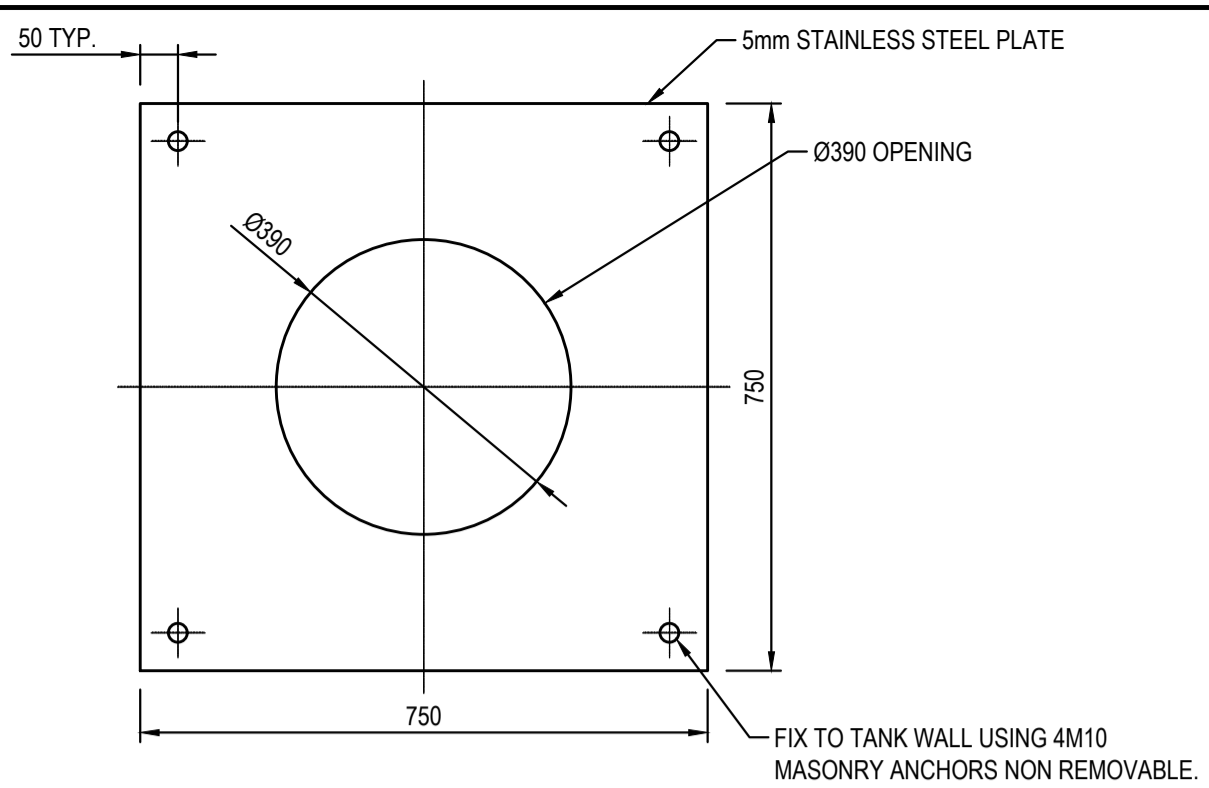
SURVEY INFORMATION SURVEYED BY: WATSDON BUCHAN DATUM: A.H.D. ORIGIN OF LEVELS: SSM 22740 RL:41.10		Client HB&B PROPERTY PTY LTD Architect NETTLETONTRIBE		Suite 2.01 828 Pacific Highway Gordon NSW 2072 Telephone +61 2 9417 8400 Facsimile +61 2 9417 8337 Email email@hhoonsult.com.au Web www.henryandhymas.com.au		Project STORAGE AND DISTRIBUTION WAREHOUSE LUDDENHAM ROAD, ORCHARD HILLS, NSW Title EASTERN OSD TANK PLAN AND DETAILS		Drawn E. Formadero Designed S. Chen Checked N. Heazlewood Approved T. Rozehnal Original issue date Feb 2025 Scale @A1 NTS		Drawing number 241745_DA_C201 Revision 1	
1	ISSUED FOR DA ONLY	EF	NH	10.04.2025	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.						
REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	DRAWING TO BE PRINTED IN COLOUR 	



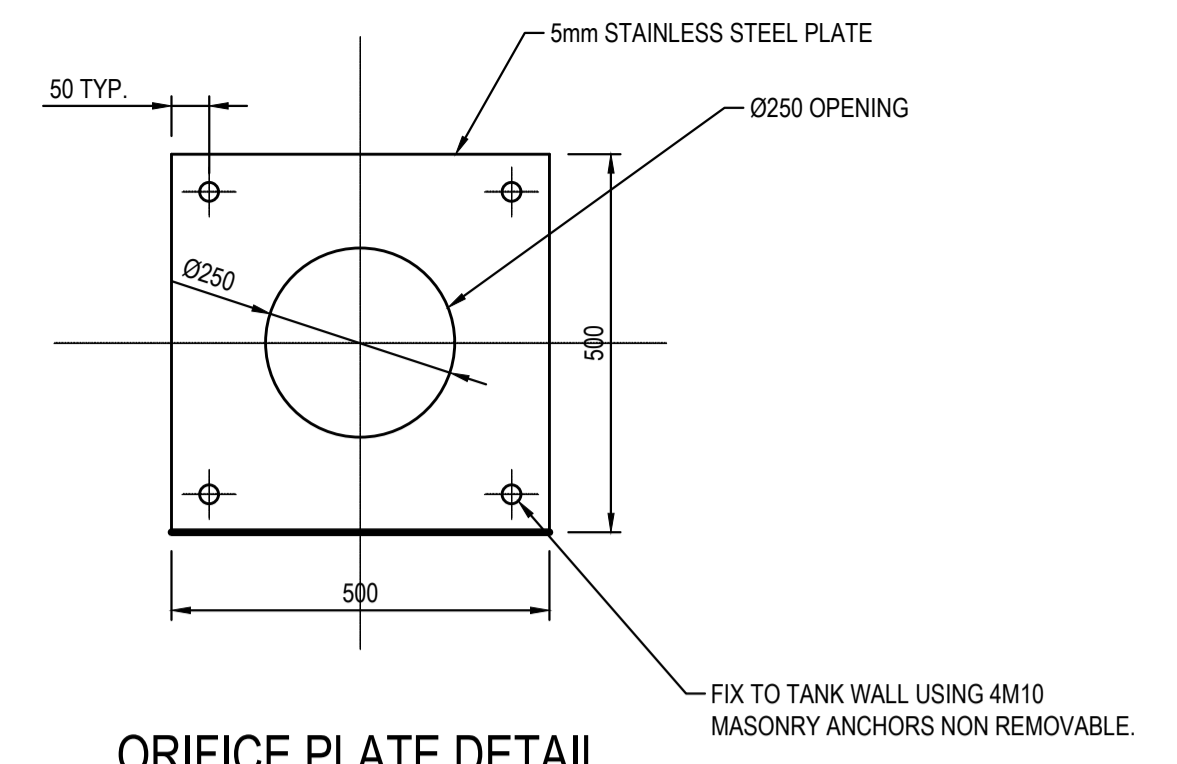
WESTERN OSD TANK PLAN
SCALE: 1:200



- A) A CONFINED SPACE DANGER SIGN SHALL BE POSITIONED IN A LOCATION SUCH THAT IT IS CLEARLY VISIBLE TO PERSONS PROPOSING TO ENTER THE BELOW GROUND TANKS/ CONFINED SPACE AT ALL ACCESS POINTS OF THE TANK/ CONFINED SPACE.
- B) SIGN TO BE MINIMUM DIMENSIONS: 250mm x 180mm ENTRIES I.E. GRATES, MANHOLES
- C) SIGN SHALL BE MANUFACTURED FROM COLOUR BONDED METAL OR POLYPROPYLENE
- D) SIGN SHALL BE AFFIXED TO A SURFACE WITH SCREWS AT EACH CORNER.



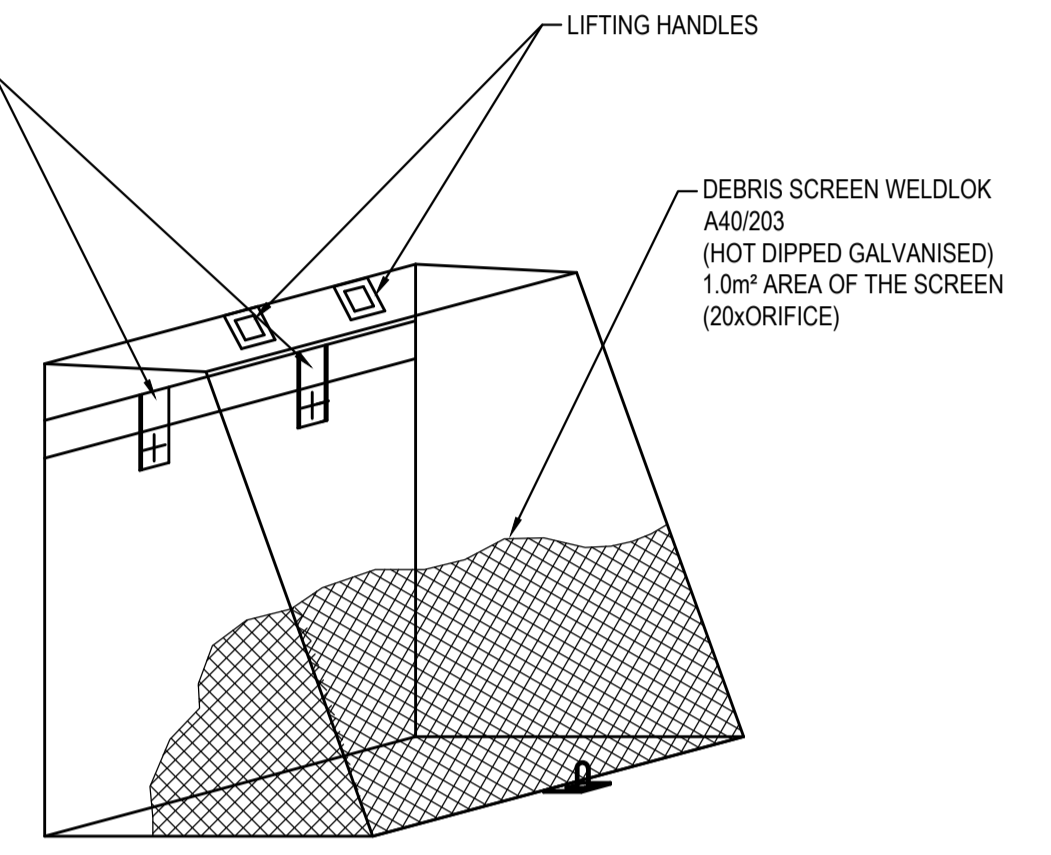
ORIFICE PLATE DETAIL
SCALE 1:10



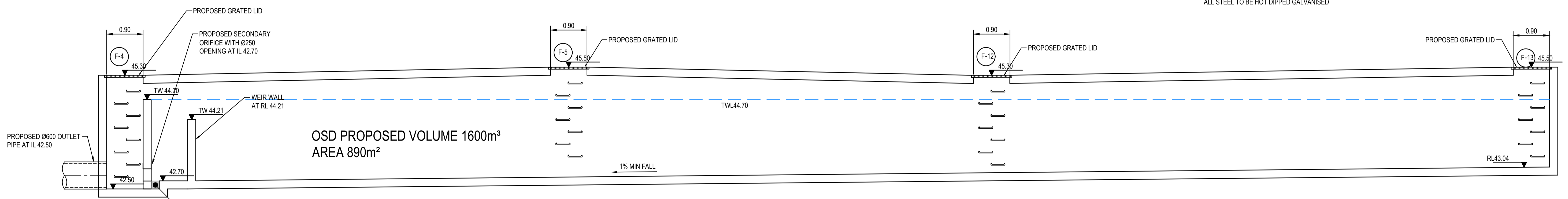
ORIFICE PLATE DETAIL
SCALE 1:10

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 UPRCT SECTION 4-13



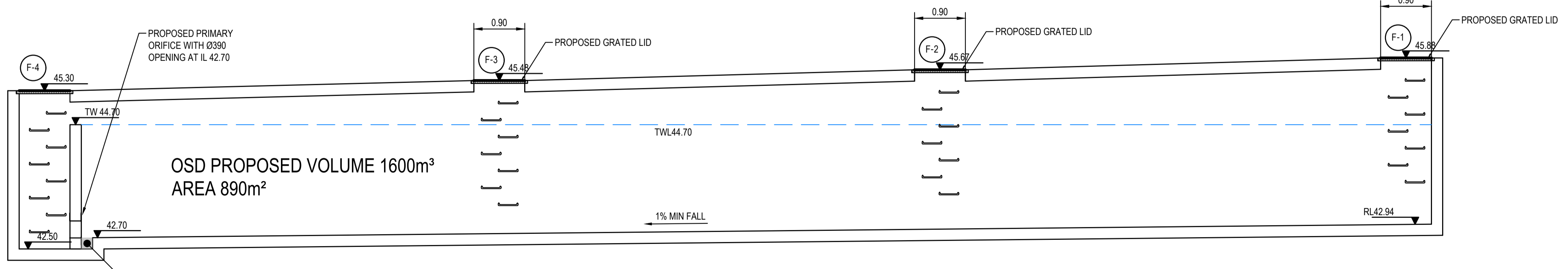
DEBRIS SCREEN DETAIL
NOT TO SCALE
ALL STEEL TO BE HOT DIPPED GALVANISED



SECTION A
SCALE: 1:50

OSD PROPOSED VOLUME 1600m³
AREA 890m²

PROPOSED DISCHARGE CHAMBER



SECTION B
SCALE: 1:50

PROPOSED DISCHARGE CHAMBER

OSD PROPOSED VOLUME 1600m³
AREA 890m²

FOR DA ONLY

SURVEY INFORMATION				Client HB&B PROPERTY PTY LTD				Telephone +61 2 9417 8400				Project STORAGE AND DISTRIBUTION WAREHOUSE				Drawn E. Formadero		Designed S. Chen		Original issue date Feb 2025	
SURVEYED BY: WATSDON BUCHAN				Architect NETTLETONTRIBE				Facsimile +61 2 9417 8337				Location LUDDENHAM ROAD, ORCHARD HILLS, NSW				Checked N. Heazlewood		Approved T. Rozehnal		Scale @A1 NTS	
DATUM: A.H.D.				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.				Email email@hhoonsult.com.au				Title WESTERN OSD TANK PLAN AND DETAILS				Drawing number 241745_DA_C202		Revision 1			
ORIGIN OF LEVELS: SSM 22740 RL+1.10				DRAWING TO BE PRINTED IN COLOUR				Web www.henryandhymas.com.au				henry&hymas									
1 ISSUED FOR DA ONLY				REVISION				AMENDMENT				DRAWN				DESIGNED		DATE			

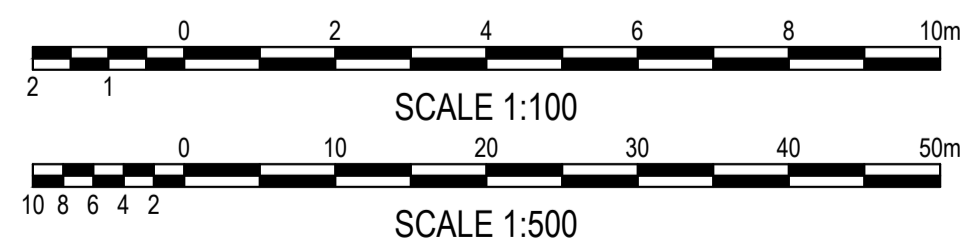
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Station	Flow (L/s)	Pipe Size (mm)	Slope (%)	Datum El.	HCL	Surface	Invert	Change
A14	64L/s	225mm	0.50%	El. 38	46.148	45.9	44.650	0
A13	116L/s	300mm	0.50%		46.147	45.9	44.700	29.98
A12	144L/s	300mm	0.50%		46.149	45.9	44.750	59.96
A11	200L/s	375mm	0.40%		46.167	45.9	44.900	89.97
A10	962L/s	900mm	0.30%		46.195	45.9	44.920	119.97
A9	1015L/s	900mm	0.30%		46.214	45.9	44.950	149.99
A8	974L/s	900mm	0.30%		46.207	46.2	44.900	179.54
A7	1012L/s	900mm	0.30%		46.203	46.1	43.946	198.82
A6	1005L/s	900mm	0.30%		46.203	46.1	43.986	208.85
A5	1155L/s	900mm	0.30%		46.224	46.1	43.762	228.74
A4	1149L/s	900mm	0.30%		46.222	46.1	43.862	257.43
A3	1272L/s	900mm	0.30%		46.202	46.1	43.662	274.11
A2	1383L/s	900mm	0.30%		46.204	46.1	43.512	298.79
A1	1398L/s	900mm	0.30%		44.994	46.25	44.600	322.59
OSDE					44.999	46.300	43.321	348.93

LINE A
1:500(H) 1:100(V)

Station	Flow (L/s)	Pipe Size (mm)	Slope (%)	Datum El.	HCL	Surface	Invert	Change
B12	114L/s	300mm	0.50%	El. 36	46.122	45.9	44.600	0
B11	188L/s	375mm	0.40%		46.120	45.9	44.650	30.04
B10	251L/s	450mm	0.40%		46.114	45.9	44.690	60.02
B9	324L/s	450mm	0.40%		46.105	45.9	44.370	90.02
B8	605L/s	600mm	0.30%		46.117	45.9	44.230	120.03
B7	594L/s	600mm	0.30%		46.279	45.9	44.100	150.02
B6	622L/s	750mm	0.30%		46.202	45.9	44.013	178.88
B5	681L/s	750mm	0.30%		46.218	45.95	43.822	208.93
B4	743L/s	750mm	0.30%		46.174	45.95	43.710	238.93
B3	775L/s	750mm	0.30%		46.105	45.95	43.590	268.95
B2	821L/s	750mm	0.30%		46.005	45.95	43.491	298.71
B1	882L/s	750mm	0.30%		44.861	45.95	43.376	328.20
OSDW					44.704	45.300	43.278	358.96

LINE B
1:500(H) 1:100(V)



FOR DA ONLY

SURVEY INFORMATION				Client HB&B PROPERTY PTY LTD				Suite 2.01 828 Pacific Highway Gordon NSW 2072		Telephone +61 2 9417 8400 Facsimile +61 2 9417 8337 Email email@hbcconsult.com.au Web www.henryandhymas.com.au		Project STORAGE AND DISTRIBUTION WAREHOUSE LUDDENHAM ROAD, ORCHARD HILLS, NSW		Drawn E. Formadero		Designed S. Chen		Original issue date Feb 2025	
SURVEYED BY: WATSDON BUCHAN				Architect NETTLETONTRIBE								Checked N. Heazlewood		Approved T. Rozehnal		Scale @A1 NTS		Revision 2	
DATUM: A.H.D.				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.				DRAWING TO BE PRINTED IN COLOUR				Drawing number 241745_DA_C210		SHEET 1 OF 2					
ORIGIN OF LEVELS: SSM 22740 RL:41.10				REVISION				DRAWN				DESIGNED				DATE			
2 ISSUED FOR DA ONLY				AFB NH 10.04.2025															
1 ISSUED FOR DA ONLY				EF NH 10.03.2025															

Change	Invert Level	Surface Level	HGL
0	43.000	45.3	45.343
29.85	43.841 43.930	45.3	45.329 45.327
59.92	43.880 43.860	45.3	45.408 45.401
89.94	43.560 43.520	45.3	45.379 45.359
119.93	43.400 43.380	45.3	45.313 45.295
139.97	43.304 43.280	45.4	45.198 45.153
152.92	43.298 43.220	45.35	46.131 45.107
180.70	43.137 43.120	45.35	45.993 45.000
199.98	43.062	45.450	44.999

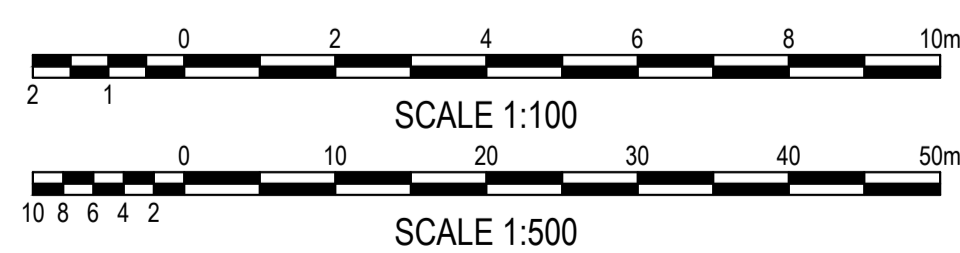
LINE C
1:500(H) 1:100(V)

Change	Invert Level	Surface Level	HGL
0	44.100	45.3	45.358
30.00	43.950 43.930	45.3	45.397 45.397
59.98	43.780 43.750	45.3	44.926 44.750
90.00	43.610 43.590	45.3	44.720 44.727
119.98	43.440 43.420	45.3	44.717 44.707
128.64	43.300	45.300	44.704


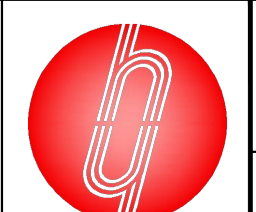
LINE E
1:500(H) 1:100(V)

Change	Invert Level	Surface Level	HGL
0	43.000	46.0	44.976
39.00	43.205 43.180	46.10	44.770 44.764
88.99	43.930 43.910	46.08	44.698 44.683
139.00	43.660 43.640	46.03	44.223 44.213
188.98	43.390 43.370	46.0	43.943 43.943
238.98	43.150 43.140	46.1	43.844 43.840
242.98		42.8	

LINE D
1:500(H) 1:100(V)



FOR DA ONLY

SURVEY INFORMATION				Client HB&B PROPERTY PTY LTD				Project STORAGE AND DISTRIBUTION WAREHOUSE LUDDENHAM ROAD, ORCHARD HILLS, NSW			
SURVEYED BY: WATSDON BUCHAN				Architect NETTLETONTRIBE				Drawn E. Formadero			
DATUM: A.H.D.				 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				Designed S. Chen			
ORIGIN OF LEVELS: SSM 22740 RL:41.10				 City of Parramatta 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.				Approved N. Heazlewood Approved T. Rozebral Title STORMWATER LONGITUDINAL SECTIONS - SHEET 2 OF 2			
REVISION 2 ISSUED FOR DA ONLY 1 ISSUED FOR DA ONLY				DRAWN DESIGNED DATE REVISION AMENDMENT DATE AMENDMENT DATE DRAWN DESIGNED DATE				Drawing number 241745_DA_C211 Revision 2			

WESTERN CATCHMENT TOTAL SITE =50,605m²

TOTAL SITE =104, 959m²

EASTERN CATCHMENT TOTAL SITE =54,354m²

ROOF AREA TO WESTERN RWT
AREA = 18352m² (100% IMPERVIOUS)

LANDSCAPING TO WESTERN OSD TANK
AREA = 539m² (0% IMPERVIOUS)

ROOF AREA TO WESTERN OSD TANK
AREA = 9000m² (100% IMPERVIOUS)

LANDSCAPING BYPASS
AREA = 3548m² (0% IMPERVIOUS)

EXTERNAL AREA TO WESTERN OSD TANK
AREA = 19166m² (100% IMPERVIOUS)

ROOF AREA TO EASTERN RWT
AREA = 15691m² (100% IMPERVIOUS)

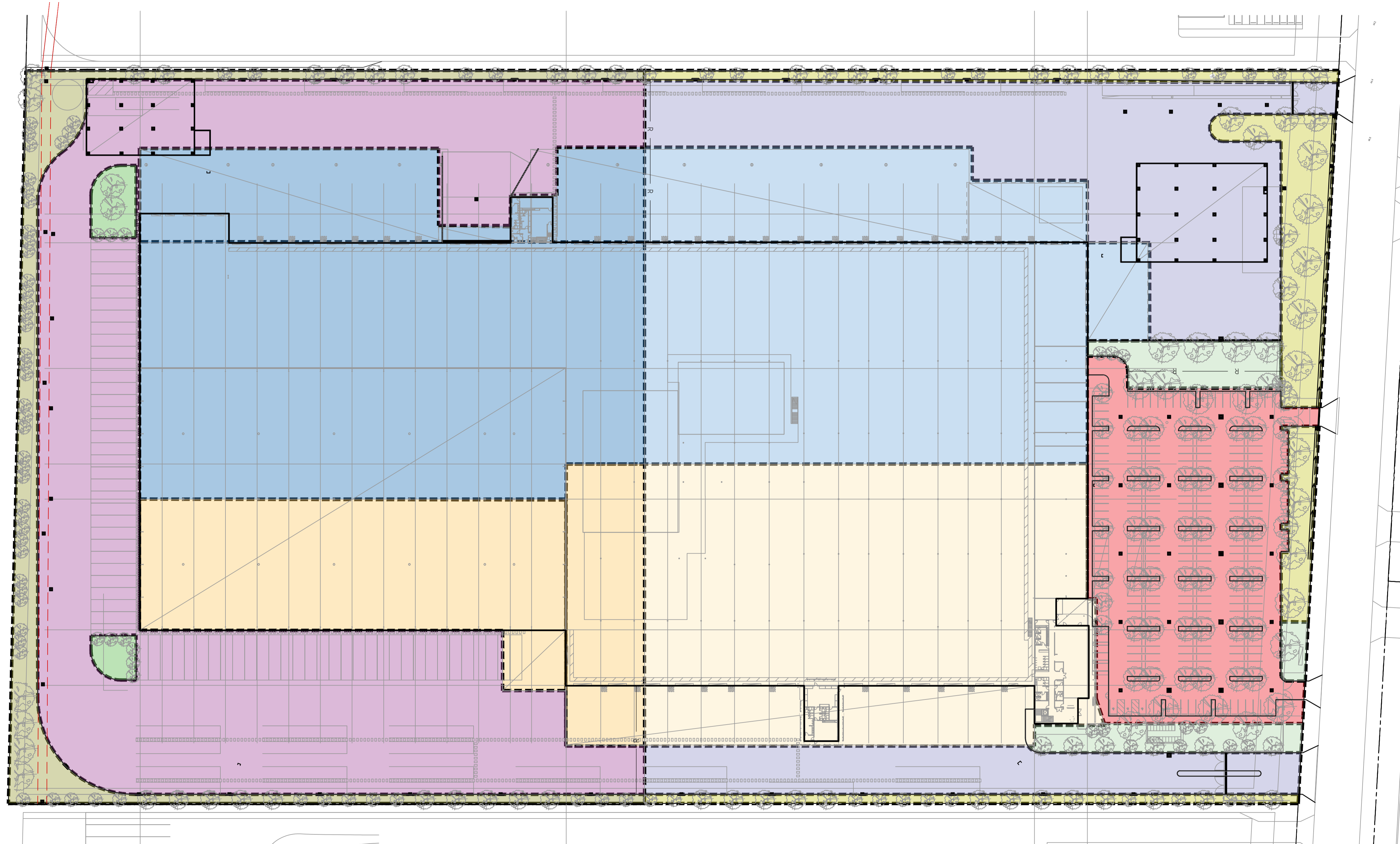
LANDSCAPING TO EASTERN OSD TANK
AREA = 1884m² (0% IMPERVIOUS)

ROOF AREA TO EASTERN OSD TANK
AREA = 13755m² (100% IMPERVIOUS)

CARPARKING TO EASTERN OSD TANK
AREA = 7426m² (94% IMPERVIOUS)

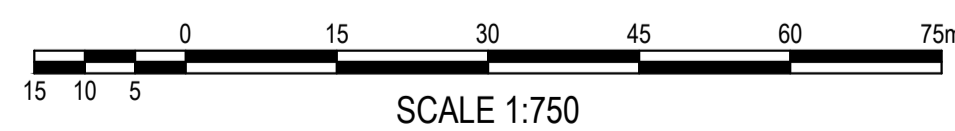
EXTERNAL AREA TO EASTERN OSD TANK
AREA = 11740m² (100% IMPERVIOUS)

LANDSCAPING BYPASS
AREA = 3860m² (0% IMPERVIOUS)


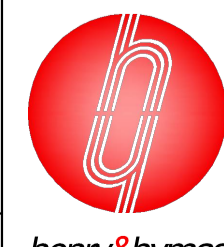




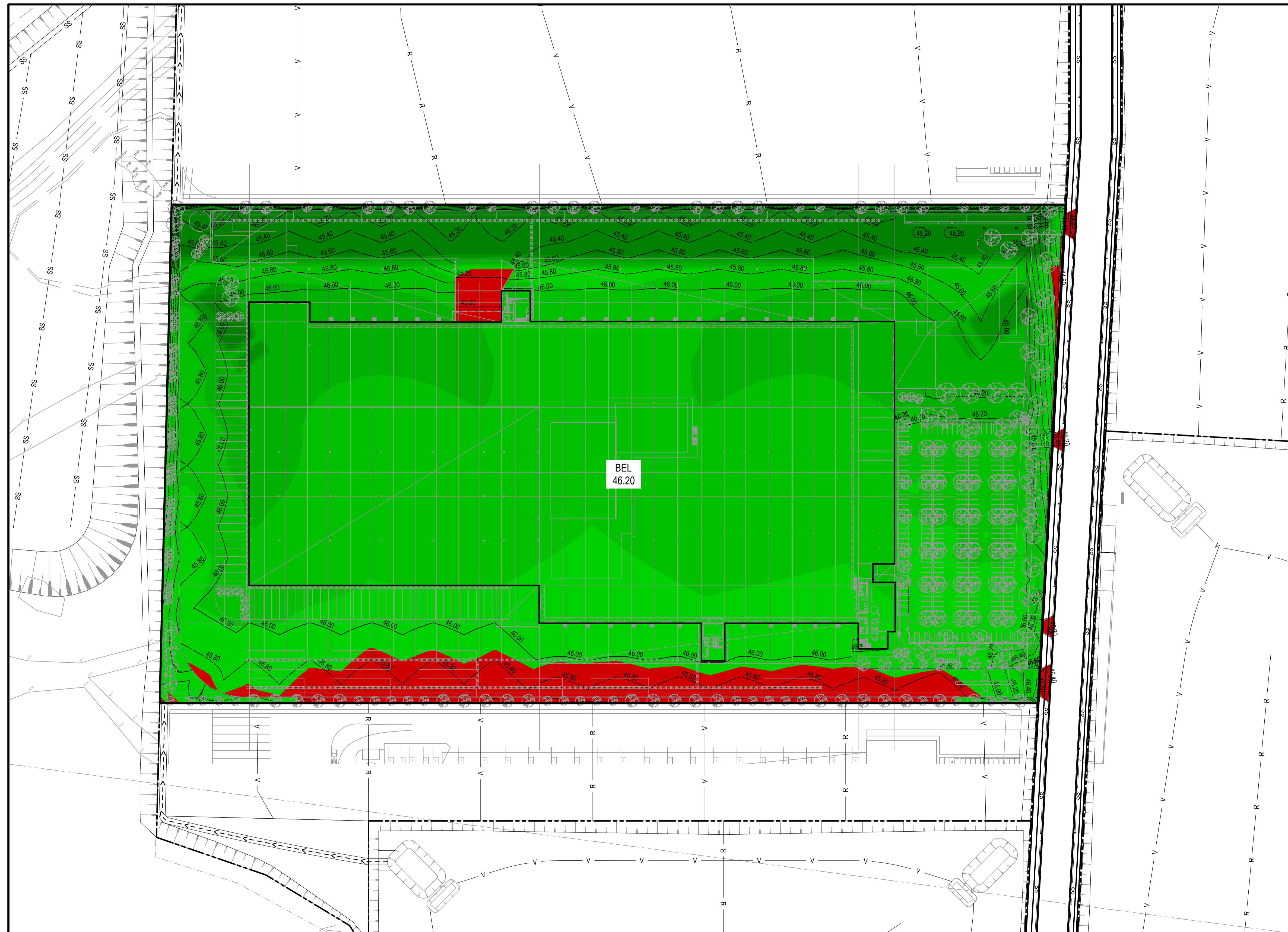
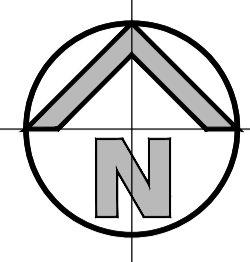
STORMWATER CATCHMENT PLAN

SCALE: 1:750



FOR DA ONLY

SURVEY INFORMATION				Client HB&B PROPERTY PTY LTD				Suite 2.01 828 Pacific Highway Gordon NSW 2072				Tel/Facsimile +61 2 9417 8400 +61 2 9417 8337				Project STORAGE AND DISTRIBUTION WAREHOUSE LUDDENHAM ROAD, ORCHARD HILLS, NSW				Drawn E. Formadero				Designed S. Chen				Original issue date Feb 2025																									
SURVEYED BY: WATSDON BUCHAN				Architect NETTLETONTRIBE												Checked N. Heazlewood				Approved T. Rozehnal				Scale @A1 NTS																													
DATUM: A.H.D.				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.								Title STORMWATER CATCHMENT PLAN				Drawing number 241745_DA_C250				Revision 2																																	
ORIGIN OF LEVELS: SSM 22740 RL:41.10				<table border="1"> <thead> <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> </thead> <tbody> <tr> <td>2</td> <td>ISSUED FOR DA ONLY</td> <td>AFB</td> <td>NH</td> <td>10.04.2025</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1</td> <td>ISSUED FOR DA ONLY</td> <td>EF</td> <td>NH</td> <td>10.03.2025</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	2	ISSUED FOR DA ONLY	AFB	NH	10.04.2025						1	ISSUED FOR DA ONLY	EF	NH	10.03.2025						DRAWING TO BE PRINTED IN COLOUR															
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1	ISSUED FOR DA ONLY	EF	NH	10.03.2025																																																	



LEGEND

- EXISTING BOUNDARY
- 41.20 BE CONTOURS

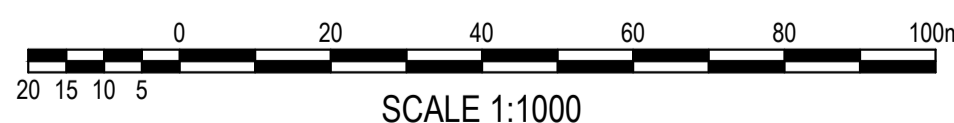
DEPTH RANGE				
Lower_value	Upper_value	Meters	Colour	
-20	to	-10	Meters	
-10	to	-8	Meters	
-8	to	-7	Meters	
-7	to	-6	Meters	
-6	to	-5	Meters	
-5	to	-4	Meters	
-4	to	-3	Meters	
-3	to	-2	Meters	
-2	to	-1	Meters	
-1	to	-1	Meters	
-1	to	-0.05	Meters	
-0.05	to	0	Meters	
0	to	.05	Meters	
.05	to	.1	Meters	
.1	to	.2	Meters	
.2	to	.4	Meters	
.4	to	.6	Meters	
.6	to	.8	Meters	
.8	to	1	Meters	
1	to	2	Meters	
2	to	4	Meters	
4	to	6	Meters	
6	to	10	Meters	
10	to	20	Meters	

EARTHWORKS QUANTITIES

(APPROXIMATE ONLY)
NOT TO BE USED FOR CONTRACTUAL PURPOSES. TENDERS TO DETERMINE VOLUMES USING THEIR OWN METHOD OF CALCULATION.

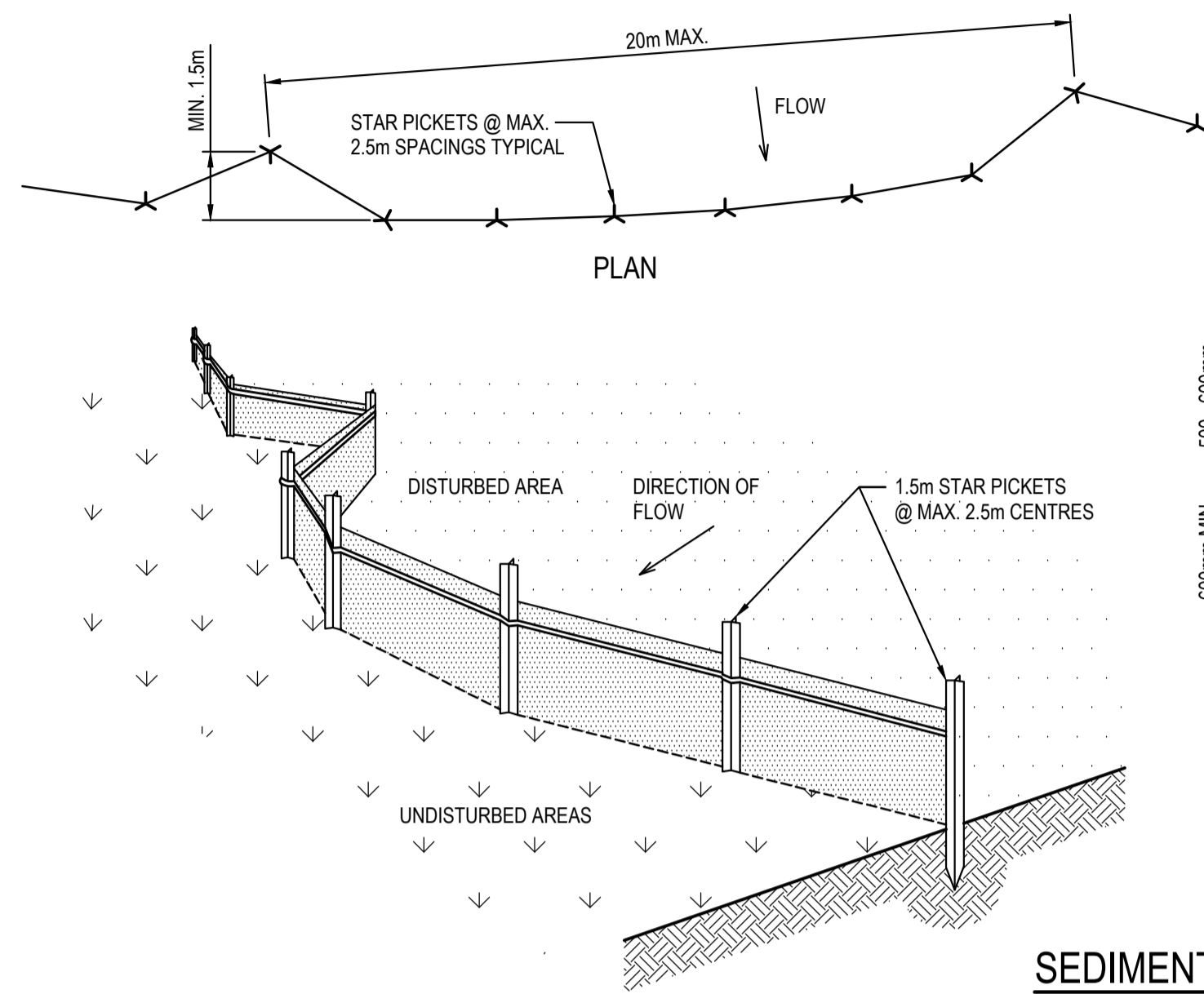
- EARTHWORKS QUANTITIES -	
TOTAL AREA (105,217 m ²)	
CUT	4,488 m ³
FILL	66,768 m ³
EXCESS OF FILL OF OVER CUT	62,280m ³
EXCAVATION FOR SERVICE TRENCHES NOT INCLUDED IN CALCULATION	
EXCAVATION FOR RETAINING WALLS NOT INCLUDED IN CALCULATION	
EXCAVATION FOR OSD AND RW TANKS NOT INCLUDED IN CALCULATION	
NO TOPSOIL STRIPPING. BULK EARTHWORKS VOLUME CALCULATED AGAINST THE DESIGN BULK SURFACE FOR THE SUBDIVISION WORKS CC DESIGN.	

PAVEMENT THICKNESS "INCLUDING BEDDING THICKNESS"		
ALL AREAS	300	mm



FOR DA ONLY

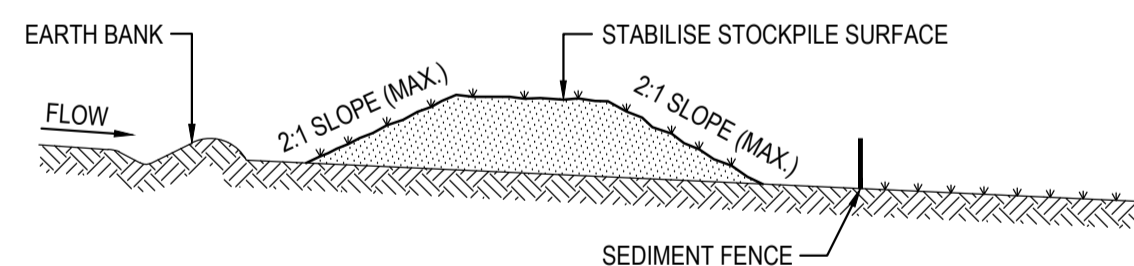
SURVEY INFORMATION SURVEYED BY: WATSDON BUCHAN DATUM: A.H.D. ORIGIN OF LEVELS: SSM 22740 RL:41.10				Client: HB&B PROPERTY PTY LTD Architect: NETTLETONTRIBE This drawing and design remains the property of Henry & Hymas and may not be copied in whole or in part without the prior written approval of Henry & Hymas.				Suite 2.01 828 Pacific Highway Gordon NSW 2072 Telephone: +61 2 9417 8400 Facsimile: +61 2 9417 8337 Email: email@hiconsult.com.au Web: www.henryandhymas.com.au Drawing to be printed in colour				Project: STORAGE AND DISTRIBUTION WAREHOUSE LUDDENHAM ROAD, ORCHARD HILLS, NSW Title: BULK EARTHWORKS CUT FILL PLAN				Drawn: E. Formadero Checked: N. Heazlewood Design: S. Chen Approved: T. Rozehnal Original issue date: Feb 2025 Scale: @A1 NTS Drawing number: 241745_DA_BE01 Revision: 2	
REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE								
2	ISSUED FOR DA ONLY	AFe	NH	10.04.2025													
1	ISSUED FOR DA ONLY	EF	NH	10.03.2025													



SEDIMENT FENCE
SCALE N.T.S.

SEDIMENT FENCE CONSTRUCTION NOTES:

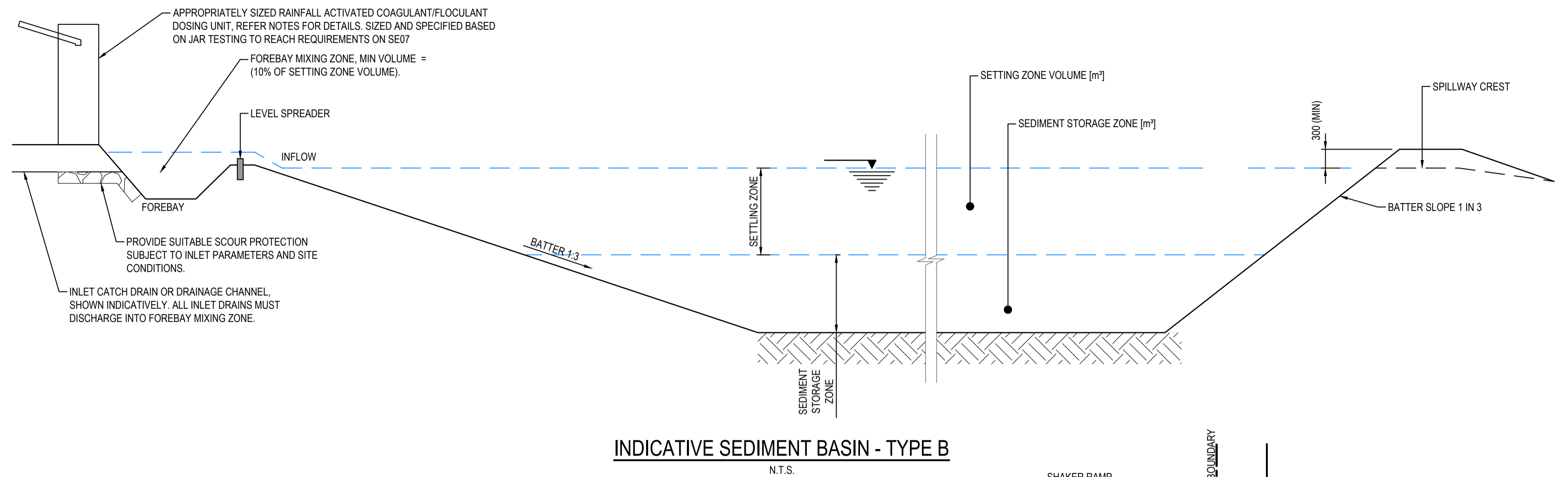
- CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND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



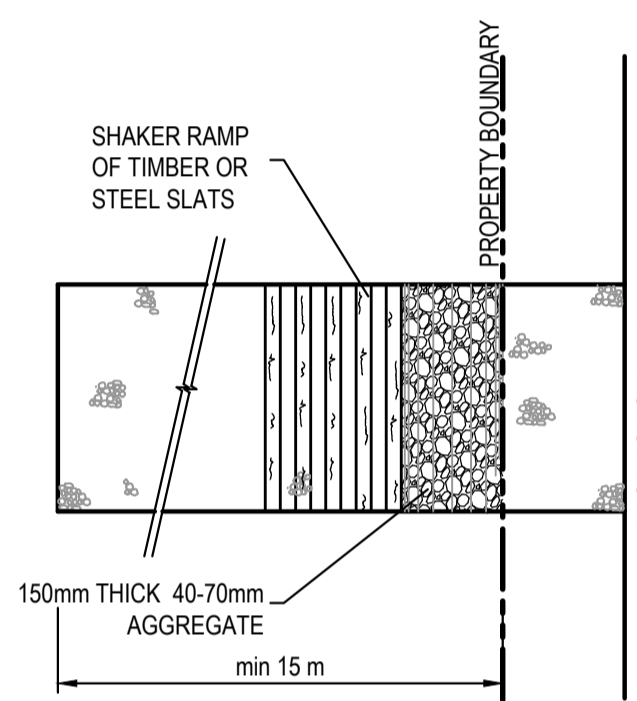
STOCKPILE CONSTRUCTION NOTES:

- PLACE STOCKPILES MORE THAN 2 (PREFERABLY 5) METRES FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
- CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
- WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2 METRES IN HEIGHT.
- 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.
- CONSTRUCT EARTH BANKS ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES 1 TO 2 METRES DOWNSLOPE.

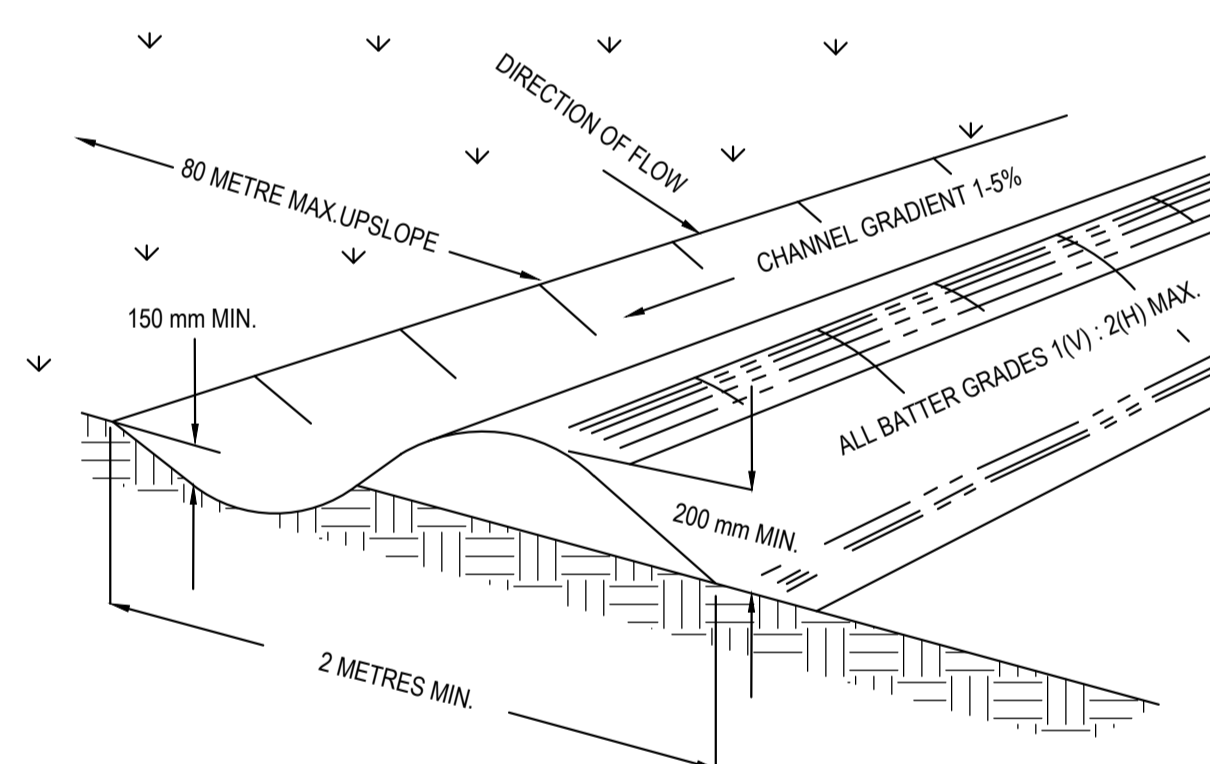
STOCKPILES
SCALE N.T.S.



INDICATIVE SEDIMENT BASIN - TYPE B
N.T.S.



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



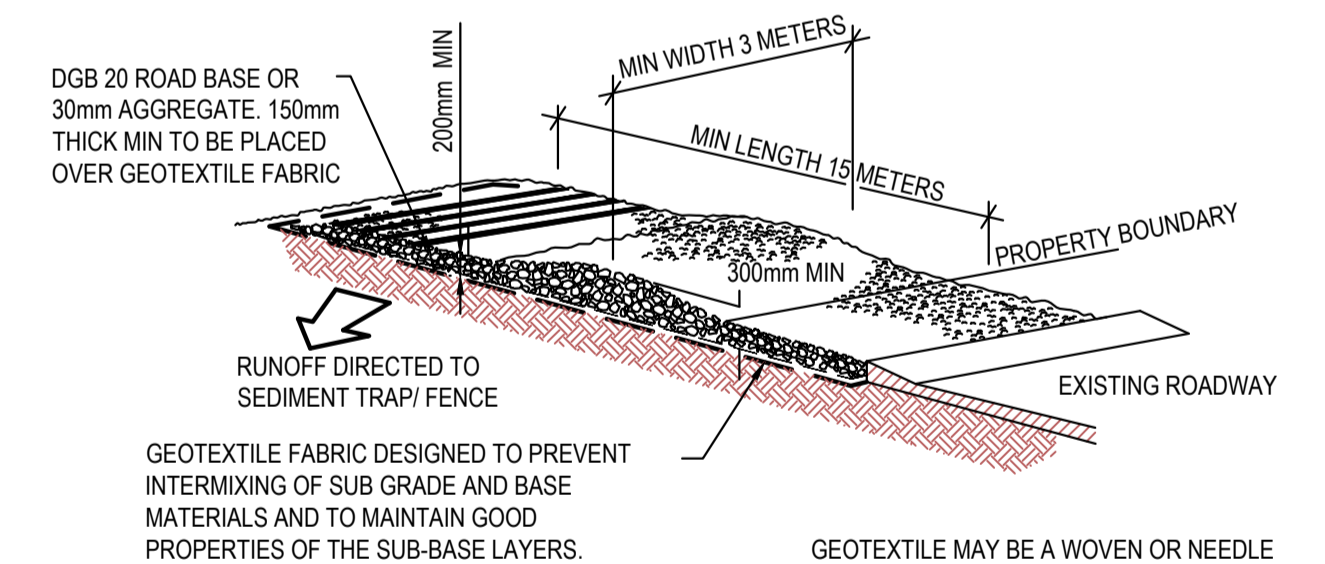
NOTE: ONLY TO BE USED AS TEMPORARY BANK WHERE MAX. UPSLOPE LENGTH IS 80 METERS.

CATCH DRAIN CONSTRUCTION NOTES:

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

CATCH DRAINS SD 5-8
SCALE N.T.S.

CONSTRUCTION SITE



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

NOTES:

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

FOR DA ONLY

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SURVEYED BY: WATSDON BUCHAN				Architect: NETTLETONTRIBE												Title: SEDIMENT AND EROSION CONTROL DETAILS				Drawing number: 241745_DA_SE02				Revision: 2			
DATUM: A.H.D.				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.				DRAWING TO BE PRINTED IN COLOUR																			
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