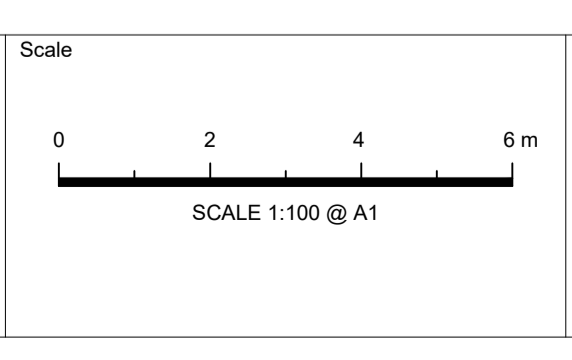


H	ISSUE FOR DEVELOPMENT APPLICATION	15/10/2025	M.Y.C.	M.C.O.	Architect
G	ISSUE FOR DEVELOPMENT APPLICATION	12/06/2025	M.Y.C.	M.C.O.	PTI ARCHITECTURE
F	ISSUE FOR DEVELOPMENT APPLICATION	05/06/2025	M.Y.C.	M.C.O.	TOURISM+RESIDENTIAL
E	ISSUE FOR DEVELOPMENT APPLICATION	29/05/2025	M.Y.C.	M.C.O.	MAN OFFICE LEVEL 2, 88 SOPHIA STREET, SURREY HILLS NSW 2010
D	ISSUE FOR DEVELOPMENT APPLICATION	17/05/2024	J.A.H.	M.C.O.	PARRAMATTA OFFICE: LEVEL 14, 3 PARRAMATTA SQUARE, 153 MACQUARIE ST, NSW 2150
Issue	Description	Date	Design	Checked	+61 2 9283 6860 www.ptiarchitecture.com.au NOMINATED REGISTERED ARCHITECT: PETER ISRAEL (REG NO 5064) ABN 90 550 071 022

Architect
PTI ARCHITECTURE
TOURISM+RESIDENTIAL
MAN OFFICE LEVEL 2, 88 SOPHIA STREET,
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PARRAMATTA OFFICE: LEVEL 14, 3 PARRAMATTA
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NOMINATED REGISTERED ARCHITECT:
PETER ISRAEL (REG NO 5064)
ABN 90 550 071 022

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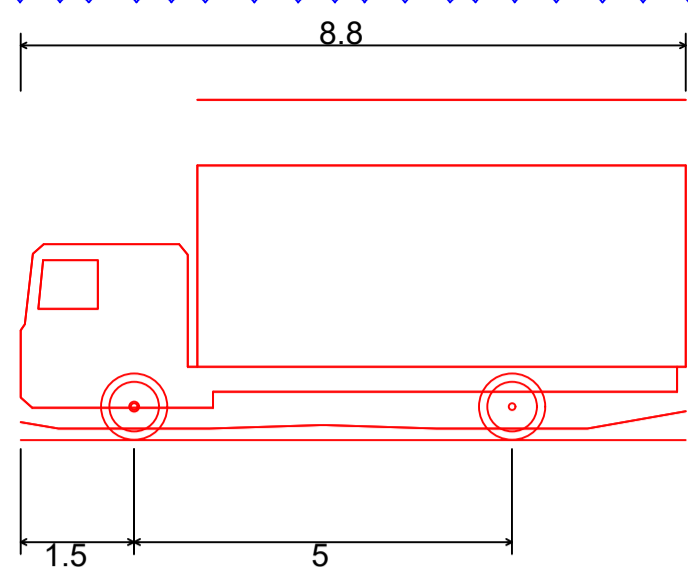


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Project
85-91 THOMAS STREET, PARRAMATTA
PUBLIC DOMAIN WORKS
CIVIL ENGINEERING PLANS
FOR DEVELOPMENT APPLICATION

Drawing Title
CIVIL WORKS LAYOUT PLAN
Scale: A1 Project No. 200994 Dwg. No. C101 Issue H

FOR APPROVAL



MRV - Vertical Clearance
 Overall Length 8.800m
 Overall Width 2.500m
 Overall Body Height 4.500m
 Min Body Ground Clearance 0.150m
 Track Width 2.500m
 Lock-to-lock time 4.00s
 Curb to Curb Turning Radius 10.000m

VERTICAL GRADE (%)

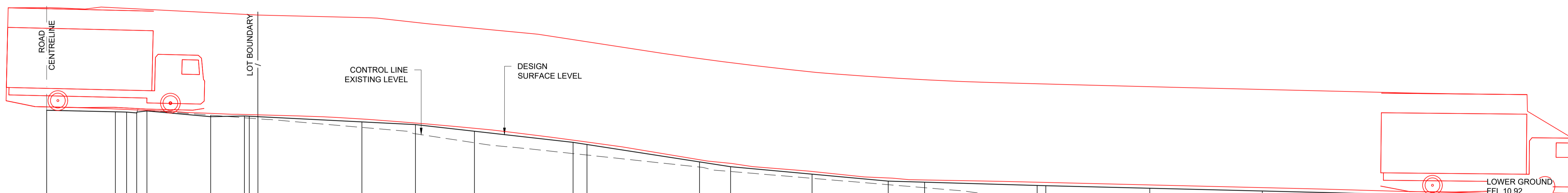
DATUM R.L. 5.00

DESIGN SURFACE LEVEL	—————	14.91	14.91	14.84	14.83	14.79	14.88	14.63	14.66	14.65	14.79	13.98	13.49	13.39	12.62	12.23	11.93	11.35	11.35	11.01	10.92	
CONTROL LINE EXISTING LEVEL	-----	14.91	14.84	14.83	14.79	14.88	14.63	14.66	14.65	14.79	13.98	13.49	13.39	12.62	12.23	11.93	11.35	11.35	11.01	10.92	10.92	
CHAINAGE		4	0.95	0.45	0	0.45	3.22	4.72	5.38	5.38	10	12.32	15	19.32	20	25	27.58	30	34.58	35	40	41.58

DRIVEWAY PROFILE - LONGITUDINAL SECTION 1

SCALE 1:100 (NATURAL)

C101



VERTICAL GRADE (%)

DATUM R.L. 5.00

DESIGN SURFACE LEVEL	—————	14.73	14.66	14.65	14.61	14.73	14.45	14.48	14.48	14.35	14.21	13.8	13.21	12.44	12.23	11.9	11.54	11.39	11.39	11.27	11.15	11.03	11	10.92			
CONTROL LINE EXISTING LEVEL	-----	14.73	14.66	14.65	14.61	14.73	14.45	14.48	14.48	14.35	14.21	13.8	13.21	12.44	12.23	11.9	11.54	11.39	11.39	11.27	11.15	11.03	11	10.92			
CHAINAGE		4	0.95	0.45	0	0.45	3.28	4.78	5.38	5.38	10	12.38	15	19.38	20	25	26.38	30	33.38	35	40	40.38	45	50	55	56	59.6

DRIVEWAY PROFILE - LONGITUDINAL SECTION 2

SCALE 1:100 (NATURAL)

C101

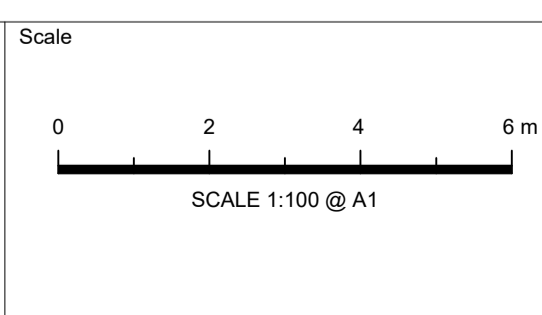


FOR APPROVAL

E	ISSUE FOR DEVELOPMENT APPLICATION	15/10/2025	M.Y.C.	M.C.O.	Architect
D	ISSUE FOR DEVELOPMENT APPLICATION	29/05/2025	M.Y.C.	M.C.O.	PTI ARCHITECTURE
C	ISSUE FOR DEVELOPMENT APPLICATION	17/05/2024	J.A.H.	M.C.O.	TOURISM+RESIDENTIAL
B	ISSUE FOR DEVELOPMENT APPLICATION	11/04/2023	H.K.B.	M.C.O.	MAN OFFICE: LEVEL 2, 88 SOPHIA STREET, SURRY HILLS NSW 2010
A	ISSUE FOR DEVELOPMENT APPLICATION	30/03/2023	H.K.B.	M.C.O.	PARRAMATTA OFFICE: LEVEL 14, 3 PARRAMATTA SQUARE, 153 MACQUARIE ST, NSW 2150
Issue	Description	Date	Design	Checked	4/1 2 3233 0860 www.ptiarchitecture.com.au NOMINATED REGISTERED ARCHITECT: PETER ISRAEL (REG NO 5064) ABN 90 550 071 022

Architect
 PTI ARCHITECTURE
 TOURISM+RESIDENTIAL
 MAN OFFICE: LEVEL 2, 88 SOPHIA STREET,
 SURRY HILLS NSW 2010
 PARRAMATTA OFFICE: LEVEL 14, 3 PARRAMATTA
 SQUARE, 153 MACQUARIE ST, NSW 2150
 4/1 2 3233 0860 | www.ptiarchitecture.com.au
 NOMINATED REGISTERED ARCHITECT:
 PETER ISRAEL (REG NO 5064)
 ABN 90 550 071 022

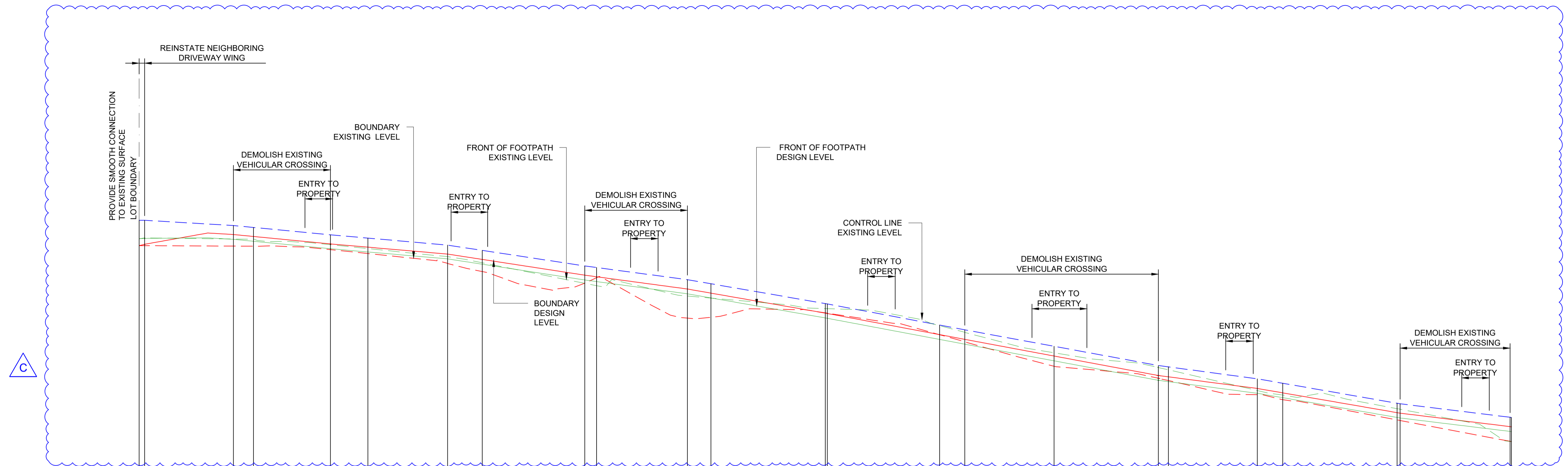
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Project
 85-91 THOMAS STREET, PARRAMATTA
 PUBLIC DOMAIN WORKS
 CIVIL ENGINEERING PLANS
 FOR DEVELOPMENT APPLICATION

Drawing Title	DRIVEWAY PROFILE LONGITUDINAL SECTIONS		
Scale	A1 AS SHOWN	Project No.	200994
Dwg. No.	C201	Issue	E



CHAINAGE	0	4.12	5	8.36	10	13.48	15	19.48	20	23.97	25	30	30.09	35	36.1	40	44.56	45	48.89	50	55	55.13	59.94	60	
CONTROL LINE VERTICAL GRADE (%)	0.06%	-1.16%	-1.91%	-1.76%	-3.03%	-2.67%	-3.47%	-3.76%	-3.69%	-2.68%	-3.49%	-2.45%	-3.8%												
DATUM R.L. 13.00																									
FRONT OF FOOTPATH EXISTING LEVEL	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	
FRONT OF FOOTPATH DESIGN LEVEL	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	16.597	
BOUNDARY EXISTING LEVEL	16.538	16.533	16.533	16.533	16.533	16.533	16.533	16.533	16.533	16.533	16.533	16.533	16.533	16.533	16.533	16.533	16.533	16.533	16.533	16.533	16.533	16.533	16.533	16.533	
BOUNDARY DESIGN LEVEL	16.538	16.634	16.617	16.552	16.524	16.464	16.417	16.28	16.258	16.158	16.123	15.948	15.945	15.759	15.719	15.573	15.403	15.391	15.235	15.251	15.078	15.074	14.838	14.855	
CONTROL LINE EXISTING LEVEL	16.759	16.538	16.537	16.537	16.537	16.537	16.537	16.537	16.537	16.537	16.537	16.537	16.537	16.537	16.537	16.537	16.537	16.537	16.537	16.537	16.537	16.537	16.537	16.537	16.537

THOMAS STREET - LONGITUDINAL SECTION - CONTROL LINE (INVERT OF KERB)

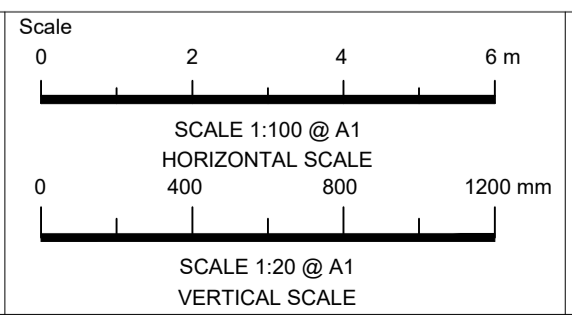
SCALE (H) 1:100
(V) 1:20

FOR APPROVAL

Issue	Description	Date	Design	Checked
C	ISSUE FOR DEVELOPMENT APPLICATION	15/10/2025	M.Y.C.	M.C.O.
B	ISSUE FOR DEVELOPMENT APPLICATION	17/05/2024	J.A.H.	M.C.O.
A	ISSUE FOR DEVELOPMENT APPLICATION	30/03/2023	H.K.B.	M.C.O.

Architect
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TOURISM+RESIDENTIAL
MAIN OFFICE: LEVEL 2, 88 SOPHIA STREET,
SURRY HILLS NSW 2010
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NOMINATED REGISTERED ARCHITECT:
PETER ISRAEL (REG NO 5064)
ABN 90 950 071 022

Council
PARRAMATTA CITY COUNCIL

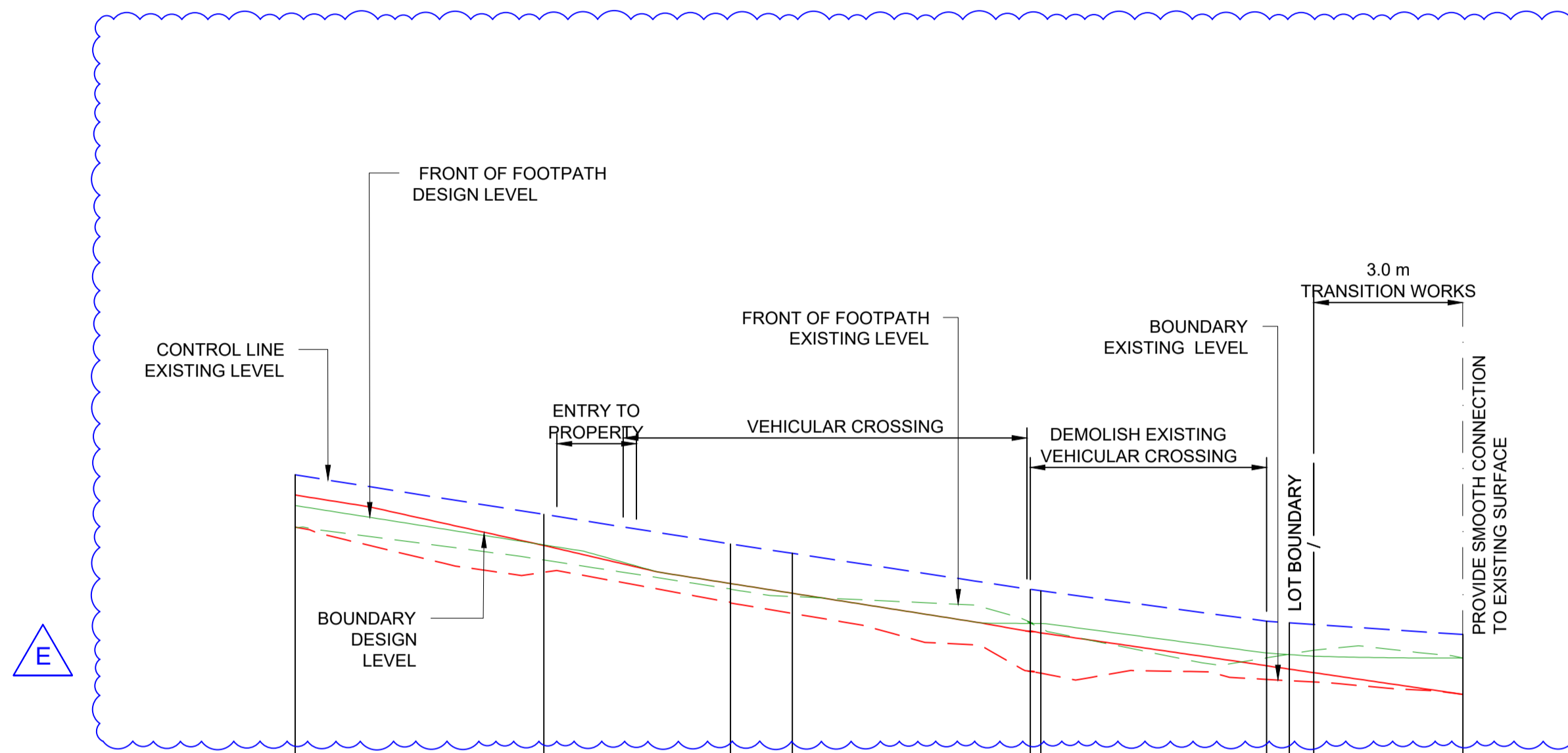


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Project
**85-91 THOMAS STREET, PARRAMATTA
PUBLIC DOMAIN WORKS
CIVIL ENGINEERING PLANS
FOR DEVELOPMENT APPLICATION**

Drawing Title
**THOMAS STREET
LONGITUDINAL SECTION
SHEET 1 OF 2**

Scale A1 AS SHOWN Project No. 200994 Dwg. No. C301 Issue C



CONTROL LINE VERTICAL GRADE (%)									
		-3.18%		-3.03%		-2.69%		-1.36%	
DATUM R.L. 13.00									
FRONT OF FOOTPATH EXISTING LEVEL	14.825	14.693	14.576	14.546	14.445	14.314	14.299		
FRONT OF FOOTPATH DESIGN LEVEL	14.913	14.754	14.599	14.559	14.438	14.319	14.299		
BOUNDARY EXISTING LEVEL	14.826	14.644	14.52	14.478	14.247	14.213	14.153		
BOUNDARY DESIGN LEVEL	14.955	14.752	14.595	14.559	14.408	14.284	14.153		
CONTROL LINE EXISTING LEVEL	15.038	14.877	14.758	14.72	14.575	14.447	14.383		
CHAINAGE	60	65	68.75	70	74.79	80	83.49		

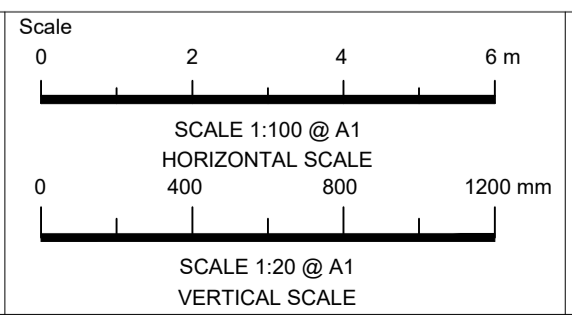
THOMAS STREET - LONGITUDINAL SECTION - CONTROL LINE (INVERT OF KERB)
 SCALE (H) 1:100
 (V) 1:20

FOR APPROVAL

Issue	Description	Date	Design	Checked
E	ISSUE FOR DEVELOPMENT APPLICATION	15/10/2025	M.Y.C.	M.C.O.
D	ISSUE FOR DEVELOPMENT APPLICATION	29/05/2025	M.Y.C.	M.C.O.
C	ISSUE FOR DEVELOPMENT APPLICATION	17/05/2024	J.A.H.	M.C.O.
B	ISSUE FOR DEVELOPMENT APPLICATION	11/04/2023	H.K.B.	M.C.O.
A	ISSUE FOR DEVELOPMENT APPLICATION	30/03/2023	H.K.B.	M.C.O.

Architect
PTI ARCHITECTURE
 TOURISM+RESIDENTIAL
 MAIN OFFICE: LEVEL 2, 88 SOPHIA STREET,
 SURRY HILLS NSW 2010
 PARRAMATTA OFFICE: LEVEL 14, 3 PARRAMATTA
 SQUARE, 153 MACQUARIE ST, NSW 2150
 +61 2 9283 6960 | www.ptiarchitecture.com.au
 NOMINATED REGISTERED ARCHITECT:
 PETER ISRAEL (REG NO 5064)
 ABN 90 950 071 922

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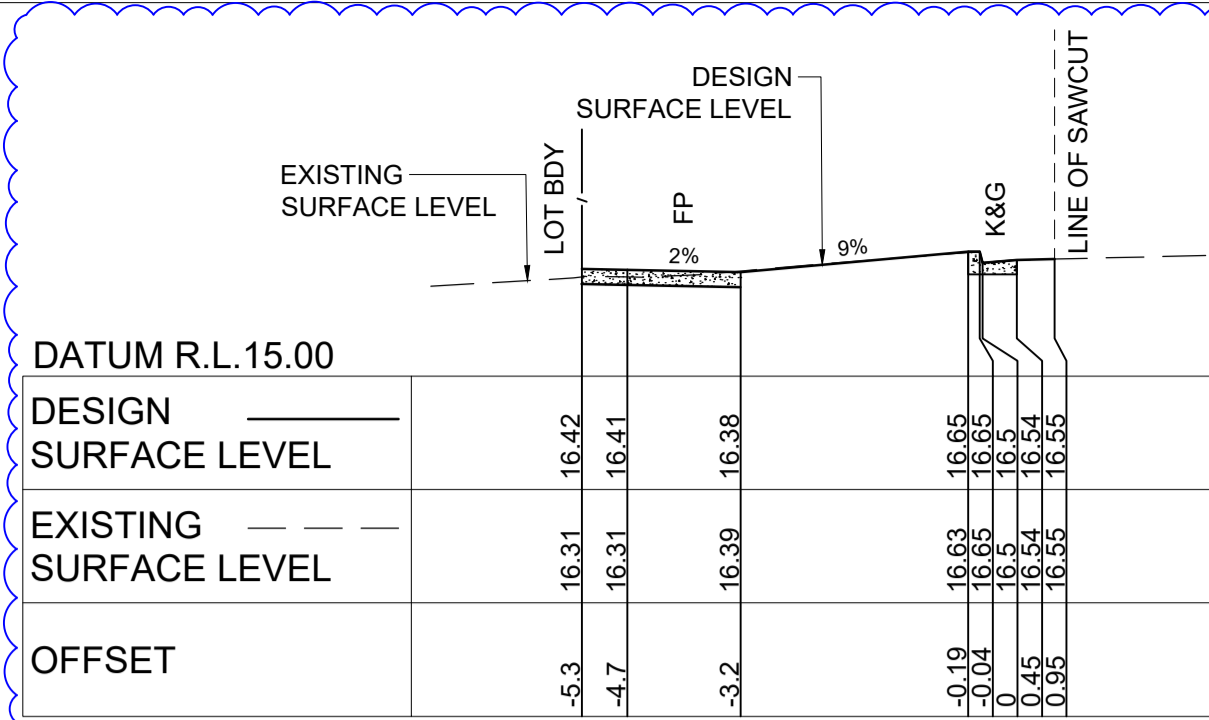


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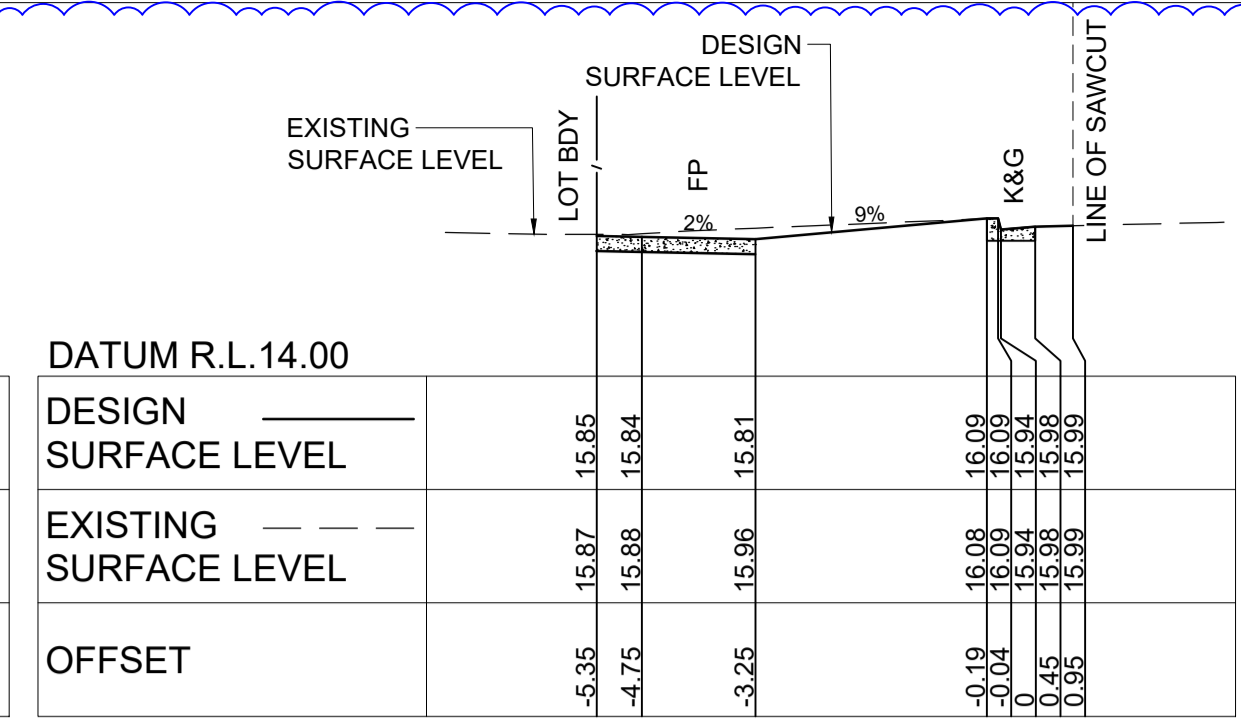
Project
85-91 THOMAS STREET, PARRAMATTA
 PUBLIC DOMAIN WORKS
 CIVIL ENGINEERING PLANS
 FOR DEVELOPMENT APPLICATION

Drawing Title
THOMAS STREET
 LONGITUDINAL SECTION
 SHEET 2 OF 2

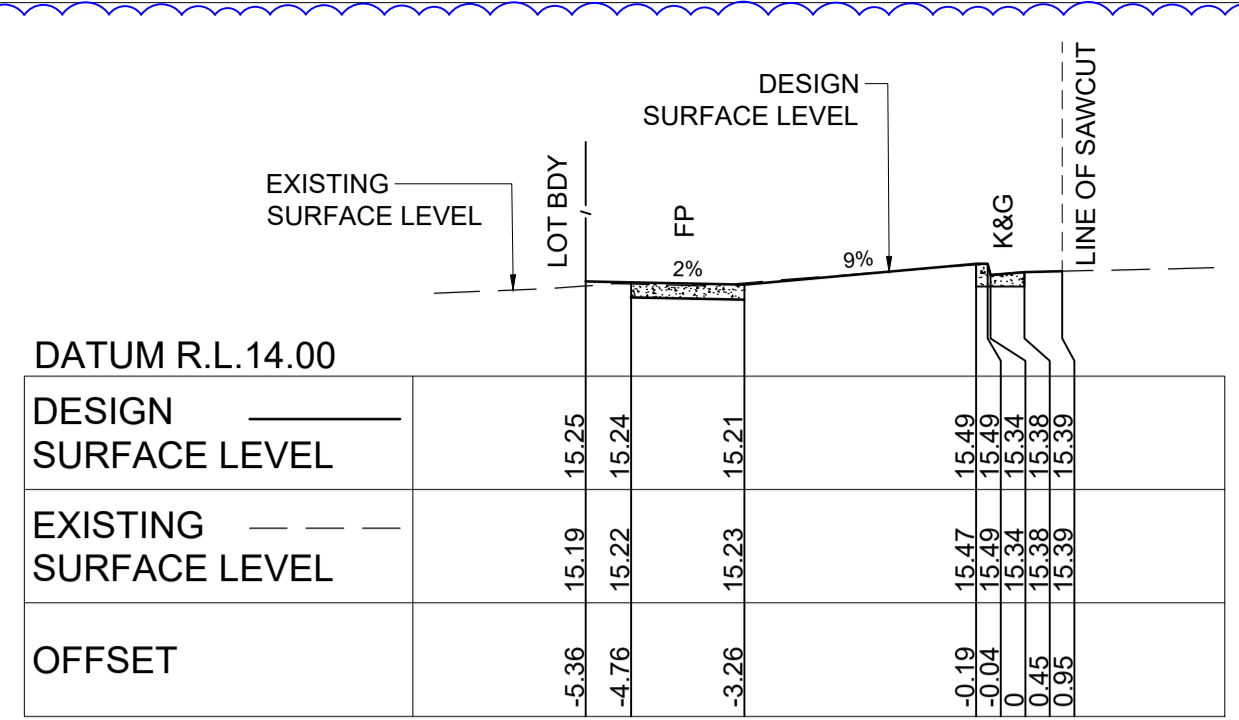
Scale	A1	Project No.	200994	Dwg. No.	C302	Issue	E
AS SHOWN							



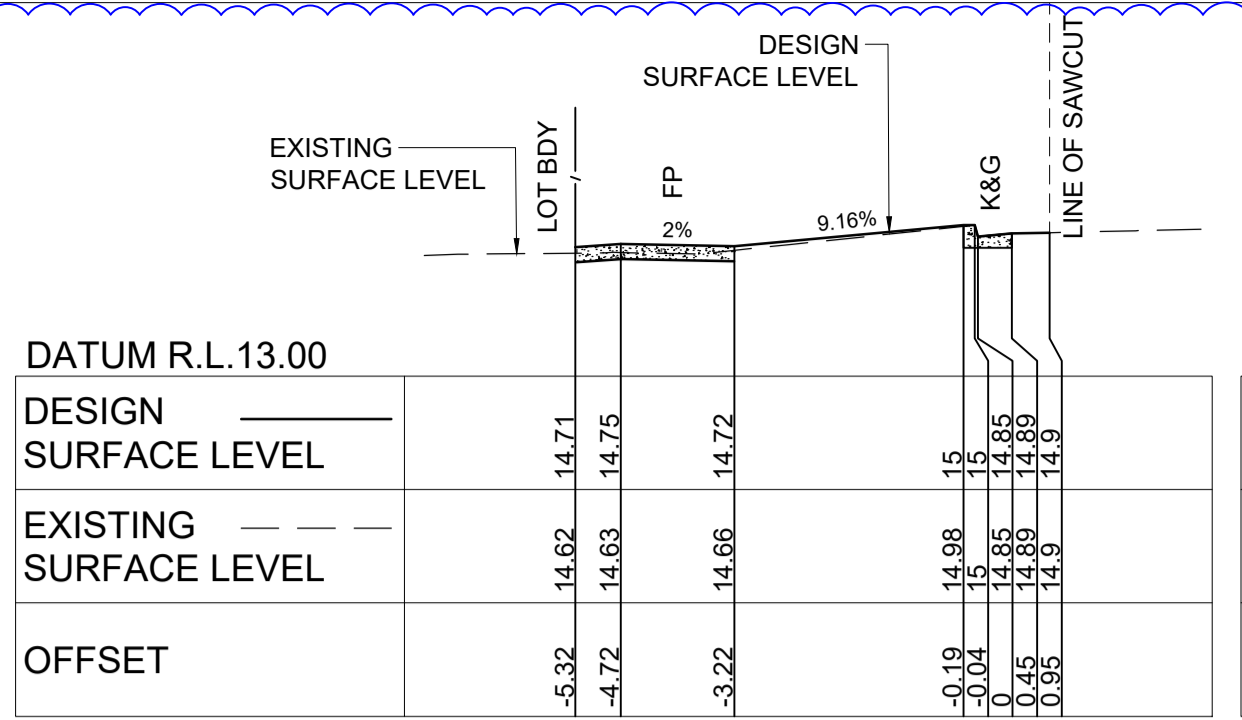
CH. 15.00 - ENTRANCE



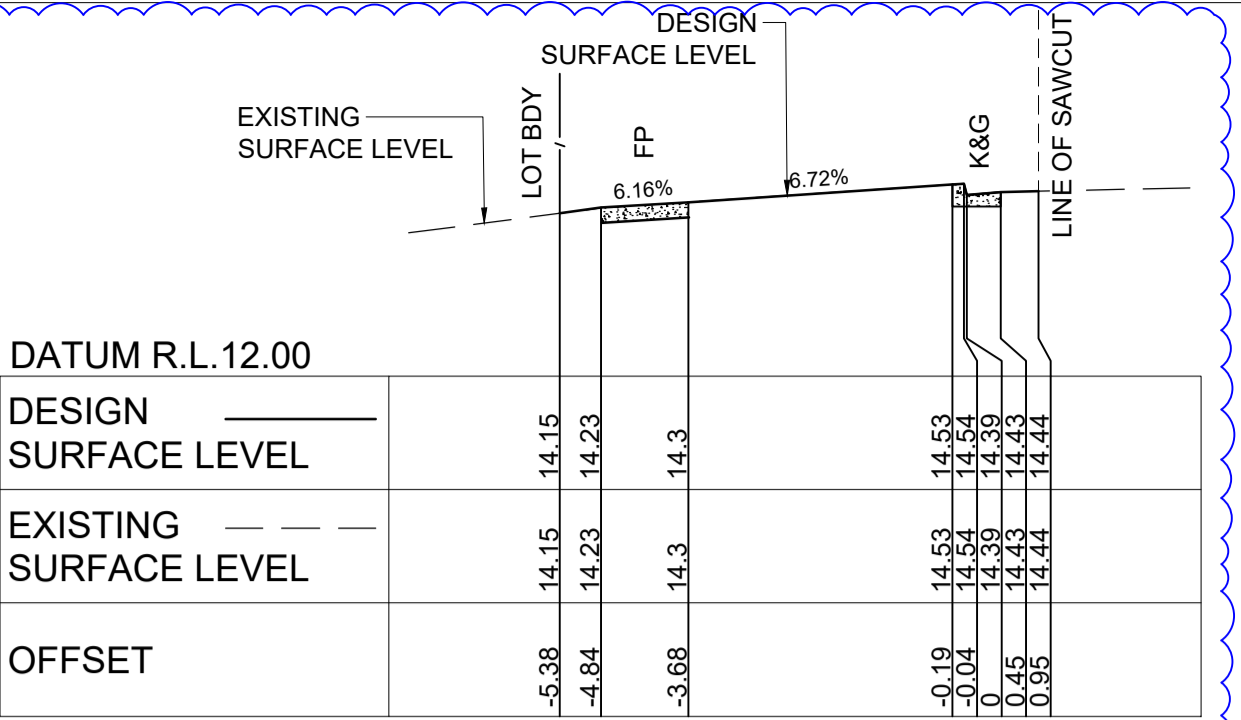
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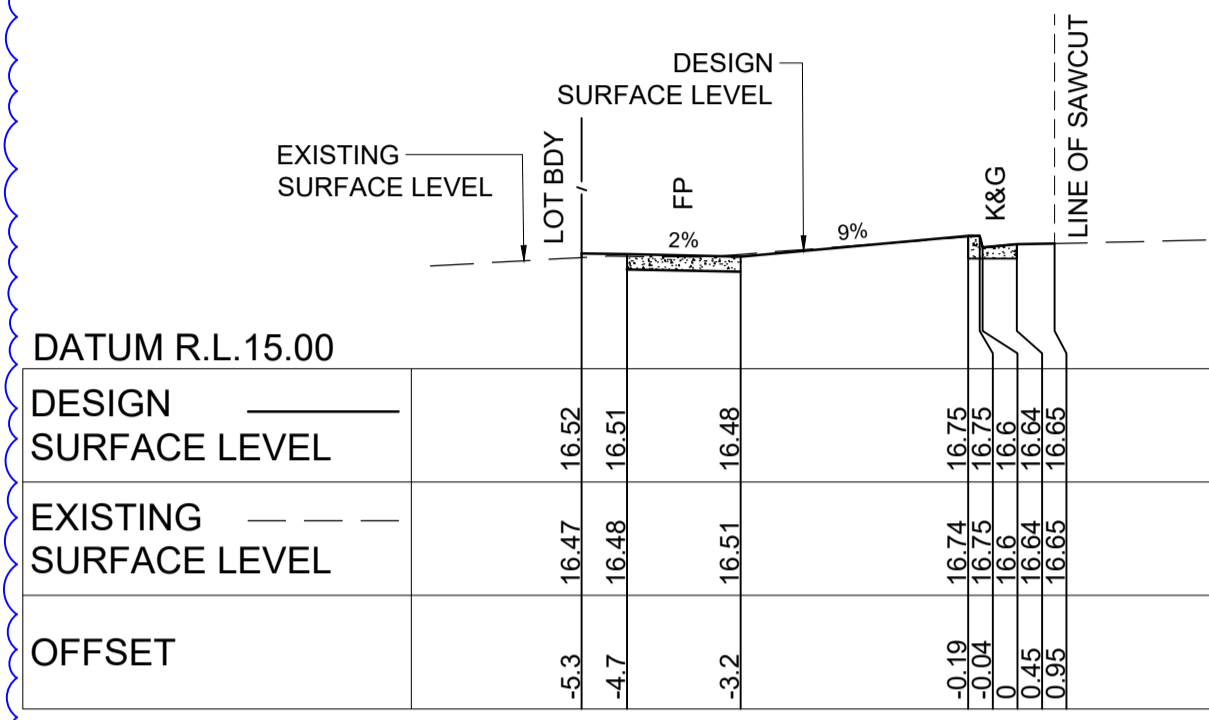
CH. 50.00



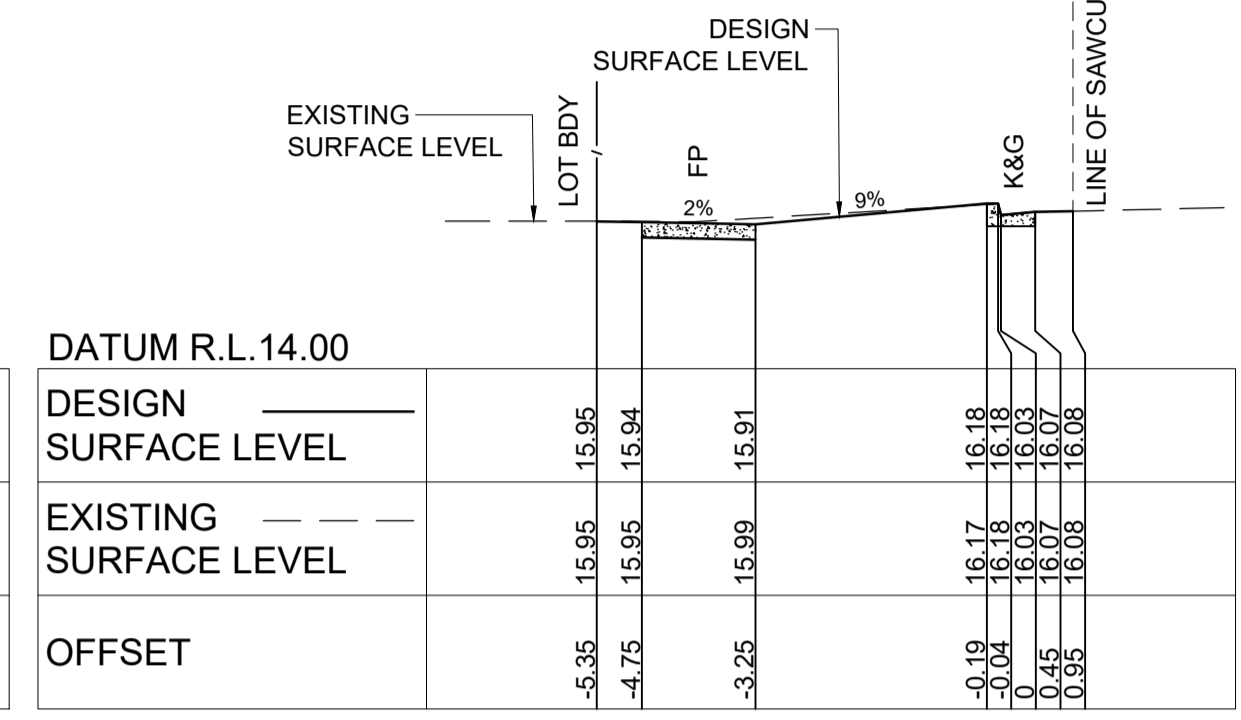
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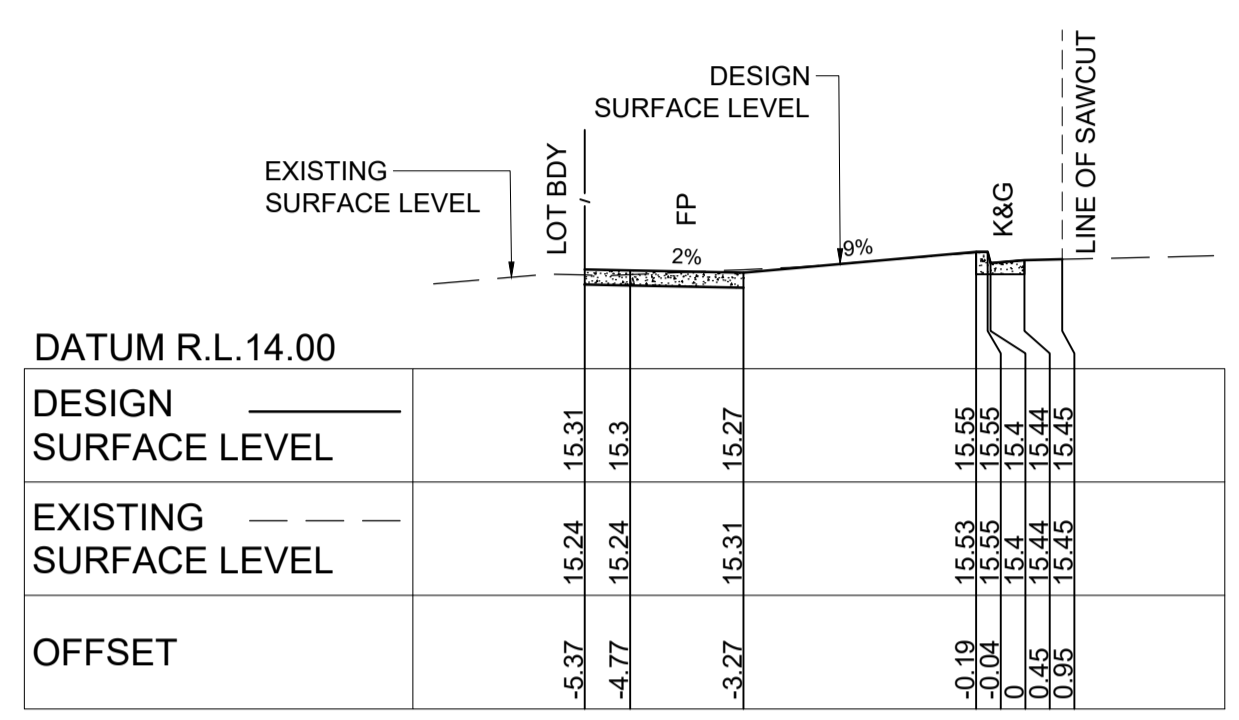
CH. 83.49 - EXTENT OF WORKS



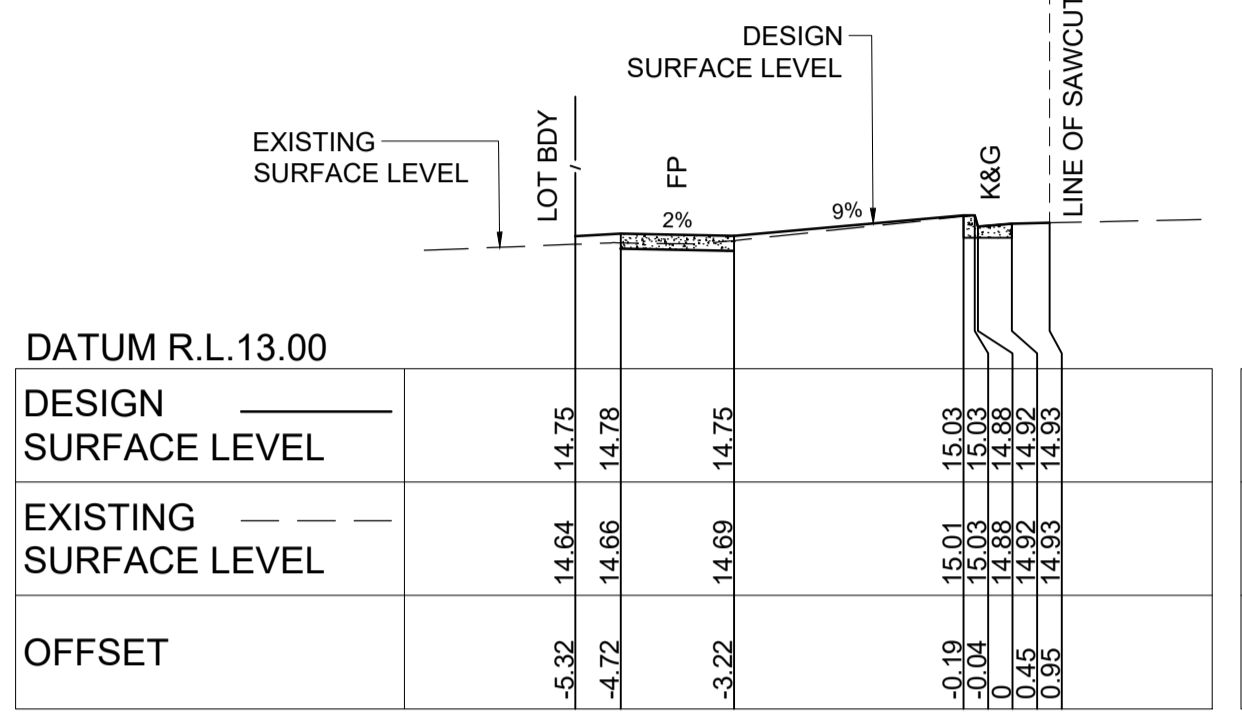
CH. 10.00



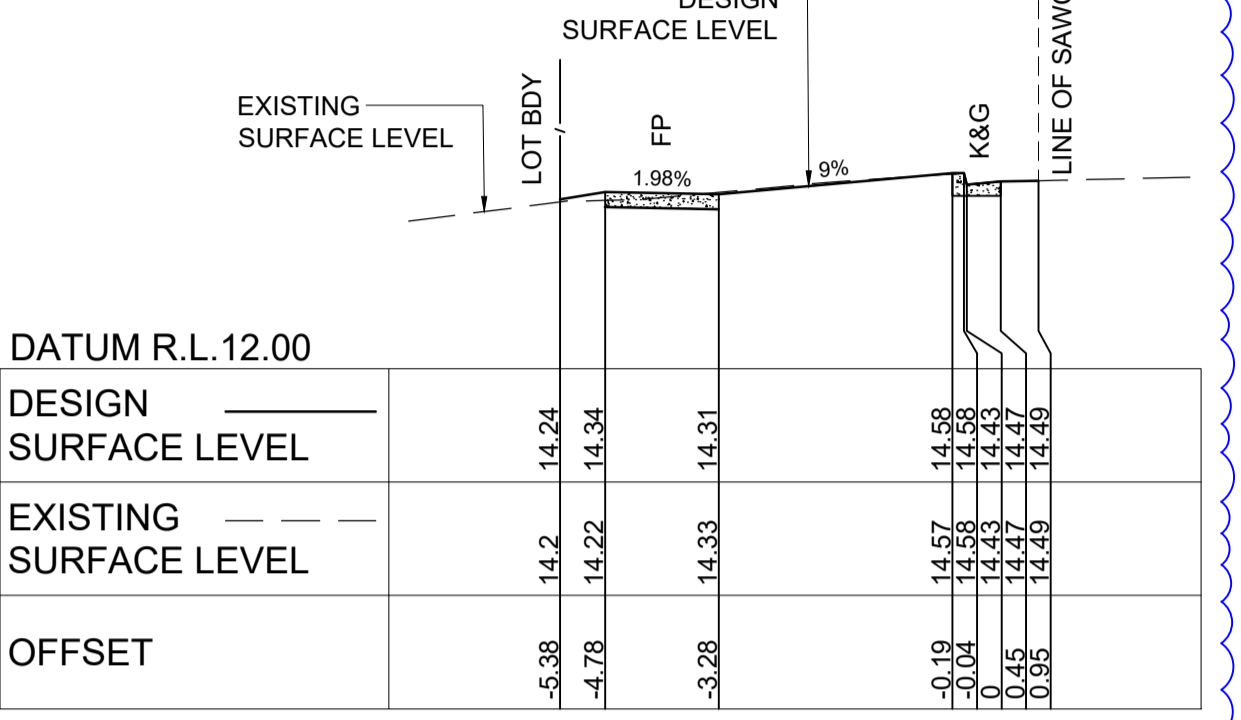
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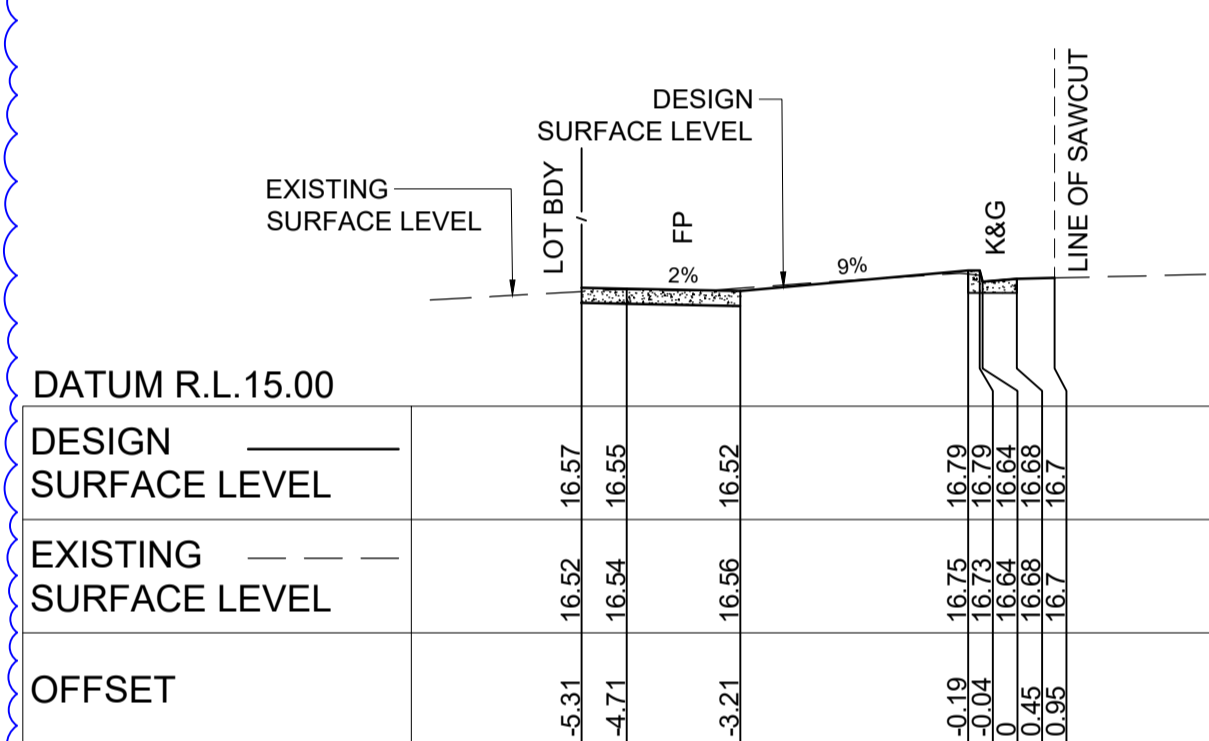
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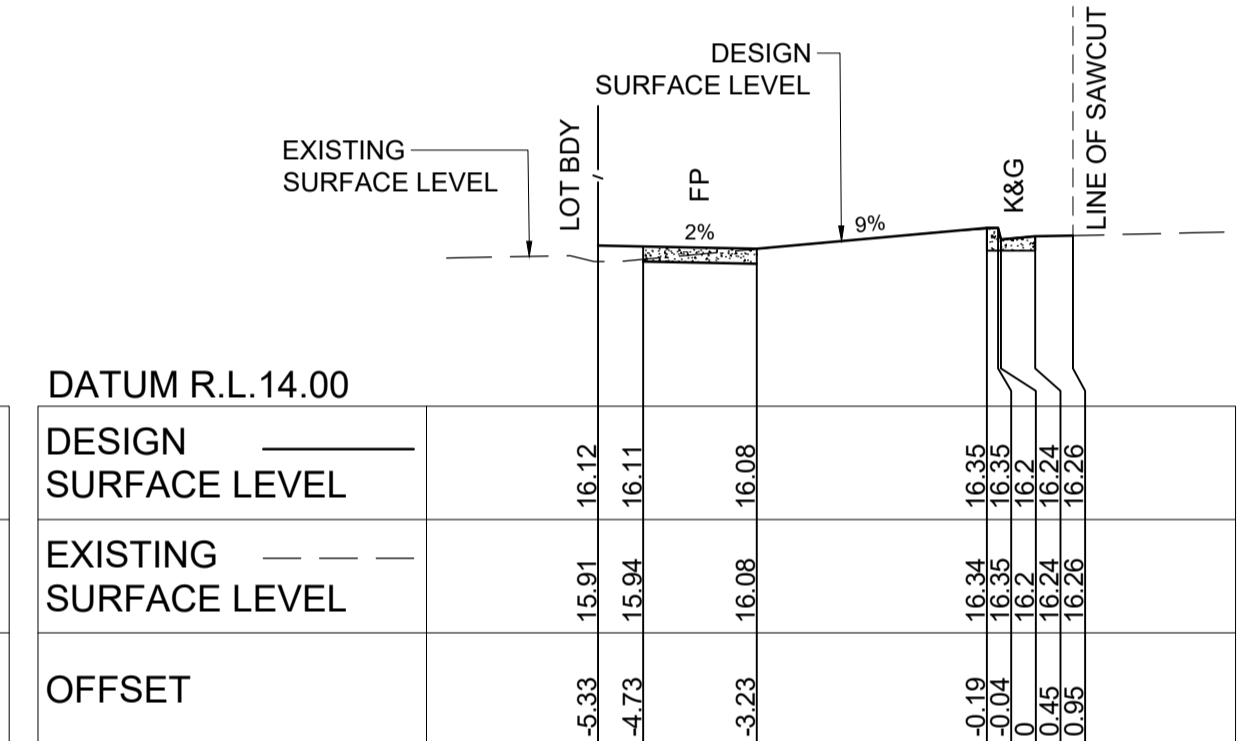
CH. 65.00



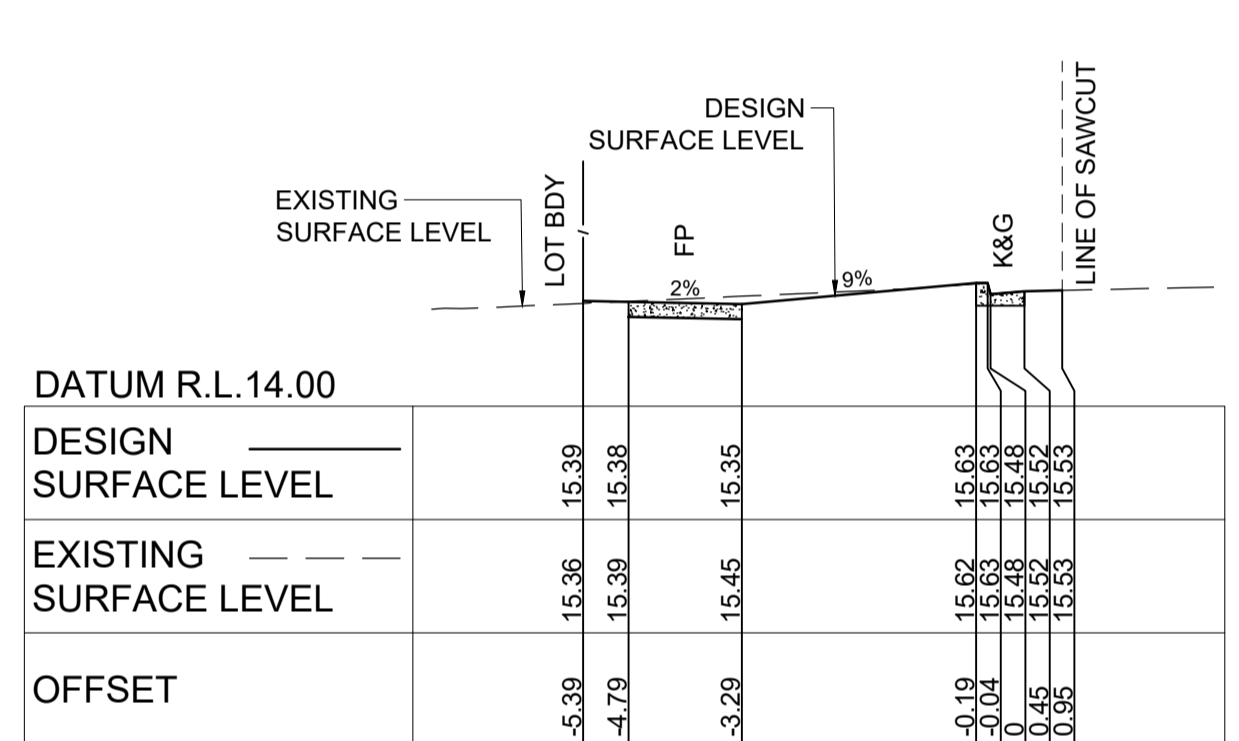
CH. 80.49 - LOT BOUNDARY



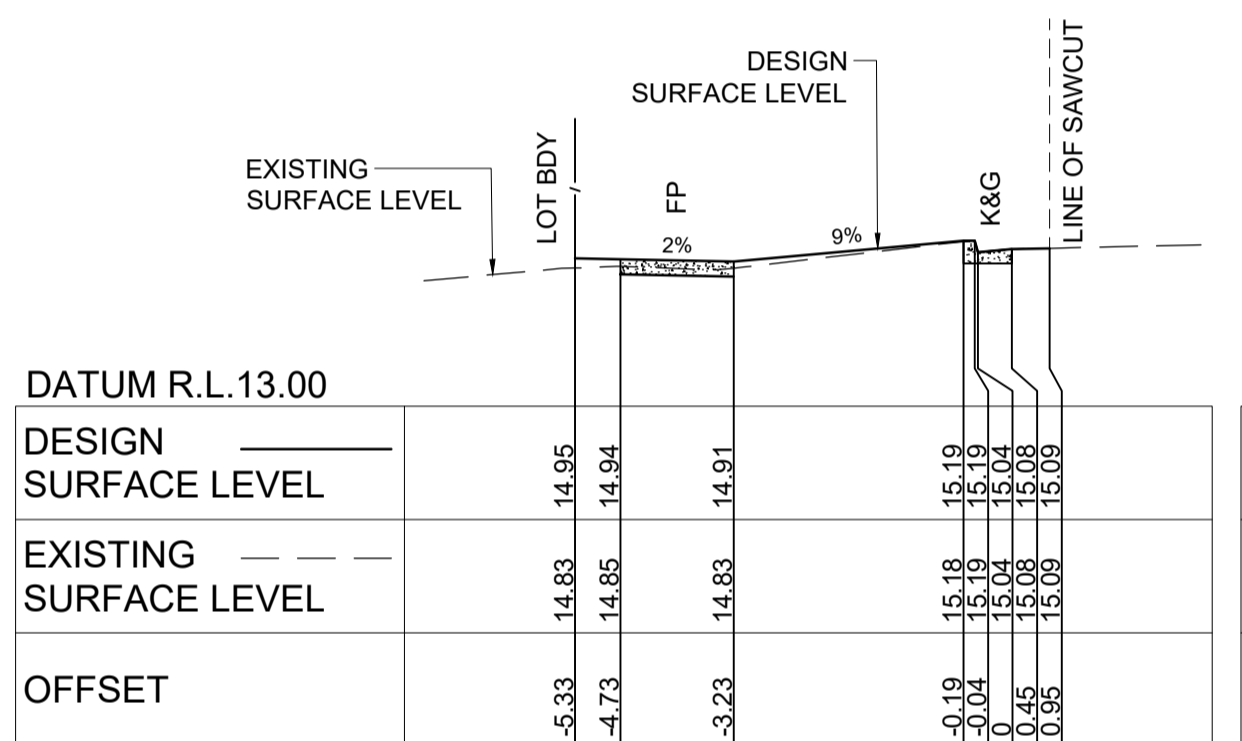
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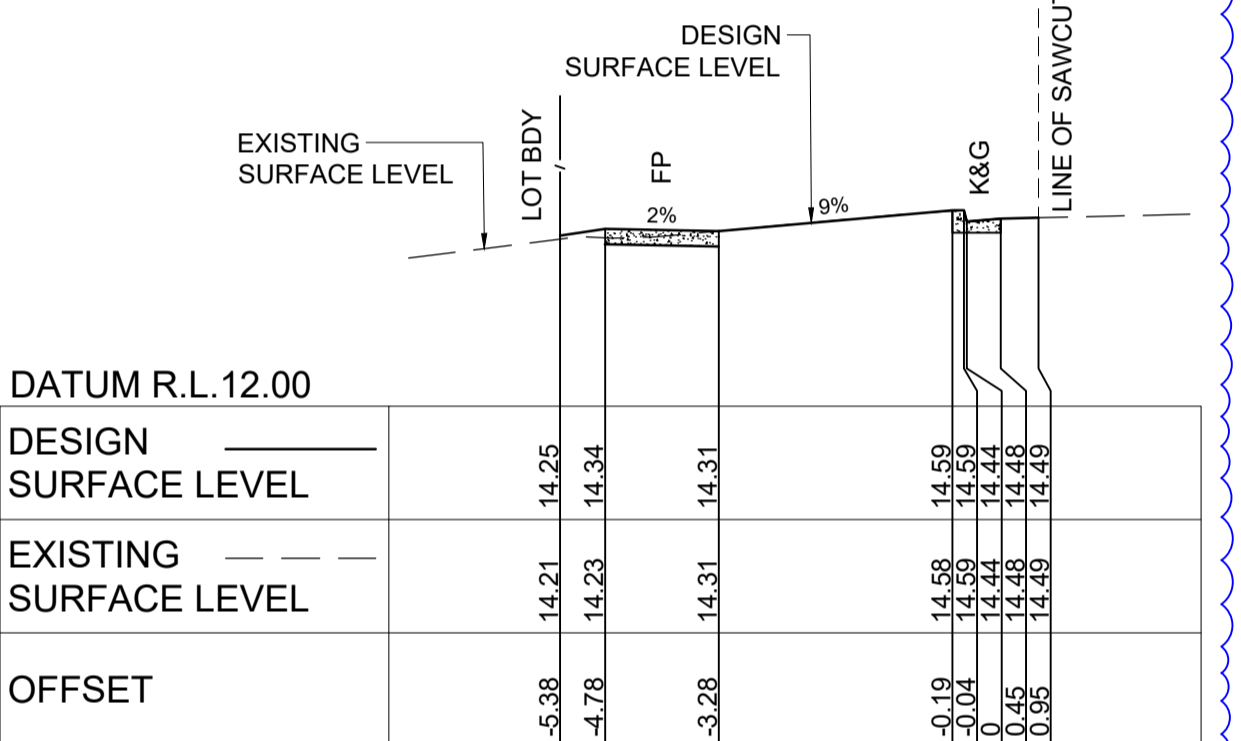
CH. 25.00



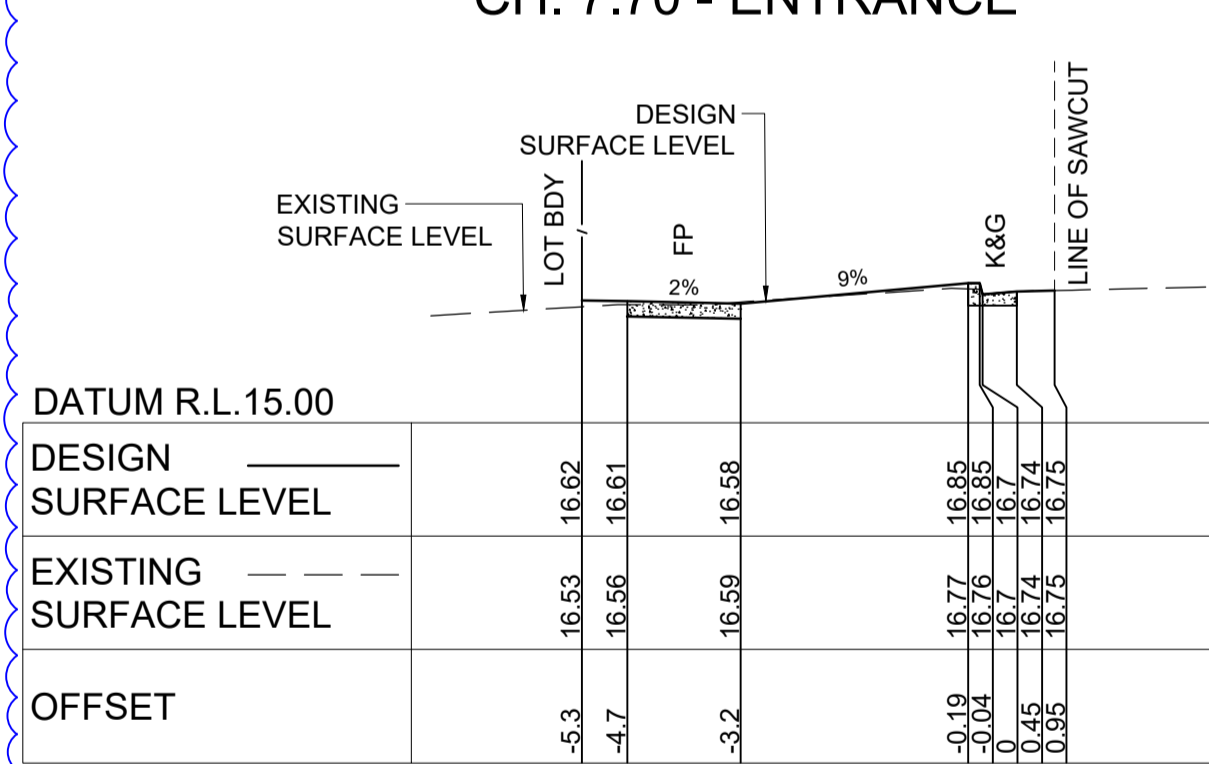
CH. 45.00



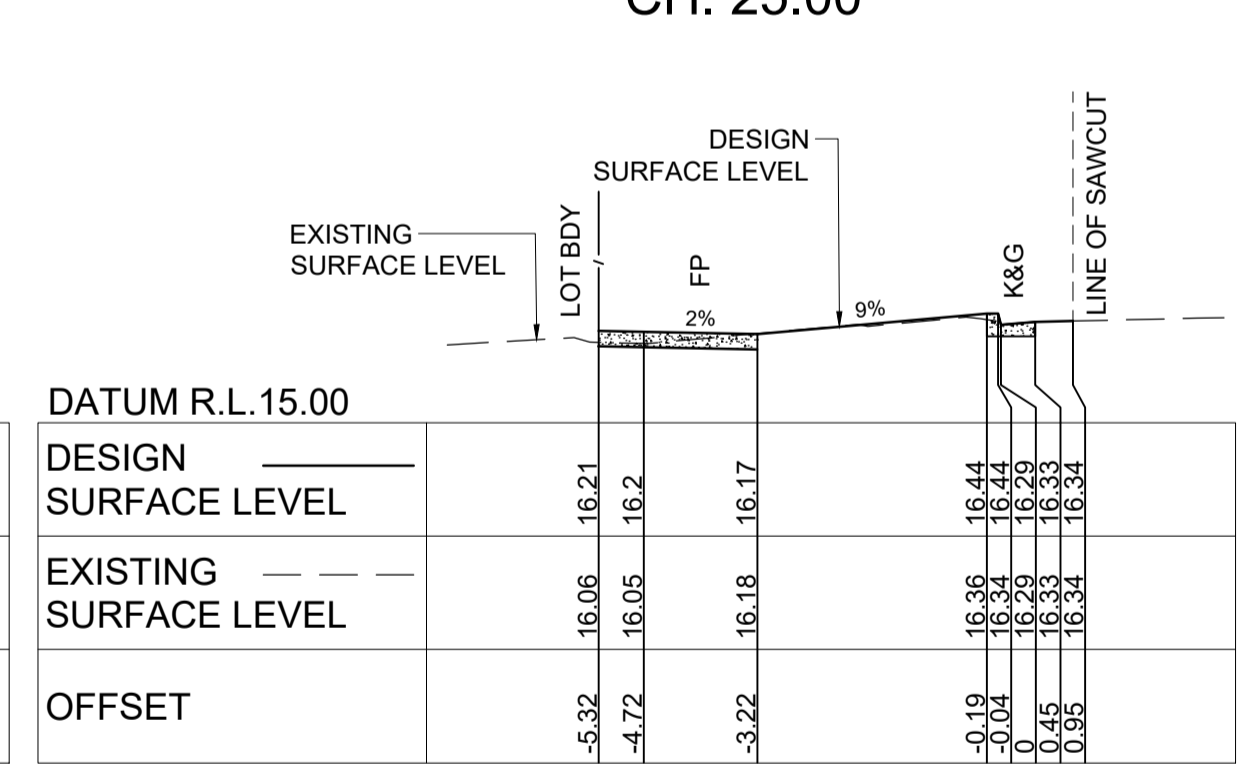
CH. 60.00



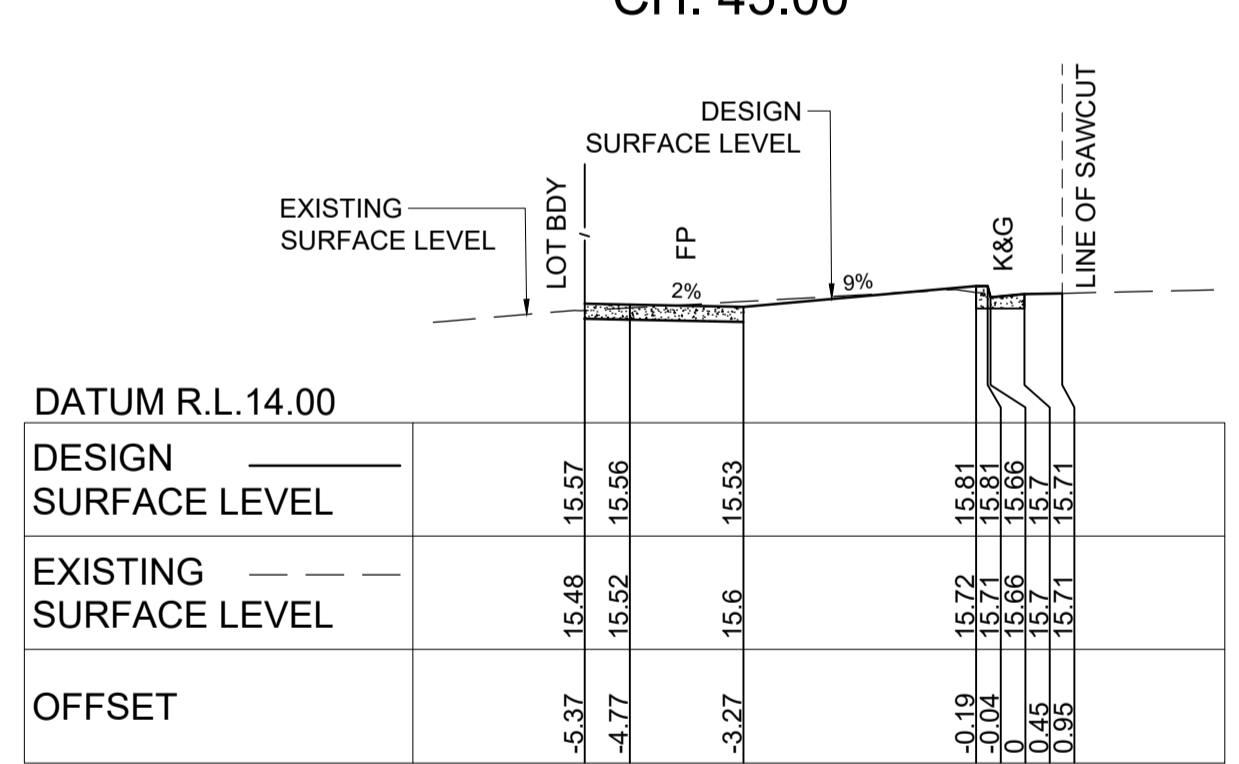
CH. 80.00



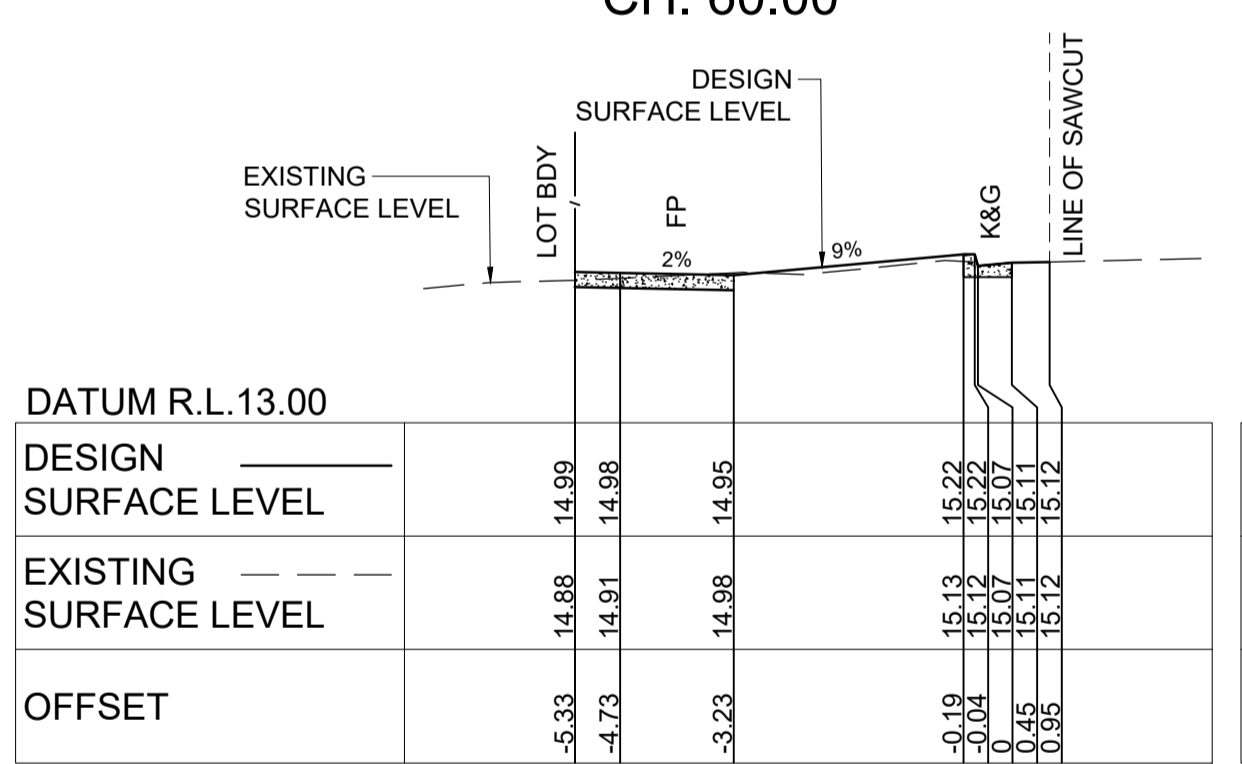
CH. 5.00



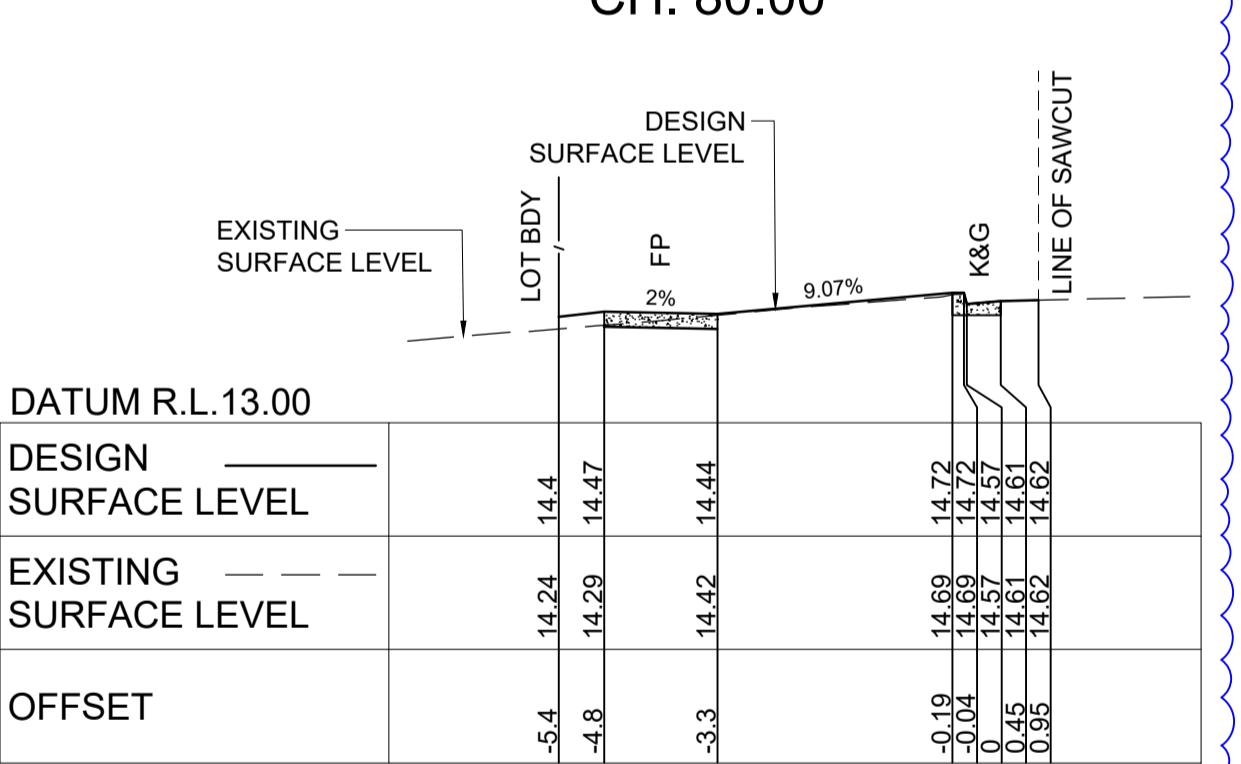
CH. 22.00 - ENTRANCE



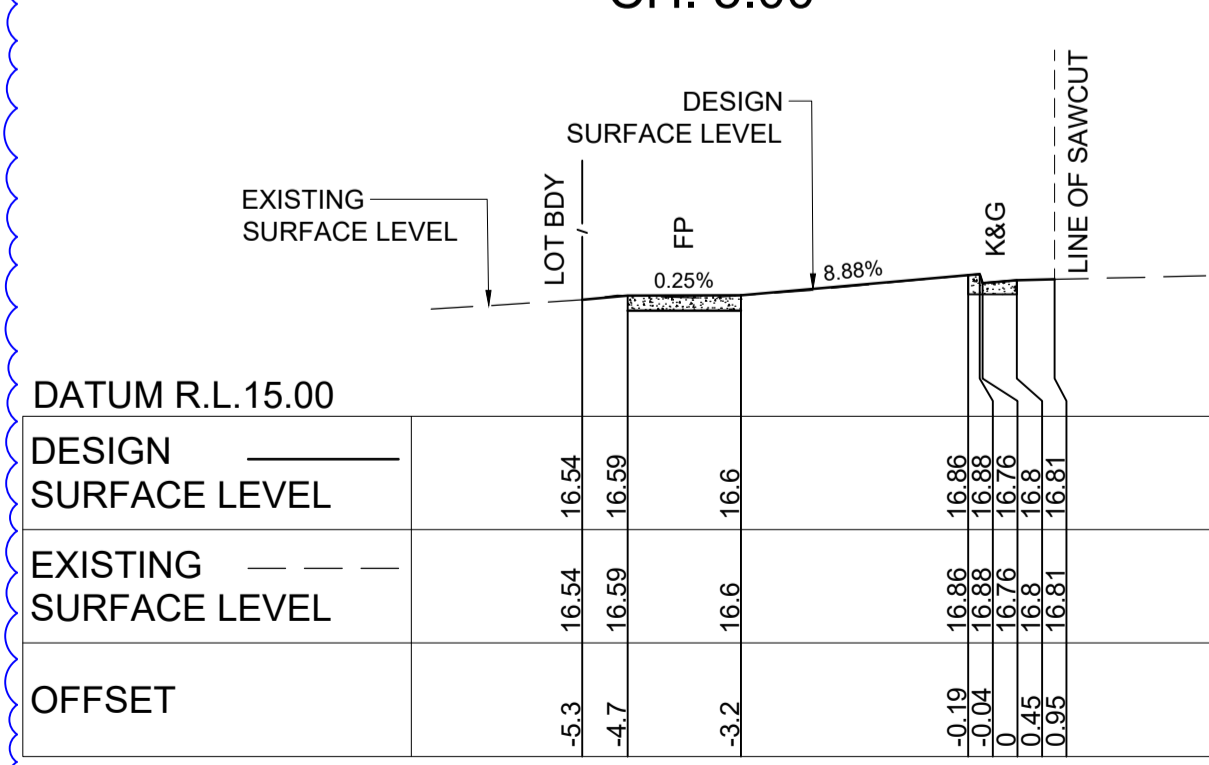
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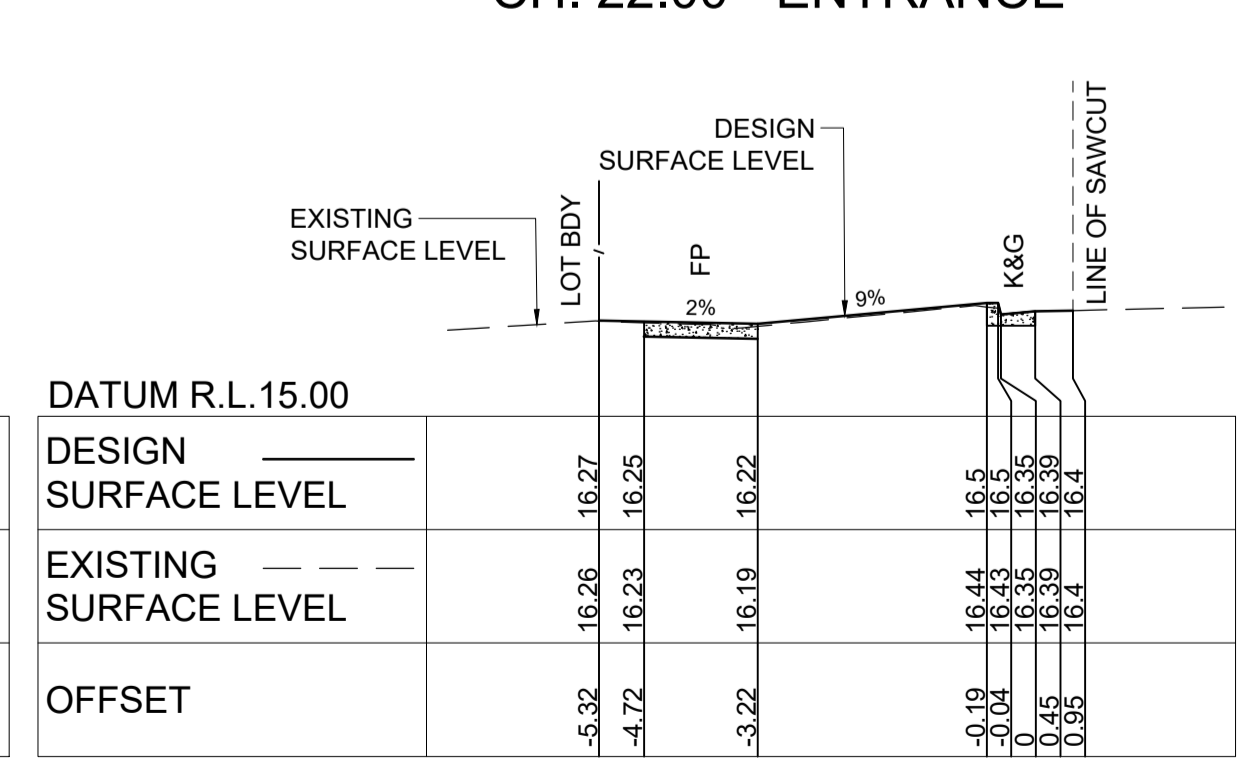
CH. 58.50 - ENTRANCE



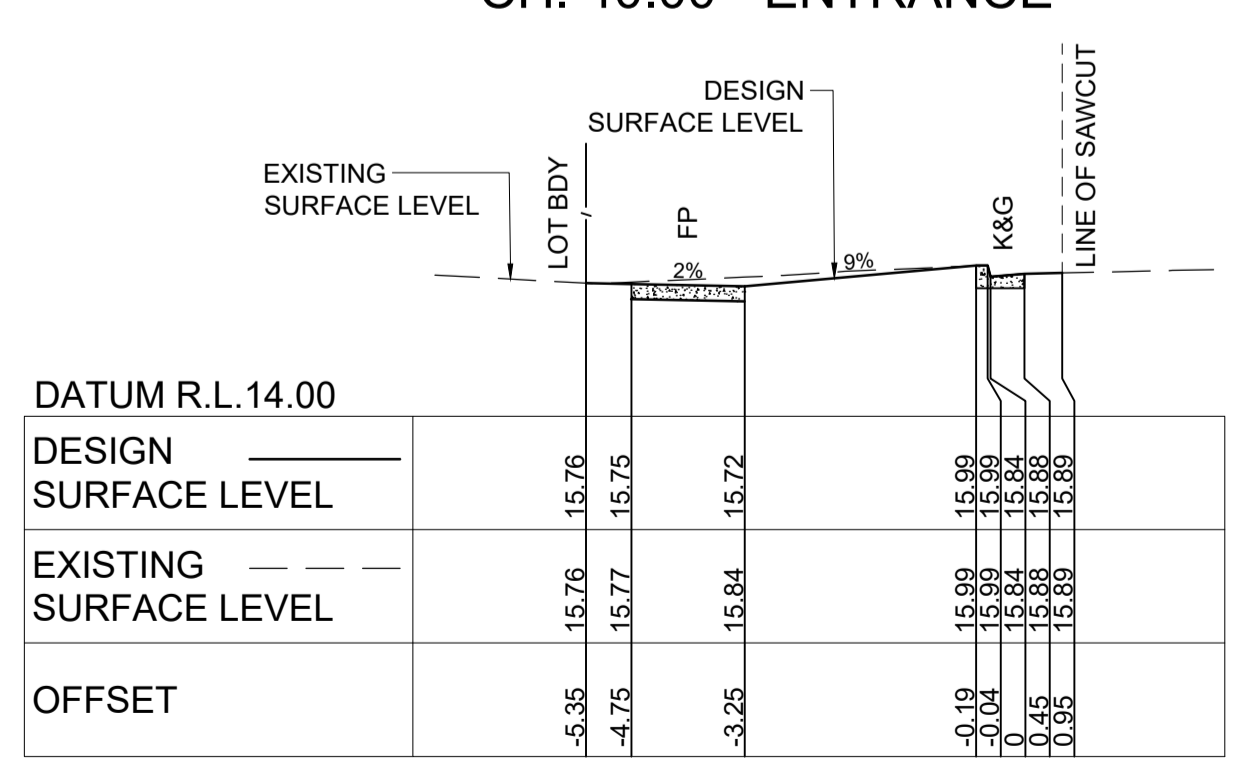
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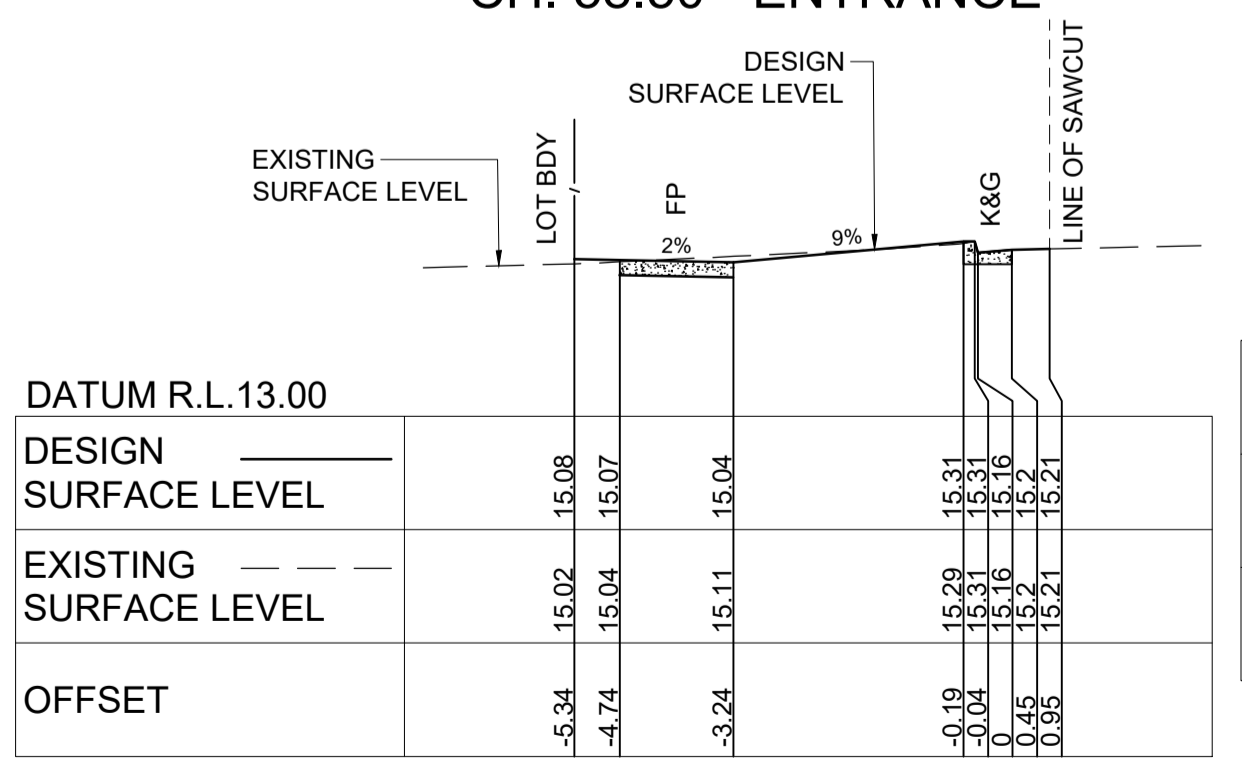
CH. 0.00 - LOT BOUNDARY



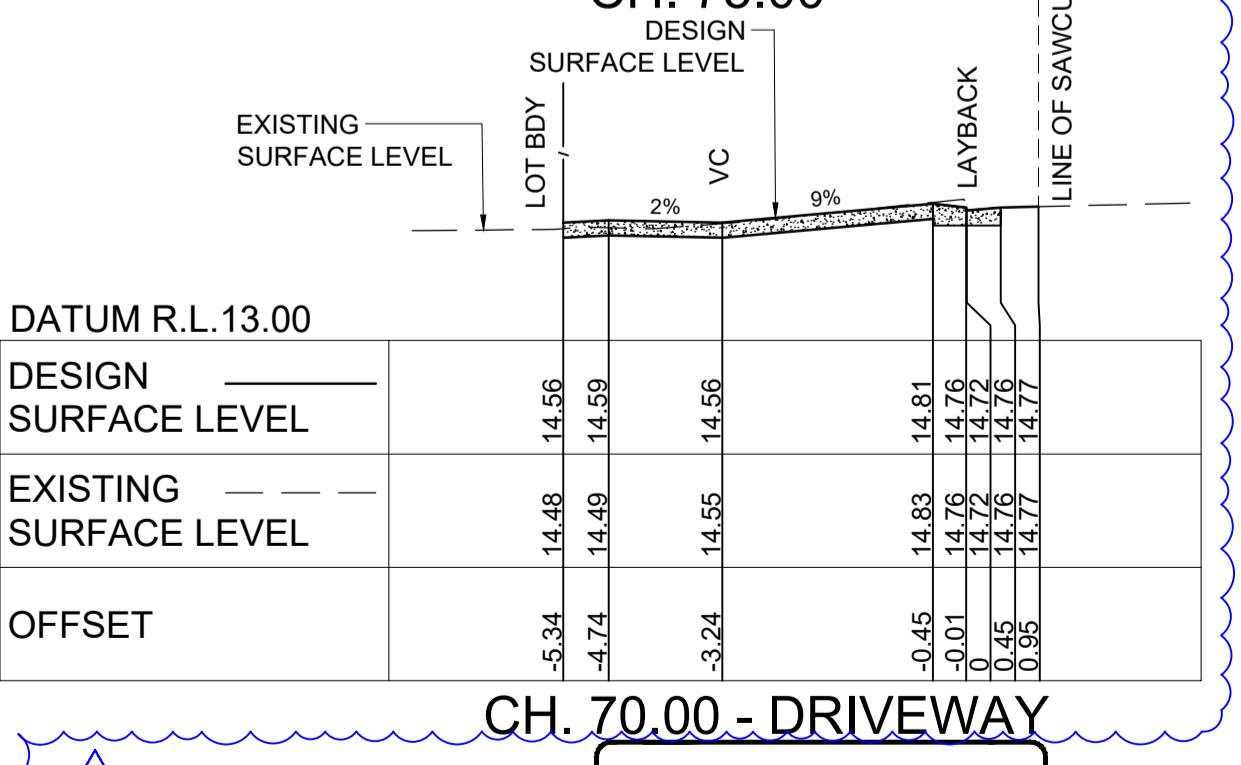
CH. 20.00



CH. 35.00



CH. 55.00

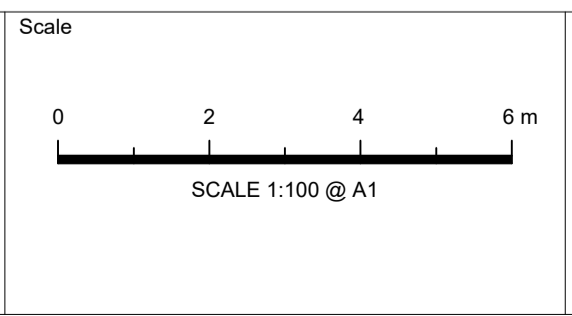


CH. 70.00 - DRIVEWAY

F	ISSUE FOR DEVELOPMENT APPLICATION	15/10/2025	M.Y.C.	M.C.O.	Architect
E	ISSUE FOR DEVELOPMENT APPLICATION	12/06/2025	M.Y.C.	M.C.O.	PTI ARCHITECTURE
D	ISSUE FOR DEVELOPMENT APPLICATION	29/05/2025	M.Y.C.	M.C.O.	TOURISM+RESIDENTIAL
C	ISSUE FOR DEVELOPMENT APPLICATION	17/05/2024	J.A.H.	M.C.O.	MAN OFFICE LEVEL 2, 88 SOPHIA STREET, SURREY HILLS NSW 2010
B	ISSUE FOR DEVELOPMENT APPLICATION	11/04/2023	H.K.B.	M.C.O.	PARRAMATTA OFFICE: LEVEL 14, 3 PARRAMATTA SQUARE, 153 MACQUARIE ST, NSW 2150
Issue	Description	Date	Design	Checked	451 2 9283 (986) www.ptiarchitecture.com.au
					NOMINATED REGISTERED ARCHITECT: PETER ISRAEL (REG NO 5064) AIN 90 950 071 022

PARRAMATTA CITY COUNCIL	
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Council	PARRAMATTA CITY COUNCIL
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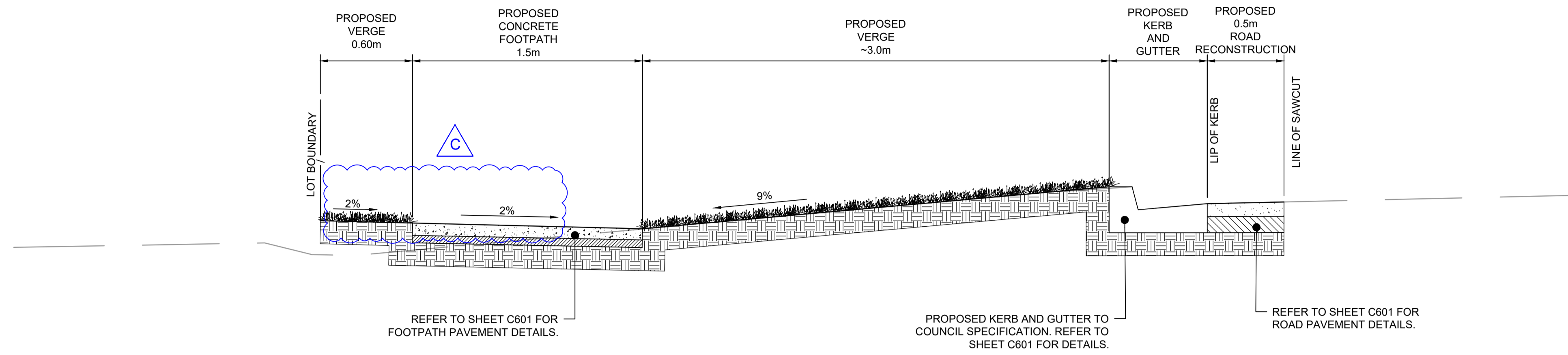


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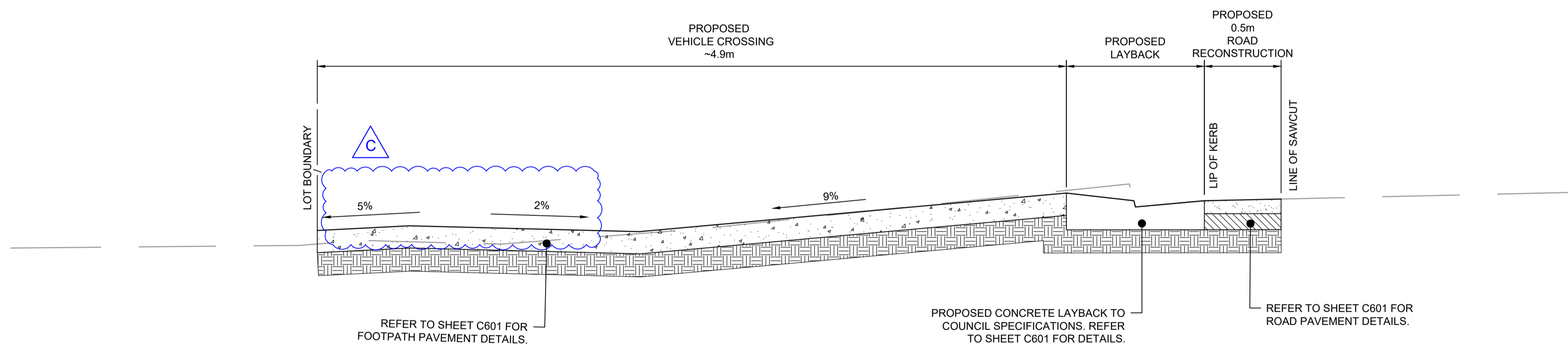
Project
85-91 THOMAS STREET, PARRAMATTA PUBLIC DOMAIN WORKS
CIVIL ENGINEERING PLANS
FOR DEVELOPMENT APPLICATION

Drawing Title	THOMAS STREET CROSS SECTIONS		
Scale	A1	Project No.	200994
Dwg. No.	C401	Issue	F

FOR APPROVAL



TYPICAL CROSS SECTION - THOMAS STREET
SCALE 1:20



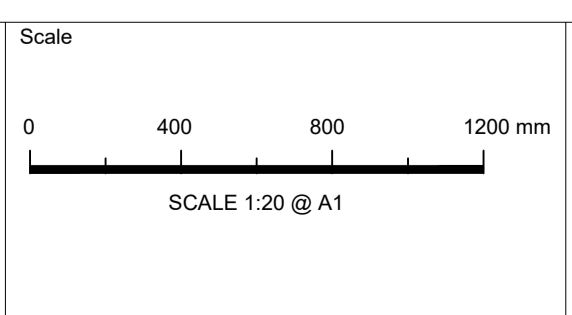
TYPICAL DRIVEWAY CROSS SECTION - THOMAS STREET
SCALE 1:20

FOR APPROVAL

Issue	Description	Date	Design	Checked
C	ISSUE FOR DEVELOPMENT APPLICATION	15/10/2025	M.Y.C.	M.C.O.
B	ISSUE FOR DEVELOPMENT APPLICATION	11/04/2023	H.K.B.	M.C.O.
A	ISSUE FOR DEVELOPMENT APPLICATION	30/03/2023	H.K.B.	M.C.O.

Architect
PTI ARCHITECTURE
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 NOMINATED REGISTERED ARCHITECT:
 PETER ISRAEL (REG NO 5064)
 ABN 90 050 071 022

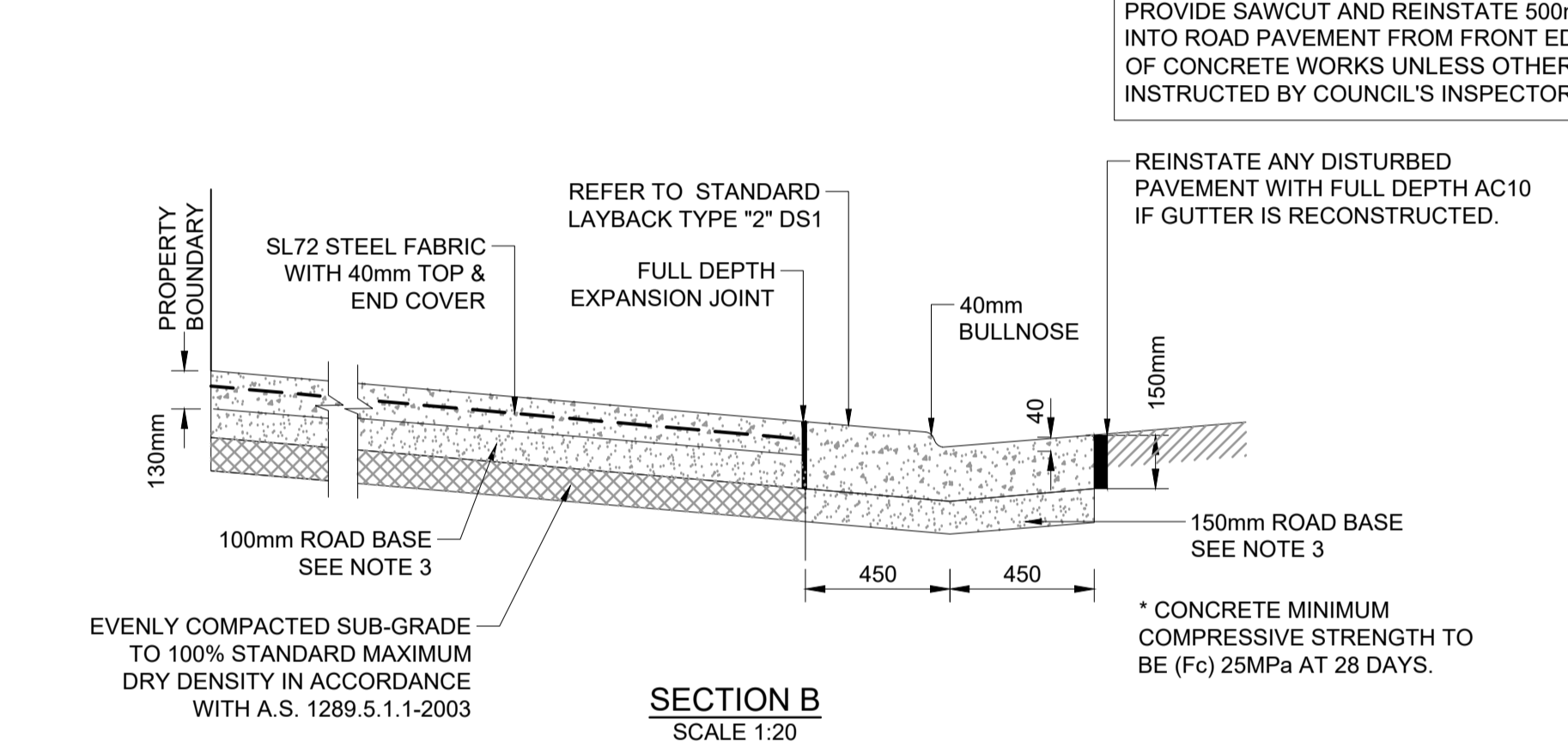
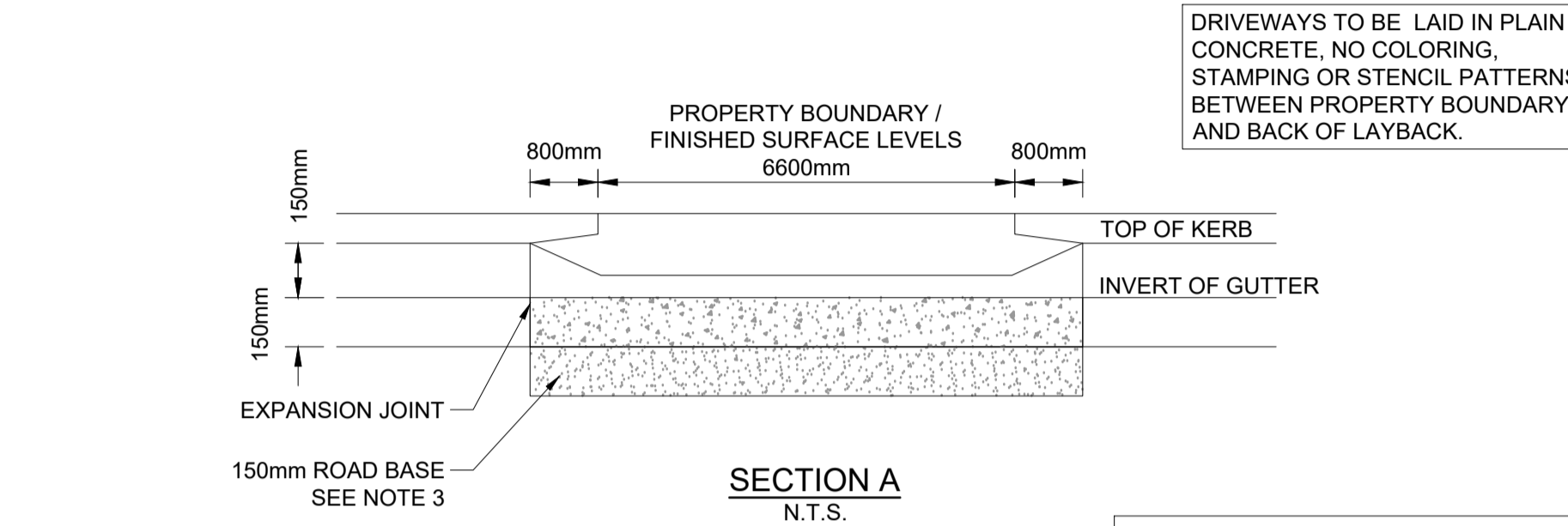
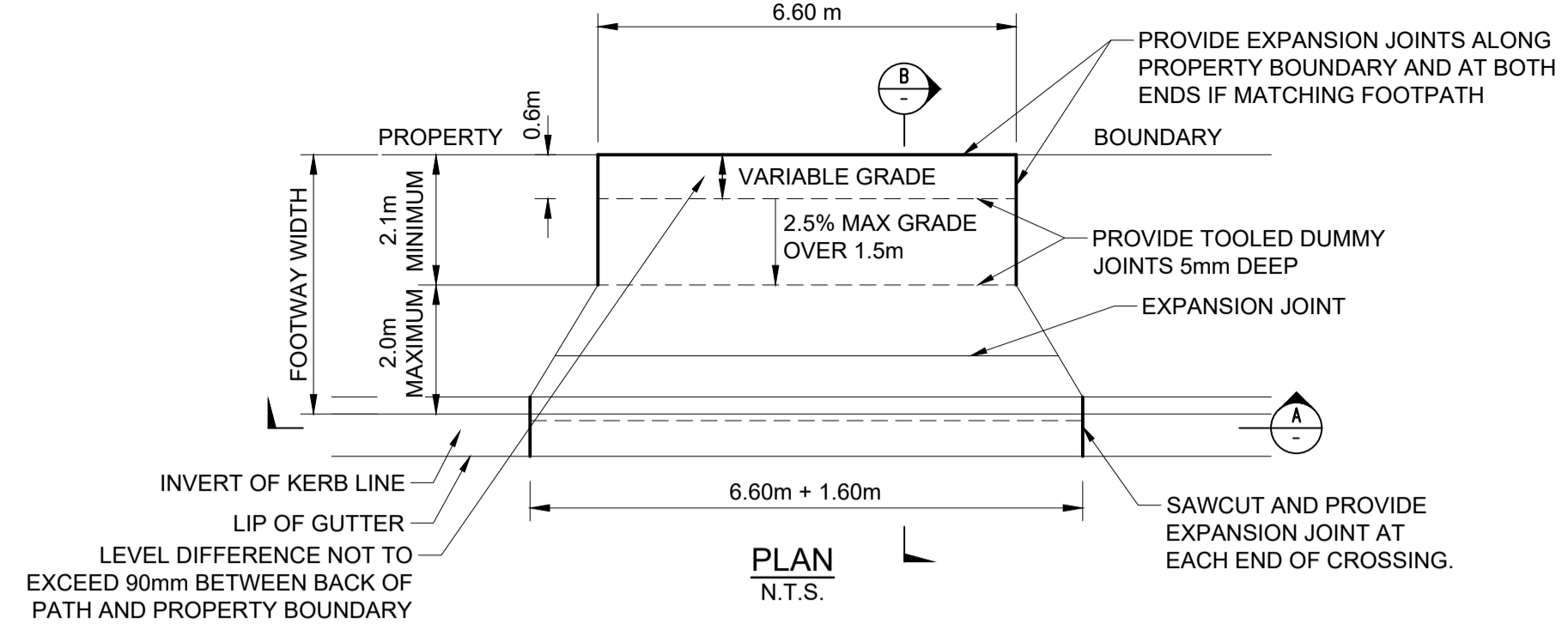
Council
PARRAMATTA CITY COUNCIL



C & S
 ENGINEERING SERVICES
 CIVIL & STORMWATER ENGINEERING
 SERVICES PTY LTD
 ABN: 27 644 422 506
 Shop 1, 143-147 Parramatta Road, Concord, NSW 2137
 P:(02) 8397 6500
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Project
85-91 THOMAS STREET, PARRAMATTA
 PUBLIC DOMAIN WORKS
 CIVIL ENGINEERING PLANS
 FOR DEVELOPMENT APPLICATION

Scale	A1	Project No.	Dwg. No.	Issue
1:20		200994	C501	C



STANDARD VEHICULAR CROSSING
N.T.S.

NOTES:

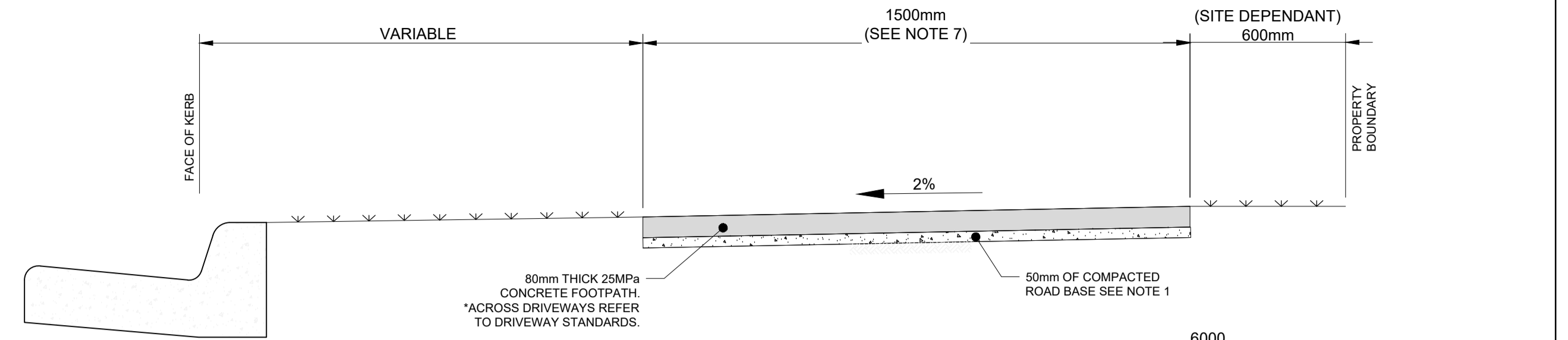
1. ALL EXISTING KERB AND GUTTER SHALL BE REMOVED PRIOR TO ANY NEW LAYBACK WORKS UNLESS OTHERWISE DIRECTED BY COUNCIL'S INSPECTOR AT PRE-INSPECTION.
2. VEHICULAR CROSSING LEVELS TO BE IN ACCORDANCE WITH P.C.C. STD DWG DS10 AND DETAILED DESIGN.
3. ROAD BASE MATERIAL IS TO BE DGB20 OR SIMILAR AND COMPACTED TO 100% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH A.S. 1289.5.1.1-2003.
4. ALL DISTURBED AREAS TO BE TOPSOILED WITH 75mm OF APPROVED LOAM AND TURFED AS SOON AS PRACTICABLE (PRIOR TO FINAL INSPECTION) TO ENCOURAGE REVEGETATION AND MINIMISE SOIL EROSION FROM SITE.
5. EXISTING CONCRETE FOOTPAVING IS TO BE RECONSTRUCTED AS REQUIRED BY COUNCIL'S INSPECTOR OR PROJECT MANAGER TO MATCH CROSSING.
6. THE FOOTWAY IS TO BE SHAPED AS REQUIRED BY COUNCIL'S INSPECTOR OR PROJECT MANAGER TO THE CROSSING EVENLY.
7. THIS PLAN DOES NOT APPLY FOR FOOTWAY WIDTHS LESS THAN 2.8m.
8. ALL SURFACES TO BE BROOM OR WOOD FLOAT FINISHED.

DRIVEWAYS TO BE LAID IN PLAIN CONCRETE, NO COLORING, STAMPING OR STENCIL PATTERNS BETWEEN PROPERTY BOUNDARY AND BACK OF LAYBACK.

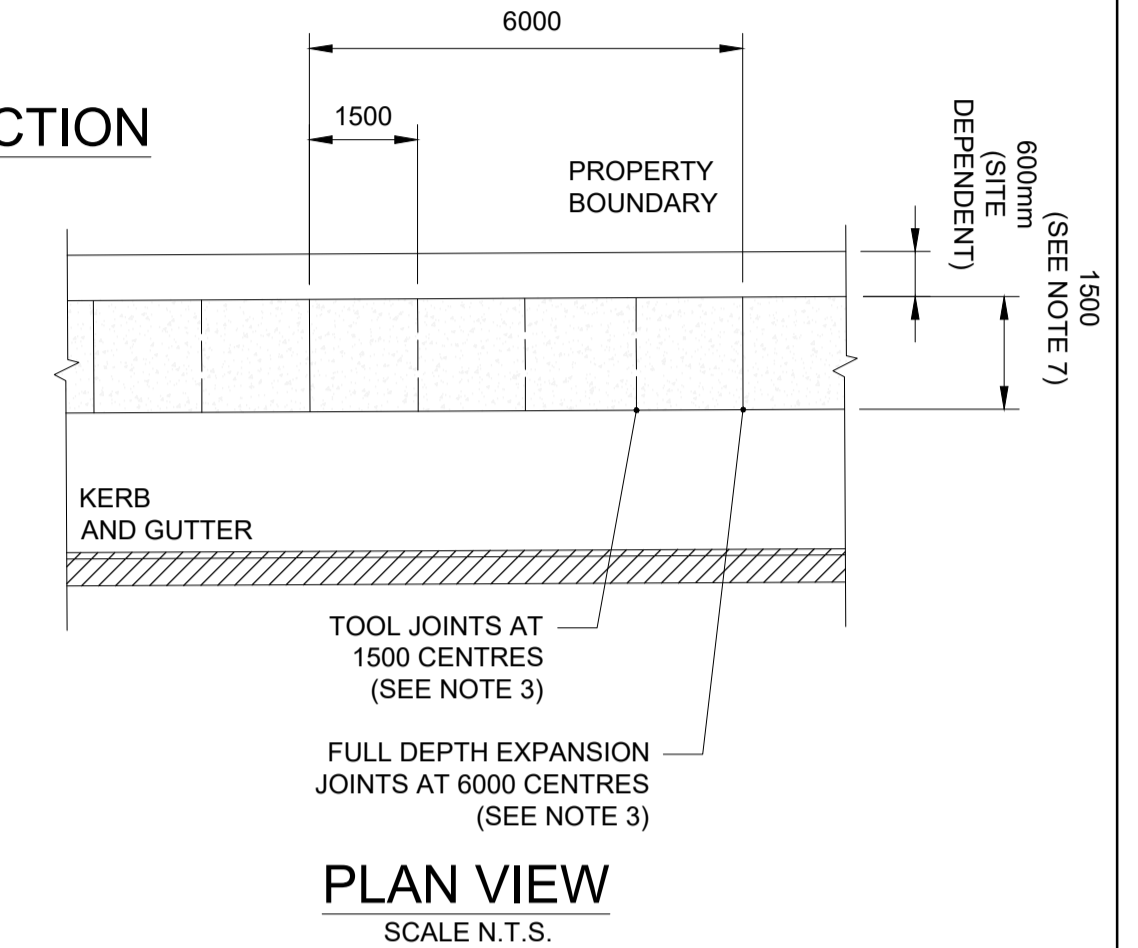
PROVIDE SAWCUT AND REINSTATE 500mm INTO ROAD PAVEMENT FROM FRONT EDGE OF CONCRETE WORKS UNLESS OTHERWISE INSTRUCTED BY COUNCIL'S INSPECTOR.

REINSTATE ANY DISTURBED PAVEMENT WITH FULL DEPTH AC10 IF GUTTER IS RECONSTRUCTED.

* CONCRETE MINIMUM COMPRESSIVE STRENGTH TO BE (F_c) 25MPa AT 28 DAYS.



TYPICAL FOOTWAY SECTION
SCALE N.T.S.

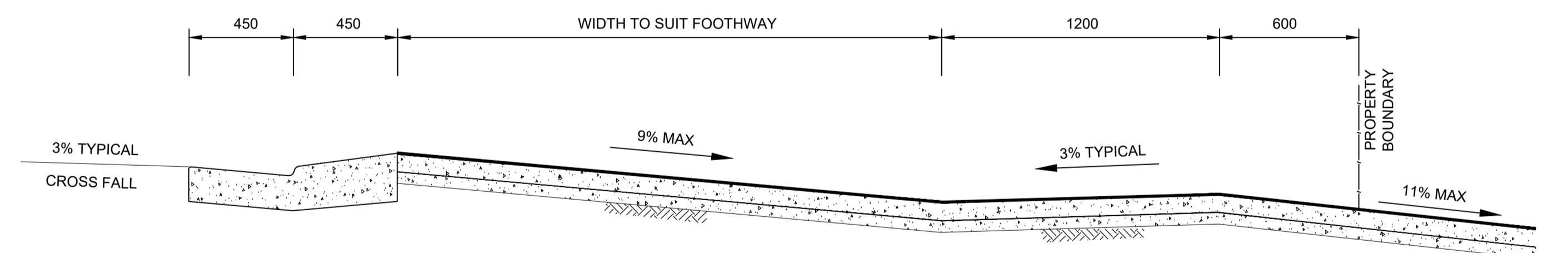


NOTES:

1. BASE MATERIAL IS TO BE DGB20 OR SIMILAR. COMPACT TO 100% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH A.S. 1289.5.1.1 - 2017.
2. CONCRETE IS TO BE N25 IN ACCORDANCE WITH AS 1379-2007 (R2017) AND AS 3600-2018.
3. PROVIDE FULL DEPTH EXPANSION JOINT 10mm WIDE AT 6m SPACING. PROVIDE TOOL JOINTS 10mm WIDE BY A MINIMUM OF 20mm DEEP AT 1.5m SPACING.
4. ALL SURFACES TO BE BROOM FINISHED AT 90° TO DIRECTION OF TRAVEL AND EDGES TO BE ROUNDED TO 20 RADIUS USING AN EDGING TOOL. (NO WOOD FLOAT FINISH PERMITTED)
5. ADJOINING NATURAL FOOTWAY IS TO BE CUT OR FILLED WITH TOPSOIL AS REQUIRED TO GRADE EVENLY TO THE FOOTPATH. ALL DISTURBED AREAS TO BE TOPSOILED WITH 50mm APPROVED TURF UNDERLAY AND TURFED AS SOON AS PRACTICABLE TO ENCOURAGE REVEGETATION AND MINIMISE SOIL EROSION FROM SITE, OR REINSTATED AS DIRECTED BY THE COUNCIL'S INSPECTOR OR PROJECT MANAGER. REFER TO COUNCIL'S STD DWG DS42.
6. LONGITUDINAL TRANSITIONS IN GRADE OF 1 IN 14 TO COMPLY WITH AS 1428.1 - 2009
7. FOOTPATH WIDTH AND CROSS FALL AS SHOWN ABOVE UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDENT / PROJECT MANAGER
8. PROVIDE ARTICULATED JOINT IF FOOTPATH IS ADJACENT TO TREES AND WHERE DIFFERENTIAL SOIL MOVEMENT IS EXPECTED
9. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

FOOTPATH
N.T.S.

ROAD CROSSFALL WILL AFFECT
MAXIMUM ALLOWABLE GRADE



VEHICULAR CROSSING: LOW LEVEL
TYPICAL SECTION
N.T.S.

1. MAX CROSSFALL ARE ADVISORY ONLY. MAXIMUM LEVELS WILL ONLY BE APPROVED BY COUNCIL IN EXCEPTIONAL CIRCUMSTANCE. ANY OTHER GRADE ARRANGEMENT (DRIVEWAY DESIGN) SHALL BE DESIGNED BY A SUITABLE QUALIFIED PROFESSIONAL ENGINEER AND LONGITUDINAL SECTION 1:20 SCALE SHALL BE SUBMITTED TO PCC FOR FORMAL CHECK AND APPROVAL PLAN TO SHOW CORRECT ROAD CROSSFALL.
2. CROSSING LEVELS TO BE DESIGNED TO ALLOW COUNCIL'S STANDARD CAR TO PASS WITHOUT SCRAPING, (PCC STANDARD DRAWING DS7)
3. SPECIAL CONSIDERATION IS REQUIRED TO ALLOW "NON-STANDARD" AND MODIFIED VEHICLES TO CROSS WITHOUT SCRAPING. G. A STANDARD VEHICLE MODIFIED WITH A TOW BAR.
4. VEHICULAR CROSSING CAN ONLY BE CONSTRUCTED IN ACCORDANCE WITH COUNCIL APPROVED PLANS AND TO RELEVANT PCC STANDARD DRAWING DS8 OR DS9.
5. FOOTPAVING EXPANSION JOINTS SHALL BE PREFORMED BITUMEN IMPREGNATED FIBREBOARD 10mm WIDE, FULL CONCRETE DEPTH AT NO MORE THAN 6m SPACING WITH TOOLED 10mm DEEP, 10mm WIDE DUMMY JOINTS AT 1.2 SPACING.
6. ALL WORKMANSHIP AND MATERIALS TO RELEVANT, AUSPEC AND AUSTRALIAN STANDARDS.

ALL DIMENSION SHOWN ARE IN MILLIMETRES

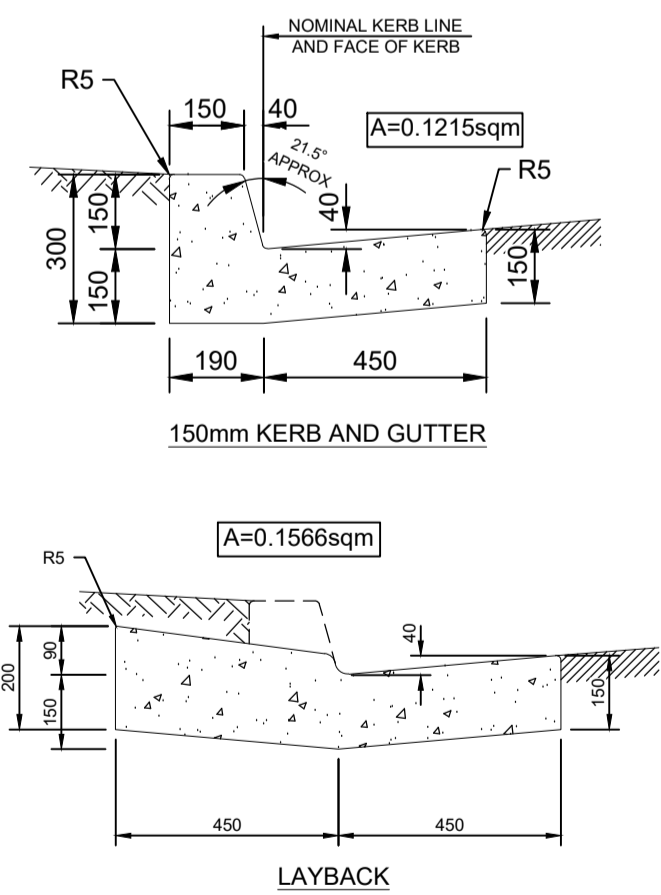
ALL DIMENSIONS SHOWN ARE IN MILLEMETRES.

CONCRETE TO BE A MINIMUM OF N25 IN ACCORDANCE WITH AS 1012. 9:2014 AS 1379-2007 (R2017) AND AS 3'600:2018 ALL CHAMFER/FILLETS ARE RADIUS 20 UNLESS SHOWN OTHERWISE

TIE IN KERBS TO BE ONLY USED AS A LAST ALTERNATIVE APPROVAL TO BE GIVEN BY COUNCIL'S SUPERVISING ENGINEER ONLY

NOTES:

1. ROAD BASE MATERIAL IS TO BE DGB20 OR SIMILAR AND COMPACTED TO 100% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289.5.1.1:2017.
2. ROAD BASE MATERIAL 150mm THICK TO BE PLACED BENEATH KERB & GUTTER AND 300mm BEYOND THE EXTERNAL EDGES OF KERB & GUTTERS, APRONS, AND CROSSINGS.
3. ALL DISTURBED AREAS TO BE TOPSOILED WITH 50mm MIN OF APPROVED LOAM AND TURFED AS SOON AS PRACTICABLE TO ENCOURAGE REVEGETATION AND MINIMISE SOIL EROSION FROM SITE.
4. PROVIDE SAWCUT AND REINSTATE 500mm INTO ROAD PAVEMENT FROM FRONT EDGE OF CONCRETE WORKS UNLESS OTHERWISE INSTRUCTED BY COUNCIL'S INSPECTOR.
5. REINSTATE PAVEMENT WITH 175mm DEPTH DEEP LIFT (AC14) AND 30mm DEPTH AC10 COMPACTED TO 95% MODIFIED (97% MAX) TO RMS SPECIFICATIONS R116 AND R117 CRACK SEAL ALL BITUMEN TO BITUMEN FACES AC14 TO BE COMPACTED IN LAYERS EACH LAYER TO BE OF 40-70mm THICKNESS.
6. APPROVED FULL DEPTH EXPANSION JOINTS (10mm) TO BE PROVIDED AS FOLLOWS:
 - BETWEEN NEW AND EXISTING WORKS
 - BETWEEN LAYBACK WINGS AND KERB
 - EITHER SIDE OF ANY LINTELS
 - AT EVERY 6m INTERVALS ALONG CONTINUOUS LENGTHS (PROVIDE A DUMMY JOINT AT EVERY 3m INTERVALS UNLESS INSTRUCTED OTHERWISE BY SUPERINTENDENT).
7. ALL SURFACES TO BE STEEL TROWEL FINISHED.
8. ROOFWATER OUTLETS TO BE APPROVED IN ACCORDANCE WITH STANDARD DRAWING DS2.
9. USE CLEAN FILL AS BACKFILL MATERIAL UNLESS INSTRUCTED OTHERWISE.



KERBS AND LAYBACKS
N.T.S.

VEHICULAR CROSSING PROFILES
N.T.S.

FOR APPROVAL

Architect PTI ARCHITECTURE TOURISM+RESIDENTIAL MAIN OFFICE: LEVEL 2, 88 SOPHIA STREET, SURRY HILLS NSW 2010 PARRAMATTA OFFICE: LEVEL 14, 3 PARRAMATTA SQUARE, 153 MACQUARIE ST, NSW 2150 +61 2 9283 0960 www.ptiarchitecture.com.au NOMINATED REGISTERED ARCHITECT: PETER ISRAEL (REG NO 5064) ABN 90 950 071 022				Council PARRAMATTA CITY COUNCIL		Scale		Project CIVIL & STORMWATER ENGINEERING SERVICES PTY LTD ABN: 27 644 422 506 Shop 1, 143-147 Parramatta Road, Concord, NSW 2137 P:(02) 8397 6500 E:info@esgconsult.com.au		Drawing Title 85-91 THOMAS STREET, PARRAMATTA PUBLIC DOMAIN WORKS CIVIL ENGINEERING PLANS FOR DEVELOPMENT APPLICATION		CONSTRUCTION NOTES AND DETAILS SHEET	
A ISSUE FOR DEVELOPMENT APPLICATION				30/03/2023		H.K.B.		M.C.O.		Scale N.T.S.		Project No. 200994	
Issue Description				Date		Design		Checked		Dwg. No. C601		Issue A	

85-91 THOMAS STREET, PARRAMATTA PROPOSED RESIDENTIAL APARTMENTS

STORMWATER CONCEPT PLANS

LEGEND

- PROPOSED STORMWATER DRAINAGE PIPE
- PROPOSED STORMWATER DRAINING TO OSD
- PROPOSED STORMWATER BYPASSING OSD
- 0100 PVC WRAPPED IN 20mm ABLEFLEX STORMWATER DRAINAGE PIPE CAST IN SLAB
- 065 PVC WRAPPED IN 20mm ABLEFLEX STORMWATER DRAINAGE PIPE CAST IN SLAB
- 050mm PVC WRAPPED IN 20mm ABLEFLEX CAST IN SLAB
- PROPOSED STORMWATER PIPE TO RAINWATER TANK
- 0100mm SUBSOIL DRAINAGE TO BE WRAPPED IN GEOTEXTILE BIDIMA34
- RISER PIPE
- 0300 CLEANING EYE
- RWT RAINWATER TANK
- DP DOWNPIPE 0100
- VD VERTICAL DROP 0100
- PG PLANTER GRATE 0150
- FG FLOOR GRATE 0150
- FG FLOOR GRATE 200x200 (ALLOW MINIMUM 1.0% FALL TO FG)
- FG FLOOR GRATE 300x300 (ALLOW MINIMUM 1.0% FALL TO FW)
- RW RAINWATER OUTLET 0260 SPS (ALLOW MINIMUM 1.0% FALL TO RWO)
- SPB SUSPENDED PLANTER BOX RAINWATER OUTLET
- RL 47.00 DESIGN SURFACE LEVEL
- EXISTING SURFACE LEVEL
- I 47.00 INVERT LEVEL
- TD AC CONDENSER TUNDISH TO MANUFACTURER'S DETAILS
- OF 050mm EMERGENCY OVERFLOW SPITTERS/PIPES
- EXISTING STORMWATER
- ExW EXISTING WATER MAIN
- ExS EXISTING SEWER MAIN
- ExT EXISTING TELSTRA
- ExE EXISTING ELECTRICAL
- ExG EXISTING GAS
- ExOP EXISTING OPTIC FIBER



LOCALITY PLAN
N.T.S.

GENERAL NOTES

1. ALL LINES ARE TO BE 090 uPVC 1.0% GRADE UNLESS NOTED OTHERWISE. CHARGED LINES TO BE SEWERGRADE & SEALED.
2. EXISTING SERVICES LOCATIONS SHOWN INDICATIVE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE & LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS.
3. ALL PIPES TO HAVE MIN 150mm COVER IF LOCATED WITHIN PROPERTY.
4. ALL PITS IN DRIVEWAYS TO BE 450x450 CONCRETE AND ALL PITS IN LANDSCAPED AREAS TO BE 450x450 PLASTIC.
5. PITS LESS THAN 600mm DEEP MAY BE BRICK, PRECAST OR CONCRETE.
6. ALL BALCONIES AND ROOFS TO BE DRAINED AND TO HAVE SAFETY OVERFLOWS IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
7. ALL EXTERNAL SLABS TO BE WATERPROOFED.
8. ALL GRATES TO HAVE CHILD PROOF LOCKS.
9. ALL DRAINAGE WORKS TO AVOID TREE ROOTS.
10. ALL DPs TO HAVE LEAF GUARDS.
11. ALL EXISTING LEVELS TO BE CONFIRMED BY BUILDER PRIOR TO CONSTRUCTION.
12. ALL WORK WITHIN COUNCIL RESERVE TO BE INSPECTED BY COUNCIL PRIOR TO CONSTRUCTION.
13. COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY COUNCIL.
14. ALL WORK SHALL BE IN ACCORDANCE WITH B.C.A. AND A.S.3500.3.
15. REFER TO LANDSCAPE ARCHITECT'S DRAWINGS FOR LANDSCAPING.
16. CARE TO BE TAKEN AROUND EXISTING SEWER. STRUCTURAL ADVICE IS REQUIRED FOR SEWER PROTECTION AGAINST ADDITIONAL LOADING FROM NEW PITS, PIPES, RETAINING WALLS AND OSD BASIN WATER LEVELS.
17. ALL PIPES IN BALCONIES TO BE 050mm HDPE OR PVC WRAPPED IN 20mm ABLEFLEX CAST IN SLAB AT MIN 1.0% SLOPE. CONTRACTOR TO PROVIDE A BREAK / OPEN VOID IN RAIL / BALLUSTRADE FOR STORMWATER EMERGENCY OVERFLOW. ALL ENCLOSED AREAS/PLANTER BOXES TO BE FITTED WITH FLOOR WASTES & DRAINED TO OSD DOWNPIPES TO BE CHECKED BY ARCHITECT & PLUMBER PRIOR TO CONSTRUCTION.
18. THE OSD BASIN / TANK IS TO BE BUILT TO THE CORRECT LEVELS & SIZE AS PER THIS DESIGN. ANY VARIATIONS ARE TO BE DONE UNDER CONSULTATION FROM OUR OFFICE ONLY. ANY AMENDMENTS WITHOUT OUR APPROVAL WOULD RESULT IN ADDITIONAL FEES FOR REDESIGN AT OC STAGE OR IF A SOLUTION CANNOT BE FOUND, RECONSTRUCTION IS REQUIRED UNDER THE CONTRACTOR'S EXPENSES.










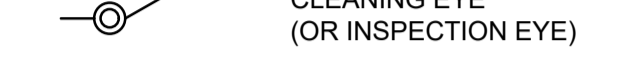


DRAWING INDEX

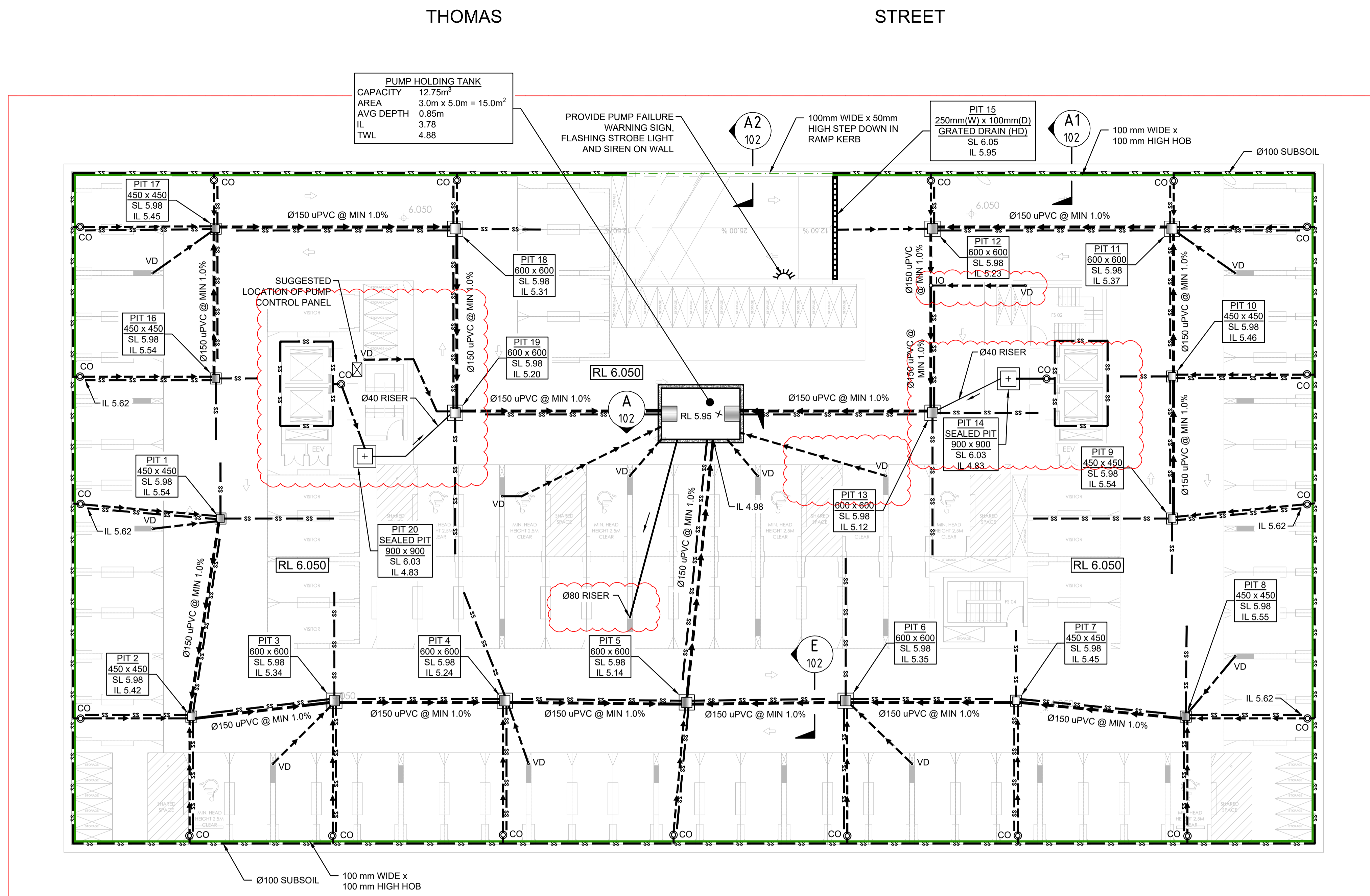
Drawing No.	DESCRIPTION
000	COVER SHEET PLAN
101	STORMWATER CONCEPT PLAN BASEMENT LEVEL 2 SHEET 1 OF 2
102	STORMWATER CONCEPT PLAN BASEMENT LEVEL 2 SHEET 2 OF 2
102.1	NOT USED
102.2	STORMWATER CONCEPT PLAN BASEMENT LEVEL 1
102.3	STORMWATER CONCEPT PLAN LOWER GROUND LEVEL
103	STORMWATER CONCEPT PLAN GROUND LEVEL
104	NOT USED
105	OSD CALCULATION AND DETAILS SHEET
106	CATCHMENT PLAN AND MUSIC RESULTS
107	RAINGARDEN DETAILS SHEET
108	SEDIMENT & EROSION CONTROL PLAN & DETAILS
109	MISCELLANEOUS DETAILS SHEET

NOT FOR CONSTRUCTION

<table border="1"> <tr> <td>D</td> <td>ISSUE FOR DEVELOPMENT APPLICATION</td> <td>29/05/2025</td> <td>SFK</td> <td>EH</td> <td>OC</td> </tr> <tr> <td>C</td> <td>ISSUE FOR DEVELOPMENT APPLICATION</td> <td>15/05/2023</td> <td>DBF</td> <td>EH</td> <td>OC</td> </tr> <tr> <td>B</td> <td>ISSUE FOR DEVELOPMENT APPLICATION</td> <td>31/03/2023</td> <td>MGH</td> <td>EH</td> <td>OC</td> </tr> <tr> <td>A</td> <td>ISSUE FOR DEVELOPMENT APPLICATION</td> <td>16/03/2023</td> <td>DBF</td> <td>EH</td> <td>OC</td> </tr> <tr> <td>Issue</td> <td>Description</td> <td>Date</td> <td>Designed</td> <td>Engineer</td> <td>Checked</td> </tr> </table>	D	ISSUE FOR DEVELOPMENT APPLICATION	29/05/2025	SFK	EH	OC	C	ISSUE FOR DEVELOPMENT APPLICATION	15/05/2023	DBF	EH	OC	B	ISSUE FOR DEVELOPMENT APPLICATION	31/03/2023	MGH	EH	OC	A	ISSUE FOR DEVELOPMENT APPLICATION	16/03/2023	DBF	EH	OC	Issue	Description	Date	Designed	Engineer	Checked	Architect PTI Architecture Level 2, 68 Sophia Street, Surry Hills NSW 2010 ABN 90 050 071 022 W: www.ptiarchitecture.com.au P: +61 2 9283 0860	Council Parramatta City Council Client Century 888 Pty Ltd	Scale N.T.S.	 CIVIL & STORMWATER ENGINEERING SERVICES PTY LTD ABN: 27 644 422 506 Shop 1, 143-147 Parramatta Road, Concord, NSW 2137 P:(02) 8397 6500 E: info@esgconsult.com.au	Project 85-91 THOMAS STREET, PARRAMATTA PROPOSED RESIDENTIAL APARTMENTS STORMWATER CONCEPT PLAN	Drawing Title COVER SHEET PLAN Scale N.T.S.	Project No. 200994	Dwg. No. 000	Issue D
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Issue	Description	Date	Designed	Engineer	Checked																																		

LEGEND

-  PROPOSED STORMWATER PIPE
-  PROPOSED GRATED STORMWATER PIT
-  PROPOSED STORMWATER PIT FITTED WITH GAS TIGHT SEALED LID
-  Ø100mm VERTICAL DROP
-  SURFACE FLOW DIRECTION
-  Ø100mm SUBSOIL DRAINAGE TO BE WRAPPED IN GEOTEXTILE BIDIMA34 @MIN 1.0% SLOPE
-  CLEANING EYE (OR INSPECTION EYE)
-  INSPECTION OPENING
-  FINISHED SURFACE LEVEL
-  GRATED DRAIN (HD)
-  Ø150mm FLOOR GRATE
-  (HD) (HEAVY DUTY)



WARNING
PUMP OUT SYSTEM FAILURE IN BASEMENT WHEN LIGHT IS FLASHING AND SIREN SOUNDING

BASEMENT PUMP OUT FAILURE WARNING SIGN
SIGN SHALL BE PLACED IN A CLEAR AND VISIBLE LOCATION WHERE VEHICLES ENTER THE BASEMENT
COLOURS:
"WARNING" = RED
BORDER AND OTHER LETTERING = BLACK

DANGER
WHEN EXCAVATING WITHIN ANY SITE, FOOTPATH AND ROADWAY, ALL SERVICES SHALL BE LOCATED PRIOR TO COMMENCEMENT OF THE EXCAVATION WORKS.
CONTACT "DIAL BEFORE YOU DIG" ON PHONE No. 1100 OR GO TO THE WEB SITE
"www.1100.com.au"

DANGER
CONFINED SPACE
NO ENTRY WITHOUT CONFINED SPACE TRAINING

STANDARD PUMP OUT DESIGN NOTES

- THE PUMP OUT SYSTEM SHALL BE DESIGN TO BE OPERATED IN THE FOLLOWING MANNER:
- 1 - THE PUMP SHALL BE PROGRAMMED TO WORK ALTERNATELY TO ALLOW BOTH PUMPS TO HAVE AN EQUAL OPERATION LOAD AND PUMP LIFE.
 - 2 - A FLOAT SHALL BE PROVIDED TO ENSURE OF THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS REGARD THIS FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMPS AT THE MINIMUM WATER LEVEL. THE SAME FLOAT SHALL BE SET TO TURN ONE OF THE PUMPS ON UPON THE WATER LEVEL IN THE TANK RISING TO APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL. THE PUMP SHALL OPERATE UNTIL THE TANK IS DRAINED TO THE MINIMUM WATER LEVEL.
 - 3 - A SECOND FLOAT SHALL BE PROVIDE AT A HIGH LEVEL, WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHALL START THE OTHER PUMP THAT IS NOT OPERATING AND ACTIVATE THE ALARM.
 - 4 - AN ALARM SYSTEM SHALL BE PROVIDE WITH A FLASHING STROBE LIGHT AND A PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT LEVEL THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE.
 - 5 - A CONFINED SPACE DANGER SIGN SHALL BE PROVIDED AT ALL ACCESS POINT TO THE PUMP-OUT STORAGE TANK IN ACCORDANCE WITH THE UPPER PARRAMATA RIVER CATCHMENT TRUST OSD HANDBOOK.

NOTE:
ALL STORMWATER DRAINAGE PIPES ARE Ø100 uPVC U.N.O.

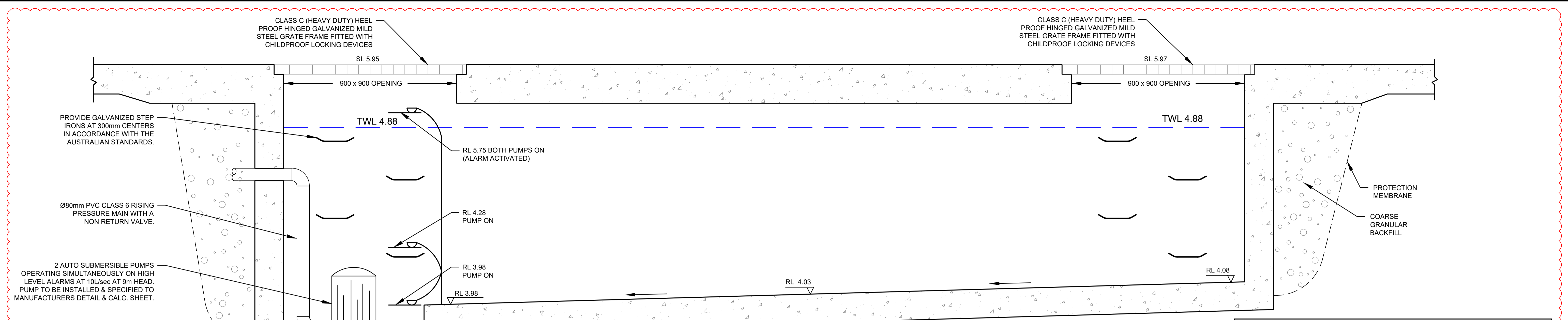
NOTE
PROVIDE 100mm DEEP LAYER OF 10mm BLUE METAL AGGREGATE UNDER THE SLAB ON GROUND IN BETWEEN FOOTINGS. REFER DETAIL ON DRAWING 102

PIPES NOTE:
Ø65 PVC @ MIN 1.0%
Ø90 PVC @ MIN 1.0%
Ø100 PVC @ MIN 1.0%
Ø150 PVC @ MIN 1.0%
Ø225 PVC @ MIN 0.5%
Ø300 PVC @ MIN 0.4%
UNLESS NOTED OTHERWISE

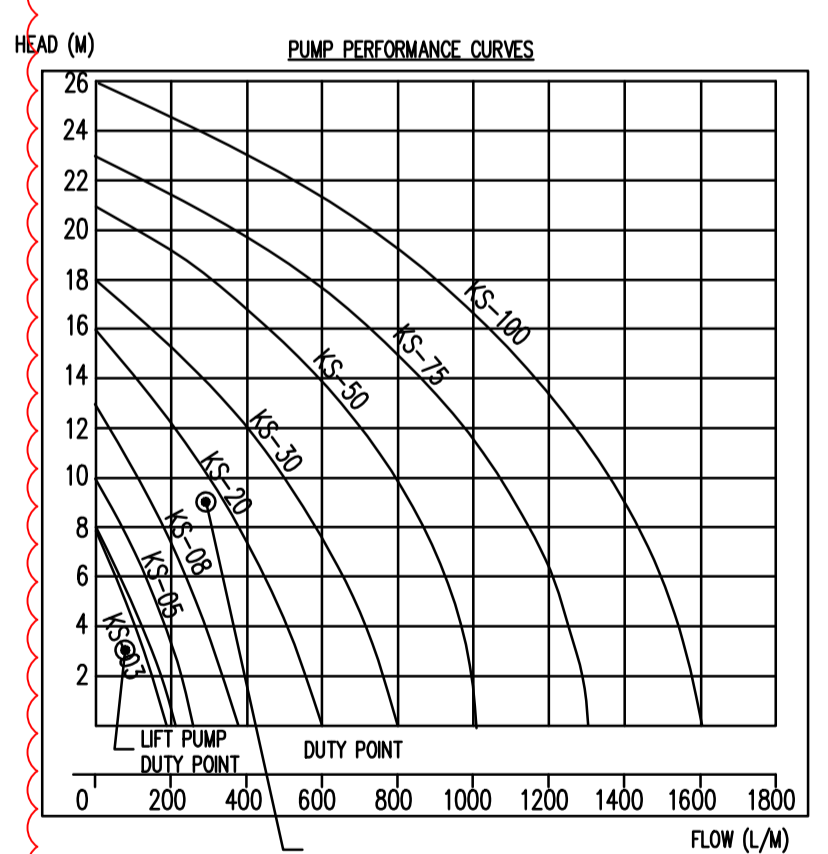
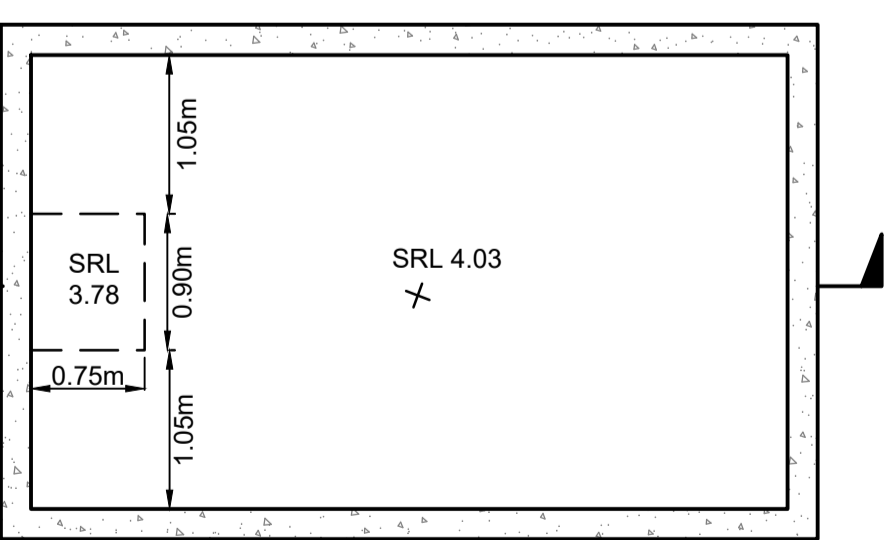
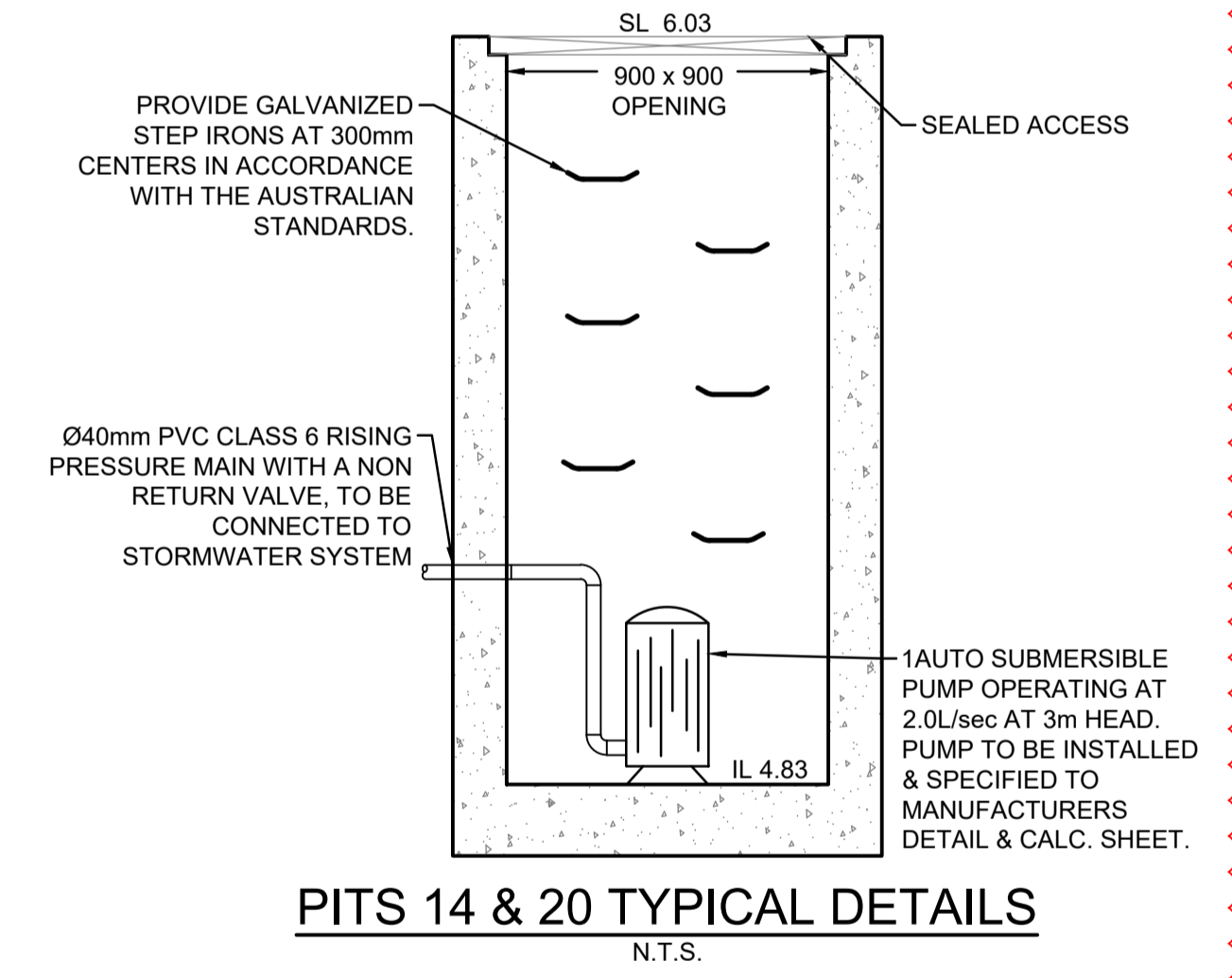
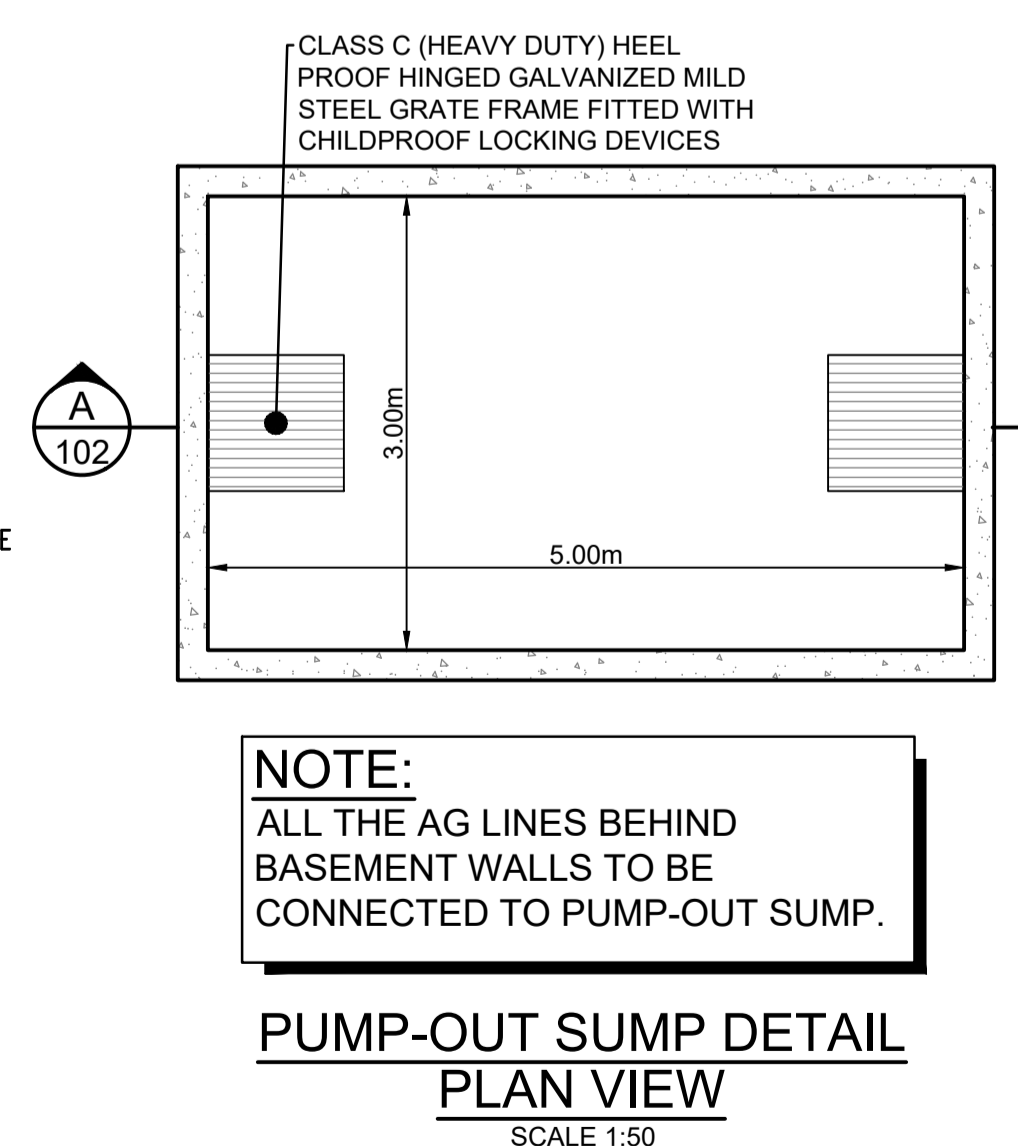
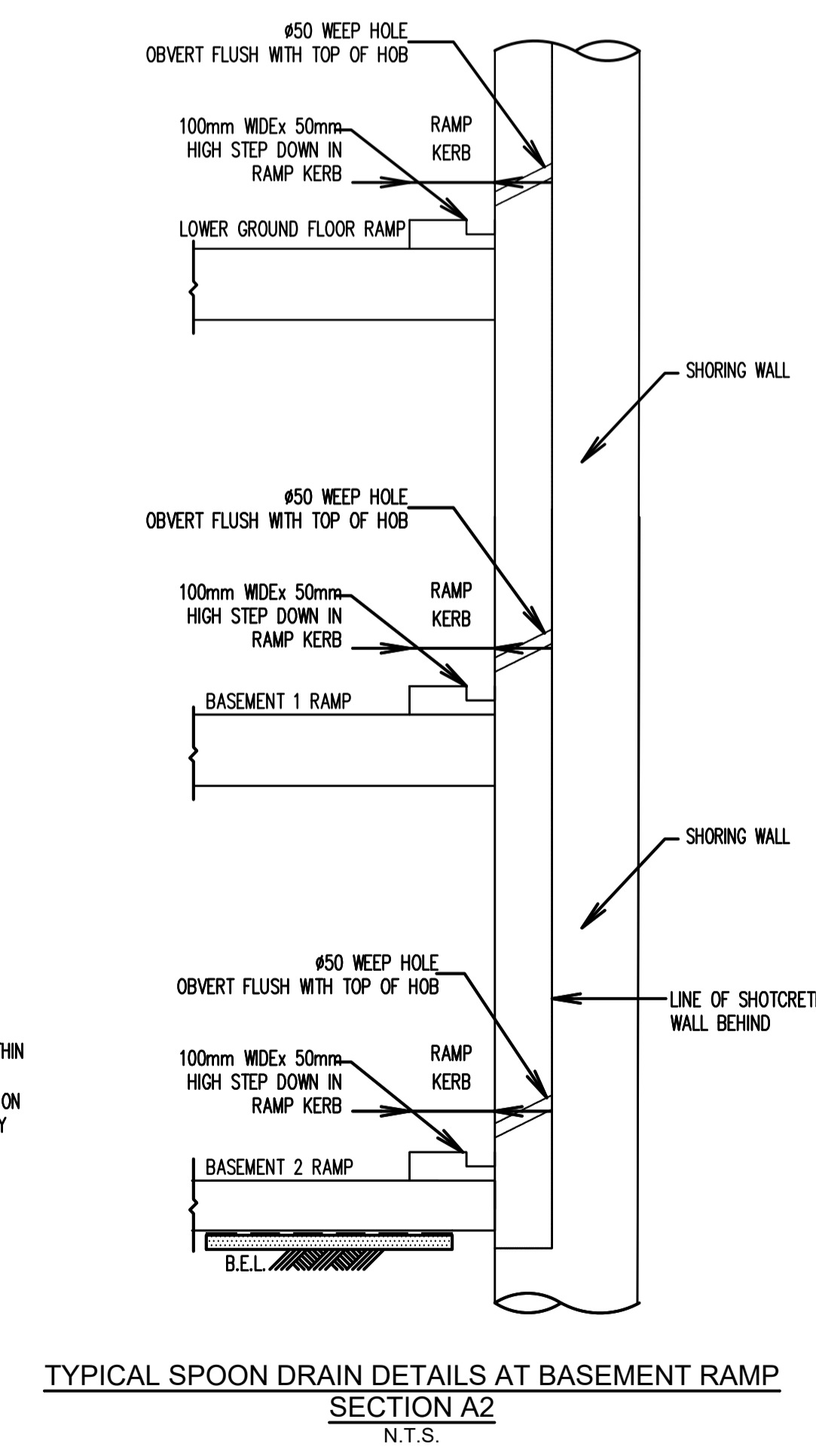
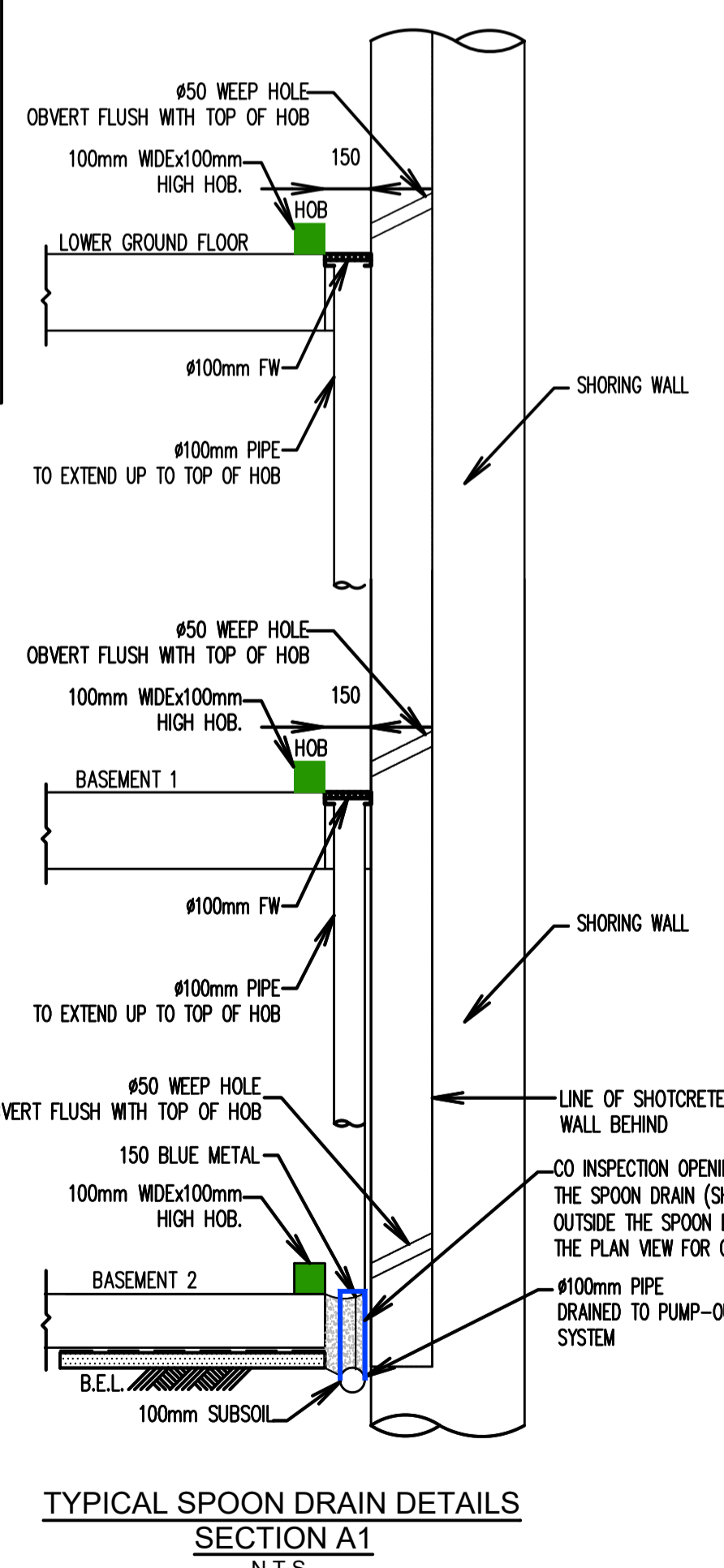
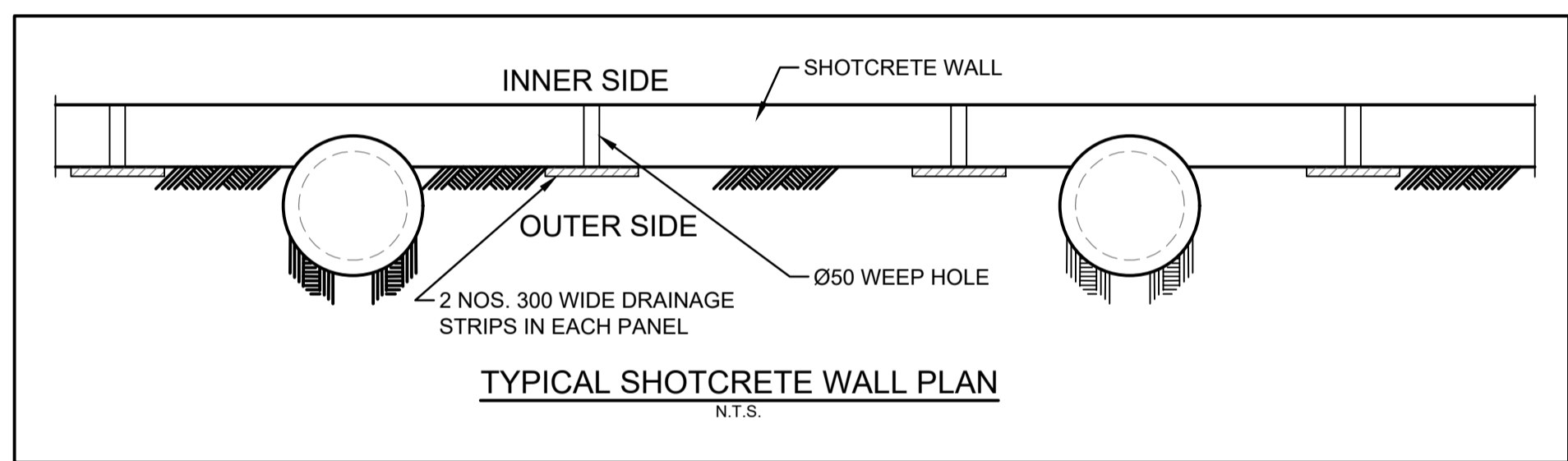
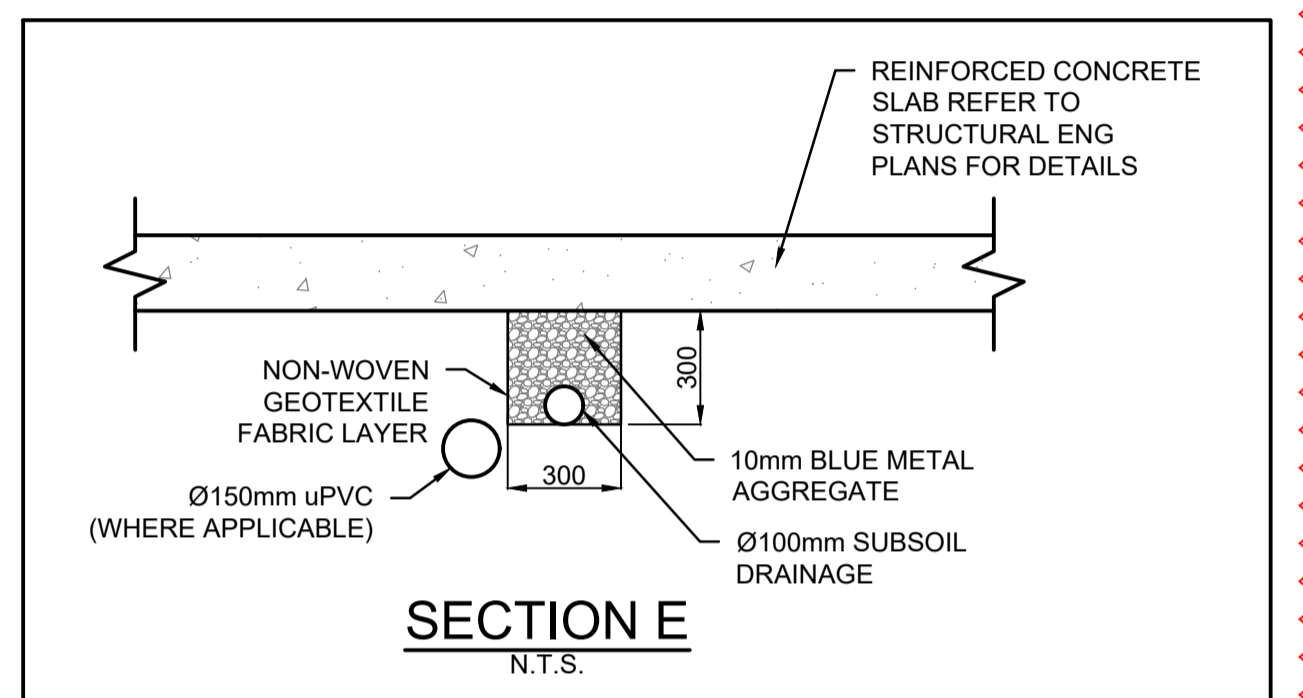
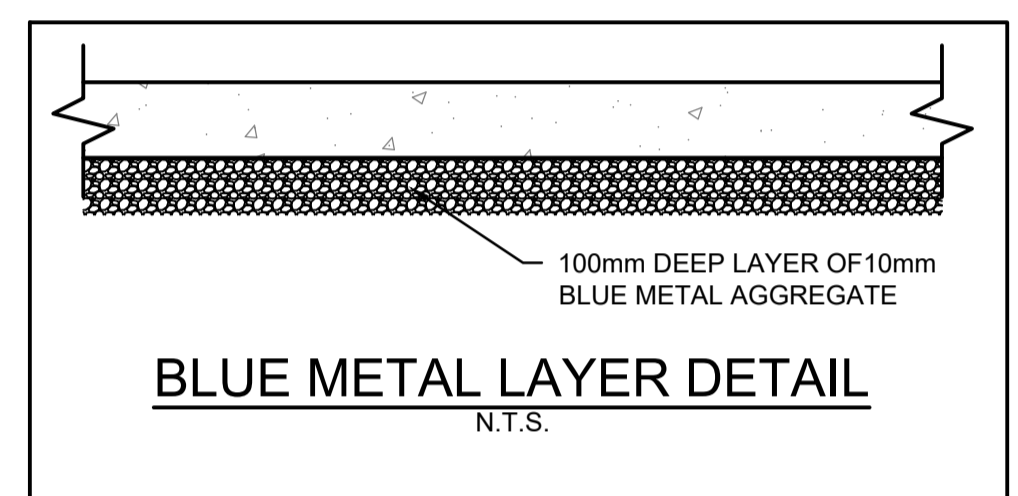
CONFINED SPACE DANGER SIGN
A) A CONFINED SPACE DANGER SIGN SHALL BE POSITIONED IN A LOCATION AT ALL ACCESS POINTS, SUCH THAT IT IS CLEARLY VISIBLE TO PERSONS PROPOSING TO ENTER THE BELOW GROUND TANK/S CONFINED SPACE.
B) MINIMUM DIMENSIONS OF THE SIGN - 300mm x 450mm (LARGE ENTRIES, SUCH AS DOORS) - 250mm x 180mm (SMALL ENTRIES SUCH AS GRATES & MANHOLES)
C) THE SIGN SHALL BE MANUFACTURED FROM COLOUR BONDED ALUMINUM OR POLYPROPYLENE
D) SIGN SHALL BE AFFIXED USING SCREWS AT EACH CORNER OF THE SIGN
COLOURS:
"DANGER" & BACKGROUND = WHITE
ELLIPTICAL AREA = RED
RECTANGLE CONTAINING ELLIPSE = BLACK
BORDER AND OTHER LETTERING = BLACK

NOT FOR CONSTRUCTION

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%;">I</td><td style="width: 75%;">ISSUE FOR DEVELOPMENT APPLICATION</td><td style="width: 10%;">16/10/2025</td><td style="width: 5%;">SFK</td><td style="width: 5%;">EH</td><td style="width: 5%;">OC</td></tr> <tr><td>H</td><td>ISSUE FOR DEVELOPMENT APPLICATION</td><td>18/06/2025</td><td>SFK</td><td>EH</td><td>OC</td></tr> <tr><td>G</td><td>ISSUE FOR DEVELOPMENT APPLICATION</td><td>12/06/2025</td><td>SFK</td><td>EH</td><td>OC</td></tr> <tr><td>F</td><td>ISSUE FOR DEVELOPMENT APPLICATION</td><td>29/05/2025</td><td>SFK</td><td>EH</td><td>OC</td></tr> <tr><td>E</td><td>ISSUE FOR DEVELOPMENT APPLICATION (ARCHITECTURAL LAYOUT CHANGED)</td><td>27/11/2024</td><td>SFK</td><td>EH</td><td>OC</td></tr> <tr><td>Issue Description</td><td>Date</td><td>Designed</td><td>Engineer</td><td>Checked</td><td></td></tr> </table>	I	ISSUE FOR DEVELOPMENT APPLICATION	16/10/2025	SFK	EH	OC	H	ISSUE FOR DEVELOPMENT APPLICATION	18/06/2025	SFK	EH	OC	G	ISSUE FOR DEVELOPMENT APPLICATION	12/06/2025	SFK	EH	OC	F	ISSUE FOR DEVELOPMENT APPLICATION	29/05/2025	SFK	EH	OC	E	ISSUE FOR DEVELOPMENT APPLICATION (ARCHITECTURAL LAYOUT CHANGED)	27/11/2024	SFK	EH	OC	Issue Description	Date	Designed	Engineer	Checked		<p>Architect PTI Architecture Level 2, 68 Sophia Street, Surry Hills NSW 2010 ABN 90 050 071 022 W: www.ptiarchitecture.com.au P: +61 2 9283 0860</p>	<p>Council Parramatta City Council</p> <p>Client Century 888 Pty Ltd</p>	<p>Scale 0 3 6 9 m SCALE 1:150 @ A1</p>	<p>CIVIL & STORMWATER ENGINEERING SERVICES PTY LTD ABN: 27 644 422 506 Shop 1, 143-147 Parramatta Road, Concord, NSW 2137 P:(02) 8397 6500 E:info@esgconsult.com.au</p>	<p>Project 85-91 THOMAS STREET, PARRAMATTA PROPOSED RESIDENTIAL APARTMENTS STORMWATER CONCEPT PLAN</p>	<p>Drawing Title STORMWATER CONCEPT PLAN BASEMENT LEVEL 2 SHEET 1 OF 2</p> <p>Scale: A1 Project No. 200994 Dwg. No. 101 Issue 1</p>
I	ISSUE FOR DEVELOPMENT APPLICATION	16/10/2025	SFK	EH	OC																																					
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SECTION A
STORMWATER PUMP-OUT SUMP
N.T.S.



PUMP STORAGE VOLUME CALCULATION

AREA DRAINING TO SUMP = 26.39m²

SUMP SIZE BASED ON 100 YEAR 2 HR STORM, I = 48.10 mm/hr,
 $Q = CIA/3600 = 1 \times 48.10 \times 26.39/3600 = 0.35 \text{ L/sec}$
 VOLUME REQUIRED = $0.35 \times (2 \times 60 \times 60) = 2520 \text{ L} = 2.52 \text{ m}^3$
 STORAGE PROVIDED $5.0 \times 3.0 \times 0.85 = 12.75 \text{ m}^3$

PUMP OUT RATE BASED ON 100YR 5MIN STORM, I = 227 mm/hr
 (MIN RATE REQUIRED AS PER AS3500.3 IS 10 L/sec)
 $Q = CIA/3600 = 1 \times 227 \times 26.39/3600 = 1.66 \text{ L/sec}$

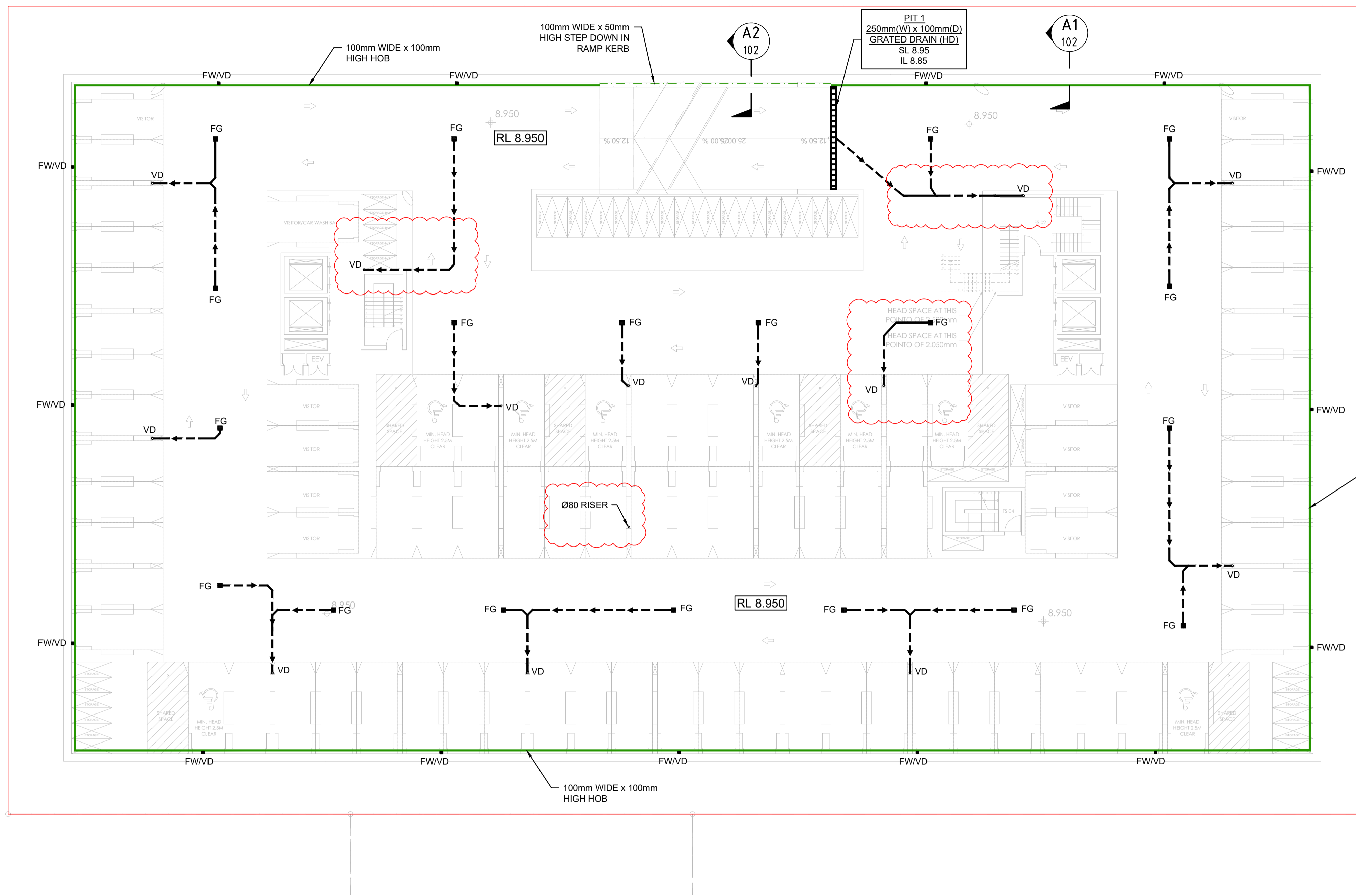
DUAL KS-20 PUMP OR EQUIVALENT TO BE INSTALLED IN SUMP AND CONNECTED TO CONTROL PANEL WHICH WILL ALLOW FOR THE PUMP TO OPERATE SIMULTANEOUSLY ON HIGH LEVEL WITH ALARM AT 10 L/sec AT 9m HEAD

Type	Output		Outlet		Rated Head Capacity		Maximum Head Capacity		Weigh Kg	Dimension		
	HP	kW	mm	Inch	M	LPM	M	LPM		L(mm)	W(mm)	H(mm)
LIFT PUMP												
KS-03	1/3	0.25	40	1 1/2"	3	130	8	180	9	188	141	305
KS-04	1/2	0.4	50	2"	5	150	8	220	11	208	140	359
KS-05	1/2	0.4	50	2"	5	160	10	260	14	230	156	375
KS-08	1	0.75	50	2"	6	240	13	380	21	290	180	425
KS-20	2	1.5	80	3"	10	300	16	600	31	278	182	475
KS-30	3	2.2	80	3"	10	500	18	800	42	390	250	450
KS-50	5	3.7	100	4"	10	800	21	1100	48	450	240	530
KS-75	7 1/2	5.6	100	4"	15	800	23	1300	60	550	310	590
KS-100	10	7.5	150	6"	18	900	25	1600	70	550	310	610

THOMAS

STREET

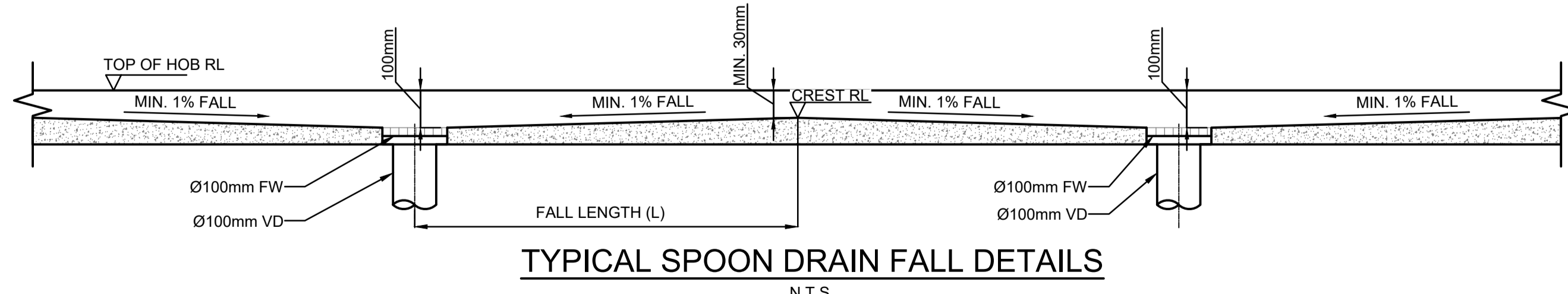
- LEGEND**
- PROPOSED STORMWATER
 - Ø100mm VERTICAL DROP
 - SURFACE FLOW DIRECTION
 - Ø100mm SUBSOIL DRAINAGE TO BE WRAPPED IN GEOTEXTILE BIDIMA34 @ MIN 1.0% SLOPE
 - CLEANING EYE (OR INSPECTION EYE)
 - INSPECTION OPENING
 - FINISHED SURFACE LEVEL
 - GRATED DRAIN (HD)
 - Ø150mm FLOOR GRATE (HD)



BASEMENT 1 LEVEL
SCALE 1:150

NOTE:
ALL STORMWATER DRAINAGE PIPES ARE Ø100 uPVC U.N.O.

NOTE:
ALLOW BENCHING WITHIN SPOON DRAIN TO ACHIEVE MIN 1.0% FALL TO FLOOR WASTES



TYPICAL SPOON DRAIN FALL DETAILS
N.T.S.

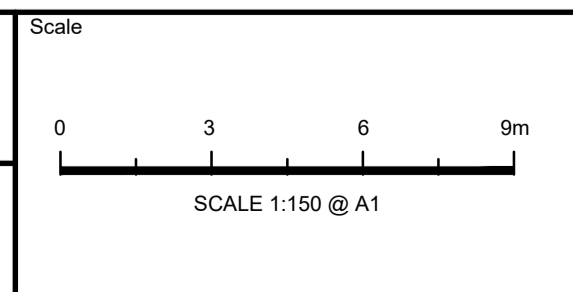
PIPES NOTE:
Ø65 PVC @ MIN 1.0%
Ø90 PVC @ MIN 1.0%
Ø100 PVC @ MIN 1.0%
Ø150 PVC @ MIN 1.0%
Ø225 PVC @ MIN 0.5%
Ø300 PVC @ MIN 0.4%
UNLESS NOTED OTHERWISE

NOT FOR CONSTRUCTION

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Issue	Description	Date	Designed	Engineer	Checked

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P:(02) 8397 6500
E: info@esgconsult.com.au

Project
85-91 THOMAS STREET, PARRAMATTA PROPOSED RESIDENTIAL APARTMENTS STORMWATER CONCEPT PLAN

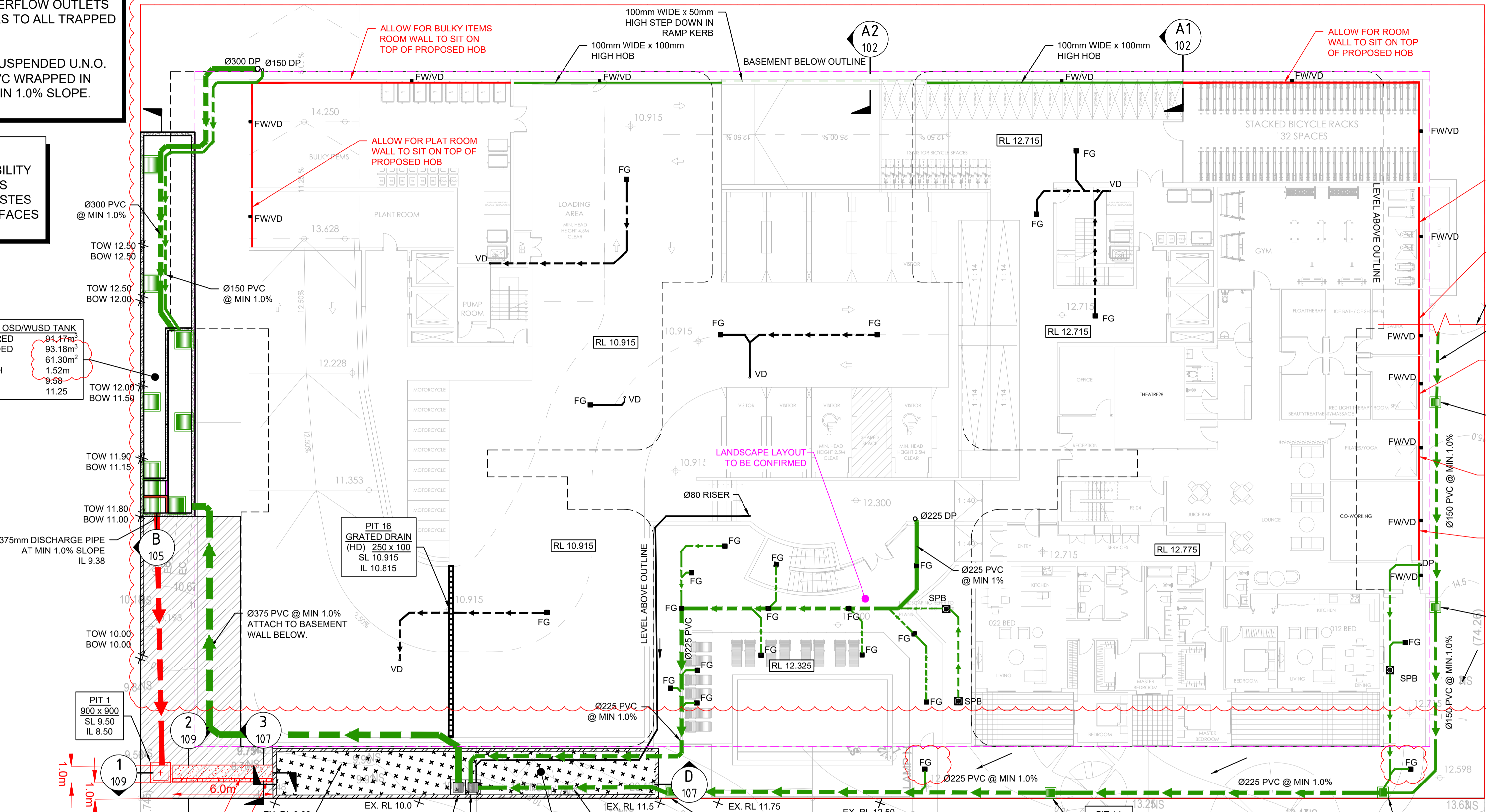
Drawing Title STORMWATER LAYOUT PLAN BASEMENT LEVEL 1			
Scale 1:150	A1	Project No. 200994	Dwg. No. 102.2
			Issue D

NOTES:
 1- CONTRACTOR IS TO PROVIDE OVERFLOW OUTLETS & EMERGENCY OVERFLOW SPITTERS TO ALL TRAPPED AREAS.
 2- DP/VD ARE Ø100mm PIPES U.N.O.
 3- ALL TRANSFERRING PIPES ARE SUSPENDED U.N.O.
 4- BALCONIES PIPES ARE Ø50mm PVC WRAPPED IN 10mm ABLEFLEX CAST IN SLAB AT MIN 1.0% SLOPE.

NOTE:
 IT IS CONTRACTOR'S RESPONSIBILITY TO ENSURE MINIMUM PONDING IS ACHIEVED OVER THE FLOOR WASTES BY GRADING CATCHMENTS' SURFACES AT MINIMUM 1.0% FALL

PIPES NOTE:
 Ø65 PVC @ MIN 1.0%
 Ø90 PVC @ MIN 1.0%
 Ø100 PVC @ MIN 1.0%
 Ø150 PVC @ MIN 1.0%
 Ø225 PVC @ MIN 0.5%
 Ø300 PVC @ MIN 0.4%
 UNLESS NOTED OTHERWISE

UNDERGROUND OSD/WUSD TANK
 VOLUME REQUIRED 84.77m³
 VOLUME PROVIDED 93.18m³
 TANK AREA 61.30m²
 AVERAGE DEPTH 1.52m
 ORIFICE CL 9.58
 TWL 11.25



ALLOW FOR BULKY ITEMS ROOM WALL TO SIT ON TOP OF PROPOSED HOB
 ALLOW FOR PLAT ROOM WALL TO SIT ON TOP OF PROPOSED HOB
 ALLOW FOR GYM ROOM WALL TO SIT ON TOP OF PROPOSED HOB
 ALLOW FOR SAUNA ROOM WALL TO SIT ON TOP OF PROPOSED HOB
 CONTINUES ON SHEET 102.3
 Ø150mm PVC @ MIN 1.0%
 ALLOW FOR SPA ROOM WALL TO SIT ON TOP OF PROPOSED HOB
 ALLOW FOR PILATES/YOGA ROOM WALL TO SIT ON TOP OF PROPOSED HOB
 ALLOW FOR CO-WORKING ROOM WALL TO SIT ON TOP OF PROPOSED HOB

NOTE:
 ALL GRATES WITHIN FOOTWAY AREAS TO BE HEEL GUARD & BIKE SAFE.

NOTE:
 PITS DEEPER THAN 1.0m TO BE FITTED WITH STEP IRONS

NOTE:
 REFER ARCHITECTURAL DRAWINGS FOR FINAL SET-OUT LEVELS.

NOTE:
 ALL STORMWATER DRAINAGE PIPES ARE Ø100 PVC U.N.O

NOTE:
 ALL REDUNDANT PIPELINES WITHIN FOOTPATH AREA MUST BE REMOVED AND FOOTPATH/KERB REINSTATED.

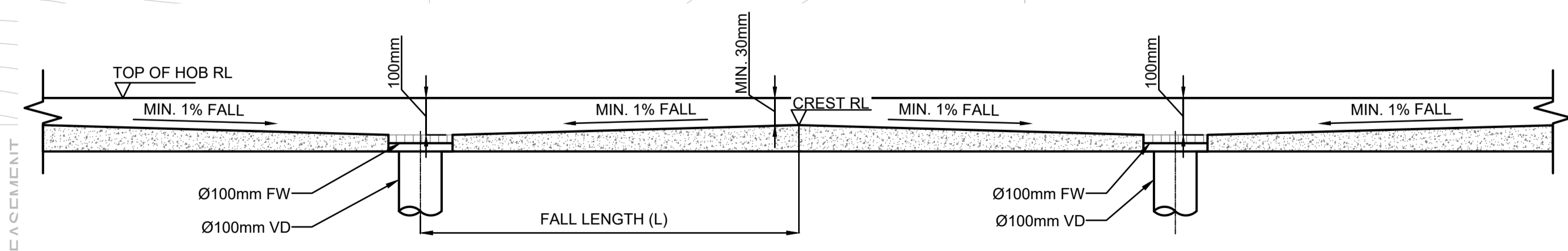
PROPOSED 15.0m (L) x 1.0m (W) x 0.7m (D) RUBBLE / SPREADER PIT. REFER TO SHEET 107 FOR MORE DETAILS.

PROVIDE A GRATED DRAIN ACTING AS A FLOW SPREADER TO AVOID CONCENTRATED FLOWS IN CASE OF EMERGENCY OVERFLOW.

TOTAL AREA
 S 7258.4m²

LOWER GROUND LEVEL

SCALE 1:150



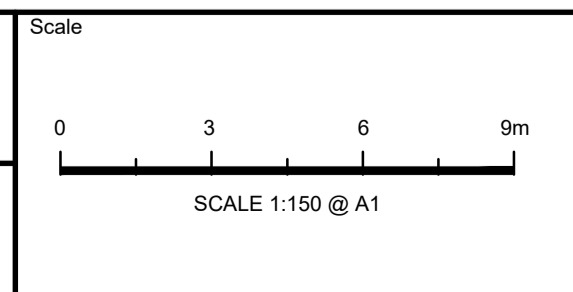
TYPICAL SPOON DRAIN FALL DETAILS
 N.T.S.

NOT FOR CONSTRUCTION

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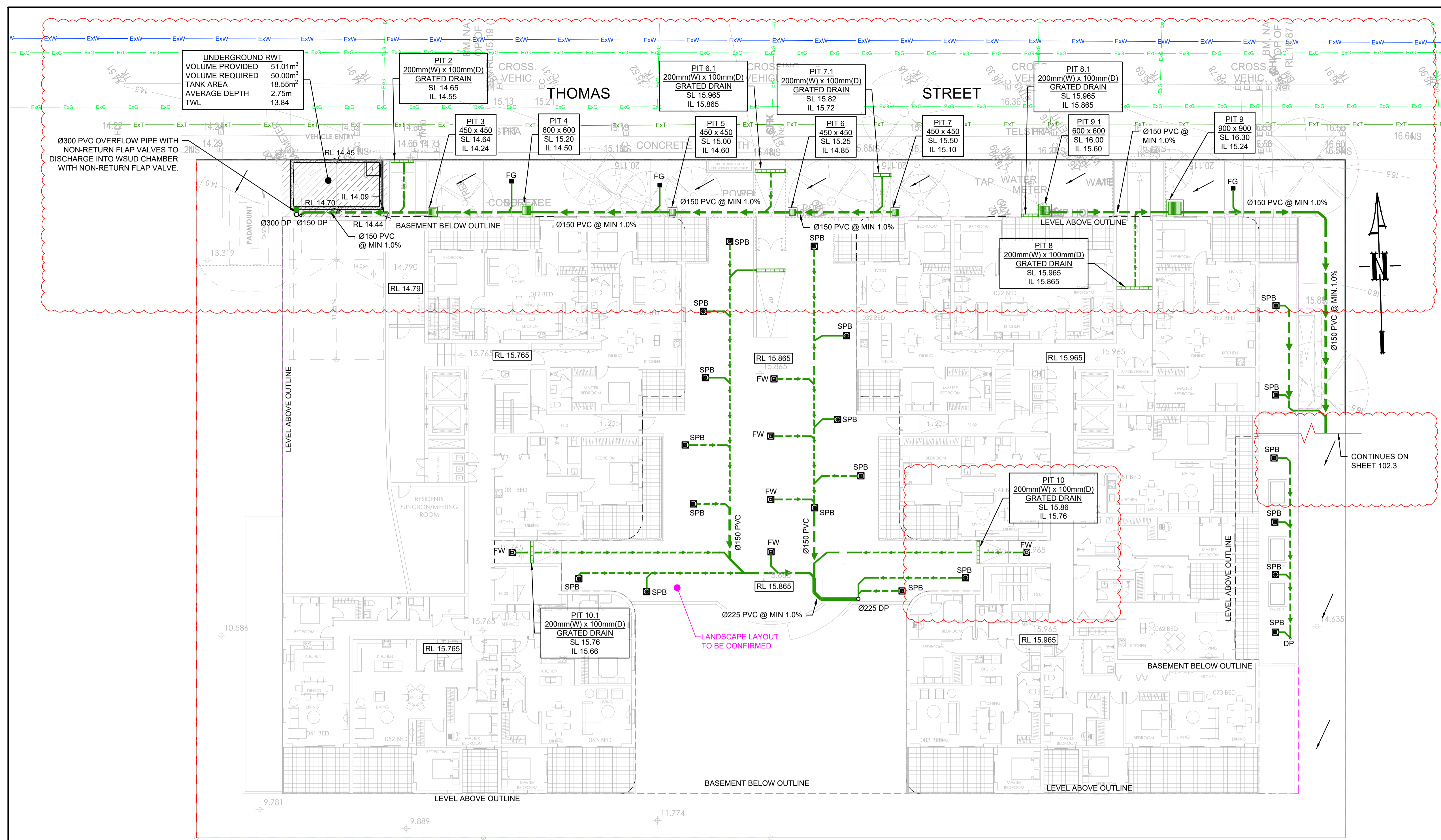
Council
Parramatta City Council
 Client
Century 888 Pty Ltd



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Project
85-91 THOMAS STREET, PARRAMATTA PROPOSED RESIDENTIAL APARTMENTS STORMWATER CONCEPT PLAN

Drawing Title	STORMWATER LAYOUT PLAN LOWER GROUND LEVEL		
Scale	A1	Project No.	200994
Dwg. No.	102.3	Issue	D



UNDERGROUND RWT
 VOLUME PROVIDED 51.01m³
 VOLUME REQUIRED 50.00m³
 TANK AREA 18.55m²
 AVERAGE DEPTH 2.75m
 TWL 13.84

PIT 2
 200mm(W) x 100mm(D)
 GRATED DRAIN
 SL 14.65
 IL 14.55

PIT 6.1
 200mm(W) x 100mm(D)
 GRATED DRAIN
 SL 15.965
 IL 15.865

PIT 7.1
 200mm(W) x 100mm(D)
 GRATED DRAIN
 SL 15.82
 IL 15.72

PIT 8.1
 200mm(W) x 100mm(D)
 GRATED DRAIN
 SL 15.965
 IL 15.865

PIT 9
 900 x 900
 SL 16.30
 IL 15.24

PIT 3
 450 x 450
 SL 14.64
 IL 14.24

PIT 4
 600 x 600
 SL 15.20
 IL 14.50

PIT 5
 450 x 450
 SL 15.00
 IL 14.60

PIT 6
 450 x 450
 SL 15.25
 IL 14.85

PIT 7
 450 x 450
 SL 15.50
 IL 15.10

PIT 8
 200mm(W) x 100mm(D)
 GRATED DRAIN
 SL 15.965
 IL 15.865

PIT 10
 200mm(W) x 100mm(D)
 GRATED DRAIN
 SL 15.86
 IL 15.76

PIT 10.1
 200mm(W) x 100mm(D)
 GRATED DRAIN
 SL 15.76
 IL 15.66

NOTE:
 ALL GRATES WITHIN
 FOOTWAY AREAS TO BE
 HEEL GUARD & BIKE SAFE.

NOTE:
 PITS DEEPER THAN 1.0m
 TO BE FITTED WITH STEP
 IRONS

NOTE:
 REFER ARCHITECTURAL DRAWINGS
 FOR FINAL SET-OUT LEVELS.

NOTE:
 ALL STORMWATER DRAINAGE
 PIPES ARE Ø100 PVC U.N.O

NOTE:
 ALL REDUNDANT PIPELINES WITHIN
 FOOTPATH AREA MUST BE REMOVED
 AND FOOTPATH/KERB REINSTATED.

NOTE:
 IT IS CONTRACTOR'S RESPONSIBILITY
 TO ENSURE MINIMUM PONDING IS
 ACHIEVED OVER THE FLOOR WASTES
 BY GRADING CATCHMENTS' SURFACES
 AT MINIMUM 1.0% FALL

NOTES:
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 AREAS.
 2- DP/V/D ARE Ø100mm PIPES U.N.O.
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 4- BALCONIES PIPES ARE Ø50mm PVC WRAPPED IN
 10mm ABLEFLEX CAST IN SLAB AT MIN 1.0% SLOPE.

HATCHED AREA DENOTES AREA DRAINING
 TO BASEMENT= 26.39m² (100% IMPERVIOUS)

GROUND PLAN
 SCALE 1:150

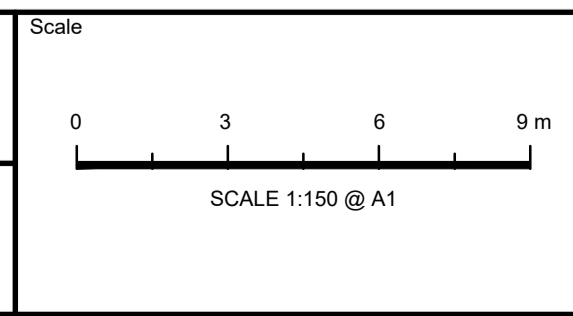
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H	ISSUE FOR DEVELOPMENT APPLICATION	27/11/2024	SFK	EH	OC
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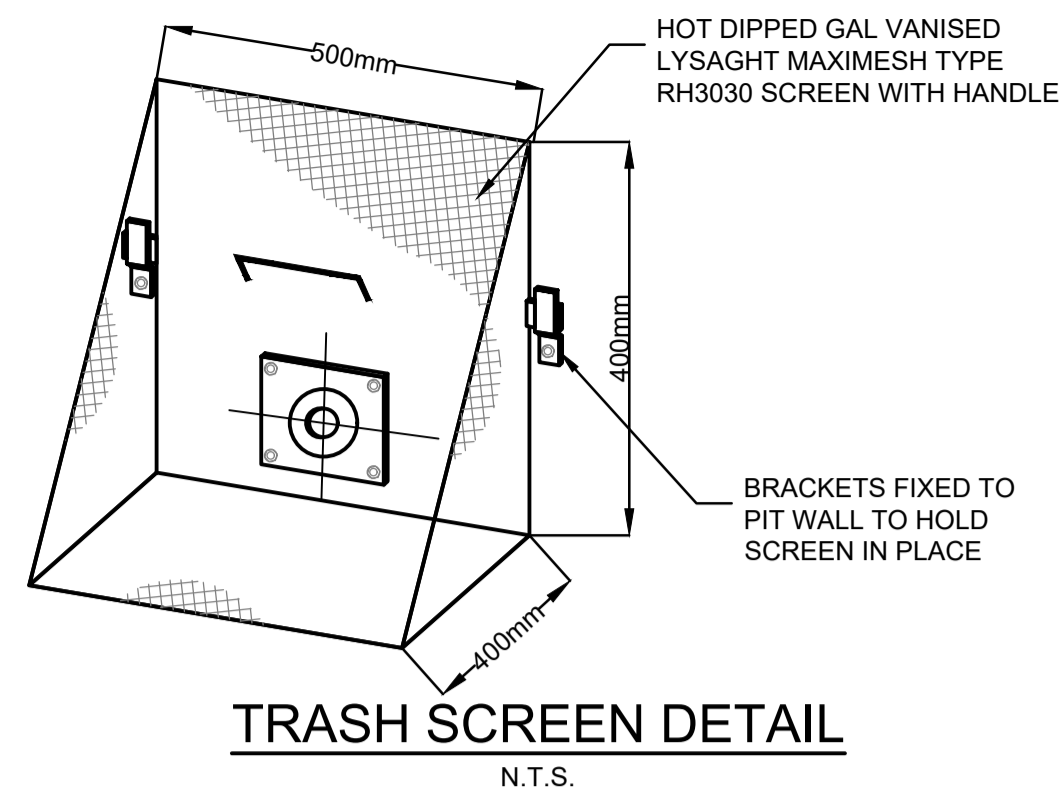


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Project
**85-91 THOMAS STREET, PARRAMATTA
 PROPOSED RESIDENTIAL APARTMENTS
 STORMWATER CONCEPT PLAN**

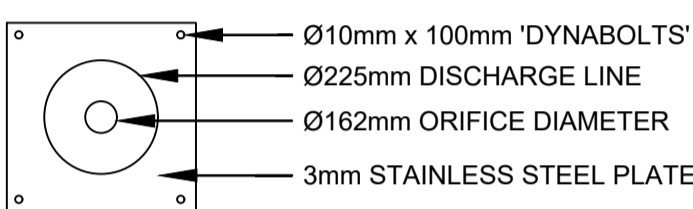
Drawing Title STORMWATER CONCEPT PLAN GROUND LEVEL			
Scale 1:150	A1	Project No. 200994	Dwg. No. 103
Issue L		Issue L	

PARRAMATTA CITY COUNCIL			
On-Site Detention Calculation Sheet			
Project:	ESG200994.SW.DA	Lot No.	
Location:	85 - 91 Thomas Street, Parramatta	DP No.	
Designer:	D.B.F.	D.A. No.	
Phone:	02 8607 5051		
OSD Area:	Front Lot	UPRCT	URCT
Site Area		0.382	0.382
Basic Storage Volume		89.82	89.82
Basic Discharge		79.50	79.50
Area of Site to Storage		0.372	0.372
Percentage of Site		97%	97%
Storage per ha of contributing area		97.20	97.20
Volume/PSD Adjustment		241.77	241.77
PSD for site		199.45	199.45
Maximum Head to Orifice Centre		74.07	74.07
Calculated Orifice Diameter		1.670	1.670
Maximum discharge		0.163	0.163
Head for high early discharge		74.073	74.18
High Early Discharge		1.570	1.570
Mean Discharge		71.821	71.65
Average Discharge per Hectare		97%	97%
Final Site Storage Ratio		72.947	72.92
Site Storage Volume		196.350	196.71
Volume Provided		245	245
		91.17	91.13
		102%	102%
Checked By:	Osman Chowdhury		
Date Checked:	18-Jun-25		
OSD Plan Number:	105		

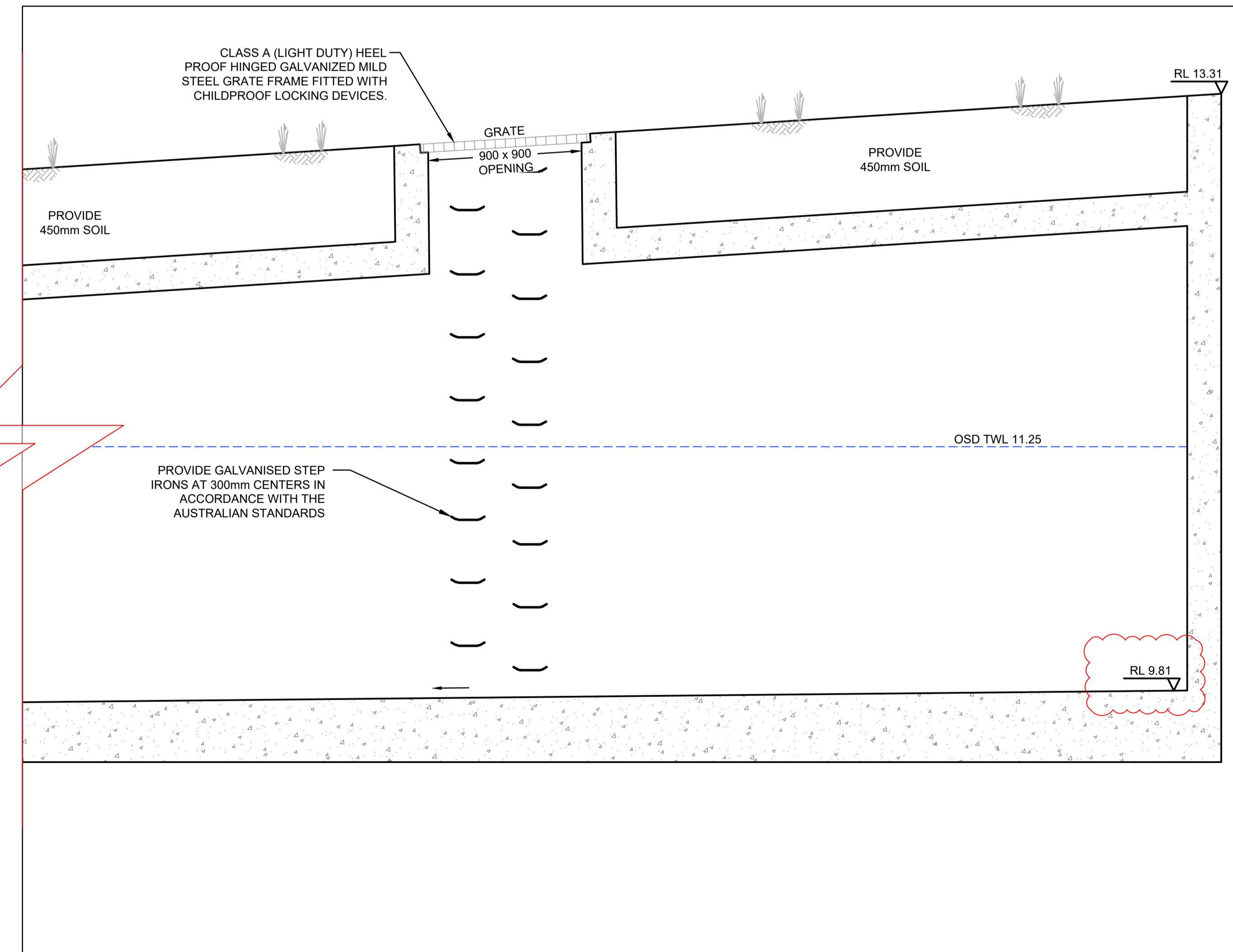
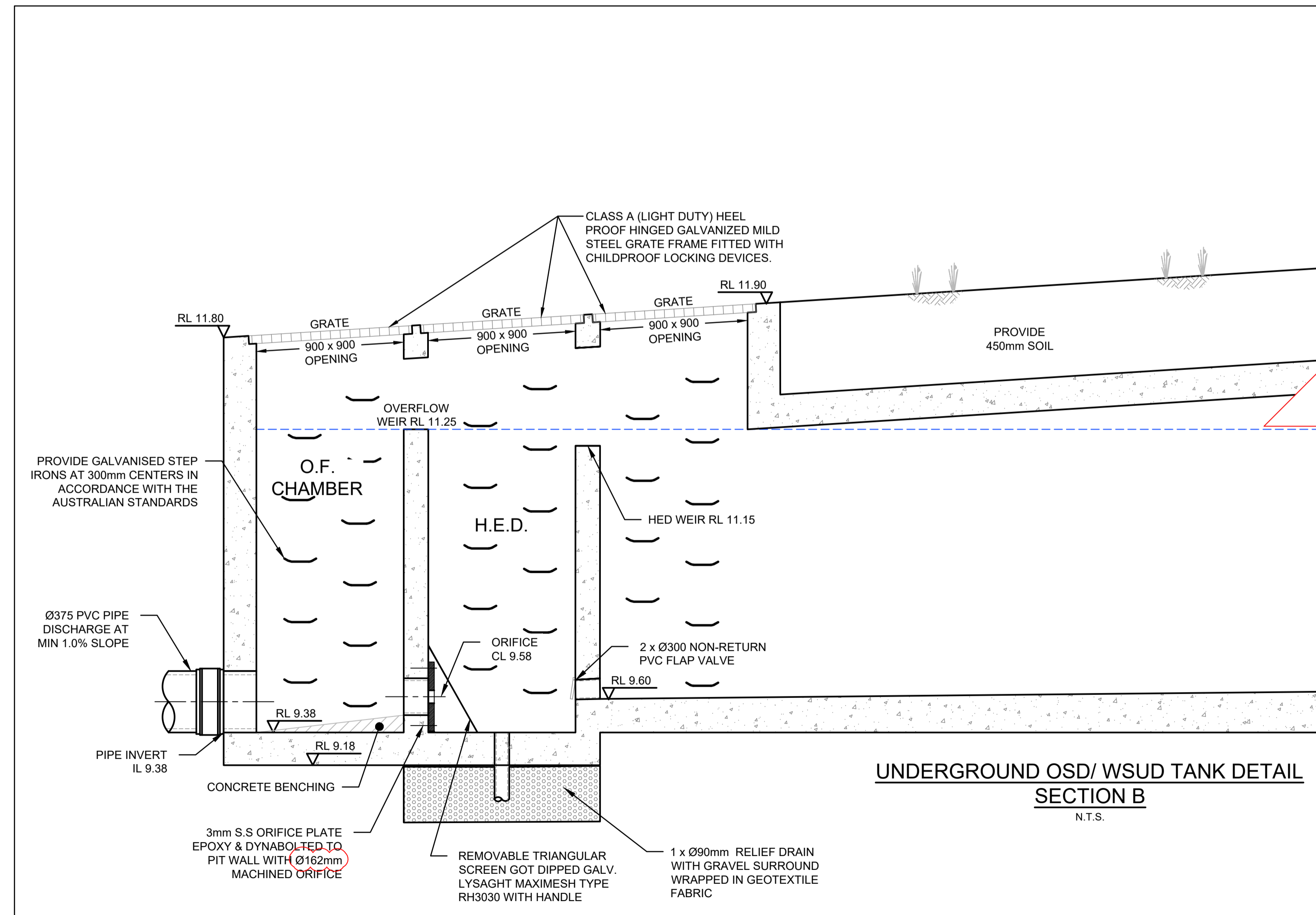
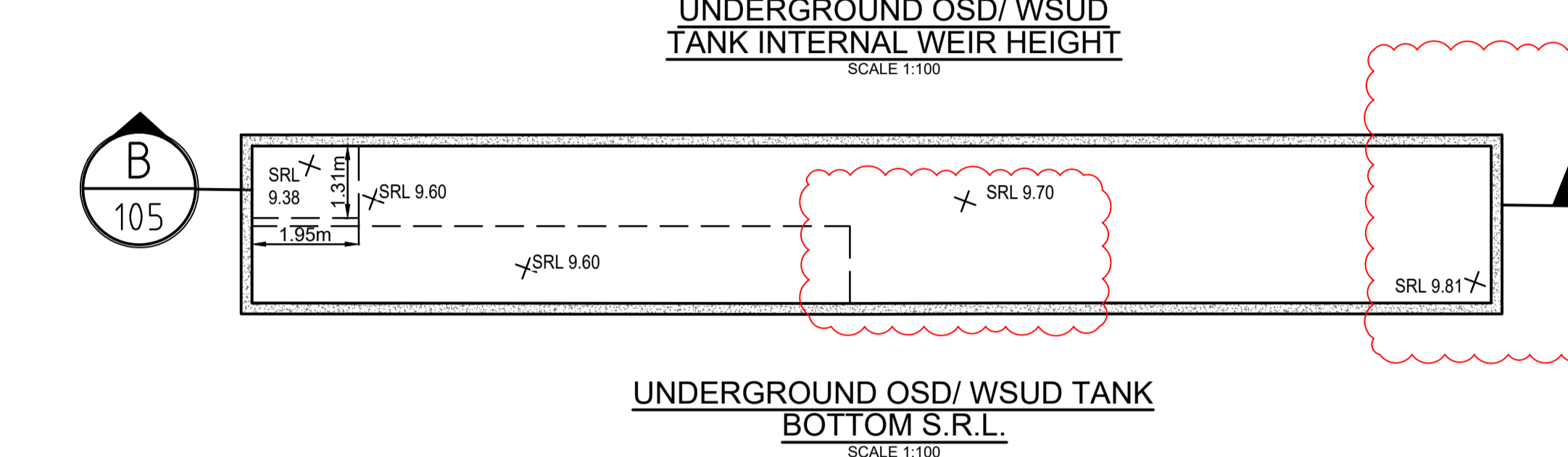
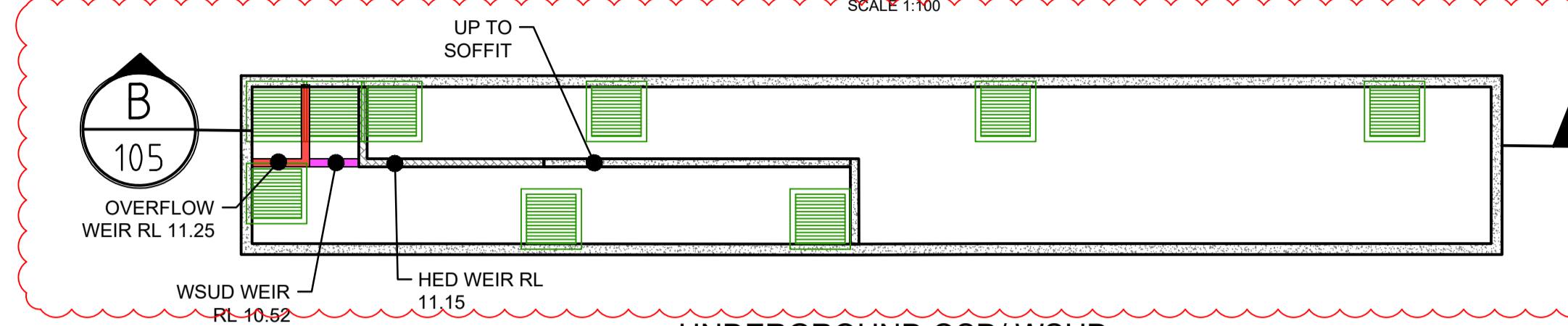
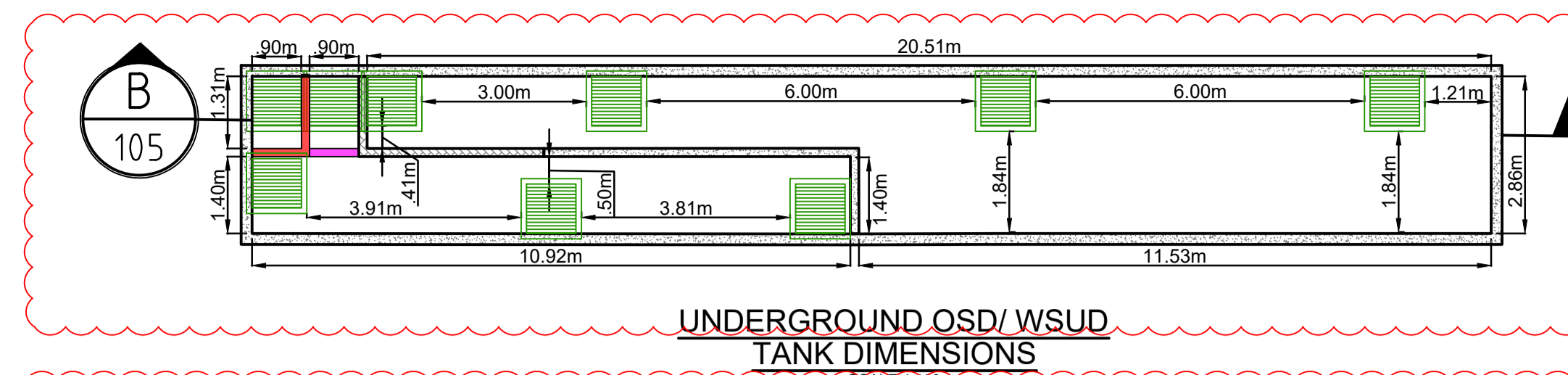


REDUCED ORIFICE CALCULATIONS:

PSD = 74.07L/s
 WSUD DISCHARGE TO OVERFLOW CHAMBER = 1.35 L/s
 NEW PSD = 74.07 - 1.35 = 72.72 L/s
 NEW ORIFICE SIZE = Ø162mm.

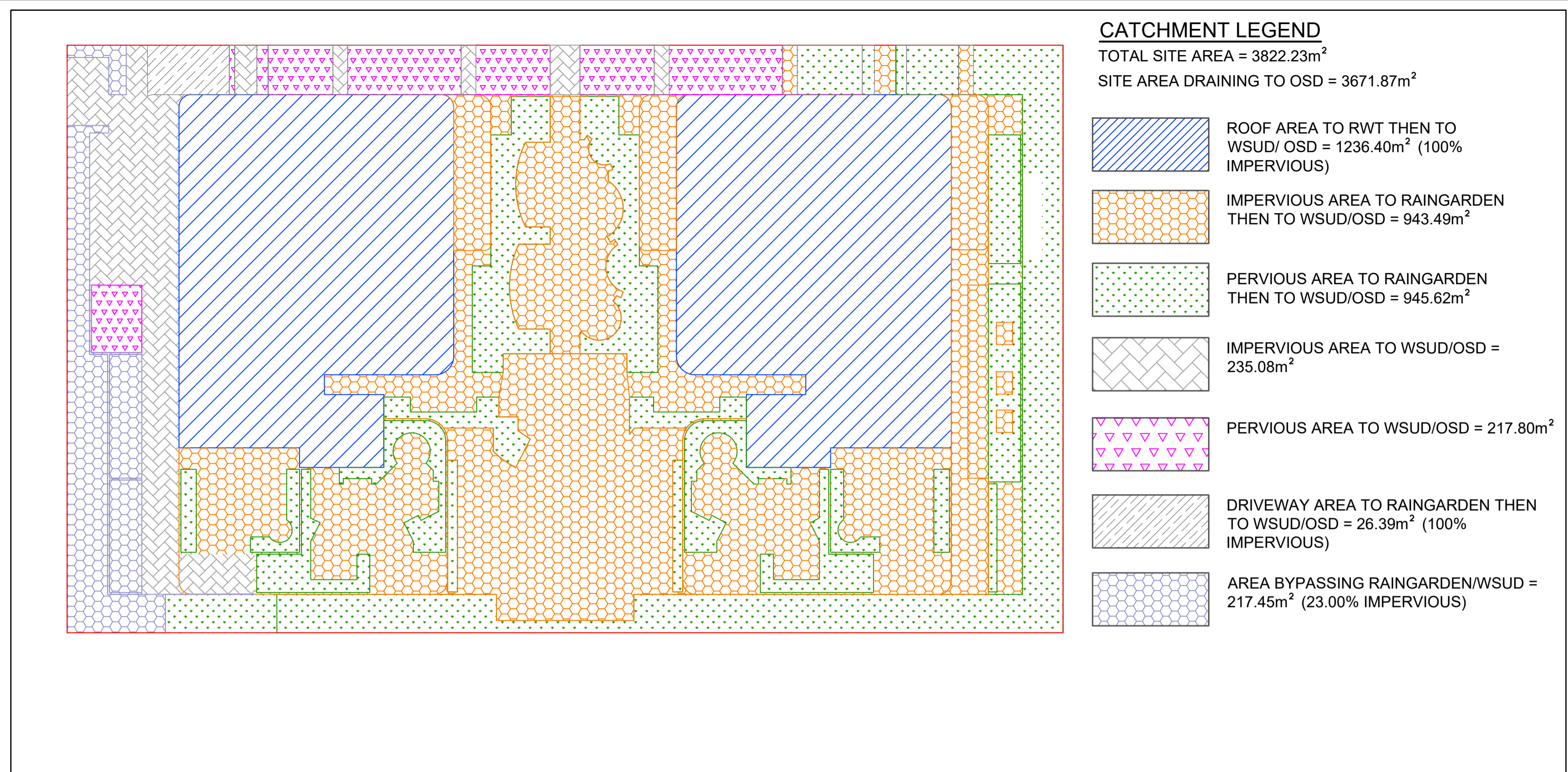
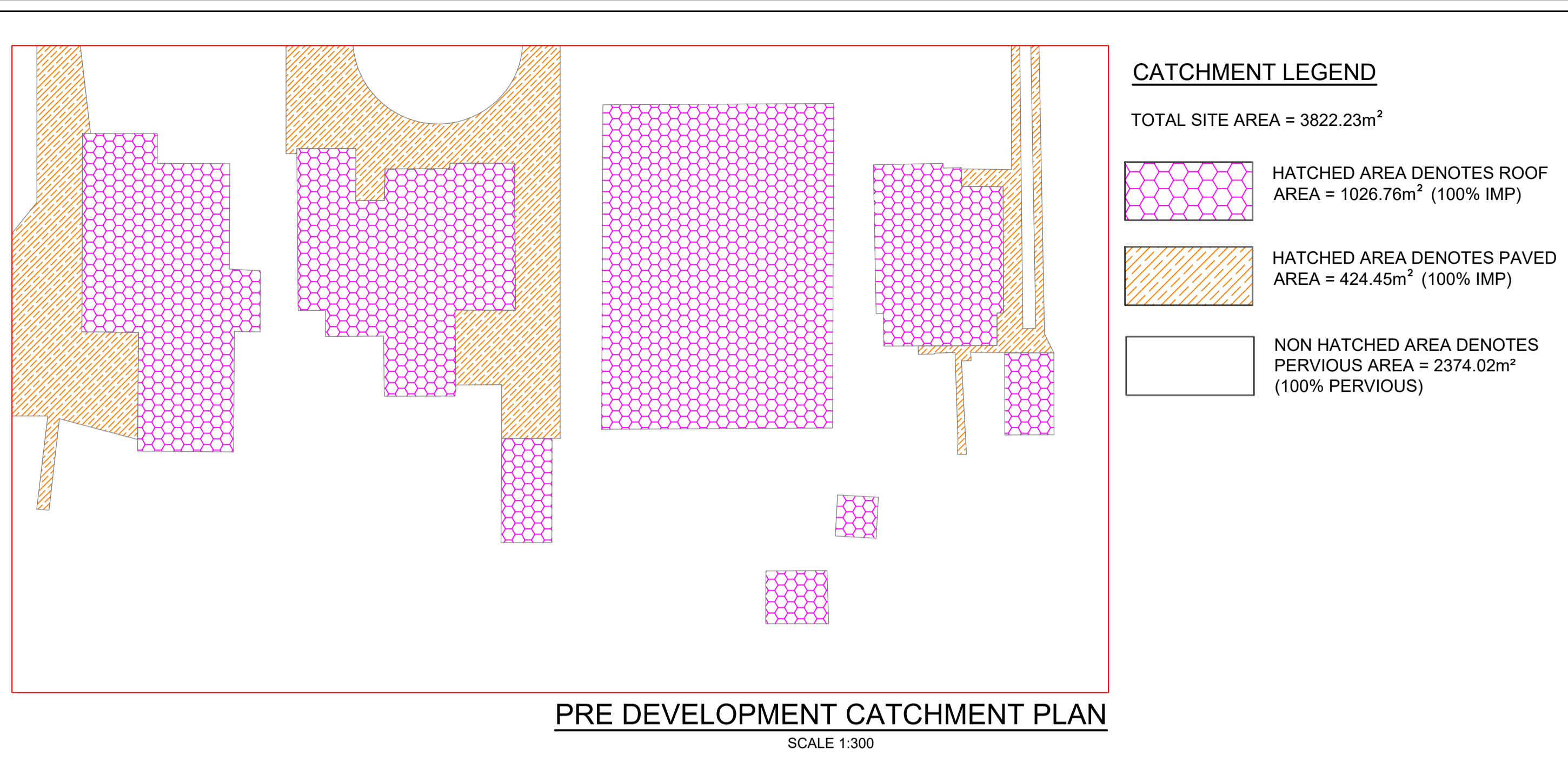


ORIFICE PLATE DETAIL
N.T.S.



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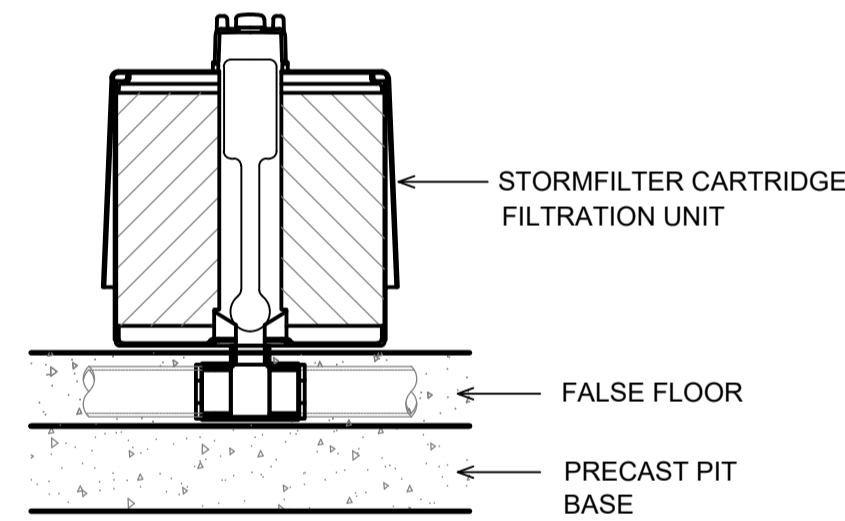


Filtration Unit Maintenance Schedule

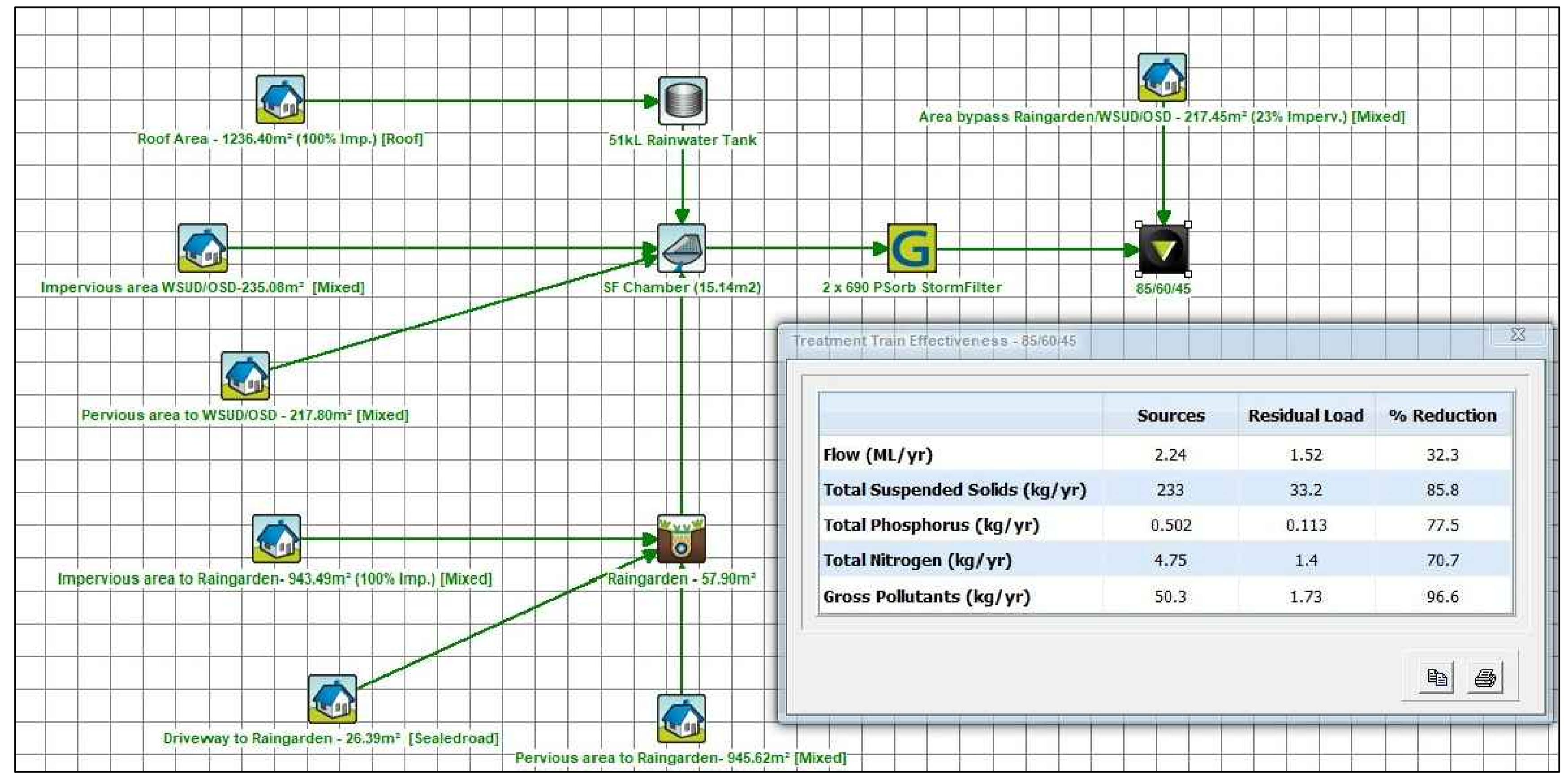
Facility Component Requiring Maintenance	Maintenance Activity	When Maintenance Activity is Required	Expected Facility Performance After Maintaining	INSPECTION/MINOR MAINTENANCE (TIMES/YEAR)	MAJOR MAINTENANCE (TIMES/YEAR)
StormFilter® Cartridges and Containment Structure	Trash and Debris Removal	Floatable objects or other trash is present in the filter. Remove to avoid hindrance of filtration and eliminate unsightly debris and trash.	Permanent removal from storm system.	2 (and after major storms)	1 (except in case of a spill)
	Cartridge Replacement and Sediment Removal	1. Media has been contaminated by high levels of pollutants, such as after a spill.	1. New media is able to effectively treat stormwater.	-	-
Drainage System Piping	Flushing With Water	Drainage system is obstructed by debris or sediment.	Outflow is not restricted.	-	-

GENERAL NOTES

- INLET AND OUTLET PIPING SHALL BE SPECIFIED BY SITE CIVIL ENGINEER (SEE PLANS) AND PROVIDED BY CONTRACTOR. STORMFILTER IS PROVIDED WITH OPENINGS AT INLET AND OUTLET LOCATIONS.
- IF THE PEAK FLOW RATE, AS DETERMINED BY THE SITE CIVIL ENGINEER, EXCEEDS THE PEAK HYDRAULIC CAPACITY OF THE PRODUCT, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED. PLEASE CONTACT STORMWATER360 FOR OPTIONS.
- THE FILTER CARTRIDGE(S) ARE SIPHON-ACTUATED AND SELF-CLEANING. THE STANDARD DETAIL DRAWING SHOWS THE MAXIMUM NUMBER OF CARTRIDGES. THE ACTUAL NUMBER SHALL BE SPECIFIED BY THE SITE CIVIL ENGINEER ON SITE PLANS OR IN DATA TABLE BELOW. PRECAST STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH AS3600.
- FOR SHALLOW, LOW DROP OR SPECIAL DESIGN CONSTRAINTS, CONTACT STORMWATER360 FOR DESIGN OPTIONS.
- ALL WATER QUALITY PRODUCTS REQUIRE PERIODIC MAINTENANCE AS OUTLINED IN THE O&M GUIDELINES. PROVIDE MINIMUM CLEARANCE FOR MAINTENANCE ACCESS.
- STRUCTURE AND ACCESS COVERS DESIGNED TO MEET AUSTRROADS T44 LOAD RATING WITH 0.2m FILL MAXIMUM.
- THE STRUCTURE THICKNESSES SHOWN ARE FOR REPRESENTATIONAL PURPOSES AND VARY REGIONALLY.
- ANY BACKFILL DEPTH, SUB-BASE, AND OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY SITE CIVIL ENGINEER.
- STORMFILTER BY STORMWATER360: SYDNEY (AU) PHONE: (02) 9525 5833, BRISBANE (AU) PHONE: (07) 3272 1872.



STORMFILTER CARTRIDGE DETAIL



MUSIC RESULTS
N.T.S.

Table 6-2 Typical Water Demands for Multi-residential Dwellings (derived from data provided by Sydney Water, 2015)

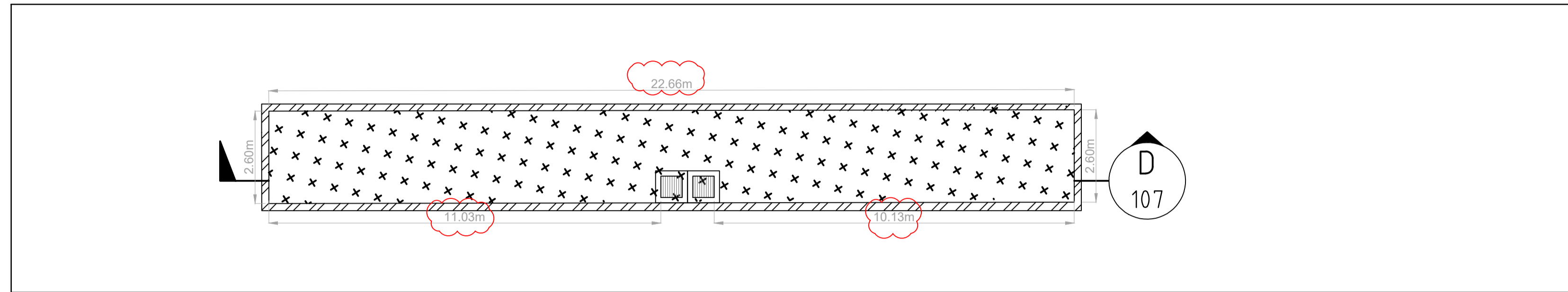
Water Use	Multi-residential dwellings (litres/day/dwelling)				
	Number of occupants				
	1	2	2.35	3	4
Indoor Uses					
Toilets	27	54	63	81	108
Toilets + Washing Machine	53	105	124	158	210
Toilets + Washing Machine + Hot Water	101	202	238	304	405
All uses	157	315	370	472	629
Outdoor Uses					
All uses	88	88	88	88	88

LOWER OF+ GF LEVEL	NUMBER	TOILET RE-USE (L/DAY/DWELLING)	TOILET RE-USE (L/DAY)
DWELLING (4 OCCUPANTS)	16	108	1728
DWELLING (2 OCCUPANTS)	4	54	216

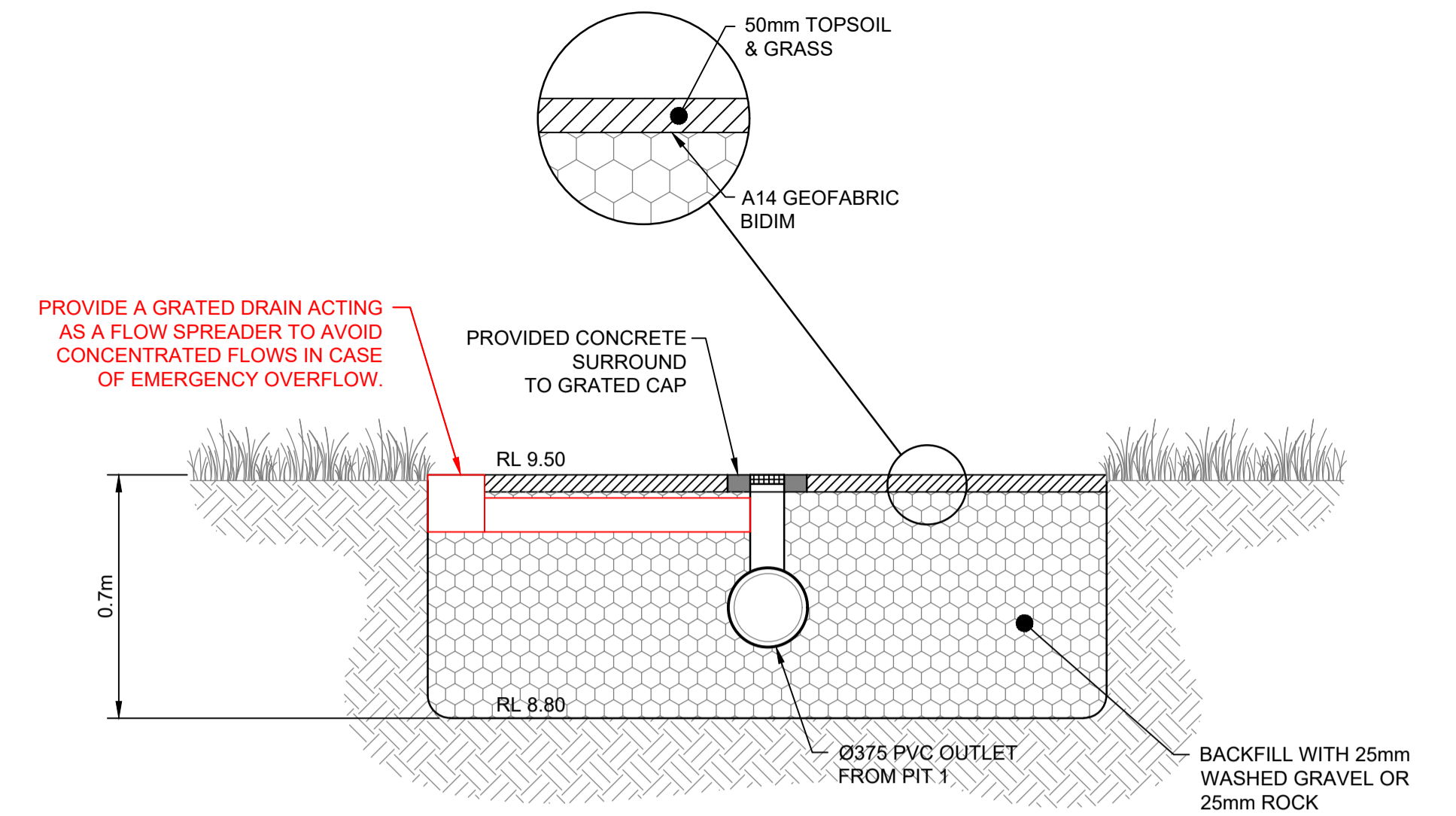
TOTAL RE-USE FOR TOILETS = 1.94KL/DAY
 TOTAL RE-USE FOR IRRIGATION = 1263.75m³ × 0.4m³/YR/m² = 505.5m³/YR = 1.385m³/DAY
 TOTAL WATER USAGE = 3.33m³/DAY

RWT RE-USE CALCULATIONS

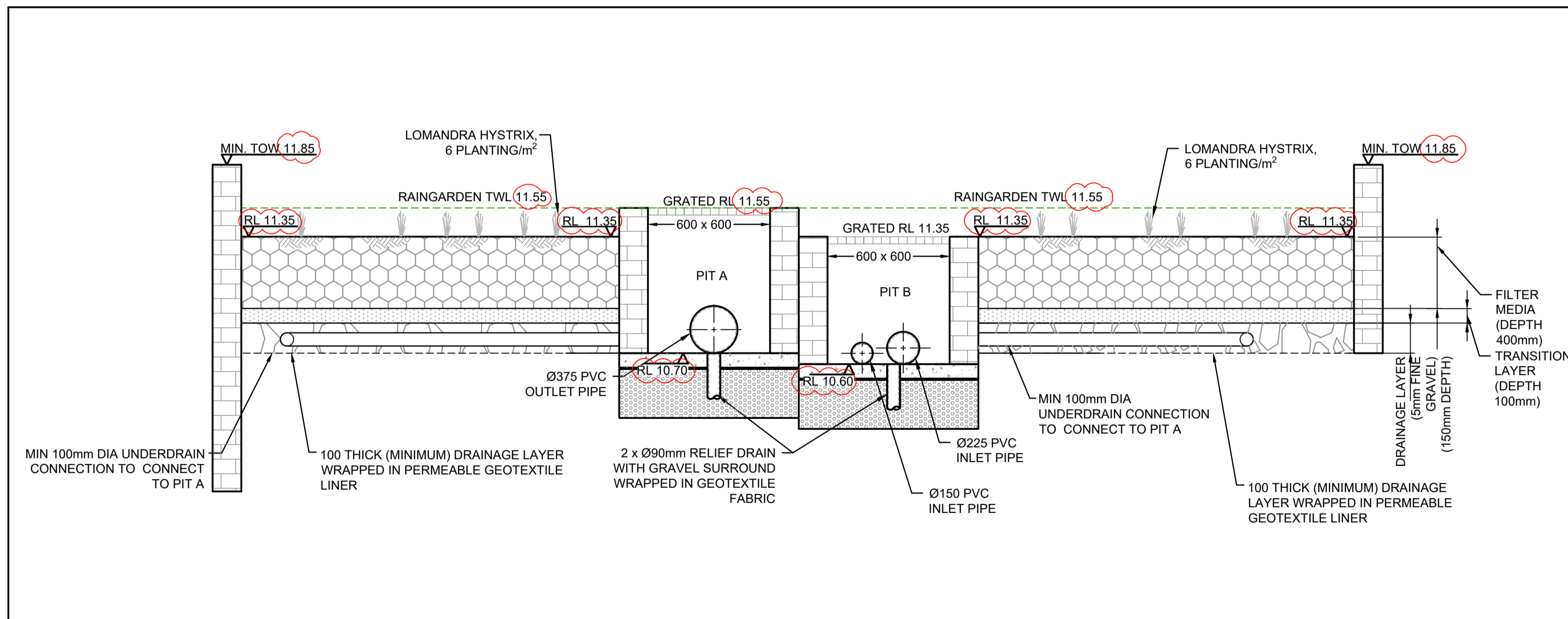
NOT FOR CONSTRUCTION



RAINGARDEN DIMENSIONS
SCALE 1:100



RUBBLE / SPREADER PIT SECTION 3
N.T.S.



RAINGARDEN DETAIL SECTION D
N.T.S.

NOTE:
ALL RAINGARDEN GRATES TO BE CLASS A LIGHT DUTY HINGED GALVANISED MILD STEEL GRATE AND FRAME & TO BE FITTED WITH CHILD PROOF LOCK DEVICE.

NOT FOR CONSTRUCTION

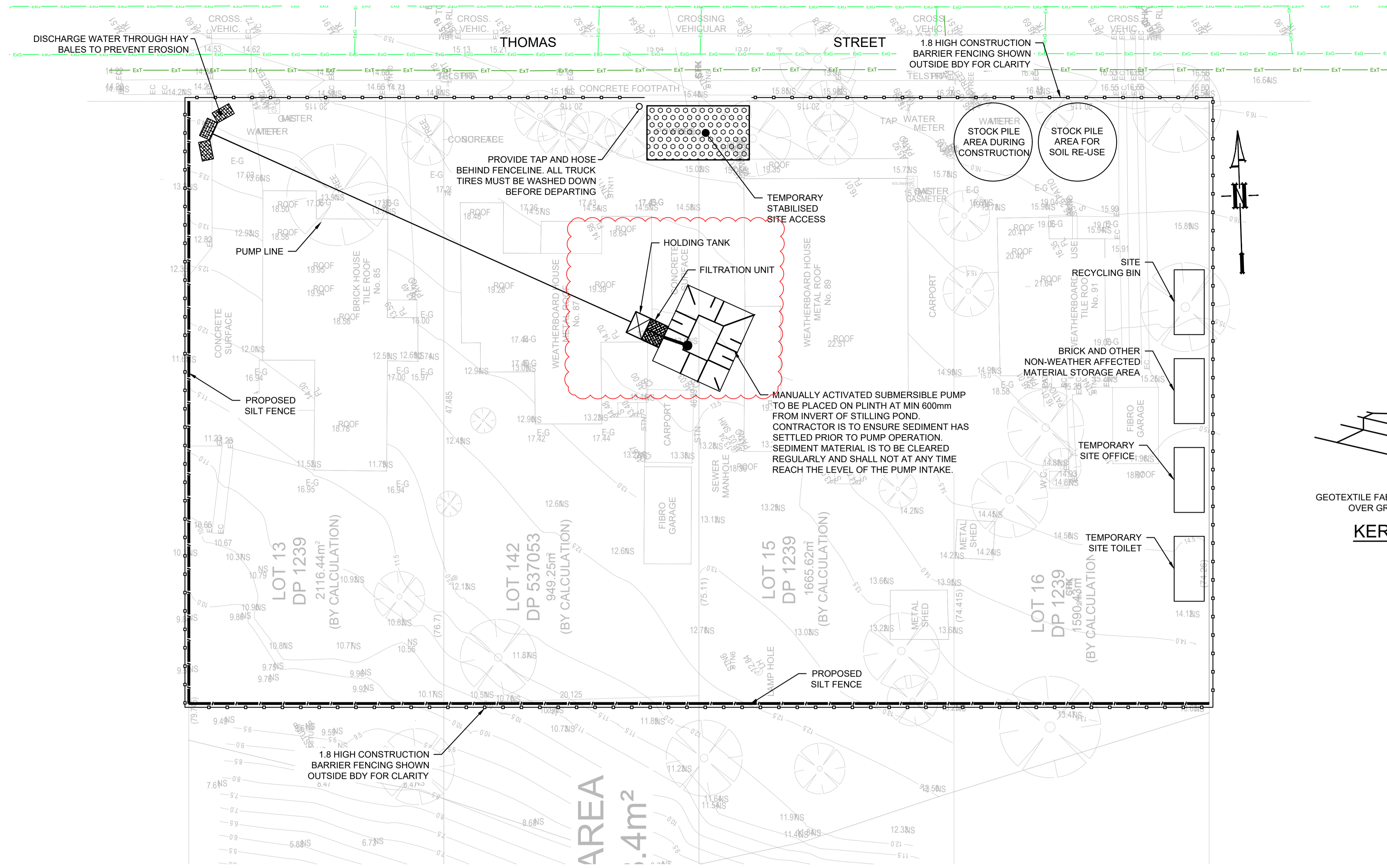
F	ISSUE FOR DEVELOPMENT APPLICATION	12/06/2025	SFK	EH	OC	Architect	Council	Scale	Civil & Stormwater Engineering Services Pty Ltd	Project	Drawing Title				
E	ISSUE FOR DEVELOPMENT APPLICATION	29/05/2025	SFK	EH	OC	PTI Architecture Level 2, 68 Sophia Street, Surry Hills NSW 2010 ABN 90 050 071 022 W: www.ptiarchitecture.com.au P: +61 2 9283 0860	Parramatta City Council	0 1 2 3 m SCALE 1:50 @ A1	Shop 1, 143-147 Parramatta Road, Concord, NSW 2137 P:(02) 8397 6500 E: info@esgconsult.com.au	85-91 THOMAS STREET, PARRAMATTA PROPOSED RESIDENTIAL APARTMENTS STORMWATER CONCEPT PLAN	RAINGARDEN DETAILS SHEET				
D	ISSUE FOR DEVELOPMENT APPLICATION	07/02/2024	SFK	EH	OC										
C	ISSUE FOR DEVELOPMENT APPLICATION	15/05/2023	DBF	EH	OC										
B	ISSUE FOR DEVELOPMENT APPLICATION	31/03/2023	MGH	EH	OC										
Issue	Description	Date	Designed	Engineer	Checked							Client	Century 888 Pty Ltd	Scale	As Shown

LEGEND

- ExW EXISTING WATER MAIN
- ExS EXISTING SEWER MAIN
- ExT EXISTING TELSTRA
- ExE EXISTING ELECTRICAL
- ExG EXISTING GAS
- ExOP EXISTING OPTIC FIBER
- 26.45 EXISTING CONTOUR
- X EL: 47.00 EXISTING SURFACE LEVEL
- X RL: 47.00 DESIGN SURFACE LEVEL
- SILT FENCE
- STABILISED SITE ACCESS
- 1.8 HIGH CONSTRUCTION BARRIER FENCING
- TREES TO BE RETAINED
- TREES TO BE REMOVED
- INLET PROTECTION

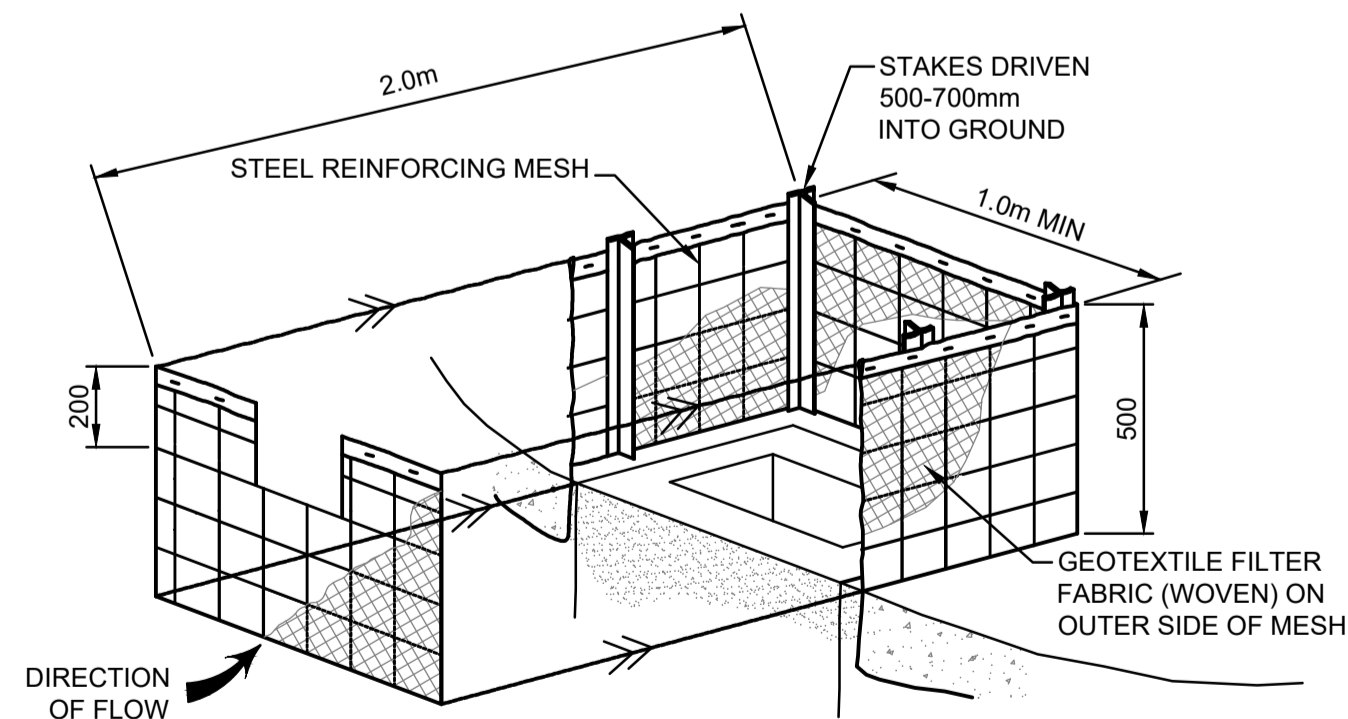
SEDIMENT & EROSION NOTES

1. IMMEDIATELY FOLLOWING SETTING OUT OF THE WORKS, BUT PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORKS, THE CONTRACTOR AND SUPERINTENDENT SHALL WALK THE SITE TO NOMINATE THE LOCATIONS AND TYPES OF SEDIMENT AND EROSION CONTROL MEASURES TO BE ADOPTED. THESE MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY CLEARING OR EARTHWORKS AND MAINTAINED UNTIL THE WORKS ARE COMPLETED AND NO LONGER POSE AN EROSION HAZARD, UNLESS OTHERWISE APPROVED BY THE SUPERINTENDENT.
2. IMMEDIATELY FOLLOWING SETTING OUT OF THE WORKS, BUT PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORKS, THE CONTRACTOR AND SUPERINTENDENT SHALL WALK THE SITE TO IDENTIFY AND MARK TREES WHICH ARE TO BE PRESERVED. NOTWITHSTANDING THE ABOVE, THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO MINIMISE DISTURBANCE TO EXISTING VEGETATION AND GROUND COVER OUTSIDE THE MINIMUM AREAS REQUIRED TO COMPLETE THE WORKS AND SHALL BE RESPONSIBLE FOR RECTIFICATION, AT ITS OWN COST, OF ANY DISTURBANCE BEYOND THOSE AREAS.
3. PROVIDE GULLY GRATE INLET SEDIMENT TRAPS AT ALL GULLY PITS.
4. PROVIDE SILT FENCING ALONG PROPERTY LINE AS DIRECTED BY SUPERINTENDENT.
5. ADDITIONAL CONTROL DEVICES TO BE PLACED WHERE DIRECTED BY THE PRINCIPLE.
6. ALTERNATIVE DESIGNS TO BE APPROVED BY SUPERINTENDENT PRIOR TO CONSTRUCTION.
7. WASH DOWN/RUMBLE AREA TO BE CONSTRUCTED WITH PROVISIONS RESTRICTING ALL SILT AND TRAFFICKED DEBRIS FROM ENTERING THE STORMWATER SYSTEM.
8. NO WORK OR STOCKPILING OF MATERIALS TO BE PLACED OUTSIDE OF SITE WORK BOUNDARY.
9. APPROPRIATE EROSION AND SEDIMENT CONTROLS TO BE USED TO PROTECT STOCKPILES AND MAINTAINED THROUGH OUT CONSTRUCTION.
10. IT IS THE CONTRACTORS RESPONSIBILITY TO TAKE DUE CARE OF NATURAL VEGETATION. NO CLEARING IS TO BE UNDERTAKEN WITHOUT PRIOR APPROVAL FROM THE SUPERINTENDENT.
11. TO AVOID DISTURBANCE TO EXISTING TREES, EARTHWORKS WILL BE MODIFIED AS DIRECTED ON-SITE BY THE SUPERINTENDENT.
12. THE LOCATION OF EROSION AND SEDIMENTATION CONTROLS WILL BE DETERMINED ON SITE BY THE SUPERINTENDENT.
13. ACCESS TRACKS THROUGH THE SITE WILL BE LIMITED TO THOSE DETERMINED BY THE SUPERINTENDENT AND THE CONTRACTOR PRIOR TO ANY WORK COMMENCING.
14. ALL SETTING OUT IS THE RESPONSIBILITY OF THE CONTRACTOR PRIOR TO WORKS COMMENCING ON SITE. THE SUPERINTENDENT'S SURVEYOR SHALL PEG ALL ALLOTMENT BOUNDARIES, PROVIDE COORDINATE INFORMATION TO THESE PEGS AND PLACE BENCH MARKS. THE CONTRACTOR SHALL SET OUT THE WORKS FROM AND MAINTAIN THESE PEGS.



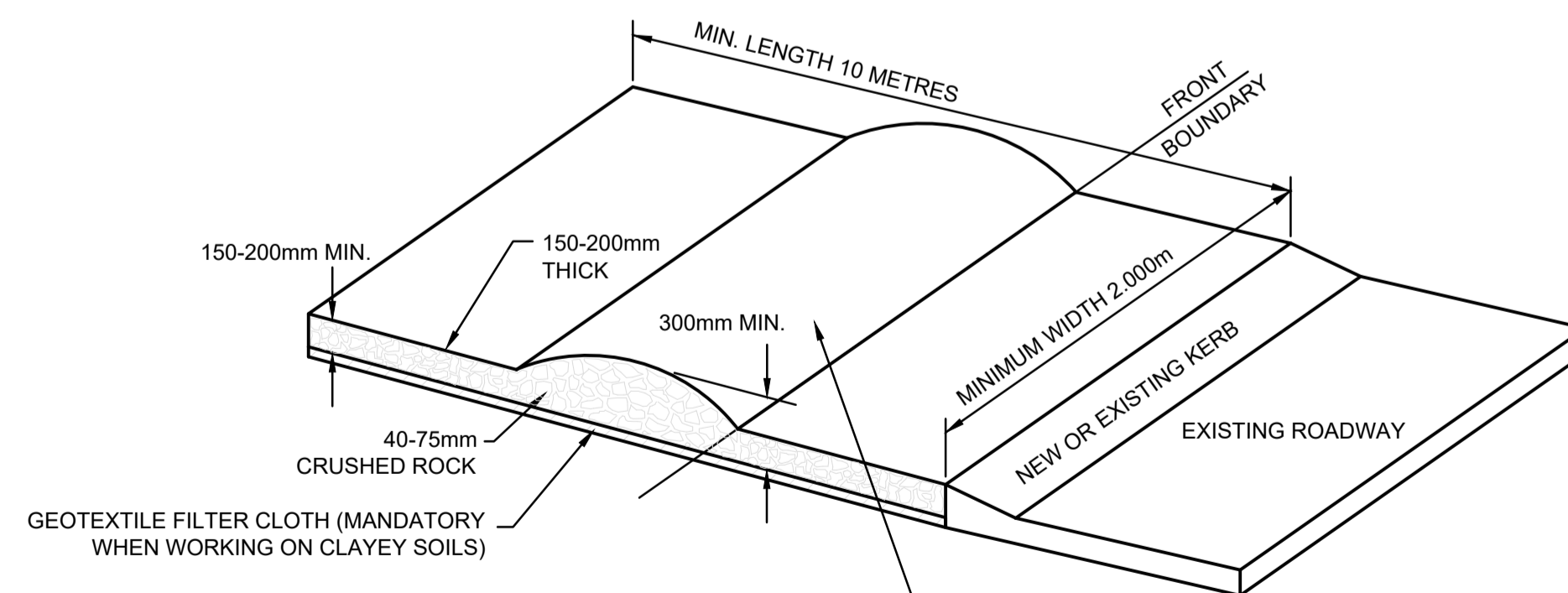
SEDIMENT & EROSION CONTROL PLAN

SCALE 1:200



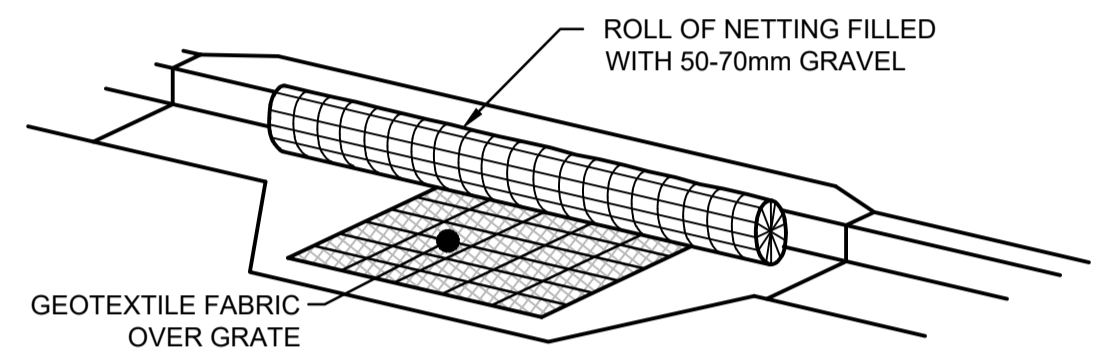
FIELD INLET SEDIMENT TRAP

N.T.S.



SHAKEDOWN DEVICE

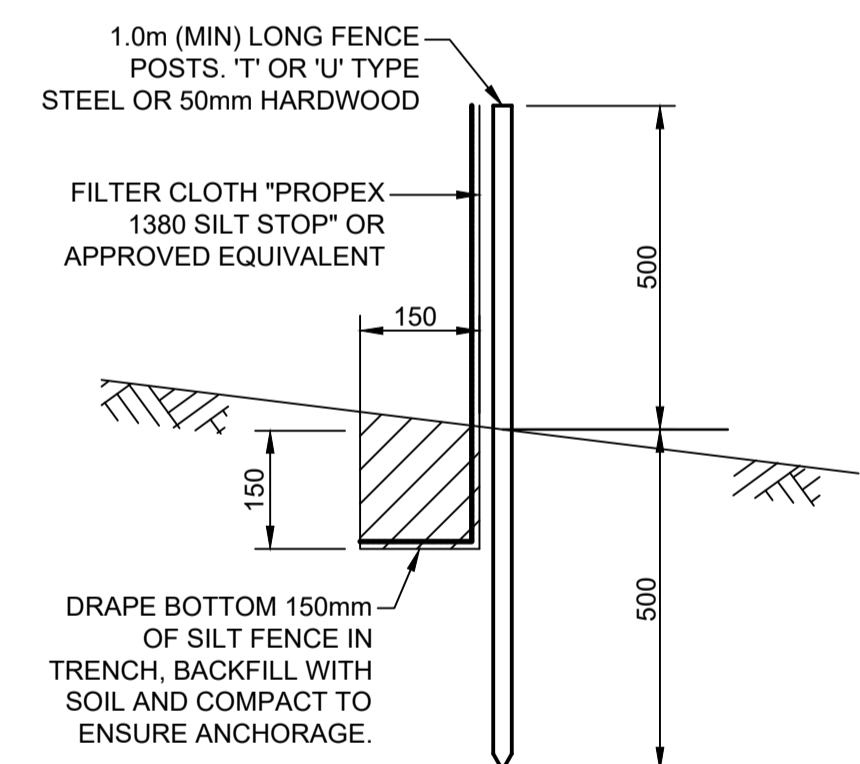
N.T.S.



KERB INLET PROTECTION

SAG GULLIES

N.T.S.



SILT FENCE DETAIL

N.T.S.

SILT FENCE NOTES:

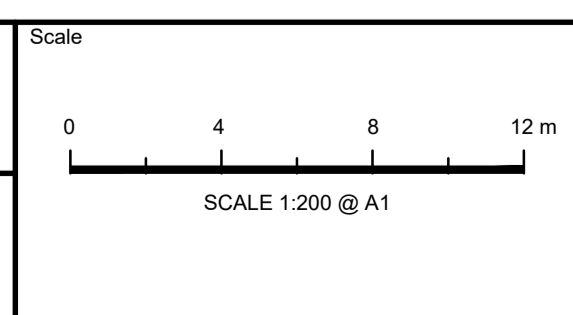
1. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS WITH GALVANISED WIRE TIES, STAPLES OR ATTACHMENT BELTS.
2. POSTS SHOULD NOT BE SPACED MORE THAN 3.0m APART.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 150mm AND FOLDED.
4. FOR EXTRA STRENGTH TO SILT FENCE, WOVEN WIRE (14mm GAUGE, 150mm MESH SPACING) TO BE FASTENED SECURELY BETWEEN FILTER CLOTH AND POSTS BY WIRE TIES OR STAPLES.
5. INSPECTIONS SHALL BE PROVIDED ON A REGULAR BASIS, ESPECIALLY AFTER RAINFALL AND EXCESSIVE SILT DEPOSITS REMOVED WHEN "BULGES" DEVELOP IN SILT FENCE.
6. SEDIMENT FENCES SHALL BE CONSTRUCTED WITH SEDIMENT TRAPS AND EMERGENCY SPILLWAYS AT SPACINGS NO GREATER THAN 40m ON FLAT TERRAIN DECREASING TO 20m SPACINGS ON STEEP TERRAIN.

NOT FOR CONSTRUCTION

B	ISSUE FOR DEVELOPMENT APPLICATION	29/05/2025	SFK	EH	OC
A	ISSUE FOR DEVELOPMENT APPLICATION	16/03/2023	DBF	EH	OC
Issue	Description	Date	Designed	Engineer	Checked

Architect
PTI Architecture
 Level 2, 68 Sophia Street,
 Surry Hills NSW 2010
 ABN 90 050 071 022
 W: www.ptiarchitecture.com.au
 P: +61 2 9283 0860

Council
Parramatta City Council
 Client
Century 888 Pty Ltd

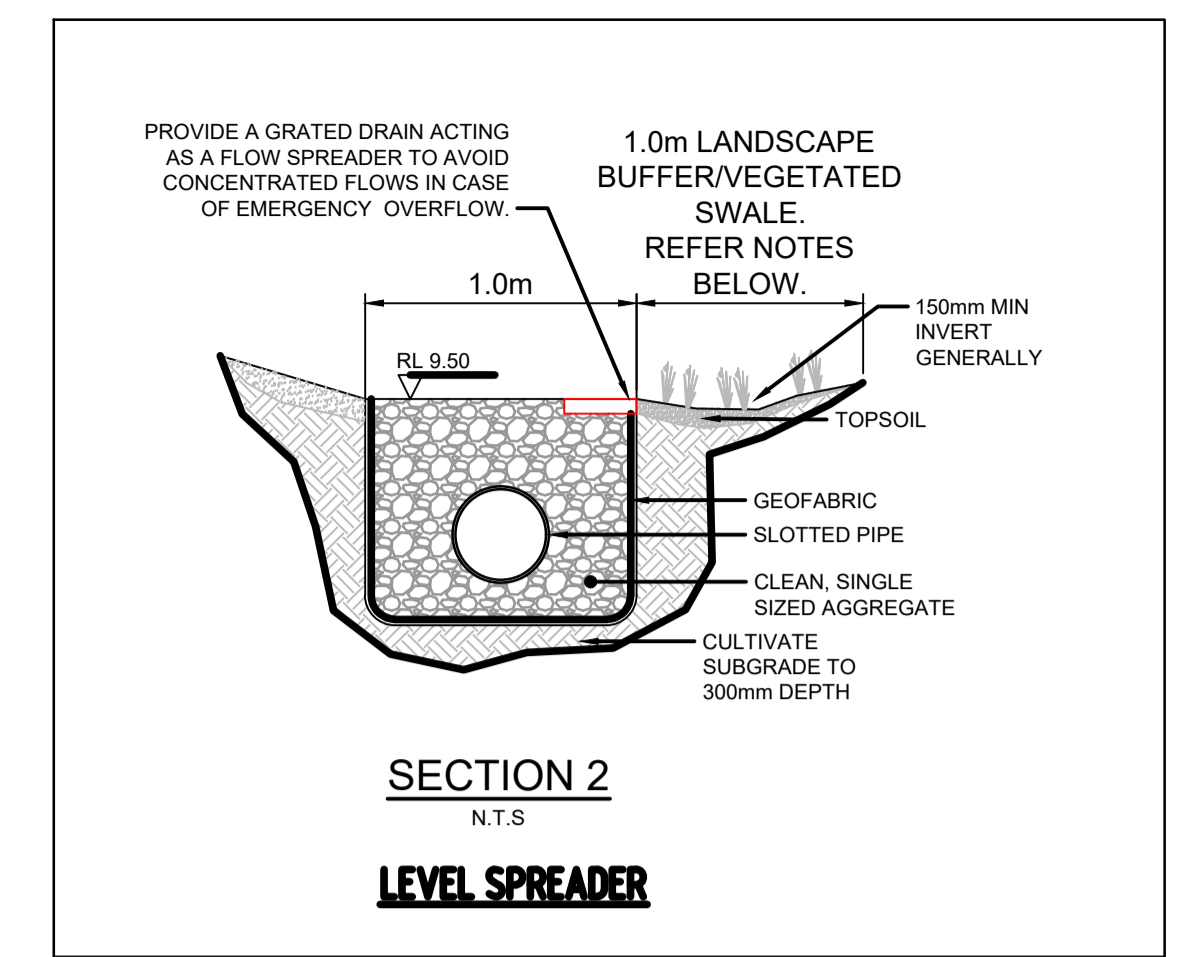
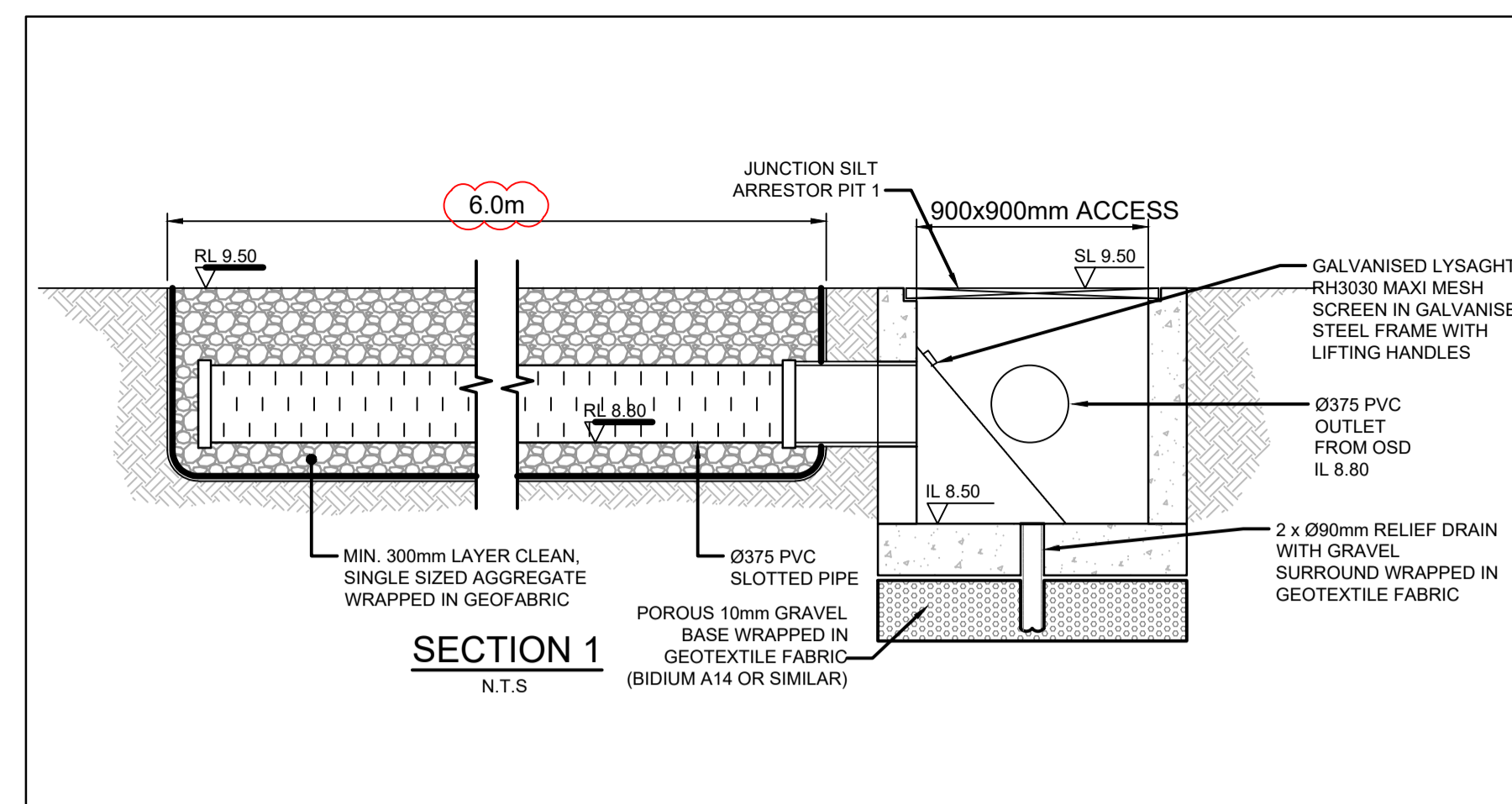


CIVIL & STORMWATER ENGINEERING
SERVICES PTY LTD
 ABN: 27 644 422 506
 Shop 1, 143-147 Parramatta Road, Concord, NSW
 2137
 P:(02) 8397 6500
 E: info@esgconsult.com.au

Project
85-91 THOMAS STREET, PARRAMATTA PROPOSED RESIDENTIAL APARTMENTS STORMWATER CONCEPT PLAN

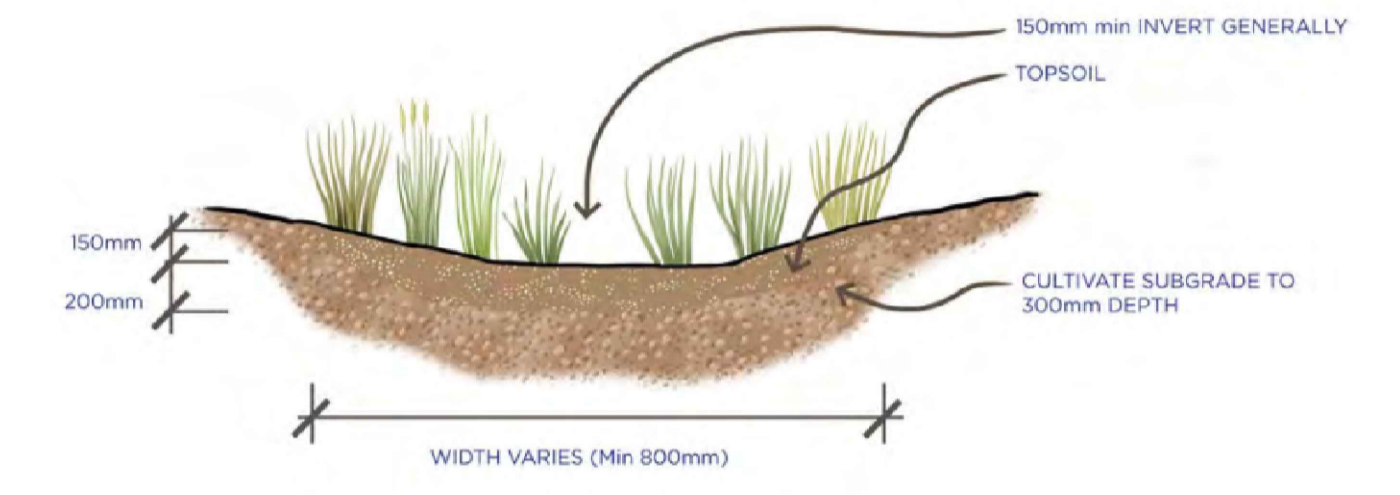
Drawing Title SEDIMENT & EROSION CONTROL PLAN & DETAILS			
Scale As Shown	A1	Project No. 200994	Dwg. No. 108
			Issue B

Stormwater Drainage System Maintenance Schedule			
Maintenance Action	Frequency	Responsibility	Procedure
General			
Inspect roof drainage system of building and remove any debris/sludge	Six Monthly	Strata/Maintenance Contractor	Remove any leaves or debris and sludge from gutters of building and flush downpipes of building to remove any blockages. Pits downstream of downpipes to be cleaned of flushed debris.
Inspect pits and trench drains on site and remove debris/litter/sludge	Monthly or following Rain Period	Strata/Maintenance Contractor	Remove grate. Remove any debris/litter/sludge from within pits.
Inspect site for litter and floatable debris and remove	Fortnightly	Strata/Maintenance Contractor	Remove litter from site and sweep all driveway and pathways in order to remove leaves or sediments that may enter into the drainage system.
Basement Pump out			
Inspect and clean flap valve,	Six Monthly	Strata/Maintenance Contractor	Remove grate and check flap valve and pipe for blockages and clean. Check hinges for rust and test operation by moving flap to full extent.
Check hinge operation.	Annually	Strata/Maintenance Contractor	Inspect hinge and check its operation.
Check attachment of flap valve to wall pit.	Annually	Strata/Maintenance Contractor	Remove grate and ensure valve fixings are secure.
Check flap valve seal.	Six Monthly	Strata/Maintenance Contractor	Remove grate and fill pit with water. ensure flap seals against side of pit with minimal leakage.
Inspect walls for cracking or spalling.	Annually	Strata/Maintenance Contractor	Remove grate to inspect internal walls, remove vegetation to inspect external wall, repair as required.
Inspect sump and clean.	Six Monthly	Strata/Maintenance Contractor	Remove grate and clean sediment/sludge from sump.
Inspect grate for damage or blockage.	Six Monthly	Strata/Maintenance Contractor	Check both sides of grate for corrosion (particularly welds and corners); also check for damage and blockages.
Inspect outlet pipe and remove blockages	Six Monthly	Strata/Maintenance Contractor	Remove grate and flush outlet pipe to ensure it drains freely. Check for debris on upstream side of return line.
Outlets			
Inspect grate for blockages	Six monthly	Owner	Remove any mulch or debris blocking grate.
Inspect storage area to remove items that may cause blockage	Six monthly	Owner	Inspect storage area and remove all material which may float and be carried to grates.
Inspect actual storage volume to design volume.	Annually	Maintenance Contractor	Calculate available volume and compare to volume on work as executed plan. If loss is greater than 5%.
Inspect & remove any blockage of orifices	Six monthly	Strata/Maintenance Contractor	Remove grate & screen to inspect orifice. See plan for location of outlets
Check attachment of orifice plates to wall of chamber and/or pit (gaps less than 5 mm)	Annually	Strata/Maintenance Contractor	Remove grate and screen. Ensure plates are mounted securely, tighten fixings if required. Seal gaps as required.
Check orifice diameters are correct and retain sharp edges	Five yearly	Strata/Maintenance Contractor	Compare diameter to design (see Work-as-Executed) and ensure edge is not pitted or damaged.
Inspect screen and clean	Six monthly	Strata/Maintenance Contractor	Remove grate(s) and screens if required to clean them.
Check attachment of screens to wall of chamber or pit	Annually	Strata/Maintenance Contractor	Remove grate(s) and screen(s). Ensure screen fixings are secure. Repair as required.
Check screen(s) for corrosion	Annually	Strata/Maintenance Contractor	Remove grate(s) and examine screen(s) for rust or corrosion, especially at corners or welds.
Inspect walls (internal and external, if appropriate) for cracks or spalling	Annually	Strata/Maintenance Contractor	Remove grate(s) to inspect internal walls. Repair as required. Clear vegetation from external walls if necessary and repair as required.
Inspect outlet sumps & remove any sediment/sludge	Six monthly	Strata/Maintenance Contractor	Remove grate(s) and screen(s). Remove sediment/sludge build-up and check orifices are clear.
Inspect grate(s) for damage or blockage	Six monthly	Strata/Maintenance Contractor	Check both sides of a grate for corrosion, (especially corners and welds) damage or blockage.
Inspect outlet pipe & remove any blockage	Six monthly	Strata/Maintenance Contractor	Remove grate(s) and screen(s). Ventilate underground storage if present. Check orifices and remove any blockages in outlet pipe. Flush outlet pipe to confirm it drains freely. Check for sludge/debris on upstream side of return line.
Check step irons for corrosion	Annually	Strata/Maintenance Contractor	Remove grate. Examine step irons and repair any corrosion or damage
Check fixing of step irons is secure	Six monthly	Strata/Maintenance Contractor	Remove grate(s) and ensure fixings are secure prior to placing weight on step iron.
Storage			
Inspect storage & remove any sediment/sludge in pit	Six monthly	Strata/Maintenance Contractor	Remove grate(s) and screen(s). Remove sediment/sludge build-up.
Inspect internal walls of storage (and external, if appropriate) for cracks or spalling	Annually	Strata/Maintenance Contractor	Remove grate(s) to inspect internal walls. Repair as required. Clear vegetation from external walls if necessary and repair as required.
Inspect & remove any debris/litter/mulch etc blocking grates	Six monthly	Strata/Maintenance Contractor	Remove blockages from grate(s) and check if storage is blocked.
Inspect areas draining to the storage(s) & remove debris/mulch/litter etc likely to block screens/grates	Six monthly	Strata/Maintenance Contractor	Remove debris and floatable material likely to be carried to grates.
Compare storage volume to volume approved. (Rectify if loss > 5%)	Annually	Strata/Maintenance Contractor	Compare actual storage available with Work-as-Executed plans. If volume loss is greater than 5%, arrange for reconstruction to replace the volume lost. Council to be notified of the proposal.
Inspect storages for subsidence near pits	Annually	Strata/Maintenance Contractor	Check along drainage lines and at pits for subsidence likely to indicate leakages.
Raingarden			
Check for sediment deposition	Three monthly, after rain	Strata/Maintenance Contractor	Remove excess sediment from around the inlet.
Check for holes, erosion or scour	Three monthly, after rain	Strata/Maintenance Contractor	Infill any holes, repair erosion and scour. Provide/Augment energy dissipation (e.g. rocks and pebbles at inlet)
Inspect for the build-up of fine sediment on the surface of the filter media, excessive moss growth, vegetation or evidence of prolonged ponding	Three monthly, after rain or if infiltration through the filter media is reduced	Strata/Maintenance Contractor	Clear away any fine sediment on the surface and lightly rake over the surface of the filter media between plants to loosen filter media. Remove leaves and vegetation from the surfaces.
Check for presence of weeds	Three monthly	Strata/Maintenance Contractor	Remove weeds by hand
Check that inflow areas, weirs and grates over pits are clear of litter and debris	Monthly, and after rain.	Strata/Maintenance Contractor	Remove litter and debris
Level Spreader			
Mowing the vegetative filter strip	Monthly	Strata/Maintenance Contractor	Mow the vegetative filter using weed whips or power brush cutters and mowers. maintain 2-6 inches in height
Removal of vegetation from the gravel verge	Monthly	Strata/Maintenance Contractor	remove intrusive vegetation.
Inspect & remove any trash debris from the entire system	Monthly	Strata/Maintenance Contractor	Remove loose bottles, cans, food containers and other forms of rubbish
Check flow distribution to be evenly	Monthly	Strata/Maintenance Contractor	Inspect pipes coming into and leaving the spreader pit

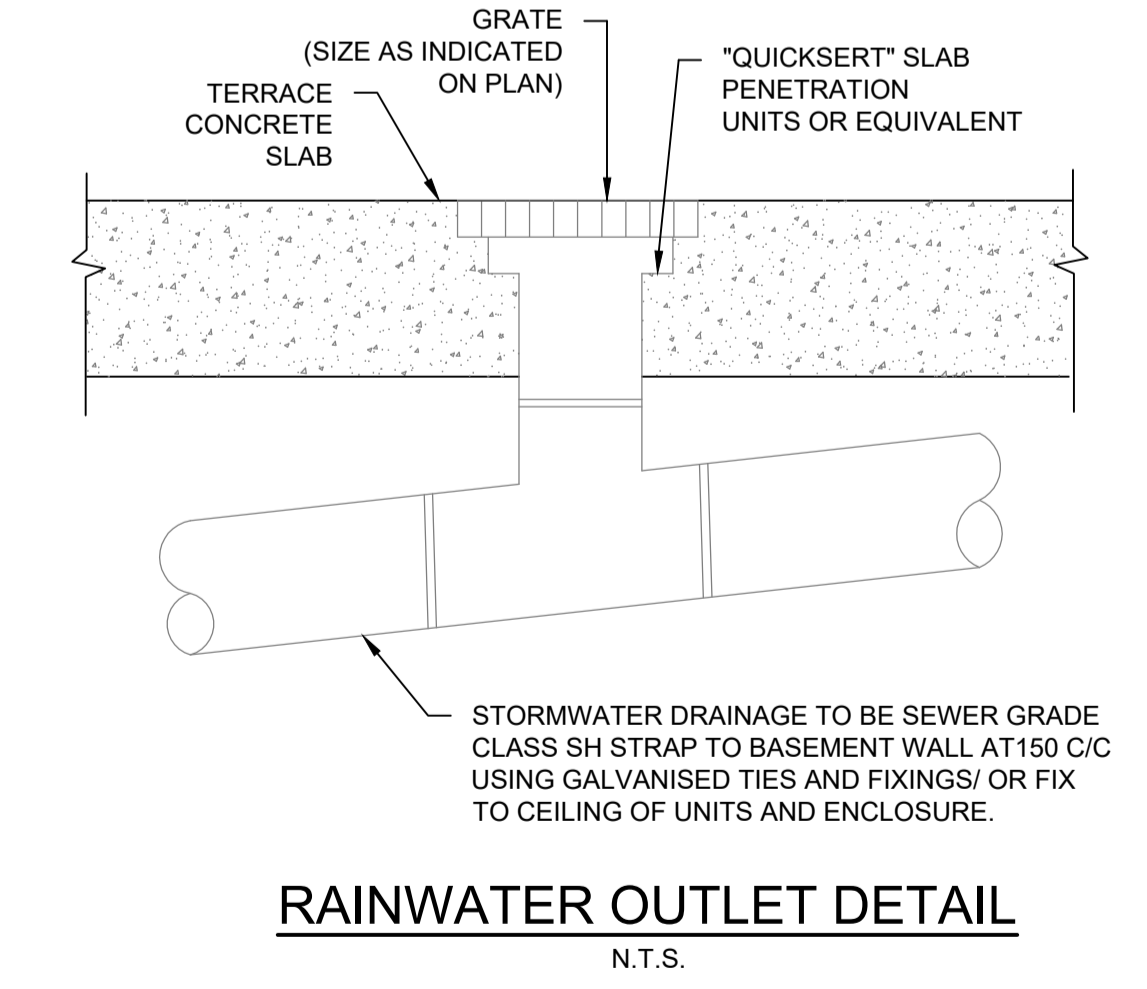
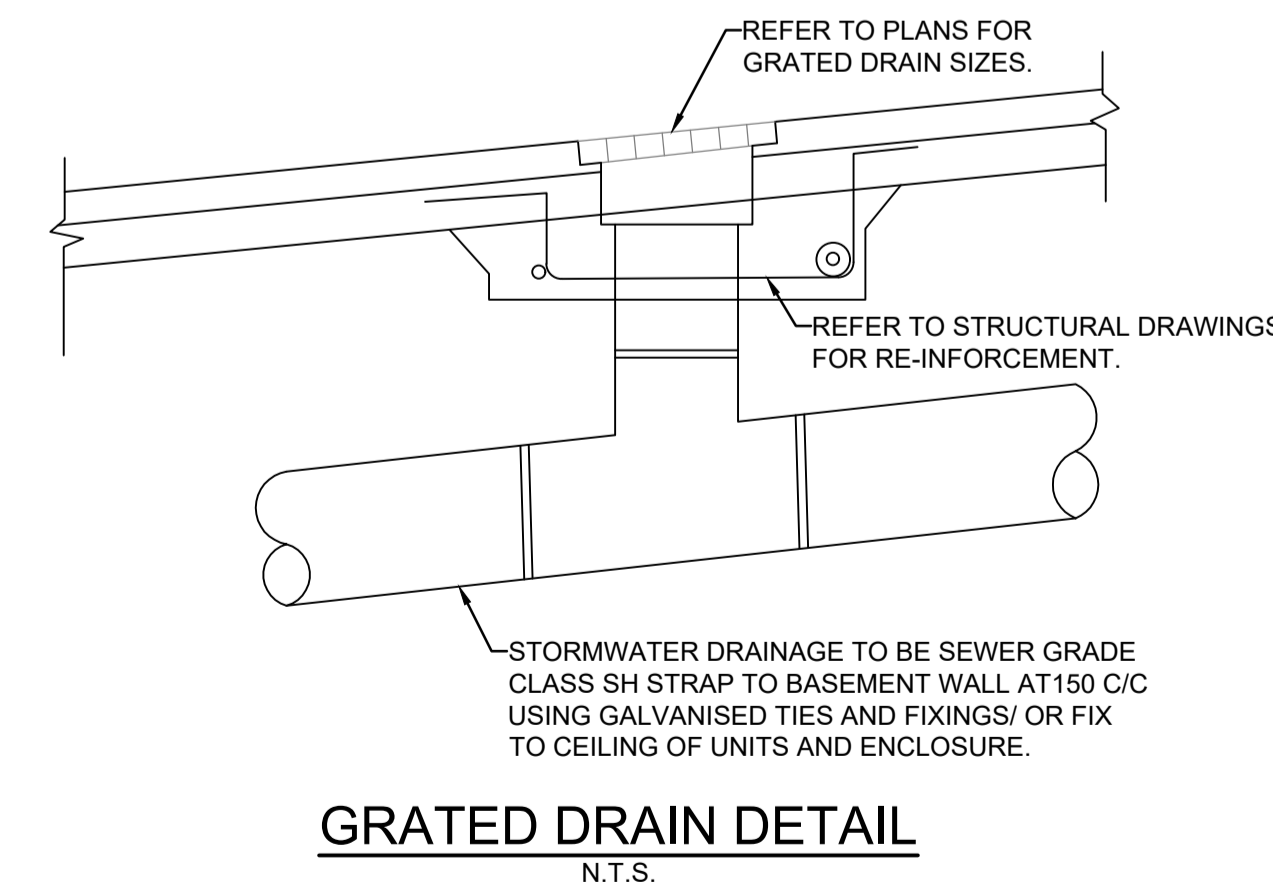
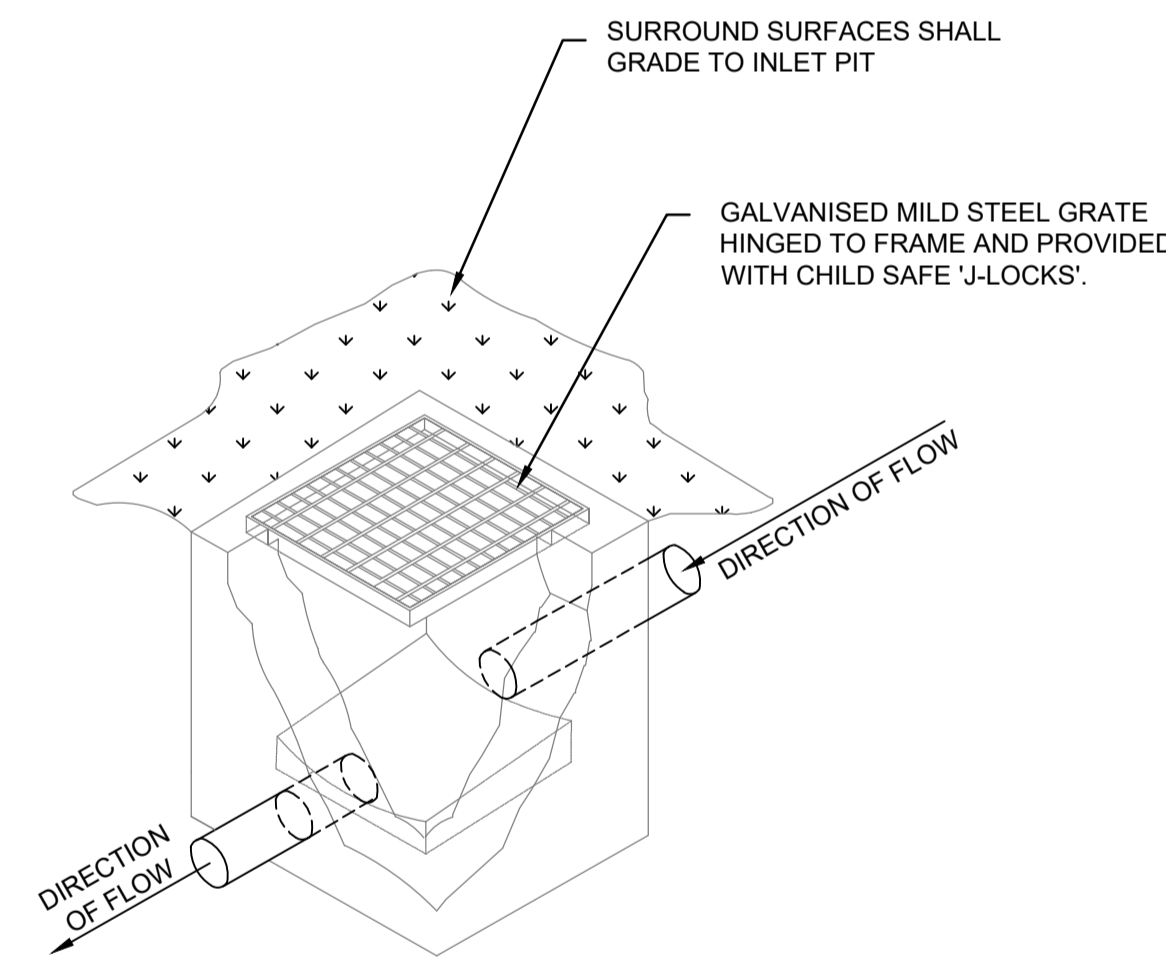


CONSTRUCTION NOTES:

- 1- BUILD WITH GRADIENTS BETWEEN 1 PERCENT AND 5 PERCENT.
- 2- AVOID REMOVING TREES AND SHRUBS IF POSSIBLE - WORK AROUND THEM.
- 3- ENSURE THE STRUCTURES ARE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT COULD IMPEDE WATER FLOW.
- 4- BUILD THE DRAINS WITH CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTIONS, NOT V SHAPED.
- 5- ENSURE THE BANKS ARE PROPERLY COMPACTED TO PREVENT FAILURE.
- 6- COMPLETE PERMANENT OR TEMPORARY STABILISATION WITHIN 10 DAYS OF CONSTRUCTION.

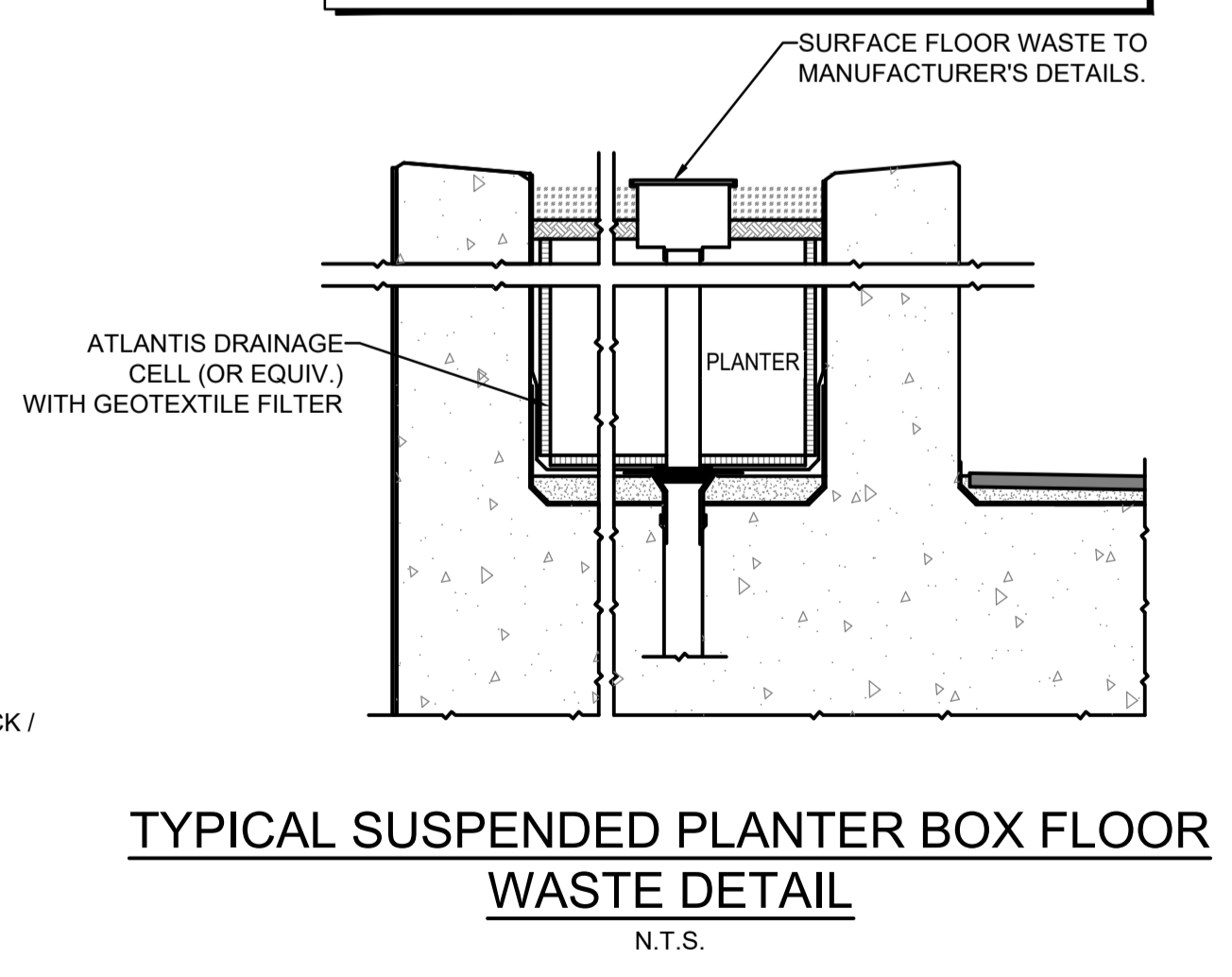
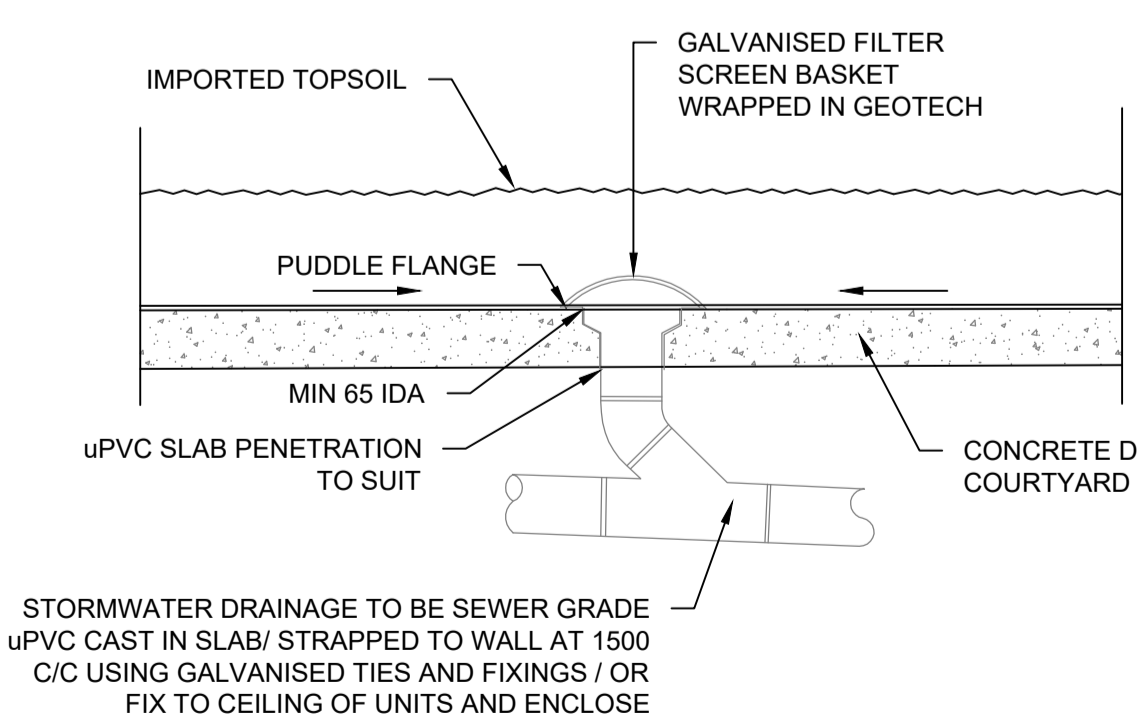


LEVEL SPREADER & LANDSCAPE BUFFER DETAILS



NOTE:
MAINTENANCE SCHEDULE TO BE REFERENCED/ FORM PART OF THE POSITIVE COVENANT TO ENSURE THE SPREADER AND RAINGARDEN SYSTEMS EFFECTIVENESS IS MAINTAINED.

NOTE:
DETAIL TO BE CONFIRMED BY WATERPROOFING CONSULTANT/ARCHITECT.



NOT FOR CONSTRUCTION

<table border="1"> <tr> <td>D</td> <td>ISSUE FOR DEVELOPMENT APPLICATION</td> <td>12/06/2025</td> <td>SFK</td> <td>EH</td> <td>OC</td> </tr> <tr> <td>C</td> <td>ISSUE FOR DEVELOPMENT APPLICATION</td> <td>07/02/2024</td> <td>SFK</td> <td>EH</td> <td>OC</td> </tr> <tr> <td>B</td> <td>ISSUE FOR DEVELOPMENT APPLICATION</td> <td>31/03/2023</td> <td>MGH</td> <td>EH</td> <td>OC</td> </tr> <tr> <td>A</td> <td>ISSUE FOR DEVELOPMENT APPLICATION</td> <td>16/03/2023</td> <td>DBF</td> <td>EH</td> <td>OC</td> </tr> <tr> <td>Issue</td> <td>Description</td> <td>Date</td> <td>Designed</td> <td>Engineer</td> <td>Checked</td> </tr> </table>		D	ISSUE FOR DEVELOPMENT APPLICATION	12/06/2025	SFK	EH	OC	C	ISSUE FOR DEVELOPMENT APPLICATION	07/02/2024	SFK	EH	OC	B	ISSUE FOR DEVELOPMENT APPLICATION	31/03/2023	MGH	EH	OC	A	ISSUE FOR DEVELOPMENT APPLICATION	16/03/2023	DBF	EH	OC	Issue	Description	Date	Designed	Engineer	Checked	Architect PTI Architecture Level 2, 68 Sophia Street, Surry Hills NSW 2010 ABN 90 050 071 022 W: www.ptiarchitecture.com.au P: +61 2 9283 0860	Council Parramatta City Council Client Century 888 Pty Ltd	Scale C & S ENGINEERING SERVICES E: info@esgconsult.com.au	Project CIVIL & STORMWATER ENGINEERING SERVICES PTY LTD ABN: 27 644 422 506 Shop 1, 143-147 Parramatta Road, Concord, NSW 2137 P:(02) 8397 6500	Drawing Title 85-91 THOMAS STREET, PARRAMATTA PROPOSED RESIDENTIAL APARTMENTS STORMWATER CONCEPT PLAN	Drawing Title MISCELLANEOUS DETAILS SHEET	Scale N.T.S.	Project No. 200994	Dwg. No. 109	Issue D
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