A1

PROPSOED SINGLE DWELLING DEVELOPMENT
25 LINDA STREET BELFIELD NSW 2191

GENERAL NOTES:

1. MAIN STORMWATER DRAINS ≥ 300mm DIAMETER SHALL FALL AS NOTED. HOWEVER, ALL OTHER BRANCH DRAINS SHALL HAVE A MINIMUM GRADE OF 1%.
2. STORMWATER DRAINS SHALL BE RUBBER RING JOINTED FRC (CLASS 2) OR RCP OF EQUIVALENT CLASS. PIPES OF SIZE LESS THAN 300mm SHALL BE DWV GRADE PVC WITH SOLVENT CEMENT JOINTS.
3. STORMWATER PIT LIDS LOCATED IN DRIVEWAY AREAS SHALL BE EQUAL TO CI & D CAST IRON GRATES AND FRAMES - CLASS D.
4. STORMWATER PIT LIDS TO LANDSCAPED AND PEDESTRIAN AREAS SHALL BE EQUAL TO CI & D CAST IRON GRATES AND FRAMES - CLASS A.
5. ALL WORKS SHALL BE CARRIED OUT TO THE REQUIREMENTS OF THE RELEVANT COUNCIL / AUTHORITY, AS 3500.3, AS 2032, AS 3996 AND AS 3725.
6. AT THE COMPLETION OF THE WORKS PROVIDE A "WORK AS EXECUTED" PLAN OF THE STORMWATER DRAINAGE AND DETENTION SYSTEM. THE PLAN SHALL BE PREPARED AND CERTIFIED BY THE REGISTERED SURVEYOR AND SHOW ALL PIPE SIZES, INVERTS, PIT COVER AND BASE LEVELS AND ALL DETENTION TANK DIMENSIONS, SURFACE LEVELS AND THE ORIFICE PLATE SIZE (IF APPLICABLE).
7. PITS SHALL BE CI & D PRECAST CONCRETE OR APPROVED EQUAL WITH EXTENSION RISERS AS REQUIRED. PITS SHALL BE BEDDED ON A 50mm LAYER OF 4:1 CEMENT MORTAR AND BACKFILLED WITH EXCAVATED MATERIAL IN 200mm THICK COMPACTED LAYERS TO FINISHED SURFACE LEVEL.
8. COVERS TO PITS LOCATED WITHIN PAVED AREAS SHALL BE CAST IN WITH THE CONCRETE POUR. ALL OTHER PIT COVERS SHALL BE PROVIDED WITH A 150mm CONCRETE SURROUND.
9. PROVIDE TO EACH STORMWATER PIT A 1m LONG SECTION OF SUB-SOIL DRAINAGE, Ø75mm WITH GEOTEXTILE, LAID WITHIN THE UPSTREAM TRENCH.
10. PROVIDE 25mm DIAMETER GALVANIZED STEP-IRONS AT INTERVALS OF 300mm WHERE THE INTERNAL DEPTH OF THE PIT EXCEEDS 1000mm, TO AS 4108.
11. RETENTION TANK TO BE CLEANED & ALL SLUDGE REMOVED ON AN ANNUAL INSPECTION.
12. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE THE POSITION & LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS.
13. LOCATION OF DOWNPIPES & FLOOR WASTES ARE INDICATIVE ONLY. DOWNPIPE & FLOOR WASTE SIZE, LOCATION & QUANTITY TO BE DETERMINED BY BUILDER & IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
14. THE GRATES (HEAVY DUTY IN THE DRIVEWAYS) SHALL BE HINGED AND LOCKABLE.
15. THE PLANS SHALL INDICATE THAT DRIVEWAYS AND LAYBACKS MUST BE CONSTRUCTED AT LEAST 1-METRE CLEAR OF STORMWATER PITS/LINTELS, TREES, TELSTRA PITS AND EXISTING POWER POLES.
16. REFER TO ENGINEER ANY SERVICES THAT INTERFERE WITH THE REQUIREMENTS OF THESE PLANS.

SITEWORKS NOTES:

1. DATUM A.H.D.
2. ORIGIN OF LEVELS. REFER TO BENCH OR STATE SURVEY MARKS WHERE SHOWN ON PLAN.
3. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK.
4. ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS & THE DIRECTIONS OF THE SUPERINTENDENT.
5. 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 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.
6. WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS ACHIEVED.
7. THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR.
8. 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.
9. CONTRACTOR TO OBTAIN AUTHORITY APPROVALS WHERE APPLICABLE.
10. MAKE SMOOTH TRANSITION NEW TO EXISTING SURFACES AND MAKE GOOD AS APPLICABLE.
11. 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 BY THE SUPERINTENDENT.
12. TRENCHES THROUGH EXISTING ROAD AND CONCRETE PAVEMENTS SHALL BE SAWCUT TO FULL DEPTH OF CONCRETE AND A MINIMUM OF 50mm IN BITUMINOUS PAVING.
13. ALL BRANCH GAS AND WATER SERVICES UNDER DRIVEWAYS AND BRICK PAVING SHALL BE LOCATED IN 80Ø uPVC SEWER GRADE CONDUITS EXTENDING A MINIMUM OF 500mm BEYOND EDGE OF PAVING.
14. GRADES TO PAVEMENTS TO BE AS INDICATED ON PLAN . GRADE EVENLY BETWEEN NOMINATED RL'S. AREAS EXHIBITING PONDING GREATER THAN 5mm DEPTH WILL NOT BE ACCEPTED UNLESS IN A DESIGNATED SAG DRAINAGE LOCATION.
15. ALL COVERS AND GRATES ETC. TO EXISTING SERVICE UTILITIES ARE TO BE ADJUSTED TO SUIT NEW FINISHED SURFACE LEVELS WHERE APPLICABLE TO AUTHORITY REQUIREMENTS.

EROSION CONTROL NOTES:

1. ALL EROSION & SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH 'MANAGING URBAN STORMWATER, 4th EDITION PRODUCED BY LANDCOM.
2. ALL EROSION AND SILTATION CONTROL DEVICES ARE TO BE PLACED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORKS, AND ALL SILT TRAPS ARE TO HAVE DEPOSITED SILT REMOVED REGULARLY DURING CONSTRUCTION.
3. ALL TREES ARE TO BE PRESERVED UNLESS INDICATED OTHERWISE ON THE ARCHITECT'S OR LANDSCAPE ARCHITECT'S DRAWINGS. EXISTING GRASS COVER SHALL BE MAINTAINED EXCEPT IN AREAS CLEARED FOR BUILDINGS, PAVEMENTS ETC.
4. INSTALL TEMPORARY SEDIMENT BARRIERS TO ALL INLET PITS LIKELY TO COLLECT SILT LADEN WATER.
5. NOT WITHSTANDING DETAILS SHOWN IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO ENSURE THAT ALL SITE ACTIVITIES COMPLY WITH THE REQUIREMENTS OF THE CLEAN WATERS ACT. DISCHARGE TURBIDITY NOT TO EXCEED 50mg/L

CHARGED PIPE SYSTEMS

1. GENERAL REQUIREMENTS FOR CHARGED PIPE SYSTEMS:
   (A) WHERE THE BOUNDARY LEVEL IS ABOVE ANY KERB WITHIN 15m OF THE SITE OR A COUNCIL PIPE IS AVAILABLE, THE ROOF WATER IS TO DRAIN BY GRAVITY FROM THE BOUNDARY TO THE COUNCIL SYSTEM VIA A SILT/LITTER ARRESTOR PIT. WHERE A GRAVITY DISCHARGE TO THE COUNCIL SYSTEM IS NOT VIABLE THE CHARGED PIPE MAY CONNECT DIRECTLY TO THE KERB.
   (B) FLAP (REFLUX) VALVES ARE TO BE INSTALLED ON THE OUTLET PIPES FROM THE CHARGED SYSTEM THAT DISCHARGE TO THE SILT/LITTER ARRESTOR PIT TO MINIMISE MOSQUITO NUISANCE.
   (C) THE LOWEST LEVEL OF THE CHARGED SYSTEM SHALL DRAIN BY GRAVITY TO A SMALL INSPECTION PIT (600mm x 600mm MIN.) WITH SUMP FOR CLEANING. There shall be a minimum of ONE METRE OF PIPE FROM THE LAST DOWNPIPE TO THE INSPECTION PIT. THE CONNECTION TO THE PIT IS TO HAVE A SEALED SCREW CAP TO ALLOW FOR PERIODIC CLEANING AND REMOVAL OF RUBBISH. THE CAP IS TO HAVE A 5mm DRIBBLE HOLE TO ALLOW TRAPPED WATER TO DISCHARGE SLOWLY. REFER TO CHARGED PIPE CLEAN-OUT PIT DETAIL.
   (D) ONLY SEWER GRADE PVC OR PRESSURE PIPES ARE TO BE USED TO CONVEY CHARGED FLOWS.
   (E) ALL PIPES AND DOWNPIPES ARE TO BE SEALED TO A MINIMUM OF 0.5m ABOVE THE MAXIMUM WATER LEVEL IN THE SYSTEM. THE SYSTEM SHALL BE PRESSURE TESTED PRIOR TO BACKFILLING. THE USE OF EXPOSED PIPELINE SHALL BE MINIMISED.
   (F) ALL GUTTERS MUST HAVE LEAF GUTTER GUARDS INSTALLED AND UNDERTAKE REGULARLY CLEANING OF THE DOWNPIPES TO ENSURE EFFECTIVENESS OF THE SYSTEM.
2. REQUIREMENTS FOR CHARGED PIPE SYSTEMS FOR ROOF SYSTEMS:
   (A) THE EAVE GUTTER LEVEL SHALL BE A MINIMUM OF 0.6m AN PREFERABLY 1.6m ABOVE THE HIGHER OF THE TOP OF THE KERB OUTLET OR THE TOP STORAGE LEVEL (E.G. RAINWATER TAKN). WHERE THE HEIGHT IS BEWTEEN 0.5m AND 1.5m AN ANALYSIS OF HEAD LOSSES SHALL BE PROVIDED.
3. REQUIREMENTS FOR CHARGED PIPE SYSTEMS FOR ABOVEGROUND RAINWATER TANKS:
   (A) THE OVERFLOW FROM THE RAINWATER TANK IS TO BE A MINIMUM OF 0.5m AND PREFERABLY 1.5m ABOVE THE TOP OF THE KERB OUTLET. WHERE THE HEIGHT IS BEWTEEN 0.5m AND 1.5m AN ANALYSIS OF HEAD LOSSES SHALL BE PROVIDED.
   (B) THE INLET PIPES FROM THE ROOF SYSTEM TO THE RAINWATER TANK MAY ENTER DIRECTLY, OR THROUGH A CHARGE SYSTEM, WHERE A CHARGE SYSTEM IS USED EACH LINE WILL HAVE A CLEAN-OUT PIT.
   (C) FLAP VALVES ARE TO BE INSTALLED ON THE INLET PIPES TO THE RAINWATER TANK FROM THE CHARGED SYSTEM TO MINIMISE MOSQUITO NUISANCE.
   (D) THE DESIGN AND INSTALLATION SHALL COMPLY WITH HB 230 - RAINWATER TANK DESIGN AND INSTALLATION HANDBOOK.

FOR APPROVAL

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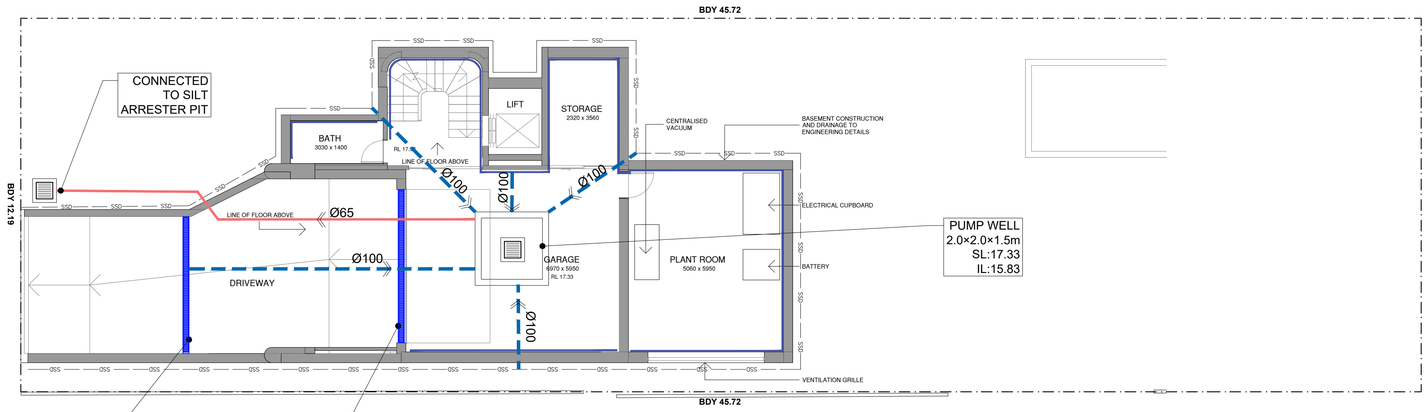
REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
A	ISSUED FOR APPROVAL	WG	WG	11/12/2024

CLIENT: MOUSA
ARCHITECT: URSINO

CATES CONSULTING ENGINEERS
Address: Suite 2, 1 King Street, Concord West NSW Australia 2137
Email: info@CATES.com.au

PROJECT: PROPSOED SINGLE DWELLING DEVELOPMENT 25 LINDA STREET BELFIELD NSW 2191	DRAWN: WG	DESIGNED: WG	DATE: 12.2024
	CHECKED: DY	APPROVED: DY	SCALE: NOT TO SCALE
TITLE: GENERAL NOTES & LOCALITY PLAN	DRAWING NUMBER: 24235C1.00		REVISION: A

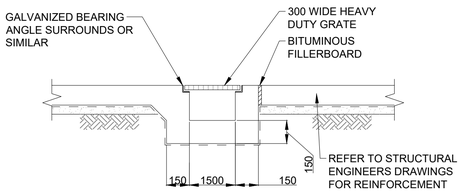
A1



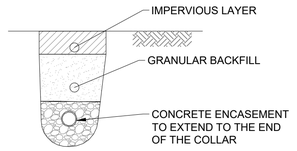
BASEMENT STORMWATER DRAINAGE PLAN
SCALE 1:100

LEGEND

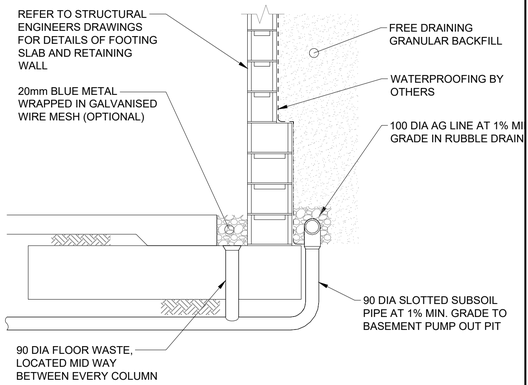
- PROPOSED BOUNDARY
- PROPOSED SILT FENCE
- 25.90 PROPOSED SPOT LEVEL
- PROPOSED SURFACE INLET PIT
- Ø100 DP — DOWNPIPE FROM ABOVE
- Ø100 DP — DOWNPIPE CONTINUES UNDER
- Øxxx — CHARGED PIPE SIZE AS NOMINATED
- Øxxx — UPVC PIPE @1% MIN SIZE AS NOTED
- RWT/OSD/OSR
- SSD SSD — SUB-SOIL DRAINAGE PIPE
- PO — PLANTER OUTLET
- FW — FLOOR WASTE
- RO — ROOF OUTLET
- 100mm CLASS B GRATED DRAIN
- SP — DOWNPIPE SPREADER
- SHORING WALL DRAINAGE
- Øxxx — CLASS 12 PRESSURE PIPE



TYPICAL GRATED DRAIN DETAIL (DRIVEWAY)
SCALE 1:20



TYPICAL SUBSOIL LINE
SCALE 1 : 20



TYPICAL GROUNDWATER DRAINAGE DETAIL
SCALE 1:20

Type	Output		Outlet		Rated Head	Rated Capacity	Maximum Head	Maximum Capacity	Weigh	Dimension		
	HP	kW	mm	Inch	M	LPM	M	LPM	Kg	L(mm)	W(mm)	H(mm)
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

PUMP TO BE USED (IN ACCORDANCE WITH AS/NZS 3500.3 A 4.0 L/S PUMP IS REQUIRED AT MINUMUM)

PUMP STORAGE CALCS:

TOTAL STORAGE:

100yr 2hr ARI STORM= 79.10mm
CATCHMENT AREA= 30.04m^2

V=Axd
=30.04x(79.10/1000)
=2.38m^3 REQUIRED

PUMP-OUT VOLUME REQUIRED = 2.38m^3
PUMP-OUT VOLUME PROVIDED = 6.00m^3

PUMP DISCHARGE RATE WAS DESIGNED FOR THE 100yr 5 MIN STORM:

Q=CIA/3600
=1.0x178x30.04/3600
=1.49L/s REQUIRED @ 4.0 m OF HEAD

RECOMMENDED PUMP: DUAL SABRE MODEL NO. KS-05 PUMPS WITH 65mm PVC CLASS 12 OUTLETS.

KEY NOTES:

INSTALL STEP IRONS FOR EASE OF ACCESS DURING MAINTENANCE OF PUMP OUT CONTROL PIT TO COUNCIL SATISFACTION.

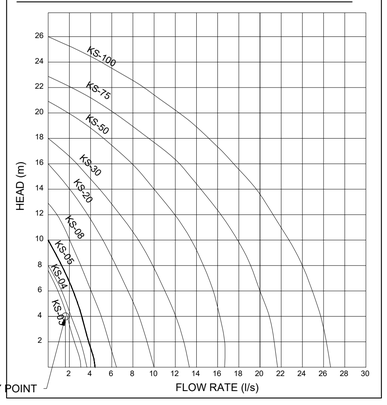
INSTALL CONFINED SPACE SIGN ABOVE PUMP OUT PIT FOR PUBLIC AWARENESS AND WARNING.

ALL STORMWATER PIPES ARE Ø100mm uPVC AND SLOPING @ 1.0% U.N.O (TYP).

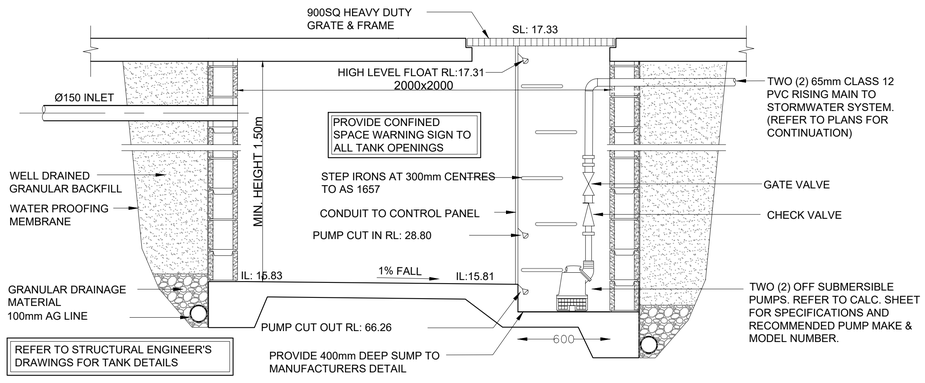
ALL BUILDING AND HYDRAULIC SERVICES TO BE PROPERLY CO-ORDINATED WITH STORMWATER PIPES AND ENSURE NO CLASHES ARE PRESENT DURING CONSTRUCTION (TYP).

STORMWATER PIPE ARRANGEMENT TO BE CO-ORDINTED WITH STRUCTURAL SLAB AND BEAMS WHERE REQUIRED (TYP).

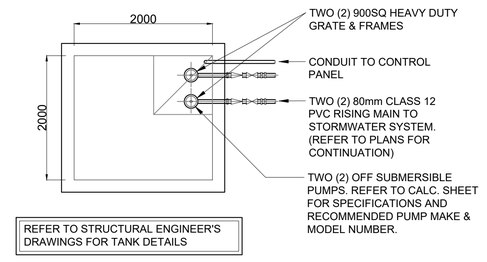
PUMP PERFORMANCE CURVES:



PUMP MAKE & MODEL DETAILS
SCALE N.T.S.



PUMP-OUT TANK SECTION DETAIL
SCALE N.T.S.



PUMP-OUT TANK PLAN DETAIL 'A'
SCALE 1:50

FOR APPROVAL

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
A	ISSUED FOR APPROVAL	WG	WG	11/12/2024

BEFORE YOU DIG www.byda.com.au

CLIENT: MOUSA
ARCHITECT: URSINO

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Address: Suite 2, 1 King Street, Concord West NSW Australia 2137
Email: info@CATES.com.au

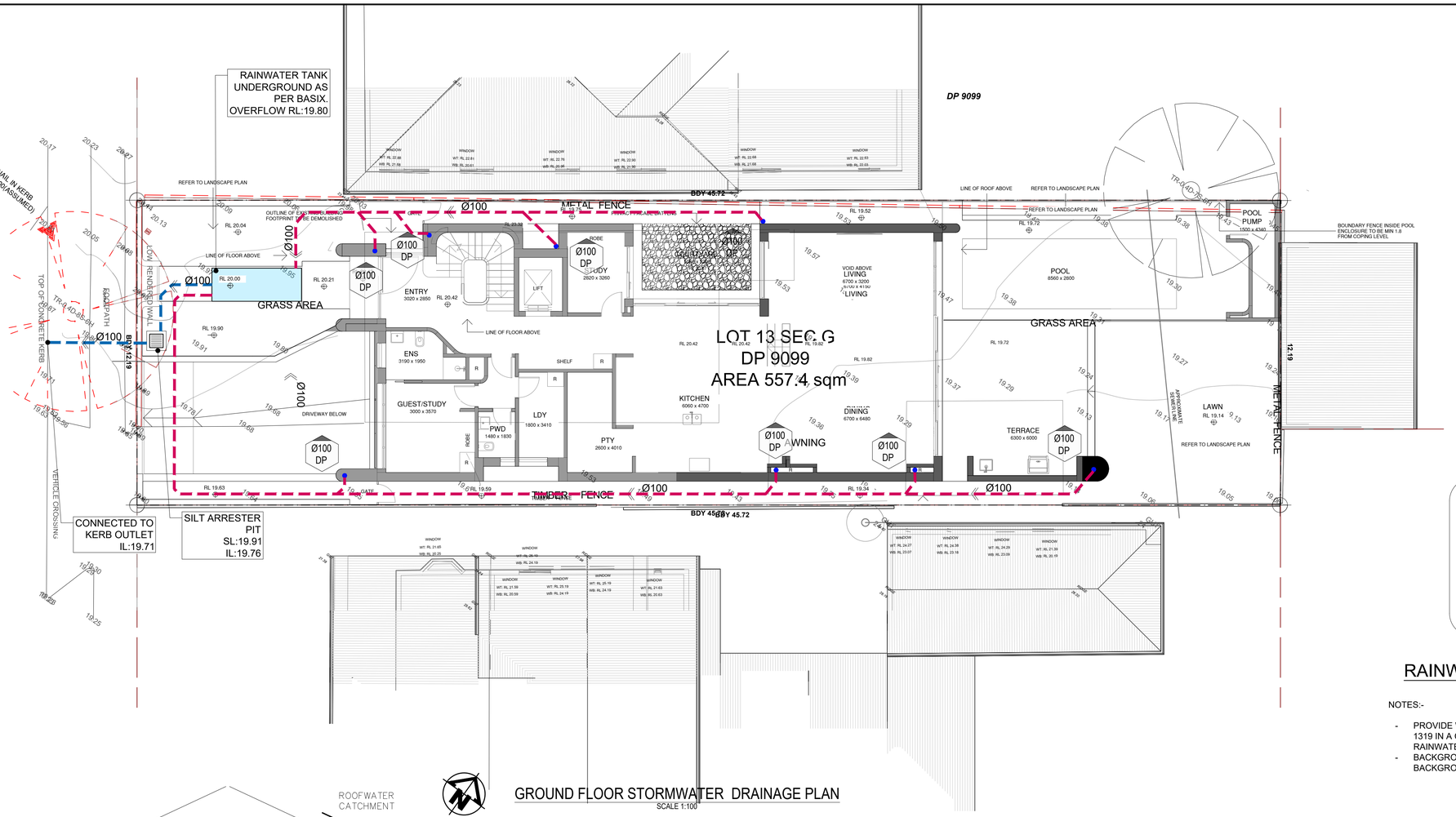
PROJECT: PROPSOED SINGLE DWELLING DEVELOPMENT
25 LINDA STREET BELFIELD NSW 2191

TITLE: BASEMENT DRAINAGE PLAN & DETAILS

DRAWN	DESIGNED	DATE
WG	WG	12.2024
CHECKED	APPROVED	SCALE
DY	DY	1:100

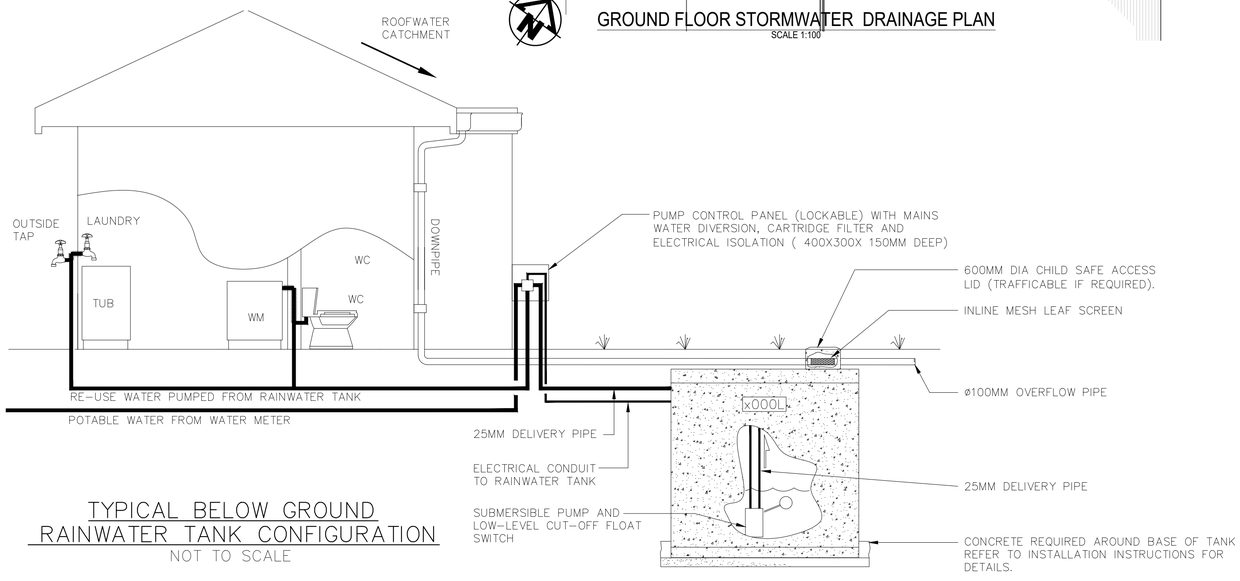
DRAWING NUMBER: 24235 C2.01
REVISION: A

A1



GROUND FLOOR STORMWATER DRAINAGE PLAN

SCALE 1:100



TYPICAL BELOW GROUND RAINWATER TANK CONFIGURATION

NOT TO SCALE

LEGEND

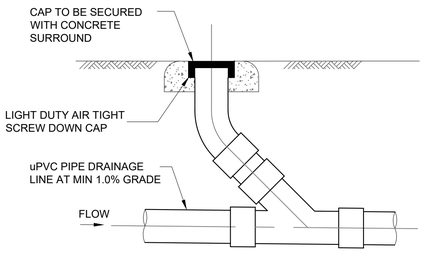
- PROPOSED BOUNDARY
- PROPOSED SILT FENCE
- 25.90 PROPOSED SPOT LEVEL
- PROPOSED SURFACE INLET PIT
- Ø100 DP — DOWNPIPE FROM ABOVE
- Ø100 DP — DOWNPIPE CONTINUES UNDER
- Øxxx — CHARGED PIPE SIZE AS NOMINATED
- Øxxx — UPVC PIPE @1% MIN SIZE AS NOTED
- RWT/OSD/OSR
- SSD — SSD — SUB-SOIL DRAINAGE PIPE
- PO — PLANTER OUTLET
- FW — FLOOR WASTE
- RO — ROOF OUTLET
- 100mm CLASS B GRATED DRAIN
- SP — DOWNPIPE SPREADER
- SHORING WALL DRAINAGE
- Øxxx — CLASS 12 PRESSURE PIPE

RAINWATER SIGN DETAIL

SCALE: 1:10

NOTES:-

- PROVIDE WARNING SIGN IN ACCORDANCE WITH AS 1319 IN A CLEAR AND VISIBLE LOCATION AT ALL RAINWATER SUPPLY POINTS
- BACKGROUND IS YELLOW TEXT IS WHITE ON BLACK BACKGROUND



CLEANING EYE DETAIL

SCALE: 1:20

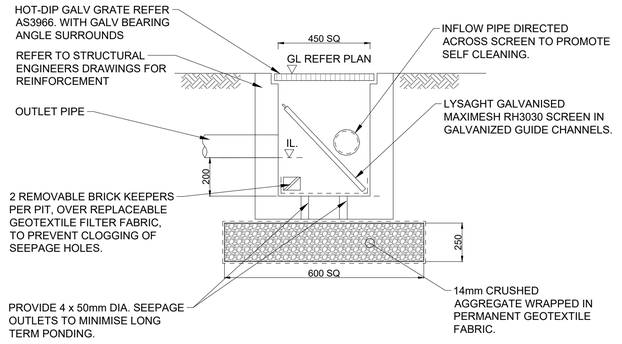
KEY NOTES:

1. ALL EXISTING STORMWATER PIPES AND DOWNPIPES ARE TO BE RETAINED U.N.O (TYP). PLUMBER TO ASSESS CONDITION AND STATE OF REPAIR. ALLOW FOR REPLACEMENT IF REQUIRED.

2. CONTRACTOR TO ENSURE LOCATION OF NEW DWELLING DOES NOT ADVERSELY IMPACT EXISTING STORMWATER SYSTEM. IF SO, CONTRACTOR TO CONTACT STORMWATER ENGINEER PRIOR TO COMMENCING ANY WORKS.

3. CONTRACTOR PERMITTED TO CONNECT TO EXISTING STORMWATER SYSTEM IF FOUND TO BE IN GOOD CONDITION DURING CONSTRUCTION. STORMWATER ENGINEER TO BE CONTACTED PRIOR TO COMMENCING ANY WORKS WHICH VARY FROM THE APPROVED STORMWATER PLANS.

4. IF EXISTING STORMWATER SYSTEM IS CONNECTED TO SEWER, CONTRACTOR IS TO RECTIFY STORMWATER DESIGN AND CREATE A NEW CONNECTION AS PER COUNCIL SPECIFICATIONS AND AUSTRALIAN STANDARDS. CONTRACTOR TO CONTACT STORMWATER ENGINEER PRIOR TO COMMENCING ANY WORKS.



NOTE:
MAINTENANCE OF SILT ARRESTOR PIT IS TO BE CARRIED OUT AT LEAST EVERY SIX MONTHS AND AFTER EVERY SIGNIFICANT STORM EVENT.

SILT ARRESTOR PIT DETAIL

SCALE 1:20

FOR APPROVAL

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
A	ISSUED FOR APPROVAL	WG	WG&CZ	11/12/2024

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CLIENT: MOUSA

ARCHITECT: URSINO

CATES CONSULTING ENGINEERS
Address: Suite 2, 1 King Street, Concord West NSW Australia 2137
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PROJECT: PROPSOED SINGLE DWELLING DEVELOPMENT
25 LINDA STREET BELFIELD NSW 2191

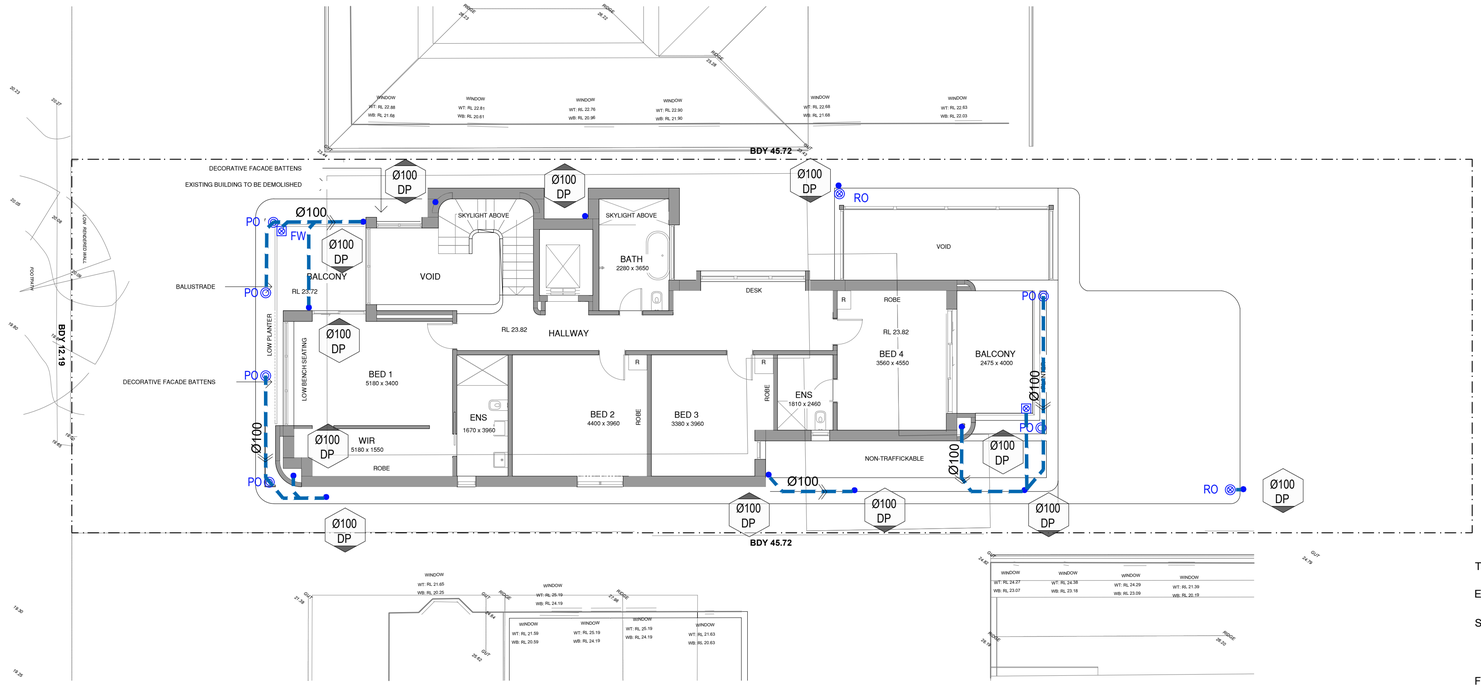
TITLE: GROUND FLOOR DRAINAGE PLAN & DETAILS

DRAWN	DESIGNED	DATE
WG	WG	12.2024
CHECKED	APPROVED	SCALE
DY	DY	1:100

DRAWING NUMBER: 24235 C2.02

REVISION: A

A1



LEGEND

- PROPOSED BOUNDARY
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- 25.90 PROPOSED SPOT LEVEL
- PROPOSED SURFACE INLET PIT
- Ø100 DP DOWNPIPE FROM ABOVE
- Ø100 DP DOWNPIPE CONTINUES UNDER
- Øxxx CHARGED PIPE SIZE AS NOMINATED
- Øxxx UPVC PIPE @1% MIN SIZE AS NOTED
- RWT/OSD/OSR
- SSD SSD SUB-SOIL DRAINAGE PIPE
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- FW FLOOR WASTE
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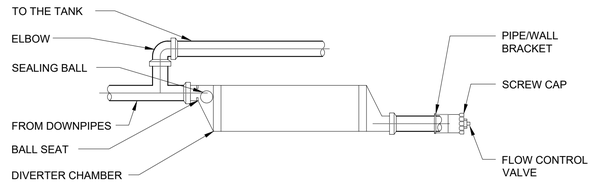
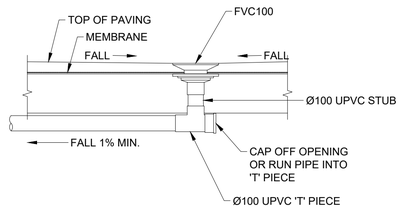
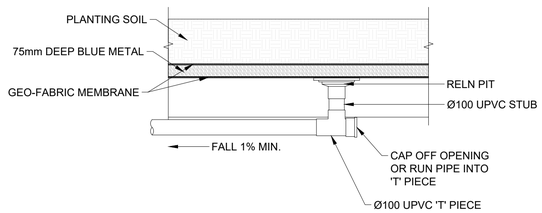


FIRST FLUSH DIVERTER(FF)
SCALE: 1:20

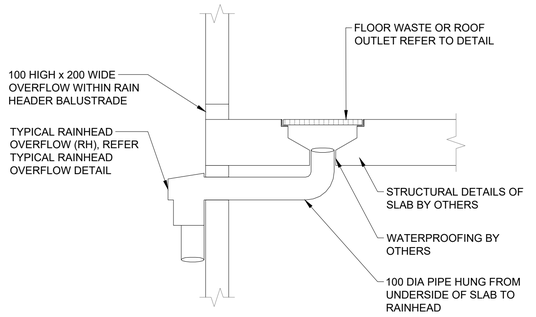
FIRST FLOOR STORMWATER DRAINAGE PLAN
SCALE 1:100



TYPICAL BALCONY FLOOR DRAIN DETAIL
SCALE 1:20



TYPICAL PLANTER DRAIN DETAIL
SCALE 1:20



TYPICAL ROOF OUTLET/FLOOR WASTE TO RAIN HEAD(RH) DETAIL
SCALE 1:20

FIRST FLOOR & ROOF NOTES:

INSTALL 50mm uPVC SPITTER PIPES 20mm ABOVE SURFACE LEVEL FOR BALCONY AND CONCRETE ROOF AREAS TO ALLOW FOR EMERGENCY OVERFLOW INCASE OF BLOCKAGES DURING HEAVY STORMS. PLUMBER TO CONFIRM LOCATION DURING CONSTRUCTION.

ALL BUILDING AND HYDRAULIC SERVICES TO BE PROPERLY CO-ORDINATED WITH STORMWATER PIPES AND ENSURE NO CLASHES ARE PRESENT DURING CONSTRUCTION (TYP).

STORMWATER PIPE ARRANGEMENT TO BE CO-ORDINTED WITH STRUCTURAL SLAB AND BEAMS WHERE REQUIRED (TYP).

BALCONY, TERRACE & CONCRETE ROOF AREAS TO SLOPE TOWARDS RAINWATER OUTLETS WHERE REQUIRED (TYP).

ARROW DENOTES THE SLOPE OF FINISHED SURFACE LEVEL (TYP).

DOWNPIPES SHOWN ON PLAN ARE TO BE Ø100mm uPVC U.N.O. (TYP).

ALL EAVES GUTTERS SHALL BE 145mm WIDE x 75mm DEEP (OR EQUIVALENT) AND LAID AT MIN. 1:500 SLOPE.

ALL GUTTERS TO BE FITTED WITH ADEQUATE OVERFLOW MEASURES IN ACCORDANCE WITH AS3500.3:2018.

PROPOSED DOWNPIPE LOCATIONS ARE NOMINAL AND TO BE CONFIRMED DURING CONSTRUCTION (TYP).

INSTALL DOWNPIPE WITH SPREADER (IF REQUIRED) TO DISPERSE STORMWATER ONTO LOWER ROOF AREAS EFFECTIVELY.

PROVIDE SURFACE DRAINAGE FOR ALL CONCRETE AND BALCONY ROOF AREAS WHERE REQUIRED.

FOR APPROVAL

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REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
A	ISSUED FOR APPROVAL	WG	WG&CZ	11/12/2024

CLIENT: MOUSA

ARCHITECT: URSINO

CATES CONSULTING ENGINEERS
Address: Suite 2, 1 King Street, Concord West NSW Australia 2137
Email: info@CATES.com.au

PROJECT: PROPSOED SINGLE DWELLING DEVELOPMENT
25 LINDA STREET BELFIELD NSW 2191

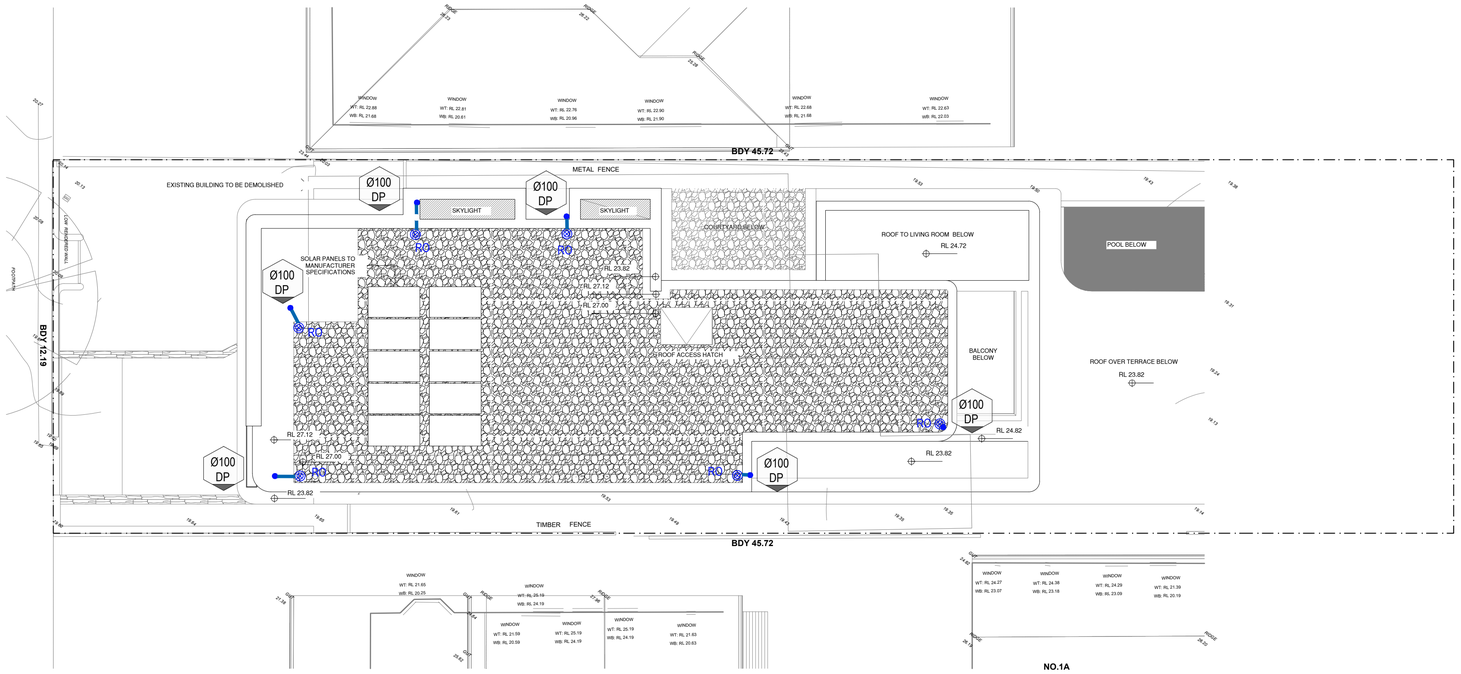
TITLE: FIRST FLOOR DRAINAGE PLAN & DETAILS

DRAWN	DESIGNED	DATE
WG	WG	12.2024
CHECKED	APPROVED	SCALE
DY	DY	1:100

DRAWING NUMBER: 24235 C2.03

REVISION: A

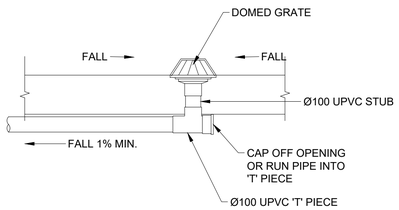
A1



ROOF STORMWATER DRAINAGE PLAN
SCALE 1:100

LEGEND

- PROPOSED BOUNDARY
- PROPOSED SILT FENCE
- 25.90 PROPOSED SPOT LEVEL
- PROPOSED SURFACE INLET PIT
- Ø100 DP DOWNPIPE FROM ABOVE
- Ø100 DP DOWNPIPE CONTINUES UNDER
- Øxxx CHARGED PIPE SIZE AS NOMINATED
- Øxxx UPVC PIPE @1% MIN SIZE AS NOTED
- RWT/OSD/OSR
- SSD SUB-SOIL DRAINAGE PIPE
- PO PLANTER OUTLET
- FW FLOOR WASTE
- RO ROOF OUTLET
- 100mm CLASS B GRATED DRAIN
- SP DOWNPIPE SPREADER
- SHORING WALL DRAINAGE
- Øxxx CLASS 12 PRESSURE PIPE



TYPICAL ROOF OUTLET DETAIL
SCALE 1:20

FOR APPROVAL

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
A	ISSUED FOR APPROVAL	WG	WG&CZ	11/12/2024

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PROJECT: PROPSOED SINGLE DWELLING DEVELOPMENT
25 LINDA STREET BELFIELD NSW 2191

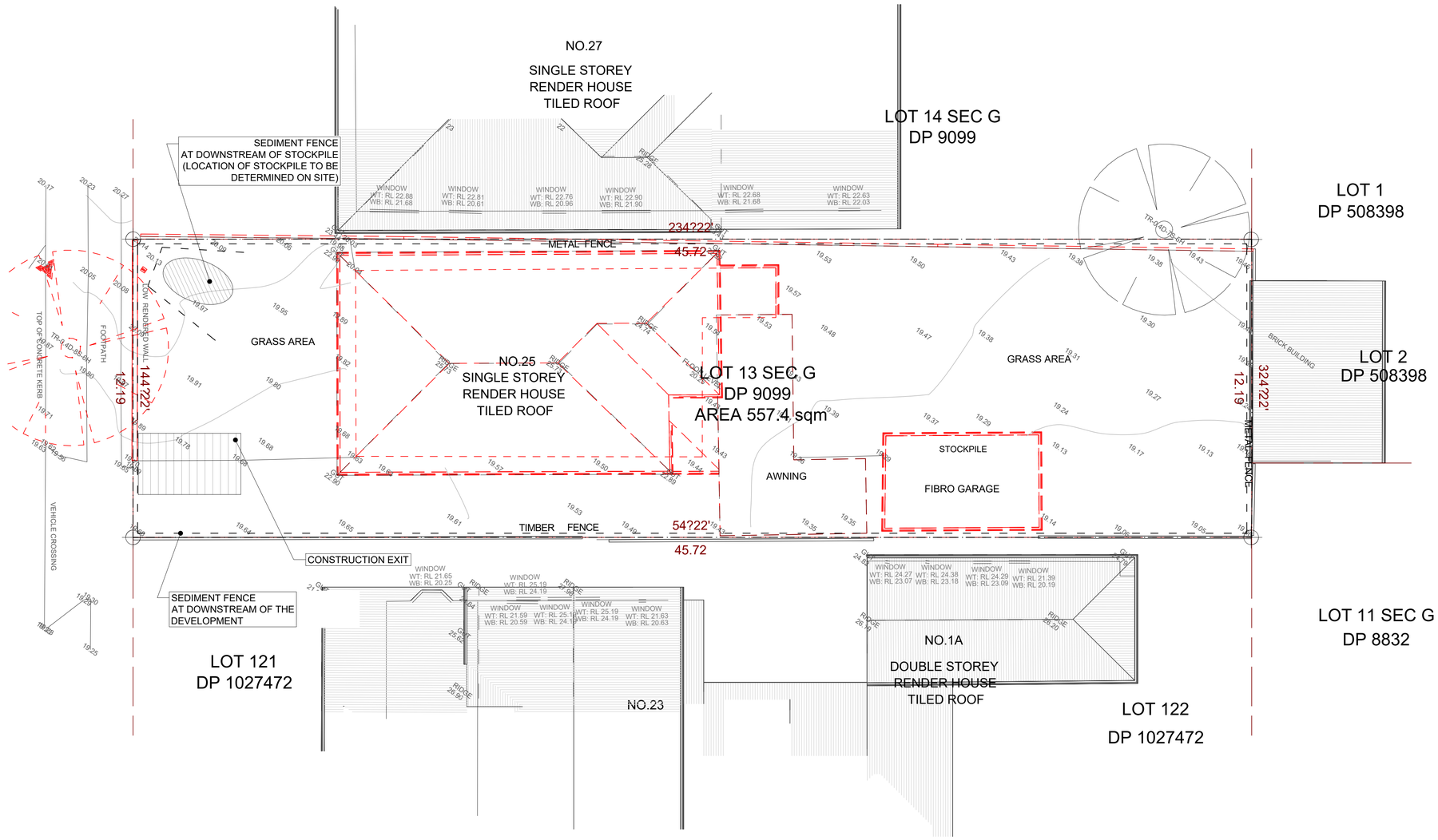
TITLE: ROOF DRAINAGE PLAN & DETAILS

DRAWN	DESIGNED	DATE
WG	WG	12.2024
CHECKED	APPROVED	SCALE
DY	DY	1:100

DRAWING NUMBER: 24235 C2.04

REVISION: A

A1



LEGEND

- PROPOSED BOUNDARY
- PROPOSED SILT FENCE
- 25.90 PROPOSED SPOT LEVEL
- PROPOSED SURFACE INLET PIT
- Ø100 DP DOWNPIPE FROM ABOVE
- Ø100 DP DOWNPIPE CONTINUES UNDER
- Øxxx CHARGED PIPE SIZE AS NOMINATED
- Øxxx UPVC PIPE @1% MIN SIZE AS NOTED
- RWT/OSD/OSR
- SSD SUB-SOIL DRAINAGE PIPE
- PO PLANTER OUTLET
- FW FLOOR WASTE
- RO ROOF OUTLET
- 100mm CLASS B GRATED DRAIN
- SP DOWNPIPE SPREADER
- SHORING WALL DRAINAGE
- Øxxx CLASS 12 PRESSURE PIPE

EROSION AND SEDIMENT CONTROL PLAN
SCALE 1:100

FOR APPROVAL

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PROJECT: PROPSOED SINGLE DWELLING DEVELOPMENT
25 LINDA STREET BELFIELD NSW 2191

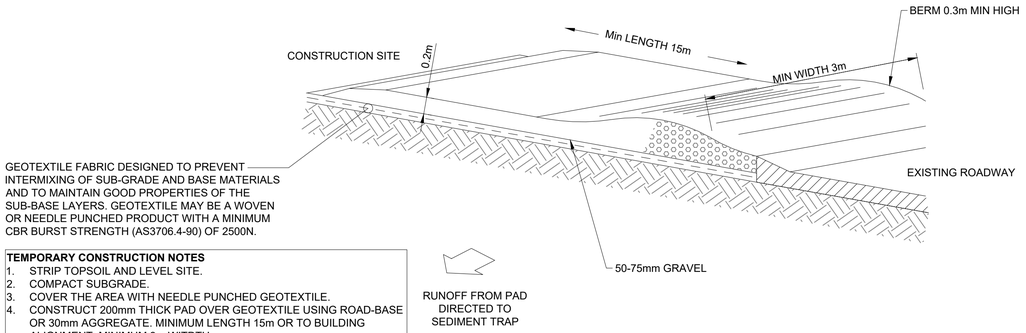
TITLE: EROSION AND SEDIMENT CONTROL PLAN

DRAWN	DESIGNED	DATE
WG	WG	12.2024
CHECKED	APPROVED	SCALE
DY	DY	1:100

DRAWING NUMBER: 24235 C4.00

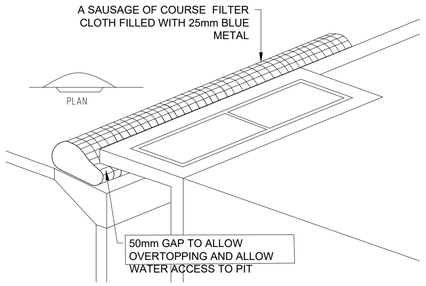
REVISION: A

A1

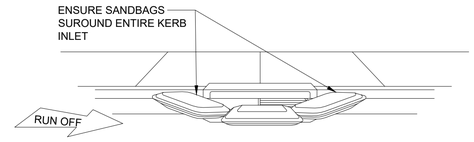


TEMPORARY CONSTRUCTION NOTES
1. STRIP TOPSOIL AND LEVEL SITE.
2. COMPACT SUBGRADE.
3. COVER THE AREA WITH NEEDLE PUNCHED GEOTEXTILE.
4. CONSTRUCT 200mm THICK PAD OVER GEOTEXTILE USING ROAD-BASE OR 30mm AGGREGATE. MINIMUM LENGTH 15m OR TO BUILDING ALIGNMENT, MINIMUM 3m WITDTH.
5. CONSTRUCT HUMP IMMEDIATELY WITHIN BOUNDARY TO DIVERT WATER TO A SEDIMENT FENCE OR OTHER SEDIMENT DEVICE.

TEMPORARY CONSTRUCTION EXIT DETAIL
SCALE 1 : 20

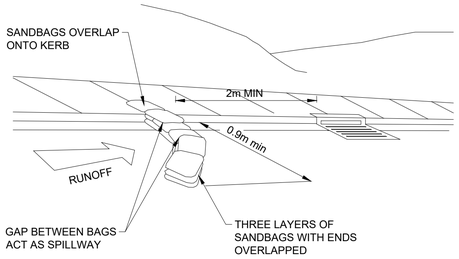


KERB INLET CONTROL (LOCATIONS TO BE DETERMINED ON SITE BY SUPERINTENDENT)
NOT TO SCALE

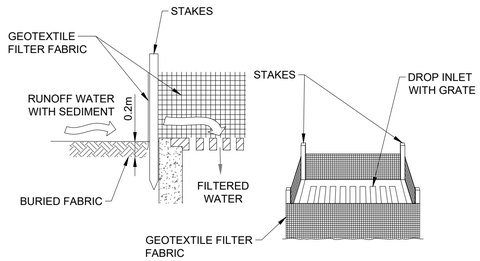


NOTES:
1. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT.
2. FILL THE SLEEVE WITH 25mm TO 50MM GRAVEL.
3. FORM AN ELIPTICAL CROSS SECTION ABOUT 150mm HIGH X 400mm WIDE.
4. PLACE THE FILTER AT THE OPNEING OF THE KERB INLET LEAVING A 100MM GAP AT THE TOP TO ACT AS AN EMERGENCY SPILL WAY.
5. MAINTAIN A CLEAR DISTANCE AWAY FROM THE PIT WITH SPACER BLOCKS.
6. FORM A SEAL WITH THE KERBING AND PREVENT SEDIMENT BYPASSING THE FILTER.
7. FIT TO ALL KERB INLETS AS SHOWN.

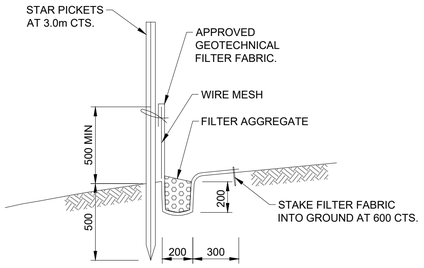
SANDBAG SEDIMENT INLET TRAP
SCALE 1 : 20



SANDBAG SEDIMENT TRAP DETAIL
SCALE 1 : 20

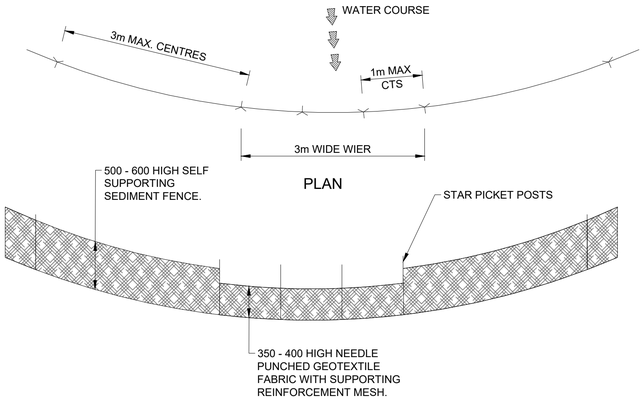


GEOTEXTILE FILTER FABRIC DROP INLET SEDIMENT TRAP DETAIL
SCALE 1:20

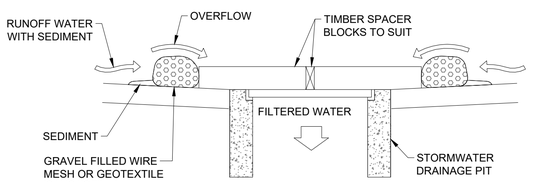


SILT FENCE DETAIL

SEDIMENT SILT FENCE DETAIL
SCALE 1 : 20

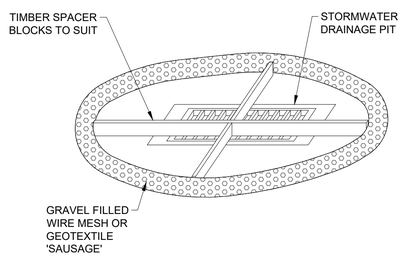


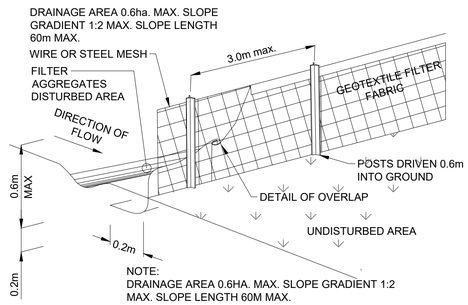
ELEVATION
SEDIMENT FENCE WEIR AT CONCENTRATED FLOW LOCATIONS
SCALE 1 : 20



1. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH ON THE INLET PIT.
2. FILL THE SLEEVE WITH 25mm TO 50mm GRAVEL.
3. FORM AN ELLIPTICAL CROSS SECTION ABOUT 150mm HIGH x 400mm WIDE.
4. MAINTAIN A CLEAR DISTANCE AWAY FROM THE PIT WITH SPACER BLOCKS.

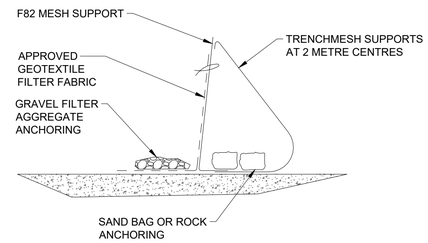
SAUSAGE BARRIER DETAIL
SCALE 1 : 20





SEDIMENT FENCE

GENERAL CONSTRUCTION NOTES
1. CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE.
2. DRIVE 1.5m LONG STAR PICKETS IN GROUND 3m APART.
3. DIG A 200mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE FABRIC TO BE ENTRENCHED.
4. BACKFILL TRENCH OVER BASE OF FABRIC
5. FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF POSTS WITH WIRE TIES OR AS RECOMMENDED BY GEOTEXTILE MANUFACTURER.
6. JOIN SECTIONS OF FABRIC AT A SUPPORT WITH A 150m OVERLAP.



GENERAL CONSTRUCTION NOTES:
1. CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE.
2. FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF POSTS WITH WIRE TIES OR AS RECOMMENDED BY GEOTEXTILE MANUFACTURER.
3. JOIN SECTIONS OF FABRIC AT A SUPPORT WITH A 150mm OVERLAP.
4. REFER TO DETAIL SD 6-9 "BLUE BOOK"

SEDIMENT FENCE - ALTERNATIVE
SCALE 1 : 20

FOR APPROVAL

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
A	ISSUED FOR APPROVAL	WG	WG	11/12/2024

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ARCHITECT: URSINO

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Address: Suite 2, 1 King Street, Concord West NSW Australia 2137
Email: info@CATES.com.au

PROJECT: PROPSOED SINGLE DWELLING DEVELOPMENT
25 LINDA STREET BELFIELD NSW 2191

TITLE: EROSION AND SEDIMENT CONTROL DETAILS

DRAWN	DESIGNED	DATE
WG	WG	12.2024
CHECKED	APPROVED	SCALE
DY	DY	1:20

DRAWING NUMBER: 24235 C4.10
REVISION: A

A1

METAL FENCE

BDY 45.72

LOT 13 SEC G
DP 9099
AREA 557.4 sqm

GRASS AREA

BATH
3030 x 1400

RL 17.33
LINE OF FLOOR ABOVE

LIFT

STORAGE
2320 x 3560

CENTRALISED VACUUM

BASEMENT CONSTRUCTION AND DRAINAGE TO ENGINEERING DETAILS

ELECTRICAL CUPBOARD

GARAGE
6970 x 5950
RL 17.33

PLANT ROOM
5060 x 5950

BATTERY

AWNING

VENTILATION GRILLE

LOW RENDERED WALL

TOP OF CONCRETE KERB

FOOTPATH

TR-0.4D-8S-6H

VEHICLE CROSSING

DRIVEWAY

TIMBER FENCE

BDY 45.72

CH 0.00 — A

CH 4.12 — B

IK:19.61 LB:19.71 FP:19.80 FP:19.81 BDY:19.82 RL:19.64 RL:17.63 GR:17.33

IK:19.45 LB:19.55 FP:19.64 FP:19.65 BDY:19.66 RL:19.41 RL:17.63 GR:17.33

FOR APPROVAL

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
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PROJECT
PROPSOED SINGLE DWELLING DEVELOPMENT
25 LINDA STREET BELFIELD NSW 2191

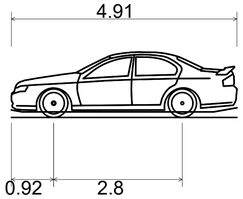
TITLE
DRIVEWAY PLAN

DRAWN	DESIGNED	DATE
WG	WG	12.2024
CHECKED	APPROVED	SCALE
DY	DY	1:50

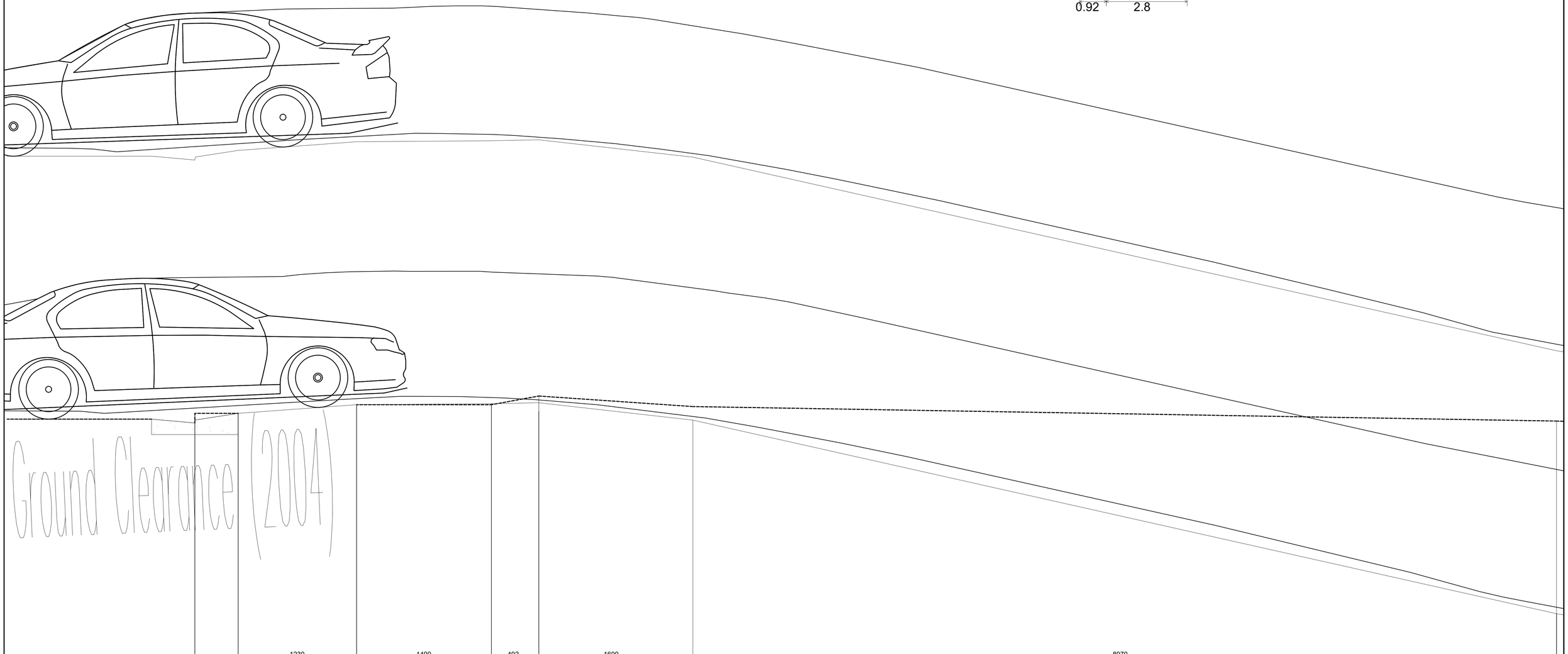
DRAWING NUMBER
24235 C6.00

REVISION
A

A1



B85 Ground Clearance (2004)	
Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.120m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	8.000m



A
C6.00

SECTION - CH0.00

CROSS-SECTION
SCALE 1:20

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REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
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PROJECT
PROPSOED SINGLE DWELLING DEVELOPMENT
25 LINDA STREET BELFIELD NSW 2191

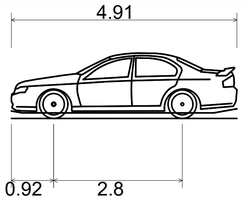
TITLE
DRIVEWAY LONG SECTION CH 0.00 - 1

DRAWN	DESIGNED	DATE
WG	WG	12.2024
CHECKED	APPROVED	SCALE
DY	DY	1:20

DRAWING NUMBER
24235 C6.11

REVISION
A

A1



B85 Ground Clearance (2004)	
Overall Length	4.910m
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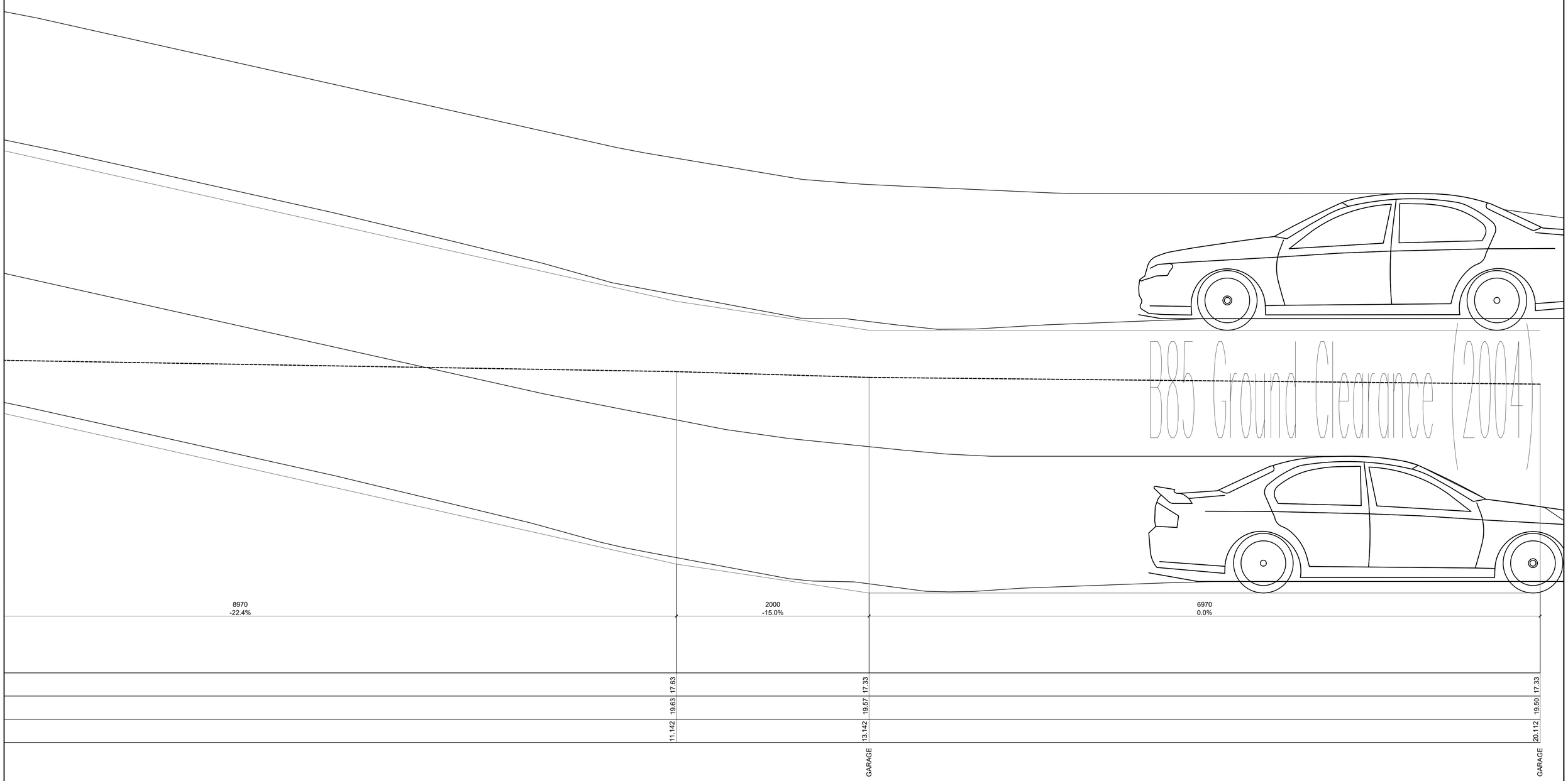

A
C6.00

SECTION - CH0.00

CROSS-SECTION
SCALE 1:20

FOR APPROVAL

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REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
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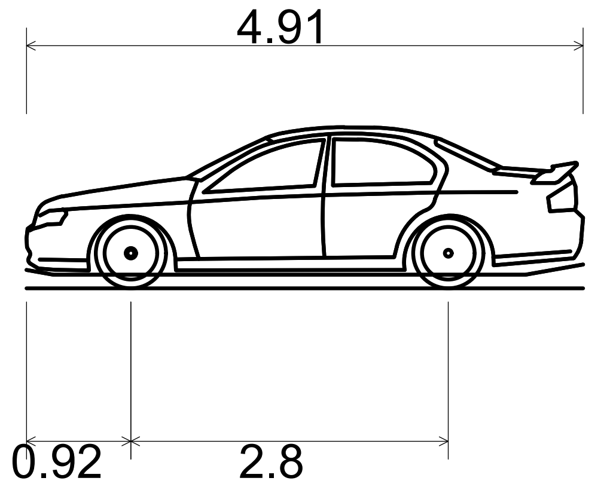
PROJECT
PROPSOED SINGLE DWELLING DEVELOPMENT
25 LINDA STREET BELFIELD NSW 2191

TITLE
DRIVEWAY LONG SECTION CH 0.00 - 2

DRAWN	DESIGNED	DATE
WG	WG	12.2024
CHECKED	APPROVED	SCALE
DY	DY	1:20

DRAWING NUMBER: 24235 C6.12
REVISION: A

A1



B85 Ground Clearance (2004)

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

DATUM 16.50

PROPOSED LEVEL	19.45	19.55	19.64	19.65	19.66	19.41	17.63
EXISTING LEVEL	19.45	19.55	19.65	19.65	19.69	19.78	19.63
CHAINAGE	0.000	0.450	1.680	3.080	3.572	5.572	11.142

B
C6.00

SECTION - CH4.12

CROSS-SECTION
SCALE 1:20

FOR APPROVAL

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
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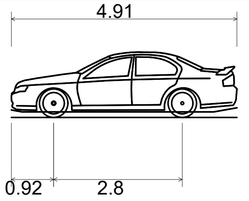
PROJECT
PROPSOED SINGLE DWELLING DEVELOPMENT
25 LINDA STREET BELFIELD NSW 2191
TITLE
DRIVEWAY LONG SECTION CH 4.12 - 1

DRAWN	DESIGNED	DATE
WG	WG	12.2024
CHECKED	APPROVED	SCALE
DY	DY	1:20

DRAWING NUMBER 24235 C6.13
REVISION A

A1



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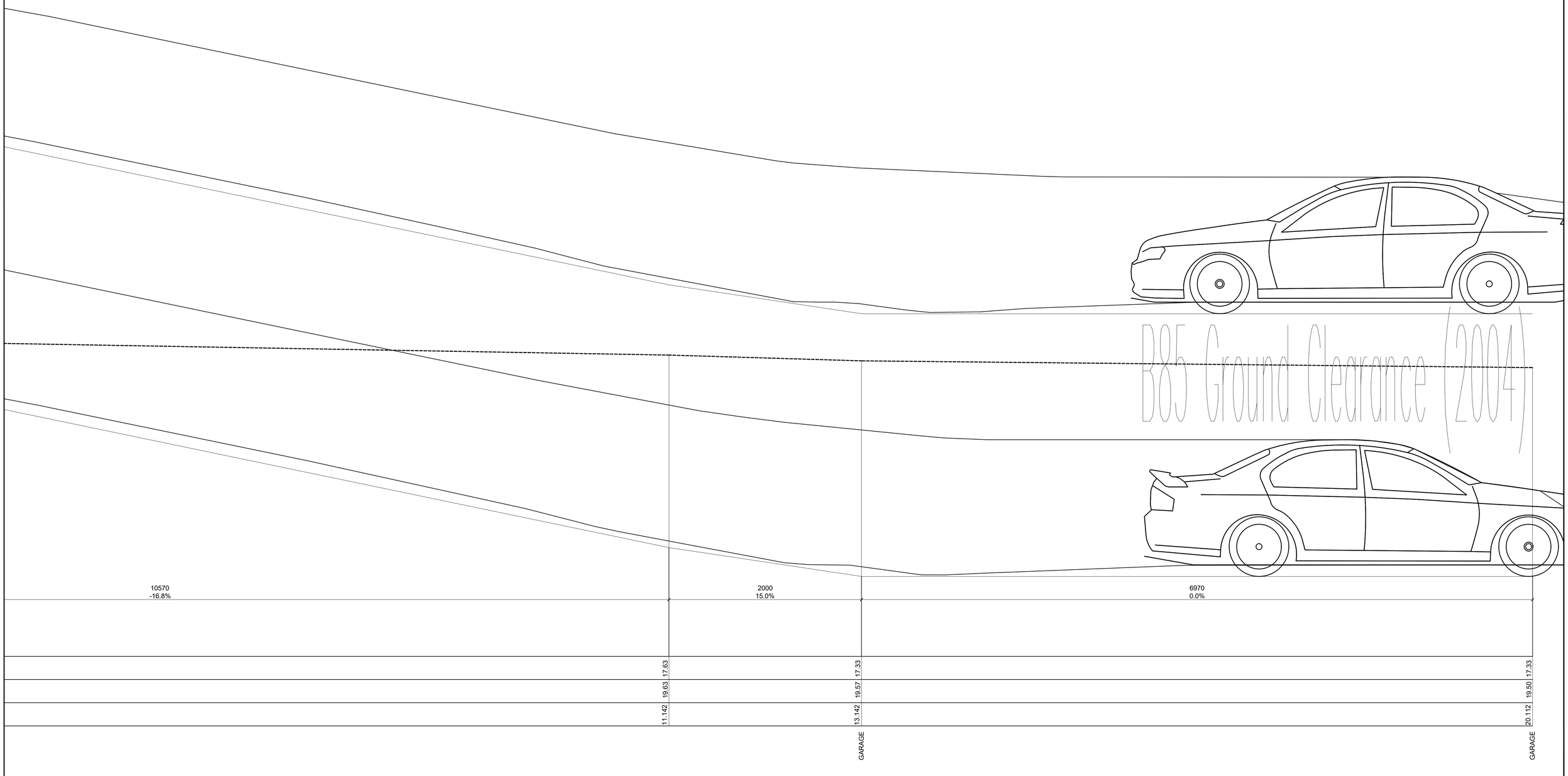

B
C6.00

SECTION - CH4.12

CROSS-SECTION
SCALE 1:20

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TITLE
DRIVEWAY LONG SECTION CH 4.12 - 2

DRAWN	DESIGNED	DATE
WG	WG	12.2024
CHECKED	APPROVED	SCALE
DY	DY	1:20

DRAWING NUMBER: 24235 C6.14
REVISION: A