
MISSING SURVEY INFORMATION ALONG SOUTH WESTERN BOUNDARY TO BE ATTAINED AT A LATER STAGE
ON HOLD - AWAITING FOR SURVEY INFORMATION
CONCRETE DRIVEWAY & PARKING
EASEMENT TO DRAIN WATER VARIABLE WIDTH (D.P. 1091355)
STORMWATER CULVERT UNDER CONCRETE DRIVE
GENERAL ARRANGEMENT = 6.5 WIDE & 1.1 HIGH
D.P. 752473
D.P. 1091355
BEL187.05
BEL187.10
BEL187.10
BEL187.10

THE HILLS MARKETPLACE
287 MONA VALE ROAD, TERREY HILLS, NSW 2084
CIVIL ENGINEERING WORKS

GENERAL NOTES:

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

EXISTING SERVICES & FEATURES

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

SURVEY NOTES

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

LOCALITY SKETCH

N.T.S.

DRAWING SCHEDULE	
21F99_DA_C000	COVER SHEET, DRAWING SCHEDULE, NOTES & LOCALITY SKETCH
21F99_DA_C100	GENERAL ARRANGEMENT PLAN
21F99_DA_C101	DETAIL PLAN, SHEET 1 OF 2
21F99_DA_C102	DETAIL PLAN, SHEET 2 OF 2
21F99_DA_C200	STORMWATER MISCELLANEOUS DETAILS AND PIT LID SCHEDULE
21F99_DA_C201	BIO-BASIN PLAN AND SECTIONS
21F99_DA_C501	PAVEMENT & JOINTING PLAN, SHEET 1 OF 2
21F99_DA_C502	PAVEMENT & JOINTING PLAN, SHEET 2 OF 2
21F99_DA_SE01	SEDIMENT & EROSION CONTROL PLAN
21F99_DA_SE02	SEDIMENT & EROSION CONTROL TYPICAL DETAILS
21F99_DA_BE01	BULK EARTHWORKS - CUT AND FILL PLAN

SITEWORKS NOTES

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

SUBSOIL DRAINAGE NOTES

1. GENERALY PROVIDE SUBSOIL DRAINS TO INTERCEPT GROUNDWATER SEEPAGE AND PREVENT WATER BUILD-UP BEHIND WALLS AND UNDER FLOORS AND PAVEMENTS. CONNECT SUBSOIL TO SURFACE DRAINS OR TO THE STORMWATER DRAINAGE SYSTEM AS APPLICABLE.
2. PIPE DEPTH:
   PROVIDE THE FOLLOWING MINIMUM CLEAR DEPTH, MEASURED TO THE CROWN OF THE PIPE, WHERE THE PIPE PASSES BELOW THE FOLLOWING ELEMENTS:
   - 100mm BELOW FORMATION LEVEL OF THE PAVEMENT, KERB OR CHANNEL.
   - 100mm BELOW THE AVERAGE GRADIENT OF THE BOTTOM OF FOOTINGS.
3. JOINTING:
   AT JUNCTIONS OF SUBSOIL PIPES PROVIDE TEES, COUPLINGS OR ADAPTORS TO AS2439.1.
4. TRENCH WIDTH MINIMUM 300mm.
5. PIPE UNDERLAY
   GENERAL: GRADE THE TRENCH FLOOR EVENLY TO THE GRADIENT OF THE PIPELINE. IF THE TRENCH FLOOR IS ROCK, CORRECT ANY IRREGULARITIES WITH COMPACTED BEDDING MATERIAL. BED PIPING ON A CONTINUOUS UNDERLAY OF BEDDING MATERIAL, AT LEAST 75mm THICK AFTER COMPACTION. LAY THE PIPE WITH ONE LINE OF PERFORATIONS AT THE BOTTOM.

   CHASES: IF NECESSARY TO PREVENT PROJECTIONS SUCH AS SOCKETS AND FLANGES FROM BEARING ON THE TRENCH BOTTOM OR UNDERLAY.
6. PIPE SURROUNDS:
   GENERAL: PLACE THE MATERIAL IN THE PIPE SURROUND IN LAYERS SMALLER THAN OR EQUAL TO 200mm LOOSE THICKNESS, AND COMPACT WITHOUT DAMAGING OR DISPLACING PIPING.
   DEPTH OF OVERLAY: TO THE UNDERSIDE OF THE BASE OF OVERLYING STRUCTURES SUCH AS PAVEMENTS, SLABS AND CHANNELS TO WITHIN 150mm OF THE FINISHED SURFACE OF UNPAVED OR LANDSCAPED AREAS.
7. FILTER SOCKS:
   PROVIDE POLYESTER PERMEABLE SOCKS CAPABLE OF RETAINING PARTICLES OF 0.25mm SIZES. SECURELY FIT OR JOIN THE SOCK AT EACH JOINT.

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY
BEE&LETHBRIDGE
DATUM: A.H.D.
ORIGIN OF LEVELS: PM 50080 RL 199.895

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
03	ISSUED FOR DA ONLY	MB	MM	19.12.2022
02	ISSUED FOR PRELIMINARY	MP	MM	21.11.2022
01	ISSUED FOR PRELIMINARY	SC	MM	19.10.2022

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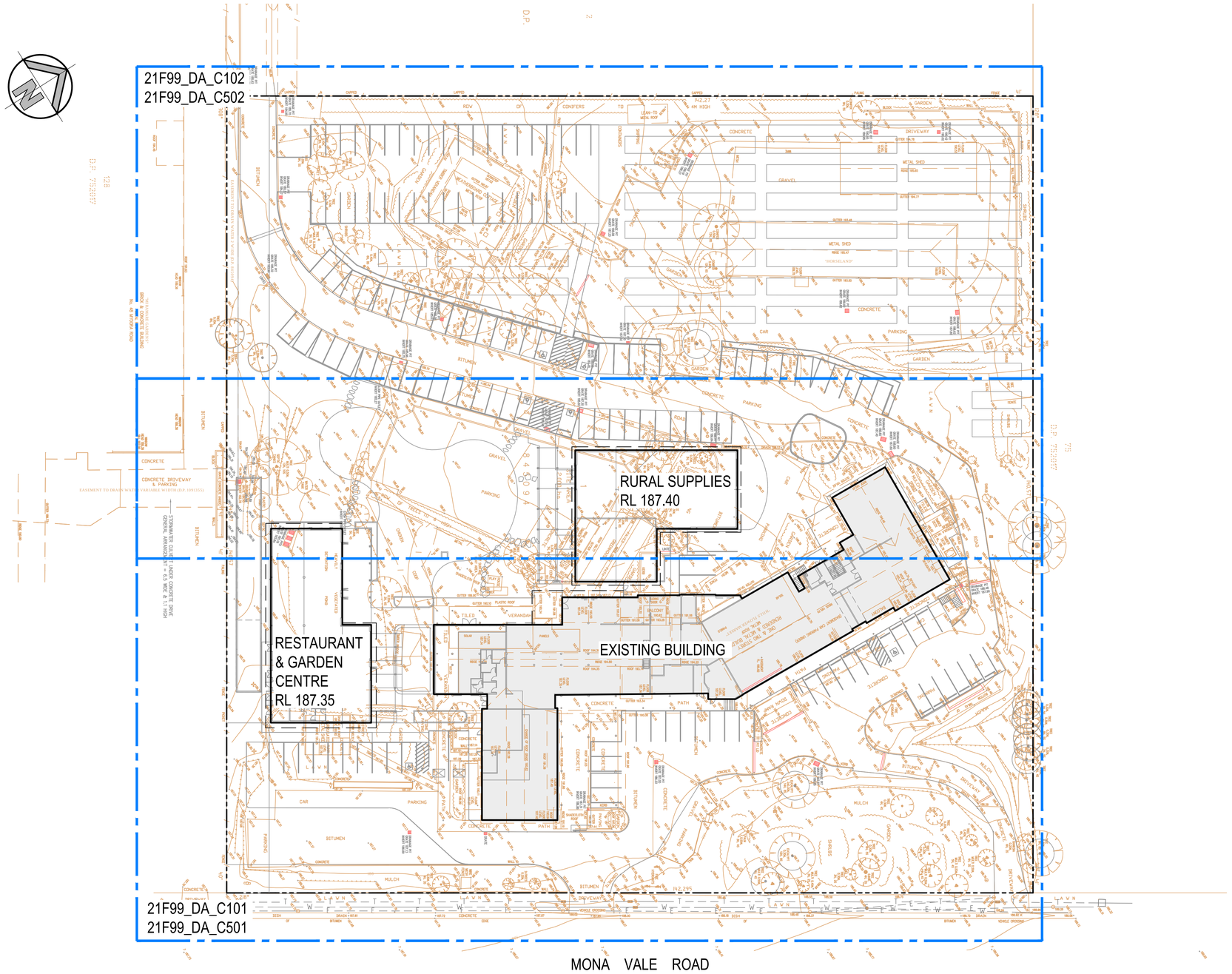
Project: THE HILLS MARKETPLACE
287 MONA VALE ROAD, TERREY HILLS, NSW 2084

Title: COVER SHEET, DRAWING SCHEDULE, NOTES & LOCALITY SKETCH

Drawn	Designed	Date
S.Chen	M.Mishevski	OCT 2022
Checked	Approved	Scale
A.Francis	A.Francis	NTS

Drawing number: 21F99_DA_C000
Revision: 03



LEGEND

- EXISTING BOUNDARY
- EXTENT OF WORKS
- PROPOSED JUNCTION PITS
- PROPOSED SURFACE INLET PITS
- PROPOSED LINTEL ONGRADE & SAG PITS
- A-1 — LINE LETTER / PIT NUMBER — PROPOSED PIT TAG
- 40.125 / Ø425RCP / 20.450m / 1.5% / 39.818 — STORMWATER UPSTREAM INVERT RL. / STORMWATER PIPE DIAMETER & CLASS / STORMWATER PIPE LENGTH / STORMWATER PIPE GRADE / STORMWATER DOWNSTREAM INVERT RL.
- EXISTING STORMWATER PIPE
- PROPOSED STORMWATER PIPE
- EXISTING STORMWATER PIPE TO BE DEMOLISHED
- 185.10 — EXISTING CONTOURS
- 186.10 — PROPOSED CONTOURS
- RL186.10 — PROPOSED SPOT LEVEL
- R — PROPOSED RIDGE LINE
- V — PROPOSED VALLEY LINE
- E — EXISTING ELECTRICAL MAINS LINE
- G — EXISTING GAS LINE
- S — EXISTING SEWER LINE
- T — EXISTING TELSTRA LINES
- W — EXISTING WATER LINE
- EXISTING PITS
- PROPOSED BATTER LINE
- RW — PROPOSED RETAINING WALL

GENERAL ARRANGEMENT PLAN

SCALE: 1:400

0 8 16 24 32 40m
8 6 4 2
SCALE 1:400

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY
BEE&LETHBRIDGE
DATUM: A.H.D.
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01	ISSUED FOR PRELIMINARY	SC	MM	20.10.2022
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Project: THE HILLS MARKETPLACE
287 MONA VALE ROAD, TERREY HILLS, NSW 2084
Title: GENERAL ARRANGEMENT PLAN

Drawn	Designed	Date
S.Chen	M.Mishevski	OCT 2022
Checked	Approved	Scale @A1
A.Francis	A.Francis	1:400

Drawing number: 21F99_DA_C100
Revision: 08

REFER TO DWG 21F99_DA_C102 FOR CONTINUATION

PROPOSED RETWALL ALONG BOUNDARY, BOTTOM OF WALL LEVELS TO MATCH EXISTING SURFACE LEVELS

DOWNPIPES FROM PROPOSED RESTAURANT AND GARDEN CENTRE NOT GOING TO RWT TO STUB DIRECTLY INTO COMBINED BIO-RETENTION BASIN AND OSD

EXISTING Ø600mm OUTLET PIPE TO CONNECT TO EXISTING EASEMENT

EXISTING LOW POINT BENEATH FENCE LINE TO BE RETAINED

HATCH DENOTES 2.25m LONG 0.3m HIGH OVERLOW SLOT, REFER TO C201 FOR DETAILS

EXISTING PIT EX-4 TO BE RECONSTRUCTED TO LEVELS AS SHOWN ON SECTION A AND B IN DRAWING C201

1 IN 3 BATTER DOWN TO RETWALL

100m³ (300mm DEEP) BIO BASIN BENEATH OSD

PROPOSED BIO-BASIN

1:3 BATTER DOWN TO BOUNDARY RETWALL

1:3 BATTER DOWN TO OSD

RETWALL H=0m

1.2m x 1.2m LANDING

182.5m³ OSD REQUIRED
250.0m³ OSD PROVIDED
OSD ABOVE BIO-BASIN

APPRX. 26 x 0.15m SUSPENDED GALVANISED STAIRS

HANDRAIL TO ARCHITECT'S DETAILS

16KL RWT OVERFLOW TO STUB DIRECTLY INTO PROPOSED COMBINED BIO-RETENTION BASIN AND OSD

EXTENT OF ROOF CATCHMENT GOING TO RAINWATER TANK

16KL RWT TO BE PROVIDED FOR LANDSCAPE IRRIGATION ONLY

DOWNPIPE COLLECTION LINE FROM PROPOSED RESTAURANT AND GARDEN CENTRE ROOF TO STUB DIRECTLY INTO RAINWATER TANK. DOWNPIPE COLLECTION LINE TO FUTURE DETAIL

EXISTING STORMWATER PIPE TO BE DEMOLISHED

RETWALL H=0m

EXISTING PITS TO BE DEMOLISHED AND REMOVED

FENCE TO BE FIXED TO OSD WALL. FENCE TO ARCHITECT'S DETAILS

PROPOSED RESTAURANT & GARDEN CENTRE
RL 187.35

MAIN STORWATER LINE

PROPOSED DROP/SAG PIT AT END OF LANDSCAPE VALLEY TO REDUCE OVERFLOW OVER RETAINING WALL

EXTENT OF ROOF CATCHMENT GOING TO RAINWATER TANK

DOWNPIPES FROM NORTHERN FACE OF PROPOSED RURAL SUPPLIES BUILDING TO STUP DIRECTLY INTO THIS EXISTING PIT

PROPOSED RURAL SUPPLIES
RL 187.40

8KL RWT OVERFLOW TO STUB DIRECTLY INTO EXISTING PIT

8KL RWT TO BE PROVIDED FOR LANDSCAPE IRRIGATION ONLY

DOWNPIPE COLLECTION LINE FROM PROPOSED RURAL SUPPLIES ROOF TO STUB DIRECTLY INTO RAINWATER TANK. DOWNPIPE COLLECTION LINE TO FUTURE DETAIL

EXISTING BUILDING
EX SL 187.35

EXISTING BUILDING
EX SL 187.35

MONA VALE ROAD

0 4 8 12 16 20m
4 3 2 1
SCALE 1:200

DETAIL PLAN
SCALE: 1:200

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY BEE&LETHBRIDGE
DATUM: A.H.D.
ORIGIN OF LEVELS: PM 50080 RL 199.895

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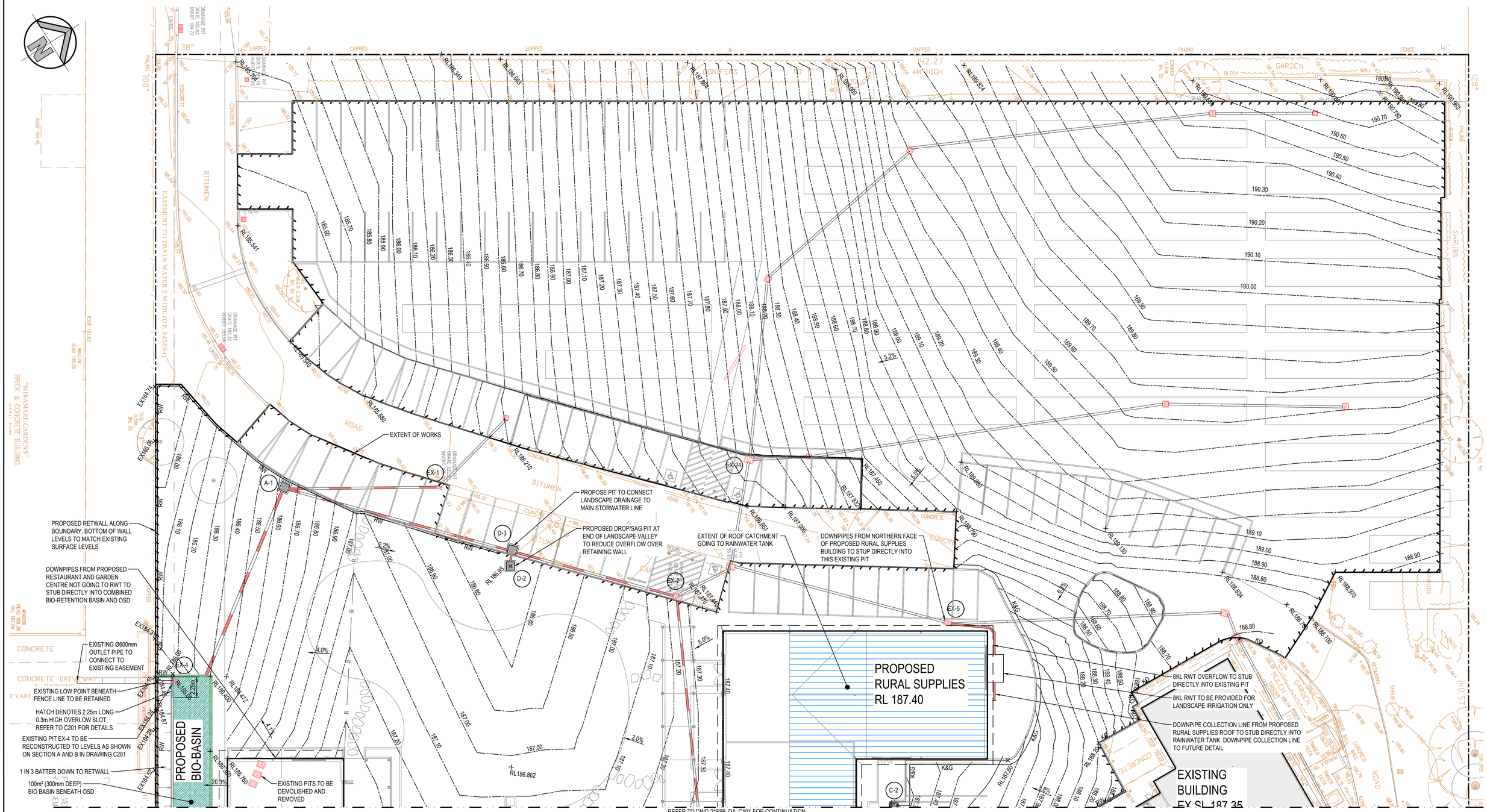
Project: THE HILLS MARKETPLACE
287 MONA VALE ROAD, TERREY HILLS, NSW 2084

Title: DETAIL PLAN
SHEET 1 OF 2

Drawn	Designed	Date
S.Chen	M.Mishevski	OCT 2022
Checked	Approved	Scale @A1
A.Francis	A.Francis	1:200

Drawing number: 21F99_DA_C101
Revision: 11



DETAIL PLAN

SCALE: 1:200

0 4 8 12 16 20m

4 3 2 1

SCALE 1:200

FOR DA ONLY

SURVEY INFORMATION

SURVEYED BY BEE&LETHBRIDGE

DATUM: A.H.D.

ORIGIN OF LEVELS: PM 50080 RL 199.895

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REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
09	ISSUED FOR DA ONLY	MP	MM	21.11.2023
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Project: THE HILLS MARKETPLACE
287 MONA VALE ROAD, TERREY HILLS, NSW 2084

Title: DETAIL PLAN
SHEET 2 OF 2

Drawn	Designed	Date
S.Chen	M.Mishevski	OCT 2022
Checked	Approved	Scale @A1
A.Francis	A.Francis	1:200

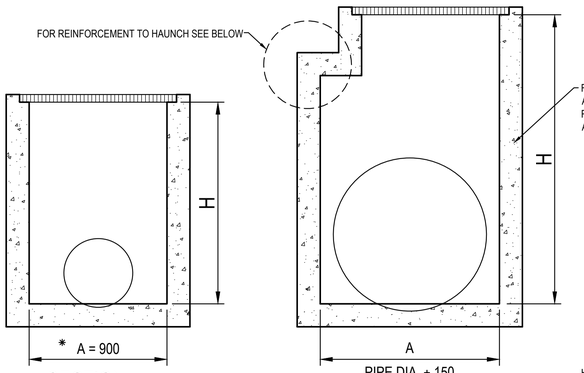
Drawing number: 21F99_DA_C102

Revision: 09

TYPICAL PIT CHAMBER SIZES

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

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



SECTION
NTS

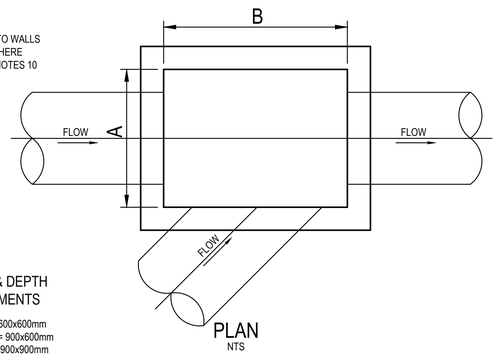
*A = 600 FOR PIPES UP TO 375 DIA.

1 PIT CHAMBER DIMENSIONS FOR PIPES UP TO 600 DIA.

SECTION
NTS

1 PIT CHAMBER FOR PIPES GREATER THAN 600 DIA.

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



PLAN
NTS

3 PIT CHAMBER FOR SIDE ENTRY ON SKEW

2 PIT SIZE & DEPTH REQUIREMENTS

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

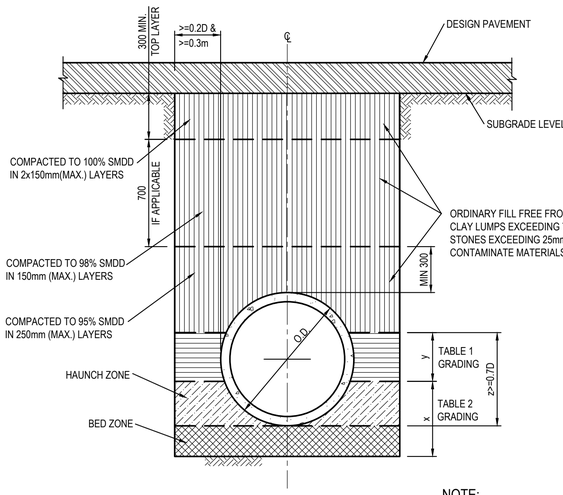
TABLE 1	
SIEVE SIZE (MM)	WEIGHT PASISNG (%)
75.0	100
9.5	100 TO 50
2.36	100 TO 30
0.60	50 TO 15
0.075	25 TO 0

TABLE 2	
SIEVE SIZE (MM)	WEIGHT PASISNG (%)
19.0	100
2.36	100 TO 50
0.60	90 TO 20
0.30	60 TO 10
0.15	25 TO 0
0.075	10 TO 0

TABLE 3				
SUPPORT TYPE	BED ZONE X	HAUNCH ZONE Y	BED AND HAUNCH ZONES COMPACTION	MAX BEDDING FACTOR
HS1	100 IF D<=1500, OR 150 IF D>=1500	0.1D	50	2.0
HS2		0.3D	60	2.5
HS3		0.3D	70	4.0

PIT LID SCHEDULE

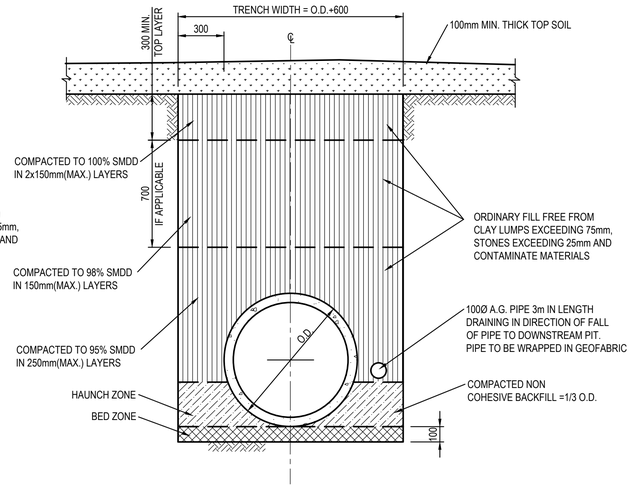
PIT/STRUCTURE NUMBER	DESCRIPTION
A-1 B-1 D-1 D-2 D-3	PROPOSED INLET PIT WITH 900x900 HINGED LIGHT DUTY GRATED CLASS "B" IN ACCORDANCE WITH WOLLONGONG CITY COUNCIL REQUIREMENTS.
C-2	PROPOSED 1.2m KERB INLET PIT WITH 900x450 INLET GRATE HEAVY DUTY CLASS "D" IN ACCORDANCE WITH WOLLONGONG CITY COUNCIL REQUIREMENTS.
C-1	PROPOSED JUNCTION PIT WITH 1200x1200 HEAVY DUTY SEALED LID CLASS "D" IN ACCORDANCE WITH WOLLONGONG CITY COUNCIL REQUIREMENTS.
EX-1 EX-2 EX-3 EX-4 EX-5	EXISTING PIT TO BE RETAINED.



PIPE TRENCH INSTALLATION BENEATH PAVEMENT

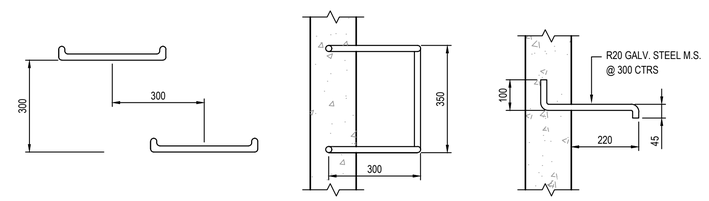
(HS SUPPORT TO BE USED UNDER ROADWAY)
SCALE 1:20

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



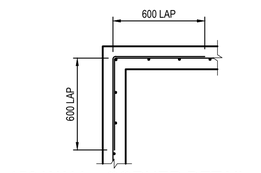
PIPE TRENCH INSTALLATION IN LANDSCAPE AREAS

(H1 & H2 SUPPORT)
SCALE 1:20

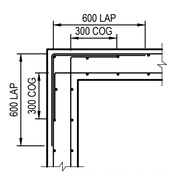


ELEVATION PLAN SECTION

TYPICAL STEP IRON DETAIL
SCALE 1:10

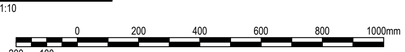


150 WALL - CORNER DETAIL
SCALE 1:20



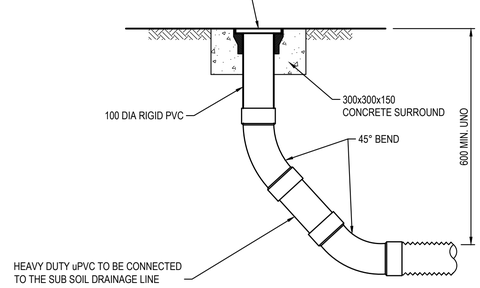
200 WALL - CORNER DETAIL
SCALE 1:20

SCALE 1:20



SCALE 1:10

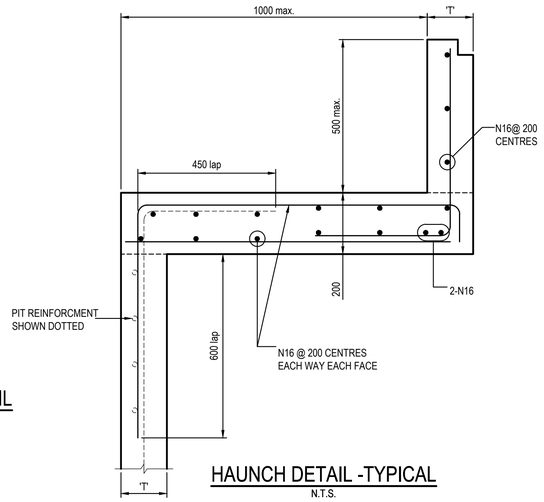
LIGHT DUTY IN LANDSCAPED AND PEDESTRIAN AREAS HEAVY DUTY IN VEHICULAR PAVEMENTS. AIR TIGHT CAST IRON OR BRASS SCREW OR BOLT DOWN CAP.



FLUSHING POINT (FP)

SCALE 1:10

NOTE: SLOTTED RIGID PVC PIPE AND FITTINGS MAY BE USED



HAUNCH DETAIL -TYPICAL

N.T.S.

DRAINAGE NOTES:

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

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY
BEE&LETHBRIDGE
DATUM: A.H.D.
ORIGIN OF LEVELS: PM 50080 RL 199.895

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
03	ISSUED FOR DA ONLY	MP	MM	04.04.2023
02	ISSUED FOR DA ONLY	MB	MM	19.12.2022
01	ISSUED FOR PRELIMINARY	SC	MM	20.10.2022

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Surveyor: BN

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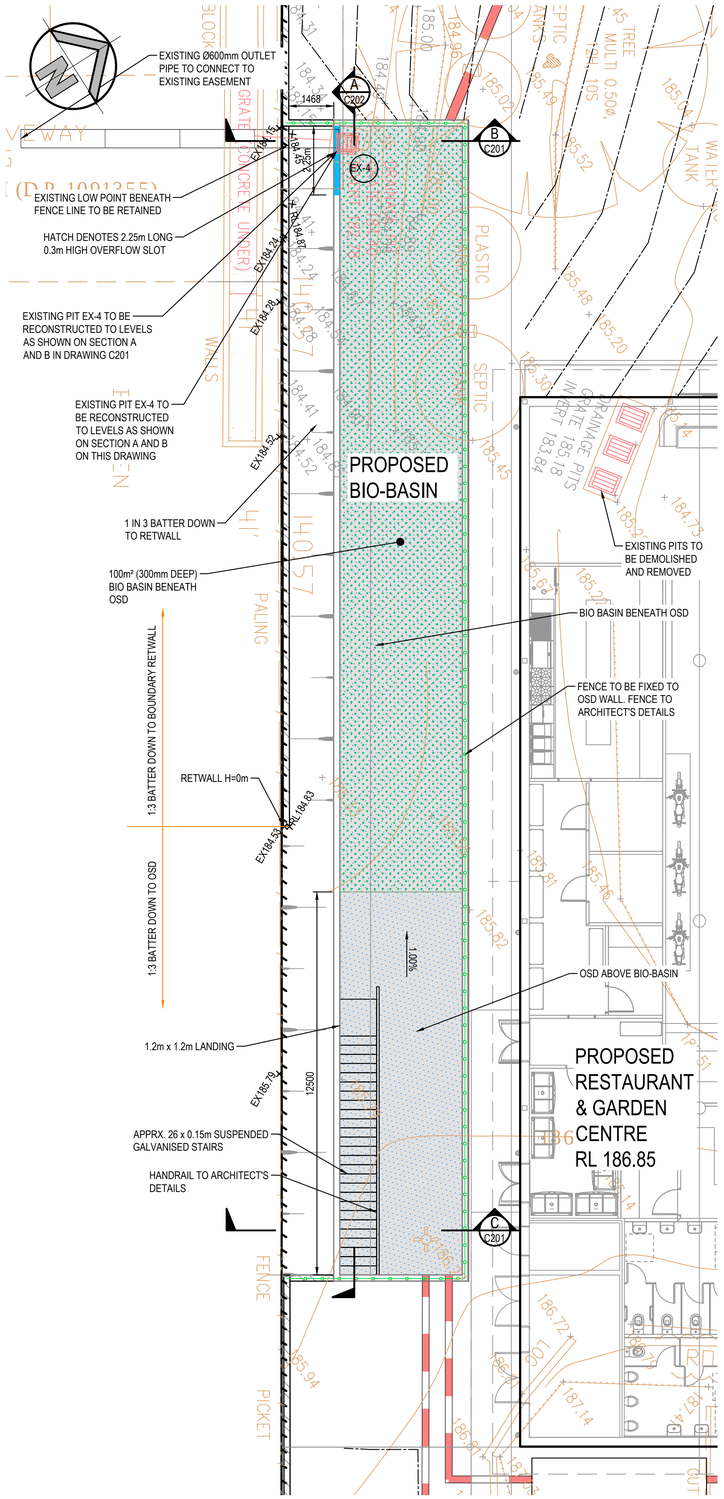
Project: THE HILLS MARKETPLACE
287 MONA VALE ROAD, TERREY HILLS, NSW 2084

Title: STORMWATER MISCELLANEOUS DETAILS AND PIT LID SCHEDULE

Drawn	Designed	Date
S.Chen	M.Mishevski	OCT 2022
Checked	Approved	Scale @A1
A.Francis	A.Francis	N.T.S.

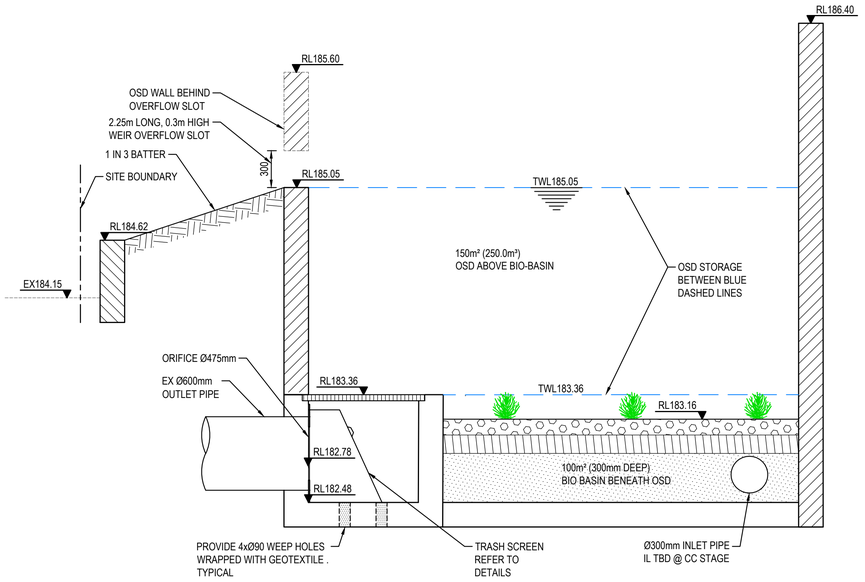
Drawing number: 21F99_DA_C200

Revision: 03



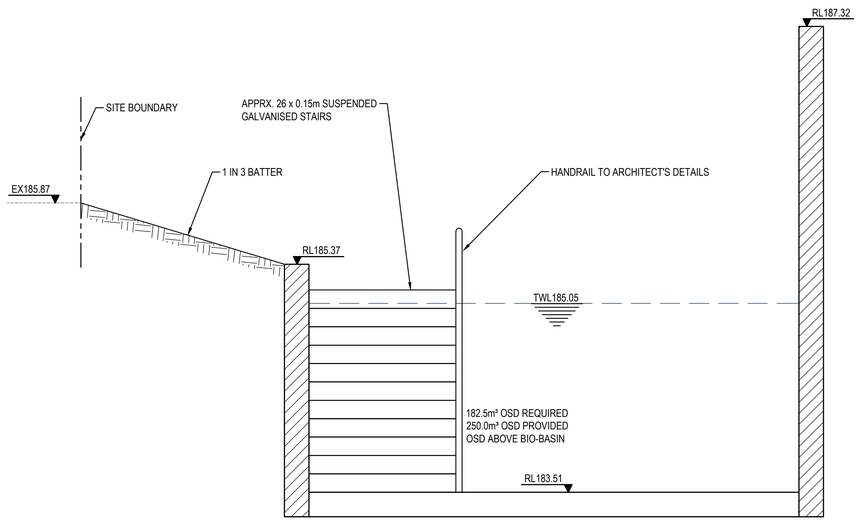
BIO-BASIN PLAN

SCALE: 1:100



SECTION B

SCALE: 1:25 — C201



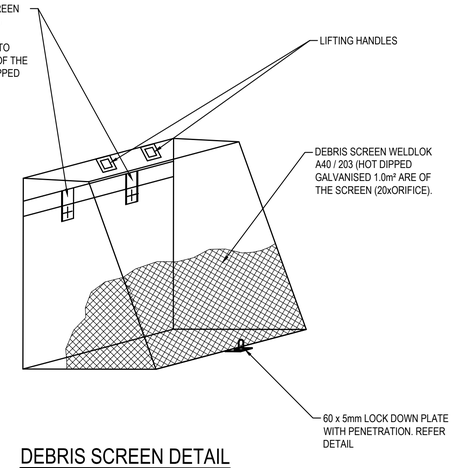
SECTION C

SCALE: 1:25 — C201

100x16 MOUNTING BAR WITH BRACKETS, SCREEN TO BE ATTACHED (GENERALLY ON A SLIDING MECHANISM) TO THE WALL, BUT SHOULD BE REMOVABLE (WITHOUT THE USE OF TOOLS) TO PERMIT CLEANSING AND EASY INSPECTION OF THE OUTLET CONTROL. ALL STEEL TO BE HOT DIPPED GALVANISED.

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

MAXIMESH RH3030 IS RECOMMENDED FOR ORIFICES LESS THAN 150mm IN DIAMETER AND SCREEN AREA 50xTHE ORIFICE AREA REFER BURWOOD COUNCIL AND UPPER PARRAMATTA RIVER CATCHMENT TRUST HANDBOOK



DEBRIS SCREEN DETAIL

NOT TO SCALE
ALL STEEL TO BE HOT DIPPED GALVANISED

DANGER

CONFINED SPACE

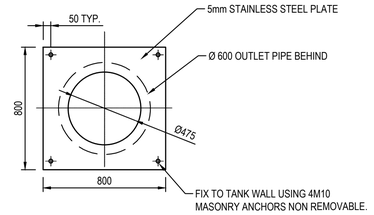
NO ENTRY WITHOUT CONFINED SPACE TRAINING

A) A CONFINED SPACE DANGER SIGN SHALL BE POSITIONED IN A LOCATION SUCH THAT IT IS CLEARLY VISIBLE TO PERSONS PROPOSING TO ENTER THE BELOW GROUND TANKS/ CONFINED SPACE AT ALL ACCESS POINTS OF THE TANK/ CONFINED SPACE.

B) SIGN TO BE MINIMUM DIMENSIONS: 250mm x 180mm ENTRIES I.E.. GRATES, MANHOLES

C) SIGN SHALL BE MANUFACTURED FROM COLOUR BONDED METAL OR POLYPROPYLENE

D) SIGN SHALL BE AFFIXED TO A SURFACE WITH SCREWS AT EACH CORNER.



ORIFICE PLATE DETAIL

SCALE 1:20

ON-SITE DETENTION DESIGN SUMMARY

A DRAINS MODEL HAS BEEN PREPARED TO DETERMINE THE PRE-DEVELOPMENT AD POST-DEVELOPMENT STORMWATER RUNOFF. REFER TO SUMMARY TABLE.

YR	PRE-DEVELOPMENT (L/s)	POST-DEVELOPMENT (L/s)
5	404	402
10	532	472
20	659	532
50	825	613
100	971	680

SCALE 1:100 | SCALE 1:25 | SCALE 1:20

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY
BEE&LETHBRIDGE
DATUM: A.H.D.
ORIGIN OF LEVELS: PM 50080 RL 199.895

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
06	ISSUED FOR DA ONLY	SC	MM	17.11.2023
05	ISSUED FOR DA ONLY	MB	MM	19.12.2022
04	ISSUED FOR PRELIMINARY	MP	MM	25.11.2022
03	ISSUED FOR PRELIMINARY	MP	MM	21.11.2022
02	ISSUED FOR PRELIMINARY	MB	MM	09.11.2022
01	ISSUED FOR PRELIMINARY	SC	MM	20.10.2022

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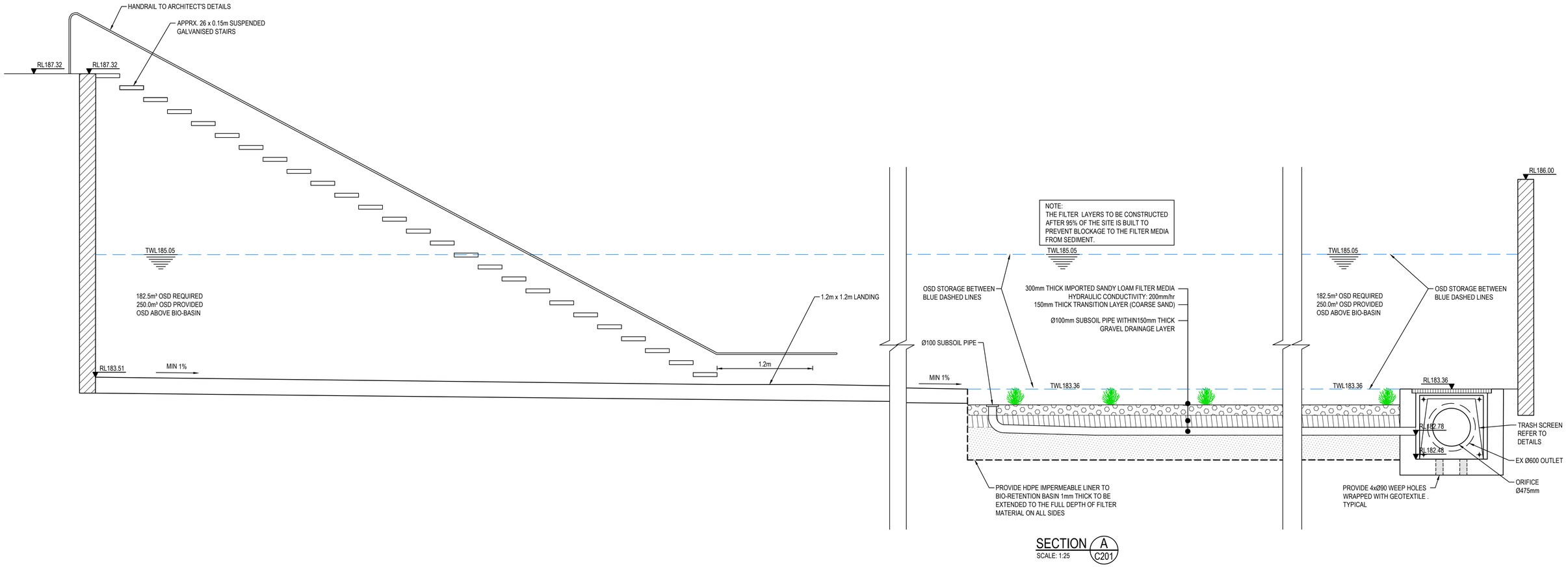
Project: THE HILLS MARKETPLACE
287 MONA VALE ROAD, TERREY HILLS, NSW 2084
Title: BIO-BASIN PLAN, SECTIONS AND DETAILS

Drawn	Designed	Date
S.Chen	M.Mishevski	OCT 2022
Checked	Approved	Scale @A1
A.Francis	A.Francis	AS NOTED

Drawing number: 21F99_DA_C201
Revision: 06



SECTION A
SCALE: 1:25
C201

0 2 4 6 8 10m
2 1
SCALE 1:100

0 500 1000 1500 2000 2500mm
500 300 100
SCALE 1:25

0 400 800 1200 1600 2000mm
400 200
SCALE 1:20

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SURVEY INFORMATION
SURVEYED BY
BEE&LETHBRIDGE
DATUM: A.H.D.
ORIGIN OF LEVELS: PM 50080 RL 199.895

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
05	ISSUED FOR DA ONLY	SC	MM	17.11.2023

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE

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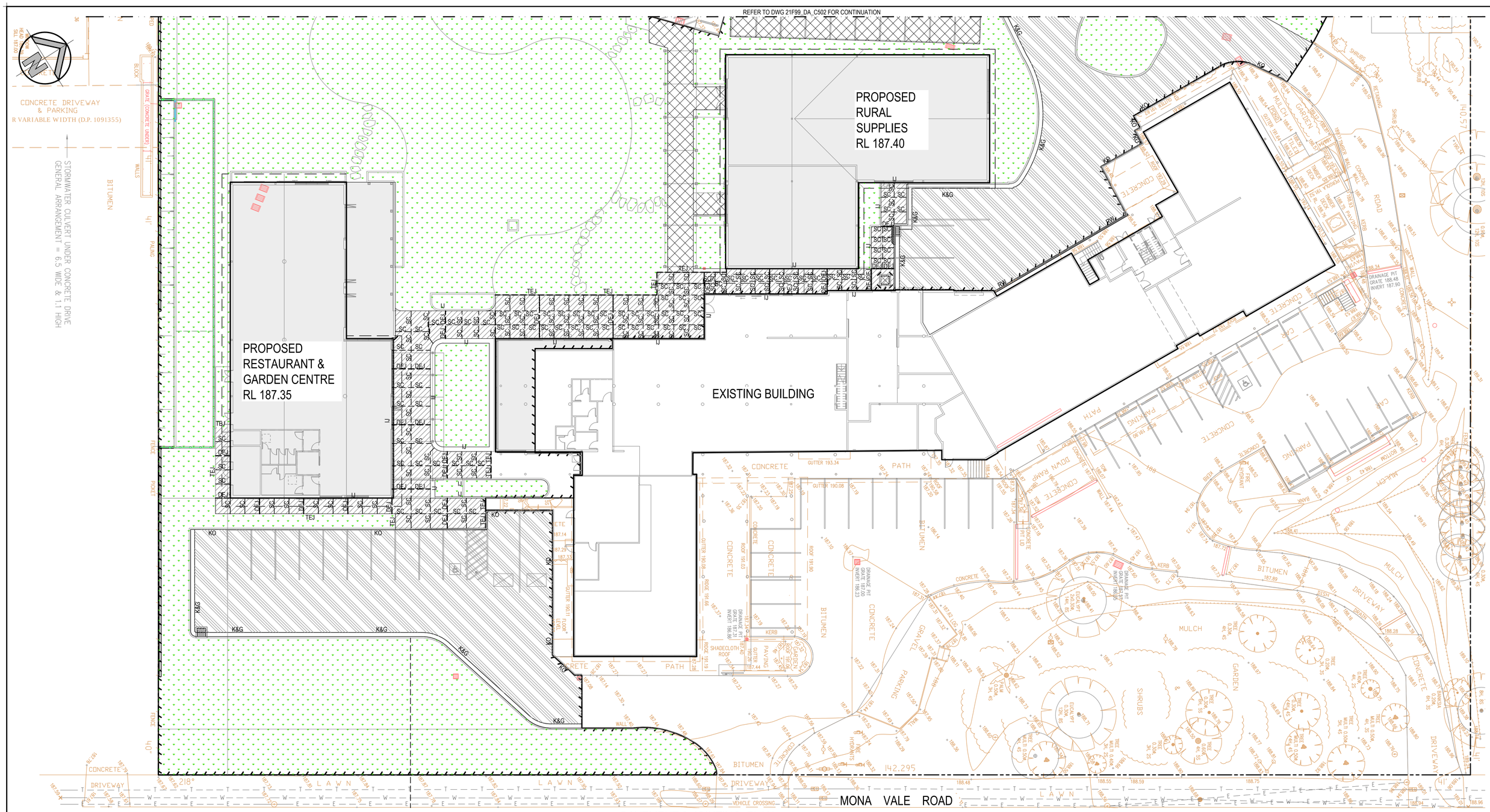
Project
THE HILLS MARKETPLACE
287 MONA VALE ROAD, TERREY HILLS, NSW 2084
Title
BIO-BASIN PLAN, SECTIONS AND DETAILS

Drawn	Designed	Date
S.Chen	M.Mishevski	OCT 2022
Checked	Approved	Scale @A1
A.Francis	A.Francis	AS NOTED

Drawing number
21F99_DA_C202
Revision
01



LEGEND

- EXISTING BOUNDARY
- LIMIT OF WORKS
- PROPOSED JUNCTION PITS
- PROPOSED SURFACE INLET PITS
- PROPOSED LINTEL ONGRADE & SAG PITS
- RW — PROPOSED RETAINING WALL
- K&G — PROPOSED KERB & GUTTER
- KO — PROPOSED KERB ONLY
- PROPOSED TRIMMER BARS
- PROPOSED CORNER REINFORCEMENT BARS
- EXISTING STORMWATER PITS
- SC — PROPOSED SAW CUT JOINT
- IJ — PROPOSED ISOLATION JOINT
- TEJ — PROPOSED THICKENED EDGE JOINT
- DEJ — PROPOSED DOWELED EXPANSION JOINT

0 4 8 12 16 20m

4 3 2 1

SCALE 1:200

PAVEMENT & JOINTING PLAN

SCALE: 1:200

PAVEMENT TYPE 1
FLEXIBLE PAVEMENT

- 40mm THICK AC10
- 150m DGB20
- 100m DGS40
- COMPACTED SUBGRADE MIN. CBR 8%

PAVEMENT TYPE 2
FOOTPATH PAVEMENT

- 100mm 20MPa CONCRETE
- 100mm DGB20 COMPACTED TO 98% SMDD
- COMPACTED SUBGRADE TO 100% SDD ASSUMED CBR OF 3%

PAVEMENT TYPE 3
PROPOSED PERMEABLE PAVEMENT
(TO MANUFACTURER DETAIL)

LANDSCAPE AREA
PROPOSED LANDSCAPE

PROPOSED BUILDING
PROPOSED BUILDING
(TO STRUCTURAL ENGINEER'S DETAIL)

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY
BEE&LETHBRIDGE
DATUM: A.H.D.
ORIGIN OF LEVELS: PM 50080 RL 199.895

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
06	ISSUED FOR DA ONLY	MP	MM	21.11.2023
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04	ISSUED FOR DA ONLY	MP	MM	04.04.2023
03	ISSUED FOR DA ONLY	MB	MM	19.12.2022
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01	ISSUED FOR PRELIMINARY	MP	MM	21.11.2022

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Project
THE HILLS MARKETPLACE
287 MONA VALE ROAD, TERREY HILLS, NSW 2084

Title
PAVEMENT & JOITING PLAN
SHEET 1 OF 2

Drawn	Designed	Date
S.Chen	M.Mishevski	OCT 2022
Checked	Approved	Scale @A1
A.Francis	A.Francis	1:200

Drawing number
21F99_DA_C501

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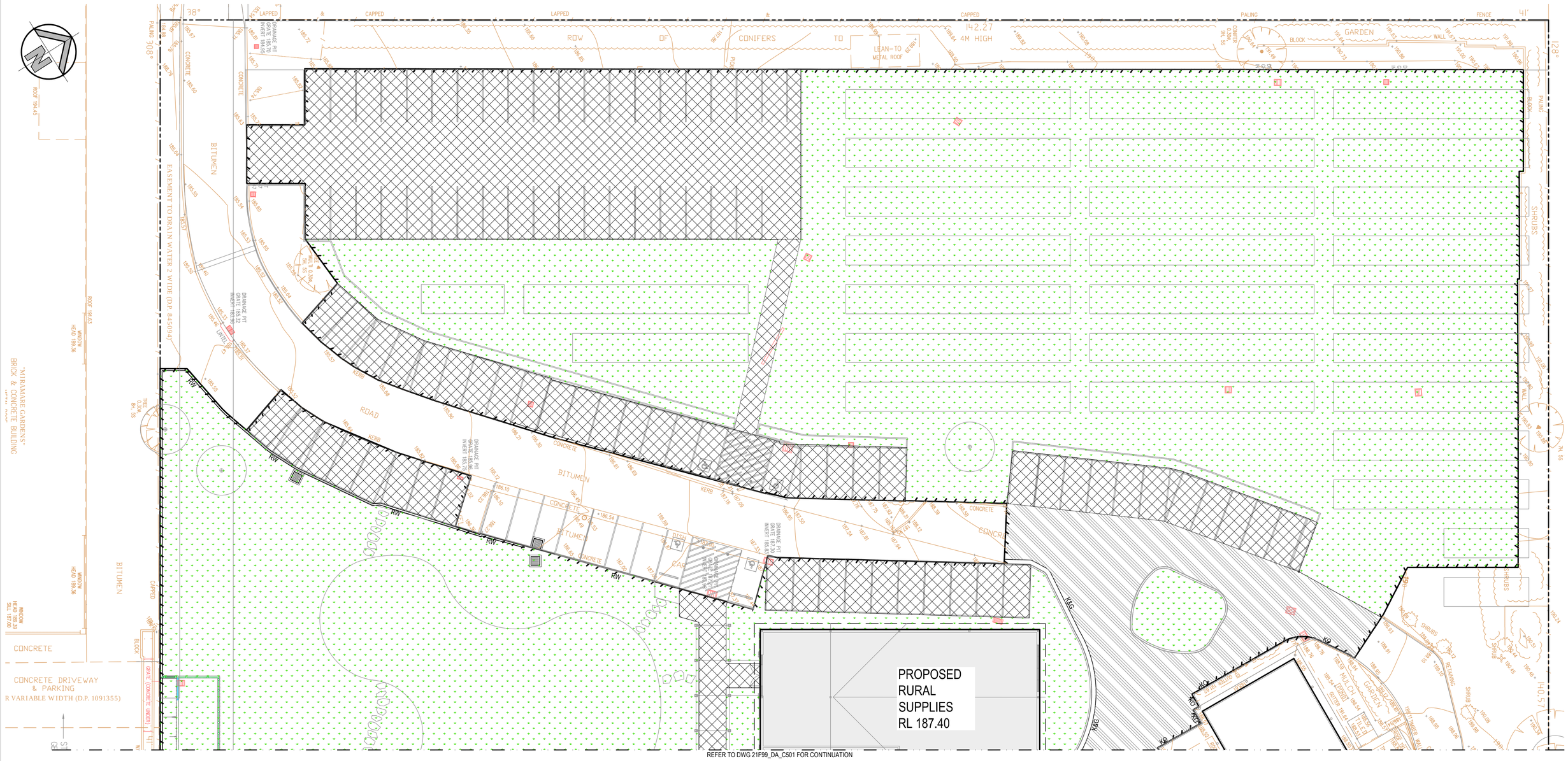

PAVEMENT & JOINTING PLAN

SCALE: 1:200

LEGEND

- EXISTING BOUNDARY
- LIMIT OF WORKS
- PROPOSED JUNCTION PITS
- PROPOSED SURFACE INLET PITS
- PROPOSED LINTEL ONGRADE & SAG PITS
- RW — PROPOSED RETAINING WALL
- K&G — PROPOSED KERB & GUTTER
- KO — PROPOSED KERB ONLY
- PROPOSED TRIMMER BARS
- PROPOSED CORNER REINFORCEMENT BARS
- EXISTING STORMWATER PITS
- SC — PROPOSED SAW CUT JOINT
- IJ — PROPOSED ISOLATION JOINT
- TEJ — PROPOSED THICKENED EDGE JOINT
- DEJ — PROPOSED DOWELED EXPANSION JOINT

0 4 8 12 16 20m

4 3 2 1

SCALE 1:200

PAVEMENT TYPE 1
FLEXIBLE PAVEMENT

- 40mm THICK AC10
- 150m DGB20
- 100m DGS40
- COMPACTED SUBGRADE MIN. CBR 8%

PAVEMENT TYPE 2
FOOTPATH PAVEMENT

- 100mm 20MPa CONCRETE
- 100mm DGB20 COMPACTED TO 98% SMDD
- COMPACTED SUBGRADE TO 100% SDD ASSUMED CBR OF 3%

PAVEMENT TYPE 3
PROPOSED PERMEABLE PAVEMENT (TO MANUFACTURER DETAIL)

LANDSCAPE AREA
PROPOSED LANDSCAPE

PROPOSED BUILDING
PROPOSED BUILDING (TO STRUCTURAL ENGINEER'S DETAIL)

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY BEE&LETHBRIDGE
DATUM: A.H.D.
ORIGIN OF LEVELS: PM 50080 RL 199.895

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
06	ISSUED FOR DA ONLY	MP	MM	21.11.2023
05	ISSUED FOR DA ONLY	MP	MM	11.04.2023
04	ISSUED FOR DA ONLY	MP	MM	04.04.2023
03	ISSUED FOR DA ONLY	MB	MM	19.12.2022
02	ISSUED FOR PRELIMINARY	MP	MM	25.11.2022
01	ISSUED FOR PRELIMINARY	MP	MM	21.11.2022

Client: HILLS MARKETPLACE PTY LTD.

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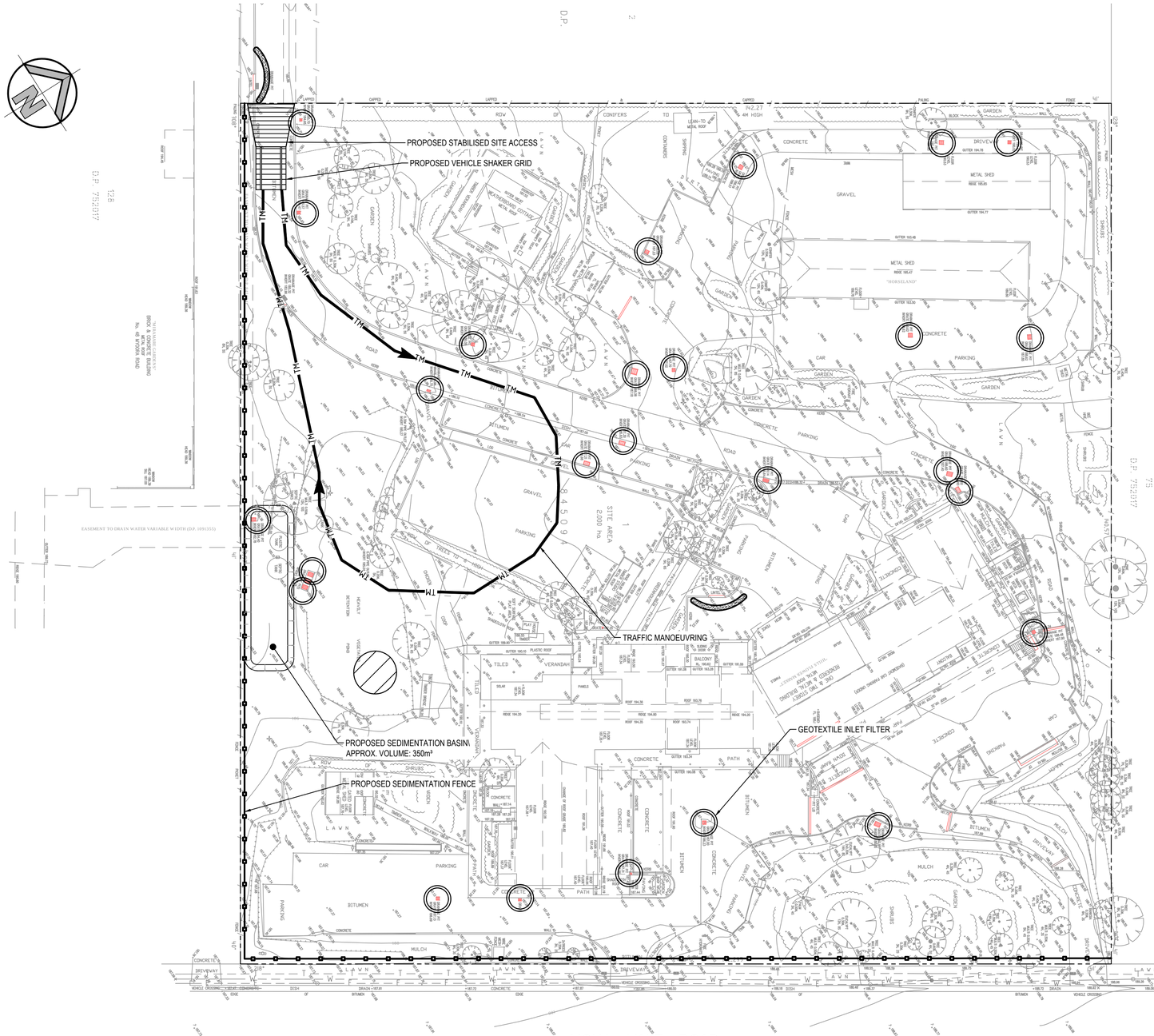
Project: THE HILLS MARKETPLACE
287 MONA VALE ROAD, TERREY HILLS, NSW 2084

Title: PAVEMENT PLAN & JOINTING PLAN SHEET 2 OF 2

Drawn	Designed	Date
S.Chen	M.Mishevski	OCT 2022
Checked	Approved	Scale @A1
A.Francis	A.Francis	1:200

Drawing number: 21F99_DA_C502

Revision: 06



LEGEND

- EXISTING BOUNDARY
- TRAFFIC MANOEUVRING
- PROPOSED SEDIMENTATION FENCE
- PROPOSED VEHICLE SHAKER GRID
- PROPOSED STABILISED SITE ACCESS
- PROPOSED STOCKPILE LOCATION
- GEOTEXTILE INLET FILTER
- PROPOSED MESH & GRAVEL INLET FILTER
- PROPOSED SEDIMENT BASIN

SEDIMENT & EROSION CONTROL NOTES

- ALL SEDIMENT CONTROL DEVICES ARE TO BE CONSTRUCTED, PLACED AND MAINTAINED IN ACCORDANCE WITH NORTHERN BEACHES COUNCIL SPECIFICATIONS AND LANDCOM'S "SOIL AND CONSTRUCTION" MANUAL.
- ALL PERIMETER & SILTATION CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN EARTH WORKS AND/OR CLEARING.
- THE SEDIMENT & EROSION CONTROL PLAN MAY REQUIRE FUTURE ADJUSTMENT TO REFLECT CONSTRUCTION STAGING. IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO PREPARE THEIR OWN SEDIMENT AND EROSION CONTROL PLAN WHICH SUITS THE DESIGNED CONSTRUCTION STAGING.
- FILTRATION BUFFER ZONES ARE TO BE FENCED OFF AND ACCESS PROHIBITED TO ALL PLANT AND MACHINERY.
- ALL TEMPORARY EARTH BERMS, DIVERSIONS & SILT DAM EMBANKMENTS ARE TO BE MACHINE COMPACTED, SEEDED & MULCHED FOR TEMPORARY VEGETATION COVER AS SOON AS THEY HAVE BEEN FORMED.
- ALL SEDIMENT TRAPPING STRUCTURES AND DEVICES ARE TO BE INSPECTED AFTER STORMS FOR STRUCTURAL DAMAGE OR CLOGGING. TRAPPED MATERIAL IS TO BE REMOVED TO A SAFE LOCATION.
- ALL TOPSOIL IS TO BE STOCKPILED ON SITE FOR REUSE (AWAY FROM TREES AND DRAINAGE LINES). MEASURES SHALL BE APPLIED TO PREVENT EROSION OF THE STOCKPILES.
- ALL EARTHWORK AREAS SHALL BE ROLLED EACH EVENING TO SEAL THE EARTHWORKS.
- ALL FILLS ARE TO BE LEFT WITH A LIP AT THE TOP OF THE SLOPE AT THE END. ALL CUT AND FILL SLOPES ARE TO BE SEEDED AND STRAW MULCHED WITHIN 14 DAYS OF COMPLETION OF FORMATION U.N.O. BY LANDSCAPE ARCHITECTS.
- UPON COMPLETION OF ALL EARTHWORKS OR AS DIRECTED BY COUNCIL SOIL CONSERVATION TREATMENTS SHALL BE APPLIED SO AS TO RENDER AREAS THAT HAVE BEEN DISTURBED, EROSION PROOF WITHIN 14 DAYS.
- EROSION AND SILT PROTECTION MEASURES ARE TO BE MAINTAINED AT ALL TIMES.

SEDIMENT & EROSION CONTROL PLAN

SCALE: 1:400

0 8 16 24 32 40m
8 6 4 2
SCALE 1:400

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY
BEE&LETHBRIDGE
DATUM: A.H.D.
ORIGIN OF LEVELS: PM 50080 RL 199.895

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR DA ONLY	MB	MM	19.12.2022
01	ISSUED FOR PRELIMINARY	SC	MM	19.10.2022

Client: HILLS MARKETPLACE PTY LTD.
Architect: BN

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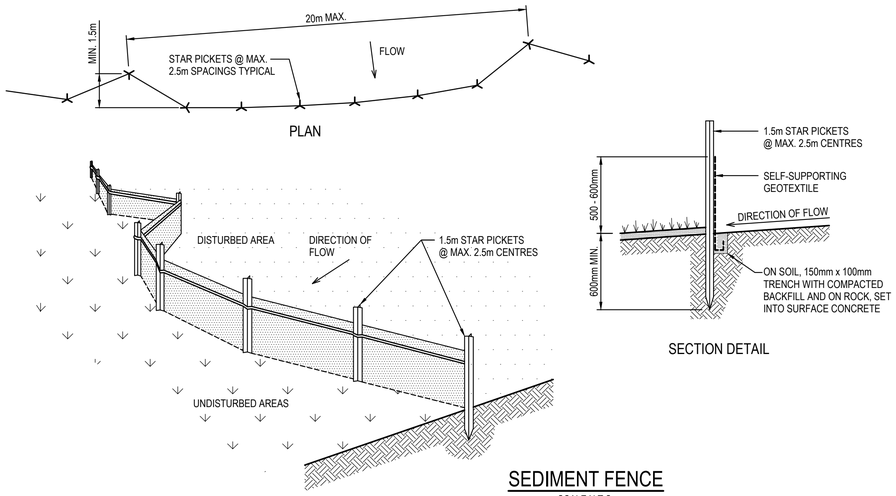
Project: THE HILLS MARKETPLACE
287 MONA VALE ROAD, TERREY HILLS, NSW 2084
Title: SEDIMENT & EROSION CONTROL PLAN

Drawn	Designed	Date
S.Chen	M.Mishevski	OCT 2022
Checked	Approved	Scale @A1
A.Francis	A.Francis	1:400

Drawing number: 21F99_DA_SE01
Revision: 02

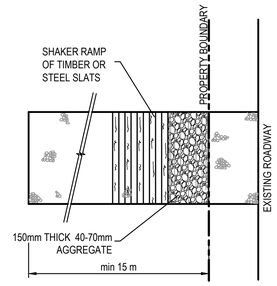


SEDIMENT FENCE

SCALE N.T.S.

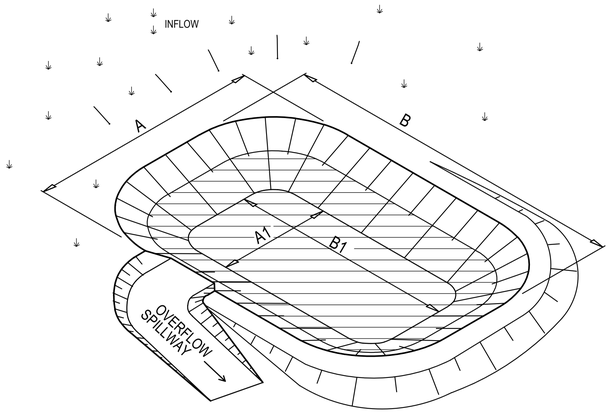
SEDIMENT FENCE CONSTRUCTION NOTES:

1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
3. 3. DRIVE 1.5m LONG STAR PICKETS INTO GROUND @ 2.5m INTERVALS (MAX.) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
4. 4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
5. 5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP. 6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.



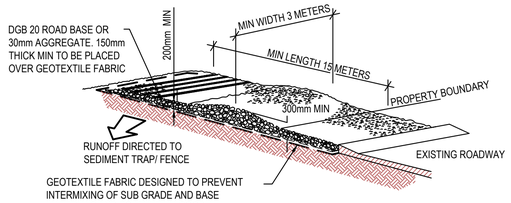
PLAN
STABILISED SITE ACCESS WITH SHAKER RAMP

N.T.S.



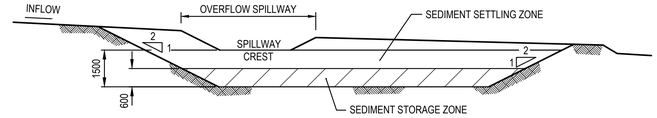
PERSPECTIVE VIEW

CONSTRUCTION SITE



STABILISED SITE ACCESS WITH SHAKER RAMP

N.T.S.



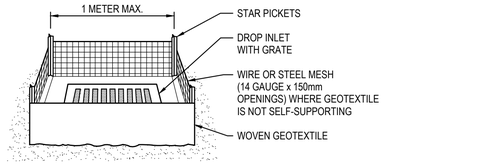
TYPICAL SECTION

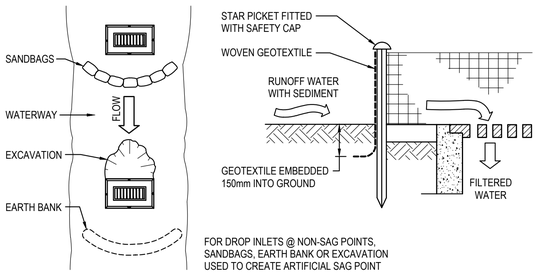
TYPE 'D' & 'F' SEDIMENTATION BASIN

N.T.S.

NOTES:

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



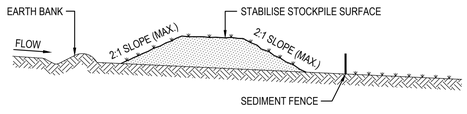


GEOTEXTILE INLET FILTER CONSTRUCTION NOTES:

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE.
2. PICKET SPACING TO BE MAXIMUM 1.0m.
3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
4. DO NOT COVER THE INLET WITH GEOTEXTILES UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

GEOTEXTILE INLET FILTER

SCALE N.T.S.

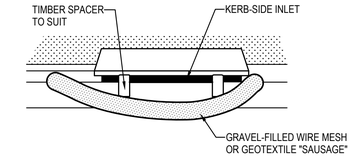


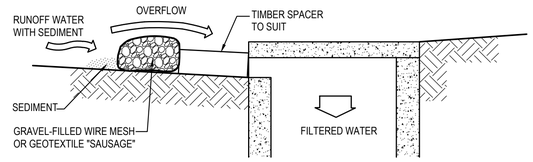
STOCKPILE CONSTRUCTION NOTES:

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

STOCKPILES

SCALE N.T.S.





MESH & GRAVEL INLET FILTER CONSTRUCTION NOTES:

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

MESH & GRAVEL INLET FILTER

SCALE N.T.S.

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY
BEE&LETHBRIDGE
DATUM: A.H.D.
ORIGIN OF LEVELS: PM 50080 RL 199.895

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR DA ONLY	MB	MM	19.12.2022
01	ISSUED FOR PRELIMINARY	SC	MM	19.10.2022

Client: HILLS MARKETPLACE PTY LTD.
Architect: BN

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Project: THE HILLS MARKETPLACE
287 MONA VALE ROAD, TERREY HILLS, NSW 2084
Title: SEDIMENT & EROSION CONTROL TYPICAL DETAILS

Drawn	Designed	Date
S.Chen	M.Mishevski	OCT 2022
Checked	Approved	Scale @A1
A.Francis	A.Francis	N.T.S.

Drawing number: 21F99_DA_SE02
Revision: 02

henry&hymas

21F99 THE HILLS MARKETPLACE
287 MONA VALE ROAD TERRY HILLS NSW

DOCUMENT REGISTER / TRANSMITTAL

DAY	19	20	09	21	25	19	04	11	20	28	17	21					
MONTH	10	10	11	11	11	12	04	04	04	04	11	11					
YEAR	22	22	22	22	22	22	23	23	23	23	23	23					

'P' = PRELIMINARY; 'X' = INFORMATION; 'A' = APPROVAL; 'T' = TENDER; 'C' = C

CC' = CONSTRUCTION CERTIFICATE

PURPOSE OF ISSUE	P	P	P	P	P	P	P	P	P	P	P	P					

DISTRIBUTION

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	D	D	D	D	D	D	D	D	D	D	D	D					

NO.	DOCUMENT TITLE																
C000	COVER SHEET, DRAWING SHEET, NOTES AND LOCALITY SKETCH	01			02		03										
C100	GENERAL ARRANGEMENT PLAN		01	02	03	04	05	06	07				08				
C101	DETAIL PLAN - SHEET 1 OF 2		01	02	03	04	05	06	07	08	09	10	11				
C102	DETAIL PLAN - SHEET 2 OF 2				01	02	03	04	05	06	07	08	09				
C200	STORMWATER MISCELLANEOUS DETAILS AND PIT LID SCHEDULE		01				02	03									
C201	BIO-BASIN AND SECTIONS		01	02	03	04	05					06					
C202	BIO-BASIN SECTION											01					
C501	PAVEMENT AND JOINTING PLAN - SHEET 1 OF 2				01	02	03	04	05				06				
C502	PAVEMENT AND JOINTING PLAN - SHEET 2 OF 2				01	02	03	04	05				06				
SE01	SEDIMENT AND EROSION CONTROL PLAN	01					02										
SE02	SEDIMENT AND EROSION CONTROL TYPICAL DETAILS	01					02										
BE01	BULK EARTHWORKS CUT ANF FILL PLAN		01	02		03	04	05	06		07		08				

H&H QA REQUIREMENT TO ISO9001:
THE ABOVE LIST OF DOCUMENTS AND/OR REVISIONS HAVE BEEN:

DESIGNED AND CHECKED BY: APPROVED BY: DATE: 21/11/2023