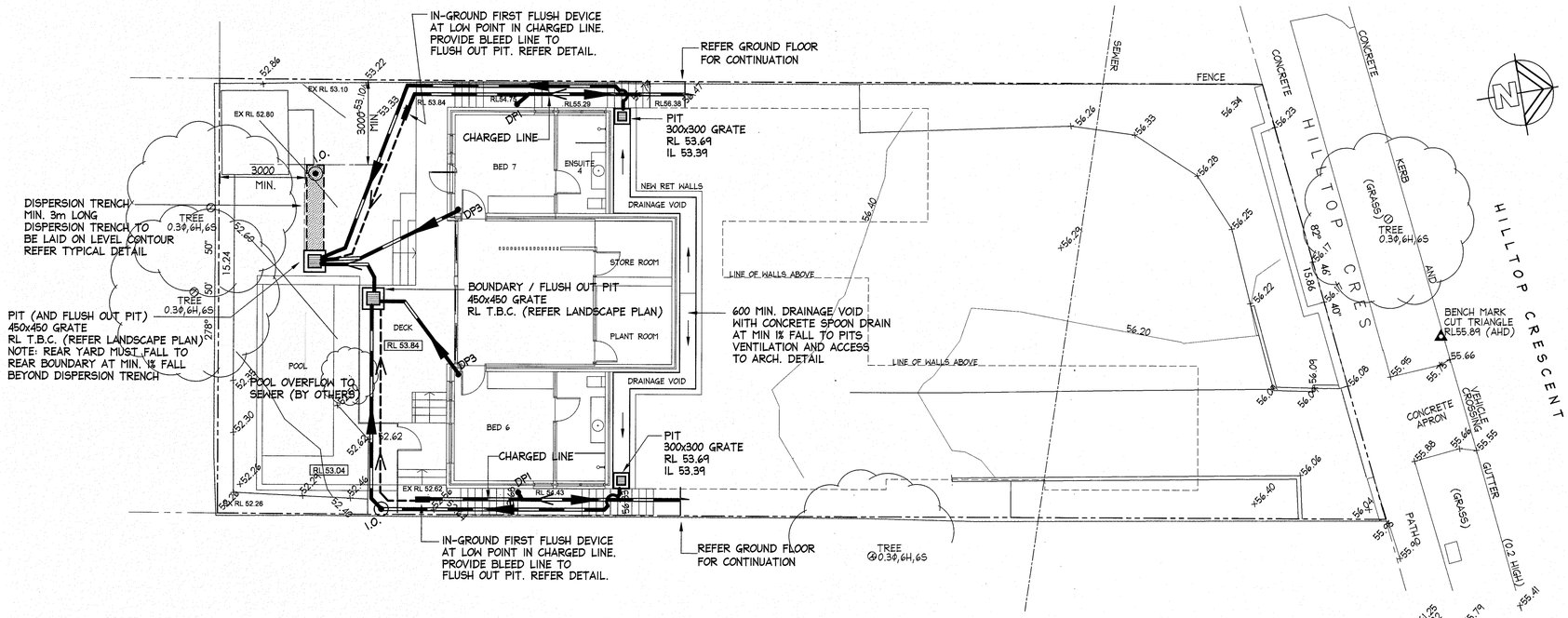


LOWER GROUND FLOOR - DRAINAGE PLAN

SCALE = 1 : 100

STORMWATER NOTES:

1. ALL PIPES TO BE 100mm ϕ UNLESS NOTED OTHERWISE.
2. ALL PIPES TO BE uPVC TO AS 1254-2002 UNLESS NOTED OTHERWISE.
3. ALL PIPES TO BE LAYED AT 1 % MINIMUM GRADE UNLESS NOTED OTHERWISE.
4. ALL PIPES SHALL BE LAID ON A 75mm SAND BED, COMPACTED TO 100% S.M.D.D. BELOW PAVEMENTS. (NO COMPACTION REQUIRED BELOW LANDSCAPING) COVER TO SURFACE FROM TOP OF PIPE TO BE 300mm MINIMUM. BACKFILL TO BE ADEQUATELY CONSOLIDATED AROUND PIPES BY METHOD OF RAMMING AND WATERING IN. TRENCHES TO BE FILLED WITH GRANULAR MATERIAL AS SPECIFIED.
5. ALL DOWN PIPES TO BE 100mm ϕ UNLESS NOTED OTHERWISE.
6. DOWN PIPE LOCATIONS ARE INDICATIVE ONLY. LOCATIONS TO BE CONFIRMED WITH ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
7. PROVIDE CLEANING EYES AT ALL DOWNPIPES.
8. ALL PITS TO BE CAST INSITU OR, IF PRECAST, APPROVED BY ENGINEER. CAST INSITU PITS TO HAVE 150mm THICK CONCRETE WALLS AND BASE. WALLS TO BE REINFORCED WITH 1 N12 TOP TIE UNLESS NOTED OTHERWISE. CAST INSITU PITS GREATER THAN 900 DEEP TO BE MINIMUM 900x600 AND TO HAVE 150mm THICK CONCRETE WALLS AND BASE. WALLS TO BE REINFORCED WITH N12 AT 300 EACH WAY UNLESS NOTED OTHERWISE.
9. ALL PITS GREATER THAN 1000mm DEEP SHALL HAVE STEP IRONS AS PER COUNCIL STANDARDS.
10. THE BOUNDARY OR SILT ARRESTOR PIT SHOULD ALWAYS INCORPORATE A SUMP AND MAXI-MESH SCREEN AS PER LOCAL COUNCIL REQUIREMENTS. HOWEVER, UNLESS SPECIFICALLY REQUIRED BY COUNCILS POLICY OR IF THE SITE CONSISTS OF A CLAY OR ROCK SUBGRADE, ALL OTHER DRAINAGE PITS WILL NOT REQUIRE A SUMP.
11. ALL WORK TO BE IN ACCORDANCE WITH LOCAL COUNCIL STANDARDS AND SPECIFICATIONS.
12. PRIOR TO COMMENCING ANY SITE WORKS THE CONTRACTOR SHALL IMPLEMENT EROSION CONTROL MEASURES TO APPROVED SEDIMENT AND EROSION CONTROL PLAN, EPA GUIDELINES AND COUNCIL SPECIFICATIONS. ALL MEASURES TO REMAIN IN PLACE UNTIL COMPLETION AND STABILIZATION OF THE SITE TO COUNCIL SATISFACTION.
13. ALL LEVELS SHOWN ARE TO AHD
14. ENSURE THAT ALL PITS AND STORMWATER PIPES ARE LOCATED CLEAR FROM TREE ROOT SYSTEMS.
15. ALL EXISTING EARTHENWARE PIPES TO BE UPGRADED TO uPVC.
16. ALL WORKS TO BE IN ACCORDANCE WITH AS 3500-2003 NATIONAL PLUMBING DRAINAGE CODE PART 3 - STORMWATER DRAINAGE.
17. UNLESS NOTED OTHERWISE, SUB-SOIL DRAINS ARE TO BE INSTALLED IN ACCORDANCE WITH AS3500.3 ALONGSIDE WALLS THAT IMPEDE THE NATURAL FLOW OF GROUNDWATER. THIS MAY ALSO INVOLVE TRENCHING INTO THE CLAY OR ROCK SUBGRADE TO DIRECT GROUNDWATER AWAY FROM STRUCTURES.
18. IF NOT INDICATED ON PLANS, PROVIDE LEAF CATCHERS TO ALL DOWNPIPES OR GUTTER GUARD TO ALL EAVES GUTTERS.

ON-SITE DETENTION SYSTEM SUMMARY NOTES NORTHERN BEACHES COUNCIL (MANLY AREA)

TOTAL SITE AREA	591 m^2
DESIGN METHOD USED	DRAINS (REFER TO DISK)
PRE DEVELOPMENT IMPERVIOUS AREA	345 m^2 (58 %)
POST DEVELOPMENT IMPERVIOUS AREA	353 m^2 (60 %)
INCREASE	8 m^2
OSD REQUIREMENT	
THIS IS A NEW SINGLE DWELLING. OSD IS REQUIRED FOR THIS DEVELOPMENT.	
PRE DEVELOPMENT SITE DISCHARGE	
5 YR	18 l/s
100 YR	36 l/s
POST DEVELOPMENT SITE DISCHARGE	
5 YR	13 l/s (9 l/s FROM OSD)
100 YR	18 l/s (9 l/s FROM OSD)
VOLUME OF OSD REQUIRED	9.2 m^3 (NOTE: 10.0 m^3 PROVIDED)
BASIX RAINWATER RE-USE REQUIREMENT	10.0 m^3
RAINWATER RE-USE PROVIDED	10.0 m^3
NOTE: OSD STORAGE OFFSET WITH RAINWATER-REUSE AS PER MANLY COUNCIL POLICY	
MAXIMUM CONCENTRATED DISCHARGE TO KERB	11 l/s (OSD & DRIVEWAY BYPASS DISCHARGE)

NOTE:

STORMWATER DRAWINGS DO NOT INCLUDE SUBSOIL AGRICULTURAL DRAINAGE DETAILS FOR D.A. SUBMISSION. NORTHERN BEACHES CONSULTING ENGINEERS PTY LTD MUST BE COMMISSIONED TO INCLUDE THESE DETAILS ONLY WHEN CONSTRUCTION CERTIFICATE AND/OR CONSTRUCTION DOCUMENTATION IS COMPLETE AND PROVIDED.

NOTE: EASEMENT REFUSAL

DESIGN FOR SUBJECT SITE HAS BEEN BASED UPON THE REFUSAL OF A DRAINAGE EASEMENT. REFER REFUSAL LETTER.

LEGEND

DP1 ●	100mm ϕ DOWNPIPE (uPVC SEWER GRADE) DISCHARGE TO RWT VIA A CHARGED SYSTEM
DP2 ●	50mm ϕ uPVC DOWNPIPE DISCHARGE TO DISPERSION TRENCH
DP3 ●	100mm ϕ uPVC DOWNPIPE DISCHARGE TO BOUNDARY/FLUSH OUT PIT
RHD	RAINHEAD - REFER DETAIL
BGI	BOX GUTTER - REFER DETAIL
PD	PLANTER DRAIN - REFER DETAIL
FD	FLOOR DRAIN - REFER DETAIL
SP	SPREADER
OF	EMERGENCY OVERFLOW WEIR WEIRS TO BE INSTALLED TO AS3500.3 MIN. 2x50ϕ SPITTERS OR 300x50 CUT
I.O.	INSPECTION OPENING
	50 ϕ uPVC
	NEW STORMWATER PIPE
	STORMWATER PIPE FALL DIRECTION IN CHARGED SYSTEMS
	STORMWATER PIPE FLOW DIRECTION
PIT	STORMWATER PIT
GDI	GRATED DRAIN GDI - 150 MIN DEPTH x 150 WIDE GRATED DRAIN
RWT 1, RWT 2	RAINWATER TANKS TO COLLECT ALL DPI DOWNPIPES. RWT 1 = 5000 L RWT 2 = 5000 L

NOTE: ALL DRAINAGE LINES ARE INDICATIVE ONLY. LOCATION MAY VARY DUE TO CONSTRAINTS.

NOTE: BOX GUTTERS

ALL BOX GUTTER SYSTEMS SHOWN ON THESE PLANS ARE TO BE INSTALLED STRICTLY IN ACCORDANCE WITH THE ASSOCIATED DETAILS. IF ANY CHANGE TO THE BOX GUTTER CONFIGURATION IS PROPOSED, NOTIFY THE ENGINEER FOR RE-DESIGN. IF THE INSTALLED BOX GUTTER DOES NOT STRICTLY COMPLY WITH OUR DESIGN, CERTIFICATION OF THE HYDRAULIC SYSTEM MAY BE REFUSED.

NOTE: CHARGED SYSTEM

ALL PIPE WORK IN CHARGED SYSTEM TO BE 100mm ϕ uPVC PRESSURE OR SEWER GRADE PIPES WITH ALL JOINTS PRESSURE SEALED TO 500mm ABOVE INLET LEVEL OF RWT.

NOTE: EXCAVATION AROUND TREES

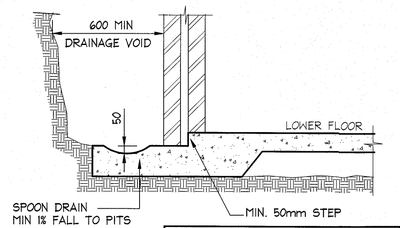
CARE SHOULD BE TAKEN WHEN UNDERTAKING WORKS IN THE VICINITY OF SELECTED TREES NOT TO DISTURB THE TREE ROOT SYSTEM. HAND DIGGING OF TRENCHES ETC MAY BE NECESSARY. REFER ARBORISTS REPORT.

NOTE: EXISTING STORMWATER SYSTEM

EXISTING STORMWATER SYSTEM TO BE UTILISED WHERE ADEQUATE AND UPGRADED AS REQUIRED IN ACCORDANCE WITH AS3500.3

NOTE:

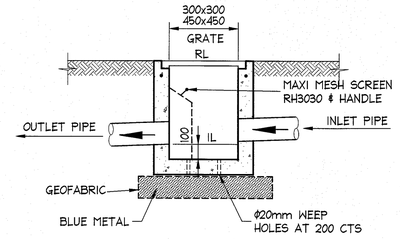
ALL DPI DOWN PIPES TO DISCHARGE INTO RAINWATER RE-USE TANKS IN ACCORDANCE WITH AS 3500.3



NOTE: REFER STRUCTURAL ENGINEERS PLANS FOR STRUCTURAL DETAILS

SPOON DRAIN DETAIL

SCALE = 1 : 20



PRECAST OR CAST INSITU PIT
REFER STORMWATER NOTES
ALTERNATIVE POLYPROPYLENE PIT BY MANUFACTURER

TYPICAL PIT DETAIL

SCALE = 1 : 20

www.dialbeforeyoudig.com.au
DIAL 1100 BEFORE YOU DIG

NOTE:

NO INVESTIGATION OF UNDERGROUND SERVICES HAS BEEN MADE. ALL RELEVANT AUTHORITIES SHOULD BE NOTIFIED PRIOR TO ANY EXCAVATION ON OR NEAR THE SITE

DEVELOPERS & EXCAVATORS MAY BE HELD FINANCIALLY RESPONSIBLE BY THE ASSET OWNER SHOULD THEY DAMAGE UNDERGROUND NETWORKS.

CARELESS DIGGING CAN:
- CAUSE DEATH OR SERIOUS INJURY TO WORKERS AND THE GENERAL PUBLIC
- INCONVENIENCE USERS OF ELECTRICITY, GAS, WATER AND COMMUNICATIONS
- LEAD TO CRIMINAL PROSECUTION AND DAMAGES CLAIMS
- CAUSE EXPENSIVE FINANCIAL LOSSES TO BUSINESS
- CUT OFF EMERGENCY SERVICES
- DELAY PROJECT COMPLETION TIMES WHILE THE DAMAGE IS REPAIRED

MINIMISE YOUR RISK AND DIAL BEFORE YOU DIG. - TEL. 1100

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Date:	Issue:	Description:	By:	Review:
29-03-2019	B	REVISED DRAINAGE	CF	MW
26-03-2019	A	ISSUED FOR DA SUBMISSION	MC	MW

DOCUMENT CERTIFICATION
Date : 29/3/19
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Architect: WATERSHED DESIGN

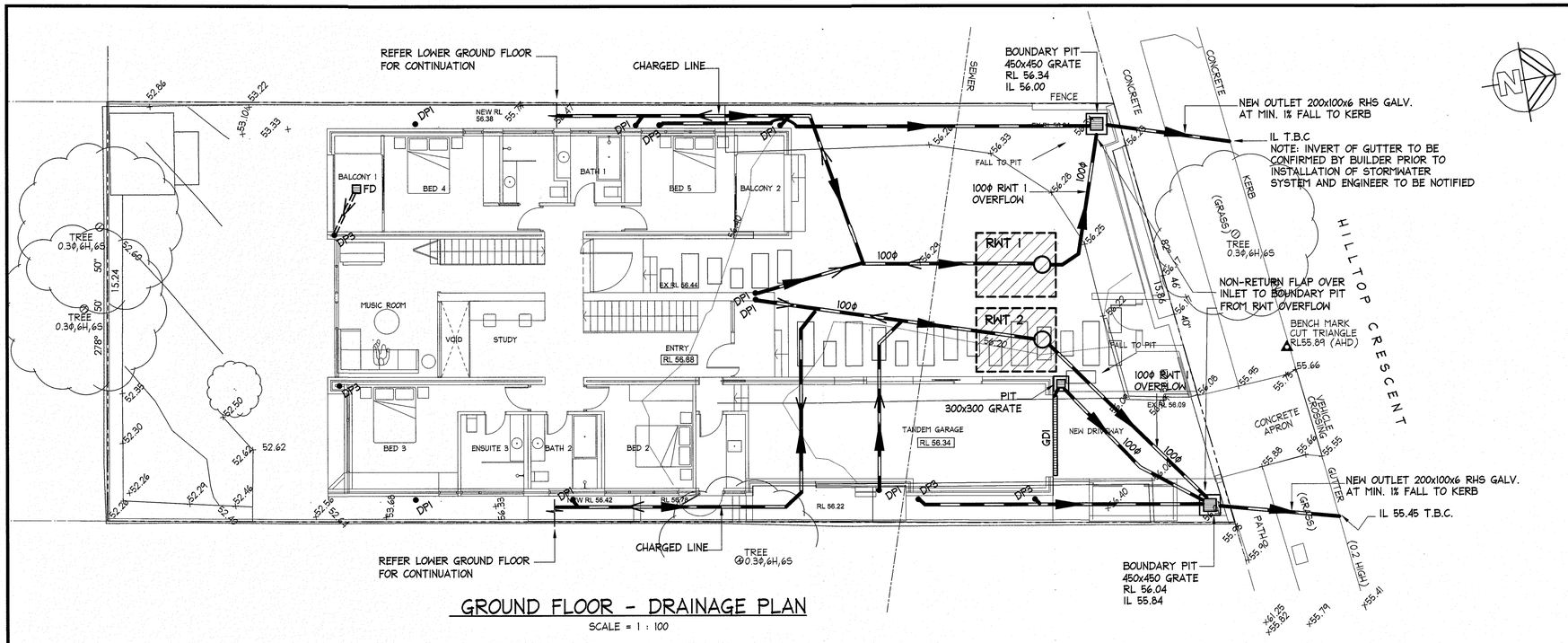
Client: MONIQUE AND ANDREW THOMPSON

Project: PROPOSED RESIDENCE 5A HILLTOP CRESCENT FAIRLIGHT

Drawing Title: STORMWATER MANAGEMENT LOWER GROUND FLOOR - DRAINAGE PLAN

Date:	Design:	Drawn:
MARCH 2019	CF	MC

Job No:	Drawing No:	Issue:
190101	D01	B



GROUND FLOOR - DRAINAGE PLAN

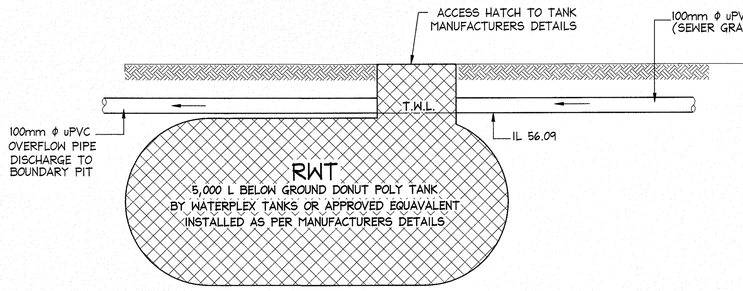
SCALE = 1 : 100

RAINWATER RE-USE TANKS:

1. CONSIDERING THE ROOF CATCHMENT AREA, LOCATION OF PROPERTY, INTENDED USE OF RAINWATER AND GARDEN SIZE WE RECOMMEND PROVIDING A RAINWATER TANK FOR USE AS PER BASIX REQUIREMENTS, SYDNEY WATER AND NSW HEALTH REQUIRMENTS FOR NON DRINKING USE ONLY AS FOLLOWS:
   a) TO WATER GARDEN AREAS b) WASHING CARS c) CONNECT TO W.C.
   d) CONNECT TO WASHING MACHINE. e) USED IN HOT WATER SYSTEMS.
   f) FILLING SWIMMING POOLS, SPAS AND ORNAMENTAL PONDS.
2. THE TANKS PROVIDED WILL REDUCE PRESSURE ON COUNCIL'S STORMWATER INFRASTRUCTURE.
3. REFERENCES:
   COOMBES P.J. & KUCZERA G. (2001), "RAINWATER TANK DESIGN FOR WATER SUPPLY & STORMWATER MANAGEMENT." STORMWATER INDUSTRY ASSOCIATION REGIONAL CONFERENCE.
   PATRICK DUPONT & STEVE SHACKEL, "RAINWATER"
   AUSTRALIAN GOVERNMENT (2004), "GUIDANCE ON USE OF RAINWATER TANKS"
4. ALL CONNECTIONS TO PLUMBING AND RAINWATER TANKS TO BE IN ACCORDANCE WITH SYDNEY WATERS' GUIDE "INSTALLING A RAINWATER TANK" AVAILABLE AT www.sydneywater.com.au
5. PROVIDE A DUAL SUPPLY SYSTEM AND BACKFLOW PREVENTION SYSTEM IN ACCORDANCE WITH 'BASIX-DESIGN GUIDE FOR SINGLE DWELLINGS' BY NSW DEPARTMENT OF INFRASTRUCTURE, PLANING AND NATURAL RESOURCES.
6. IF NOT SPECIFIED ON PLANS, THE FIRST FLUSH SYSTEM IS TO HAVE A MINIMUM SIZE OF 20L PER 100m2 OF ROOF CATCHMENT AREA PRIOR TO ENTERING THE RAINWATER TANK. INDIVIDUAL SITE ANALYSIS IS REQUIRED IN HEAVILY POLLUTED AREAS TO DETERMINE IF LARGER VOLUMES OF FIRST FLUSH RAINWATER ARE TO BE DIVERTED. IF IN DOUBT, CHECK WITH LOCAL HEALTH AUTHORITIES.
7. SCREENED DOWNPIPE RAINWATER HEAD OR OTHER SUITABLE LEAF AND DEBRIS DEVICE TO BE INSTALLED ON EACH DOWNPIPE. SCREEN MESH TO BE 4-6mm AND DESIGNED TO BE SELF-CLEANING.
8. FIRST FLUSH DEVICES, OR APPROVED ALTERATIVE, TO BE INSTALLED WITH AN AUTOMATED DIVERSION AND DRAINAGE SYSTEM, THAT IS, NO MANUAL DIVERSION AND DRAINAGE VALVES. REFER TYPICAL FLUSH OUT PIT FOR DETAILS.
9. BEFORE PURCHASING MATERIALS OR PAINT TO BE USED ON ROOF CATCHMENT AREAS, THE MANUFACTURER'S RECOMMENDATIONS ON LABELS AND BROCHURES FOR RAINWATER TANK SUITABILITY TO BE READ AND ADHERED TO.
10. PRE-STORAGE PITS FOR UNDERGROUND RAINWATER STORAGE TANKS AND FLUSH OUT PITS MAY ASSIST IN LIMITING SILT, AND PREVENT VERMIN, INSECTS (INCLUDING MOSQUITOES) AND DEBRIS FROM ENTERING THE RAINWATER STORAGE AREA.
11. BUILDER/PLUMBER TO ENSURE THE INSTALLATION OF THE RAINWATER TANK SYSTEM IS IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS AND THE RAINWATER TANK DESIGN AND INSTALLATION HANDBOOK - HB 230-2008. IF IN DOUBT CONTACT ENGINEER.
12. RAINWATER TANK TO BE WATER PROOFED IN ACCORDANCE WITH HB 230-200B

NOTE:
ALL DOWN PIPES TO DISCHARGE INTO RAINWATER RE-USE TANK IN ACCORDANCE WITH AS 3500.3

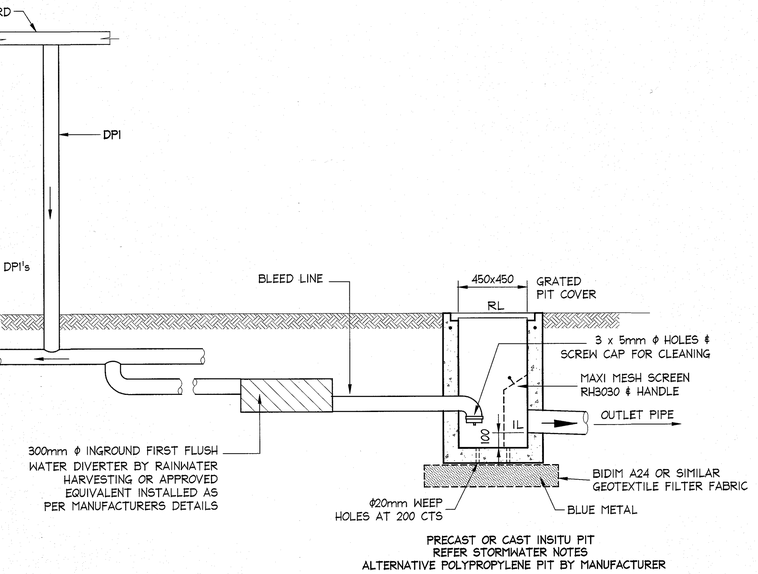
NOTE:
ALL PIPE WORK IN CHARGED SYSTEM TO BE 100mm ϕ uPVC SEWER GRADE PIPES WITH ALL JOINTS PRESSURE SEALED TO 500mm ABOVE INLET LEVEL OF RAINWATER TANK.



TANK INSTALLATION AS PER MANUFACTURERS DETAILS

TYPICAL SECTION OF IN-GROUND RWT

SCALE = N.T.S.



TYPICAL SURFACE/FLUSH OUT PIT DETAIL

SCALE = 1 : 20

LEGEND

DP1 ●	100mm ϕ DOWNPIPE (uPVC SEWER GRADE) DISCHARGE TO RWT VIA A CHARGED SYSTEM
DP2 ●	50mm ϕ uPVC DOWNPIPE DISCHARGE TO DISPERSION TRENCH
DP3 ●	100mm ϕ uPVC DOWNPIPE DISCHARGE TO BOUNDARY/FLUSH OUT PIT
RHD	RAINHEAD - REFER DETAIL
BGI	BOX GUTTER - REFER DETAIL
PD	PLANTER DRAIN - REFER DETAIL
FD	FLOOR DRAIN - REFER DETAIL
	SPREADER
	EMERGENCY OVERFLOW WEIR WEIRS TO BE INSTALLED TO AS3500.3 MIN. 2x50ϕ SPITTERS OR 300x50 CUT
	INSPECTION OPENING
	50 ϕ uPVC
	NEW STORMWATER PIPE
	STORMWATER PIPE FALL DIRECTION IN CHARGED SYSTEMS
	STORMWATER PIPE FLOW DIRECTION
PIT	STORMWATER PIT
GDI	GRATED DRAIN GDI - 150 MIN DEPTH x 150 WIDE GRATED DRAIN
RWT 1, RWT 2	RAINWATER TANKS TO COLLECT ALL DPI DOWNPIPES. RWT 1 = 5000 L RWT 2 = 5000 L

NOTE: ALL DRAINAGE LINES ARE INDICATIVE ONLY. LOCATION MAY VARY DUE TO CONSTRAINTS.

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Date:	Issue:	Description:	By:	Review:
29-03-2019	B	REVISE DRAINAGE	CF	MW
26-03-2019	A	ISSUED FOR DA SUBMISSION	MC	MW

DOCUMENT CERTIFICATION
Date : 29/3/19
Stewart McGeady
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Architect: WATERSHED DESIGN	Project: PROPOSED RESIDENCE 5A HILLTOP CRESCENT FAIRLIGHT	Date: MARCH 2019	Design: CF / Drawn: MC
Client: MONIQUE AND ANDREW THOMPSON	Drawing Title: STORMWATER MANAGEMENT GROUND FLOOR - DRAINAGE PLAN	Job No: 190101	Drawing No: D02 / Issue: B

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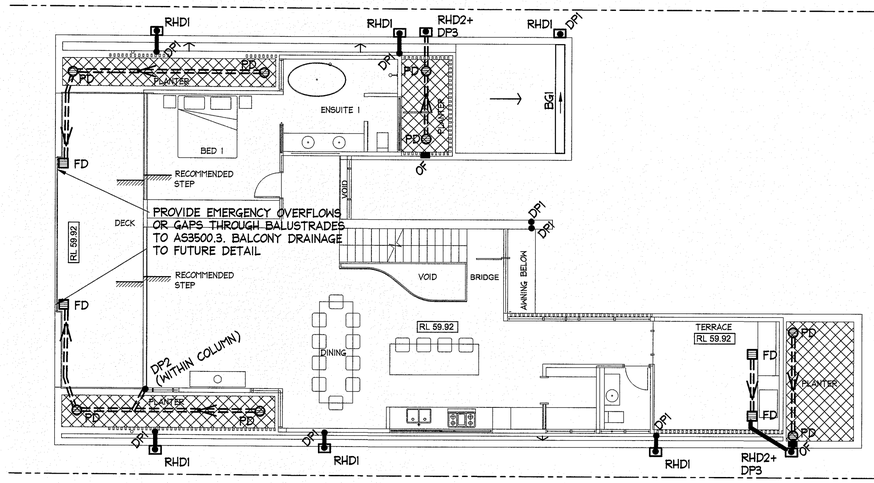


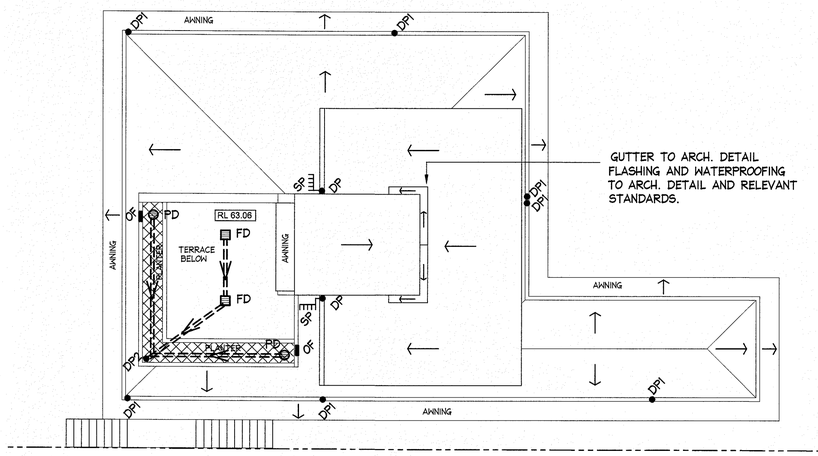
UPPER FLOOR - DRAINAGE PLAN

SCALE = 1 : 100

DENOTES EXTENT OF ATLANTIS DRAINAGE SYSTEM
(OR SIMILAR APPROVED)
INSTALLATION TO MANUFACTURER'S SPECIFICATIONS
AND IN ACCORDANCE WITH AS3500.3

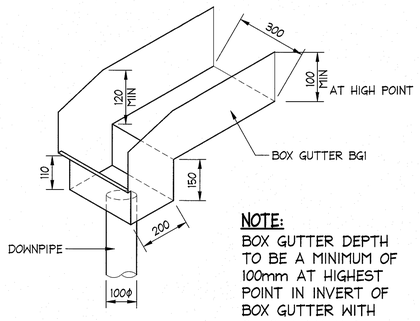
NOTE: BOX GUTTERS

ALL BOX GUTTER SYSTEMS SHOWN ON THESE PLANS ARE TO BE INSTALLED STRICTLY IN ACCORDANCE WITH THE ASSOCIATED DETAILS. IF ANY CHANGE TO THE BOX GUTTER CONFIGURATION IS PROPOSED, NOTIFY THE ENGINEER FOR RE-DESIGN. IF THE INSTALLED BOX GUTTER DOES NOT STRICTLY COMPLY WITH OUR DESIGN, CERTIFICATION OF THE HYDRAULIC SYSTEM MAY BE REFUSED.



ROOF AND TERRACE - DRAINAGE PLAN

SCALE = 1 : 100



NOTE:
BOX GUTTER DEPTH TO BE A MINIMUM OF 100mm AT HIGHEST POINT IN INVERT OF BOX GUTTER WITH 0.5 % MINIMUM FALL TO RAINHEAD.

RAINHEAD RHD1, RHD2 AND BOX GUTTER DETAIL

SCALE = NTS

LEGEND

DP1	100mm ϕ DOWNPIPE (uPVC SEWER GRADE) DISCHARGE TO RWT VIA A CHARGED SYSTEM
DP2	50mm ϕ uPVC DOWNPIPE DISCHARGE TO DISPERSION TRENCH
DP3	100mm ϕ uPVC DOWNPIPE DISCHARGE TO BOUNDARY/FLUSH OUT PIT
RHD	RAINHEAD - REFER DETAIL
BGI	BOX GUTTER - REFER DETAIL
PD	PLANTER DRAIN - REFER DETAIL
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SP	SPREADER
OF	EMERGENCY OVERFLOW WEIR WEIRS TO BE INSTALLED TO AS3500.3 MIN. 2x50ϕ SPITTERS OR 300x50 CUT
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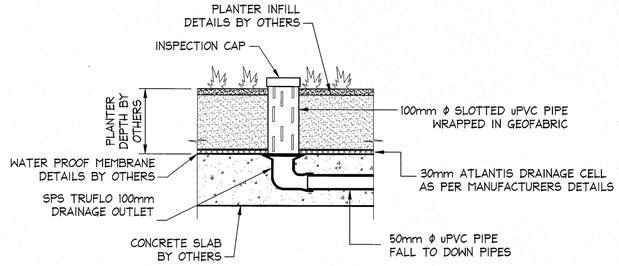
	50 ϕ uPVC
	NEW STORMWATER PIPE
	STORMWATER PIPE FALL DIRECTION IN CHARGED SYSTEMS
	STORMWATER PIPE FLOW DIRECTION
PIT	STORMWATER PIT
GDI	GRATED DRAIN GDI - 150 MIN DEPTH x 150 WIDE GRATED DRAIN
RWT 1, RWT 2	RAINWATER TANKS TO COLLECT ALL DP1 DOWNPIPES. RWT 1 = 5000 L RWT 2 = 5000 L

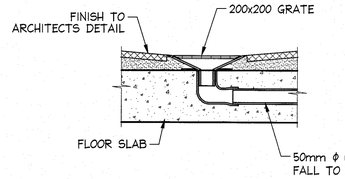
NOTE: ALL DRAINAGE LINES ARE INDICATIVE ONLY. LOCATION MAY VARY DUE TO CONSTRAINTS.



REFER TO MANUFACTURERS SPECIFICATION
FOR SPS DRAINAGE OUTLETS

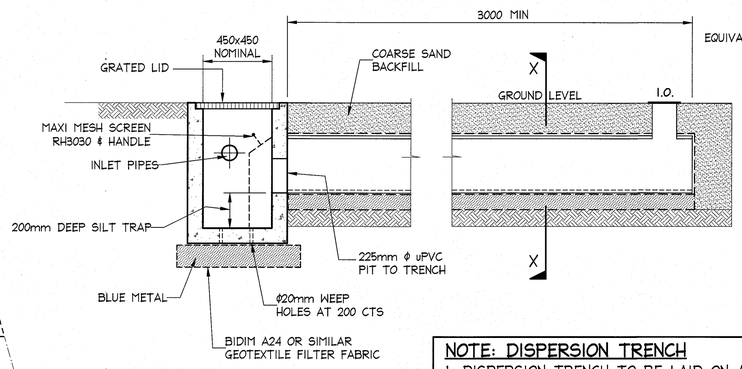
STANDARD PLANTER DRAIN - 'PD'

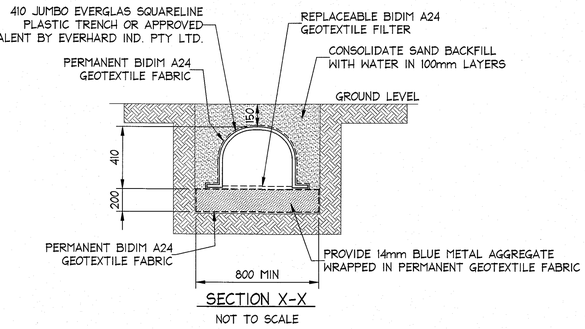
SCALE = 1 : 10



STANDARD FLOOR DRAIN - 'FD'

SCALE = 1 : 10
OR TO ARCHITECTS DETAIL





SECTION X-X
NOT TO SCALE

NOTE: DISPERSION TRENCH

1. DISPERSION TRENCH TO BE LAID ON A LEVEL CONTOUR.
2. GROUND LEVEL ABOVE TRENCH MUST BE LEVEL SO AS TO EVENLY DISPERSE WATER DOWN HILL OF THE TRENCH

DISPERSION TRENCH LONGITUDINAL SECTION

NOT TO SCALE

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Date : 27/3/19
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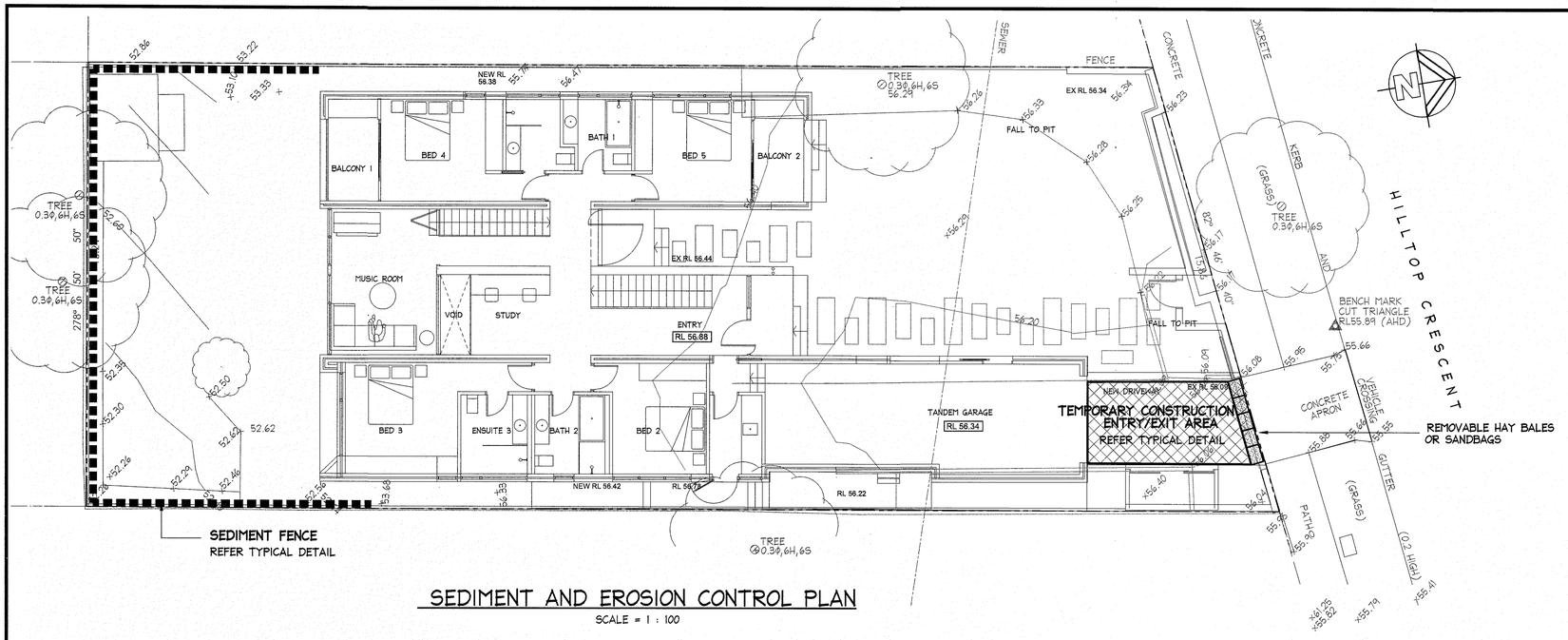
Architect: WATERSHED DESIGN	Project: PROPOSED RESIDENCE 5A HILLTOP CRESCENT FAIRLIGHT	Date: MARCH 2019	Design: CF / Drawn: MC
Client: MONIQUE AND ANDREW THOMPSON	Drawing Title: STORMWATER MANAGEMENT DRAINAGE PLANS	Job No: 190101	Drawing No: D03 / Issue: B

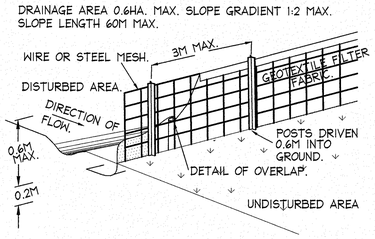


SEDIMENT AND EROSION CONTROL PLAN

SCALE = 1 : 100

GENERAL NOTES :

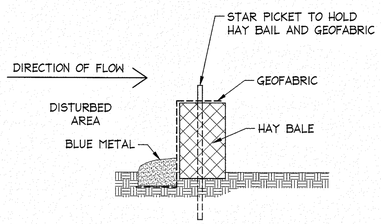
1. CONSTRUCTION VEHICLES ARE TO LEAVE AND ENTER THE SITE OVER AN ALL WEATHER SURFACE CONSISTING OF COURSE CRUSHED STONE OR BLUE METAL CONSTRUCTED WITHIN THE FRONT SETBACK AREA OPPOSITE THE EXISTING FOOTPATH CROSSING UNLESS NOTED OTHERWISE.
2. EXCAVATION MACHINERY ARE TO BE UNLOADED AND LOADED UPON THIS ALL WEATHER SURFACE. CONCRETE PUMPS AND TRUCKS WILL ALSO UTILISE THE ALL WEATHER SURFACE FOR THEIR OPERATIONS.
3. MATERIALS WILL BE UNLOADED UPON THE ALL WEATHER SURFACE WITHIN THE FRONT SETBACK AREA BY MEANS OF CRANES MOUNTED ON THE BACK OF DELIVERY TRUCKS OR UNLOADED BY HAND. IT IS NOT ENVISAGED THAT A MOBILE CRANE WILL BE REQUIRED DURING THE CONSTRUCTION PROCESS.
4. SOME STOCKPILING OF TOPSOIL REMOVED FROM THE BUILDING AREA MAY BE STORED ON THE SITE DURING THE CONSTRUCTION WITHIN THE PROPERTY IN AN AREA ENCLOSED WITHIN THE SEDIMENT CONTROL FENCING.
5. ALL EXCAVATED & CONSTRUCTION MATERIALS, SHED, SKIP BINS, TEMPORARY WATER CLOSETS, SPOIL AND EQUIPMENT, ETC SHALL BE KEPT WITHIN THE PROPERTY. NO VEHICLES OR MACHINES SHALL BE KEPT WITHIN THE PROPERTY. NO VEHICLES OR MACHINES SHALL STAND ON COUNCIL FOOTPATHS FOR LARGE LENGTHS OF TIME.
6. ALL RUBBISH & RECYCLABLE MATERIAL SHALL BE STOCKPILED IN WASTE BINS IN THE AREA NOMINATED ON THE SITE PLAN WITHIN THE SITE BOUNDARY. PUBLIC PROPERTY SHALL BE KEPT FREE OF RUBBISH AND RECYCLABLES AT ALL TIMES ANY WASTE MATERIALS SHALL BE REGULARLY COLLECTED FROM THE SITE AND DISPOSED OF IN AN APPROPRIATE FASHION.
7. ANY BUILDING / DEMOLITION WORKS INVOLVING ASBESTOS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RELAVANT STANDARDS.
8. VEHICLES LEAVING THE SITE WILL DO SO VIA THE ALL WEATHER BALLAST DRIVEWAY MADE OF COURSE AGGREGATE OR SIMILLAR LOCATED WITHIN THE FRONT SETBACK AREA OF THE DEVELOPMENT. ANY DIRT OR MATERIAL DEPOSITED ON THE ROAD RESERVE OR ROADWAY IS TO BE PROMPTLY CLEANED.
9. ANY EXCAVATED AREA REQUIRED SUPPORT WILL BE UNDERTAKEN BY THE OWNER USING STRUCTURALLY APPROVED RETAINING STRUCTURES.
10. ADEQUATE SAFETY SIGNAGE MUST BE ERECTED IN A PROMINENT POSITION ON THE WORK SITE, WARNING OF UNAUTHORISED ENTRY TO WORK SITE AND INTENDING DANGERS.
11. SAFETY FENCES SHALL BE PROVIDED AROUND ALL BOUNDARIES UNLESS A CONTINUOUS STRUCTURALLY ADEQUATE FENCE PRESENTLY EXISTS. THE FENCING SHALL BE ADEQUATE TO RESTRICT PUBLIC ACCESS TO THE SITE WHEN BUILDING WORK IS NOT IN PROGRESS OR THE SITE IS UNOCCUPIED.
12. NOISE LEVELS SHALL NOT EXCEED COUNCIL REGULATION LEVELS. BUILDING AND DEMOLITION WORKS SHALL ONLY BE CARRIED OUT BETWEEN HOURS AND DAYS SPECIFIED BY COUNCIL.
13. GEOTEXTILE FABRIC SHALL BE PLACED ON THE INSIDE OF THE SITE FENCING PRIOR TO SITE DISTURBANCE TO PREVENT SEDIMENT WASHING FROM CLEARED AND DISTURBED AREAS OF THE SITE INTO THE STORMWATER SYSTEM DURING CONSTRUCTION UNCONTAMINATED RUNOFF FROM CLEARED OR DISTURBED AREAS IS TO BE DIRECTED TO A TEMPORARY SILT ARRESTOR PIT THAT SHALL BE PROVIDED WITHIN THE SITE AT THE STREET BOUNDARY PROCESSING SITE STORMWATER BEFORE IT IS DISCHARGED TO THE STREET DRAINAGE SYSTEM OR WATERCOURSE.
14. ALL TOP SOIL STRIPPED & STOCKPILED ON SITE IS TO BE BE PLACED IN NOMINATED AREAS ON PLAN. ALL DISTURBED AREAS ARE TO BE STABILISED UPON THE COMPLETION OF BUILDING WORKS.
15. ALL SEDIMENT CONTROL STRUCTURES ARE TO BE CONTINUALLY MAINTAINED DURING CONSTRUCTION AND INSPECTED FOR STRUCTURAL DAMAGE AFTER EACH RAINFALL EVENT, WITH TRAPPED SEDIMENT BEING REMOVED TO THE TOPSOIL STOCKPILE.
16. WHERE THERE IS THE POTENTIAL OF SITE EROSION TO PRODUCE EXCESSIVE SEDIMENT RUNOFF SUITABLE GEOTEXTILE BARRIERS SHALL BE PLACED TO ALLEVIATE THE RISK ACCORDINGLY. BARE SURFACES SHALL BE KEPT MOIST TO REDUCE DUST LEVELS. GEOTEXTILE FABRIC LOCATED ON THE INSIDE OF FENCES SHALL ALSO BE UTILISED FOR DUST CONTROL WHERE NECESSARY.



SEDIMENT FENCE - OPTION 1

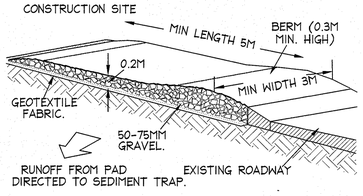
CONSTRUCTION NOTES:

1. CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE.
2. DRIVE 1.5 METRE LONG STAR PICKETS INTO GROUND, 3 METRES APART.
3. DIG A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF 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 POST WITH A 150mm OVERLAP.



SEDIMENT FENCE - OPTION 2

SCALE = N.T.S.



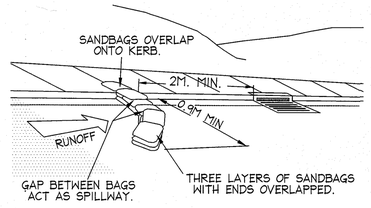
TYPICAL TEMPORARY CONSTRUCTION ENTRY/EXIT DETAIL

CONSTRUCTION NOTES:

1. STRIP TOPSOIL AND LEVEL SITE.
2. COMPACT SUBGRADE.
3. COVER AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
4. CONSTRUCT 200mm THICK PAD OVER GEOTEXTILE USING ROADBASE or 30mm AGGREGATE. MINIMUM LENGTH 15 METRES OR TO BUILDING ALIGNMENT. MINIMUM WIDTH 3 METRES.
5. CONSTRUCT HUMP IMMEDIATELY WITHIN BOUNDARY TO DIVERT WATER TO A SEDIMENT FENCE or OTHER SEDIMENT TRAP.

SCHEDULE OF WORKS:

1. SILT FENCE AND ASSOCIATED WORKS INCLUDING INTERCEPTOR DRAIN IS TO BE INSTALLED BEFORE THE COMMENCEMENT OF ANY EXCAVATION.
2. CUTS TO BE EXECUTED TO THE REQUIRED LEVEL USING CONVENTIONAL EXCAVATION MACHINERY. INITIALLY THE DEPTH OF FILL/CLAY IS TO BE ESTABLISHED TO ENSURE NEIGHBOURING PROPERTIES ARE NOT ADVERSELY AFFECTED. EARTH BATTERS TO BE A MAXIMUM SLOPE OF 1.0 m VERT. TO 1.7 m HORIZ. (AS PER GEOTECHNICAL REPORT). ANY BATTERS GREATER THAN 1.0 m VERT. TO 1.7 m HORIZ. ARE TO BE ADEQUATELY SHORED IN ACCORDANCE WITH THE ENGINEERS DETAILS AND INSTRUCTIONS.
3. ANY PERMANENT RETAINING STRUCTURE IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERS DETAILS AND INSTRUCTIONS.
4. ALL PERMANENT RETAINING STRUCTURES ARE TO BE COMPLETED WITH MINIMUM DELAY FOLLOWING EXCAVATION.

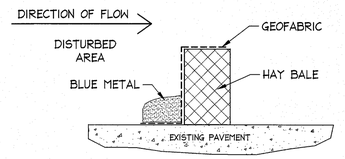


SANDBAG KERB INLET SEDIMENT TRAP

SCALE = N.T.S.

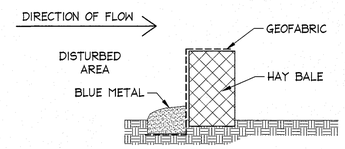
NOTES:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES TO BE INSPECTED AND MAINTAINED DAILY BY SITE MANAGER.
2. MINIMISE DISTURBED AREAS'
3. ALL STOCKPILES TO BE CLEAR FROM DRAINS, GUTTERS AND FOOTPATHS.
4. DRAINAGE IS TO BE CONNECTED TO STORMWATER SYSTEM AS SOON AS POSSIBLE.
5. ROADS AND FOOTPATH TO BE SWEPT DAILY.



REMOVABLE HAY BALE DETAIL

SCALE = N.T.S.



REMOVABLE HAY BALE DETAIL

SCALE = N.T.S.

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DIAL 1100 BEFORE YOU DIG

NOTE:

NO INVESTIGATION OF UNDERGROUND SERVICES HAS BEEN MADE. ALL RELEVANT AUTHORITIES SHOULD BE NOTIFIED PRIOR TO ANY EXCAVATION ON OR NEAR THE SITE

DEVELOPERS & EXCAVATORS MAY BE HELD FINANCIALLY RESPONSIBLE BY THE ASSET OWNER SHOULD THEY DAMAGE UNDERGROUND NETWORKS.

CARELESS DIGGING CAN:
- CAUSE DEATH OR SERIOUS INJURY TO WORKERS AND THE GENERAL PUBLIC
- INCONVENIENCE USERS OF ELECTRICITY, GAS, WATER AND COMMUNICATIONS
- LEAD TO CRIMINAL PROSECUTION AND DAMAGES CLAIMS
- CAUSE EXPENSIVE FINANCIAL LOSSES TO BUSINESS
- CUT OFF EMERGENCY SERVICES
- DELAY PROJECT COMPLETION TIMES WHILE THE DAMAGE IS REPAIRED

MINIMISE YOUR RISK AND DIAL BEFORE YOU DIG. - TEL. 1100

ISSUED FOR D.A. SUBMISSION ONLY NOT FOR CONSTRUCTION

IF IN DOUBT ASK

NB Consulting Engineers

A1

Date:	Issue:	Description:	By:	Review:
26-03-2019	A	ISSUED FOR DA SUBMISSION	MC	MW

DOCUMENT CERTIFICATION
Date : 27/3/19
Stewart McGeady
B.E.(Civil),MIEAust. .
(Director NB Consulting Engineers)

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Client: MONIQUE AND ANDREW THOMPSON

Project: PROPOSED RESIDENCE
5A HILLTOP CRESCENT FAIRLIGHT

Drawing Title: SEDIMENT AND EROSION CONTROL PLAN AND DETAILS

Date:	Design:	Drawn:
MARCH 2019	CF	MC

Job No:	Drawing No:	Issue:
190101	D04	A