

PIPEWORK

- STW STORMWATER
SS SUBSOIL
DP DOWNPIPE
RD ROOF DRAINAGE
EXISTING SERVICE
EXISTING SERVICE
X X X X X X
TO BE DISCONNECTED
AND REMOVED

PIPEWORK SYMBOLS

- R RISER
D DROPPER
COF CAPPED OFF
HP HORIZONTAL PENETRATION
DOF DIRECTION OF FLOW
NC NEW CONNECTION
C CONTINUATION
MH MAN HOLE
IO INSPECTION OPENING
STWIP STORMWATER KERB INLET PIT
STWIP STORMWATER INLET PIT
GRD GRATED DRAIN
SO SAFETY OVERFLOW
SP SPREADER
RWO RAINWATER OUTLET
BRWO BALCONY RAINWATER OUTLET
PRWO PLANTER RAINWATER OUTLET
SRWO SPOON DRAIN RAINWATER OUTLET

ABBREVIATIONS

- FFL FINISH FLOOR LEVEL
IL INVERT LEVEL
RL REDUCED LEVEL
UPVC UNPLASTICIZED POLYVINYL CHLORIDE
NTS NOT TO SCALE
UNO UNLESS NOTED OTHERWISE
SQ SQUARE
mm MILLIMETRES
m METRES
m2 SQUARE METRES
m3 CUBIC METRES
/sec PER SECOND
MIN MINIMUM
MAX MAXIMUM
APPR APPROXIMATELY
DIA DIAMETER
EX EXISTING
AHD AUSTRALIAN HEIGHT DATUM

STORMWATER
GENERAL NOTES

ALL IN ACCORDANCE WITH COUNCIL'S
STORMWATER REQUIREMENTS

PIPEWORK DESIGN

ALL PIPEWORK IS SIZED AND DESIGNED TO HANDLE
A 1:100 YEAR EVENT RAINFALL

PIPEWORK

ALL PIPEWORK TO BE 100mm @ 1% FALL (UNO)

STORMWATER PIT SIZES

MINIMUM INTERNAL MEASUREMENTS:				
DEPTH TO BASE OF CHAMBER	RECTANGULAR WIDTH	RECTANGULAR LENGTH	CIRCULAR	LADDER / STEP IRON
SMALLER THAN 600	450	450	600	NO
601 TO 900	600	600	900	NO
901 TO 1200	600	900	1050	NO
GREATER THAN 1200	900	900	1050	YES

NORTHERN BEACHES
COUNCIL NOTES

ALL IN ACCORDANCE WITH NORTHERN BEACHES COUNCIL'S
STORMWATER REQUIREMENTS (OLD MANY COUNCIL
STORMWATER MANAGEMENT POLICY)

PROPOSED WORKS
ALTERATIONS AND ADDITIONS (SINGLE DWELLING)

ON SITE DETENTION

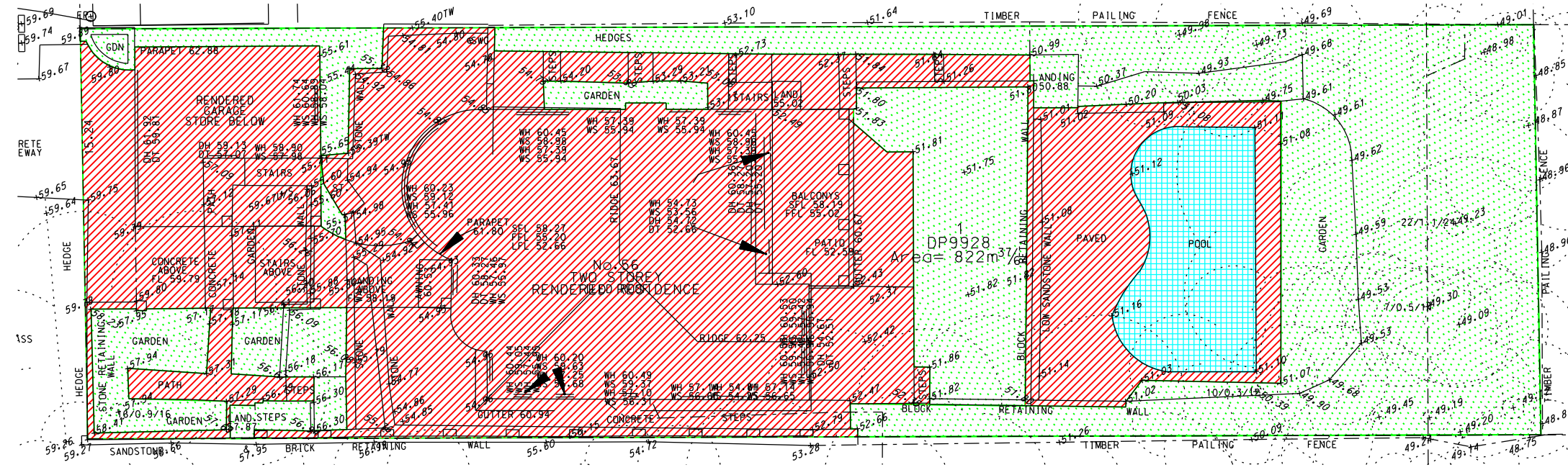
NO ON SITE DETENTION IS REQUIRED IF THE INCREASE
IN IMPERVIOUS AREAS IS LESS THAN 50.0m2 AND THE
TOTAL OF IMPERVIOUS AREAS IS LESS THAN 65.0% OF
THE SITE AREA.

SITE AREA: 882.0m2
459.0m2 (55.8%) IMP. PRE - 416.3m2 (50.6%) IMP. POST
+ 42.7m2 DECREASE IN IMPERVIOUS AREAS

SUBSEQUENTLY, ON SITE DETENTION IS NOT REQUIRED

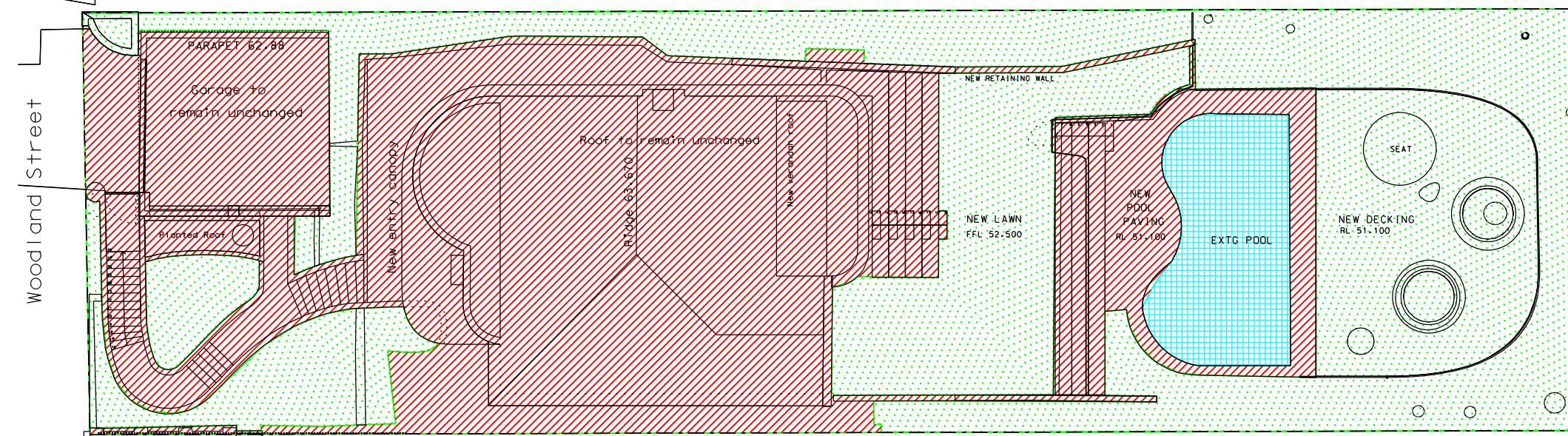
RAINWATER COLLECTION

A RAINWATER COLLECTION TANK IS PROPOSED IN LINE WITH
THE BASIX REPORT. REFER TO DRAWING H - DA - 01 FOR
DETAILS.



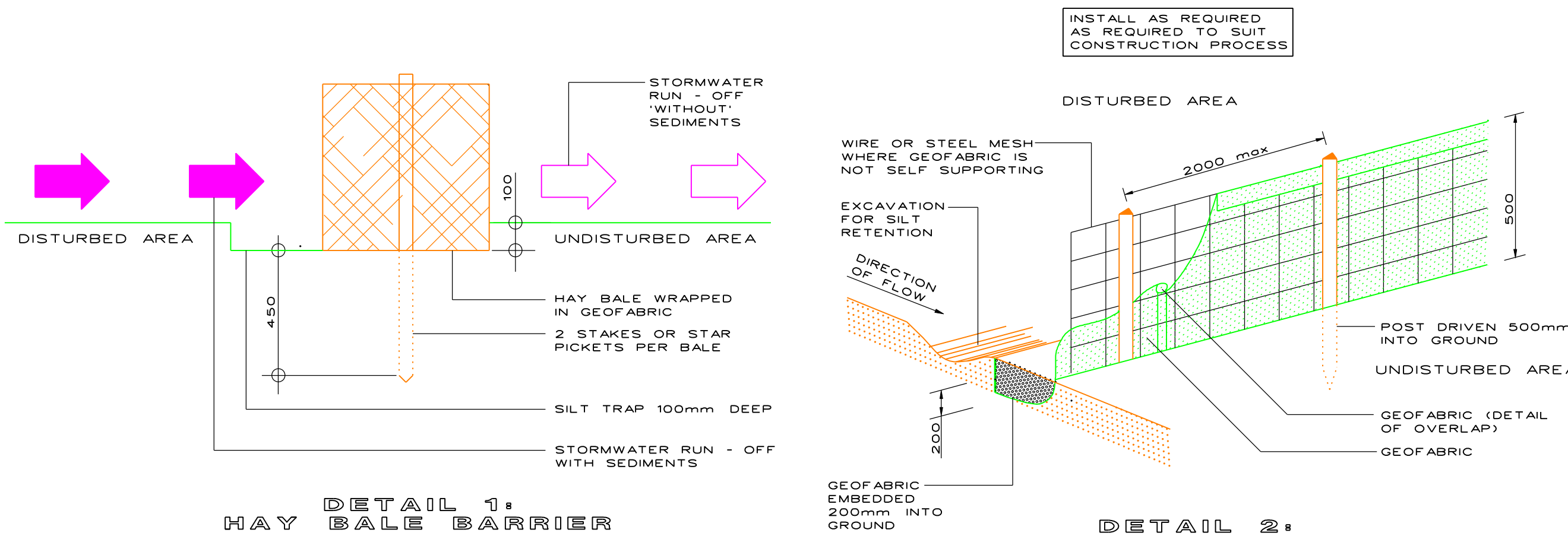
SYMBOL	CATCHMENT	IMPERVIOUS AREA	PERVIOUS AREA	PERCENTAGE
	ROOF & PAVED AREAS	459m2	-	55.8%
	DEEPSOIL LANDSCAPING	-	322.5m2	39.2%
	POOL		40.5m2	5%
TOTAL		822m2		100%

PRE DEVELOPED
CATCHMENT AREAS



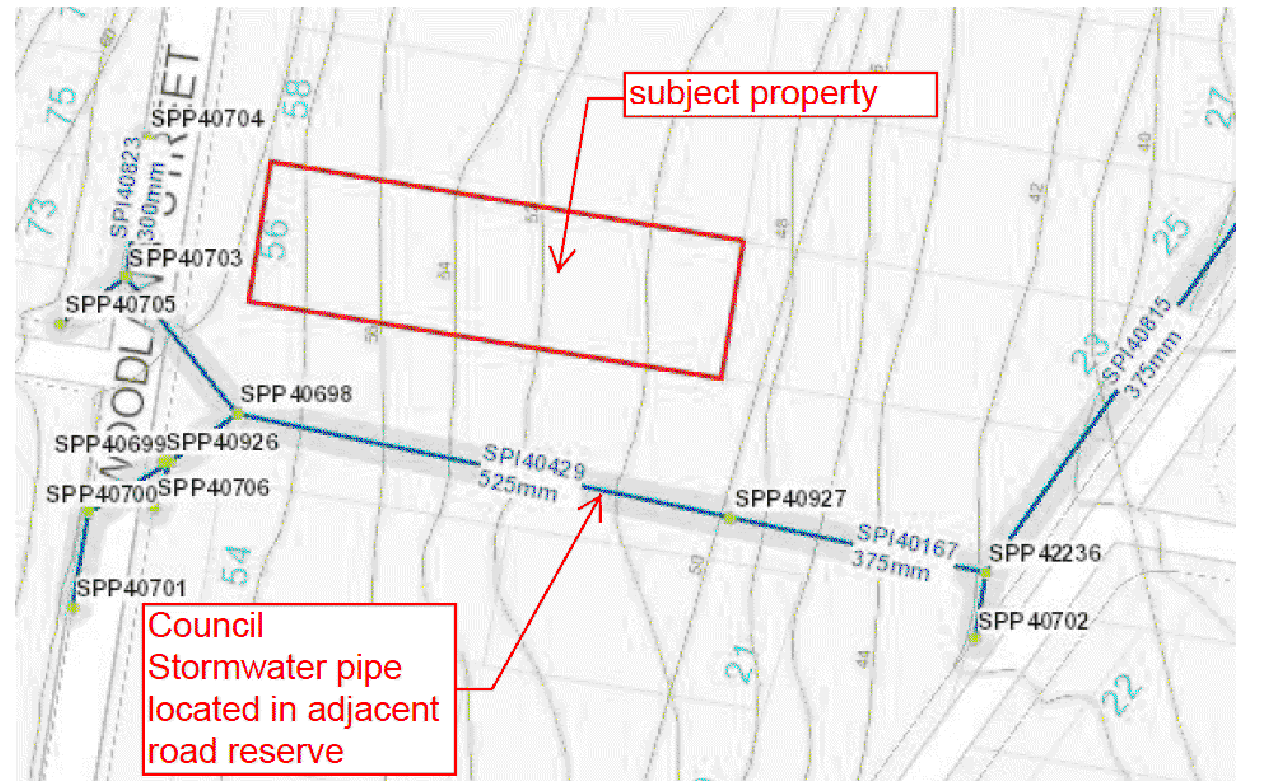
SYMBOL	CATCHMENT	IMPERVIOUS AREA	PERVIOUS AREA	PERCENTAGE
	ROOF & PAVED AREAS	416.3m2	-	50.6%
	DEEPSOIL LANDSCAPING	-	365.2m2	44.4%
	POOL		40.5m2	5%
TOTAL		822m2		100%

POST DEVELOPED
CATCHMENT AREAS

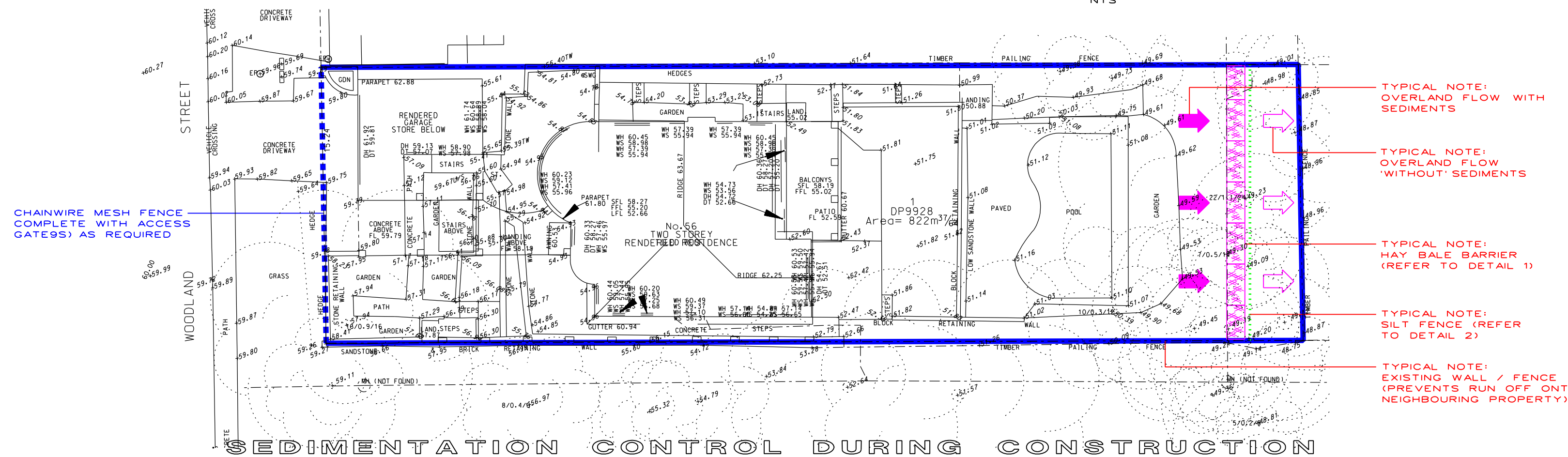


DETAIL 1:
HAY BALE BARRIER
NTS

DETAIL 2:
SILT FENCE
NTS



COUNCIL STORMWATER DRAINAGE
INFRASTRUCTURE DIAGRAM
NTS



SEDIMENTATION CONTROL DURING CONSTRUCTION

APPROVAL

B	RE - ISSUED FOR DA	13.01.22
A	ISSUED FOR DA	12.11.21
REV	DESCRIPTION	DATE

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BOKEY GRANT
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email: markus@itmdesign.com.au

PROJECT
56 WOODLAND
STREET
BALGOWLAH
HEIGHTS

DRAWING TITLE
LEGEND, CATCHMENT
CALCS. AND SED.
CONTROL

SCALE 1:200 @ A1 / 1:400 @ A3	JOB No 20/316
DISCIPLINE HYD	DRAWING No H-DA-00
	REVISION B

STORMWATER DA
DRAWING ONLY

- NOT FOR CONSTRUCTION
- FINAL LOCATION OF ALL DOWNPIPES, PITS, RAINWATER OUTLETS
AND SUBSOIL PIPES TO BE CONFIRMED DURING CONSTRUCTION
CERTIFICATE STAGE OF THE PROPOSED DEVELOPMENT

LANDSCAPING DRAINAGE

ALL LANDSCAPED AREAS LOCATED ABOVE CONCRETE SLABS
TO BE EQUIPPED WITH WATERPROOFING MEMBRANE,
DRAINAGE CELL AND GEOFABRIC

EXISTING DRAINAGE

DURING DEMOLITION / CONSTRUCTION ALLOW TO INVESTIGATE
EXACT LOCATION, SIZE AND CONDITION OF ALL DRAINAGE PIPES.
LIAISE WITH itm design TO DISCUSS THE FINDINGS. ALLOW TO
REPLACE / UPGRADE AS REQUIRED.

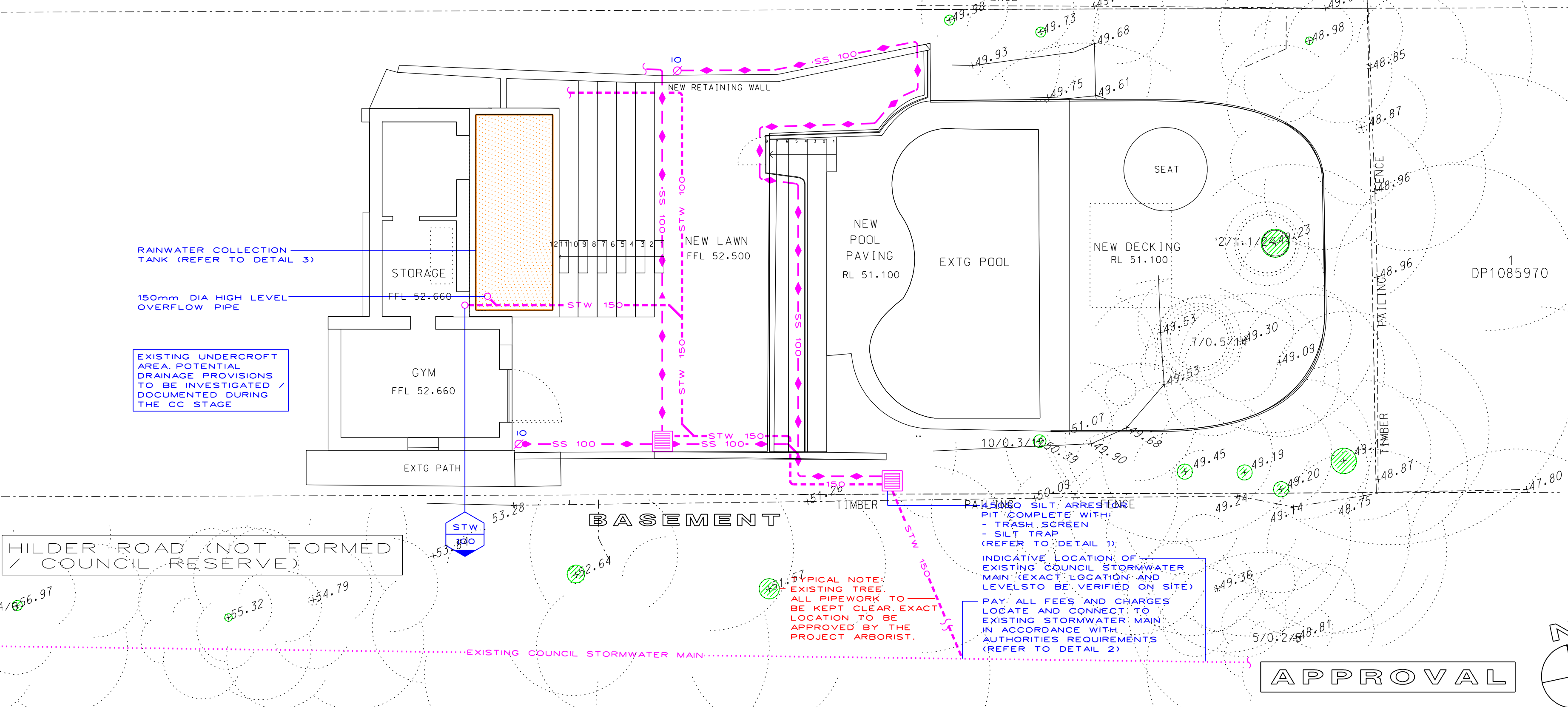
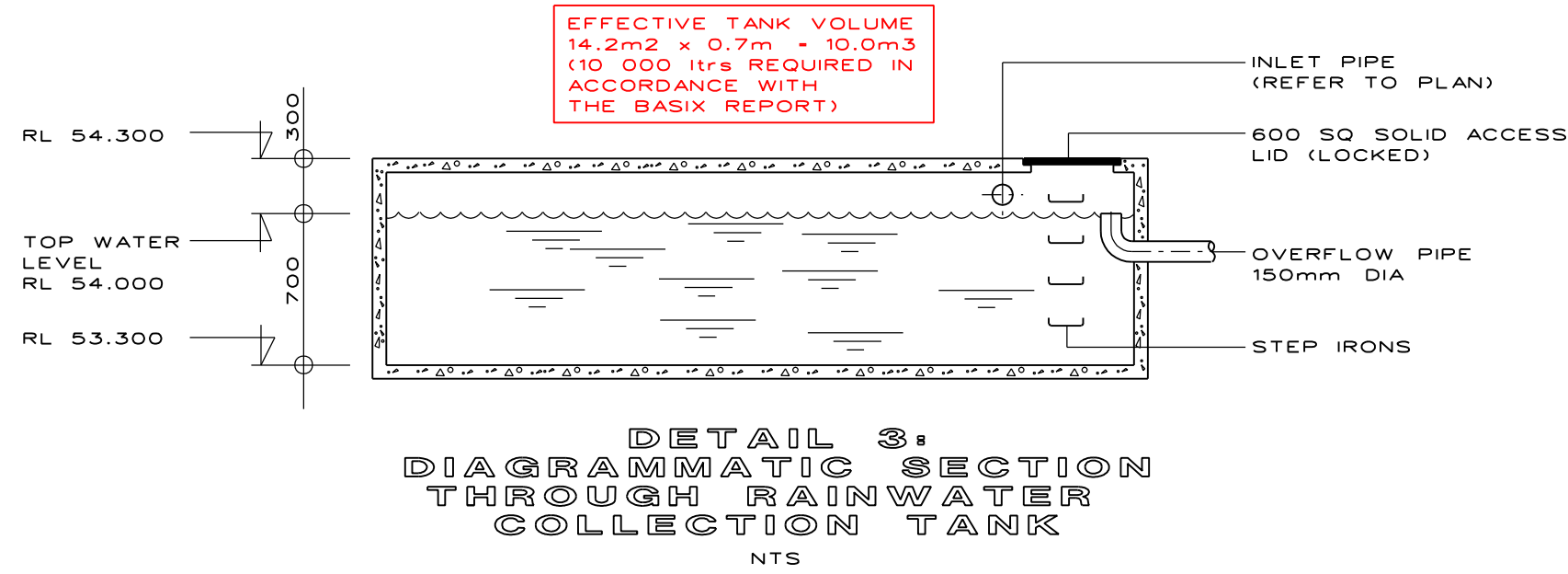
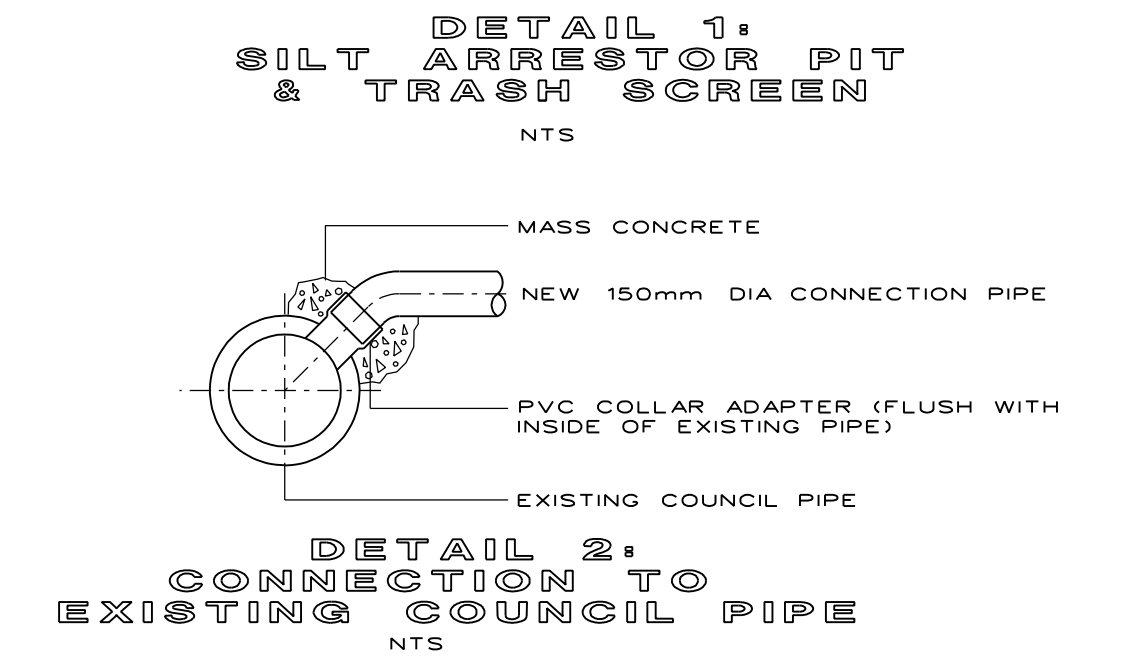
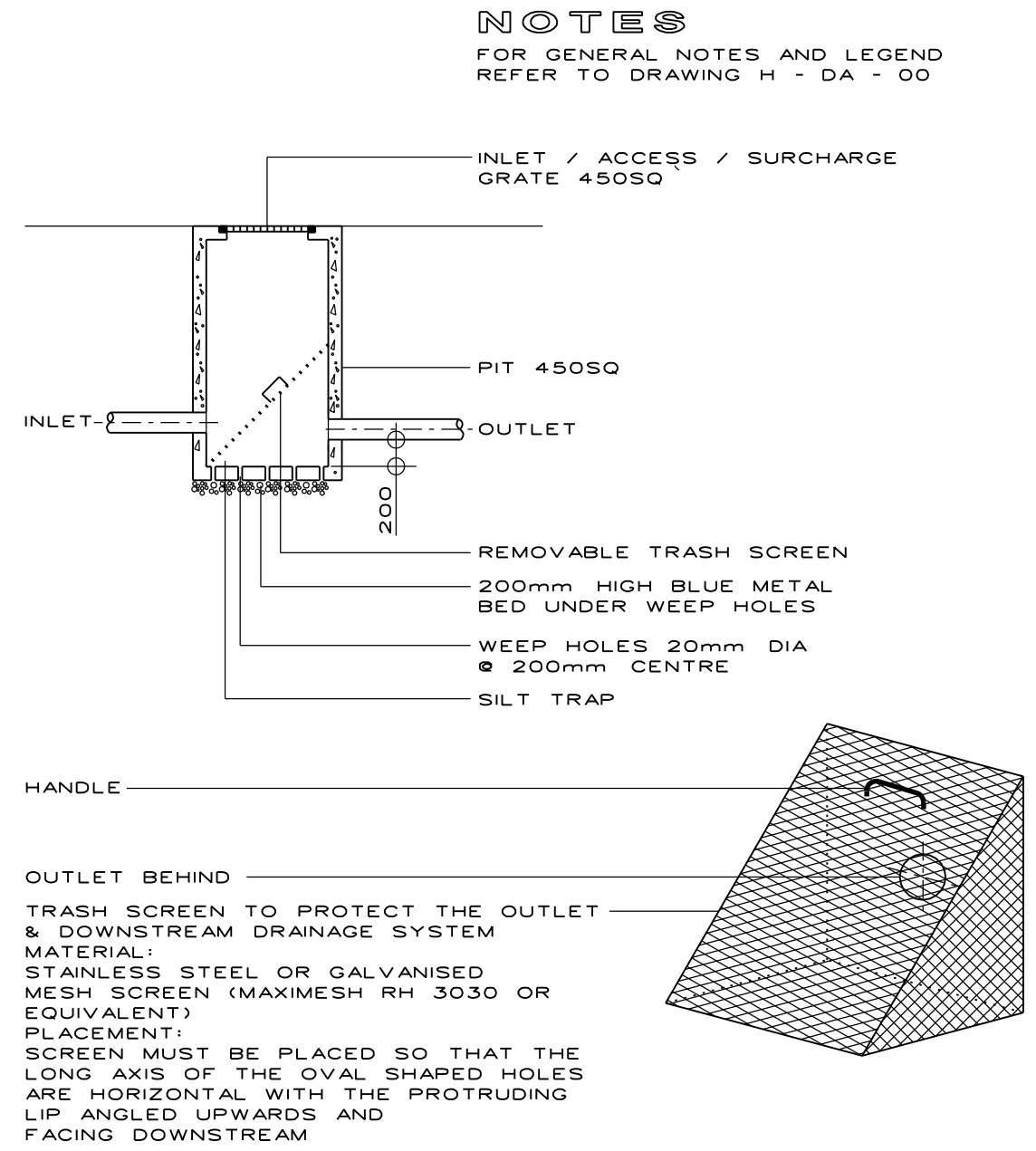
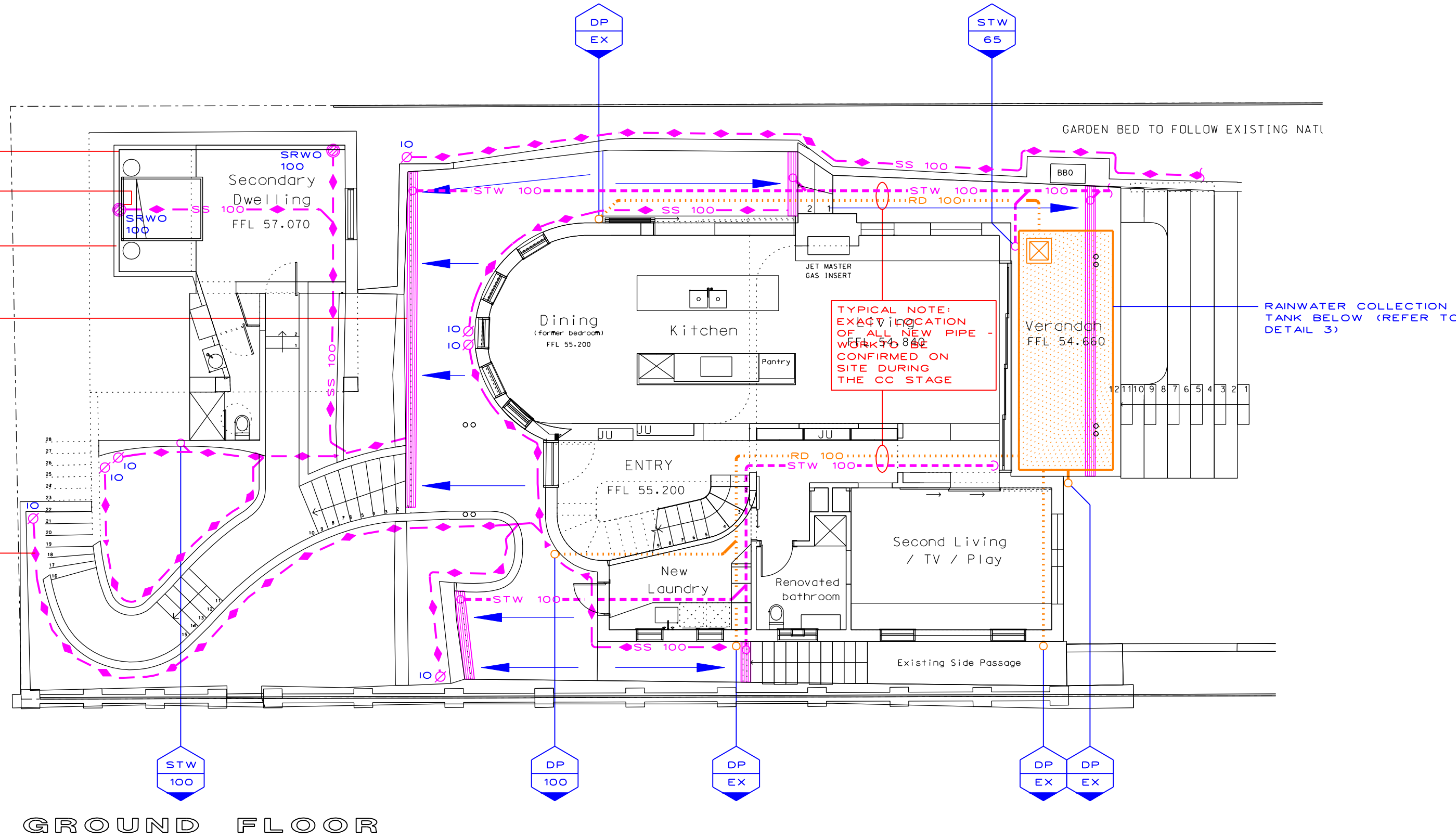
TYPICAL NOTE:
FALSE WALL IN FRONT
OF SPOON DRAIN

TYPICAL NOTE:
300 x 300 LOW LEVEL ACCESS
PANEL IN FALSE WALL (IN
FRONT OF OUTLET)

TYPICAL NOTE:
SPOON DRAIN 100mm W x
50mm D COMPLETE WITH
MIN. 1% FALL TOWARDS
OUTLETS

TYPICAL NOTE:
ALL TRENCHDRAINS TO BE
100mm W x 100mm D (UNLESS
NOTED OTHERWISE)

TYPICAL NOTE:
ALL SUBSOIL DRAINAGE PIPES TO
BE 100mm DIA COMPLETE WITH
200mm BLUE METAL SURROUND
WRAPPED IN GEOFABRIC. USE
PVC PIPES WITH TOP HALF SLOTTED
AND NOT COILS. FINAL LOCATION
AND EXTENT TO BE CO - ORDINATED
WITH:
- STRUCTURAL ENGINEER
- GEOTECHNICAL ENGINEER
- LANDSCAPING CONSULTANT /
CONTRACTOR
- SOIL CONDITIONS



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PROJECT
56 WOODLAND
STREET
BALGOWLAH
HEIGHTS

DRAWING TITLE
BASEMENT &
GROUND FLOOR
STORMWATER

SCALE		JOB No
1:100 @ A1 / 1:200 @ A3		20/316
DISCIPLINE	DRAWING No	REVISION
HYD	H-DA-01	B

STORMWATER DA
DRAWING ONLY

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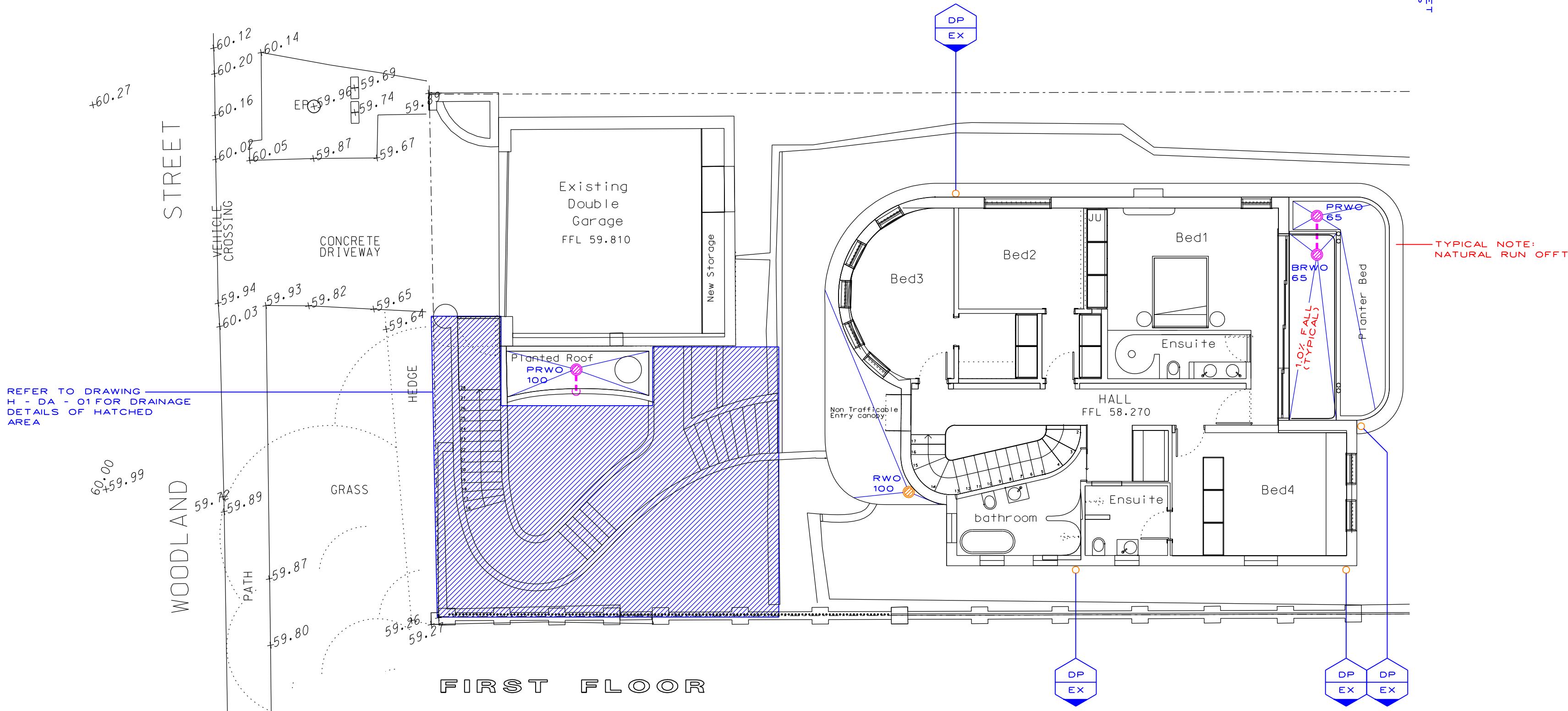
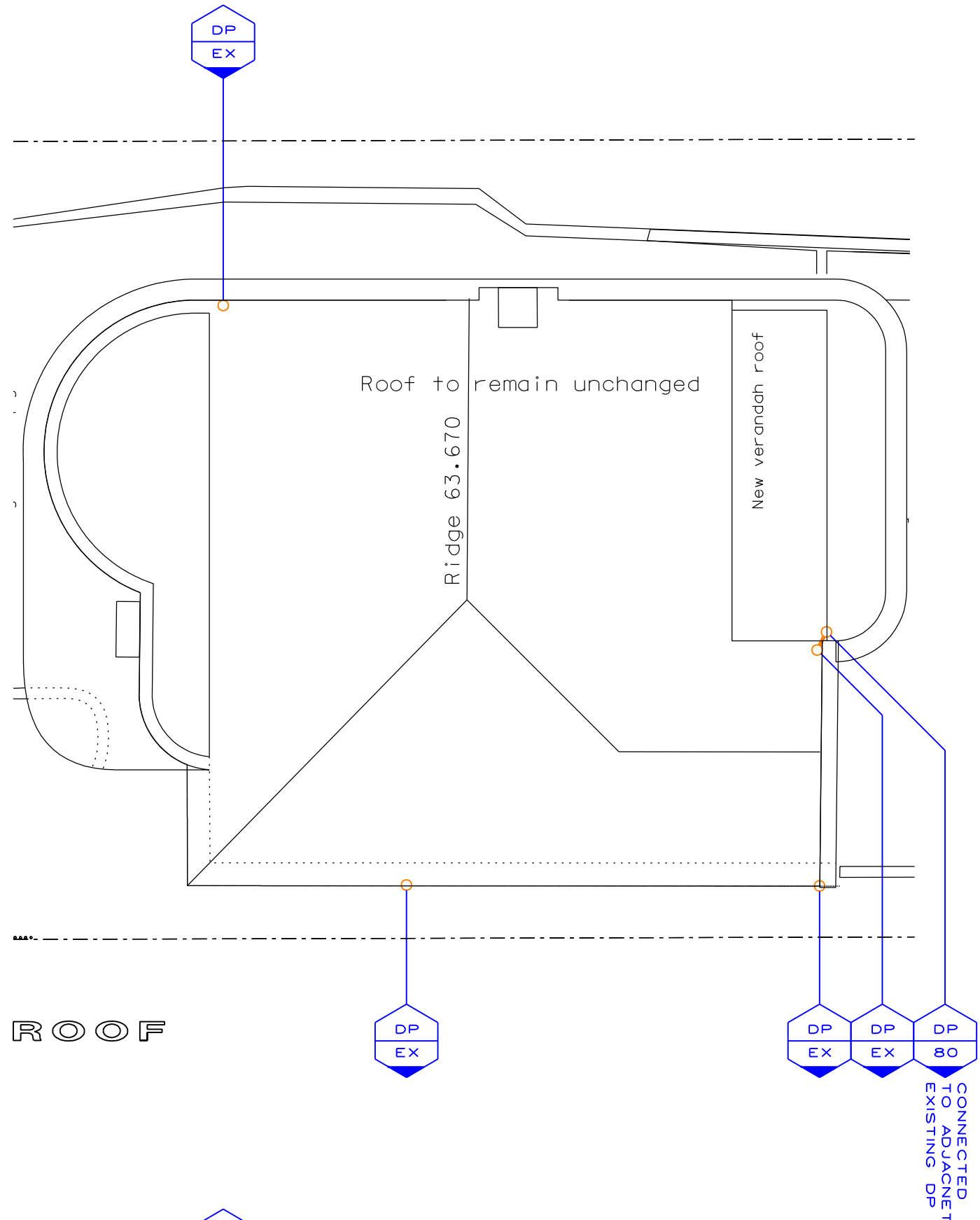
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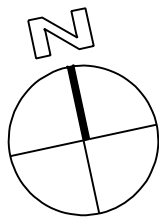
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NOTES
FOR GENERAL NOTES AND LEGEND
REFER TO DRAWING H - DA - 00



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PROJECT
56 WOODLAND
STREET
BALGOWLAH
HEIGHTS

DRAWING TITLE
FIRST FLOOR
& ROOF
STORMWATER

SCALE
1:100 @ A1 / 1:200 @ A3

JOB No
20/316

DISCIPLINE
HYD

DRAWING No
H-DA-02

REVISION
B

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

STW DA DRAWING