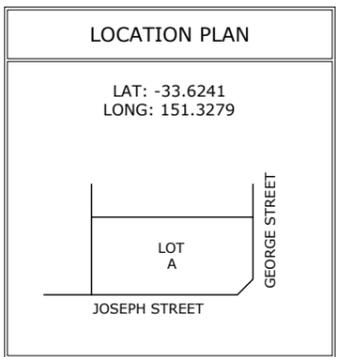
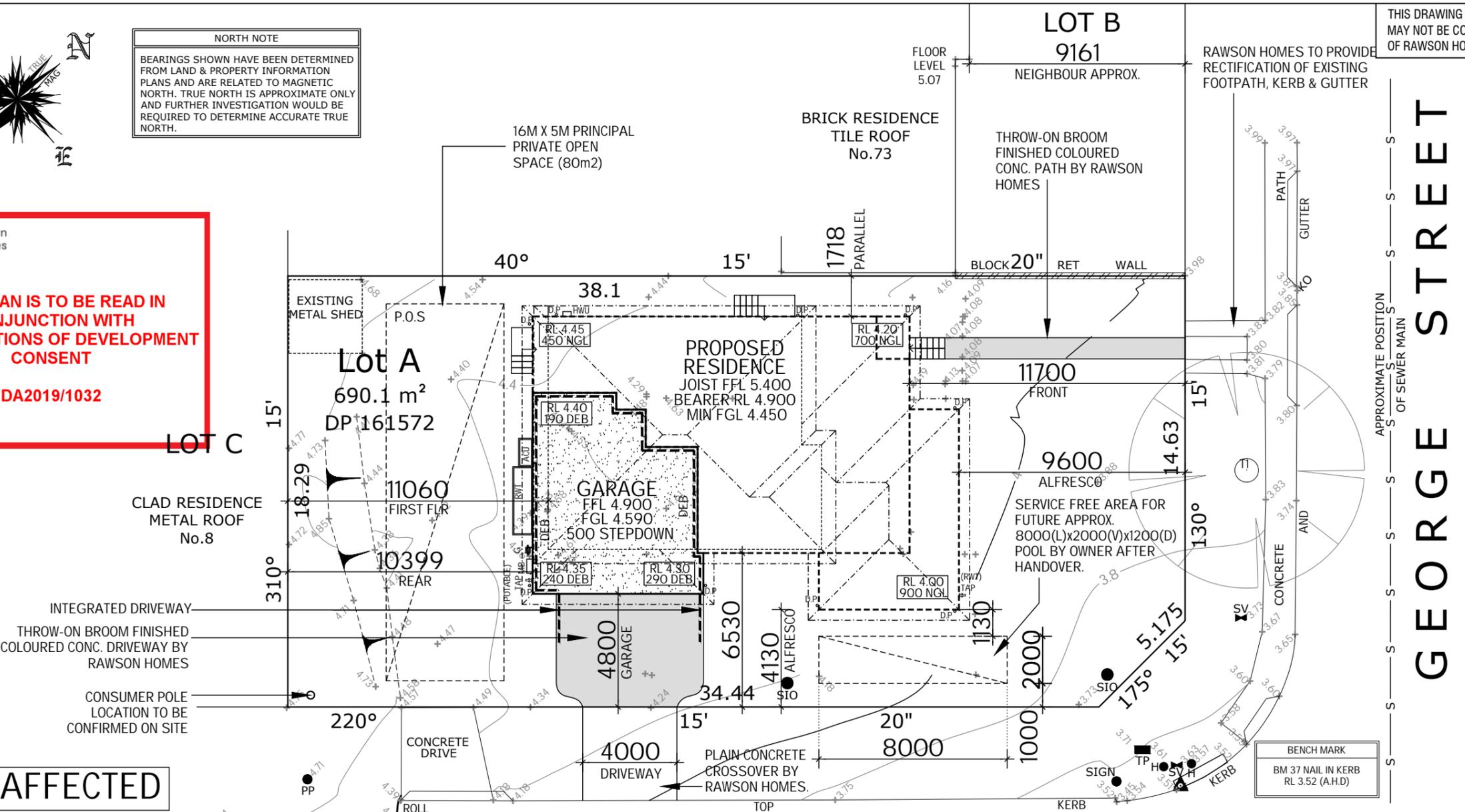


NORTH NOTE
BEARINGS SHOWN HAVE BEEN DETERMINED FROM LAND & PROPERTY INFORMATION PLANS AND ARE RELATED TO MAGNETIC NORTH. TRUE NORTH IS APPROXIMATE ONLY AND FURTHER INVESTIGATION WOULD BE REQUIRED TO DETERMINE ACCURATE TRUE NORTH.

THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT CONSENT DA2019/1032



PM 249 RL 3.225
S.C.I.M.S

SCHEDULE OF TREES

	DIAMETER	HEIGHT	TYPE
T1	1.00	9m	-
T2	0.60	7m	-
T3	0.50	7m	-

LEGEND

- BENCH MARK
- PHOTO POINT
- GULLY PIT
- VEHICULAR CROSSING
- TOP OF BANK
- BOTTOM OF BANK

ABBREVIATIONS

- EB - ELECTRICAL BOX
- EM - ELECTRICAL METER
- GM - GAS METER
- H - HYDRANT
- R - HYDRANT RECYCLED
- KO - KERB OUTLET
- LP - LIGHT POLE
- LH - LAMP HOLE
- MH - MAN HOLE
- MS - MAINTENANCE SHAFT
- PP - POWER POLE
- SH - SHRUB
- SMH - SEWER MAN HOLE
- SIO - SEWER INSPECTION OPENING
- SV - STOP VALVE
- SR - STOP VALVE RECYCLED
- SVP - SEWER VENT PIPE
- SWP - STORM WATER PIT
- T - TREE
- TP - TELECOMMUNICATIONS PIT
- VER - VERANDAH
- WT - WATER TAG
- WM - WATER METER
- WMR - WATER METER RECYCLED
- WC, GC, EC, TC - SERVICE CONDUIT
- W/C - WATER CLOSET

FLOOD AFFECTED

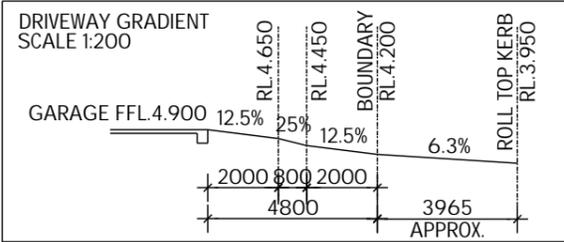
NOTES:
CONTOURS SHOWN HAVE BEEN INTERPOLATED FROM SPOT LEVELS TAKEN ON-SITE AND ARE A REPRESENTATION OF THE TOPOGRAPHY ONLY.
DIMENSIONS SHOWN (BEARINGS & DISTANCES) HAVE BEEN DETERMINED BY LAND AND PROPERTY INFORMATION PLANS ONLY. BOUNDARIES HAVE NOT BEEN ACCURATELY DETERMINED.
SERVICES SHOWN HAVE BEEN LOCATED WHERE POSSIBLE BY FIELD SURVEY. PRIOR TO ANY SITE WORKS, THE RELEVANT AUTHORITY SHOULD BE CONTACTED TO DETERMINE EXACT POSITION OF ANY UNDERGROUND PIPES, CABLES ETC.
DIMENSIONS OF ANY TREES SHOWN ON THE PLAN ARE APPROX.



N2 WIND CATEGORY 0.45M FALL ACROSS BUILDING ENVELOPE

NOTE: DRIVEWAY & FRONT PATH TO COMPLY WITH AS2890
NOTE: EXISTING LAYBACKS ON GEORGE & JOSEPH STREETS TO REMAIN AS PER CLIENT REQUEST

NOTE: PROVIDE OVERHEAD ELECTRICAL CONNECTION OF SERVICE MAINS FROM SERVICE POLE TO CONSUMER POLE WITHIN PROPERTY BOUNDARIES THEN UNDERGROUND MAINS TO METERBOX.
NOTE: RAWSON HOMES TO PROVIDE IMPORT OF FILL



SITE CALCULATIONS DA

GROUND FLOOR	116.47 m²
FIRST FLOOR	110.03 m²
TOTAL LIVING AREA	226.50 m²
SITE AREA	690.10 m²
BUILDING FOOTPRINT	200.27 m²
DRIVEWAY	29.00 m²
PATH	10.53 m²
CROSSOVER	15.88 m²
TOTAL FRONT AREA	180.77 m²
FRONT LANDSCAPE AREA (%)	94.17 %
TOTAL LANDSCAPE AREA	450.30 m²
LANDSCAPE AREA (%)	65.25 %
FLOOR SPACE RATIO	0.33 : 1
SITE COVERAGE	29.02 %

NOTES:
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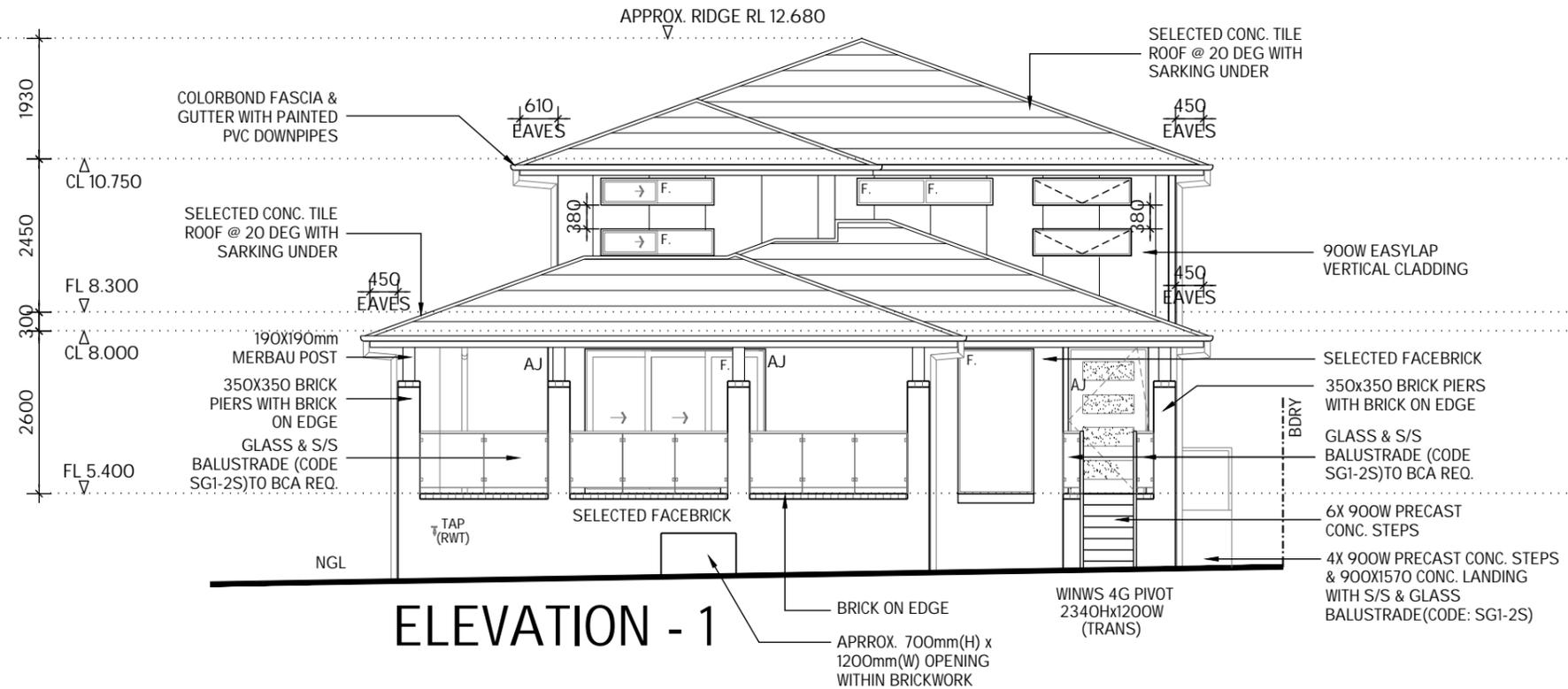
RAWSON HOMES
1 HOMEBUSH BAY DRIVE
BUILDING F, LEVEL 2, SUITE 1
RHODES NSW 2138
TELEPHONE: 02 8765 5500
FAX : 02 8765 8099
BUILDER'S LICENCE No. 33493C

CLIENT: MR M.J. EVANS & MRS J.R. EVANS
SITE ADDRESS: LOT A, DP 161572
71 GEORGE STREET
AVALON BEACH NSW 2107

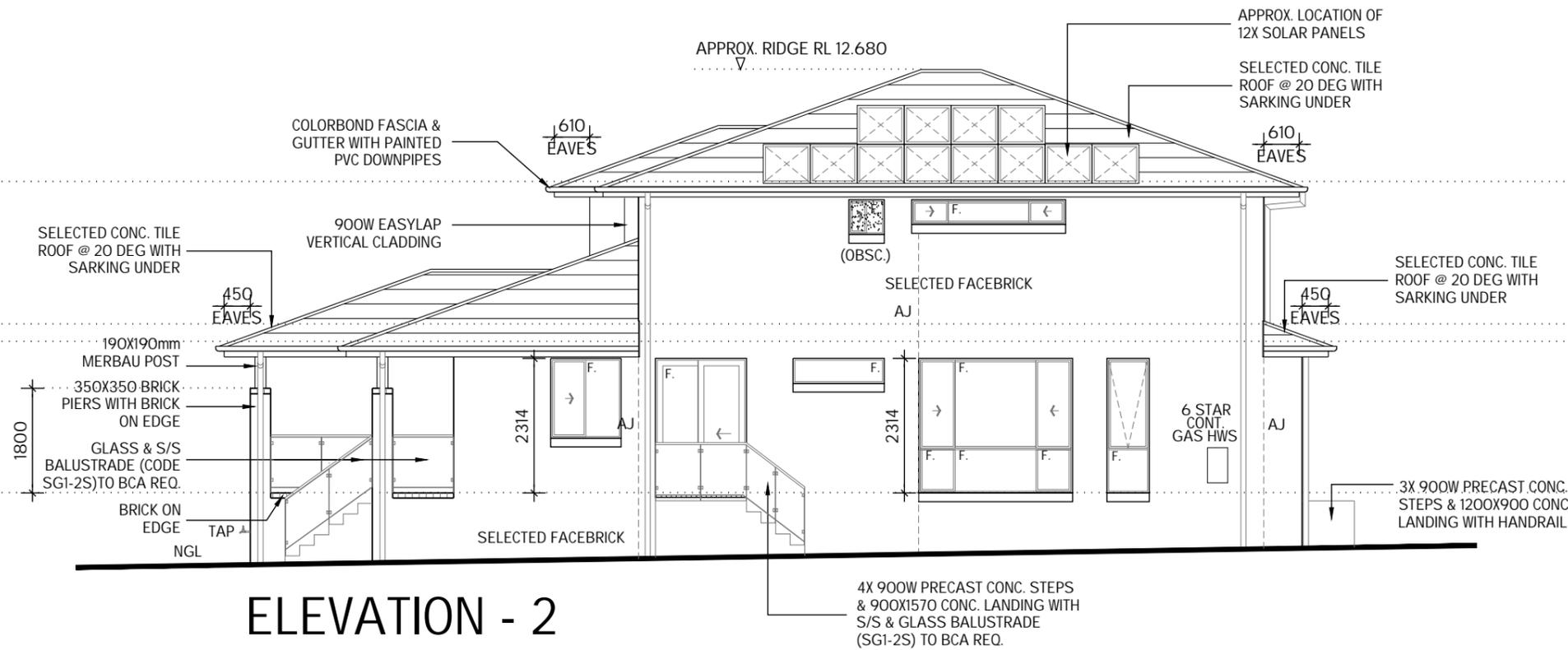
HOUSETYPE: CHIFLEY 32
MODEL: CLASSIC
FACADE: DOUBLE GARAGE
TYPE: LUX
SPECIFICATION: LUX
DRAWING TITLE: SITE PLAN

DRAWN BY: DTT
DATE DRAWN: 12.08.19
CHECKED BY: DTT
APPROVED FOR CONSTRUCTION:
COUNCIL AREA: NORTHERN BEACHES
SCALE: 1:200
JOB No: A009118
DRWG No.: 03
ISSUE: C

NOTE:
 NYLON MESH FLYSCREENS TO ALL OPENING WINDOWS, SLIDING & STACKER DOORS (EXCLUDING HINGED DOORS)



ELEVATION - 1



ELEVATION - 2

northern beaches council

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DA2019/1032

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CLIENT:
MR M.J. EVANS & MRS J.R. EVANS

SITE ADDRESS:
 LOT A, DP 161572
 71 GEORGE STREET
 AVALON BEACH NSW 2107

HOUSETYPE:
 MODEL: CHIFLEY 32
 FACADE: CLASSIC
 TYPE: DOUBLE GARAGE
 SPECIFICATION: LUX

DRAWING TITLE:
ELEVATIONS 1 & 2

DRAWN BY: DTT	DATE DRAWN: 12.08.19	CHECKED BY: DTT	APPROVED FOR CONSTRUCTION:
COUNCIL AREA: NORTHERN BEACHES		SCALE: 1:100	
JOB No: A009118	DRWG No.: 06	ISSUE: C	



northern
beaches
council

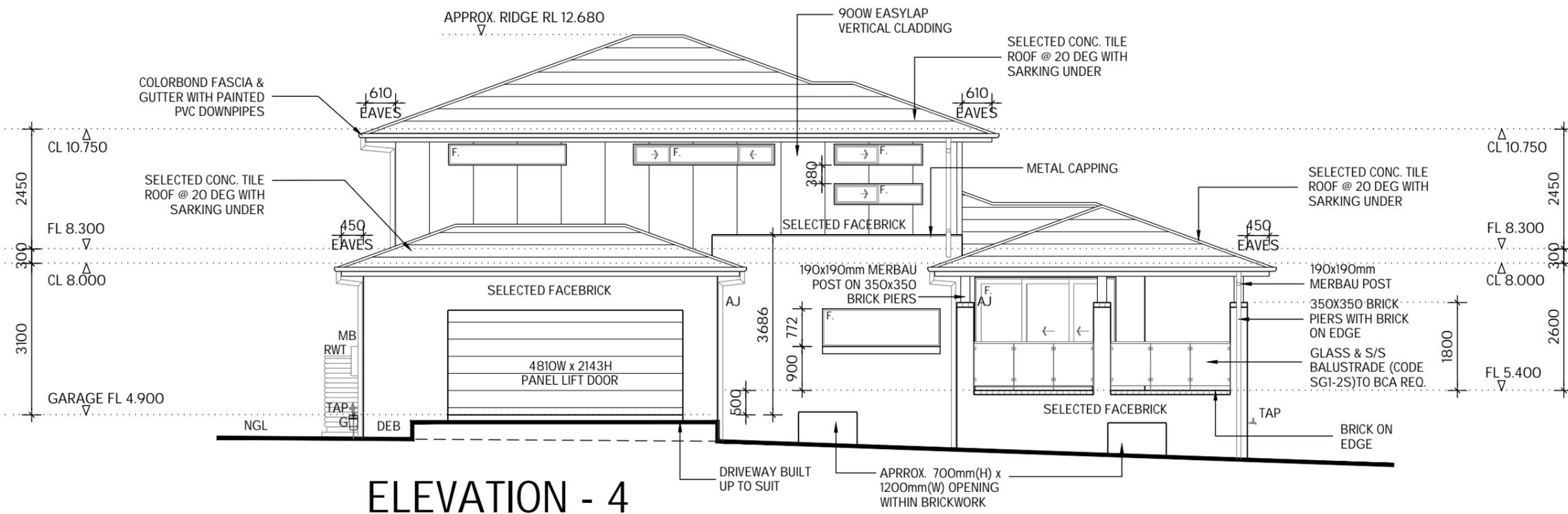
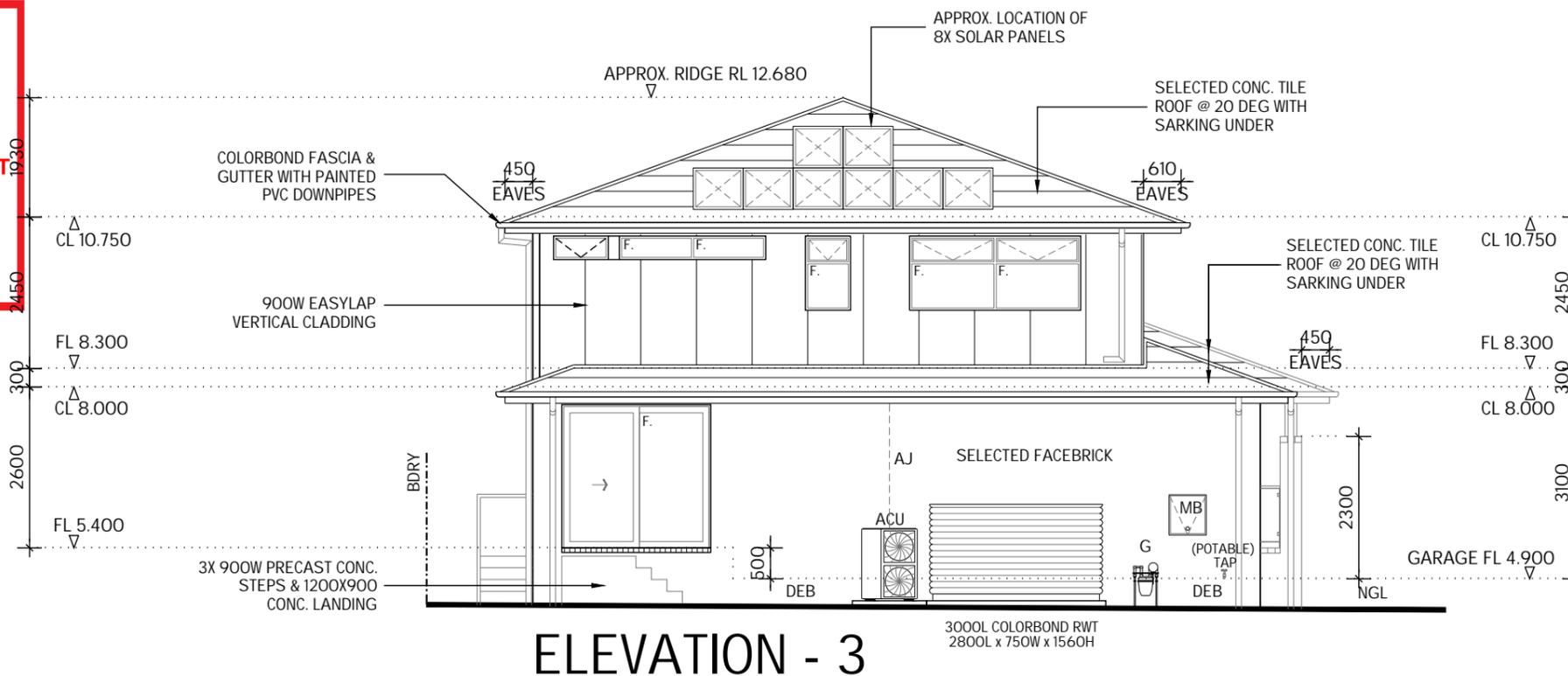
**THIS PLAN IS TO BE READ IN
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CONSENT**

DA2019/1032

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NOTE:
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OPENING WINDOWS, SLIDING & STACKER
DOORS (EXCLUDING HINGED DOORS)



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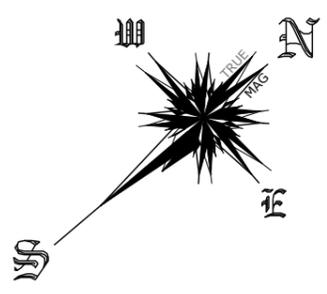
CLIENT:
MR M.J. EVANS & MRS J.R. EVANS

SITE ADDRESS:
LOT A, DP 161572
71 GEORGE STREET
AVALON BEACH NSW 2107

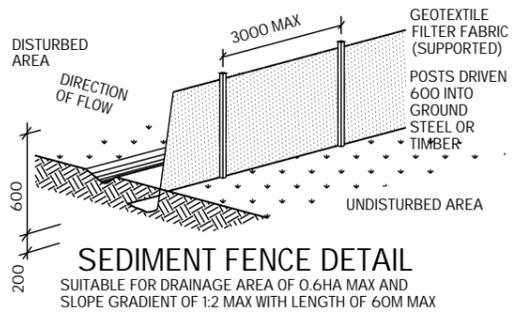
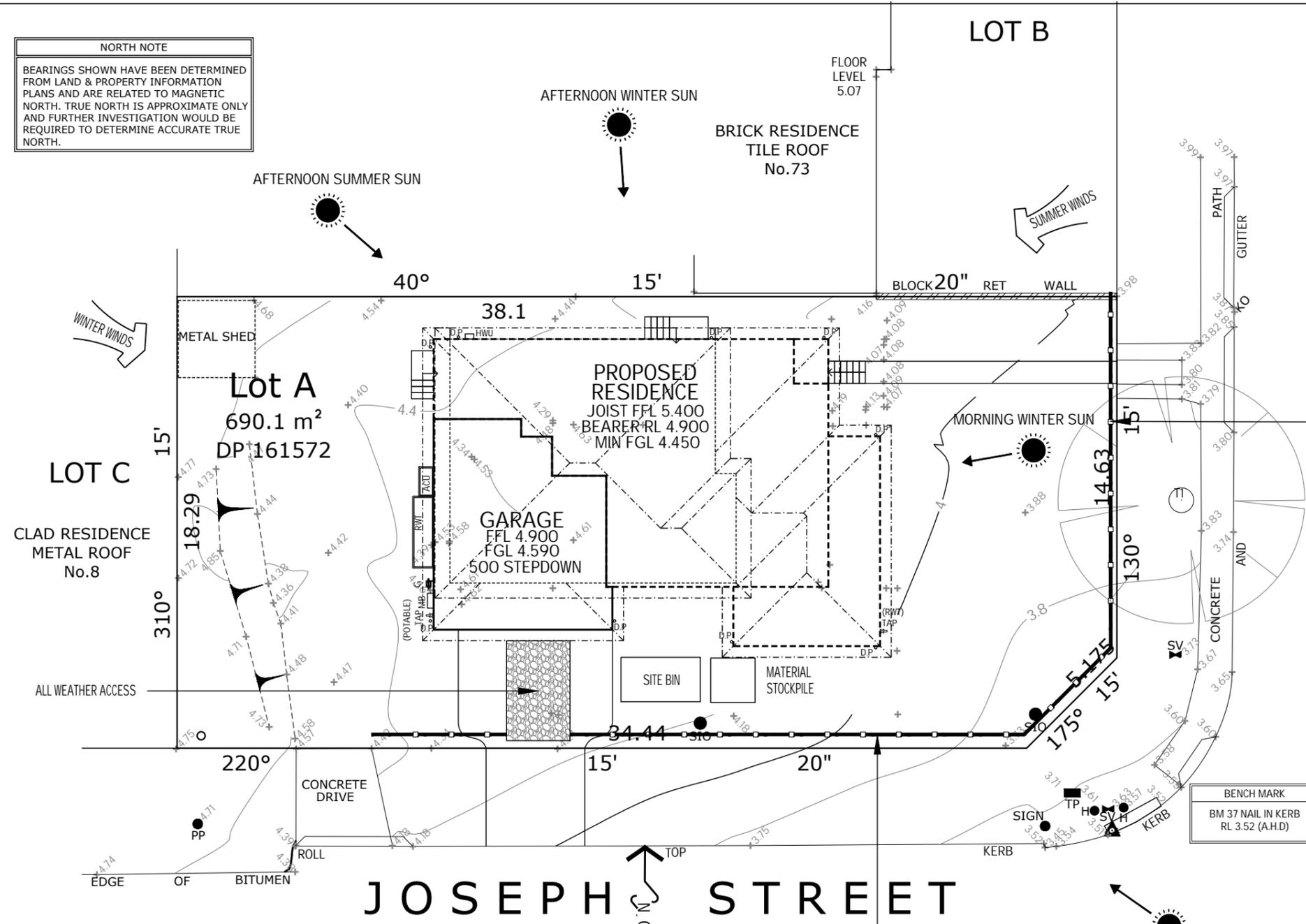
HOUSETYPE:
MODEL: CHIFLEY 32
FACADE: CLASSIC
TYPE: DOUBLE GARAGE
SPECIFICATION: LUX

DRAWING TITLE:
ELEVATIONS 3 & 4

DRAWN BY: DTT	DATE DRAWN: 12.08.19	CHECKED BY: DTT	APPROVED FOR CONSTRUCTION:
COUNCIL AREA: NORTHERN BEACHES		SCALE: 1:100	
JOB No: A009118	DRWG No.: 07	ISSUE: C	



NORTH NOTE
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SEDIMENT CONTROL

INSTALL SEDIMENT CONTROL STRUCTURES IN LOCATIONS INDICATED ON THIS DRAWING AND AS OTHERWISE REQUIRED TO CONTROL SEDIMENT DURING ALL EXCAVATIONS AND WHILST AREAS OF THE SITE ARE EXPOSED TO EROSION. REVIEW CONTROL MEASURES AND MAINTAIN STRUCTURES DURING CONSTRUCTION.

IF ADDITIONAL MEASURES ARE REQUIRED FOR EROSION AND CONTROL OR BY COUNCIL REQUIREMENTS, REFER TO "URBAN EROSION AND SEDIMENT CONTROL" GUIDELINES PREPARED BY THE DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT.

northern beaches council

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DA2019/1032



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RAWSON HOMES

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 BUILDING F, LEVEL 2, SUITE 1
 RHODES NSW 2138
 TELEPHONE: 02 8765 5500
 FAX : 02 8765 8099
 BUILDER'S LICENCE No. 33493C

CLIENT:
 MR M.J. EVANS & MRS J.R. EVANS

SITE ADDRESS:
 LOT A, DP 161572
 71 GEORGE STREET
 AVALON BEACH NSW 2107

HOUSETYPE:
 MODEL: CHIFLEY 32
 FACADE: CLASSIC
 TYPE: DOUBLE GARAGE
 SPECIFICATION: LUX

DRAWING TITLE:
 SEDIMENT & ANALYSIS PLAN

DRAWN BY: DTT	DATE DRAWN: 12.08.19	CHECKED BY: DTT	APPROVED FOR CONSTRUCTION:
COUNCIL AREA: NORTHERN BEACHES		SCALE: 1:200	
JOB No: A009118	DRWG No.: 11	ISSUE: C	

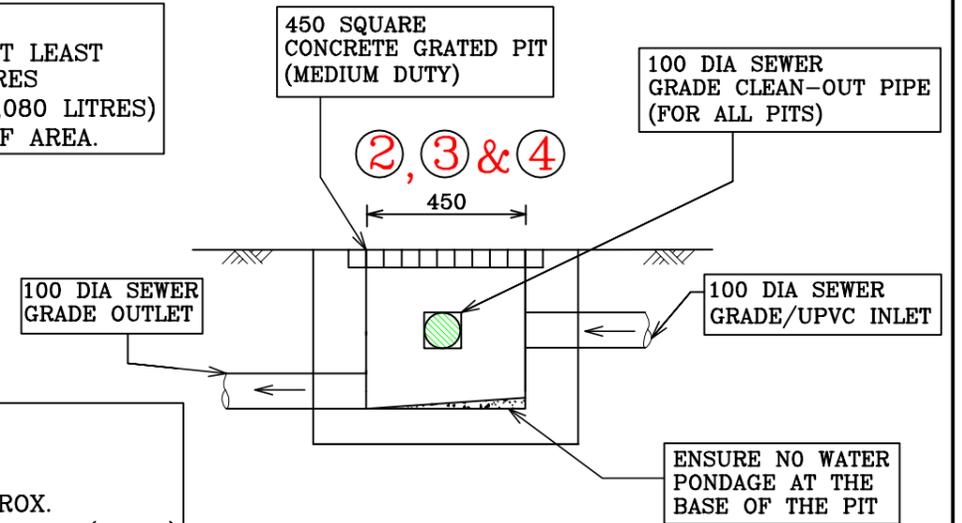
GENERAL NOTES:

1. ALL HYDRAULIC WORKS TO BE IN ACCORDANCE WITH THE NORTHERN BEACHES (OLD PITTWATER) COUNCIL'S STANDARD SPECIFICATIONS AND TO THE SUPERVISING ENGINEER'S SATISFACTION.
2. THESE PLANS ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL PLANS FROM RAWSON HOMES JOB No. A009118 ISSUE C DATED 12 AUGUST 2019 (PHONE: (02) 8765 5500).
3. ALL STORMWATER PIPES TO BE 100 DIA. UPVC UNLESS NOTED OTHERWISE. PIPES UNDER DRIVEWAY TO BE SEWER GRADE.
4. DEPTH AND LOCATION OF SEWER & SERVICES TO BE CONFIRMED PRIOR TO COMMENCEMENT OF DRAINAGE WORKS.
5. THE CONTRACTOR SHALL IMPLEMENT EROSION AND SEDIMENTATION CONTROL MEASURES AS NECESSARY AND TO THE SATISFACTION OF COUNCIL PRIOR TO COMMENCEMENT OF CONSTRUCTION AND DURING CONSTRUCTION.
6. ENSURE FINISHED GROUND LEVELS ARE SLOPING AWAY FROM THE DEVELOPMENT & INTO PITS OR YARD SUMPS, AS SHOWN ON THE ATTACHED DRAINAGE PLAN.
7. HYDRAULIC PLANS ARE SUBJECT TO COUNCIL APPROVAL.

BASIX REQUIREMENTS (29.08.2019):
 3,000 LITRES CAPACITY RAINWATER TANK FOR AT LEAST 231.00 m² OF ROOF AREA. PROVIDED 3,030 LITRES RETENTION WITHIN 8,160 LITRES CAPACITY (2x4,080 LITRES) ABOVEGROUND RWT/OSD TANKS FOR TOTAL ROOF AREA.

OSD REQUIRED = 4.500 m³
 PSD = 2 l/sec
 RWT = 3.0 m³
 PROVIDED 8,160 LITRES (EFFECTIVE 7,580 LITRES) TANKS WITH 3,030 LITRES FOR RETENTION & 4,550 LITRES FOR DETENTION SYSTEM.

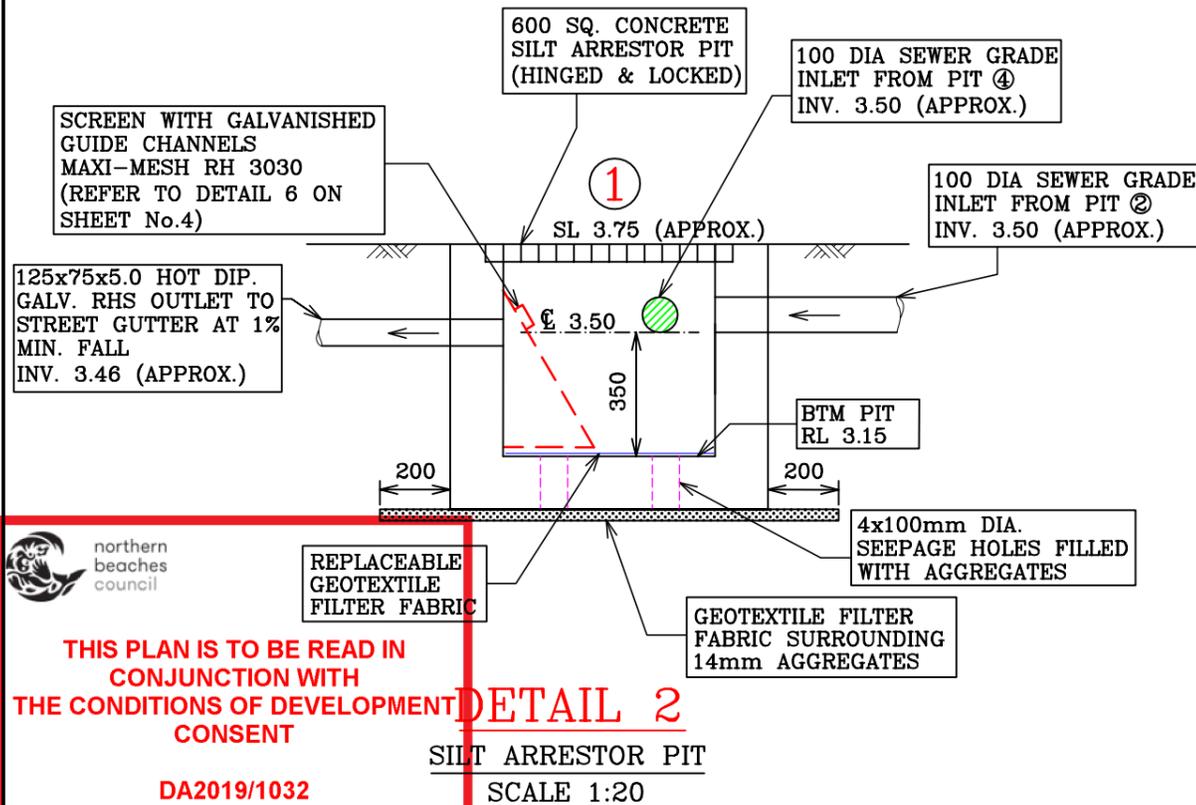
CALCULATIONS:
 TOTAL SITE AREA = 690.10 m²
 TOTAL ROOF AREA = 231.00 m²
 TOTAL EXISTING IMPERVIOUS AREA = 242.00 m² APPROX.
 TOTAL PROPOSED IMPERVIOUS AREA = 294.50 m² APPROX. (42.6%)
 INCREASE IN IMPERVIOUS AREA = 52.50 m²
 (INCLUDING ROOF, GARAGE, DRIVEWAY AND PAVED AREAS)
 * OSD IS REQUIRED.



DETAIL 1
 GRATED PIT (TYPICAL)
 SCALE 1:20

IMPORTANT NOTES:

1. THIS DEVELOPMENT IS TO CONSTRUCT A NEW SINGLE RESIDENTIAL DWELLING ONLY. ACCORDING TO COUNCIL'S DCP 2014, OSD SYSTEM IS REQUIRED FOR THIS DEVELOPMENT.
2. THIS SITE IS FLOOD AFFECTED. THE HABITABLE & NON-HABITABLE FLOOR LEVELS ARE ABOVE THE FLOOD LEVELS (ALSO REFER TO FLOOD IMPACT & RISK MANAGEMENT REPORT FROM NASSERI ASSOCIATES JOB No. D3817 DATED 3 SEPTEMBER 2019).
3. SITE INSPECTION WAS CARRIED OUT ON 16 AUGUST 2019 TO CHECK EXISTING GULLY PIT IN FRONT AND OVERALL DRAINAGE PATTERN OF THE AREA.
4. ALL ROOF WATER IS COLLECTED INTO TWO ABOVEGROUND RAINWATER TANKS WITH TOTAL CAPACITY OF 8,160 LITRES (EFFECTIVE STORAGE CAPACITY 7,580 LITRES) OR 2x4,080 LITRES (EFFECTIVE STORAGE CAPACITY 3,790 LITRES EACH) PLACED ON SOUTHERN SIDE OF THE DWELLING TO ACT AS A COMBINED RETENTION AND DETENTION SYSTEM. THE LOWER PORTION OF THE TANKS WITH TOTAL CAPACITY OF 3,030 LITRES IS USED FOR RAINWATER RETENTION ONLY FOR RE-USE SUCH AS TOILET FLUSHING, LAUNDRY & IRRIGATION SYSTEM. THE UPPER PORTION OF THE TANKS WITH TOTAL CAPACITY OF 4,550 LITRES IS FOR DETENTION. 100 DIA SEWER GRADE OVERFLOW/OUTLET PIPE FROM OSD/RWT1 TO BE CONNECTED SEPARATELY TO PIT ④ AT 1% MIN. FALL (REFER TO DRAINAGE PLAN ON SHEET No.2).
3. SURFACE WATER AROUND THE DWELLING INCLUDING DRIVEWAY AND OVERFLOW/OUTLET FROM OSD/RWT1 TO BE DRAINED TO SILT ARRESTOR PIT ① IN FRONT PRIOR TO BE DISCHARGING TO STREET GUTTER IN JOSEPH STREET VIA 125x75x5.0 HOT DIP. GALV. RHS OUTLET AT 1% MIN. FALL (REFER TO DRAINAGE PLAN ON SHEET No.2).
4. LEVELS ARE CRITICAL. PRIOR TO ANY CHANGES CONTACT ENGINEER.
5. PRIOR TO BACKFILLING STORMWATER PIPES AND CONNECTION TO STREET GUTTER IN FRONT, CONTACT ENGINEER FOR AN INSPECTION.
6. AFTER COMPLETION OF ALL HYDRAULIC WORKS, FINAL WORK-AS-EXECUTED INSPECTION WILL BE CARRIED OUT AND COMPLIANCE CERTIFICATE WILL BE ISSUED IF APPROPRIATE.



THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT CONSENT

DA2019/1032

DETAIL 2
 SILT ARRESTOR PIT
 SCALE 1:20

NASSERI ASSOCIATES
 CIVIL, HYDRAULIC & STRUCTURAL ENGINEERING
 SUITE 51, No.14 NARABANG WAY, BELROSE 2085
 PO BOX 714, BALGOWLAH, NSW 2093
 TEL. (02) 9986 3875
 FAX. (02) 9986 3876
 MOB. 0410 308 064
 EMAIL nasseriassociates@bigpond.com

J.NASSERI
 BE, FIEAust.,
 NPER, CPEng.
 DATE: 03/09/2019

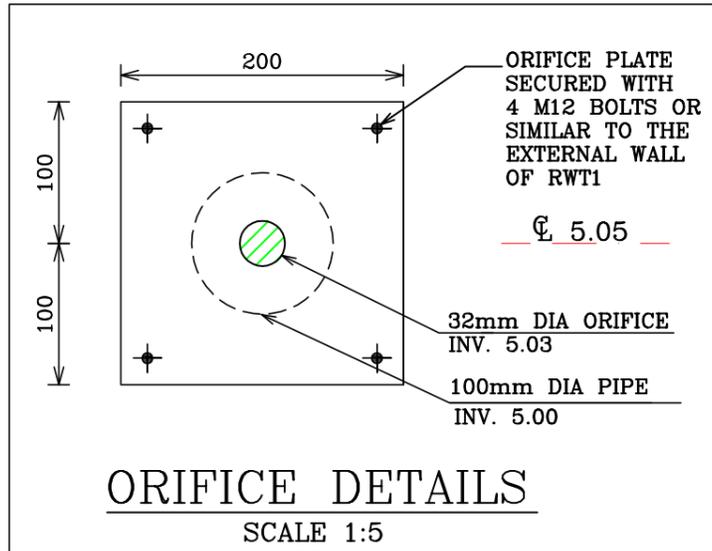
SYMBOLS & NOTATIONS

---	STORMWATER LINES	SL	FINISHED SURFACE LEVEL
o	DOWNPIPE	FFL	FINISHED FLOOR LEVEL
⊙	100 DIA YARD SUMP	FPL	FINISHED PLATFORM LEVEL
▤	225x100 GRATED BOX DRAIN	-x-	SEDIMENT CONTROL BARRIER
INV	INVERT LEVEL (PIPE / PIT)	---	PROPOSED BOUNDARY
-s-	SEWER		

ISSUE	AMENDMENTS	DATE
CLIENT: RAWSON HOMES (MR. M.J. EVANS & MS. J.R. EVANS)		
LOT A (H/No. 71) GEORGE STREET, AVALON BEACH		
DESIGNED PC	DRAWN PC	CHECKED JN
SCALE AS SHOWN		

HYDRAULIC DETAILS		
NOTES, CALCULATIONS & PITS DETAILS		
CAD REF. ENG/RAWSON	JOB No. D3817	SHEET No. 1

EACH MODLINE TANK: 3000L x 900W x 1560H



FIRST FLUSH DEVICE (REFER TO DETAIL 5)

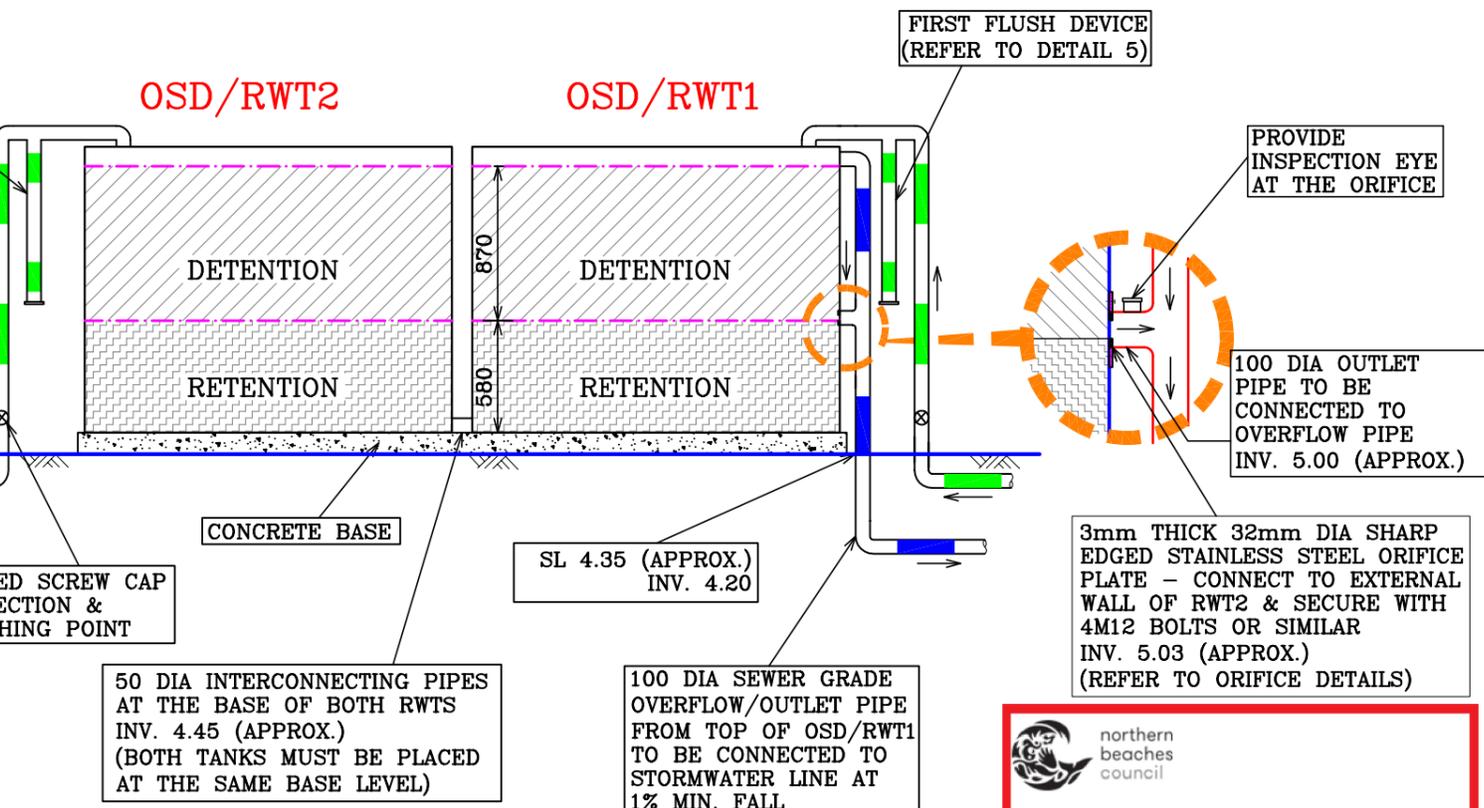
TOP RWT RL 6.01 (APPROX.)
INV. OVERFLOW RL 5.90 (APPROX.)

DETENTION VOLUME = 4.550m³ (APPROX.)

INV. ORIFICE RL 5.03 (APPROX.)

RETENTION VOLUME = 3.030m³ (APPROX.)

INV. RWT RL 4.45 (APPROX.)



- IMPORTANT NOTES:**
1. RAINWATER TANK IS FROM KINGSPAN WATER OR SIMILAR. PH: 1300 736 562
 2. A FIRST FLUSH DEVICE IN ACCORDANCE WITH THE MANUFACTURERS REQUIREMENTS SHALL BE FITTED TO THE SYSTEM TO DIVERT THE FIRST 0.5mm OF RUN-OFF FROM THE AREA DRAINING AWAY FROM THE STORAGE TANK. (eg.0.5 l/m²)
 3. BOTH TANKS MUST BE PLACED AT THE SAME BASE LEVEL AND MUST HAVE THE SAME HEIGHT.
 4. 50-DIA INTERCONNECTING PIPE MUST BE PLACED AT THE BASE OF THE TANKS.

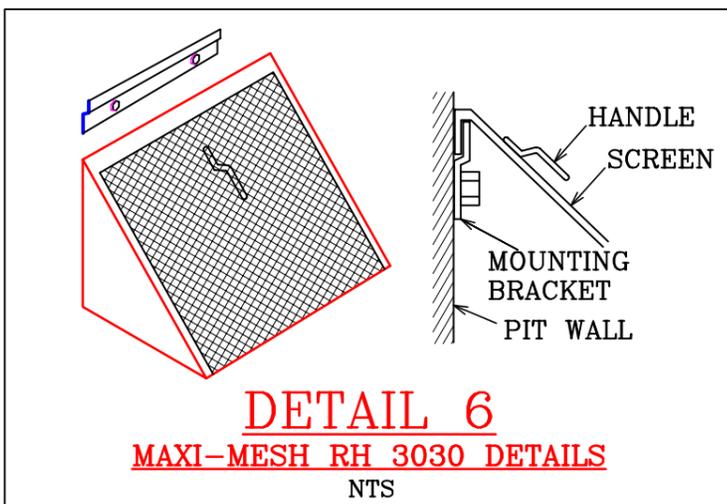
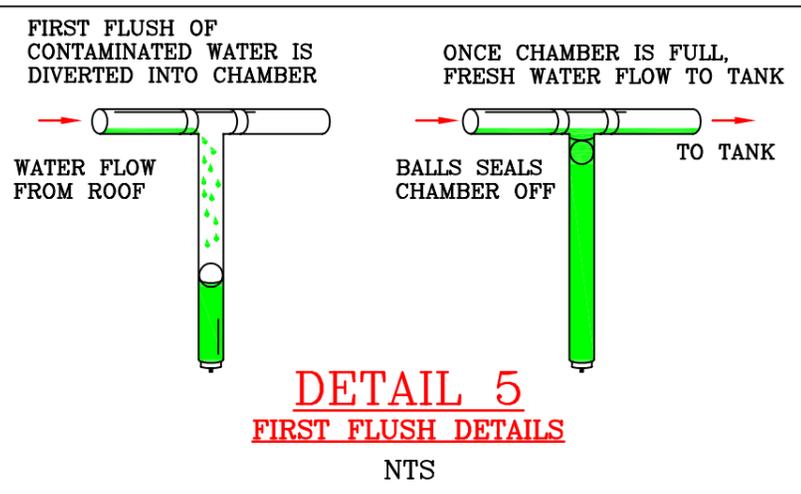
DETAIL 4

OSD/RWT DETAILS

N.T.S.

THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT CONSENT

DA2019/1032



CALCULATIONS:

RWT VOLUME = 2x4,080 LITRES = 8,160 LITRES

EFFECTIVE VOLUME = (1.450/1.560)x8,160 = 7,580 LITRES (APPROX.)

RETENTION VOLUME = (0.58x7,580)/1.45 = 3,030 LITRES (APPROX.)

DETENTION VOLUME = (0.87x7,580)/1.45 = 4,550 LITRES (APPROX.) > 4,500 LITRES.....OK

PSD = 2 l/sec

ORIFICE = 32 mm

NASSERI ASSOCIATES
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MOB. 0410 308 064
EMAIL nasseriassociates@bigpond.com

J.NASSERI
BE, FIEAust.,
NPER, CPEng.
DATE: 03/09/2019

SYMBOLS & NOTATIONS

--- STORMWATER LINES	SL FINISHED SURFACE LEVEL
o DOWNPIPE	FFL FINISHED FLOOR LEVEL
● 100 DIA YARD SUMP	FPL FINISHED PLATFORM LEVEL
▨ 225x100 GRATED BOX DRAIN	-x- SEDIMENT CONTROL BARRIER
INV INVERT LEVEL (PIPE / PIT)	--- PROPOSED BOUNDARY
	-s- SEWER

ISSUE	AMENDMENTS	DATE

CLIENT: RAWSON HOMES (MR. M.J. EVANS & MS. J.R. EVANS)
LOT A (H/No. 71) GEORGE STREET, AVALON BEACH

DESIGNED	PC	DRAWN	PC	CHECKED	JN	SCALE	AS SHOWN
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HYDRAULIC DETAILS

RWT/OSD TANKS & ORIFICE DETAILS

CAD REF. ENG/RAWSON	JOB No. D3817	SHEET No. 4
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