ATTACHMENT 3

PROPOSED RESIDENTIAL DEVELOPMENT 40-42A PARK ROAD, AUBURN STORMWATER CONCEPT DESIGN



	DRAWING REGISTER								
SHEET No.	No. TITLE								
1	SW100	COVER SHEET	D						
2	SW200	STORMWATER CONCEPT DESIGN - BASEMENT PLAN	С						
3	SW201	STORMWATER CONCEPT DESIGN - GROUND FLOOR PLAN	D						
4	SW202	STORMWATER CONCEPT DESIGN - ROOF PLAN	С						
5	SW300	STORMWATER CONCEPT DESIGN - DETAILS SHEET	С						
6	SW400	EROSION AND SEDIMENT CONTROL - PLAN AND DETAILS	С						

LOCALITY PLAN NOT TO SCALE COPYRIGHT OF GOOGLE MAP, VERSION 3



PREPARED BY:

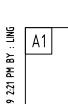
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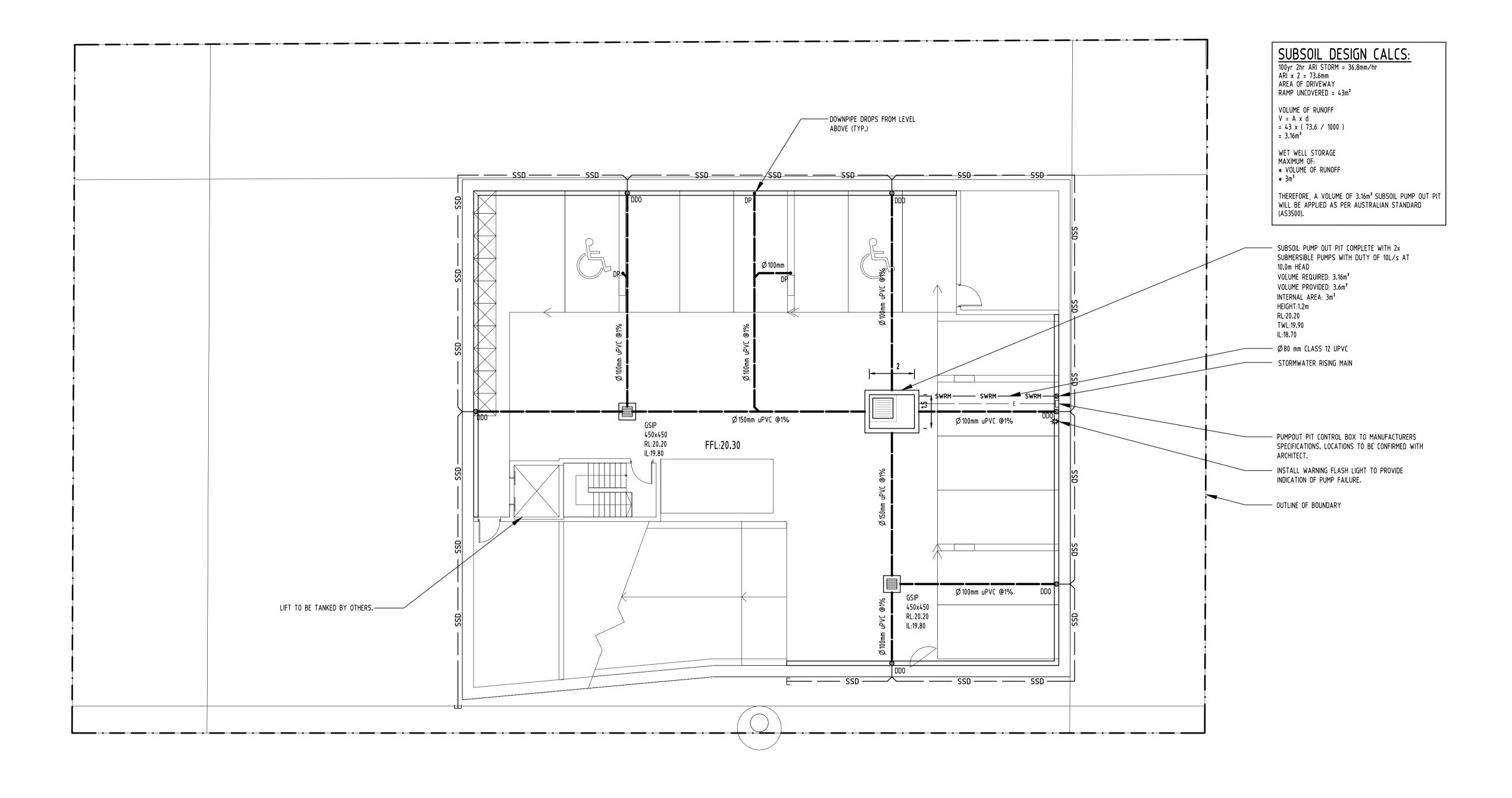
ARCHITECT:



CLIENT:

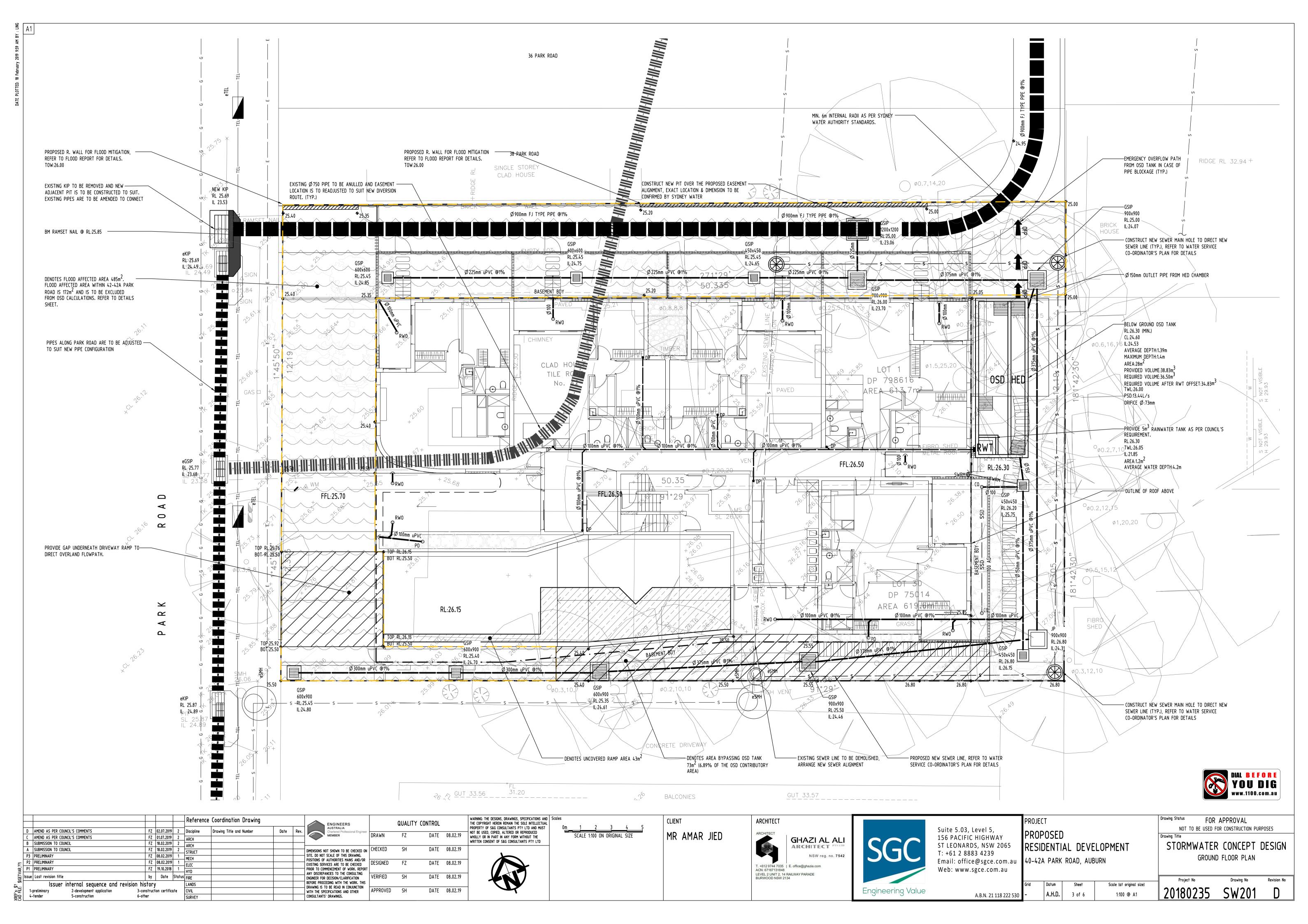
MR AMAR JIED

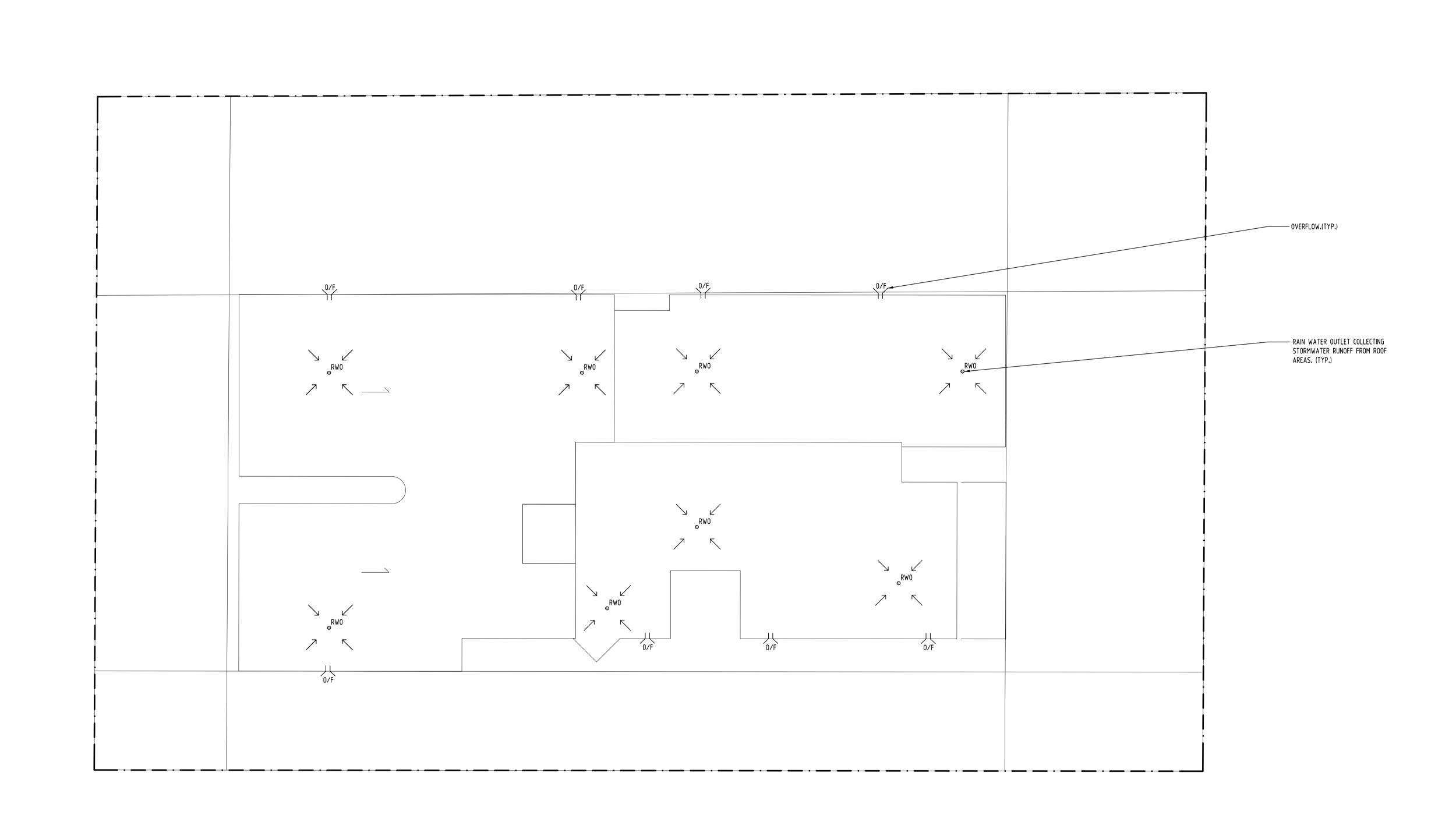






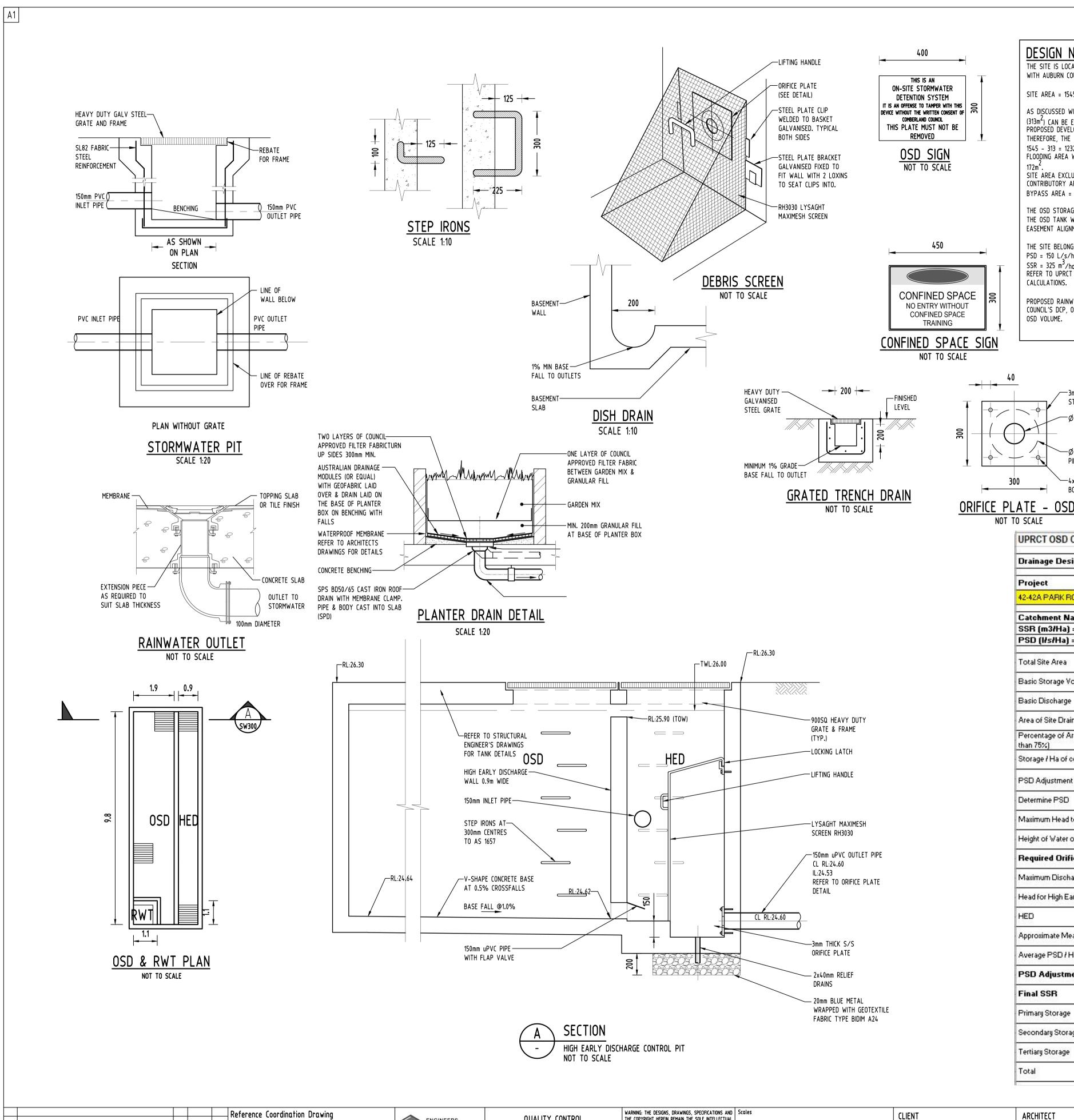
	Reference	e Coordination Drawing		ENGINEERS		QUALITY CON	NTROL	WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND STATE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL	cales	CLIENT	ARCHITECT			PROJECT			R APPROVAL	
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DESIGN NOTES: THE SITE IS LOCATED IN CUMBERLAND COUNCIL. THE DESIGN COMPLIES WITH AUBURN COUNCIL'S DCP.

SITE AREA = 1545m², AREA AFFECTED BY OVERLAND FLOW PATH = 485m⁴ AS DISCUSSED WITH COUNCIL'S ENGINEER, THE AREA OF 40 PARK ROAD (313m²) CAN BE EXCLUDED FROM OSD CALCULATIONS BECAUSE THE PROPOSED DEVELOPMENT WILL REMAIN IT AS GRASSED AREA. THEREFORE, THE TOTAL AREA CONTRIBUTED TO OSD CALCULATION IS: 1545 - 313 = 1232m² FLOODING AREA WITHIN OSD CALCULATION AREA (42-42A PARK RD) IS

SITE AREA EXCLUDING FLOOD AFFECTED AREA = 1060m² (OSD CONTRIBUTORY AREA) BYPASS AREA = 73m² (6.89% OF OSD CONTRIBUTORY AREA)

THE OSD STORAGE SYSTEM WILL BE BELOW GROUND TANK. WATER FROM THE OSD TANK WILL BE DISCHARGED TO A PROPOSED PIT WITHIN NEW EASEMENT ALIGNMENT.

THE SITE BELONGS TO LOWER HASLAMS CREEK CATCHMENT. PSD = 150 L/s/ha $SSR = 325 \text{ m}^3/\text{hg}$ REFER TO UPRCT CALCULATION SHEET FOR SITE'S PSD AND SSR

CALCULATIONS.

PROPOSED RAINWATER TANK VOLUME IS 5m³. ACCORDING TO AUBURN COUNCIL'S DCP, ONE THIRD OF RAINWATER TANK VOLUME CAN OFFSET OSD VOLUME.

-3mm STAINLESS

STEEL PLATE

−Ø73mm DIA. ORIFICE

−Ø150mm DIA. OUTLET

BOLTED & 2-PART EPOXY

NOT TO SCALE

─4xØ10mm FIXING DYNABOLTS

DRAINAGE NOTES:

ALL PIPES TO BE LAID ON 75mm SAND BED WITH THE BARRELS FULLY SUPPORTED 100mm AND 150mm DIAMETER PIPES TO BE LAID ON MINIMUM 1% GRADE

MINIMUM DEPTH OF COVER FOR PIPES NOT SUBJECT TO VEHICULAR LOADING TO BE 300mm ALL DRAINAGE PIPES LAID UNDER PAVEMENT SHALL BE REINFORCED CONCRETE WITH RUBBER RIN

BACKFILL TRENCHES WITH COMPACTED SAND OR APPROVED AGGREGATE MATERIAL

HEAVY DUTY GRATES AND COVERS ARE TO BE PROVIDED IN TRAFFICABLE AREAS PIT GRATE TO BE TYPE WELDLOK OR APPROVED EQUIVALENT

ALL PITS SHALL BE PROVIDED WITH A LOCKING CLIP

ALL PITS SHALL BE MAINTAINED REGULARLY

TOP OF BENCHING SHALL BE TO THE HALF OF THE OUTLET PIPE DIAMETER

Ø100 SUBSOIL DRAINAGE PIPE 3000mm LONG WRAPPED IN FABRIC SOCK TO BE PROVIDED ADJACENT TO INLET PIPES

COMPRESSIVE STRENGTH f'c FOR CAST IN SITU CONCRETE TO BE A MINIMUM OF 20MPa AT 28

ISOLATED JOINTS TO BE PROVIDED TO ISOLATE CONCRETE PAVEMENTS FROM PITS

ALL TRENCH GRATES PROVIDED SHALL HAVE A MINIMUM CLEAR WIDTH OF 200mm

STORMWATER DRAINAGE CONNECTIONS TO THE MAIN SYSTEM SHALL BE TO THE REQUIREMENTS AND THE SATISFACTION OF LOCAL COUNCIL

LEGEND:

STORMWATER LINE

—— SSD ——— SUBSOIL LINE

_____ G ____ G ____ AUTHORITY GAS LINE

- **SWRM** ---- STORMWATER RISING MAIN — AUTHORITY COMMS LINE

— s — AUTHORITY SEWER LINE ----- s ------ PROPOSED SEWER LINE — — E — AUTHORITY ELECTRICITY LINE

GRATED SURFACE INLET PIT

EXISTING KERB INLET PIT

RAINWATER OUTLET

DISH DRAIN OUTLET

PLANTER DRAIN CAP

DOWNPIPE

CLEAR OUT POINT

EXISTING SEWER MANHOLE

PROPOSED SEWER MANHOLE

Drowned Orifice Calculation Head to Orifice under drowned conditions (H1) = 1.00 m PSD from OSD system based on new head (Q1) = 13.44 L/s Q1 = d²xSQRT(H1)/0.464 Head for High Early Discharge under drowned conditions (H2) = 0.90 m 12.75 L/s Q2 = Q1xSQRT(H2/H1) High Early Discharge (Q2) = Mean Discharge (Q3) = 13.09 L/s Q3 = (Q1+Q2)/2 Average Discharge per Hectare (AA) = 123.52 L/s/ha AA = Q3/[D] Final Site Storage Ratio (AB) = 344.37 m3/ha AB = 74.66*([AA]/1000)^-0.731 36.50 m3 AC = ABx[D] Final Storage Volume (AC) = OSD Area 28 m2 Max Depth 1.40 m 0.02 m Level Rise in base of OSD 38.83 m3 Volume Achieved

Drainage Design Summary				S&G Pty Ltd
Project		Location		
42-42A PARK ROAD AUBURN	AUBURN			
Catchment Name:		LOVER H	ASLAMS	
SSR (m3/Ha) =	325			
PSD (IIs/Ha) =	150			
Total Site Area		0.1060	Ha	(A)
Basic Storage Volume SSRx(A)		34.45	m3	(B)
Basic Discharge PSDx(A	N)	0.0159	m3/s	(C)
Area of Site Drained to OSD ie	Area -Bypass	0.0987	Ha	(D)
Percentage of Area diverted to Storage (s than 75%)	93.11	'ж	(E)	
Storage / Ha of contributing Area	349.04	m3/Ha	(F)	
PSD Adjustment for Parramatta SSF	136.05	l/s/Ha	(G)	
Determine PSD	13.43	lłs	(H)	
Maximum Head to Orifice Centre	1.40	m	(K)	
Height of Water over weir to Storage	0.064	m	(1)	
Required Orifice Diameter	73	mm	(J)	
Maximum Discharge	13.44	lłs	(L)	
Head for High Early Discharge		1.34	m	(M)
HED		13.12	lłs	(N)
Approximate Mean Discharge		13.27	lłs	(P)
Average PSD / Ha of contibuting Area	134.48	l/s/Ha	(Q)	
PSD Adjustment (fig 5.1)	352	m3/Ha	(R)	
Final SSR	34.74	m³	(S)	
Primary Storage	34.74	m³	(T)	
Secondary Storage	0	m³	(U)	
Tertiary Storage		0	m³	(V)
Total		34.74	m³	(V)

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Reference Coordination Drawing QUALITY CONTROL AMEND AS PER COUNCIL'S COMMENTS FZ | 02.07.2019 | 2 | Discipline DATE 08.02.19 DRAWN FZ 01.07.2019 2 ARCH FZ 18.02.2019 2 ARCH FZ 18.02.2019 2 STRUCT AMEND AS PER COUNCIL'S COMMENTS SUBMISSION TO COUNCIL DIMENSIONS NOT SHOWN TO BE CHECKED ON CHECKED

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4-tender

5-construction

6-other

SURVEY

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PROJECT RESIDENTIAL DEVELOPMENT Email: office@sgce.com.au 40-42A PARK ROAD, AUBURN

Datum

A.H.D.

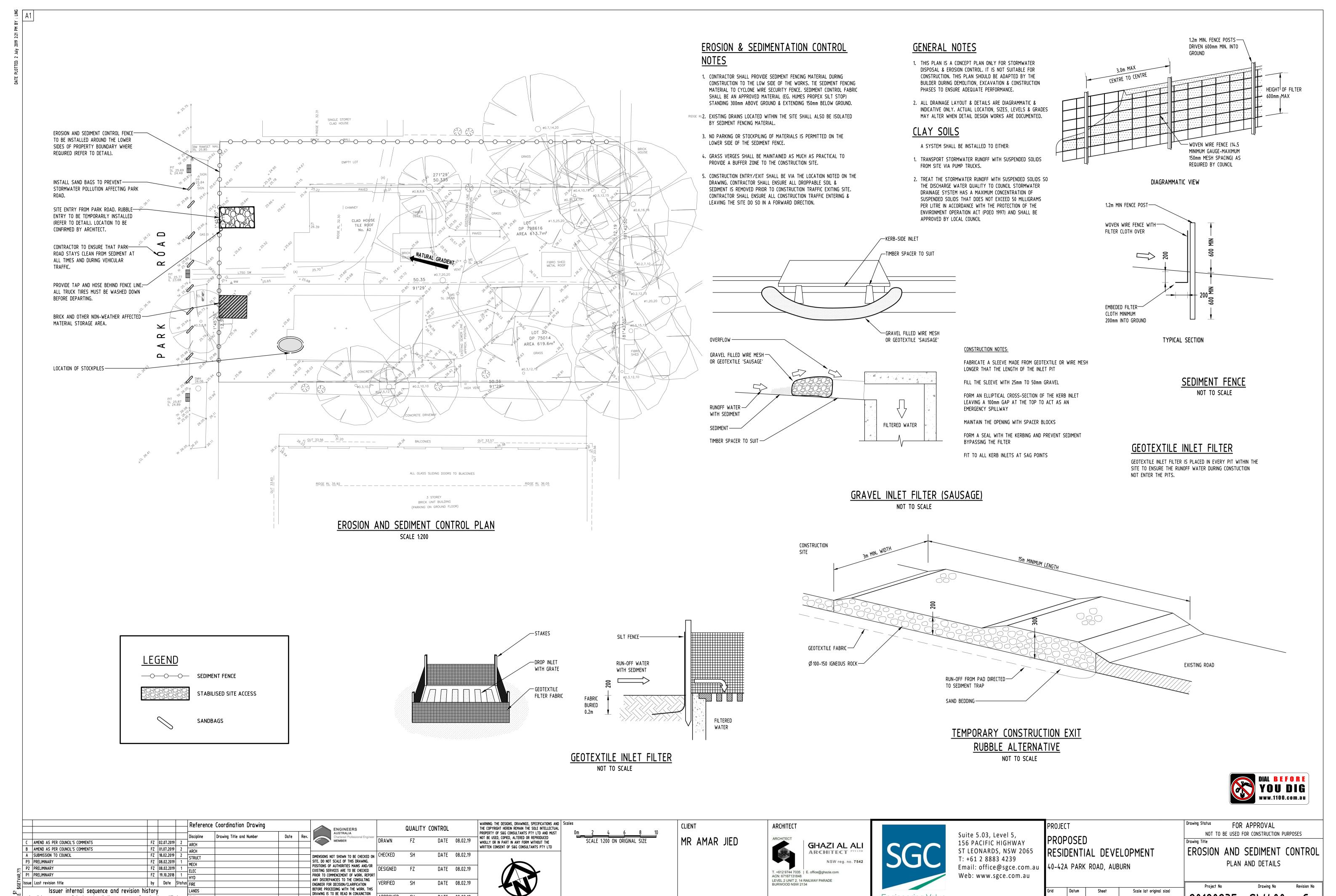
5 of 6

Scale (at original size)

AS SHOWN

NOT TO BE USED FOR CONSTRUCTION PURPOSES STORMWATER CONCEPT DESIGN DETAILS SHEET

FOR APPROVAL



3-construction certificate

SURVEY

6-other

2-development application

5-construction

4-tender

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