PURCHASE AGREEMENT BETWEEN THE CITY OF SOUTH SAN FRANCISCO AND ATLANTIS WATER MANAGEMENT VICTORIA

These terms and conditions govern the purchase of materials, supplies, and/or equipment described in this Purchase Agreement ("Purchase Agreement") by Atlantis Water Management Victoria ("Vendor") for the City of South San Francisco ("City"). Vendor and City are collectively referred to in this Purchase Agreement as "the Parties." If the Vendor selects subcontractors to execute a portion the terms of this Purchase Agreement, that subcontractor is an agent of the Vendor, and is hereby included by reference as "the Vendor."

- 1. <u>Time of Performance</u>. This Purchase Agreement shall commence effective June 26, 2019, and shall end when Vendor has provided to the City the Products described in this Purchase Agreement, and in Exhibit A ("Products"). The Vendor's obligations pursuant to this Agreement must be performed by June 26, 2021 as provided in Section 2 below. In the event that any of the terms of Exhibit A conflict with this Purchase Agreement, the terms of the Purchase Agreement shall prevail.
- 2. <u>Description of Goods</u>. Vendor shall perform everything required to be performed and shall provide and furnish to City the products listed in Exhibit A. Such products must be delivered before June 26, 2021 as instructed by the City's designated contractor or representative, in strict accordance with the specifications as established by this Purchase Agreement and Exhibit(s), which specifications are incorporated herein and made part of this Purchase Agreement.
- 3. <u>Description of Purchase</u>. The City hereby agrees to pay Vendor for the Products with a not to exceed amount. The total payment for Products provided under this Purchase Agreement is **not to exceed** Five Hundred Nine Thousand Five Hundred Dollars (\$509,500).

The City shall pay Vendor invoices for Products actually delivered in accordance with this Purchase Agreement. To be eligible for payment, Vendor invoices must itemize the Products delivered and the corresponding prices in accordance with this Purchase Agreement. Payment of Vendor invoices does not constitute acceptance of Products delivered. Prices of Products delivered that are not in accordance with this Purchase Agreement are subject to adjustment. In no event will the prices of Products delivered exceed that specified on this Purchase Agreement. Payments shall be subject to adjustment for defects in quality or failure of Vendor to meet terms and conditions herein and in Exhibit A. Such adjustments shall be equal to one hundred percent (100%) of City's costs to correct such defects or Vendor's failure to meet Purchase Agreement requirements.

4. <u>General Warranties and Product Compliance</u>. Vendor warrants that: (A) All Products are as described on this Purchase Agreement conform to all drawings, samples, descriptions and specifications contained in Exhibit A; (B) All Products delivered are new and of good merchantable quality, free from material defects of workmanship and fit for the purpose for which sold or provided; (C) Vendor has good title to all Products delivered and all Products delivered are free from liens and other encumbrances; and (D) Vendor's delivery and supply of the Products will be in strict conformity with all applicable local, state, and federal laws. For purposes of this warranty, any Products or components not meeting the foregoing quality shall be deemed defective. The foregoing warranty provisions shall also be applicable to equipment or materials provided by a third party entity to Vendor via this Purchase Agreement.

Vendor also expressly warrants and guarantees, for ten (10) years that the Products furnished by it to City shall be free from breakage or defects of material and workmanship under normal use and

in accordance with Atlantis Corporation tank manual, specifications and design calculations, service and maintenance from the date of acceptance of the City, and expressly agrees to replace Products which proves defective as a result of inferior or defective materials, equipment or workmanship. If within the period stated above, any repairs or replacements in connection with the Products are determined by an independent assessor agreed to by both parties to be as a result of the use of inferior or defective materials, equipment or workmanship, Vendor agrees on receipt of notice from City and without expense to the City, for freight, parts or labor, to properly repair, replace or correct any and all such defects therein. If Vendor, after such notice, fails to proceed promptly with the terms of this warranty and guarantee, the City may perform the work necessary to effectuate such corrections, repairs and replacements, and recover the cost thereof from Vendor.

- 5. <u>Final Inspection and Acceptance</u>. Products delivered pursuant to this Agreement shall be subject to final inspection and acceptance or rejection by the City at the time of delivery.
- 6. <u>Performance and Liability</u>. Vendor expressly agrees to assume all liabilities, responsibilities, risks, claims, costs and damages associated with the Products and their delivery pursuant to this Agreement, including those arising from actions and omissions on the part of Vendor's contractor(s) or subcontractor(s) during the course of delivery. The City shall not assume any responsibility or liability whatsoever with respect to the Products until such Products have been delivered as directed by the City's designated contractor or representative pursuant to Section 2 above and have been accepted by such designated contractor or representative pursuant to Section 5 above.
- 7. <u>Insurance</u>. Continuing throughout the term of this Purchase Agreement, Vendor, at its sole cost and expense, furnish the City with certificates of insurance evidencing that Vendor has obtained and maintains Professional Liability Insurance in an amount not less than ONE MILLION DOLLARS (\$1,000,000) covering the licensed professionals' errors and omissions.

Vendor shall also require any contractor(s) or subcontractor(s) to secure and maintain, in full force and effect during the term of this Agreement, a general liability insurance policy and other adequate insurance that shall be the types and amounts of insurance coverage listed below:

A. Workers' Compensation that satisfies the minimum statutory limits.

B. Commercial General Liability and Property Damage Insurance in an amount not less than ONE MILLION DOLLARS (\$1,000,000) combined single limit per occurrence, TWO MILLION DOLLARS (\$2,000,000) annual aggregate, for bodily injury, property damage, products, completed operations and contractual liability coverage. The policy shall also include coverage for liability arising out of the use and operation of any City-owned or City-furnished equipment used or operated by the Vendor, its personnel, agents or subcontractors.

C. Comprehensive automobile insurance in an amount not less than ONE MILLION DOLLARS (\$1,000,000) per occurrence for bodily injury and property damage including coverage for owned and non-owned vehicles.

8. <u>Termination</u>. In addition to all other legal and equitable rights of the City, the City may terminate this Purchase Agreement upon notice to the Vendor. If the City terminates this Purchase Agreement, the City will pay the Vendor for Products accepted in accordance with this Purchase Agreement prior to the date of termination.

- 9. <u>Prevailing Party</u>. In the event that either party to this Purchase Agreement commences any legal action or proceeding (including but not limited to arbitration) to interpret the terms of this Purchase Agreement, the prevailing party in such a proceeding shall be entitled to recover its reasonable attorney's fees associated with that legal action or proceeding.
- 10. <u>Notice</u>. All notices and other communications which are required or may be given under this Agreement shall be in writing and shall be deemed to have been duly given (i) when received if personally delivered; (ii) when received if transmitted by telecopy, if received during normal business hours on a business day (or if not, the next business day after delivery) provided that such facsimile is legible and that at the time such facsimile is sent the sending Party receives written confirmation of receipt; (iii) if sent for next day delivery to a domestic address by recognized overnight delivery service (e.g., Federal Express); and (iv) upon receipt, if sent by certified or registered mail, return receipt requested. In each case notice shall be sent to the respective Parties as follows:

Vendor:

Atlantis Water Management Victoria Pty Ltd 3/19-21 Gibbes St Chatswood, NSW 2067 AUSTRALIA

City:

City Clerk City of South San Francisco 400 Grand Avenue South San Francisco, CA 94080 UNITED STATES

- 11. <u>Assignment, Governing Law</u>. The Vendor may not assign any of Vendor's obligations under this Purchase Agreement without the City's prior written approval. This Purchase Agreement is governed by California law. The jurisdiction for any litigation arising from this Purchase Agreement shall be in the state of California, and shall be venued in the County of San Mateo.
- 12. <u>Severability</u>. If any portion of this Purchase Agreement is held invalid, the Parties agree that such invalidity shall not affect the validity of the remaining portions of this Purchase Agreement.
- 13. <u>Entire Agreement</u>. This Agreement represents the entire and integrated agreement between the Parties. This Purchase Agreement may be modified or amended only by a subsequent written agreement signed by both Parties.
- 14. <u>Execution in Counterpart.</u> This Agreement may be executed in counterparts and/or by facsimile or other electronic means, and when each Party has signed and delivered at least one such counterpart, each counterpart shall be deemed an original, and, when taken together with other signed counterpart, shall constitute one Agreement, which shall be binding upon and effective as to all Parties.

[signatures on the following page]

CITY OF SOUTH SAN FRANCISCO A Municipal Corporation

ATLANTIS WATER MANAGEMENT VICTORIA

By:_____

Mike Futrell City Manager By:_____ Robert Khachadourian Authorized Representative

Approved as to Form:

City Attorney

Attest:

City Clerk

3239397.1

EXHIBIT A



Shipper ATLANTIS WATER MANAGEMENT VICTORIA PTY LTD UNIT 3/19-21 GIBBES STREET CHATSWOOD, N.S.W. 2067 AUSTRALIA T: +61 2 9417 8344 F: +61 2 9417 8311				Consignee CITY OF SOUTH SAN FRA 315 MAPLE AVENUE SOUTH SAN FRANCISCO, (CONTACT: BIANCA LIU		
Notify Party				Delivery address Orange Memorial Park 1 W Orange Ave South San Francisco, CA, US	SA 94080	
Port of Loading		Vessel/Aircraft etc		Country of Origin		
PORT KLANG, MAL	AYSIA	ТВА		Malaysia		
Bill of Lading Date		Port of Discharge		Customer Order No:		nd Numbers Quantity and
j in j		ТВА		ТВА	D PLASTIC P	escription of Goods
Part No. 70006	Part Name 8,527 Atlantis Quad Flo Tanks (5-Plate) Capacity 16.31cf ea	Sales Unit Price USD 3.33	Quantity 139,075	Description cubic feet		Total USD 463,144.30
10000		000 0.00	100,010	000101001		000 400,144.00
		1				
	* CUBIC FOOT RATE IS BASED ON LATEST CONCEPT PLANS INCORPORATING 6,400 QUADS FOR INFILTARION GALLERY + 2,127 QUADS FOR CISTERN.					
	2,127 QUADS FOR CISTERN.					
	** DDP PRICE MAY INCREASE BY 2-2.5% IF OVERALL VOLUME OR					
	NUMBER OF QUADS IS REDUCED SIGNIFICANTLY OR FREIGHT RATES INCREASED DUE TO SEASONAL PEAK CHARGES.					
	Transport		19	40HC Containers		
					TOTAL	USD 463,144.30
*** SALES QUOTE VA	LID FOR 45 DAYS. CLIENT TO GIVE ESTIMATE ON TIME FRAME BETWEEN	I ORDER AND DATE	OF STOCK R	EQUIREMENT.		
TERMS DDP	Orange Memorial Park, 1 W Orange Ave, S San Francisco, CA 9	4080				
TERMS DDF		4000				
	50% PRODUCT + ALL LOGISTICS COSTS (INCL FREIGHT, 50% PRODUCT PAYABLE 30 DAYS FROM COMMERCIAL I		OKERAGE)	PAYABLE UPFRONT		
Payment by TT dire	ct to bank account as follows:					
Account Name:		ATLANTIS WATE	R MANAGEM	ENT VICTORIA PTY LTD		
Bank: Branch Address:		National Australia		d NSW 2067 Australia		
BSB No.:		082-201	ue, chatswo	od NSW 2067, Australia		
Account No.:		ATLNTUSD01				
Swift No.:		NATAAU3302S				
Signatory's Company		Signature		Name of Authorised		Date of issue
ATLANTIS WATER MAN	AGEMENT VICTORIA PTY LTD			Signatory Nermina Marosevac	7	"hursday, 20 June 2019

			Contact	Robert Khatchadourian
Atlantis	QUOTE - Lotus Water		Email	robertk@atlantiscorp.com.au
GREEN CITIES FOR LIFE	LANDED PRICE		Tel	612 406 712 296
Quote #	ATL190227_4		Quote Based on	Volume CF
Quote Date	4/23/2019 - Revised 06/12/2019		Quote Valid	45 Days
Contact			Contact(s)	
Telephone			Email	
Project Name	Orange Memorial Park		Zip Code (estimated)	South San Francisco, CA 94108
Product	Atlantis Flo-Tanks		Load Rate	5-plate
Product Quantity				
Flo Tank Parts	Part	Quantity	Unit Price	
Quad Flo Tank 5-plate	70006HD (Cistern) 26,705 cf effective storage	2,127	-	-
Quad Flo Tank 5-plate	70006HD (Infiltration Gallery) 104,413 cf	6,400	-	-
Total for Atlantis Product	Cistern & Infiltration Gallery	8,527	-	463,144.30
			Product Total	463,144.30
			Total USD	463,144.30

DDP Quote Terms: INCLUDING 5.3% Duty, Brokerage and Shipping/Freight to site

2-2.5% price increase if overall volume or number of Quad Modules is reduced significantly. Also, if freight rates are increased during peak charges.

The product will ship direct to site from the Malaysia factory.

Lead Time: 8 – 12 weeks (subject to number of containers required per shipment, production queue, available standing stock and shipping vessel)

Atlantis Flo Tanks are sold unassembled and must be assembled on site. Plates are shipped in pallets

Additional plates to cover damage caused by installation are not included

A forklift is required onsite to unload material from the truck.

This quote does not include textile, liner, geo-grid, handling or assembly costs.

Pricing is based upon information provided and may change if actual dimensions or loads differ.

Determination of all quantities required for completion of the project is the client's responsibility

Shipping costs are estimated on this quote; an estimate only and can vary

Price is valid for 45 days, subject to Atlantis Standard Terms and Conditions of Sale (Below)

Page 1 of 3

ATLANTIS STANDARDS TERMS AND CONDITIONS OF SALE

These are the terms and conditions of sale between Atlantis Water Management Victoria (Seller) and the buyer of the Products (Buyer):

Project Acceptance - All orders are subject to review and acceptance by the Seller. By placing an order with the Seller the Buyer accepts the the Seller's terms and conditions of sale written here. Changes to these terms must be done with written agreement from the Seller.
 Quoted Prices - All prices are D.D.P.. the Seller's factory or warehouse and unless otherwise specified, exclude all local, provincial, state, or federal sales taxes. Proposals and quotations of prices apply only in the quantity and on the shipping schedule named in the proposal or quote, and unless the Seller expressly agrees to the contrary in writing, such proposal and quotations are subject to change without notice.
 Prices are subject to change in the event of increases in customs duty, sales, excise, or other similar taxes, or increases in freight, insurance, of variation in foreign currency exchange rates, or in the costs of manufacture. The prices in this quotation are based on a current resin price. If the price of materials purchased by the Seller from 3rd party vendors increases during the stated acceptance period, the prices herein shall be adjusted to reflect this increase in the material prices and shall be passed to the Buyer without allowance for overhead or profit. Unless the Seller expressly agrees to the contrary in writing, all invoices become due and payable on the date of the Seller's invoice. Prices are valid for 30 days.

3. **Delivery** - Any dates or schedules that are specified for delivery of the Goods are estimates only and the Seller will incur no liability, either direct, or indirect, as a result of any delays in meeting such dates or schedules. If the Buyer shall fail to make payments in accordance with the terms of payment, the Seller may defer further shipment until such payments are made or terminate this Agreement. The Seller shall not be responsible for any delays in delivery or failures in manufacture caused by contingencies beyond the Sellers' reasonable control, including but not limited to strikes, fire, flood, embargo, war, governmental regulations, or shortages of raw materials, fuels, or transportation. Acceptance of order and delivery is subject to availability at the time of Order.

4. Product Inspection - The Buyer shall carefully inspect the condition of the Product on receipt and shall notify the Seller in writing before the product has been stored or moved out to site, of any defects or shortages, and provide the Seller an opportunity to inspect the defects. Any defects in product or material ordered and delivered must be reported to us within 48 hours. Product shall not be returned to the Seller without the written consent of the Seller. Upon written consent of the Seller, such goods may be returned to the Seller's designated location, freight prepaid, and by a carrier designated by the seller.

5. Quality and Standards Unless otherwise expressly agreed upon in writing, the products sold hereunder shall be subject to the Seller's standard specifications, manufacturing variations, and tolerances. Additional QC requirements not specifically detailed in the Seller's Quality Assurance Manual will be provided at an extra charge.

6. Warranties - The Seller does not warrant the suitability of Product for any particular purpose, but warrants and agrees to manufacture Product in accordance with the agreed specifications and without defect. For standard warranty details please contact Atlantis International Corp. Pty. or your Atlantis representative for a draft copy of the warranty based on the project design and expected loads, specifically agreed to in writing by the Seller. Where the Seller warrants the products to be sold, it shall be in accordance with the Seller's published specifications at time of the order. The Seller's warranty is limited to the materials Seller purchased from third party vendors to the standard warranty offered by those

vendors. The Seller shall in no event be liable to the Buyer or any third party for special, incidental, or consequential damages for, resulting from or in connection with, any breach of warranty or any loss resulting from the improper use of the Product by the Buyer. Our legal liability is limited to the cost of material supplied and freight if applicable.

7. Indemnity - The buyer agrees to indemnify, save harmless and defend the Seller and the Seller's directors, officers, employees and contractors from and against all claims by any third party (being an individual, partnership, joint venture, firm, trust, body corporate, government, authority of any other legal entity other than the Seller or the Buyer) in respect of or in any way relating to the Products, Services or the installation of the Products including, without limitation any claims relating to any breach of contract, negligence or other tort or breach of statutory or other duty by the Seller. The Buyer agrees that the Seller's directors, officers, employees and contractors are their intended party beneficiaries of this clause.
8. Design - It is the Buyer's responsibility to ensure that the design into which the Product will be used is properly engineered and that the Product properties are adequate for the installation. Should the Product be used in an application where property or public safety could be endangered the Buyer warrants that the design of the Product has been engineered by a competent engineer with experience in the design of the Product. Unless specifically agreed to in writing, the Seller shall not be responsible for the results of any technical advice provided free of charge in connection with the design, installation, or use of the Product.

9. Disclaimer - The information presented herein, while not guaranteed, is to the best of our knowledge true and accurate. While every effort has been made to provide accurate and reliable information, it is up to the user of this product to verify all information, including designs it might be based upon, with an independent source. Application of this data must be made on the basis of responsible professional judgment. Except when agreed to in working conditions of use, no warranty expressed or implied is made regarding the performance or suitability of use of any product, since the manner of use and handling is beyond our control.

ATL190227_4 Above sales terms are deemed accepted on Purchase Order submittal. Terms of payment will be provided at time of PO.

Date: _____

Name :	
Title	
Company	

Page 3 of 3



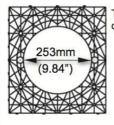
Flo-Tank® module specifications

Maximum Flow F	Rate @ 1% gradient Rate @ 5% gradient Rate @ 10% gradien	27.4 L/s (7.238 L	JSGal/s)	H 1310mm	H 1740mm	H 2170mm
	MINI	SINGLE	DOUBLE	TRIPLE	QUAD	PENTA
Part Number	70010	70003	70004	70005	70006	70007
Height	240mm <mark>(</mark> 9.45")	450mm (17.72")	880mm (34.65")	1310mm (51.57")	1740mm (68.5")	2170mm (85.43")
Width	408mm (16.06")	408mm (16.06")	408mm (16.06")	408mm (16.06")	408mm (16.06")	408mm (16.06")
	(25.0711)	(0.0.0711)		CO5 (2C 07!!)	(26.07!!)	(22.2.71)

Width	408mm (16.06")	408mm (16.06")	408mm (16.06")	408mm (16.06")	408mm (16.06")	408mm (16.06")
Length	685mm (26.97")	685mm (26.97")	685mm (26.97")	685mm (26.97")	685mm (26.97")	685mm (26.97")
Weight	4kg (8.8lbs)	6.5kg (14.3lbs)	12.0kg (26.5lbs)	17.5kg (38.6lbs)	23.0kg (50.7lbs)	28.5kg (62.8lbs)
Module Footprint	0.2795m ² (3ft ²)	0.2795m ² (3ft ²)	0.2795m ² (3ft ²)			
Gross Volume	0.067m ³ (2.366ft ³)	0.126m ³ (4.450ft ³)	0.246m ³ (8.687ft ³)	0.366m ³ (12.925ft ³)	0.486m ³ (17.163ft ³)	0.607m ³ (21.436ft ³)
Net Volume m3 (ft3)	0.064 (2.250)	0.119 (4.219)	0.234 (8.251)	0.348 (12.283)	0.462 (16.315)	0.576 (20.346)
Net Volume L (gal.)	63.72 (16.83)	119.47 <mark>(</mark> 31.56)	233.65 (61.72)	347.81 (91.88)	461.98 (122.04)	576.15 (152.20)

Flo-Channel® module specifications

Maximum Flow Rate @ 1% gradient 28.5 L/s (7.5 USGal/s) Maximum Flow Rate @ 5% gradient 89.7 L/s (23.7 USGal/s) Maximum Flow Rate @ 10% gradient 148 L/s (39 USGal/s)



Part Number

Module Footprint

Net Volume (Gallons)

Gross Volume Net Volume (litres)

Height

Width

Length

The module opening has a diameter of 253mm (9.84")





0.119 (4.219)

119.47 (31.56)

















H 880mm













H 2170mm

PENTA

2170mm (85.43")

408mm (16.06")

685mm (26.97")

0.2795m² (3ft²)

0.576 (20.346)

576.15 (152.20)

0.607m3 (21.436ft3)

70007FC





0.462 (16.315)

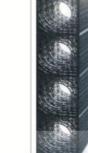
461.98 (122.04)



Charles .

1000000
Ser.









Contraction -



0.348 (12.283)

347.81 (91.88)





SINGLE DOUBLE QUAD 70003FC 70004FC 70005FC 70006FC 450mm (17.72") 880mm (34.65") 1310mm (51.57") 1740mm (68.5") 408mm (16.06") 408mm (16.06") 408mm (16.06") 408mm (16.06") 685mm (26.97") 685mm (26.97") 685mm (26.97") 685mm (26.97") 0.2795m² (3ft²) 0.2795m² (3ft²) 0.2795m² (3ft²) 0.2795m² (3ft²) 0.126m3 (4.450ft3) 0.246m³ (8.687ft³) 0.366m3 (12.925ft3) 0.486m³ (17.163ft³)

0.234 (8.251)

233.65 (61.72)



Flo---Tank Technical Document Last edit: 10/05/2016

Atlantis Corporation reserves the right to change its products specifications at any time. It is the responsibility of the specifier and purchaser to ensure that the product specifications used for design and procurement proposes are current and consistent with the products used in each instance.

Considerations for a Responsible Design

- Adequate understanding of infiltration systems
- Use of water free of sediments, debris and contaminants
- Adequate understanding of ground conditions on site
- Use of suitable backfill and installation under non-heavy loads
- Consideration of the influence groundwater levels and the effect of surface water flow into excavations during construction
- Appropriate laboratory testing and quality assurance
- Appropriate application of load combinations and partial factors of safety
- Consideration of dynamic effects from vehicles and duration of static loads
- Consideration of relevant local and international standards
- Calculation of creep to meet both short-term and long-term requirements

Atlantis modular tanks are made of recycled geo-composites and therefore their strength may have slight variations. Thus caution has been incorporated into compressive strength figures obtained from independent third party laboratories.

Atlantis carries out a batch---testing regime within the quality assurance procedures to ensure that the products delivered to the marketplace meet our technical specifications and the compressive strength shown in this document.

FloTank	(kPa)	(psi)
4 internal plates	220.0	31.9
5 internal plates	244.7	34.5
7 internal plates	309.5	44.9
9 internal plates	370.2	53.7

Vertical Compression Strength (408mm x 685mm face)

Lateral Compression Strength A (450mm x 685mm face)

FloTank	(kPa)	(psi)
4 internal plates	176.0	25.5
5 internal plates	184.4	26.7
7 internal plates	232.3	33.7
9 internal plates		**

Disclaimer: All information provided in this publication is correct to the best knowledge of the company and is given out in good faith. The information provided is intended for guidance only and shall not constitute a'sale by description'. Atlantis may modify and change the information and specifications without prior notice. Updates will not be issued automatically. This information is not intended to have any legal effect, we accept no liability whatsoever on design and installation. All rights reserved. Copyright in this datasheet belongs to Atlantis and all such copyright may not be used, sold, copied or reproduced in whole or part in any manner in any media to any person without prior consent. As each project is unique, and as Atlantis Corporation Australia Pty Ltd, Atlantis Corporation International Pty Ltd, Atlantis Aurora Pty Ltd, and its distributors and agents world wide have no direct control over the methods employed by the local user in specifying, installing or supervising of its products, no responsibility is accepted by Atlantis Corporation Australia Pty Ltd, Atlantis Corporation International Pty Ltd, Atlantis Aurora Pty Ltd and its distributors and agents world wide, as to the suitability of its use forany particular project. Users should satisfy themselves as to the suitability of the products for their purpose.

Lateral Compression Strength B (450mm x 408mm face)

FloTank	(kPa)	(psi)
4 internal plates	119.3	17.3
5 internal plates	147.4	21.4
7 internal plates	186.5	27.0
9 internal plates		

<u>Long---term Design Life</u> Creep Reduction Factor – Australian Standard 4678

Design Life (years)	Factor
20	0.33
30	0.32
50	0.30

NOTES:

* Lateral strength tests for 9 internal plates to be updated.

* Creep reduction factors have been extrapolated from specimen testing by with the University of Technology, Sydney (UTS). AS4678 Earth---Retaining Structures is referred to for creep definition.

* Other influencing factors such as all external forces, geotechnical conditions, ground temperature fluctuations, earthquakes etc. and other factors not noted must be taken into account for the design by the design engineer.

* This document is a supplement of Atlantis technical guides, manuals and specifications for modular underground water tanks.

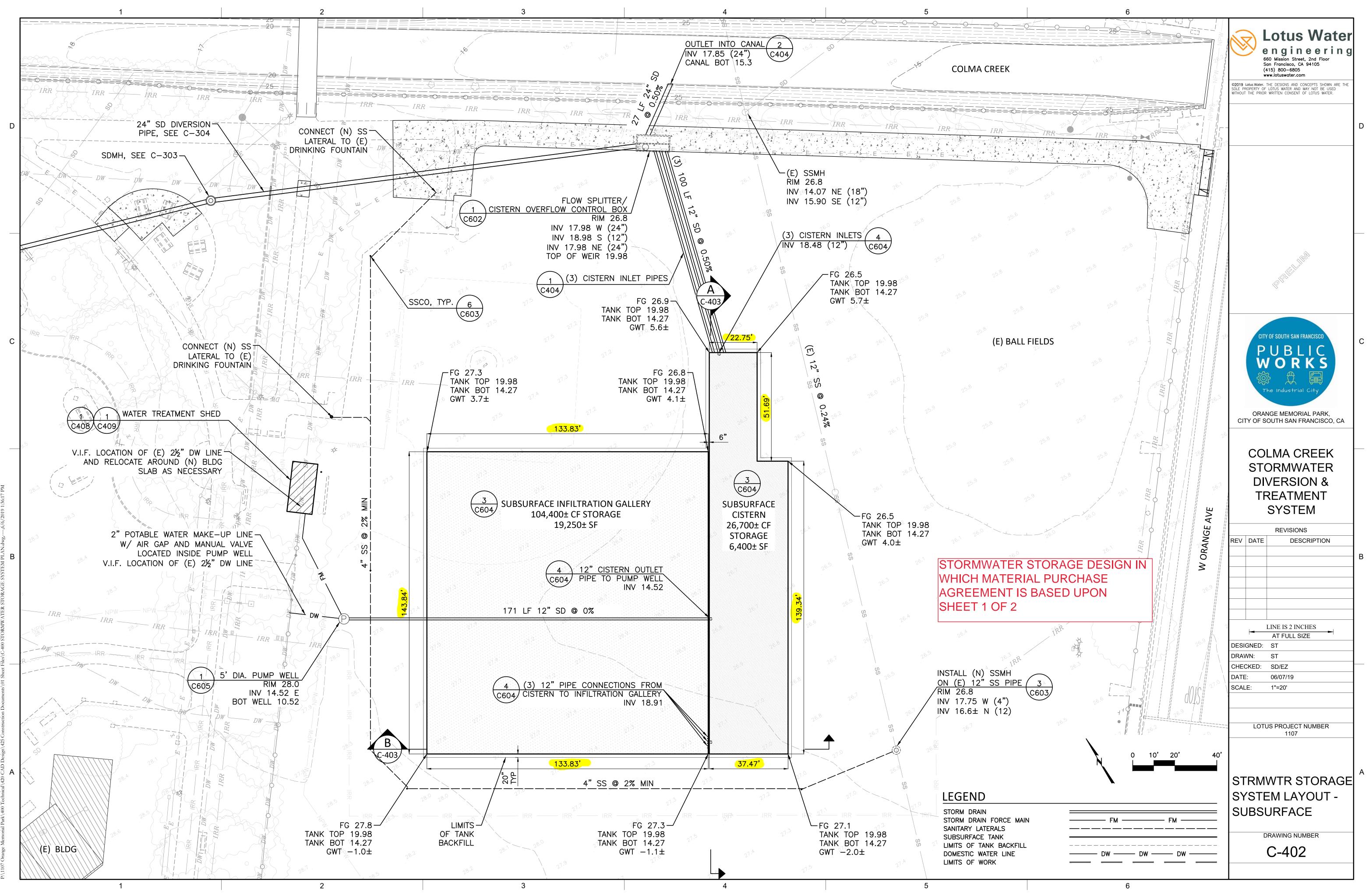
* Atlantis Corporation reserves the right to change its products specifications at any time. It is the responsibility of the specifier and purchaser to ensure that the product specifications used for design and procurement are current and consistent with the products used in each instance.

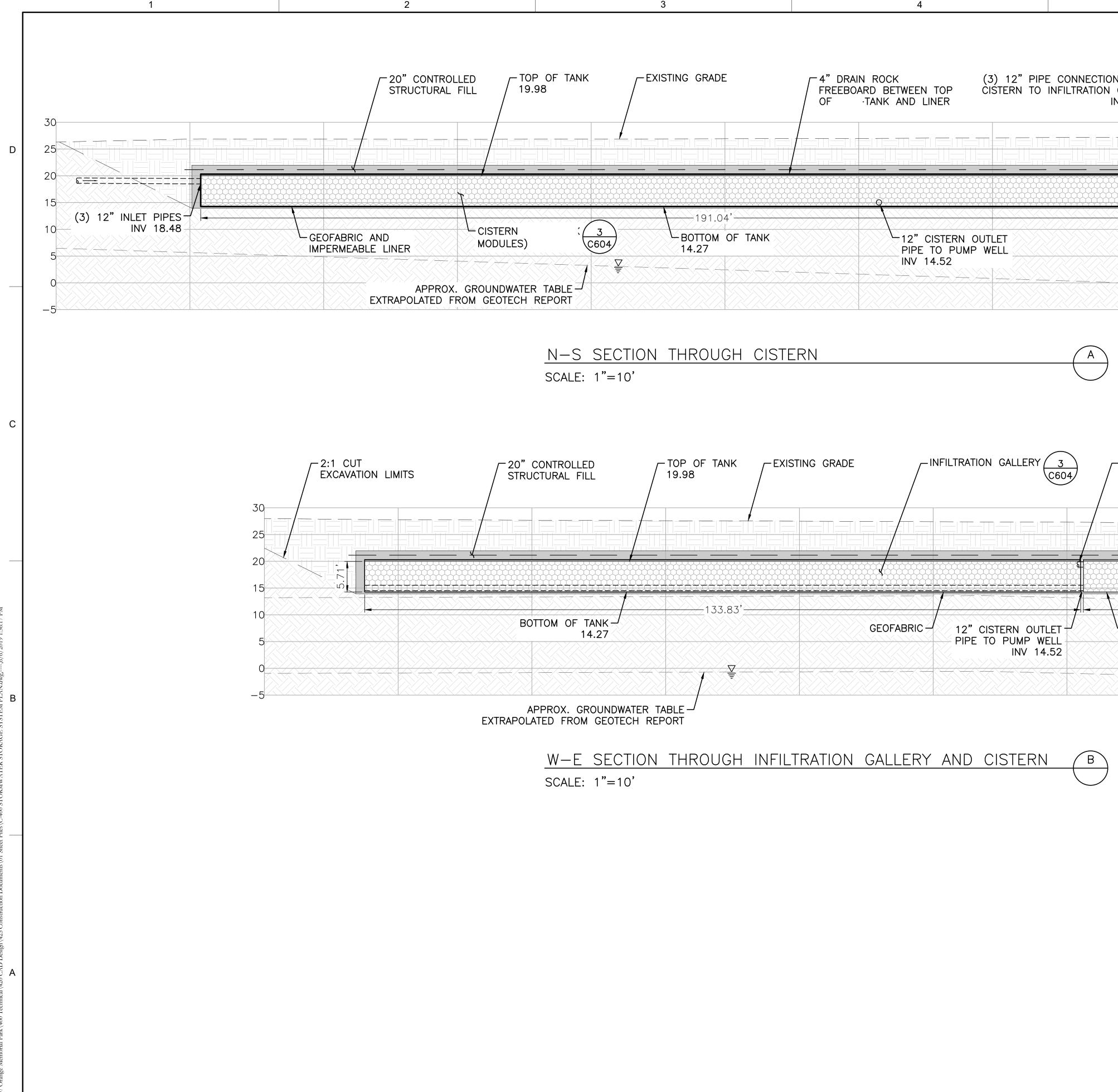
For further technical information, advice or updated documentation please contact Atlantis' technical team on:

- Email: technical@atlantiscorp.com.au
- Telephone: +61 2 9417 8344
- Website: www.atlantiscorp.com.au

Disclaimer: All information provided in this publication is correct to the best knowledge of the company and is given out in good faith. The information provided is intended for guidance only and shall not constitute a'sale by description'. Atlantis may modify and change the information and specifications without prior notice. Updates will not be issued automatically. This information is not intended to have any legal effect, we accept no liability whatsoever on design and installation. All rights reserved. Copyright in this datasheet belongs to Atlantis and all such copyright may not be used, sold, copied or reproduced in whole or part in any manner in any media to any person without prior consent. As each project is unique, and as Atlantis Corporation Australia Pty Ltd, Atlantis Aurora Pty Ltd, and its distributors and agents world wide have no direct control over the methods employed by the local user in specifying, installing or supervising of its products, no responsibility is accepted by Atlantis Corporation Australia Pty Ltd, Atlantis Corporation International Pty Ltd, Atlantis Corporation International Pty Ltd, Atlantis corporation International Pty Ltd, Atlantis Source is should satisfy themselves as to the suitability of its use forany particular project. Users should satisfy themselves as to the suitability of the products for their purpose.

3/19-21 Gibbes Street, Chatswood NSW 2067 Australia (Head Office) Phone: + (61) 2 9417 8344 Fax: + (61) 2 9417 8311 Email: info@atlantiscorp.com.au www.atlantiscorp.com.au





1

2

- EXI	ISTING GRADE		/ FREEBOA	N ROCK ARD BETW -TANK AN	EEN TOP	(3) 12 CISTER	2" PIPE RN TO IN	CONNECTI NFILTRATION	N GA	FROM LLERY 18.91			/ B G L/ (II
													5.71
	191.04'- BOTTOM OF 14.27	TANK		<u> </u>		N OUTLET						20" BASE	$\mathbb{R} \times \mathbb{N}$

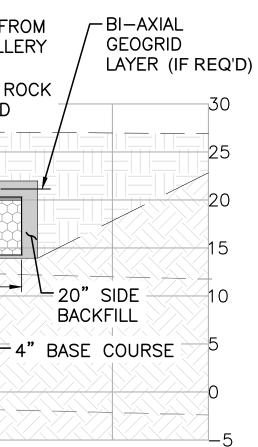
TOP OF TANK	EXISTING GRADE	IN	FILTRATION GALLERY	3 (604)	-(3) 12" PIPE C CISTERN TO INF INV 18.91	ILTRATION GALL
						4" DRAIN F
133.83'-					37.47'-	
		GEOFABRIC -	12" CISTERN OUT PIPE TO PUMP W INV 14	ELL	GEOFABRIC AND IMPERMEABLE L	

CTION	THROUGH	INFILTRATION	GALLERY	AND	CISTERN	B
=10'						\frown





I–AXIAL – 2:1 EOGRID / EXCA AYER F REQ'D) /	VATION LIMITS
/	30
	25
	20
	15
DE BACKFILL	10
DURSE	
	5
	0
	$\underline{ } \overline{ } \overline$



STORMWATER STORAGE DESIGN IN WHICH MATERIAL PURCHASE AGREEMENT IS BASED UPON SHEET 2 OF 2

