

WATER TECHNOLOGIES

Surrey, BC, 877-306-2146 BENJAMIN@CFWT.CA

## EQUIPMENT SCHEDULE

ADDITIONAL1860 USG RAINWATER TANK - UNDERGROUND CANWEST POLY TANK ADDITIONAL1860 USG RAINWATER TANK - UNDERGROUND CANWEST POLY TANK

ADDITIONAL1860 USG RAINWATER TANK - UNDERGROUND CANWEST POLY TANK

## WATER USES

NON-POTABLE, HOSE BIBS, PRESSURE WASHING, VEHICLE WASHING

POTABLE, HUMAN CONSUMPTION, ORAL CARE, FOOD PREPARATION,

## DESCRIPTION

SYSTEM DESCRIPTION AND DESIGN NARRATIVE WATER HARVESTING POTENTIAL AND WATER USE SITE PLAN DRAWING- LOCATION OF MAJOR EQUIPMENT. DETAILED DRAWING OF RAINWATER SYSTEM

## DESCRIPTION

THIS SYSTEM IS DESIGN TO MEET BC PLUMBING CODE AND CSA STANDARDS FOR RAINWATER HARVESTING B805.

THE OVERALL SYSTEM DESIGN EMPLOYS A MULTI BARRIER APPROACH TO WATER QUALITY. THE FIRST STEP IS THE PRE-FILTER. THE SECOND STEP IS THE RAINWATER TANK DESIGN. THE THIRD STEP IS THE WATER TREATMENT SYSTEM.

CLEAN FLO SYSTEMS ARE DESIGNED FROM "ROOF TO TAP" ! WITH ATTENTION TO EVERY DETAIL OF YOUR RAINWATER HARVESTING SYSTEM. WHEN YOU PURCHASE THE COMPLETE SYSTEM FROM CLEAN FLO, IT IS PART OF A COMPLETE PACKAGE THAT WE WILL PROVIDE SUPPORT AND SERVICE FOR THE LIFE OF THE SYSTEM

THIS RAINWATER HARVESTING SYSTEM IS DESIGNED AS A PRIMARY SOURCE OF WATER FOR POTABLE PURPOSES, SUCH AS DRINKING, BATHING, TOILETS AND LAUNDRY. WITH BACK-UP WATER SOURCE HAULED BULK POTABLE WATER IF THE RAINWATER TANK IS EMPTY.

THE SYSTEM WILL PROVIDE WATER FOR WATER USES TIER: R4 POTABLE DRINKING WATER

## ROOF

THE SYSTEM WILL BE HARVESTING RAIN FROM ONE BUILDING. THE ROOF IS FIBREGLASS SHINGLES.

## GUTTER, DOWNPIPES AND CONVEYANCE PIPING

THE GUTTERS, DOWNPIPES, AND CONVEYANCE PIPING IS SIZED BASED ON SPECIFICATIONS FROM THE DESIGNS

### PREFILTER

THE SYSTEM WILL REQUIRE ONE (1) PRE-FILTER. THIS PRE-FILTER OPERATES AS BOTH A FIRST FLUSH DIVERTER AND PREFILTER, WITH A FILTER MESH SIZE OF 320 MICRONS. THE FULL CROSS-SECTION (PIPE DIAMETER) OF THE RAINWATER DRAINAGE SYSTEM REMAINS CONTINUOUSLY OPEN, AND THERE ARE NO REDUCTION IN THE CROSS-SECTION OF THIS APPLIANCE IN WHICH DIRT OR WATER CAN COLLECT.

## SYSTEM OVERVIEW





## RAINWATER TANK / CISTERN

THIS SYSTEM WILL PROVIDE A TOTAL OF 7,440 USG OF RAINWATER STORAGE. WITH A TOTAL OF FOUR (4) UNDERGROUND RAINWATER TANK, MADE OF POLYETHYLENE. EACH TANK IS 1860 USG. TANK CONNECTIONS, VALVES AND FITTINGS ABOVE FROST ZONE MUST BE WRAPPED IN HEAT CABLE TO PROTECT THESE COMPONENTS FROM FREEZING WHEN INSTALLTING.

THE RAINWATER TANK IS DESIGNED TO PROVIDE SAFE STORAGE OR RAINWATER, WHICH IMPROVES WATER QUALITY BECAUSE OF IT'S DESIGN AND FUNCTION. THE CALMING INLET PREVENTS AGITATION OF SETTLED FINE DUST, THE SKIMMING OVERFLOW REMOVES FLOATING PARTICLES AND THE FLOATING FILTER ENSURES WATER IS DRAWN INTO THE PUMP FROM APPROXIMELY 150 mm (6.0") BELOW THE SURFACE OF THE WATER.

### WATER PUMPING AND TREATMENT SYSTEM

CLEAN FLO DETERMINED THE WATER DEMAND TO BE 10 GPM @ 60 PSI. THIS WILL BE PUMPED BY SUBMERCIBLW MULTI STAGE BOOSTER PUMP POWERED BY VFD. THE TREATMENT WILL BE THREE STAGES TO ENSURE WATER IS SAFE AND NO STAINING ON FIXTURES. STAGE ONE IS A SEDIMENT FILTER OF ~15 MICRONS WHICH IS REUSBALE. STAGE TWO A 10 MICRON CARBON FILTER. STAGE THREE 1 MICON ABSLOUTE SEDIMENT FILTER. STAGE FOUR IS ULTRAVIOLET SANITATION.

### WATER QUALITY AND TREATMENT

CLEAN FLO DESIGNED THIS SYSTEM TO PRODUCE WATER THAT IS SAFE FOR CSA B805 R4 USES; NAMELY: DRINKING, BATHING, COOKING, TOILET AND LAUNDRY.

**CLEANFLO WATER TECHNOLOGIES** 

250 - 997 Seymour Street BENJAMIN@CFWT.CA



SYSTEM NAME:     YOUR NAME     YOUR NAME     SYSTEM SPECIFICATIONS     DTAL DYNAMIC HEAD       SYSTEM SPECIFICATIONS     NOR ADDRESS     NOR ADDRESS     0 0 000000000000000000000000000000000						
NOLK ADDRESS         NOR ADDRESS         NOR ADDRESS         NOR ADDRESS         NOR ADDRESS           SYSTEM TPE:         BC PTABLE         COMMERSAL	SYSTEM NAME:	YOUR NAME	) ( SYSTEM SPECIFICATIO	<u>DNS</u>	CALL DYNAMIC HEAD	
STOM TYPE     N=PTOPLALE     ROOF AMEREALE     WATER LAND TOWN TOWN     POPPY PPF       CARTER     SUBMUSE     Added the Matter and Matter and Matter and the Matter and the Matter and the Matter and		YOUR ADDRESS	ROOF COLLECTION AREA:	~7, <i>500</i> SQFT	DESIGN FLOW RATE:	10 GPM
STATE NUMBER     RUTTRALE     RUTTRALE ALLANDANCE     R			ROOF MATERIAL:	FIBREGLASS SHINGLES		
OWNERS         YOU         DOWNERPOOL MATERNAL         ALMANGA	SYSTEM TYPE:	R4-POTABLE	GUTTER MATERIAL:	PAINTED ALUMINIUM		
LICATOR: SOLEWIESE CONTACT CON	OWNERS:	YOU		ALUMINUM	1.25" @ 100FT (0.7 PSI LOSS/100FT)	0.7 PSI /1.6 FT HEAD
CENERGENCY CONTACT     FIGURAGE TARKS PERMA ATTACKS     FIGURAGE TARKS SPECTRUM	LOCATION:	SOMEWHERE	DOWNSPOOT MATERIAL:		(NPSH MUST BE MET FOR BOOSTER PUMP)	
EHEBSENCY CONTACT         TSTORAGE TANK SPECIFICATIONS         Take SPECIFICATIONS         SPECIFICATIONS         SPECIFICATIONS			CONVEYANCE PIPING MATERIAL	: PVC SDR 35 OR PVC DRAIN PIPE		
PRST POINT - WSTALLERS         SYSTEM INSTALLERS         Distance management	EMERGENCY CONTACT		STOPACE TANK SPECIEIC	ATIONS	TREATMENT SKID	
NUMBER OF PORTUGATION         CLEANED MATTER TECHNILOGIES, DAMADA, 1-177-204-214         NUMBER OF FACT TANKS         4           MAINTENANCE PERSONS         CHEMPS DAMATER TECHNILOGIES, DAMADA, 1-177-204-214         NUMBER OF FACT TANKS         8460 USQ         Distribution (1970)         Distribution (1970)           SCOPE OF SYSTEM SUPPLY         VALUE OF FACT TANKS         8460 USQ         Distribution (1970)	FIRST POINT - INSTALLERS	SYSTEM INSTALLERS			PSI LOSS VARIES AS WATER FILTERS BECOME	10 PSI / 35 FT HEAD
SECOND POINT - DESIGNER     Last 73 - 306 - 34/6     MARKE 0F TAXING     Site USG		CLEANELO WATER TECHNI OCIES CANADA		1		
MAINTENANCE PERSONS     OWNER     TAINE TORME     3460 053     IIIION - 20 4201 04 10 4000 00001       MAINTENANCE PERSONS     OWNER     TAINE MATERIAL     POLYETINTENE     122 PSI / 24 FT HAD       SCOPE OF SYSTEM SUPPLY     TAINE MATERIAL     POLYETINTENE     100 4 0 25 ± 14 ± 83 = 20 2       WAIRE USES TEIR     R 4 POTBALE     UNTR     254'     MIRE USES TEIR     11 PSI / 44 FT HEAD       WATER USES TEIR     R 4 POTBALE     UNTR     264'     MIRE USES TEIRS     11 PSI / 44 FT HEAD       WARE OF DECK     AUXIEP DITBALE BULK WATER     UNTR     64'     -     -     MIRE USES TEIRS     11 PSI / 44 FT HEAD       WARE OF DECK     AUXIEP DITBALE BULK WATER     MIRE OF DECK ILLES SPECIFICATIONS     MIRE OF DECK ILLES SPECIFICATIONS     11 PSI / 44 FT HEAD       WARE OF DECK ILLES SPECIFICATIONS     -     MIRE OF DECK ILLES SPECIFICATIONS     14 PSI / 13 FT HEAD       WARE OF DECK ILLES SPECIFICATIONS     MIRE OF DECK ILLES SPECIFICATIONS     10 PSI / 132.6 FT HEAD       WARE OF DECK ILLES SPECIFICATIONS     MIRE OF DECK ILLES SPECIFICATIONS     10 PSI / 132.6 FT HEAD       WARE OF DECK ILLES SPECIFICATIONS     MIRE OF DECK ILLES SPECIFICATIONS     10 PSI / 132.6 FT HEAD       WARE OF DECK ILLES SPECIFICATIONS     MIRE OF DECK ILLES SPECIFICATIONS     10 PSI / 132.6 FT HEAD       WARE OF DECK ILLES SPECIFICATIONS     MIRE OF DECK ILLES SPECIFICATIONS <td>SECOND POINT - DESIGNER</td> <td>1 = 9.77 = 3.06 = 21.4.6</td> <td>NUMBER OF TANKS:</td> <td>4</td> <td>DISTRIBUTION PIPE</td> <td></td>	SECOND POINT - DESIGNER	1 = 9.77 = 3.06 = 21.4.6	NUMBER OF TANKS:	4	DISTRIBUTION PIPE	
MAINTENANCE PERSONS     OWNER     TAVE TYPE:     BED/ W (ROUND POLY)     Base and the same that is a band the same that same that is a band the s			VOLUME OF EACH TANK:	1860 USG	10GPM - 1.0" @ 20FT (2.6 PSI LOSS/100FT)	
BANDLENANCL PERSURY     TWWA     TAKE MATERIAL:     POLYETIMLENE     TWARE	MAINTENANCE DEDCONC		TANK TYPE:	BELOW GROUND POLY	10GPM - 0.75" @ 50FT (8.7 PSI LUSS/100FT) 5GPM - 0.5" @ 50FT (10.5 PSI LUSS/100FT)	10.2 PSI / 24 FT HEAD
SCOPE OF SYSTEM SUPPLY     INVERTIGISATION     INVERTIGISATION     23 p3 / 4 g PT HEAD       MATER USES TER:     R P OTBALE     MAIN ANTER     Seventhick	MAINTENANCE PERSONS	OWNER	TANK MATERIAL:	POLYETHYLENE	TOTAL 0.52 + 4.4 + 5.3 = 10.2	
SCODE OF SYSTEM SUPPLY         LEMATH:         154"         MMORE LOSSES VALVES, PRITTING WORK         21 PS/ / 47 FT HEAD           WATER USE TREX:         RA POTSALE         MANNATER         S6 *			TANK DIMENSIONS			
NATER         PARTAGE         WOTH         Set           PRIMARY WATER SOURCE         RAINWATER         RAINWATER         Set         Set         PRIMARY WATER SOURCE         SAINWATER         Set	SCOPE OF SYSTEM SUPPLY		LENGTH:	154"	MINOR LOSSES: VALVES, FITTINGS	21 DSI / 49 ET HEAD
PRIMARY WATER SOURCE     RAULED POILE BULK WATER     HIEAD:     54 ° °       SECONDARY WATER SOURCE     HAULED POILE BULK WATER     DAMETER:     NA       SECONDARY WATER SOURCE     7 DAY     PARE-FLICTERS SPECIFICATIONS     STATIC PSI	WATER USES TEIR:	R4 POTBALE	WIDTH:	68"	~ 20FT (10.5 PSI LOSS/100FT)	2.1 F317 4.9 FI HEAD
SECONDARY WATER SOURCE:     HALLED POTBALE BULK WATER     PIAMETER:     NA     ELEMATION HEAD     6.4 PSI / 1.5 PT HEAD       NUMBER OF PEOPLE SERVED:     S / DAY     PRE-FILTER.     WISY VORTEX 350     57 ATC PSI     40 PSI / 116.9 FT HEAD       ANNUAL WATER DEMAND:     -140, 000 LITERS     140, 000 LITERS     10 PSI / 116.9 FT HEAD     40 PSI / 116.9 FT HEAD       ANNUAL WATER MARVESTED:     140, 000 LITERS     140, 000 LITERS     10 PSI / 116.9 FT HEAD     40 PSI / 116.9 FT HEAD       MUMBER OF EXTURES     140, 000 LITERS     2     17 PSI OF REFILTER:     WISY VORTEX 350     10 PSI / 116.9 FT HEAD       MOMBER OF EXTURES     140, 000 LITERS     10 PSI / 116.9 FT HEAD     40 PSI / 116.9 FT HEAD     40 PSI / 116.9 FT HEAD       MAXIMUM WATER DEW RATE:     12 LITERS PER SECOND     70 TAL     69.4 PSI / 12.6 FT HEAD       MOMBER OF EXTURES     0.4 MOREL:     25 WOR DIVER     10 USW X00 DIVER       MAXIMUM NUM REV PERCIFICATIONS     10 USW X00 DIVER     10 USW X00 DIVER       MAXIMUM REV PERCIFICATIONS     10 USW X00 PSR     1.3 HP       MARSHER:     10 NORSE PORCE:     1.3 HP       MARSHER:     1.3 HP	PRIMARY WATER SOURCE:	RAINWATER	HIEGHT:	56 "		
NUMBER OF PEOPLE SERVED:       / 204         ANNUAL WATER DEMAND:       ~236, 000 LITERS         ANNUAL WATER ARVESTED:       ~360, 000 LITERS         MUMBER OF REFUTES:       %160 PSIL/D38/JS3/HE         NUMBER OF REFUTES:       %160 PSIL/D38/JS3/HE         MORE DIBS:       2         ADVIDATION MESH SIZE:       20 MICRONS         MAXIMUMI INLET FLOW RATE:       12 LITERS PER SECOND         PRE-FILTERS:       MAXIMUMI INLET FLOW RATE:       12 LITERS PER SECOND         MORE DIBS:       2       MAXIMUMI INLET FLOW RATE:       12 LITERS PER SECOND         PUMP SPECIFICATIONS       MAXIMUMI INLET FLOW RATE:       12 LITERS PER SECOND         PUMP SPECIFICATIONS       MORE:       STATIC PSIL         MORE:       5       DSG MIRON         MORE:       10 USG MIRON       MORE:         PIN/MAXHER:       1       POWER SPECIFICATIONS         MECH EQUIPMENT:       1       POWER SPECIFICATIONS         MERS EPOWER:       1.5 JP       SO	SECONDARY WATER SOURCE:	HAULED POTBALE BULK WATER	DIAMETER:	NA	ELEAVTION HEAD	6.4 PSI / 15 FT HEAD
ANNUAL WATER DEMAND: ~236, 000 LITERS ·26, 000 LITERS ·160, 000 LITERS ·170, 000 EIST ·160, 000 LITERS ·170, 000 LITERS	NUMBER OF PEOPLE SERVED:	<i>5 / D</i> AY			15FT (1.0 PSI L055/2.33FT)	
ANNUAL WATER HARVESTED: v140, 000 LITERS	ANNUAL WATER DEMAND:	~236, 000 LITERS				
NUMBER OF EXTURES     NUMBER OF RE-FILTENS:     1     1       NUMBER OF EXTURES     PRE-FILTENS:     320 MiCRONS     64.4 PSi/122.6 FT HEA       NUMBER OF EXTURES     PRE-FILTENS:     320 MiCRONS     64.4 PSi/122.6 FT HEA       NUMBER OF EXTURES     PRE-FILTENS:     320 MiCRONS     64.4 PSi/122.6 FT HEA       NUMBER OF EXTURES     PUMP SPECIFICATIONS     MAXIMUM INLET FLOW RATE:     12 LITERS FER SECOND       FAUCETS:     6     BRAND:     DAB WATER TECHNOLOGIES       IAUNORY:     1     DESIGN FLOW RATE:     10 USGPM       DISHWASHER:     1     DESIGN FLOW RATE:     10 USGPM       PISHWASHER:     1     POWER SPECIFICATIONS     -       BATH ONNER:     3     POWER SPECIFICATIONS     -       PRE-SUPRESSION:     0     VOLTAGE:     230 VAC       AMPS:     -     SS A     -       VOLTAGE:     13 HP     VOLTAGE:     230 VAC       AUTOMATIC TOP-UP SYSTEM     NA     WATER TECHNOLOGIES     -       SYSTEM DESIGN AND SPECS     POTABLE HUALED BULK WATER     TYPE:     CLEANFLO       SYSTEM DESIGN AND SPECS     MOREL:     VIDA RAIN REUSE     SYSTEM INFORMATION       SYSTEM DESIGN AND SPECS     MOREL:     VIDA RAIN REUSE     SYSTEM INFORMATION       DESIGN REI:     CLEANFLO <td< td=""><td>ANNUAL WATER HARVESTED:</td><td>~160,000 LITERS</td><td>TYPE OF PREFILTER:</td><td>WISY VORTEX 150</td><td>40 PSI</td><td>40 PSI / 116.5 FT HEAD</td></td<>	ANNUAL WATER HARVESTED:	~160,000 LITERS	TYPE OF PREFILTER:	WISY VORTEX 150	40 PSI	40 PSI / 116.5 FT HEAD
MUMBER OF EXTURES     PRE-FLICIATION MESN SUE:     SAU MILLOWS     IOTAL     \$44.4 PS//122.6 FT HEA       MAXIMUM MILLET FLOW RATE:     12. LITERS PER SECOND     PUMP SPECIFICATIONS     IOTAL     \$44.4 PS//122.6 FT HEA       YARD HYDRANT:     0     0     PUMP SPECIFICATIONS     IOTAL     \$44.4 PS//122.6 FT HEA       YARD HYDRANT:     0     0     PUMP SPECIFICATIONS     IOTAL     \$44.4 PS//122.6 FT HEA       YARD HYDRANT:     0     0     PUMP SPECIFICATIONS     IOTAL     \$44.4 PS//122.6 FT HEA       YARD HYDRANT:     0     0     PUMP SPECIFICATIONS     IOTAL     \$44.4 PS//122.6 FT HEA       YARD HYDRANT:     0     0     PUMP SPECIFICATIONS     IOTAL     \$44.4 PS//122.6 FT HEA       YARD HYDRANT:     1     0     PUMP SPECIFICATIONS     IOTAL     \$44.4 PS//122.6 FT HEA       YARD HYDRANT:     1     0     PUMP SPECIFICATIONS     IOTAL     IOTAL     \$44.4 PS//122.6 FT HEA       YARD HYDRANT:     1     0     PUMP SPECIFICATIONS     IOTAL     PUMP SPECIFICATIONS     IOTAL     IOTAL <td></td> <td></td> <td>NUMINER OF PRE-FILTERS:</td> <td></td> <td></td> <td></td>			NUMINER OF PRE-FILTERS:			
NUMBER OF EXTURES       MAXIMUM INTEL FLOW RATE:       12 DITERS PER SELOND         YARD HYDRANT:       0         PUMP_SPECIFICATIONS       BRAND:       DAB WATER TECHNOLOGIES         FAUCETS:       6         LAUNDRY:       1         TOILETS:       5         S       DESIGN FLOW RATE:       10 USGFM         MAXIMUM INEL FLOW RATE:       10 USGFM         MODEL:       ESYBOX DIVER         DISHWASHER:       1         SECONDARY_WATER SOURCE:       1         TYPE:       POTABLE HUALED BULK WATER         AUTOMATIC TOP-UP SYSTEM       NA         PESCRIPTION / COMMENTS:       VOLTAGE:         SYSTEM DESIGN AND SPECS.       POTABLE HUALED BULK WATER TECHNLOGIES, 1-877-306-2146         PESCRIPTEDF       MARCH 01, 2021			PRE-FILTRATION MESH SIZE:	SZO MICKONS	101AL	69.4 PSI/122.6 FT HEA
Hose bills:       2         Hose bills:       0         FAUCETS:       6         LAUNDRY:       1         DIELS:       5         Standie How RATE:       0 USGPM         DISHWASHER:       1         BATH/SHOWER:       3         BATH/SHOWER:       3.3 HP         VOLTAGE:       > 5.5 A         WATTS:       3200 VAC         AMPS:       3200 VAC         AMPS:       3200 VAC         AMPS:       3200 VAC         AUTOMATIC TOP-UP SYSTEM       NA         PESCRIPTION / COMMENTS:       VIDARATIN ENEL         SYSTEM DESIGN AND SPECS.       VIDARND:         DESIGN AND SPECS.       VIDARFUD WATER TECHNLOGIES, 1-877-306-2146         PATE COMPLETED:       MARCH 01, 2021	NUMBER OF FIXTURES		MAXIMUM INLET FLOW RATE:	12 LITERS PER SECOND		
TADD HTURANT:       0         FAUCETS:       6         LANDRY:       1         TOILETS:       5         DISHWASHER:       1         BATH/SHOWER:       3         BATH/SHOWER:       3         BATH/SHOWER:       0         BATH/SHOWER:       NA         PESCRIPTION / COMMENTS:       VIDA	HOSE BIBS:	2	PUMP SPECIFICATIONS			
PAUCE1S:       *       MOPEL:       ESYBOX DIVER         LAUNDRY:       1       DESIGN FLOW RATE:       10 USGPM         TOILETS:       5       MAXIMUN PSI @ 10 GPM:       77.4 PSI         BATH/SHOWER:       3       MAXIMUN PSI @ 10 GPM:       7.4 PSI         BATH/SHOWER:       1       1       HORSE OPDECIFICATIONS         FIRE SUPRESSION:       0       0       AMPS:       250 VAC         AUTOMATIC TOP-UP SYSTEM       NA       WATER TREATMENT SPECIFICATIONS       WATER:       1300 W         PSSCRIPTION / COMMENTS:       POTABLE HUALED BULK WATER       WATTS:       1300 W       1300 W         SYSTEM DESIGN AND SPECS.       POTABLE TUPN LICQIES, 1-877-306-2146       WATER:       CLEANFLO       SYSTEM INFORMATION         PESIGNER:       CLEANFLO WATER TECHNLOGIES, 1-877-306-2146       QE OF EQUIPMENT:       VIDA RAIN REUSE       SYSTEM INFORMATION         PESIGNER:       MARCH 01, 2021       MARCH 01, 2021       MARCH 01, 2021       AMPC       SYSTEM INFORMATION	TARD HIDRANT:	0	BRAND:	DAB WATER TECHNOLOGIES	_	
LAUNTATI.       1         DIALTST.       5         STOLLETS:       5         DISHWASHER:       1         BATH/SHOWER:       3         BATH/SHOWER:       3         DISTEMMER:       1         POWER SPECIFICATIONS:         HIRE SUPRESSION:       0         SECONDARY WATER SOURCE       1.3 HP         TYPE:       POTABLE HUALED BULK WATER         AUTOMATIC TOP-UP SYSTEM       NA         DESCRIPTION / COMMENTS:       VOLTAGE:         SYSTEM DESIGN AND SPECS.       TYPE:         PESIGN FLED:       VIDA RAIN REUSE         SYSTEM DESIGN AND SPECS.       CLEANFLO WATER TECHNLOGIES, 1-877-306-2146         PESIGN FLED:       MARCH 01, 2021			MODEL:	ESYBOX DIVER		
Indicator       S         Indicator       Maximun Psi @ 10 GPM:       77.4 PSi         BATH/SHOWER:       3         MAXIMUN PSi @ 10 GPM:       77.4 PSi         BATH/SHOWER:       3         MAXIMUN PSi @ 10 GPM:       77.4 PSi         MAXIMUN PSi @ 10 GPM:       77.4 PSi         MAXIMUN PSi @ 10 GPM:       7.4 PSi         MAXIMUN PSi @ 10 GPM:       7.4 PSi         MAXIMUN PSi @ 10 GPM:       7.4 PSi         MAXIMUN PSi @ 10 GPM:       1.3 HP         VOLTAGE:       250 VAC         AMPS:       ~ 5.5 A         WATES:       1300 W         VYPE:       POTABLE HUALED BULK WATER         AUTOMATIC TOP-UP SYSTEM       NA         PESCRIPTION / COMMENTS:       VMATER TREATMENT SPECIATIONS         TYPE:       POTABLE HUALED BULK WATER         MAXIMUN PSI @ 10 GPM:       VIDA RAIN REUSE         MODEL:       VIDA RAIN REUSE         MODEL:       VIDAPROSUB         AGE OF EQUIPMENT:       NEW		1	DESIGN FLOW RATE:	10 USGPM		
Both Solvere: 3   MECH. EQUIPMENT: 1   FIRE SUPRESSION: 0   O 1.3 HP   VOLTAGE: 250 VAC   AMPS: ~ 5.5 A   WATTS: 1300 W   TYPE: POTABLE HUALED BULK WATER   AUTOMATIC TOP-UP SYSTEM NA   DESCRIPTION / COMMENTS: VIDARDES   SYSTEM DESIGN AND SPECS. VIDA RAIN REUSE   DESIGN RE: CLEANFLO WATER TECHNLOGIES, 1-877-306-2146   MARCH 01, 2021 MARCH 01, 2021	DISHWASHER.	1	MAXIMUN PSI @ 10 GPM:	77.4 PSI		
MeCH. EQUIPMENT: FIRE SUPRESSION: SECONDARY WATER SOURCE TYPE: AUTOMATIC TOP-UP SYSTEM DESCRIPTION / COMMENTS: SYSTEM DESIGN AND SPECS. DESIGNER: CLEANFLO WATER TECHNLOGIES, 1-877-306-2146 MARCH 01, 2021 MARCH 01, 2021 DESCRIPTION MARCH 01, 2021 MARCH 01, 2	BATH/SHOWER:	- 3	BOWER SPECIFICATIONS			
FIRE SUPRESSION:       0       1.5 HP         FIRE SUPRESSION:       0       230 VAC         SECONDARY WATER SOURCE       70 TABLE HUALED BULK WATER       AMPS:       - 5.5 A         AUTOMATIC TOP-UP SYSTEM       NA       WATTS:       1300 W         DESCRIPTION / COMMENTS:       VIDARAIN REUSE       TYPE:       CLEANFLO         SYSTEM DESIGN AND SPECS.       MODEL:       VIDA RAIN REUSE       MODEL:       VIDAPROSUB         DESIGNER:       CLEANFLO WATER TECHNLOGIES, 1-877-306-2146       AGE OF EQUIPMENT:       NEW       SYSTEM INFORMATION	MECH. EQUIPMENT:	1	FOWER SPECIFICATIONS			
SECONDARY WATER SOURCE     POTABLE HUALED BULK WATER       TYPE:     POTABLE HUALED BULK WATER       AUTOMATIC TOP-UP SYSTEM     NA       DESCRIPTION / COMMENTS:     VATER TREATMENT SPECIFICATIONS       SYSTEM DESIGN AND SPECS.     TYPE:       DESIGNER:     CLEANFLO WATER TECHNLOGIES, 1-877-306-2146       DATE COMPLETED:     MARCH 01, 2021	FIRE SUPRESSION:	0	HORSE POWER:	1.3 HP		
SECONDARY WATER SOURCE       POTABLE HUALED BULK WATER         TYPE:       POTABLE HUALED BULK WATER         AUTOMATIC TOP-UP SYSTEM       NA         DESCRIPTION / COMMENTS:       VATER TREATMENT SPECIFICATIONS         SYSTEM DESIGN AND SPECS.       VIDA RAIN REUSE         DESIGNER:       CLEANFLO WATER TECHNLOGIES, 1-877-306-2146         DATE COMPLETED:       MARCH 01, 2021			AMPS			
TYPE:       POTABLE HUALED BULK WATER         AUTOMATIC TOP-UP SYSTEM       NA         Description / comments:       VATER TREATMENT SPECIFICATIONS         SYSTEM DESIGN AND SPECS.       VIDA RAIN REUSE         DESIGNER:       CLEANFLO WATER TECHNLOGIES, 1-877-306-2146         MARCH 01, 2021       MARCH 01, 2021	SECONDARY WATER SOURCE		AMPS.	1300 W		
AUTOMATIC TOP-UP SYSTEM       NA         DESCRIPTION / COMMENTS:       VMATER TREATMENT SPECIFICATIONS         SYSTEM DESIGN AND SPECS.       TYPE:         DESIGNER:       CLEANFLO WATER TECHNLOGIES, 1-877-306-2146         MARCH 01, 2021       MARCH 01, 2021	TYPE:	POTABLE HUALED BULK WATER		1500 W		
DESCRIPTION / COMMENTS:       TYPE:       CLEANFLO         SYSTEM DESIGN AND SPECS.       BRAND:       VIDA RAIN REUSE         DESIGNER:       CLEANFLO WATER TECHNLOGIES, 1-877-306-2146       MODEL:       NEW         DATE COMPLETED:       MARCH 01, 2021       MARCH 01, 2021       AGE OF EQUIPMENT:       NEW	AUTOMATIC TOP-UP SYSTEM	NA	WATER TREATMENT SPEC	CIFICATIONS		
SYSTEM DESIGN AND SPECS.       BRAND:       VIDA RAIN REUSE         DESIGNER:       CLEANFLO WATER TECHNLOGIES, 1-877-306-2146       MODEL:       NEW         DATE COMPLETED:       MARCH 01, 2021       MARCH 01, 2021       AGE OF EQUIPMENT:       NEW	DESCRIPTION / COMMENTS.		TYPE:	CLEANFLO		
SYSTEM DESIGN AND SPECS.       VIDAPROSUB         DESIGNER:       CLEANFLO WATER TECHNLOGIES, 1-877-306-2146       MODEL:       VIDAPROSUB         AGE OF EQUIPMENT:       NEW       SYSTEM INFORMATION			BRAND:	VIDA RAIN REUSE		
DESIGNER: CLEANFLO WATER TECHNLOGIES, 1-877-306-2146 AGE OF EQUIPMENT: NEW	SYSTEM DESIGN AND SPECS.		MODEL:	VIDAPROSUB	SYSTEM INFORM	ATION
DATE COMPLETED: MARCH 01, 2021	DESIGNER:	CLEANFLO WATER TECHNLOGIES, 1-877-306-2146	AGE OF EQUIPMENT:	NEW		
	DATE COMPLETED:	MARCH 01, 2021				





CLEANFLO WATER TECHNOLOGIES

250 - 997 Seymour Street Surrey, BC, 877-306-2146 BENJAMIN@CFWT.CA

Number of Full Time Occupance	5						
Parameter	Litres / Use	Total Litres / Person	Roof Material	FIBERGLASS			
5 Toilet Flushes Per Day	6	30	Intial Loss (mm)		0.5	0.5	
Clothes Washer (2.5 loads/week)	56	20	Continous Loss (%)		10%		
Bath/Shower (9L /min @ 5 min)	9	45					
Faucets (5L / min @ 5 min)	5	25	Prefilter Loss (%)		10%		
Dishwasher (2 loads/week)	16	4.5	First Flush Loss (mm/m2)		0.05		
Leaks	5	5					
Per Capita Daily Water Demand		130	Roof Area (sq m)	710			
			(sq ft)	7642			
Total Daily Water Demand	647.5						
			Total Tank Volume (Litres)	28300			
Monthly Water Demand (30 days)	19425		(US Gallons)	7477			
			Bulk Water Delivery (Litres)	20000			
Annual Water Demand	236338		(US Gallons)	5284			



40000



 Jan	Feb	Mar	Apr	May	ηη	In	Aug	Sep	ð	Nov	Dec	Jan	Feb	Mar
				_				•••		_	_			

	Rainfall (mm)	Average # of Days With Rainfall	Intial Loss From Roofing (mm)	Gross Rainwater Harvested (Litres)	Contious Loss From Roofing (Litres)	Loss From First Flush (Litres)	Loss From Prefilter (Litres)	Net Rainwater Harvested (Litres)	Tank Top Up Fill (Litres)	Tank Volume (Litres)	Proposed Monthly Water Demand (Litres)	Net Tank Volume (Litres)	End of Month Tank Volume (Litres)	Water Used From Tank (Litres)	Alternitive Water Required (Litres)	Overflow Rainwater From Tank (Litres)
Jan	8.1	2	1	5041	504	71	447	4019	20000	24019	19695	4325	4325	19695	0	0
Feb	6.7	4	2	3337	334	142	286	2575	20000	26900	19695	7205	7205	19695	0	0
Mar	12	7	4	6035	604	249	518	4665	20000	28300	19695	8605	8605	19695	0	3570
Apr	28.9	12	6	16259	1626	426	1421	12786		21392	19695	1697	1697	19695	0	0
Мау	47.2	17	9	27477	2748	604	2413	21713		23410	19695	3715	3715	19695	0	0
Jun	65.3	22	11	38553	3855	781	3392	30525		28300	19695	8605	8605	19695	0	5940
Jul	62.1	20	10	36991	3699	710	3258	29324		28300	19695	8605	8605	19695	0	9629
Aug	51.5	18	9	30175	3018	639	2652	23867		28300	19695	8605	8605	19695	0	4172
Sep	55.9	17	9	33654	3365	604	2969	26717		28300	19695	8605	8605	19695	0	7022
Oct	56.5	19	10	33370	3337	675	2936	26423		28300	19695	8605	8605	19695	0	6728
Nov	23.9	10	5	13419	1342	355	1172	10550		19155	19695	-540	0	19155	540	0
Dec	5.6	3	2	2911	291	107	251	2262	20000	22262	19695	2567	2567	19695	0	0
Jan	8.1	4	2	4331	433	142	376	3380	20000	25948	19695	6253	6253	19695	0	0
Feb	6.7	4	2	3337	334	142	286	2575	20000	28300	19695	8605	8605	19695	0	528
Mar	12	7	4	6035	604	249	518	4665	20000	28300	19695	8605	8605	19695	0	4970
Apr	28.9	12	6	16259	1626	426	1421	12786		21392	19695	1697	1697	19695	0	0
Мау	47.2	17	9	27477	2748	604	2413	21713		23410	19695	3715	3715	19695	0	0
Jun	65.3	22	11	38553	3855	781	3392	30525		28300	19695	8605	8605	19695	0	5940
Jul	62.1	20	10	36991	3699	710	3258	29324		28300	19695	8605	8605	19695	0	9629
Aug	51.5	18	9	30175	3018	639	2652	23867		28300	19695	8605	8605	19695	0	4172
Sep	55.9	17	9	33654	3365	604	2969	26717		28300	19695	8605	8605	19695	0	7022
Oct	56.5	19	10	33370	3337	675	2936	26423		28300	19695	8605	8605	19695	0	6728
Nov	23.9	10	5	13419	1342	355	1172	10550		19155	19695	-540	0	19155	540	0
Dec	5.6	3	2	2911	291	107	251	2262	20000	22262	19695	2567	2567	19695	0	0

## WATER BALANCE





CLEANFLO WATER TECHNOLOGIES 250 - 997 Seymour Street Surrey, BC, 877-306-2146 BENJAMIN@CFWT.CA

# Table 1: Water Balance

- Net Rainwater Harvested (Litres)
- ★ Tank Top Up Fill (Litres)
- Tank Volume (Litres)
- Proposed Monthly Water Demand (Litres)
- End of Month Tank Volume (Litres)
- Water Used From Tank (Litres)
- Alternitive Water Required (Litres)
- Overflow Rainwater From Tank (Litres)

# Apr Jun Jun Sep Oct Dec



CLEANFLO WATER TECHNOLOGIES





May 4, 2021

