

# SPEL Hydrosystem

Cartridge filter for tertiary stormwater treatment



**spelstormwater**  
joy in water

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# APPLICATIONS

- Car parks & shopping centres
- Council depots
- Industrial estates
- Heavy vehicle maintenance
- Transport depots & loading bays
- Tunnels
- Highways & transport corridors
- Recycling yards
- Airport aprons & tarmacs

SPEL Hydrosystem is a specialist stormwater filter, designed for installation within load bearing shafts and chambers of concrete or plastic construction. The pre-fitted plastic housing is safe and easy to fit on site.

The SPEL Hydrosystem uses an up-flow process. This means there is a minimal head drop between the inlet and the outlet. The stormwater is treated within the unit by the following processes: sedimentation, filtration, adsorption and precipitation. It is suitable for Heavy Metal, TSS and Nutrient reduction.

## Tested Treatment Efficiencies\*

Pollutant	Efficiency
Gross Pollutants (GP)	100%
Total Suspended Solids (TSS)	85%
Total Phosphorus (TP)	66%
Total Nitrogen (TN)	43%
Petroleum Hydrocarbon	82%

\*Contact Spel to confirm approved performance for the project LGA



# FEATURES

- German-Engineered for heavily polluted traffic areas
- Because of its up-flow process it can efficiently work in flat sites requiring only 250 mm fall across the device
- Multiple units can be manifolded together to treat higher flows
- Each SPEL Hydrosystem will provide 12 L/s of treatment flow rate, installed in offline configuration
- Field tested
- Quick and easy underground installation
- Designed for TSS, TP and TN Removal

# SPECIFICATIONS

Model	NO. CARTRIDGE	TFR	ID (m)	Height (m)	Inlet/Outlet (mm)
<b>400 SERIES</b>					
SHS.400/1	1	2.5 LPS	1.13	1.5	100
SHS.400/2	2	5 LPS			
SHS.400/3	3	7.5 LPS			
<b>1000 SERIES</b>					
SHS.1000/4	4	12 LPS	1.20	2.60	225
<b>1500 SERIES</b>					
SHS.1500/4	4	16 LPS	1.50	2.00	225
SHS.1500/5	5	20 LPS			
SHS.1500/6	6	24 LPS			
<b>1850 SERIES</b>					
SHS.1850/7	7	28 LPS	1.85	2.00	225
<b>2200 SERIES</b>					
SHS.2200/7	7	28 LPS	2.20	2.50	225
SHS.2200/8	8	32 LPS			
SHS.2200/9	9	36 LPS			
<b>2500 SERIES</b>					
SHS.2500/10	10	40 LPS	2.50	2.70	300
SHS.2500/11	11	44 LPS			
SHS.2500/12	12	48 LPS			
SHS.2500/13	13	52 LPS			
SHS.2500/14	14	56 LPS			
SHS.2500/15	15	60 LPS			
SHS.2500/16	16	64 LPS			

Model	NO. CARTRIDGE	TFR	ID (m)	Height (m)	Inlet/Outlet (mm)
<b>3000 SERIES</b>					
SHS.3000/17	17	68 LPS	3.00	2.85	300
SHS.3000/18	18	76 LPS			
SHS.3000/19	19	76 LPS			
SHS.3000/20	20	80 LPS			
SHS.3000/21	20	84 LPS			
<b>3500 SERIES</b>					
SHS.3500/22	22	88 LPS	3.50	2.95	375
SHS.3500/23	23	92 LPS			
SHS.3500/24	24	96 LPS			
SHS.3500/25	25	100 LPS			
SHS.3500/26	26	104 LPS			
SHS.3500/27	27	108 LPS			
SHS.3500/28	28	112 LPS			
SHS.3500/29	29	116 LPS			
SHS.3500/30	30	120 LPS			
SHS.3500/31	31	124 LPS			
<b>4000 SERIES</b>					
SHS.4000/32	32	128 LPS	4.00	3.25	375
SHS.4000/33	33	132 LPS			
SHS.4000/34	34	136 LPS			
SHS.4000/35	35	140 LPS			
SHS.4000/36	36	144 LPS			
SHS.4000/37	37	148 LPS			
SHS.4000/38	38	152 LPS			
SHS.4000/39	39	156 LPS			

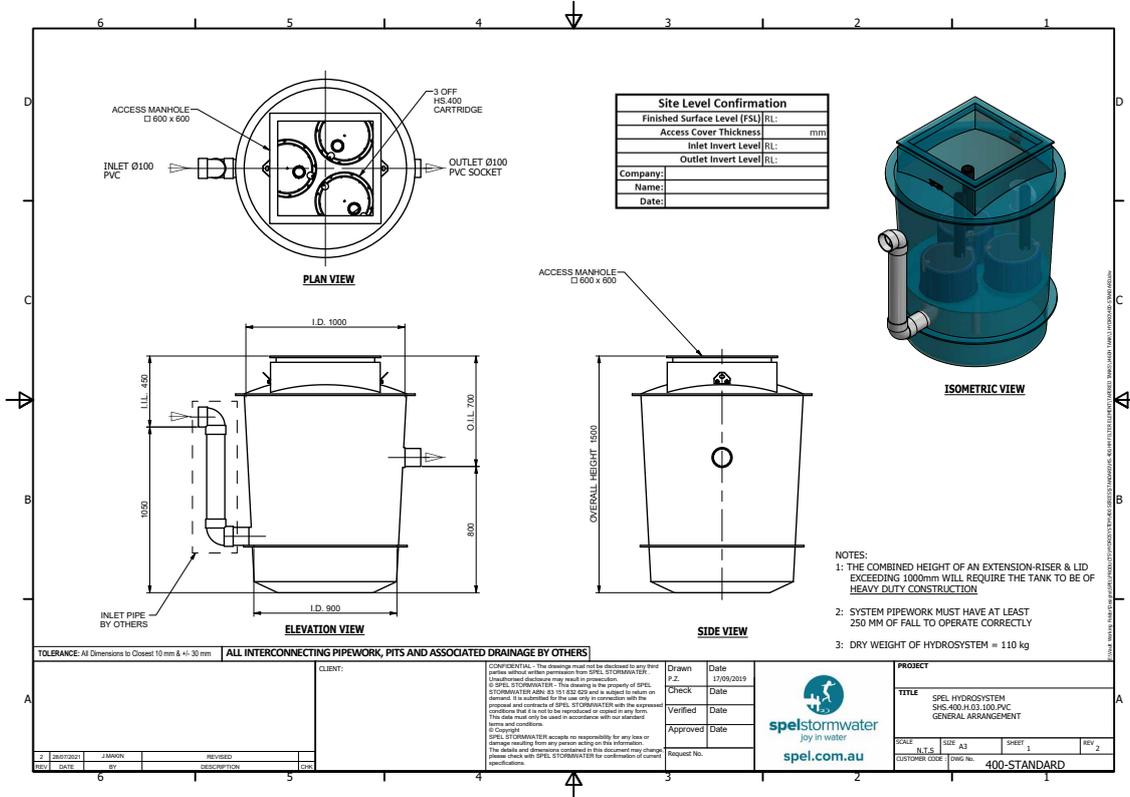


## Operating System

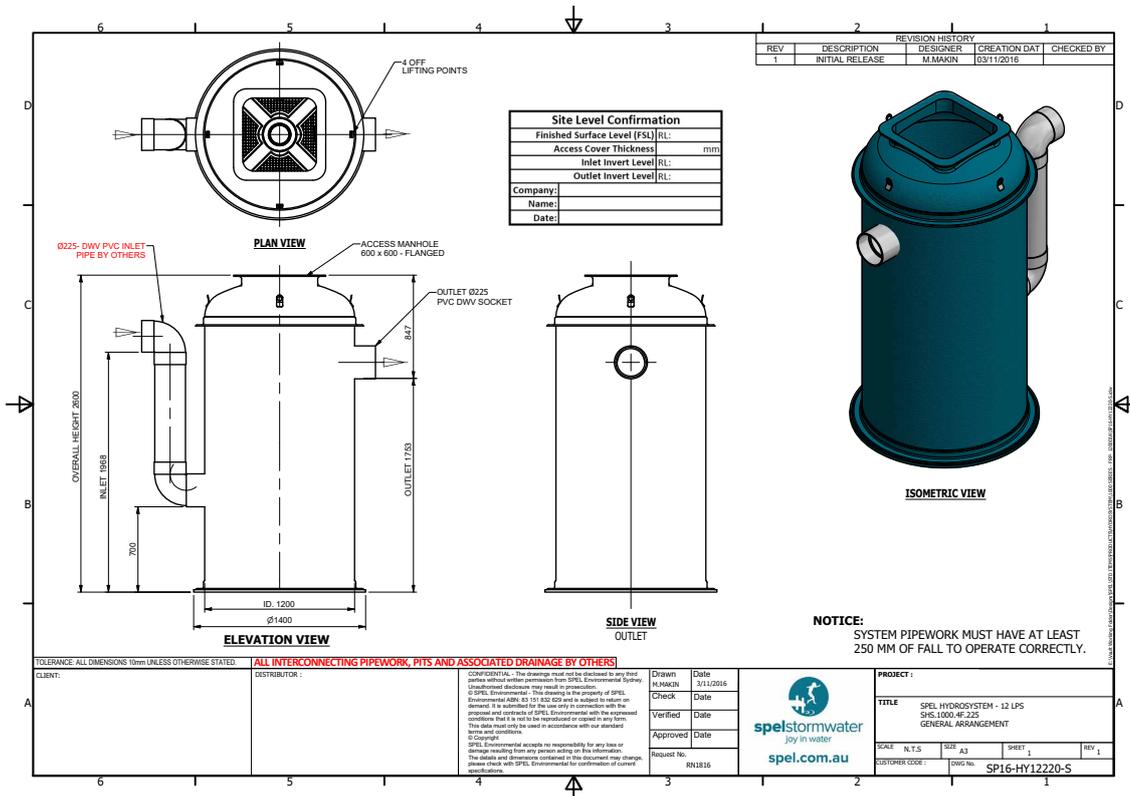
1. The Stormwater from the catchment enters the hydrosystem via PVC inlet pipe.
2. Heavy sediment is retained within the sump area.
3. Filter elements are located in the tank. With these filter elements, the fines are filtered in an upflow process and most of the dissolved pollutants are precipitated and adsorptively bound. The filter can be backflushed from above and can easily to be replaced in the event of it becoming fully contaminated.
4. The clean water is situated above the filter elements; flows out the outlet.

# DRAWINGS

## Model 400

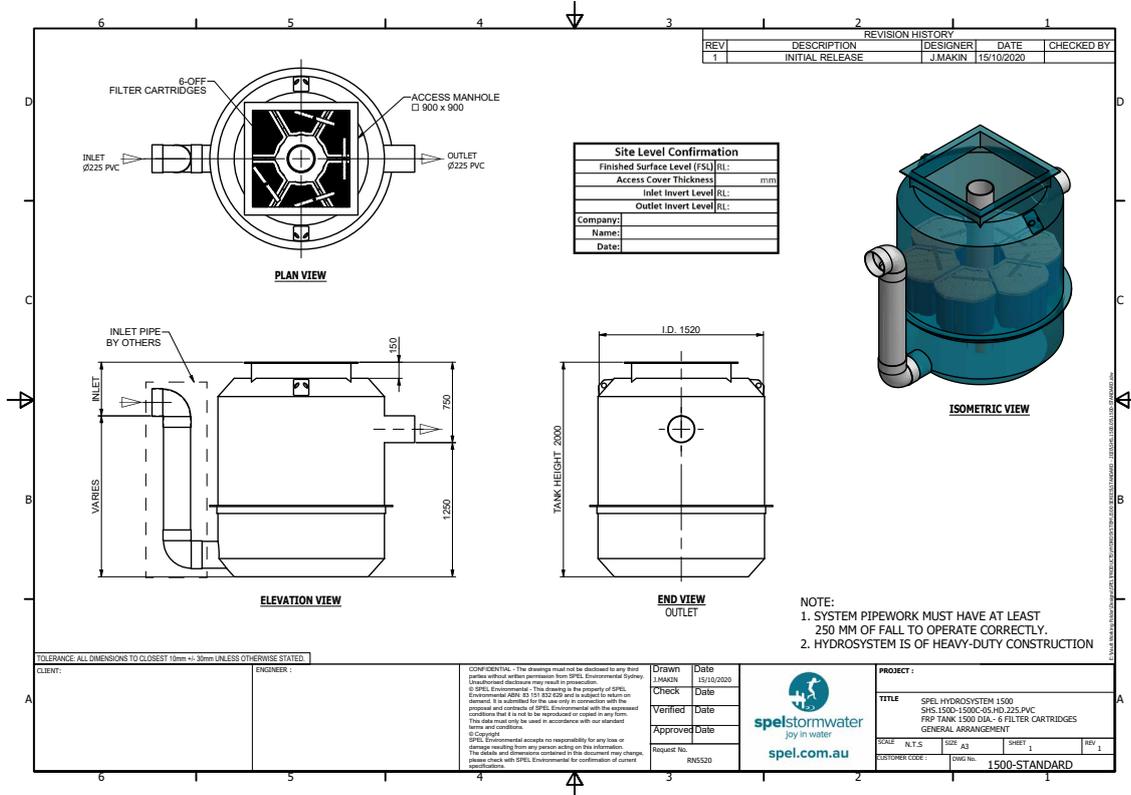


## Model 1000

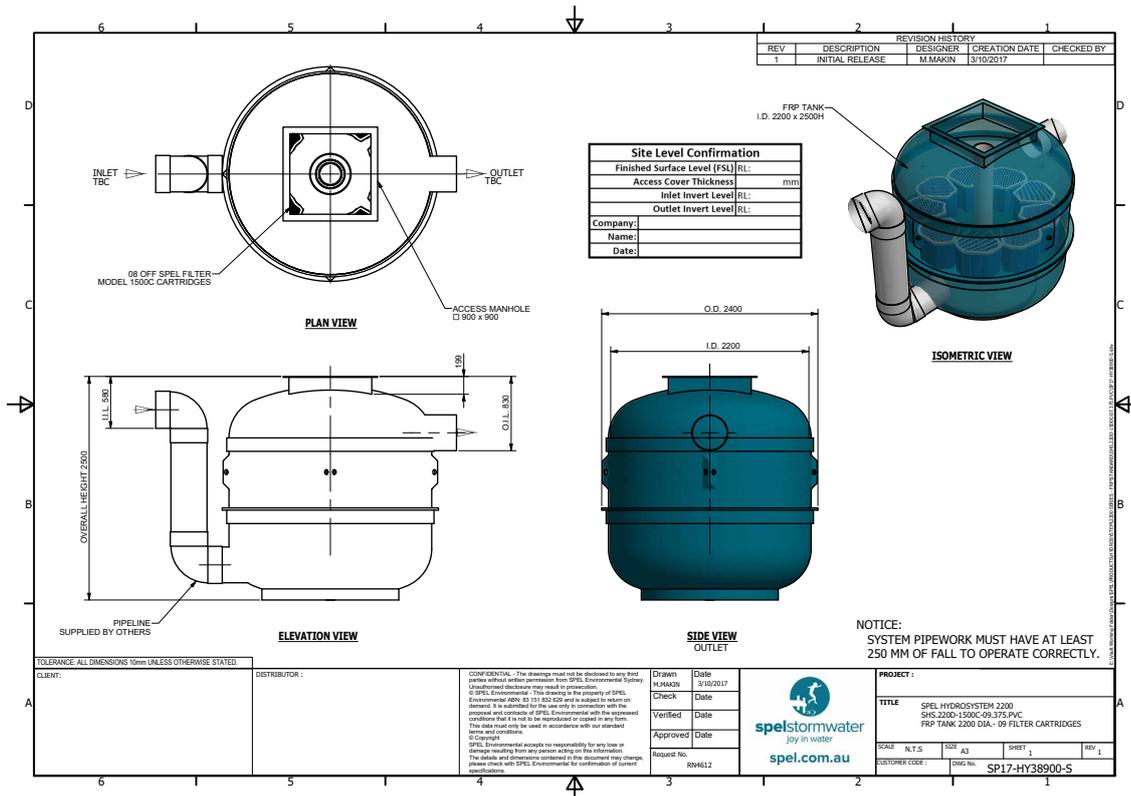


# DRAWINGS

## Model 1500

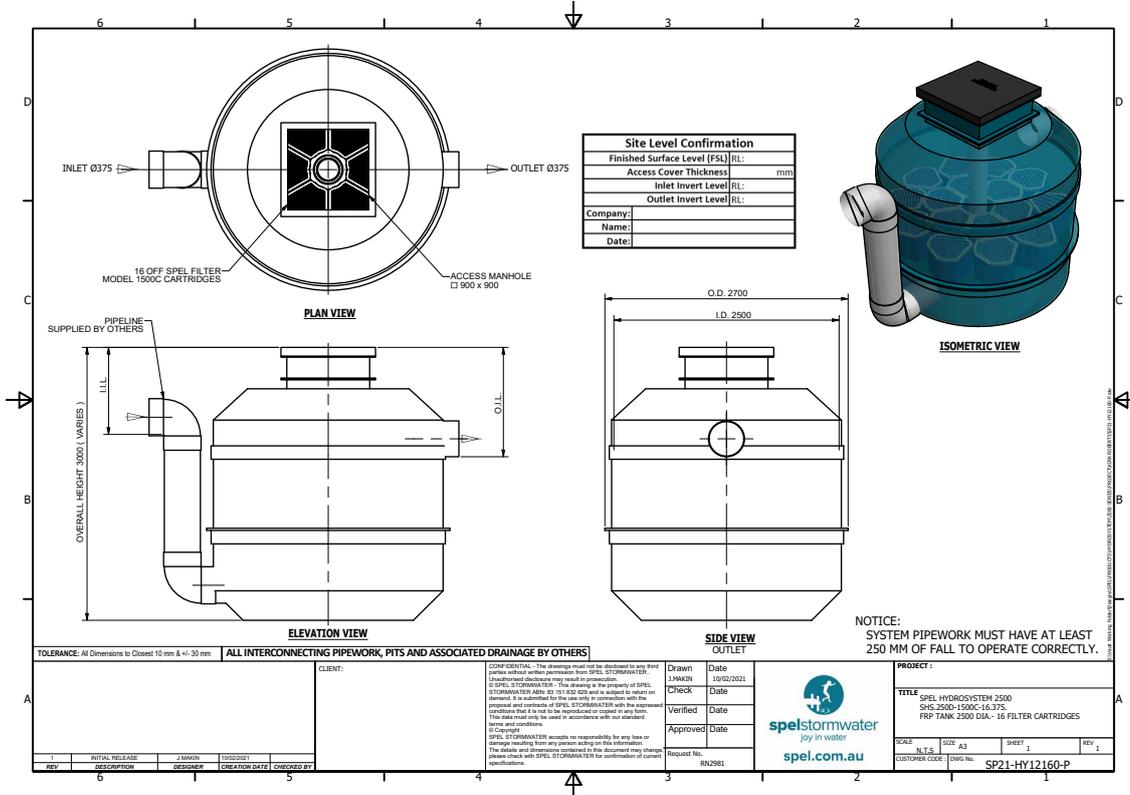


## Model 2200

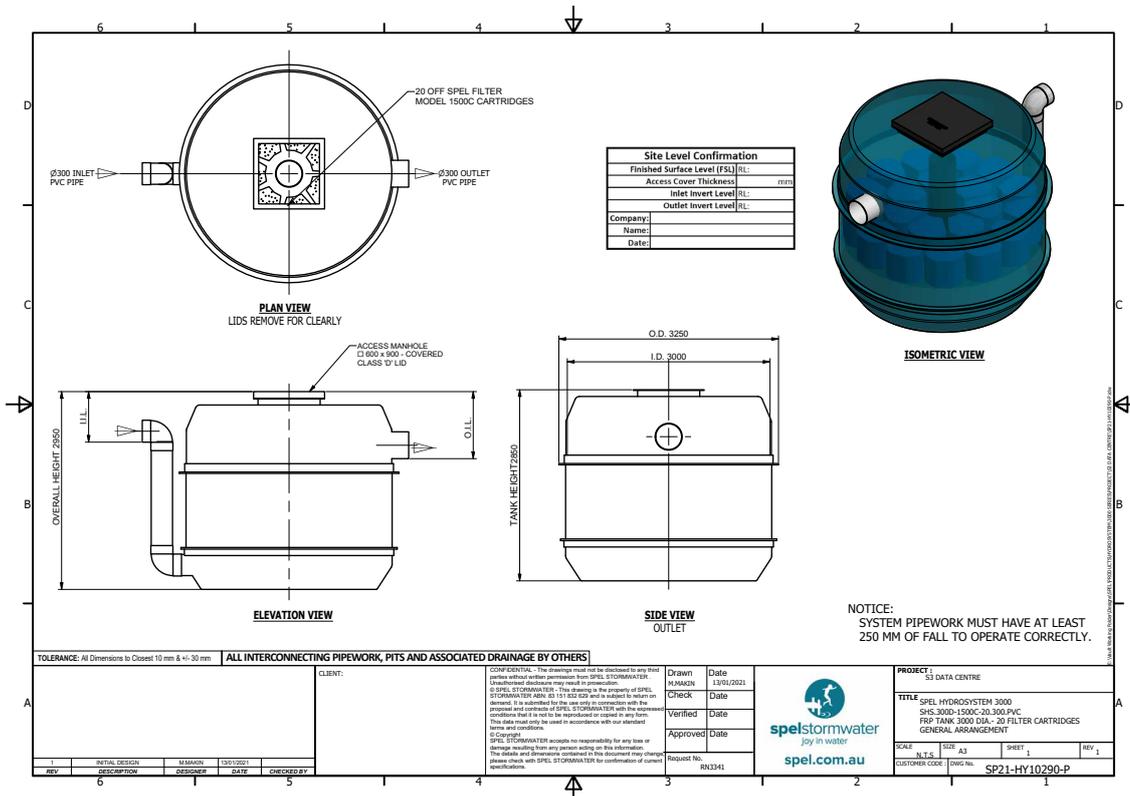


# DRAWINGS

## Model 2500

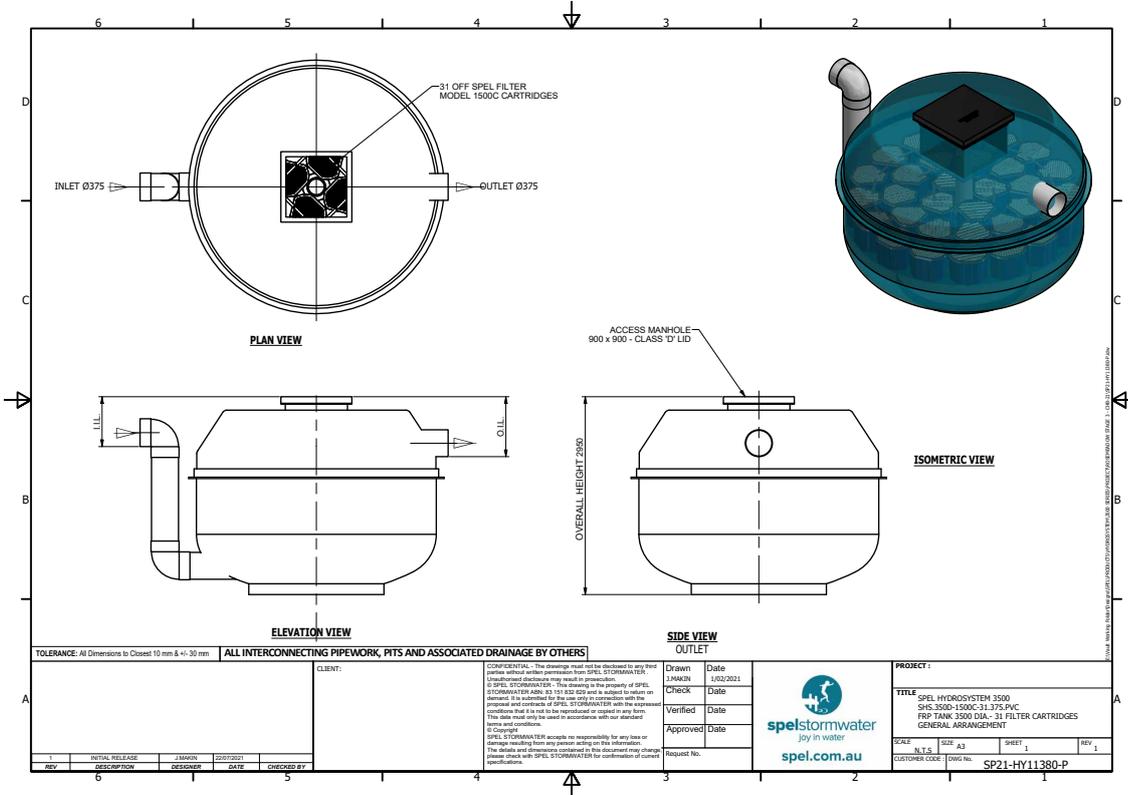


## Model 3000

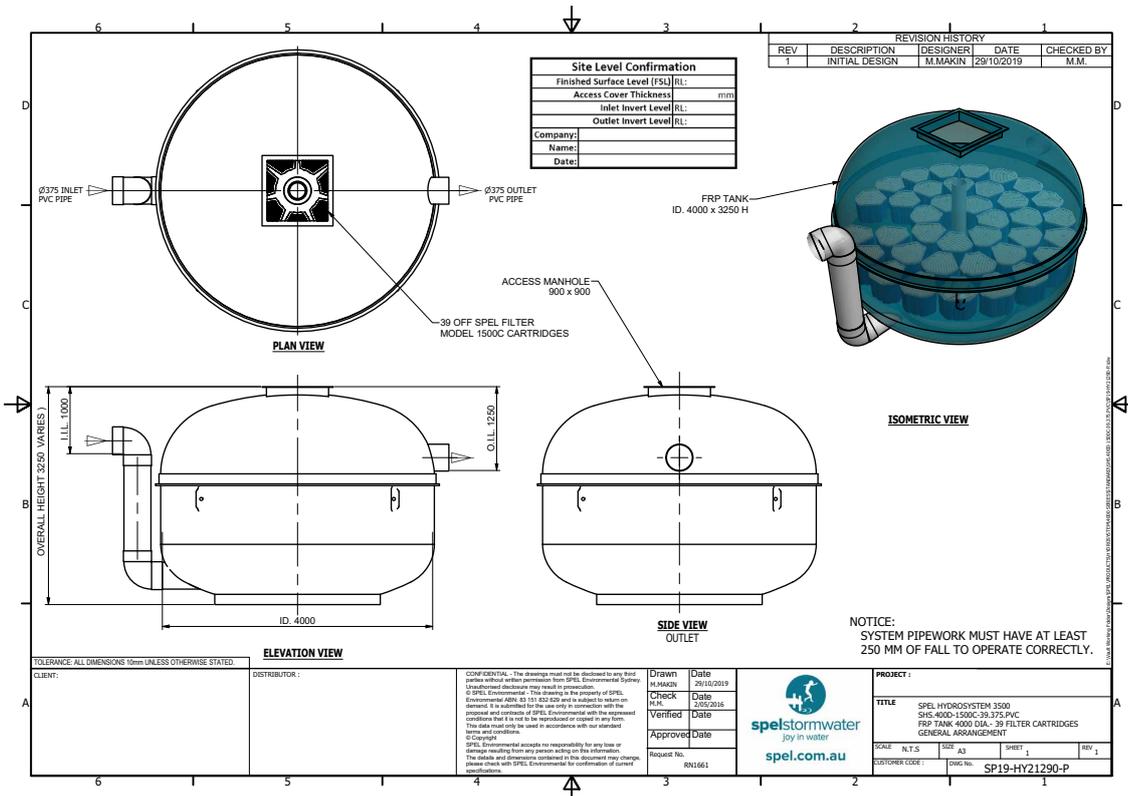


# DRAWINGS

## Model 3500



## Model 4000



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We believe clean water is a right not a privilege and we work to ensure a joy in water experience for you with your children and grandchildren.



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