

**VORTCAPTURE DESIGN NOTES**

THE VORTCAPTURE IS A FULL CAPTURE, HIGH CAPACITY LITTER, DEBRIS AND SEDIMENT SOLUTION DESIGNED TO REMOVE ALL PARTICLES GREATER THAN 5 mm IN SIZE. THE SYSTEM COMBINES THE PROVEN SEDIMENT CAPABILITY OF HYDRODYNAMIC SEPARATION WITH SUPERIOR LITTER AND ORGANIC DEBRIS CAPTURE.

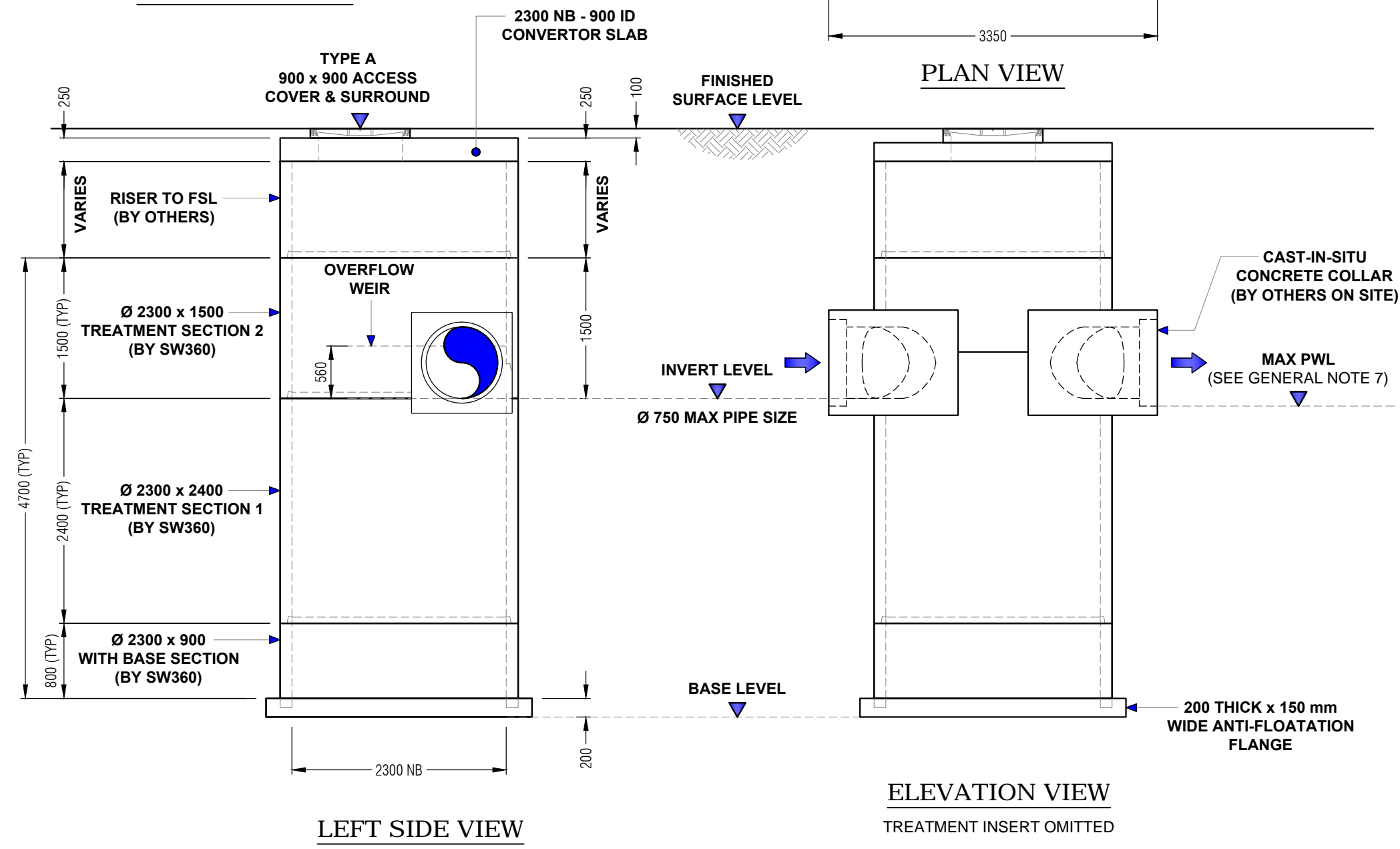
VORTCAPTURE (MODEL : VC80) PEAK TREATMENT CAPACITY IS 283.0 L/S. MAXIMUM HYDRAULIC INTERNAL BYPASS CAPACITY IS 2832 L/S. IF THE SITE CONDITIONS EXCEED 2832 L/S AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

**SITE SPECIFIC DATA REQUIREMENTS**

STRUCTURE ID	
WATER QUALITY FLOW RATE (QWq) (L/S)	
PEAK FLOW RATE (L/S)	
RETURN PERIOD OF PEAK FLOW (yrs)	
HYDRAULIC EFFECT @ QWq (mm)	580

PIPE DATA:	R.L.	MATERIAL	DIAMETER
INLET PIPE			
OUTLET PIPE			
LID LEVEL		N/A	N/A

AS PER ENGINEER OF RECORD



- GENERAL NOTES :**
1. STORMWATER360 TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
  2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR SW360 STORMWATER CONSULTANT VIA [www.stormwater360.co.nz](http://www.stormwater360.co.nz), OR 0800 STORMWATER, OR [sales@stormwater360.co.nz](mailto:sales@stormwater360.co.nz).
  3. VORTCAPTURE WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
  4. STRUCTURE SHALL MEET NZTA'S HN-HO-72 OR PER APPROVING JURISDICTION TRAFFICKED LOAD REQUIREMENTS, WHICHEVER IS MORE STRINGENT. COVER AND FRAME ARE TO BE RATED TO EITHER CLASS B (FOR PEDESTRIAN AREAS) OR CLASS D (TRAFFICKED ROADS) IN ACCORDANCE WITH AS 3996 : 2006.
  5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO NZS 3109 : 1997, NZS 3114 : 1987 AND AS/NZS 4058 : 2007.
  6. THE INLET PIPE AND OUTLET PIPE INVERT SHALL BE AT THE SAME ELEVATION.
  7. THE MAXIMUM DOWNSTREAM PERMANENT WATER LEVEL (PWL) IS TO BE SET AT OR BELOW THE OUTLET PIPE INVERT
  8. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

- INSTALLATION NOTES :**
- A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
  - B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.
  - C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT)
  - D. CONTRACTOR TO PROVIDE, INSTALL AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATION SHOWN. A CAST-IN-SITU CONCRETE COLLAR IS TO BE POURED ON SITE BY CONTRACTOR AS SHOWN ON DRAWINGS.
  - E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE DEVICE IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERT ARE GROUTED.
  - F. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT DEVICE FROM CONSTRUCTION-RELATED EROSION RUN OFF.

- MAXIMUM CHAMBER WEIGHT = 6450 Kg (APPROX)  
 - LID WEIGHT = 2731 Kg (APPROX)  
 - CONCRETE WEIGHT TOTAL = 18200 Kg (APPROX)

<p>Stormwater360 BETWEEN SKY AND SEA</p>	<p>0800 STORMWATER</p> <p><a href="mailto:sales@stormwater360.co.nz">sales@stormwater360.co.nz</a></p> <p><a href="http://www.stormwater360.co.nz">www.stormwater360.co.nz</a></p>	<p>CONDITION OF USE</p> <p>© STORMWATER360 2016 Any unauthorised reproduction of this drawing in part or in full is prohibited</p>	<p>VORTCAPTURE MODEL : VC80 Ø 2300 PRECAST CHAMBER GENERAL ARRANGEMENT</p>	<p>DRAWING</p> <p>1</p> <p>A</p>	<p>JOB NO :</p> <p>PROJECT :</p> <p>DEVICE # :</p>	<p>DRN :</p> <p>CKD :</p>	<p>R.P.</p> <p>T.B.</p>	<p>12.10.16</p> <p>12.10.16</p>
	<p>SCALE : N.T.S.</p>	<p>DRG No : STD-VC80-GA</p>	<p>MAXIMUM CHAMBER WEIGHT = 6450 Kg (APPROX) LID WEIGHT = 2731 Kg (APPROX) CONCRETE WEIGHT TOTAL = 18200 Kg (APPROX)</p>	<p>AS PER ENGINEER OF RECORD</p>	<p>GENERAL NOTES :</p> <ol style="list-style-type: none"> <li>1. STORMWATER360 TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.</li> <li>2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR SW360 STORMWATER CONSULTANT VIA <a href="http://www.stormwater360.co.nz">www.stormwater360.co.nz</a>, OR 0800 STORMWATER, OR <a href="mailto:sales@stormwater360.co.nz">sales@stormwater360.co.nz</a>.</li> <li>3. VORTCAPTURE WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.</li> <li>4. STRUCTURE SHALL MEET NZTA'S HN-HO-72 OR PER APPROVING JURISDICTION TRAFFICKED LOAD REQUIREMENTS, WHICHEVER IS MORE STRINGENT. COVER AND FRAME ARE TO BE RATED TO EITHER CLASS B (FOR PEDESTRIAN AREAS) OR CLASS D (TRAFFICKED ROADS) IN ACCORDANCE WITH AS 3996 : 2006.</li> <li>5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO NZS 3109 : 1997, NZS 3114 : 1987 AND AS/NZS 4058 : 2007.</li> <li>6. THE INLET PIPE AND OUTLET PIPE INVERT SHALL BE AT THE SAME ELEVATION.</li> <li>7. THE MAXIMUM DOWNSTREAM PERMANENT WATER LEVEL (PWL) IS TO BE SET AT OR BELOW THE OUTLET PIPE INVERT</li> <li>8. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.</li> </ol>	<p>INSTALLATION NOTES :</p> <ol style="list-style-type: none"> <li>A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.</li> <li>B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.</li> <li>C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT)</li> <li>D. CONTRACTOR TO PROVIDE, INSTALL AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATION SHOWN. A CAST-IN-SITU CONCRETE COLLAR IS TO BE POURED ON SITE BY CONTRACTOR AS SHOWN ON DRAWINGS.</li> <li>E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE DEVICE IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERT ARE GROUTED.</li> <li>F. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT DEVICE FROM CONSTRUCTION-RELATED EROSION RUN OFF.</li> </ol>		