


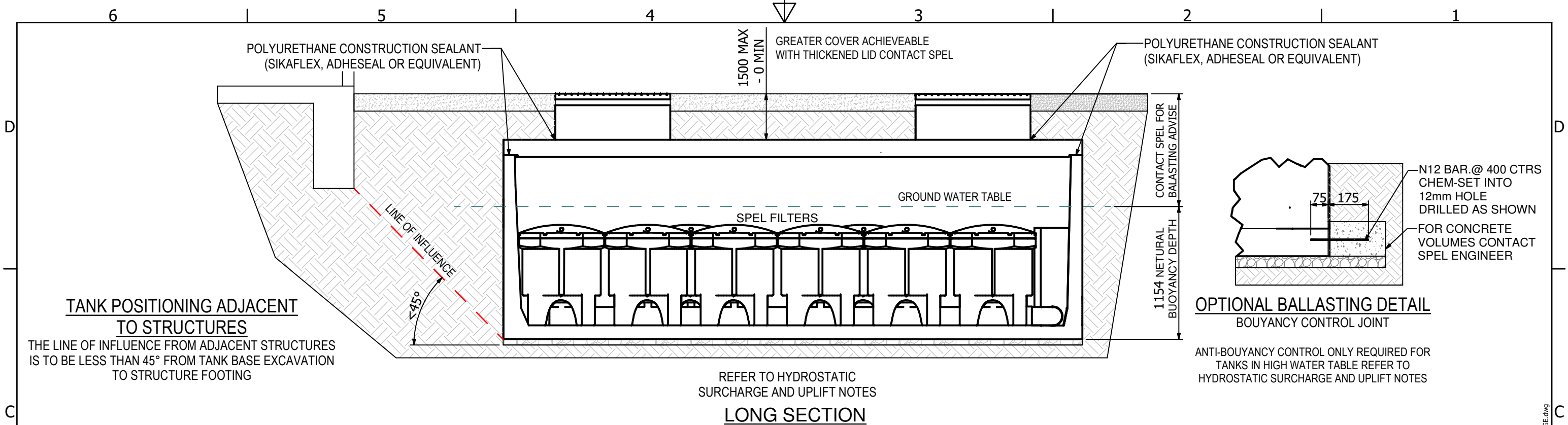
SV.5030-1464-14 FILTER - 3D VIEW

DRAWING INDEX	
DRAWING No.	DRAWING TITLE
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SP21-CT27120-P	GENERAL NOTES PAGE
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SP21-CT27140-P	PERMISSIBLE PENETRATIONS

TOLERANCE: All Dimensions to Closest 10 mm & +/- 30 mm

ALL INTERCONNECTING PIPEWORK, PITS AND ASSOCIATED DRAINAGE BY OTHERS

<div>1</div> <div>07/2021</div> <div>G.T</div> <div>INITIAL RELEASE</div> <div></div>	<div>CLIENT:</div> <div></div> <div>CONFIDENTIAL - The drawings must not be disclosed to any third parties without written permission from SPEL STORMWATER . Unauthorised disclosure may result in prosecution. © SPEL STORMWATER - This drawing is the property of SPEL STORMWATER ABN: 83 151 832 629 and is subject to return on demand. It is submitted for the use only in connection with the proposal and contracts of SPEL STORMWATER with the expressed conditions that it is not to be reproduced or copied in any form. This data must only be used in accordance with our standard terms and conditions. © Copyright SPEL STORMWATER accepts no responsibility for any loss or damage resulting from any person acting on this information. The details and dimensions contained in this document may change; please check with SPEL STORMWATER for confirmation of current specifications.</div>	Drawn	Date	<div><div>spelstormwater</div><div>joy in water</div><div>spel.com.au</div></div>	PROJECT :											
Check	Date	Verified	Date													
Approved	Date	Request No.	RN211930			TITLE										
					COVER SHEET AND DRAWING INDEX											
					14.88 kL SPEL PRECAST CONCRETE TANK											
					SV.5023-1464-14-30											
SCALE	N.T.S	SIZE	A3		SHEET	1	REV	1								
CUSTOMER CODE :		DWG No.			SP21-CT27110-P											



**TANK POSITIONING ADJACENT TO STRUCTURES**  
THE LINE OF INFLUENCE FROM ADJACENT STRUCTURES IS TO BE LESS THAN 45° FROM TANK BASE EXCAVATION TO STRUCTURE FOOTING

## DESIGN CRITERIA

DESIGN IN ACCORDANCE WITH:  
AS/NZS 1170.0 - DESIGN LOAD GENERAL REQUIREMENTS  
AS/NZS 1170.1 - PERMANENT AND SUPERIMPOSED LOADS  
EXPOSURE CLASSIFICATION IN ACCORDANCE WITH AS/NZS 3600 - 'B2'  
ACCESS LID AND RISER TO BE RATED CLASS 'D'  
HEAVY VEHICLES ARE ASSUMED TO BE WITHIN THE GROSS VEHICLE MASS (GVM) AND AXLE LIMITS PRESCRIBED BY THE QUEENSLAND DEPARTMENT OF TRANSPORT AND MAIN ROADS. THE HEAVY VEHICLES THAT THE TANK AND LID ARE DESIGNED FOR INCLUDES:

- SINGLE RIGID TRUCK
- RIGID TRUCK WITH TRAILER
- SEMI TRAILER
- B-DOUBLE
- TWIN STEER TRUCKS

WHICH REPRESENTS AXLE GROUPS OF:

- SINGLE AXLE = 9.0 TONNES
- TANDEM AXLE = 16.0 TONNES
- TRI-AXLE = 20.0 TONNES

WHEEL LOADS ARE BASED ON TANKS INSTALLED IN CONTROLLED TRAFFIC AREA (CARPARK) WITH VEHICLES OPERATING AT REDUCED SPEED.  
NOTE: TANKS ARE NOT DESIGNED TO BE INSTALLED UNDER OPEN ROADS. IF W80 AND SM1600 RATING IS REQUIRED, CONSULT SPEL ENGINEERS

## FOUNDATION REQUIREMENTS AND BACKFILLING

1. THE TANK MUST BE FOUNDED ON MATERIAL WITH AN ALLOWABLE BEARING CAPACITY OF 100kPa. MINIMUM UNIFORM BASE.
2. THE TANK MUST BE FOUNDED ON COMPACTED 50mm MINIMUM LEVELLING SUB-BASE COMPRISED OF SAND OR ROAD BASE THAT ACHIEVES CBR40 WHEN THE TANK IS SUBJECTED TO VEHICLE LOADING. CBR15 OR OTHERWISE. 5-10mm DRAINAGE GRAVEL IS AN ACCEPTABLE SUB-BASE MATERIAL WHEN TANK IS SUBJECTED TO VEHICLE LOADING, 10mm MAXIMUM TO STRICTLY ADHERED TO.
3. BACKFILL AROUND THE TANK WITH A WELL DRAINING GRANULAR MATERIAL IN LAYERS NO THICKER THAN 500mm.
4. COMPACT PAVEMENT SUBGRADES ABOVE THE TANK LID WITH LIGHT DUTY HAND OPERATED COMPACTION EQUIPMENT. DO NOT USE HEAVY MECHANICAL COMPACTION TECHNIQUES (SUCH AS VIBRATORY OR STATIC ROLLERS) ABOVE OR ADJACENT TO THE TANK WALLS WITHIN 1500mm OF TANKS WITHOUT ENGINEER'S APPROVAL.

## LIFTING NOTES:

1. TOTAL APPROVED 15.0 t (WLL) LIMIT AS SPECIFIED ON DRAWING. CONSULT AN RPEQ ENGINEER FOR LIFTING DESIGN OF SPECIFICALLY DESIGNED TANKS WITH ADDITIONAL FIXTURES INSTALLED AND TOTAL WEIGHT EXCEEDING APPROVED 15.0 t
2. THE ERECTOR SHALL COORDINATE WITH THE SITE PROJECT ENGINEER FOR SITE ACCESS, GROUND CONDITIONS AND PLANNED LIFTING EQUIPMENT PRIOR TO TANK DELIVERY ON SITE.
3. RIGGING ARRANGEMENT SHALL ENSURE THE LOAD IS EVENLY DISTURBED BETWEEN ALL LIFTING ANCHORS
4. ONLY USE LIFTING PINS PROVIDED WHEN LIFTING, DAMAGED LIFTING PINS SHALL NOT BE USED UNLESS CAPACITY IS VERIFIED AND APPROVED BY A RPEQ ENGINEER.

## HYDROSTATIC SURCHARGE AND UPLIFT


### IMPORTANT NOTE:

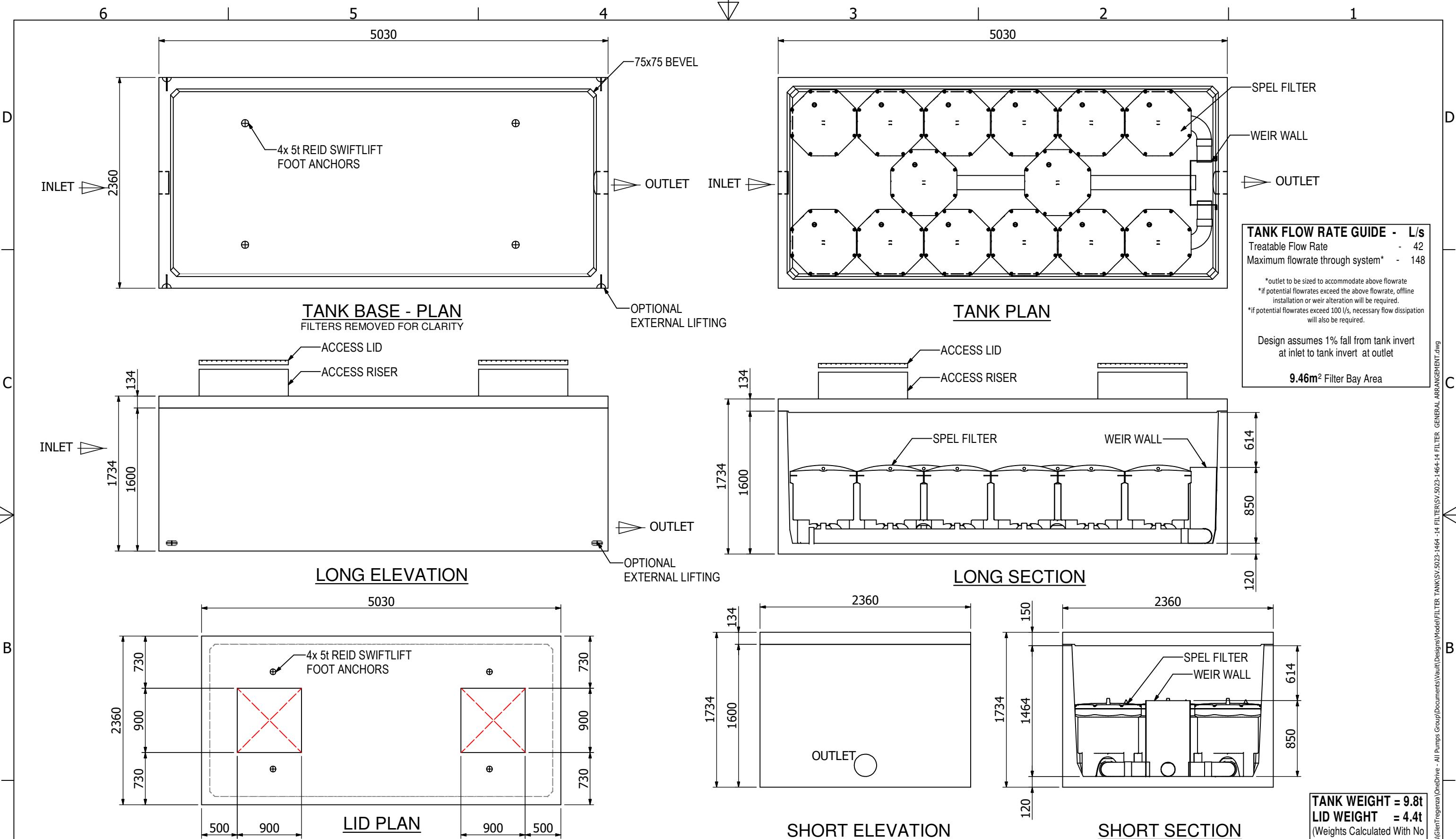
NEUTRAL BUOYANCY DEPTH PROVIDED IS A GUIDE ONLY. IT IS CONSERVATIVELY CALCULATED WITH ZERO SOIL COVER AND ZERO SLAB COVER. SEEK SPEL ADVISE FOR SITE SPECIFIC BALLASTING CALCULATIONS, THAT CAN TAKE INTO CONSIDERATION SOIL / SLAB COVER OVER TANK, ANY ADDITIONAL CLEAR OPENINGS IN THE TANK LID, AND ANY PENETRATIONS IN THE TANK WALLS OR BASE.

1. TANK WITH WATER LEVEL UP TO 1154 FROM THE TANK BASE HAS NIL HYDROSTATIC UPLIFT (NEUTRAL BUOYANCY MARK). FOR WATER LEVELS GREATER THAN THIS CONTACT SPEL ENGINEERS FOR SITE SEPTIC BALLASTING ADVICE.
2. REFER TO SPEL ENGINEERS FOR ADVICE ON WATER TABLES EXCEEDING 1.734 m ABOVE THE BASE EXCAVATION LEVEL.

TOLERANCE: All Dimensions to Closest 10 mm & +/- 30 mm

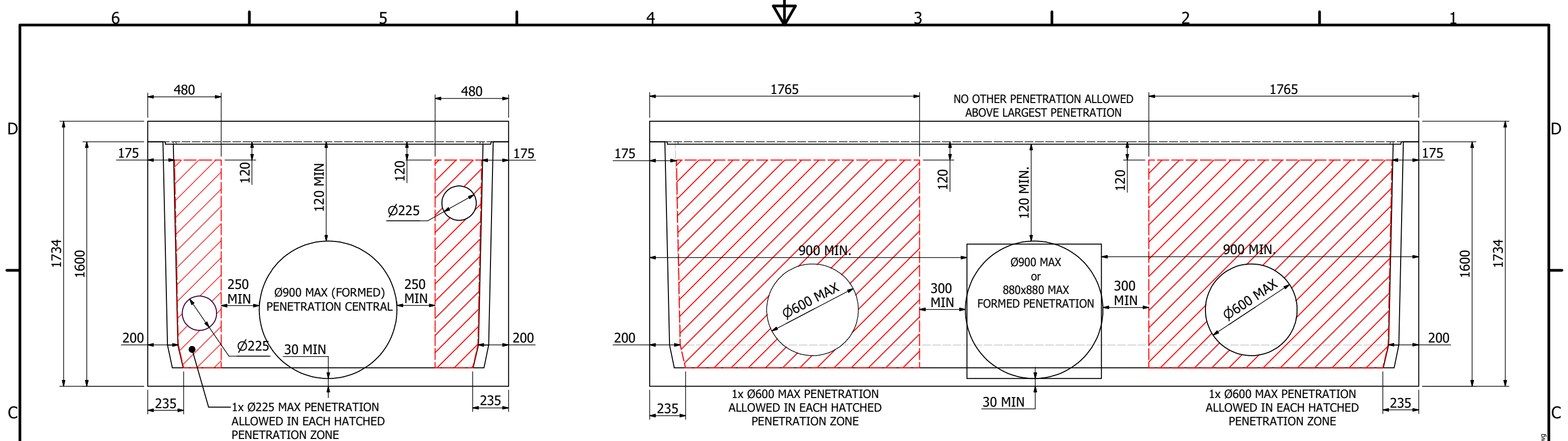
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					Check	Date					TITLE GENERAL NOTES 14.88 kL SPEL PRECAST CONCRETE TANK SV.5023-1464-14-30			
1	07/2021	G.T.	INITIAL RELEASE		Verified	Date	SCALE N.T.S				SIZE A3	SHEET 1	REV 1	
REV	DATE	BY	DESCRIPTION		Approved	Date	CUSTOMER CODE : DWG No.				SP21-CT27120-P			



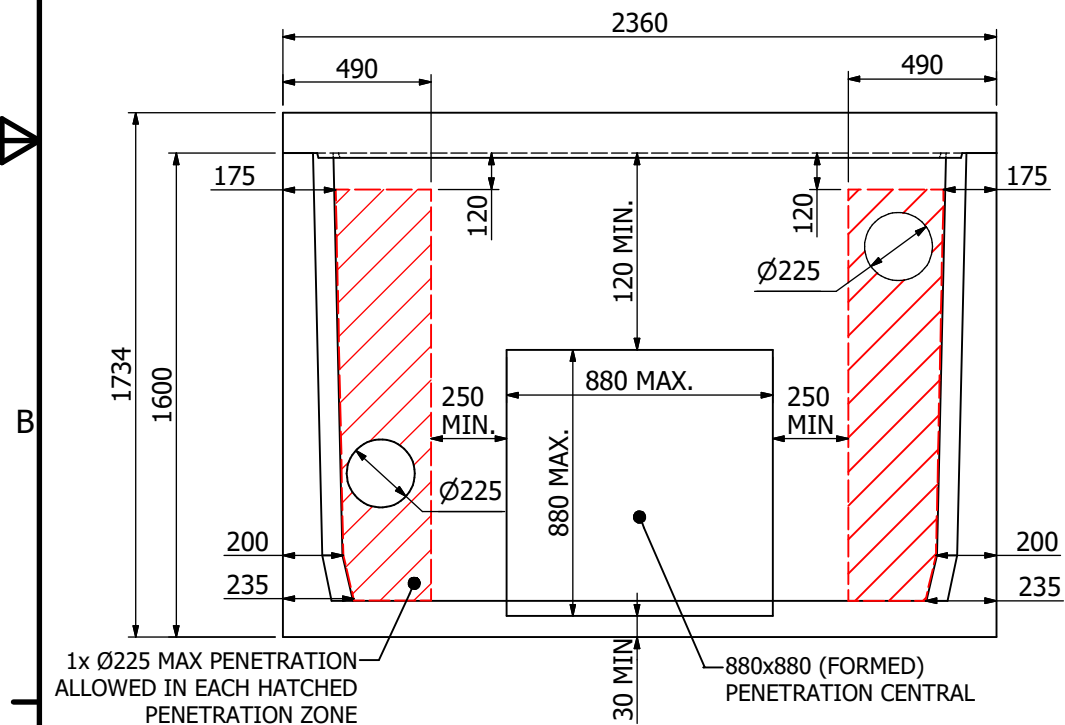
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<div>807/2021G.T</div>					<div>SCALE N.T.S</div>				
<div>907/2021G.T</div>					<div>SIZE A3</div>				
<div>1007/2021G.T</div>					<div>SHEET 1</div>				
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<div>1207/2021G.T</div>					<div>CUSTOMER CODE : DWG No.</div>				
<div>1307/2021G.T</div>					<div>SP21-CT27130-P</div>				



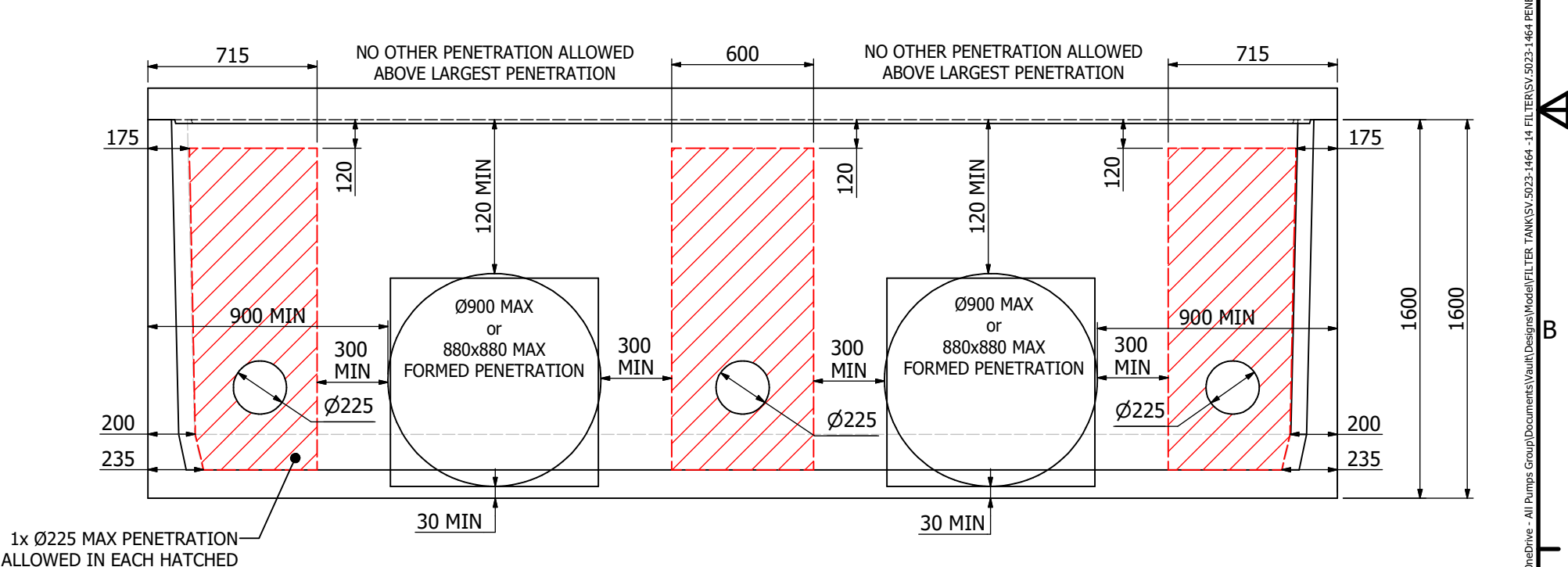


SHORT WALL - Ø 900 MAX PENETRATION

LONG WALL - SINGLE LARGEST PERMISSIBLE PENETRATION



SHORT WALL - 880x880 MAX. PENETRATION



LONG WALL - 2x LARGEST PERMISSIBLE PENETRATION

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