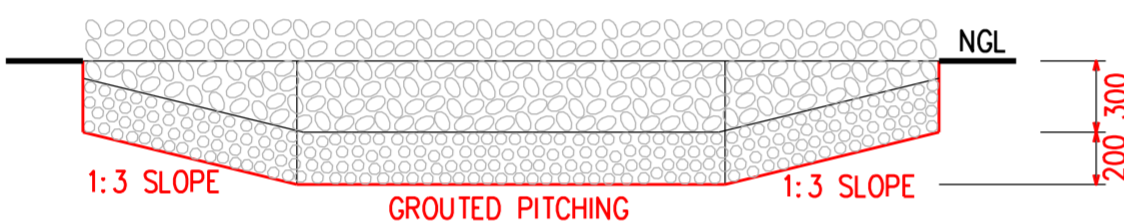
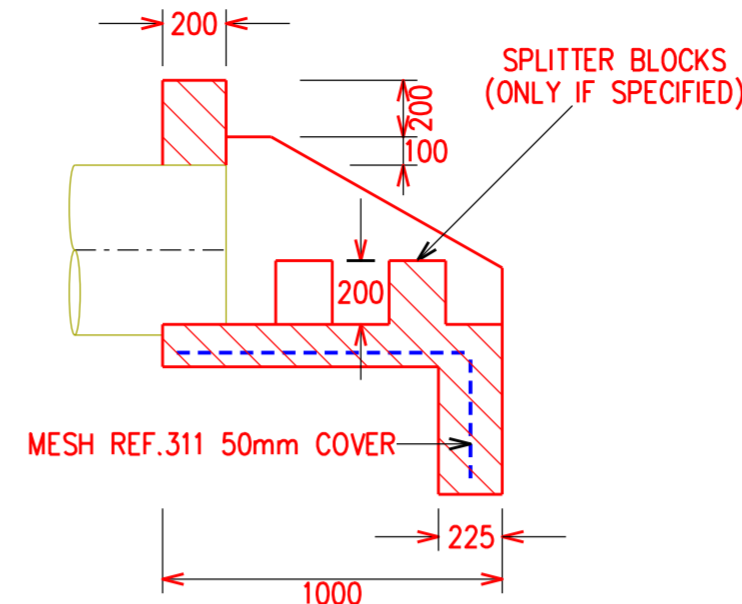


GROUTED PITCHING  
**STILLING BASIN PLAN**  
SCALE 1:1

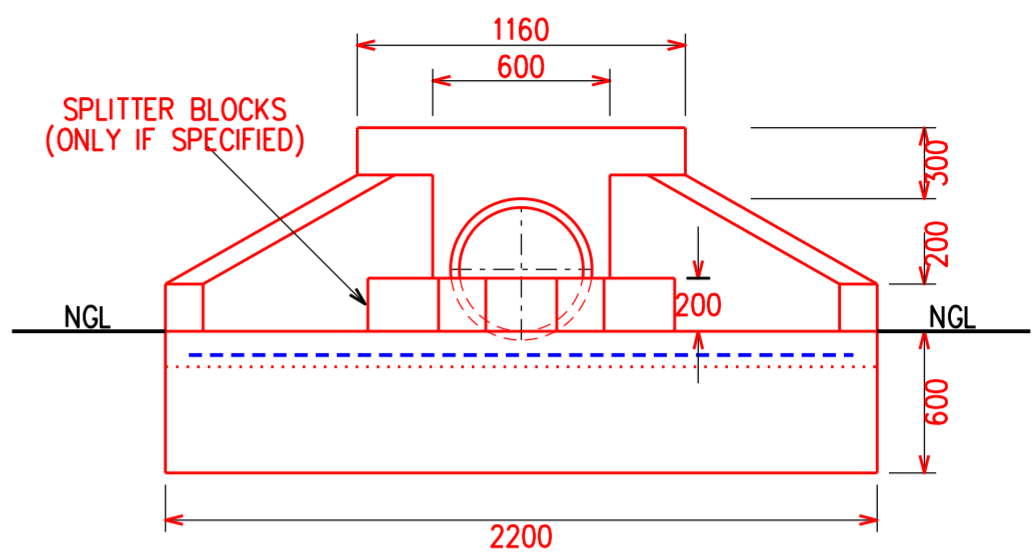


**STILLING BASIN SECTION A-A**  
SCALE 1:1

**NOTES**  
1. 100-150mm BOULDER STONE TO BE USED FOR STILLING BASIN. THE EXTENTS INDICATED ON DRAWING MAY VARY, BASED ON ACTUAL SITE CONDITIONS AND ARE TO BE CONFIRMED BY THE ENGINEER.

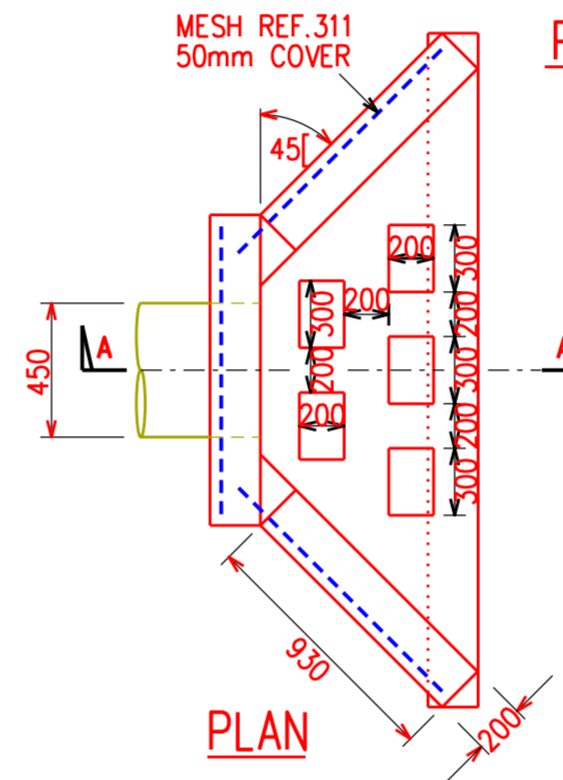


**SECTION A-A**



**FRONT VIEW**

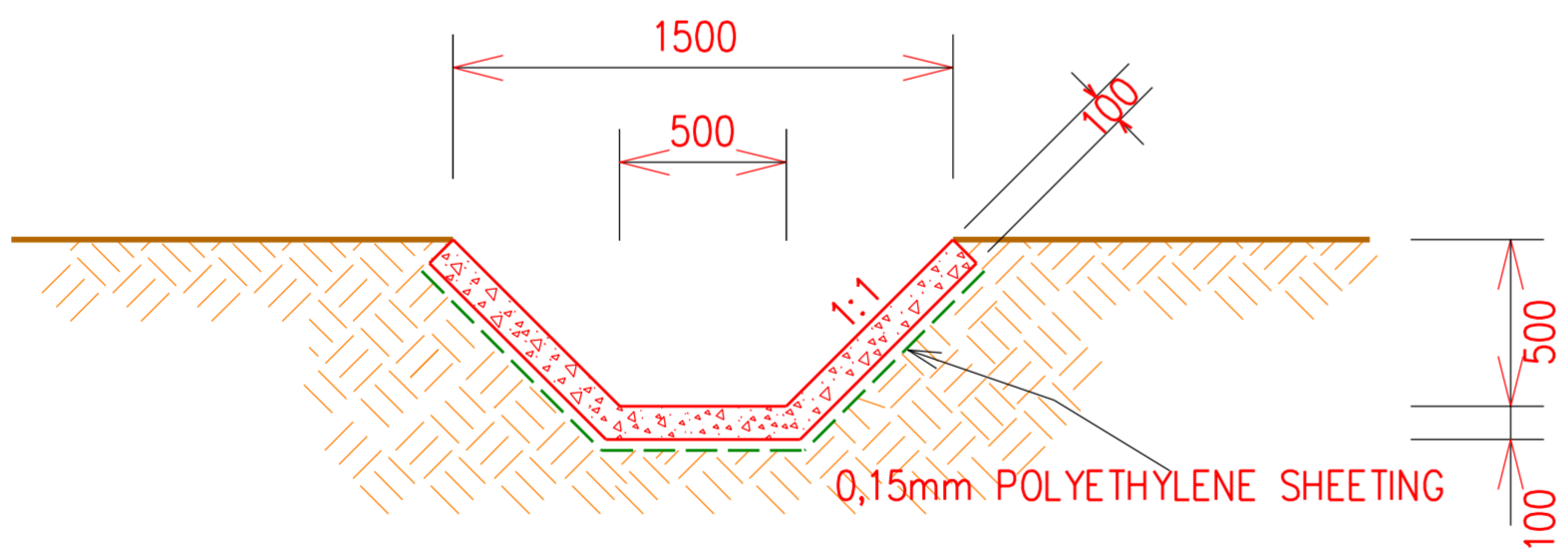
**PLAN - HEADWALL**  
NTS



**PLAN**

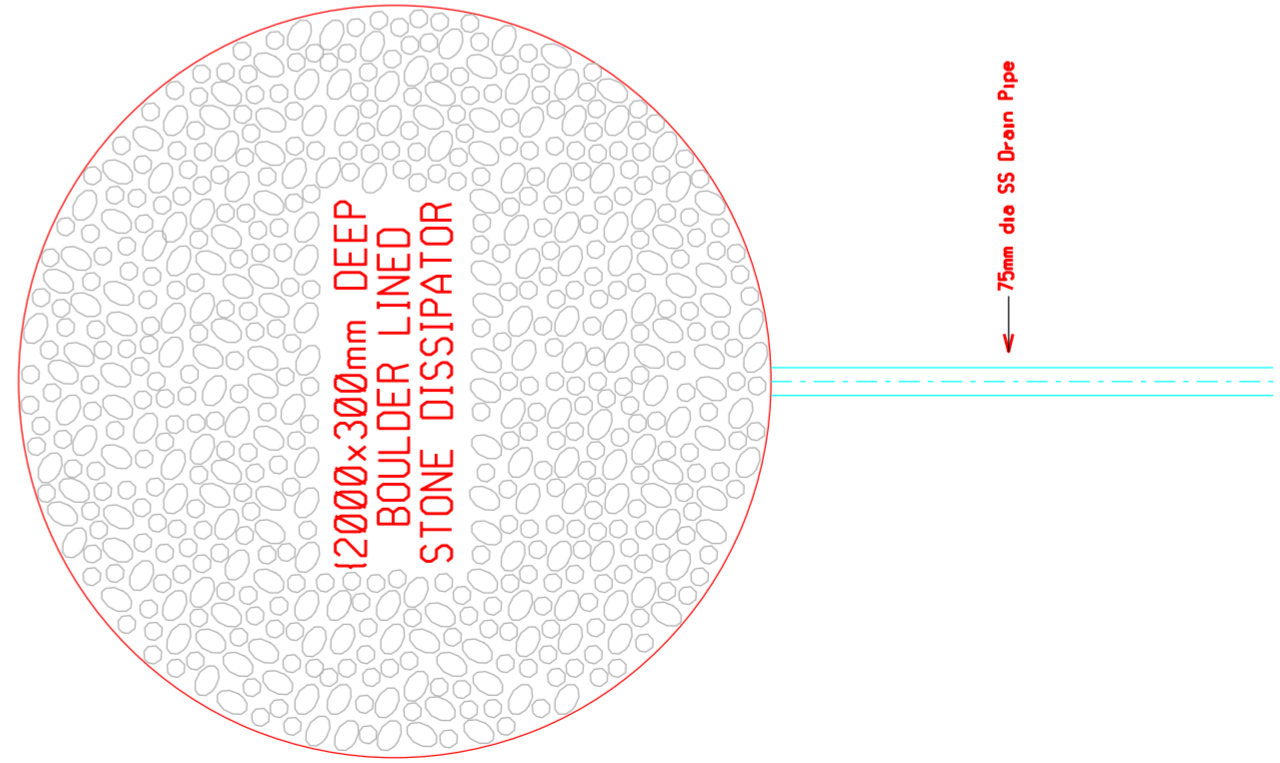
**NOTES**

1. SPLITTER BLOCKS AND STILLING BASIN TO BE PROVIDED AT ALL OUTLETS WHERE EROSION IS LIKELY TO OCCUR.
2. SPLITTER BLOCKS MAY BE OMITTED IF DISCHARGE VELOCITY IS LESS THAN 1,5 m/s OR AS DIRECTED BY THE ENGINEER.
3. CUT-OFF WALLS MAYBE OMITTED IF STRUCTURE IS FOUNDED ON ROCK.
4. ALL CONCRETE TO BE 25mPA.
5. ALL EXPOSED CORNERS TO BE CHAMFERED 20x20mm.
6. SQUARE MESH FABRIC (REF.311) TO BE PLACED IN ALL APRON SLABS, WING AND CUT-OFF WALLS. (50mm COVER)



FORM CONSTRUCTION JOINTS AT 5000mm CENTRES USING 10mm POLYSTYRENE SHEET CUT TO SUITE. JOINTS TO BE RAKED OUT 15mm DEEP AND SEALED WITH A SUITABLE MASTEC SEALER FINISHED FLUSH TO TOP OF FINISHED CONCRETE.  
CONCRETE = 0.29 cu.m/m

**CONCRETE CUT-OFF DRAIN**



**DISSIPATOR**  
NTS

REV	DRAWN	CHKD	APPROVED	DATE	REVISION DESCRIPTION	
01	PAM	PAM	PDC	30/10/24	30/10/24	ADDED CONCRETE CUT-OFF DRAIN, UPDATING HEADWALL AND STILLING BASIN
00	TDOB	PAM	PDC	31/8/17	24/8/17	RE-ISSUE, WAS ON SET.17 SHT.01

CHECKED	AUTHORIZED
P A Moabi 31/8/2017	P D Chetty 31/7/2017
DRAWN	
T D O'Brien 24/8/2017	
SCALE	NTS

**MAKHATHINI SUBSTATION**  
CIVILS  
HEADWALL AND STILLING BASIN,  
CONCRETE CUT OFF DRAIN  
SECTION AND PLANS

ER00024		
SET	SHEET	REVISION
20	06	01