

**STEP 1: PREPARING THE AREA**

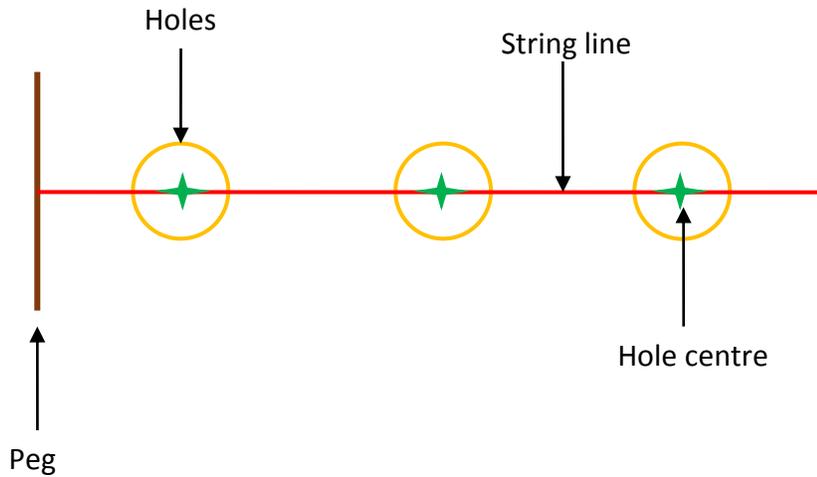
Clear and level your site where you plan to build the retaining wall. Please ensure you leave 200mm behind the retaining wall area for backfill.

**STEP 2: ALIGNMENT**

Place a star piquet or peg at both ends of the proposed wall. Attach two string lines at each end of the wall, top and bottom, to keep your wall aligned.

**STEP 3: MARKING OUT HOLES**

Starting from one end of the wall, mark a cross on the ground at intervals with their center being approximately 15mm more than the length of the sleeper. For example if you are using 1530mm sleepers the hole centers should be 1545mm apart – note, this will vary on the length of sleeper used.



**STEP 4: AUGER HOLES**

Auger holes as per following engineer specifications:

WALL HEIGHT	SLEEPER LENGTH	POST TYPE	POST SPACING	HOLE DIAMETER	PIER DEPTH
0.2m	2.0m	100UC14.8	2015mm	450mm	0.5m
0.21m to 0.4m	2.0m	100UC14.8	2015mm	450mm	0.8m
0.41m to 0.6m	2.0m	100UC14.8	2015mm	450mm	1.0m
0.61m to 0.8m	2.0m	100UC14.8	2015mm	450mm	1.2m
0.81m to 1.0m	2.0m	100UC14.8	2015mm	450mm	1.4m
1.01m to 1.2m	2.0m	100UC14.8	2015mm	450mm	1.6m
1.21m to 1.4m	1.53m	100UC14.8	1545mm	450mm	1.6m
1.41m to 1.6m	1.53m	100UC14.8	1545mm	450mm	1.8m
1.61m to 1.8m	1.53m	100UC14.8	1545mm	450mm	2.0m
1.81m to 2.0m	1.53m	100UC14.8	1545mm	450mm	2.2m
2.01m to 2.2m	1.53m	150UC23.4	1545mm	450mm	2.4m
2.21m to 2.4m	1.53m	150UC23.4	1545mm	450mm	2.6m
2.41m to 2.6m	1.53m	150UC23.4	1545mm	450mm	2.8m
2.61m to 2.8m	1.53m	150UC23.4	1545mm	450mm	3.0m
2.81m to 3.0m	1.53m	150UC23.4	1545mm	450mm	3.2m

### STEP 5: POURING CONCRETE

Pour concrete into holes, one at a time. Make the concrete stiff. If using readymix concrete, order 20/20, 60 slump. Set your post by lowering into ground until level with the top string lines. Ensure there is a minimum lean back of 30mm for every 1.0m in height.

### STEP 6: CHECKING POSTS

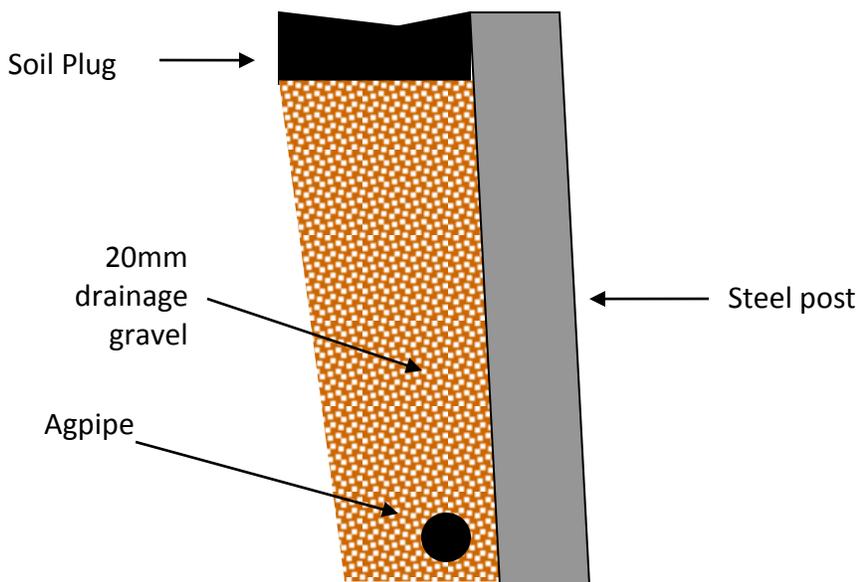
Use a spirit level to make sure all your posts are aligned with the string line and are perpendicular on the sides. It is also important to measure the remaining distance to the top of your steel posts, to ensure the sleepers finish flush with the top of the posts. If required, lay a concrete pad on both sides of the steel post.

### STEP 7: AGPIPE AND BACKFILL

Allow the concrete to cure for two to three days before you place your sleepers in. Place agpipe at the base, then backfill with gravel to 200mm from the top.

### STEP 8: SOIL PLUG

A soil plug is then placed in, to fill the wall to the top.



### NOTE:

- Ensure when backfilling do not push dirt from behind into the back of the wall with any machinery. Always place dirt/fill from the top, when using a Bobcat/Dingo, or if you prefer, by hand.
- Retaining walls over 1.0m in height must be engineer designed and are subject council approval.