The Installed Cost of Capiphon Drainage is Less

By "cost less", we mean we anticipate you will enjoy savings from one or more of the following:

- ✓ By not requiring a geotextile cloth to prevent soil particles from entering into the system.
- ✓ By backfilling with washed coarse sand which is easier to transport and handle than gravel.
- ✓ By using a narrower trench.
- ✓ By using a shallower trench.

✓ Racecourse Drainage.

In a scientifically designed trial, Capiphon Drainage was compared to the standard specified by Racing NSW - 50mm ag pipe without sock, embedded in small gravel and the trench backfilled with sand. While it was difficult to compare the cost of installation of the two systems in trial conditions, the independent contractor was asked to estimate the cost for larger, more usual installations.



Even more significant than the increased efficacy of Capiphon, the independent contractor (Sports Turf Services) installing the system reported that Capiphon installation costs were much lower, to the extent that **the installed cost of Capiphon drainage was some 40% less than the standard drainage.**

✓ Playground Softfall

A contractor interviewed for this trial was asked to quote for the job using his usual methods (he didn't want to try our new system). The new contractor provided this actual cost.



Capiphon™ Drainage		Conventional Drainage		Comments	
Labour	\$2,400	Labour	\$3,200		
PVC Pipes	\$198	Ag Pipe	\$900	50 mm DWV	
Sand	\$40	Aggregate	\$1,800		
Excavation	\$680	Excavation	\$2,400	Capiphon™ requires smaller machine. Less spoil to remove.	
Capiphon™	\$270	Geofabric	\$1,206		
		Top soil			
	\$3,588		\$9,506	Saving: \$5,918	

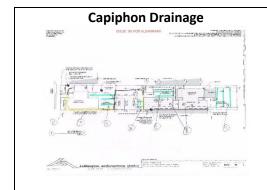
✓ Cost Comparison on Reactive Soil

A contractor (a plumber)was given the plans and the engineer's report, and asked to draw up a drainage plan with a quote.

COTIVE	IIIIOIIai	Drainage
	TATELLE -	9017 Sec. 01 250-200 Jan Sec. 200
Contract of the second		*
		-
AND THE REAL PROPERTY.	PERM	
(i) *********	(100 000 000 000 000 000 000 000 000 000	
	hitecture studie Warranto	

Item	Cost
20mm blue metal aggregate	\$1,156.00
100mm socked aggy pipe	\$467.00
Geo fabric cloth	\$489.00
Excavation costs 2.5 days	\$2,290.00
Labour 3 days @ \$ 88	\$2,112.00
Total =	\$6,514.00

A Capiphon installer was given the same plan and report and also asked for a plan and quote.



Capiphon Drainage Quote	Quantity	per unit	Cost
Capiphon - 10m rolls	8	110.0	\$880
Coarse sand	1.2	55.0	\$66
50mm DWV pipe	42	3.2	\$133
Delivery	2	20.0	\$40
Excavation	8	150.0	\$1,200
Labour	14	88.0	\$1,232
Fittings	6	5.0	\$30
Total =			\$3,581

√ Spreadsheet analysing where the cost savings in a 40m Intercept Drain.

Length of drain (metres) Site difficulty (select one)	40.00 Average		(note: doe	es not assume	site difficulty varies for type of machine. T	o be include	ed later))	
Conventional	Cost	Unit	per job	\$ per metre	Capiphon	Cost	Unit	per job	per metre
Labour cost	100.00	per hou	ır		Labour cost	100.00	Unit		
Trench Dimension (mm) Width Depth √olume		mm mm			Trench Dimension 300*100 Width Depth Volume		mm mm		
Hire 1.7t Excavator					Hire walk-behind mini trencher				
Dig time of trench including set up Excavator cost hire per hour Site difficulty excavation cost (hire + operator)	16 150.00		4,000	100.00	Dig time of trench including set up Dingo with trench chain Site difficulty excavation cost (hire + operator)	4.0 100	hours	800	20.00
Volume of spoil Labour Equipment/trucking Site difficulty		per m3			Volume of spoil Labour Equipment/trucking Site difficulty		per m3 per m3		
excavation cost (hire + operator) Spoil tip fees \$100 m3 x 0.09m3	100.00)	8,100 720	202.50 18.00	excavation cost (hire + operator) Spoil tip fees \$100 m3 x 0.09m3	100.00		2,025 180	50.63 4.50
100mm x 20m Socked Slotted PVC Fime to install Draincoil	180.00	20			Draintube x 65mm Time to install Draintube	295.00 2	10	1,200	30.00
Installation cost labour			200	5.00	Installation cost operator			200	5.00
Geofabric 2m x 50m roll 140gsm Fime install geofabric Installation cost labour	265.00 2		265 80 200	2.00	Install geofabic Time install geofabric Installation cost labour			0	:
Backill with stone/gravel		-			Backfill washed coarse sand				
cost of stone per metre) Backfill time	75.00	2	540		cost of washed coarse sand per m3 Backfill time	65.00 2		39	0.98
Backfill cost operator + operator			500	12.50	Backfill cost operator + operator			400	10.00
JOB TOTAL			14,965					4,844	
TOTAL per metre				374.13					121.10

✓ Analysis from Taiwan Railway Engineers

Under the condition of the same water collection, the unit price (including the cost of construction and other filter materials) required for 10-meter drainage in a railway embankment.

Product	Maintenance Cycle	TWD	AUD	AUD/Year
1. Capiphon Draintube	25+ years	\$24,720	\$1,179	\$47
2. PVC pipe with holes(φ3")	3-5 years	\$162,528	\$7,754	\$1,550
3. PVC pipe with holes(φ4")		-	-	
4. HDPE mesh pipe(φ3")	5-10 years	\$48,797	\$2,331	<mark>\$233</mark>
5. HDPE mesh pipe(φ4")		-	-	