MANAWATU DISTRICT COUNCIL

Himatangi Beach Community Sewage Scheme **Wastewater Treatment Pond Civil Works**

PRELIMINARY SCHEDULE OF QUANTITES

28 March 2012

Note: Cost Estimate applies to construction of a combined facultative and floating wetland treatment pond area. The floating wetland is to be supplied and installed by a specialist supplier. Refer to CPG Drawing No. 705434 Sheets WW-01 to 04.

Abbreviations:

NR - Not Required - refer to others scope of work

Provided by CPG NZ Ltd Prepared by G M Dent N Deo

TBC - To Be Confirmed Reviewed Job No. 705434 c/w - complete with ITEM DESCRIPTION UNIT QUANTITY RATE **AMOUNT** 1.00 Preliminary and General 1.01 Fixed charges for site establishment and all mobilisation

activities not measured elsewhere 1.02 Setting out 1.03 Insurances, bonds, fees, permits LS 1 LS 1 LS 1	
1.03 Insurances, bonds, fees, permits LS 1	I
	-
1.04 Provision of as-built information and Producer LS 1	1 1
Statement	
1.05 Reports and meetings LS 1	
1.06 Quality management, quality plan, health & safety	
testing LS 1	
1 07 Construction Management Plan including allowance for	
review and agreement with the Engineer	
1.08 Implement, maintain and inspect erosion/sediment control	
manageres for the duration of construction. Additional	1
measures to ensure compliance with Resource Consent	
conditions	
1.09 At the completion of pond construction remove all excess	
materials, plant and tidy the site including repair of the	
access track, make good any damage including to fencing.	
access track, make good any damage including to rending.	
Subtotal of Preliminary and General Carried to Summary	
2.00 Earthworks and Pond Formation	
2.01 Site clearing and removal of vegetation, remove existing	
fence across pond location and all other materials not	
required as part of the pond construction and other work	
	1
on the site.	
on the site.	
on the site. 2.02 Strip Pond Site and access track topsoil to stockpile m² 24,200	
on the site. 2.02 Strip Pond Site and access track topsoil to stockpile m ² 24,200 2.03 Cut to fill' from pond floor and access track to pond embankments including placing, compaction, trimming and work required in prepartion for placing the liner. This rate	
on the site. 2.02 Strip Pond Site and access track topsoil to stockpile m ² 24,200 2.03 Cut to fill' from pond floor and access track to pond embankments including placing, compaction, trimming and	
on the site. 2.02 Strip Pond Site and access track topsoil to stockpile 2.03 Cut to fill' from pond floor and access track to pond embankments including placing, compaction, trimming and work required in prepartion for placing the liner. This rate	
on the site. 2.02 Strip Pond Site and access track topsoil to stockpile 2.03 Cut to fill' from pond floor and access track to pond embankments including placing, compaction, trimming and work required in prepartion for placing the liner. This rate includes for all care required to maintain the trimmed on the site. 24,200 24,200 5,500	
on the site. 2.02 Strip Pond Site and access track topsoil to stockpile 2.03 Cut to fill' from pond floor and access track to pond embankments including placing, compaction, trimming and work required in prepartion for placing the liner. This rate includes for all care required to maintain the trimmed surface for placement of the liner. 24,200 m ² 5,500	
on the site. 2.02 Strip Pond Site and access track topsoil to stockpile 2.03 Cut to fill' from pond floor and access track to pond embankments including placing, compaction, trimming and work required in prepartion for placing the liner. This rate includes for all care required to maintain the trimmed surface for placement of the liner. 2.04 Access track - Supply, form, compact and trim basecourse	
on the site. 2.02 Strip Pond Site and access track topsoil to stockpile 2.03 Cut to fill' from pond floor and access track to pond embankments including placing, compaction, trimming and work required in prepartion for placing the liner. This rate includes for all care required to maintain the trimmed surface for placement of the liner. 2.04 Access track - Supply, form, compact and trim basecourse (300mm layer GAP40 general purpose granular material)	
on the site. 2.02 Strip Pond Site and access track topsoil to stockpile 2.03 Cut to fill' from pond floor and access track to pond embankments including placing, compaction, trimming and work required in prepartion for placing the liner. This rate includes for all care required to maintain the trimmed surface for placement of the liner. 2.04 Access track - Supply, form, compact and trim basecourse	
on the site. 2.02 Strip Pond Site and access track topsoil to stockpile 2.03 Cut to fill' from pond floor and access track to pond embankments including placing, compaction, trimming and work required in prepartion for placing the liner. This rate includes for all care required to maintain the trimmed surface for placement of the liner. 2.04 Access track - Supply, form, compact and trim basecourse (300mm layer GAP40 general purpose granular material) and running cource for the access track. m ² 5,500	
on the site. 2.02 Strip Pond Site and access track topsoil to stockpile 2.03 Cut to fill' from pond floor and access track to pond embankments including placing, compaction, trimming and work required in prepartion for placing the liner. This rate includes for all care required to maintain the trimmed surface for placement of the liner. 2.04 Access track - Supply, form, compact and trim basecourse (300mm layer GAP40 general purpose granular material) and running cource for the access track. 2.05 Uplift sand fill material supplied from a stockpile on the site	
on the site. 2.02 Strip Pond Site and access track topsoil to stockpile 2.03 Cut to fill' from pond floor and access track to pond embankments including placing, compaction, trimming and work required in prepartion for placing the liner. This rate includes for all care required to maintain the trimmed surface for placement of the liner. 2.04 Access track - Supply, form, compact and trim basecourse (300mm layer GAP40 general purpose granular material) and running cource for the access track. 2.05 Uplift sand fill material supplied from a stockpile on the site and place in the pond embankments, compact and trim	
on the site. 2.02 Strip Pond Site and access track topsoil to stockpile 2.03 Cut to fill' from pond floor and access track to pond embankments including placing, compaction, trimming and work required in prepartion for placing the liner. This rate includes for all care required to maintain the trimmed surface for placement of the liner. 2.04 Access track - Supply, form, compact and trim basecourse (300mm layer GAP40 general purpose granular material) and running cource for the access track. 2.05 Uplift sand fill material supplied from a stockpile on the site and place in the pond embankments, compact and trim ready for placement of the liner. This rate includes for all m ² 1,680	
on the site. 2.02 Strip Pond Site and access track topsoil to stockpile 2.03 Cut to fill' from pond floor and access track to pond embankments including placing, compaction, trimming and work required in prepartion for placing the liner. This rate includes for all care required to maintain the trimmed surface for placement of the liner. 2.04 Access track - Supply, form, compact and trim basecourse (300mm layer GAP40 general purpose granular material) and running cource for the access track. 2.05 Uplift sand fill material supplied from a stockpile on the site and place in the pond embankments, compact and trim ready for placement of the liner. This rate includes for all care required to maintain the trimmed surface for	
on the site. 2.02 Strip Pond Site and access track topsoil to stockpile 2.03 Cut to fill' from pond floor and access track to pond embankments including placing, compaction, trimming and work required in prepartion for placing the liner. This rate includes for all care required to maintain the trimmed surface for placement of the liner. 2.04 Access track - Supply, form, compact and trim basecourse (300mm layer GAP40 general purpose granular material) and running cource for the access track. 2.05 Uplift sand fill material supplied from a stockpile on the site and place in the pond embankments, compact and trim ready for placement of the liner. This rate includes for all care required to maintain the trimmed surface for placement of the liner.	
on the site. 2.02 Strip Pond Site and access track topsoil to stockpile 2.03 Cut to fill' from pond floor and access track to pond embankments including placing, compaction, trimming and work required in prepartion for placing the liner. This rate includes for all care required to maintain the trimmed surface for placement of the liner. 2.04 Access track - Supply, form, compact and trim basecourse (300mm layer GAP40 general purpose granular material) and running cource for the access track. 2.05 Uplift sand fill material supplied from a stockpile on the site and place in the pond embankments, compact and trim ready for placement of the liner. This rate includes for all care required to maintain the trimmed surface for	

Date: 28/03/2012

File: J:\700000-799999\705434 - Himatangi Wastewater Pond Design\Detailed- Design\Detailed_Des_Cost_Estimates.xlsx Page 1 of 3

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT		
2.07	Uplift (excess) topsoil from stockpile and fill to the outer batters of the pond embankments and elswhere on the site as directed by the Engineer including compaction and trimming	m ³	2,930		,		
2.08	Regrass all disturbed areas including ground preparation, seeding and maintenance of the grass for 3 months	m²	4,800				
2.09	Extra over costs at borrow site to strip topsoil and replace. (Provisional)	LS	NR				
2.10	Where directed by the Engineer - excavation of unsuitable material and disposal on site and backfilling from suitable materials on site including compaction, trimming, (Provisional)	m ³	100				
2.11	Excavation, reinstatement and compaction of excavated or other suitable backfill material to anchor trenches around the top of the pond embankment.	m	578				
2.12	Liner - Supply and install 2 mm thick HDPE Membrane (as per the drawings) including all cutting, triming and waste material, welding of the material, placing the liner to the pond and anchor trenches and all temporary work required for completing the liner.	m²	20,000	,			
2.13	Membrane under drainage system for gas pressure relief including provision of venting pipework and post at each of the 4 corners of the pond. 150 Megaflo in filter sock laid on flat side on top of sand under the liner across the pond as indicated in the drawings.	m	2,950				
2.14	Supply and place sand tubes for holding down membrane in the Storage Pond as per drawings. Any additional sand tubes as required by the Contractor for temporary works during construction are to be allowed for in the liner supply and instal rate.	m	630				
2.15	Supply and install Geo-tech safety ladders - details TBC	No.	12		, ,		
2.16	Allow for the supply and installation of Aerator(s) at the Facultative Pond.	No.	By others				
2.17	Allow for the electrical supply and connection requirements to the Aerator(s).	No.	By others	* E	, a		
2.18	Allow for the supply of all materials and construction of access steps for maintenance of and and access to the Aerators, including any PE attachments and handrails - details TBC	LS	Byolte Detail TBC	55			
2.19	Supply and install site pond fencing - 7 wire farm fence.	m	730				
2.20	Floating wetland including all baffles, anchors and any other requirements for its establishment.	m	By others	٠	-		
2.21	Supply and install gates c/w chain and pad lock at the entrance to the site as shown on the drawings	ea	2	G.			
Sub To	Sub Total of Earthworks and Pond Formation Carried to Summary						
3.00 3.01	Pipework Construct Pond Inlet weir chambers	No.	NR				
3.02	Supply and install valves at the inlet chambers.	No.	NR				
3.03	Construct Pond oulets.	No.	NR	1			
3.04	Supply and install valves at Pond Outlets as shown.	No.	NR				
3.05	Supply, and install, complete with joints, bends, fittings, bedding and backfill the inlet and outlet pipelines at the Ponds as shown in the drawing.	Е	NR				