



Ministry of Finance

Ameenee Magu, Male', Republic of Maldives

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## CLARIFICATION 1

ފޮތްތައް ބަލާފައިވާ 1

ނަންބަރު No:	TES/2022/G-002	
ފޮތްތައް ބަލާފައިވާ Project:	Design, Supply, and Installation of Waste sorting line with sieving equipment and MSW shredder at R. Vandhoo Regional Waste Management Centre	
ފޮތްތައް ބަލާފައިވާ Issued Date	17 <sup>th</sup> March 2022	
ފޮތްތައް ބަލާފައިވާ No. of Pages: -04	ފޮތްތައް ބަލާފައިވާ Boq: -00	ފޮތްތައް ބަލާފައިވާ Drawings: -04

Please include this clarification when submitting the bid

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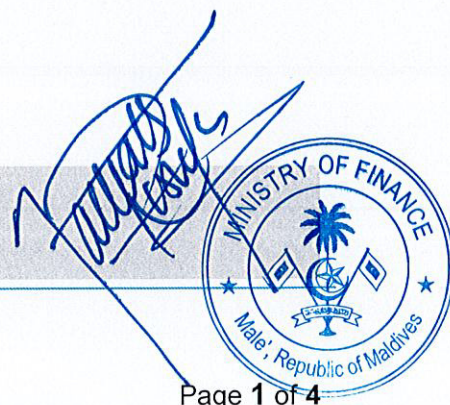
- Please find attached, answers to the queries received.

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Name: Fathimath Rishfa Ahmed

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Signature:





## CLARIFICATION 1

#	Document Name	Document Reference	Query	Query Response
1			<p>According to the tender specifications , the output rate of the proposed sorting system is 5TPH, but we have noticed the maximum burning rate of the incinerator is 1.5TPH , therefore if we proposed a fully automated single line from trommel up to existing incinerator waste bunker (completely with conveyor belts without manual loading or unloading ), then sorting line is delivering 3.5TPH of extra waste to the existing bunker and then at one point of time waste feed bunker will get overflow then operators has to shut the sorting plant temporally and the same process has to be continued at least 3 for 4 times on every day in order to maintain the waste level of the feed bunker.</p> <p>Therefore, we are suggesting 3 options and please let me know which option shall suit you most and accordingly we shall do our final design and submit the proposal.</p> <p>Go with semi-automated 5TPH system and run the whole sorting system only for only 8 hours shift then can generate 40TPD of waste which is sufficient to run the incinerator for 24 hours. With this option line is not fully automated as it will be semi-automated and after the trommel sieve and shredder waste will be store on the floor and has to be feed to the existing feed bunker manually via long belt conveyor.(Labors has to load shredded waste manually to belt conveyor and not with wheel loader or tele handler).</p> <p>Go with semi-automated 3TPH system and run the whole sorting system only for 2 x 8 hours shifts then can generate 40TPD of waste which is sufficient to run the incinerator for 24 hours. With this option line is not fully automated as it will be semi-automated and after the trommel sieve and shredder waste will be store on the floor and has to be feed to the existing feed bunker manually via long belt conveyor.(Labors</p>	<p>Please be informed that change is made to the current requirement replacing 5TPH with fully automated 2TPH and a dosing conveyor at the front end with a bag opener drum fitted within it.</p>



*Signature*



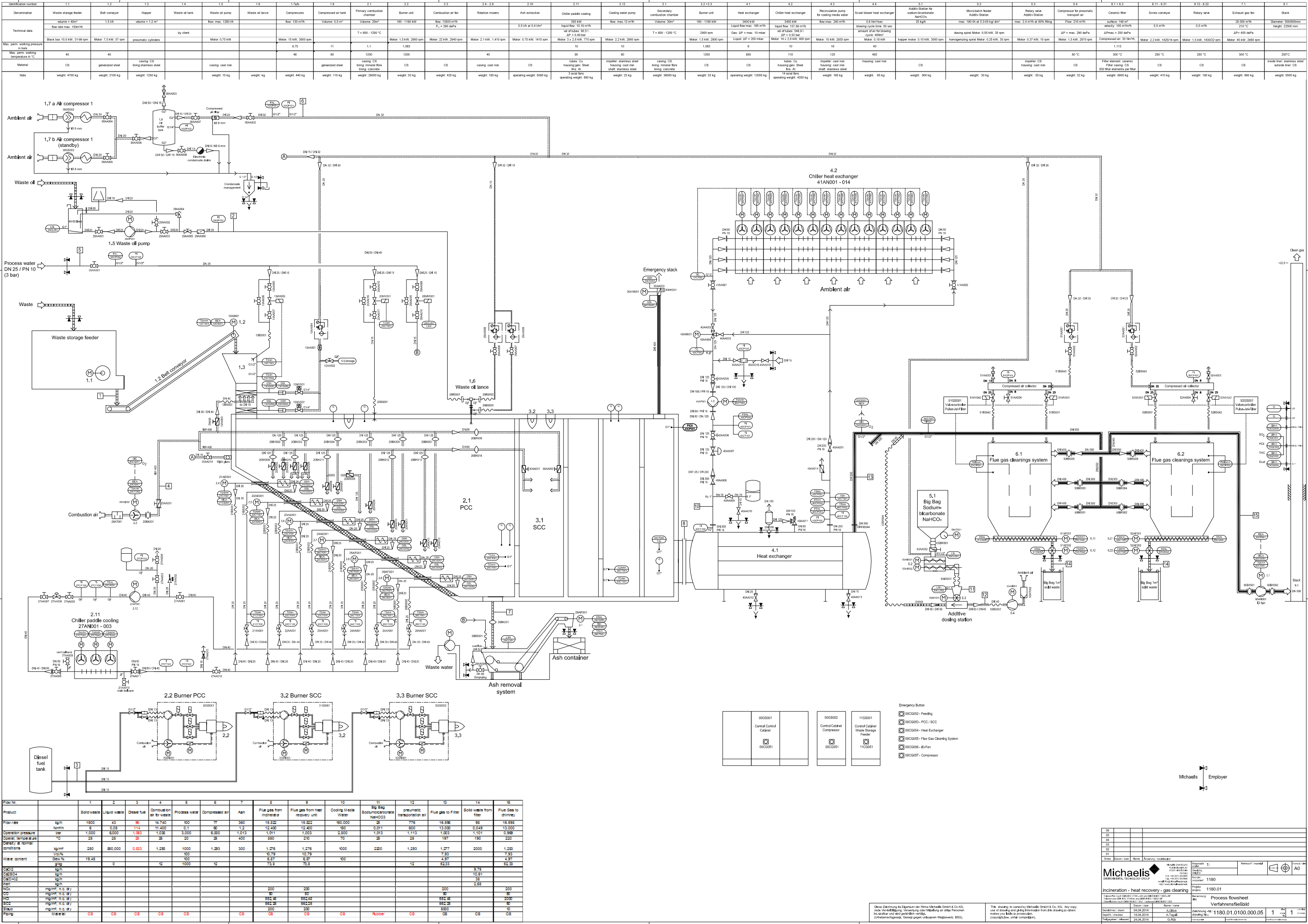
			has to load shredded waste manually to belt conveyor and not with wheel loader or tele handler). Go with fully automated 2TPH sorting system – With this system right from the trommel up to existing waste feed bunker is fully automated with different type of belt conveyors and , waste has to load to the in point of the system by using wheel loader (direct from the ship waste can load to this point), from there onwards everything will be fully automated up to the existing feed bunker, with this flow rate we can guarantee that feed bunker won't get over flow as sorting system and incinerator burning flow rate is almost same.	
2			Please let us know, Custom clearance in Maldives and delivery up to R. Vandoo site is also under bidders' scope?	Yes, but custom duty exemption will be assisted by the Employer
3			The tender documents state that the throughput should be 5 tph infeed to the plant. Looking at the percentage spit of material we have to remove before it reaches the incinerator equates to 3.69 tph. I understand that the incinerator can only take 1.6 tph / 40 tonnes per day running 24 hours. If this is the case, could you confirm so that we can specify the correct size of machinery.	Same as the first point
4			Do you have an as -built drawing or render of the R. Vandhoo Regional Waste Management Centre we can work from showing the feed height to the incinerator as we will have to arrange the conveyor feed point to it?	As-built drawings are attached to this
5			Can you also confirm that there is already an existing conveyor feeding the incinerator we could connect to?	Yes, there is already an existing feeding conveyor
6			Can you also confirm that the material being presented to the plant for separation will be loose and not in plastic bags as we understand there is no need for a bag opener at the front end.	both loose and in bags, therefore a bag opener is required as mentioned above
7			Multi crusher - Usually, we design large waste is separate with MSW to go to different waste shredder, but we found the owner need all waste go to in same shredder(crusher). some bulk waste maybe have hard materials such as stone and metal. should we go forward with base on demand of tender? In addition, please confirm the shredder drive is hydraulic motor or electric motor?	crusher is required to shred waste into a certain size and make homogenous. Large and bulky waste are to be separate and will not go into the crusher
8			Sieve - We found tender file write is disc sieve, if have any other more demand such as shaft quantity, sieve length etc?	sieve is to screen sand and soil as sometime incoming waste contains soil



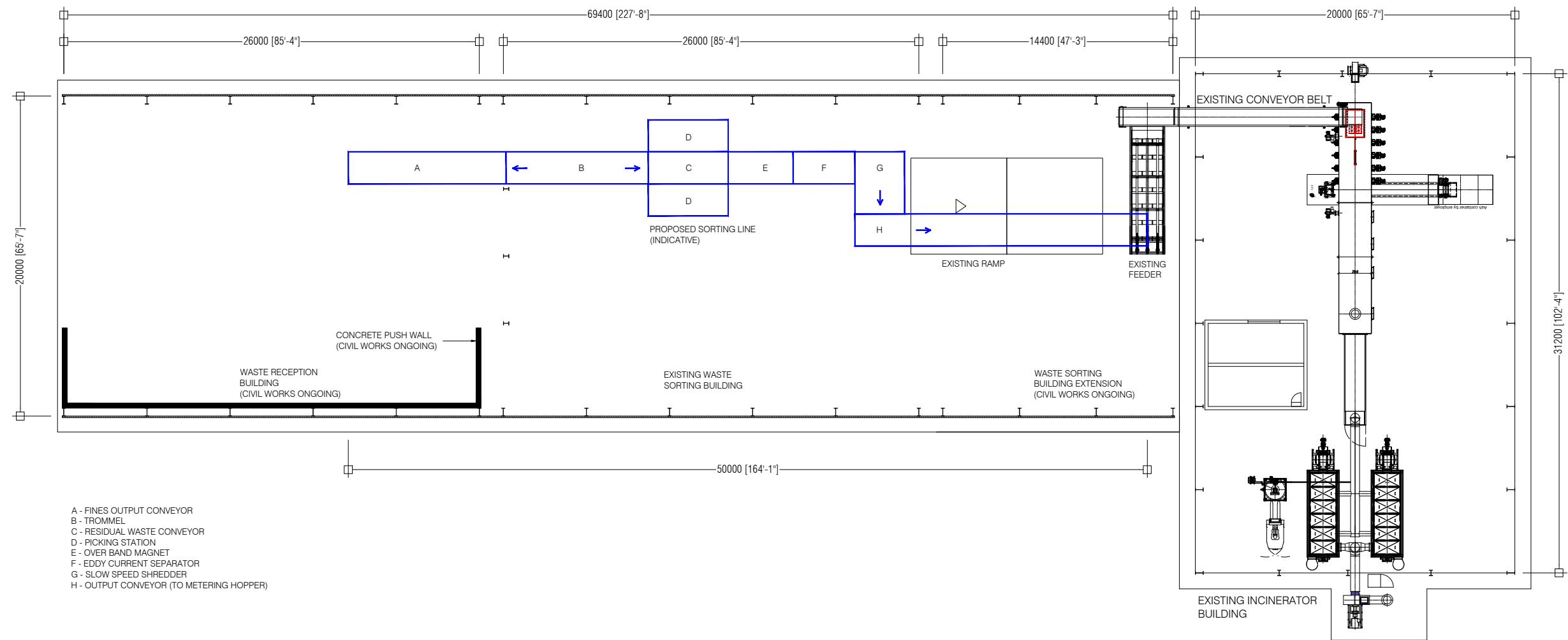
9			Conveyor Belt - is there any demand for length of output belt conveyor? Throw directly into the concrete receiving bin ?	No. but should be sufficient to reach the receiving bin
10			We have no specifications given about boiler system, no information given about the final material required and also the throughout size of the material	throughput material size should not be more than 100mm
11			We need to know what kind of Grate going to use for incineration/Power generation. In the input material composition almost 70% is the organic fraction which may not be a good input material for power generation, so we need proper details of what is actual planning and output. (What is the capacity of their boiler? how many Megawatt?)	steam boiler with steam turbine with a capacity of 500 KW
12			What is the calorific value want to achieve in final material?	3500 Kcal/kg average
13			What is plan with the organic fraction? Will it convert into a compost? For this do owner need a compost treatment line?	organic fraction will not come into the facility as there will be source separation of this waste and treat onsite. However, it should be considered some of organic waste will still be coming into the facility and these are to be fed into the incinerator
14			The most important point is owner have asked for 5Mt / hour machines, this would be too small as in future the waste may grow, is there any provision to offer for the bigger capacities machines.	No. 5TPH is changed to 2TPH as the incineration capacity is 38 TPD
15			Please share site plan, flow chart and more detail for better understanding.	Attached
16			As per Clause 18.4 (ii) all customs duties and other taxes paid or payable in the Purchaser's country on the goods if the contract is awarded to the Bidder; Kindly clarify if this project is a duty-free project or if the Contractor has to bear all the customs duties and other taxes.	Customs duties will be exempted. However, other taxes are payable by the contractor












<div>  <div> MCEP  MINISTRY OF ENVIROMENT  GREEN BUILDING, HANDHUVAREE  HIGUN,  MAAFANNU, MALE' (20392),  REPUBLIC OF MALDIVES,  TEL: +960-3018431,  +960-3018300, FAX:  +960-328301 </div> </div>	PROJECT	DESIGN BY	AMENDMENTS
	PROPOSED SORTING LINE		
	R. VANDHOO		
	TITLE	STRUCTURE BY	
	SORTING LINE - WASTE FEEDER ARRANGEMENT		
	CLIENT DEPARTMENT	DRAWN BY	
	WMPC DEPARTMENT	AFRAZ	
PAPER SIZE	A3	SCALE	1:150
PAGE NO.	01	DWG NO.	VNDRMP-A1-01(R2)
		DATE	07.09.2020

