



MINISTRY OF COMMUNICATIONS, WORKS & LABOUR
P O BOX 344, BRADES, MONTSERRAT, W I
◆ Tel: (664) 491-2521/2522 ◆ Fax: (664) 491-6659 ◆ E-mail: mcw@gov.ms

February 5th, 2016

Dear Sir/Madam,

ADDENDUM No. 2 – Change of Scope and Extension of Time

Re: Tender for Construction of Geothermal Exploratory Drill Pad – Well No.3

Tenderers are asked to note there has been an update to the Bill of Quantities and the Tender Drawings for the Above mentioned project. As a result all Tenderers are asked to note that the submission deadline for submission of tenders under the above named project has been extended from Wednesday 10th February 2016 to Wednesday 17th February 2016 at 2:00pm. All queries and clarification relating to this tender should be sent to Rawlson Patterson, Civil Engineer PWD at pattersonr@gov.ms or Felix Persaud, Assistant Civil Engineer PWD at persaudf@gov.ms.

Best Regards

for Williams
.....
Beverly Mendes
Permanent Secretary
Ministry of Communications, Works & Labour

BEM/gf

EVALUATION OF TENDER

Evaluation Criteria

The following evaluation criteria will be used to evaluate tenders received in response to this Invitation to Tender. The Administrative Compliance would be applied before the remaining criteria and is either pass or fail with failure meaning that bids would be deemed Non-compliant. **Tenders must achieve a minimum score of 65% to be considered for award of contract.**

Criteria Description	Weight (%)
Administrative Compliance	Pass/Fail
Financial Compliance	50
Completion Time	20
Technical Compliance & Tenderer's Experience	30

Tenderers that fail to meet the above qualifying score will be rejected and not considered for award of contract.

Administrative Compliance (Pass/Fail)

Tenderers must submit all the documents requested in the tender document. The tender checklist provides a list of requirements which need to be fulfilled. All Tenderers are required to fully complete the Form of Tender including the commencement time and the proposed completion time which are highlighted. In addition they need to fully complete the Bill of Quantities provided. A valid Tax Compliance Certificate need to be submitted with their submission. Tenderers should sign and date the Anti-Collusion statement. Similarly details of previous experience must be submitted in accordance with the Technical Compliance below. This is a pass/fail criteria. If **all** the above requirements are fulfilled then the tenderer would move onto the other evaluation criteria. If any of the above mentioned items are not submitted then the tender would be deemed non-compliant and rejected.

Financial Compliance (50%)

The tendered price is a significant factor and the Government of Montserrat will seek to ensure that the works are undertaken at the most economically advantageous price. The Government of Montserrat is not bound to accept the lowest or any tender. However, there are other factors which comprise the criterion which are stated in the table above (Criteria Description) and these will be considered proportionately. The percentage for this criterion will be calculated proportionately in comparison to other price submissions from tenders.

Completion Time (20%)

The procuring entity is desirous for the works to be completed as soon as possible. Marks will be awarded to the tenderer who proposes to complete the works soonest. The percentage for this criterion will be calculated proportionately in comparison to other price submissions from tenders.

Technical Compliance & Experience (30%)

Adherence to technical specification is paramount. Prospective tenderers need to provide details of at least 2 previous contracts completed within the past 10 years of a similar nature to the scope of works of this tender with a value of a minimum \$300,000.00 for material and labour. These details should include but are not limited to the following; the entity or person for which the work was completed, contact information for the entity or person, the value of the works, the location of the works. In addition the prospective tenders can submit award letters for works in lieu of the above mentioned information. The percentage for this criterion will be calculated proportionately in comparison to other submissions from tenders.

Start Date or Date of Award	Description of Works	Name of Client	Price of Contract	Date Completed

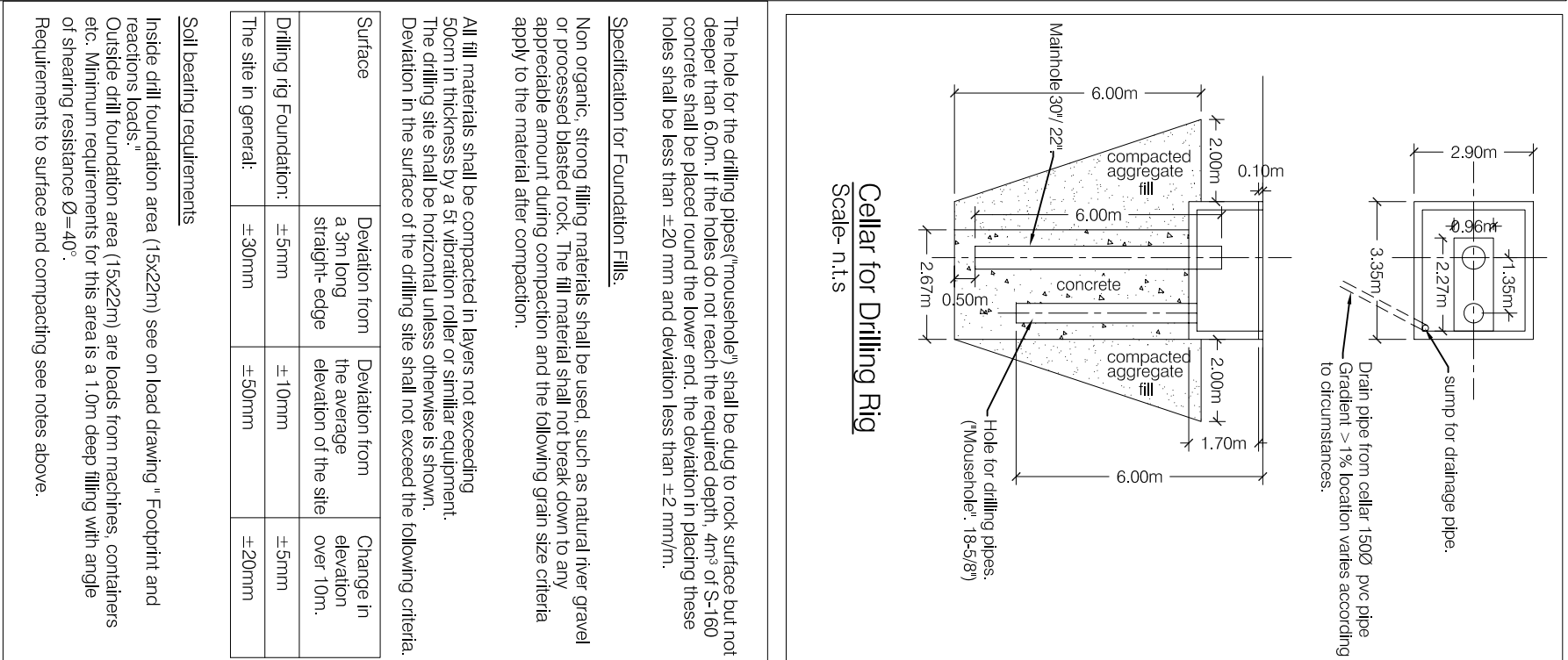
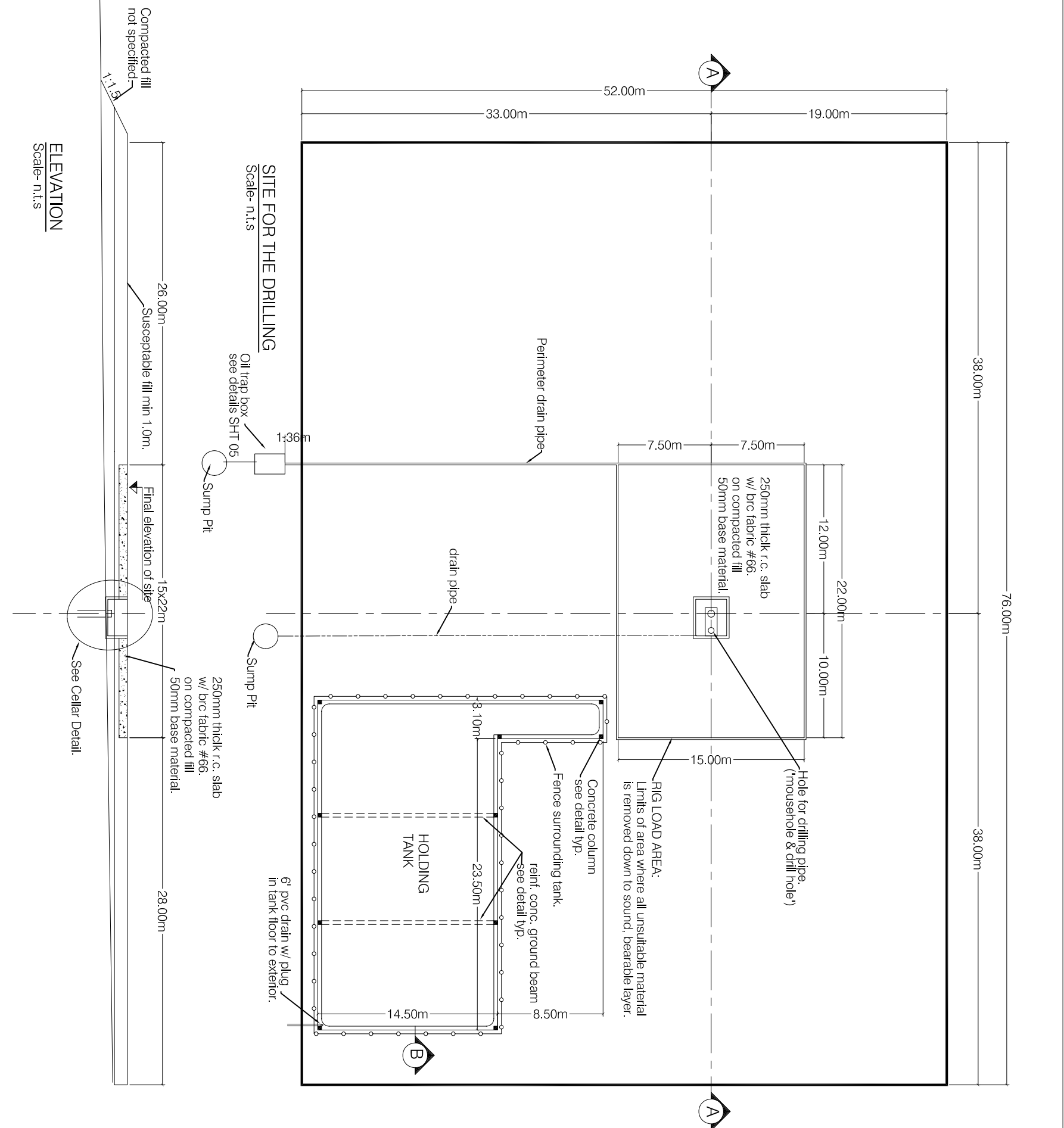
Well Site Three (3) - MON-03

Tender for Construction of Geothermal Exploratory Drill Pad - Well No.3 within Lower St. Georges

Item	Description	Units	Quantity	Rate	Total
A	Preliminaries				
a.1	Contractor's preliminaries, mobilisation/demobilisation and insurance cost. The contractor shall be responsible for the safety of the employees during the construction phase. Further, it is the contractor's responsibility to make contact with all utilities prior to commencement of works and where necessary shall make provision for re-routing any utilities which may interfere with the works. <i>Construction Site</i> The proposed drill site has been identified within the Lower St George's found in zone "C". It is the responsibility of the contractor to make the necessary site visit/s and ascertain the soil condition for the proposed excavation works. For this purpose, the client has invited the contractor to a site visit in order for the contractor to carry out assessment/s of the soil condition, access route and site location. Sheet No.01 provides a location of the proposed third well. All excavated material must be cart away from the construction site to a stockpile area selected by the client. The distance between the construction site to the stockpile area is 1.3 km using the shortest route. Nb: Contractor's Safety Operational Plan The contractor will need to produce a safety plan suitable for working within the location. The proposed plan shall form part of the tender document and must be approved by the GOM before the contractor can commence operation at the proposed site location.	item			
B	Setting out works				
	The client will provide the bench mark point for the Drillhole. The contractor shall be responsible for setting out the drill pad with the cellar box for drilling rig; the perimeter drainage; water holding tank; oil trap box and soak-away sumps. The drill pad is to be constructed within the site of the drilling area (76.0 metres by 52.0 metres). Details are shown on Sheet No.02.	item			
C	Reinforced Concrete Drill Pad				
c.1	In accordance with Sheet No.2, excavate 305mm deep for the reinforced concrete drill pad; for cellar box according to details specified. Also include the excavation works for the placement of the mainhole and mousehole pipes.	m ³	231.0		
c.2	Supply base material according to ASTM D1241, place, shape and compact to 50 mm thickness prior to placing brc fabric and pouring concrete for drill pad area.	m ³	35.0		
c.3	Supply and place No.66 Brc fabric over compacted base to reinforce concrete slab in accordance with Sheet No.2.	m ²	330.0		
c.4	In accordance with Sheet No.2 supply, place and poker vibrate 250mm thick in-situ concrete for drill loading and oil runoff surface area. Concrete strength shall comply to 24 N/mm2 @ 28-days. Include for the necessary formwork and shoring required to give a level concrete platform. Concrete shall be broomed finish.	m ³	85.0		
	Drill Pad Drainage and Oil Trapment Box				
	Sand and Oil Trapment Box				
c.5	In accordance with Sheet No.5 details, supply the necessary materials and construct the 200mm thick reinforced hollow concrete block for the sand and oil trapment box. It is reinforced with T12mm rebar placed into every other core and concrete filled. The base shall be 150mm thick reinforced with T12mm bar placed at 200mm bothways.	item			
c.6	In accordance with Sheet No.2, supply and place 150mm diameter size pressurised PVC pipes to channel oil spills and surface runoff from the drill pad and cellar box into the sand and oil trapment box.	m	42.0		
	Drainage				
c.7	In accordance with Sheet No.2 and No.4 (drainage around concrete platform detail), supply and place 150mm diameter perforated pressurised pvc pipes lined with pond liner or a similar impermeable geotextile fabric around the slab perimeter to collect and channel surface runoffs into the sand and oil trapment box.	m	105.0		
c.8	In accordance with Sheet No.2, construct water catchment sump; include for excavation works, supplying 300mm diameter size boulders and place to form soak away sump. Provision must also be made to connect oil trap box to sump as detailed on drawing shown on Sheet No.5.	item			
D	Water Holding Tank				
	Excavation				
d.1	In accordance with Sheet No.02, excavate the proposed water holding tank area. Area shall be marked out through PWD for contractor to excavate. Contractors shall be further responsible for supplying the necessary equipment to complete this activity. Provision must be made for trucking away excavated material from the construction site to spread over Crown owned land within 300 metres proximity from the construction site. Proposed location is shown on site layout.	m ³	1092.0		
	Reinforced slab, Foundation and Ground Beam				
d.2	In accordance with Sheet No.02 and No.03, construct the concrete slab of water holding tank. Concrete slab of water holding tank shall be 150 mm thick in-situ concrete reinforced with No.66 brc fabric and reinforced at corners with T12mm bar as shown on Sheet No.03. Concrete for under-ground beam shall be included into this activity and shall be poured in-situ. Concrete strength is specified at 20 N/mm2 @ 28-days.	m ³	72.0		
d.3	Supply and place No.66 brc fabric to reinforce concrete base of water holding tank as shown on Sheet No.03 and No.04. Include for 305mm lapping length.	m ²	420.0		
d.4	In accordance with Sheet No.03, supply, fabricate and place foundation base reinforcement: 4T12mm longitudinal bars equally spaced and transverse bars spaced @ 200mm centres within bottom zone of foundation base. Include for the necessary formwork and shoring to complete this activity.	kg	900.0		
	Sub-total carried forward to page 2				

	<i>Sub-total brought forward from page 1</i>			
d.5	In accordance with Sheet No.04, supply and place hydrophilic waterstop strip along perimeter of 2"x4" keyed joint. Include for forming the 2"x4" joint at the interface of foundation base and wall	m	100.0	
d.6	Supply, fabricate and place T12mm @ 300mm bothways to top of foundation base and corners of concrete slab joining No.66 brc fabric. Details are shown on Sheet No.03 and No.04.	kg	2150.0	
d.7	In accordance with Sheet No.2 and No.3, supply, T16mm bar fabricate and place for underground beam. Include for the necessary formwork and shoring for pouring concrete to complete this task	Kg	400.0	
d.8	In accordance with Sheet No.2 and No.3, supply T10mm bar, fabricate tensile links and place for underground beam.	kg	115.0	
d.9	Supply gravel material to ASTM D1241 standard, place in 102mm layer and compact for base of holding tank.	m ²	525.0	
	Reinforced Concrete Wall			
d.10	In compliance with drawing details on Sheet No.3&4, supply T12mm bar, fabricate and place prior to placement of in-situ concrete. T12mm bars are placed at 200mm centres bothways.	kg	2180.0	
d.11	In compliance with drawing details on Sheet No.3&4 supply and place in-situ concrete to comply with 20 N/mm2 @ 28-days to walls of holding tank. Include for formwork and shoring necessary to complete this task. Concrete shall be poked vibrated to achieve compaction and prevent honeycombing.	m ³	52.0	
d.12	In accordance with drawing details on Sheet No.02 holding tank layout, supply and apply an appropriate concrete pool paint to the interior face of reinforced wall	m ²	242.0	
	Reinforced Concrete Stiffeners			
d.13	Supply, fabricate and place T12mm (1/2") for structural concrete stiffeners as shown on Sheet No.04. Include for column starters from foundation. Placement of in-situ concrete should be monolithic with the in-situ concrete for wall.	kg	135.0	
d.14	Supply, fabricate and place T10 (3/8") tensile links to column stiffeners.	kg	220.0	
	Safety fence			
d.15	In accordance with drawing details on Sheet No.3, supply and place 1.0 metres high fencing wire of 9 gauge pvc coating specification, around the perimeter of water holding tank; 50mm size dia. heavy duty galvanise poles shall be used at 3.05 metres spacing interval. Additionally anti-corrosive paint shall be applied to metal poles.	m	90.0	
	E Transporting and Placing Drill Pipes			
	Holes for Drill Pipes			
e.1	Provide the necessary equipment for lifting and transporting the mainhole pipe (762mm diameter by 6.0m) and the mousehole pipe (473mm diameter by 6.0m) to the drill site location. The distance between the two location is 1.4km.	item		
e.2	In accordance with Sheet No.2; supply 20 N/mm2 in-situ concrete, place and poked vibrate around main hole and mouse hole pipes as detailed. Include for setting out works, supplying formwork and fabricating the profile for placing concrete around the casement pipes	m ³	15.0	
e.3	In accordance with Sheet No.2&5, supply 19mm gravel, place in 610 mm layers and compact around drill pipes.	m ³	60.0	
e.4	In accordance with cellar view details as shown on Drawing Sheet No.2, provide certified welder to connect the mainhole pipe (762mm diameter by 6.0 meters) to the mousehole pipe (473mm diameter by 6.0 meters). Include for using 50mm angle iron to connect the two pipes in accordance with the specifications as detailed on Sheet No.2 Cellar details. Also make all the necessary provision to install the welded pipes (mainhole and mousehole) into its final position as specified on Sheet No.2.	item		
	Nb: The client will provide the pipes for the mainhole and mousehole.			
	F Reinforced Concrete Cellar Box			
f.1	In accordance with drawing details on Sheet No.2, construct the cellar box with sump for drainage pipe. Cellar shall be constructed using T12mm (1/2") rebar placed at 200mm (8") bothways in the walls and base of cellar. Include for in-situ concrete with 20 N/mm2 strength @ 28-days to wall and base of cellar box.	item		
f.2	Drainage pipe from cellar shall be 150mm dia pressurised PVC. The drainage pipe from cellar box shall be placed at 1% gradient over the full distance to discharge the runoffs into the sump pit. Details for sump pit are shown on Sheet No.5	m	35.0	
	G Laboratory Testing			
g.1	Administration of quality controls as it relates to works undertaken inclusive of concrete, soil and aggregate compaction testings etc.	P.Sum		\$ 12,080.00
	Nb: Testing certificate must be presented for approval of concrete, soil and base material compaction for preparation of payment certificate Contractor shall be responsible for providing its own electricity, transportation and water for use at the construction site.			
Total value to form of tender				

GENERAL NOTES



The hole for the drilling pipes ("mousehole") shall be dug to rock surface but not deeper than 6.0m. If the holes do not reach the required depth, 4m³ of S-160 concrete shall be placed round the lower end; the deviation in placing these holes shall be less than ±20 mm and deviation less than ±2 mm/m.

Specification for Foundation Fills:
Non organic, strong filling materials shall be used, such as natural river gravel or processed blasted rock. The fill material shall not break down to any appreciable amount during compaction and the following grain size criteria apply to the material after compaction.

All fill materials shall be compacted in layers not exceeding 50cm in thickness by a 5t vibration roller or similar equipment. The drilling site shall be horizontal unless otherwise is shown. Deviation in the surface of the drilling site shall not exceed the following criteria.

Surface	Deviation from a 3m long straight- edge	Deviation from the average elevation of the site	Change in elevation over 10m.
Drilling rig Foundation:	±5mm	±10mm	±5mm
The site in general:	±30mm	±50mm	±20mm

Soil bearing requirements
Inside drill foundation area (15x22m) see on load drawing "Footprint and reactions loads."
Outside drill foundation area (15x22m) are loads from machines, containers etc. Minimum requirements for this area is a 1.0m deep filling with angle of shearing resistance $\phi = 40^\circ$.
Requirements to surface and compacting see notes above.

No.	Revision / Issue	By	Chk	Date

Public Works Department
P.O. Box 344
Monserrat
West Indies
Tel: 664- 491-2521/2
Fax: 664- 491- 3475
Email: gov.eng@candw.mts

PROJECT: GEOTHERMAL PROJECT

TITLE: SITE/SLAB

DESIGN: PWD JOB #: 0

DRAWN: OREENU

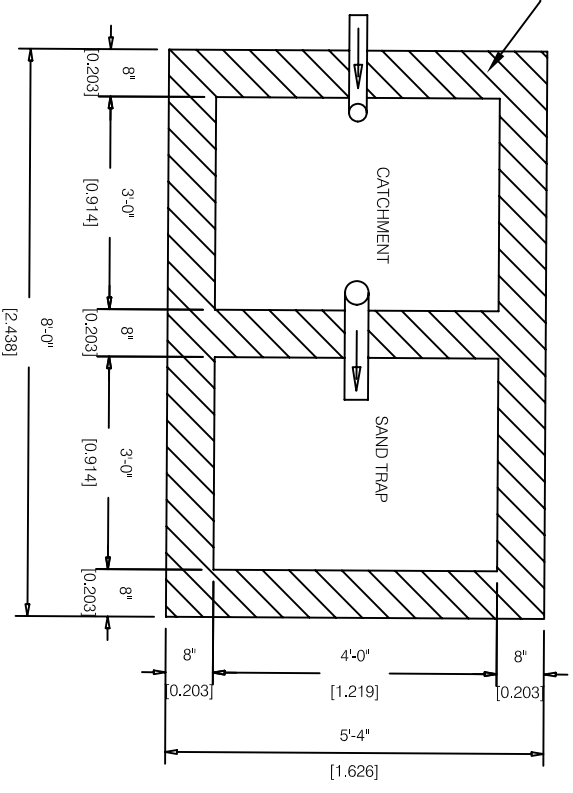
CHECKED: P.W.D.

FILE PATH: 0

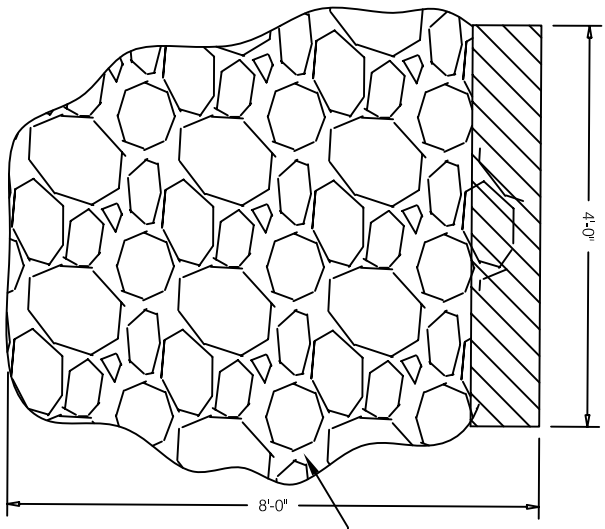
DATE: 04/02/16 SHEET NO.: 02

SCALE: NTS

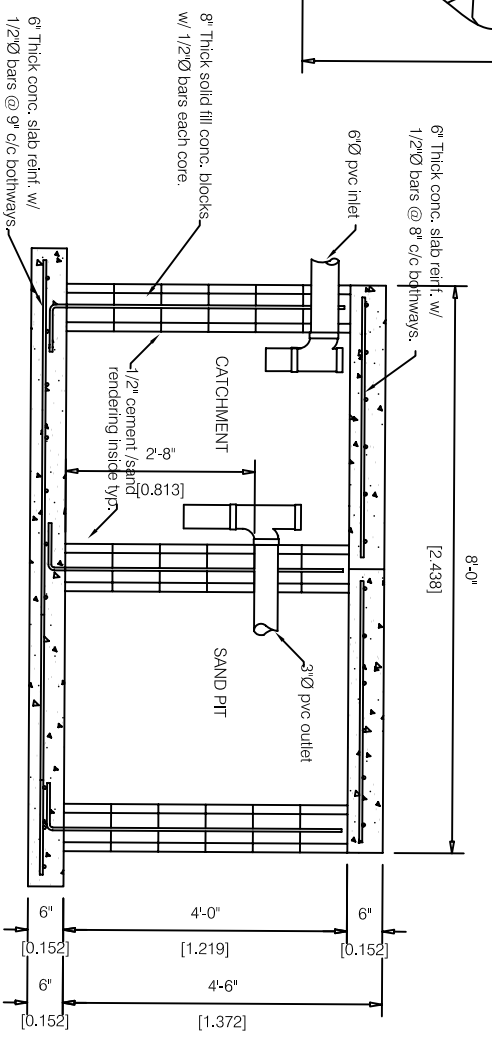
GENERAL NOTES



Oil Trap Box Plan
Scale nts



Sump
Scale nts



Longitudinal Section
Scale nts

No.	Revision / Issue	By	Chk	Date

PWD
Public Works Department
P.O. Box 344
Montserrat
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Email: gov.eng@candw.ms

PROJECT: GEOTHERMAL PROJECT

TITLE: OIL TRAP BOX

DESIGN: ORENU JOB #: 0

DRAWN: ORENU

CHECKED: P.W.D.

FILE PATH: 0	SHEET NO.: 05
DATE: 04/12/15	
SCALE: AS SHOWN	