at Scientia campus, CSIR

ITEM	PAYMENT	DESCRIPTION		071		ntia campus, CSIR
NO	SANS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.00	1200A	PRELIMINARY AND GENERAL (limited to 10%)				R
1.00	1200A	FREEIMINARY AND GENERAL (IIIIIIed to 1076)				
1.1	8.30	FIXED - CHARGE ITEMS				
1.1.1	8.3.1	Contractual Requirements	Sum	1		
	DOA 4.5	Contractor's initial obligations in respect of the Occupational Health and	Sum			
1.1.2	PSA 4.5	Safety Act and Construction Regulations Submission of the Health and Safety File	Sum	1		
		Establish Facilities on the Site :		'		
		a) Facilities for Engineer (SABS 1200 AB)	Sum	1		
		[,		Į.		
	PSA 8.3.2	b) Facilities for Contractor	Sum	1		
1.1.6	8.3.4	Remove Contractor's Site establishment on completion of construction	Sum	1		
1.2	PSA 8.2.2	TIME-RELATED ITEMS				
1.2.1	8.4.1	Contractual Requirements	Sum	1		
	PSA 8.2.2	Operation and maintenance of facilities on the Site for duration of construction, except where otherwise stated:				
	PSA 8.2.2	a) Facilities for Engineer for duration of construction (SANS 1200 AB)				
1.2.2		(vi) Survey assistants and materials	Sum	1		
1.2.4	PSA 8.13	Compliance with environmental requirements	Sum	1		
	PSA 8.2.2	b) Facilities for Contractor for duration of construction, except where otherwise stated				
1.2.6		(i) Office and storage sheds	Months	3		
1.2.7 1.2.8	PSA 8.8	(iv) Portable latrines- maintenance	Months	3		
1.2.8		(v) Tools and equipment	Months	3		
	PSA 8.4.3	Supervision for duration of construction	Months	3		
	8.4.4	Company and Head Office overhead cost	Months	3		
1.2.13	8.4.5	Provision of Security Personnel	Month	3		
1.3	8.5	SUMS STATED PROVISIONALLY BY ENGINEER				
1.3.1	PSG 8.20	a) Acceptance testing of material and workmanship called for by the	Prov.	1		
1.3.2		Engineer at a nominated laboratory b) Overheads, charges and profit on item 1.3.1	Sum %	0		
1		Existing Services				
1.3.3		Relocation of existing Services	Sum	1		
TOTAL	CARRIED 1	[FO SUMMARY				-

Contract Name: Construction of Platform for Water Demonstration Hub

at Scientia campus, CSIR

	I B	I	ı	ı	at S	cientia campus, CSIR
Item Ref	Payment Refers SANS	Description	Unit	Quantity	Rate	Amount
		SECTION C:				
C1.0	1200 C	SITE CLEARANCE				
C1.1	8.2.1	Clear and grub	ha	0.035		
	8.2.2	Remove and grub large trees and tree stumps of girth				
C1.2 C1.3		1 m 2 m 2 m 3 m	No. No.	1.0 0.0		
C1.4						
	8.2.4	Reclear surfaces (provisional) (where ordered by Engineer)	l ha	0.05		
C1.5	8.2.5	Take down existing fence	Km	0.1		
C1.6	8.2.8	Demolish and remove structure, buildings and dismantle steelwork etc.	Sum	1.0		
C1.7	8.2.9	Cart materials and debris and dump to the nearest landfill (Provisional)	t.km	10		
C1.8	8.2.10	Remove Topsoil to Nominal Depth 150 mm (or other Stated Depth), Stockpile,and Maintain	m ²	42		
C2.0	1200 D 8.3.2	EARTHWORKS Bulk excavations				
C2.1		a) i) Excavate in all materials, compact formation and use material for embankment or backfill or dispose, as ordered :	m³	125		
		b) Extra over items 8.3.2a) above for:		40		
C2.2 C2.3		i) Intermediate materials ii) Hard rock materials	m³ m³	12 3		
C2.6	8.3.8.2	Dealing with services that are at risk because of the construction of earthworks (Provisional)	P/Sum	1		
	1200 DM 8.3.3	EARTHWORKS (roads, subgrade) Treatment of road bed				
C2.7		a) Treatment of road-bed. Road- bed Preparation (to a depth 150 mm) and compaction of material Minimum of 90% of Mod AASHTO maximum density	m³	50.00		
C2.8	8.3.5	ii) 150mm G7 or better natural material compacted to 93% Mod AASHTO for laying inside the pond	m³	50		
	1200 ME	Subbase from commercial sources				
C2.9	8.3.3	i) 150mm G5 natural material compacted to 95% Mod AASHTO for laying inside the pond	m³	50		
	1200 MF	Base from commercial sources				
C2 40	8.3.3	a) Construct subbase layer, 150 mm thick, C4 materail	3	50		
C2.10		compacted to 100% Mod AASHTO Max Dry Density	m³	50		
C2.11	8.3.5 8.3.8	Process subbase material by stabilization	m³	50.00		
C2.12	0.3.0	Stabilizing agent b) Portland cemet at 3%	t	3.30		
CARRIE	D FORWARD			1		R -

BROUGI	HT FORWAR	D			R	-
C3.0	4000.0	CONCRETE (STRUCTURAL)				
C3.0	1200 G	CONCRETE (STRUCTURAL) Formwork				
	8.2 8.2.2	Smooth vertical formwork Walls				
C3.1	8.2.2		2	40.0		
		Slab	m²	18.0		
C3.2		Sump	m²	12.0		
C3.3		Apron	m²	0.0		
C3.4		Ramp	m²	18.0		
C3.5		Retaining Wall	m²	40.0		
	8.3	Reinforcement				
C3.6		High tensile Steel with diameters rangining from 8mm up to				
	8.3.1	32 mm	t	4.20		
C3.7		a) High-tensile welded mesh reiforcemnt REF 617 in Concrete Pond lining and access ramp	m²	544.0		
	PSG 8.4	CONCRETE				
	8.4.1	a) Strength Concrete Grade 35 MPa/19mm to:				
C3.8	0	Slab	m³	74.0		
C3.9		Sump	m³	2.5		
C3.10		Apron		0.0		
C3.10		Ramp	m³ m³	16.0		
C3.11				3.0		
03.12		Retaining Wall	m³	3.0		
	8.4.4	Unformed Surface Finishes				
		a) Wood-floated finish to:				
C3.13		Slab	m²	260.0		
C3.14		Sump	m²	2.0		
C3.15		Apron	m²	0.0		
C3.16		Ramp	m²	55.0		
C3.17		Retaining Wall	m²	10.0		
	8.5	Joints				
C3.18		Formed construction Joint sealed with SIKAFLEX PRO-3 WF polyurethane sealant or similarly approved with 8mm dia polycord backing strip as per detail	m	128.0		
C3.19	PSG 8.9.1	Supply and Install 0,25 mm thick HDPE lining for all the	m ²	275		
		ponds.				
CARRIEI	D FORWARD				R	_

1200 DB Excavation Excavate in all materials for trenches, backfill and compact to 93% Mod AASHTO Density, including disposal of surplus and unsultable material as directed for:	BROUG	HT FORWAR	RD			 R	
120							
8.3.2.a Excavate in all materials for trenches, backfull and compact to 93% Mod AASHTO Density, including disposal of surplus and unsultable material as directed for:	C4.0						
10 93% Mod AASHTO Density, including depths:		1					
Additional content of the following depths:		8.3.2.a					
Pipes up to 200mm dia for the following depths: Exceeding							
Exceeding but Not Exceeding Not 10 m m² 15.00			and unsuitable material as directed for .				
Exceeding but Not Exceeding Not 10 m m² 15.00			Pines up to 200mm dia for the following depths:				
10			1				
2.2 2.0 1.0 m	C4.1			m³	15 00		
23.2 b	C4.2		1 '				
2.20		8.3.2.b	,	'''	0.00		
3.3.2 c Excavate and dispose of unsuitable material from trench bottom (Provisional) 3.0 3.0 5.0 1.00 3.00 3.3.1 5.0 3.3.1 5.0 3.3.1 5.0 3.3.1 5.0 3.3.1 5.0 3.3.1 5.0 3.3.1 5.0 3.3.1 5.0 3.3.1 5.0 3.3.1 5.0 3.3.1 5.0 3.3.1 5.0	C4.3		.01) Intermediate excavation	m³	5.00		
bottom (Provisional)	C4.4		.02) Hard rock excavation	m³	2.00		
8.3.3 Sexawation soncilaries Sexawation son site Mode Deficiency in backfill material (Provisional) Deficiency in backfill material Deficiency in Deficiency	C4.5	8.3.2 c	Excavate and dispose of unsuitable material from trench	ma 3	1.00		
3.3.1 Make up deficiency in backfill material (Provisional) 0.1) From other necessary excavations on site m³ 10.00 m² 2.00			bottom (Provisional)	""-	1.00		
0.11 From other necessary excavations on site m² 10.00		1	Excavation ancillaries				
0.20 by importation from commercial m² 0.00		8.3.3.1					
24.9 3.3	C4.6						
1 1 200 LB 8.3.5 Existing serives that intersect or adjoin a pipe trench 200 LB 8.2.3 Surphy only of bedding by Importation from Commercial Source 0.1) Selected granular material 0.2) Selected fill material 0.2) Selected fil			, , .				
24.10		8.3.4					
1200 LB 8.22.3 Supply only of bedding by Importation from Commercial Source .01) Selected granular material .02) Selected fill material .03		0.05	1 7 7				
8.2.2.3 Supply only of bedding by Importation from Commercial Source	C4.10	8.3.5	Existing serives that intersect or adjoin a pipe trench	m	5.00		
8.2.2.3 Supply only of bedding by Importation from Commercial Source		4000 : -	Dodding.				
Source		I					
10 10 10 10 10 10 10 10		8.2.2.3					
25.0	C4 11			m³	20.00		
SEWER RETICULATON SEWERS 8.2.1 Supply, handle, lay and bed pipes on flexible pipe bedding complete with testing of Class 34 Solid wall uPVC pipeline0.1) 110mm diameter pipe .0.2) 160mm diameter pipe .0.2) 160mm diameter pipe .0.2) 160mm diameter pipe .0.3) 170 mm diameter pipe .0.4 8.2.2 Pipe specials Extra-over Items 8.2.2.3 above for supplying, laying and bedding of specials complete with couplings for: PVC-u bends Class 16 45° .110 mm dia .00 .101 mm dia .00 .100 8.2.3 MANHOLES Supply, construct manholes 1250mm diameter complete with HDPE step irons and medium duty concrete cover and frames for following depths as per the engineer's design Exceeding but Not Exceeding .01) Up to 1.5 m .02) 1.50 to 2.5 m .00 Breaking up existing sewer and Connection to existing sewer			_				
1200LD 8.2.1 Supply, handle, lay and bed pipes on flexible pipe bedding complete with testing of Class 34 Solid wall uPVC pipeline. .01) 110mm diameter pipe 8.2.2 Pipe specials Extra-over Items 8.2.2.3 above for supplying, laying and bedding of specials complete with couplings for: PVC-u bends Class 16 45° 110 mm dia 90° 110 mm dia PVC-u 45° V- Junctions (Class 16) 160 mm dia 8.2.3 MANHOLES Supply, construct manholes 1250mm diameter complete with HDPE step irons and medium duty concrete cover and frames for following depths as per the engineer's design Exceeding but Not Exceeding .01) Up to 1.5 m No. 3 .02) 1.50 to 2.5 m No. 1 Breaking up existing sewer and Connection to existing sewer	04.12		.02) Gelected IIII Material	'''	00.00		
1200LD 8.2.1 Supply, handle, lay and bed pipes on flexible pipe bedding complete with testing of Class 34 Solid wall uPVC pipeline. .01) 110mm diameter pipe 8.2.2 Pipe specials Extra-over Items 8.2.2.3 above for supplying, laying and bedding of specials complete with couplings for: PVC-u bends Class 16 45° 110 mm dia 90° 110 mm dia PVC-u 45° V- Junctions (Class 16) 160 mm dia 8.2.3 MANHOLES Supply, construct manholes 1250mm diameter complete with HDPE step irons and medium duty concrete cover and frames for following depths as per the engineer's design Exceeding but Not Exceeding .01) Up to 1.5 m No. 3 .02) 1.50 to 2.5 m No. 1 Breaking up existing sewer and Connection to existing sewer	C5 0		SEWER RETICULATION				
8.2.1 Supply, handle, lay and bed pipes on flexible pipe bedding complete with testing of Class 34 Solid wall uPVC pipeline. 9.11 1/10 mm diameter pipe 8.2.2 Pipe specials Extra-over Items 8.2.2.3 above for supplying, laying and bedding of specials complete with couplings for: PVC-u bends Class 16 45° 110 mm dia 90° 110 mm dia PVC-u 45° Y- Junctions (Class 16) 160 mm dia PVC-u 45° Y- Junctions (Class 16) 160 mm dia 8.2.3 MANHOLES Supply, construct manholes 1250mm diameter complete with HDPE step irons and medium duty concrete cover and frames for following depths as per the engineer's design Exceeding but Not Exceeding 0.1) Up to 1.5 m 0.2) 1.50 to 2.5 m Breaking up existing sewer and Connection to existing Sum 1 Sum 1	00.0	1200LD					
complete with testing of Class 34 Solid wall uPVC pipeline. .01) 110mm diameter pipe .02) 160mm diameter pipe .03) 160mm diameter pipe .04		1					
8.2.2 Pipe specials Extra-over Items 8.2.2.3 above for supplying, laying and bedding of specials complete with couplings for: PVC-u bends Class 16 45° 110 mm dia 90° 110 mm dia PVC-u 45° Y- Junctions (Class 16) 160 mm dia No 1.00 8.2.3 MANHOLES Supply, construct manholes 1250mm diameter complete with HDPE step irons and medium duty concrete cover and frames for following depths as per the engineer's design Exceeding but Not Exceeding 01) Up to 1.5 m 02) 1.50 to 2.5 m Seewer No 3 No. 1 Breaking up existing sewer and Connection to existing sewer							
8.2.2 Pipe specials Extra-over Items 8.2.2.3 above for supplying, laying and bedding of specials complete with couplings for: PVC-u bends Class 16 45° 110 mm dia 90° 110 mm dia PVC-u 45° Y- Junctions (Class 16) 160 mm dia No 1.00 8.2.3 MANHOLES Supply, construct manholes 1250mm diameter complete with HDPE step irons and medium duty concrete cover and frames for following depths as per the engineer's design Exceeding but Not Exceeding .01) Up to 1.5 m No. 1 .02) 1.50 to 2.5 m No. 1 Breaking up existing sewer and Connection to existing sewer	C5.1		.01) 110mm diameter pipe	m	65.00		
Extra-over Items 8.2.2.3 above for supplying, laying and bedding of specials complete with couplings for: PVC-u bends Class 16 45° 110 mm dia 90° 25.4 110 mm dia PVC-u 45° Y- Junctions (Class 16) 160 mm dia 8.2.3 MANHOLES Supply, construct manholes 1250mm diameter complete with HDPE step irons and medium duty concrete cover and frames for following depths as per the engineer's design Exceeding but Not Exceeding .01) Up to 1.5 m No. 3 .02) 1.50 to 2.5 m No. 1 Breaking up existing sewer and Connection to existing sewer	C5.2			m			
Extra-over Items 8.2.2.3 above for supplying, laying and bedding of specials complete with couplings for: PVC-u bends Class 16 45° 110 mm dia 90° 25.4 110 mm dia PVC-u 45° Y- Junctions (Class 16) 160 mm dia 8.2.3 MANHOLES Supply, construct manholes 1250mm diameter complete with HDPE step irons and medium duty concrete cover and frames for following depths as per the engineer's design Exceeding but Not Exceeding .01) Up to 1.5 m No. 3 .02) 1.50 to 2.5 m No. 1 Breaking up existing sewer and Connection to existing sewer							
bedding of specials complete with couplings for: PVC-u bends Class 16 45° 110 mm dia 90° 15.4 110 mm dia PVC-u 45° Y- Junctions (Class 16) 160 mm dia 8.2.3 MANHOLES Supply, construct manholes 1250mm diameter complete with HDPE step irons and medium duty concrete cover and frames for following depths as per the engineer's design Exceeding but Not Exceeding .01) Up to 1.5 m .02) 1.50 to 2.5 m No. 1 Breaking up existing sewer and Connection to existing sewer		8.2.2	Pipe specials				
PVC-u bends Class 16 45° 110 mm dia 90° C5.4 110 mm dia PVC-u 45° Y- Junctions (Class 16) 160 mm dia 8.2.3 MANHOLES Supply, construct manholes 1250mm diameter complete with HDPE step irons and medium duty concrete cover and frames for following depths as per the engineer's design Exceeding but Not Exceeding .01) Up to 1.5 m .02) 1.50 to 2.5 m No. 1 Seewer No. 3 No. 1 Sum 1							
25.3							
110 mm dia 90° 110 mm dia No 3,00 25.4 110 mm dia PVC-u 45° Y- Junctions (Class 16) 160 mm dia No 1.00 1.00							
90° 110 mm dia PVC-u 45° Y- Junctions (Class 16) 160 mm dia 8.2.3 MANHOLES Supply, construct manholes 1250mm diameter complete with HDPE step irons and medium duty concrete cover and frames for following depths as per the engineer's design Exceeding but Not Exceeding .01) Up to 1.5 m No. 3 .02) 1.50 to 2.5 m No. 1 Breaking up existing sewer and Connection to existing sewer			45°				
110 mm dia PVC-u 45° Y- Junctions (Class 16) 160 mm dia 8.2.3 MANHOLES Supply, construct manholes 1250mm diameter complete with HDPE step irons and medium duty concrete cover and frames for following depths as per the engineer's design Exceeding but Not Exceeding .01) Up to 1.5 m .02) 1.50 to 2.5 m No. 3 C5.7 Breaking up existing sewer and Connection to existing sewer Sum 1	C5.3			No	3.00		
PVC-u 45° Y- Junctions (Class 16) 160 mm dia 8.2.3 MANHOLES Supply, construct manholes 1250mm diameter complete with HDPE step irons and medium duty concrete cover and frames for following depths as per the engineer's design Exceeding but Not Exceeding .01) Up to 1.5 m .02) 1.50 to 2.5 m No. 1 Breaking up existing sewer and Connection to existing sewer			90°				
8.2.3 MANHOLES Supply, construct manholes 1250mm diameter complete with HDPE step irons and medium duty concrete cover and frames for following depths as per the engineer's design Exceeding but Not Exceeding .01) Up to 1.5 m No. 3 .02) 1.50 to 2.5 m No. 1 Dreaking up existing sewer and Connection to existing sewer	C5.4			No	4.00		
8.2.3 MANHOLES Supply, construct manholes 1250mm diameter complete with HDPE step irons and medium duty concrete cover and frames for following depths as per the engineer's design Exceeding but Not Exceeding .01) Up to 1.5 m No. 3 .02) 1.50 to 2.5 m No. 1 Breaking up existing sewer and Connection to existing sewer Sum 1							
Supply, construct manholes 1250mm diameter complete with HDPE step irons and medium duty concrete cover and frames for following depths as per the engineer's design Exceeding but Not Exceeding .01) Up to 1.5 m No. 3 .02) 1.50 to 2.5 m No. 1 Seewer Breaking up existing sewer and Connection to existing sewer	C5.5		160 mm dia	No	1.00		
Supply, construct manholes 1250mm diameter complete with HDPE step irons and medium duty concrete cover and frames for following depths as per the engineer's design Exceeding but Not Exceeding .01) Up to 1.5 m No. 3 .02) 1.50 to 2.5 m No. 1 Seewer Breaking up existing sewer and Connection to existing sewer							
with HDPE step irons and medium duty concrete cover and frames for following depths as per the engineer's design Exceeding but Not Exceeding .01) Up to 1.5 m No. 3 .02) 1.50 to 2.5 m No. 1 Dreaking up existing sewer and Connection to existing sewer Sum 1		8.2.3					
Exceeding but Not Exceeding Output to 1.5 m Output to 2.5 m Output to 2			1 11 21				
Exceeding but Not Exceeding Output to 1.5 m No. 3 No. 1 Description of the service o							
0.01 Up to 1.5 m No. 3 No. 1			mariles for following deputs as per the engineer's design				
0.01 Up to 1.5 m No. 3 No. 1			Evenading but Net Evenading				
C5.6 .02) 1.50 to 2.5 m No. 1 Breaking up existing sewer and Connection to existing sewer 1 Sum 1	C5 5		1	No	2		
Breaking up existing sewer and Connection to existing sewer Sum 1			1 ' '				
sewer Sum 1	00.0		.02) 1.00 10 2.0111	INU.	1		
sewer Sum 1	C5.7		Breaking up existing sewer and Connection to existing				
	50.1			Sum	1		
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	CARRIE	D FORWAR	D			 R	-

BROUGHT FORWARD						R	
C5.8	1200 L 8.2.1	MEDIUM- PRESSURE PIPELINES Supply handle, lay and bed pipes on flexible pipe bedding complete with coupling, testing and disinfecting .01) 110mm uPVC Class 12	m	50.00			
	8.2.2	Pipe specials Extra-over Items for supplying, laying and bedding of specials complete with couplings for: PVC-u bends Class 16		30.00			
C5.9		110 mm dia	No	2.00			
C5.10		110 mm dia	No	4.00			
C5.11	8.2.3	Valves Extra-over Items C5.9 for supplying, laying and bedding of valves: 110ND handwheel cast iron (non-rising stem) resilient seal gate valve flanged on both ends.	No	1			
		Grating 38x38mm square mesh pattern, 38mm Deep open grid anti- slip grey coloured fibre glass grating, complete with angle iron frame and the fixing components					
C5.12 C5.13		a) Cable trench b) Grid inlets frame	m² m²	5 0.75			
TOTAL CARRIED TO SUMMARY							-

Contract No:

Contract Name: Construction of Platform for Water Demonstration Hub at Scientia campus, CSIR

SUMMARY

SECTION	DESCRIPTION		AMOUNT
SECTION 1	PRELIMINARY AND GENERAL	R	-
SECTION 2	CIVIL WORKS	R	-
NETT TOTAL OF TE	NDER	R	-
ALLOWANCE FOR \	/AT 15.0%	R	-
TOTAL TENDER SU	M	R	-