



3001116.1 / 30012599.002

29 March 2019

Savills Australia Stephanie Ballango Level 25, Governor Phillip Tower 1 Farrer Place, Sydney NSW 2000

Dear Stephanie,

RE: Review of Water and Wastewater Servicing Strategies for the North Tuncurry Development Project

SMEC Australia Pty Ltd (SMEC) was commissioned by UrbanGrowth NSW, now Landcom, to develop the Water and Wastewater Servicing Strategies for a proposed new development at North Tuncurry known as the North Tuncurry Development Project (NTDP). Reports documenting the results of these investigations, which were finalised in 2014, are appended to this letter. Since 2014 several changes have occurred, including:

- The development Master Plan has been updated (copy attached);
- UrbanGrowth NSW, is now known as Landcom; and
- MidCoast Water (MCW), is now MidCoast Water Services (MCWS) part of MidCoast Council.

The purpose of this letter is to outline the status of the 2014 Water and Wastewater Servicing Strategies and to confirm their overall suitability to support development approval for the proposed development.

Water Servicing Strategy

A review of the key design considerations for the Water Servicing Strategy is summarised in the table below.

ITEM	CURRENT STATUS OF REPORT	CONCLUSION
Development Density	The expected Equivalent Tenement (ET) load for the development is marginally higher than documented in the 2014 report due to the change in the masterplan.	The increase is marginal and does not affect the overall servicing strategy or serviceability of the proposed development.
Water Demands	The demands applied in the 2014 report were in accordance with the MCW Design Manual, which was applicable at the time. Written advice from MCWS has confirmed that these guidelines are still current (see attached letter from MCWS).	No change to the serviceability.







ITEM	CURRENT STATUS OF REPORT	CONCLUSION
Water Servicing - Trunk	It is proposed that the NTDP will be serviced as part of the Manning Water supply system, connecting to a DN600 DICL water main located on Lakes Way.	Given the marginal change in development density this connection is still considered suitable.
Water Servicing - Internal	The preliminary layout and sizing of the internal water mains are based on the previous masterplan.	Updates to the masterplan will affect the internal layout. However, this will not affect the serviceability of the development.

Wastewater Servicing Strategy

A review of the key design considerations for the Wasterwater Servicing Strategy is summarised in the table below.

ITEM	CURRENT STATUS OF REPORT	CONCLUSION
Development Density	The expected ET load for the development is marginally higher than documented in the 2014 report due to the change in the masterplan.	The increase is marginal and does not affect the overall servicing strategy or serviceability of the proposed development.
Sewer Loadings	The loadings applied in the 2014 report were in accordance with the MCW Design Manual, which was applicable at the time. Written advice from MCWS has confirmed that these guidelines are still current (see attached letter from MCWS).	No change to the serviceability.
Wastewater Servicing Strategy – Reticulation System	Two servicing options were considered for NTDP in the 2014 report; Gravity Sewerage System and Vacuum Sewerage System. This is still consistent with MCWS's expectation for the development, as outlined in the Hallidays Point Sewerage Scheme – Servicing Strategy (2016). A gravity reticulation sewerage system is preferable for the NTDP. The preliminary layout of the	The assessment of these systems is still valid, with minimal changes due to the marginal change in load. Updates to the masterplan will also have a minimal effect on the internal layout. Overall these changes will not affect the serviceability of the development.
	The preliminary layout of the internal systems are based on the previous masterplan.	

ITEM	CURRENT STATUS OF REPORT	CONCLUSION
Wastewater Servicing Strategy – Trunk Main	The NTDP is included in the catchment for the Hallidays Point Wastewater Treatment Plant (WWTP), with several options considered for transferring flows to the WWTP. These options are consistent with MCWS's expectation for the development, as outlined in the Hallidays Point Sewerage Scheme – Servicing Strategy (2016).	Given the marginal change in development loads this strategy is still considered suitable.
Servicing the Initial Stages of the Development	The initial stages of the development will be serviced via the Tuncurry No. 22 WWPS. This is consistent with the Hallidays Point Sewerage Scheme – Servicing Strategy (2016).	Changes to the masterplan may affect how many stages can be serviced via this WWPS. However, this will not affect the overall serviceability of the development.

Summary

In summary, while the 2014 Water and Wastewater Servicing Strategies will need to be updated as the development design is progressed, they are considered suitable for planning purposes and to support any necessary approvals.

Yours sincerely,



Team Leader – Water Resources

ATTACH

- Attachment 1: North Tuncurry Masterplan
- Water Servicing Study, 30011196 Water Servicing Strategy_rev D, dated 17 October 2014
- Wastewater Servicing Study, 30011196 Wastewater Servicing Study 2014-Rev 1_final, dated 30 October 2014.
- MidCoast Water Letter Water and Sewerage Development Standards, dated 18 February 2019

Attachment 1: North Tuncurry Masterplan





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File: 30011196 - Wastewater Servicing Study - 2014-Rev 1_final

Our ref: 30011196

Your ref:

30 October 2014

UrbanGrowth NSW PO Box 718 Forster NSW 2428

Attention: Michael Pring

Dear Michael,

RE: North Tuncurry Development Project - Wastewater Servicing Study

1 INTRODUCTION

UrbanGrowth NSW has commissioned SMEC Australia Pty Ltd (SMEC) to undertake wastewater servicing investigations for a new development in North Tuncurry.

The North Tuncurry Development Project (NTDP) involves the re-zoning and subdivision of a 615 ha project site north of Tuncurry on the mid north coast of New South Wales (the Site). Refer locality plan on **Figure 1**.

It is the intention of UrbanGrowth NSW to develop the site in stages for a mix of land uses, including residential dwellings, employment land, retail and open space.

This study has been prepared to define the wastewater servicing strategy for the new development and includes investigation of the following elements:

- Development description, refer Section 2.
- Study area (the natural catchment boundaries, topography, environmental conservation constraints etc.), refer **Section 3**.
- Planning context (references to Local Environmental Plan, development consent), refer Section 4.
- Identification of the options for the wastewater reticulation design, refer Section 5.
- Identification of the trunk main options, assessment of downstream capacity in MidCoast Water's sewerage system and details of any upgrades required. Refer **Section 6**.
- Options Assessment, refer Section 7.
- Identification of the options for servicing the initial stages of the development, refer Section 8.
- Conclusion, refer Section 9.







2 DEVELOPMENT DESCRIPTION

UrbanGrowth NSW are proposing to deliver a mixed use development on the site that meet's the State Government's objectives to increase housing supply, provide community benefits and create jobs¹.

The NTDP will be located within a 261.6ha development area that comprises the following key components¹:

- Approximately 2,123 residential dwellings.
- 13.2ha of employment lands.
- 9.6ha of parks and open space.
- A village centre.
- Reconfiguration of the existing North Tuncurry Golf Course (total area 59ha).
- Water management infrastructure, including 18.1ha of water management basins.

It is estimated that the site will be developed over thirty years. The stages of the residential development will proceed from the south to the north-west, then to the north and to the south-east. Stages E1 and E2 are employment land stages which will only be developed as demand emerges. The proposed Master Plan is shown on **Figure 2**.

3 STUDY AREA

The study area covers the 615 ha project site including the wastewater trunk main sites. The study area is relatively flat located within a rural landscape with a moderately dense coverage of small trees and coastal scrub

The project site is located north of Tuncurry on the mid north coast of New South Wales, refer Figure 1.

The site is bounded by:

- The Lakes Way road to the west;
- undeveloped bushland and a low density residential zone to the south;
- undeveloped bushland and Nature Reserve to the north; and
- Nine Mile Beach to the east.

The trunk main will transport wastewater from the site to the existing MidCoast Water wastewater system. Three options for the trunk main alignment have been investigated and are detailed in **Section** 6 and on **Figure** 7. The wastewater trunk main study area extends from the township of Tuncurry along The Lakes Way and the access road to the Hallidays Point Wastewater Treatment Plant (WWTP).

¹ JBA –urban development services, (2014), "North Tuncurry Development Project Assessment Report"



4 PLANNING CONTEXT

A majority of the proposed works are located within the Great Lakes Local Government Area (LGA). Only Option 1 that includes a rising main transporting wastewater from the NTDP to Hallidays Point WWTP would be located in both the Great Lakes LGA and the Greater Taree LGA.

The relevant environmental planning instruments are the Great Lakes Local Environmental Plan, 2014 and the Greater Taree LEP, 2010.

According to these plans, construction of public wastewater infrastructure does not require local government consent. However, consultation with the local government bodies is to be undertaken during the concept design stage.

5 WASTEWATER SERVICING STRATEGY - RETICULATION SYSTEM

5.1 Development Site

The finished surface level of the final development is at approximately RL 4 - 6m AHD.

Under developed conditions, typical groundwater levels are expected to range between 1.4 to 2.5m AHD, with the 100 year ARI groundwater level being approximately 4 to 5m AHD across the site. The site water management philosophy adopted for the project is to minimise the potential effects of groundwater levels (up to and including the 100 year ARI event) on the proposed development.

5.2 Servicing Options

There are two technology options currently being considered for the NTDP, being conventional gravity sewers and vacuum sewers.

It is noted that there are other technology options to provide wastewater service to the site, including onsite treatment and pressure sewers, but preliminary negotiations with MidCoast Water have indicated that these are not favoured at the North Tuncurry site due to a variety of technical, environmental, legislative and cost factors.

5.2.1 Gravity Sewerage System

A conventional gravity sewerage system consists of a reticulated pipe network, which transports sewage via gravity flow in the reticulation pipes. In a 'typical' subdivision, it provides the highest level of service with the minimum ongoing costs and is the most widely used technology in Australia.

Conventional sewerage reticulation pipework is a minimum 150mm diameter. The pipes are laid with a downhill grade that promote minimum self-cleaning flows for the transport of sewage solids. For maintenance purposes a conventional sewerage system has access manholes at approximately a 120 metres spacing and at changes of grade or direction.

A conventional gravity system may be coupled with a pumped transfer system to deliver sewage to another downstream sewerage system or to a centralised treatment works. The need for pumping depends mainly on site topography and the location of the sewage treatment works.



5.2.2 Vacuum Sewerage System

A vacuum sewerage system consists of a reticulated pipe network, which transports sewage from vacuum collection chambers to a vacuum pumping station. It provides a high level of service but with some ongoing maintenance requirements.

Wastewater from each property gravitates to a collection chamber. The collection chamber consists of a storage chamber for sewage and a special vacuum valve. When the level of sewage fills the chamber a sensor opens the vacuum valve and the sewage is admitted into the vacuum sewerage reticulation pipework.

Vacuum sewerage reticulation pipework is of a minimum 80mm diameter. The reticulation pipework is airtight to maintain a vacuum in the reticulation system. The pipes are laid with a downhill grade with vertical risers to minimise depth of the reticulation and provide a 'sawtooth' profile which assists with moving the sewage through the reticulation in short 'bursts' as vacuum valves open and close. This profile provides flexibility to avoid obstacles, without the need for deep excavations or lift pump stations.

The vacuum sewerage system does not have access manholes. The 'sawtooth' profile keeps sewer lines shallow and is designed to ensure that sewage will not block the pipe at low flow periods when the sewage is at rest.

5.3 Loadings

The wastewater servicing study is based on the NTDP Master Plan developed by UrbanGrowth NSW as shown on **Figure 2**.

Table 5-1 provides a breakdown of the proposed ultimate sewer loading. There is a small component of employment land loading, but the loads are dominated by the residential component. A nominal allocation has been made for the employment lots.

Table 5-1 -Sewer Loading

	Sewer Loading (ET)
Residential Lots	2,123
Non-Residential Lots (comprising Employment Area E1 and Employment Area E2 North of Stage T)	90 (E1) + 90 (E2) = 180
TOTAL	2,303 ET

Different technologies have different potential for groundwater / storm water ingress to the system, resulting in different design flows. Design flows for the technologies considered are detailed in **Sections 5.3.1** and **5.3.2**.

5.3.1 Option A – Gravity Sewerage System

Conventional gravity sewerage system loadings for the NTDP have been estimated in accordance with the MidCoast Water Design Manual, as summarised below.



Average Dry Weather Flow ADWF = 0.005 L/s/ET

Peaking Factor $r = \sqrt{1.74 + \frac{56}{ET^{0.4}}}$

Peak Dry Weather Flow PDWF = r x ADWF

Storm Allowance SA = 0.029 L/s/ET (Sandy areas, including Tuncurry)

Peak Wet Weather Flow PWWF = PDWF + SA

Design flows calculated using the above parameters are summarised below in **Table 5-2**.

Table 5-2 – Conventional wastewater design flows (per MCW Design Manual) – Coastal Permanent Population

Stage	Lots	Units	Employment	Total	ADWF	r	PDWF	SA	PWWF
	ET	ET	ET	ET	L/s		L/s	L/s	L/s
Α	85			85	0.4	3.3	1.4	2.5	3.9
В	76			76	0.4	3.4	1.3	2.2	3.5
С	82			82	0.4	3.4	1.4	2.4	3.8
D	67	58		125	0.6	3.1	2.0	3.6	5.6
Е	76			76	0.4	3.4	1.3	2.2	3.5
F	91			91	0.5	3.3	1.5	2.6	4.1
G	75			75	0.4	3.4	1.3	2.2	3.5
Н	74			74	0.4	3.4	1.3	2.1	3.4
- 1	74			74	0.4	3.4	1.3	2.1	3.4
J	75			75	0.4	3.4	1.3	2.2	3.5
К	64			64	0.3	3.5	1.1	1.9	3.0
L	76			76	0.4	3.4	1.3	2.2	3.5
VC	55	98		153	0.8	3.0	2.3	4.4	6.8
М	73			73	0.4	3.4	1.3	2.1	3.4
N	82			82	0.4	3.4	1.4	2.4	3.8
0	63			63	0.3	3.5	1.1	1.8	2.9
Р	69			69	0.3	3.5	1.2	2.0	3.2
Q	42			42	0.2	3.8	0.8	1.2	2.0
R	70			70	0.4	3.5	1.2	2.0	3.2
S	76			76	0.4	3.4	1.3	2.2	3.5
Т	80			80	0.4	3.4	1.4	2.3	3.7
U	75			75	0.4	3.4	1.3	2.2	3.5
V	72			72	0.4	3.4	1.2	2.1	3.3
W	78			78	0.4	3.4	1.3	2.3	3.6



Stage	Lots	Units	Employment	Total	ADWF	r	PDWF	SA	PWWF
Х	65	44		109	0.5	3.2	1.8	3.2	4.9
Υ	66			66	0.3	3.5	1.2	1.9	3.1
Z	42			42	0.2	3.8	0.8	1.2	2.0
E1			90	90	0.5	3.3	1.5	2.6	4.1
E2			90	90	0.5	3.3	1.5	2.6	4.1
Sub-	1923	200	180						
Total	21	23	180						
Total	2303		2303	11.5		38.8	66.8	105.6	

5.3.2 Option B - Vacuum Sewerage System

Design flow rates for a vacuum sewerage system have been calculated using a similar methodology to the conventional gravity flows, but with a lower storm allowance.

The potential for storm water ingress is greatly reduced with this system, as it is airtight and being shallower is more likely to be above the groundwater table. As the system is designed to be airtight (and watertight) it will not function if there is a leak. The affected collection chambers will not empty and will trigger a maintenance call from the Water Authority. As such, the potential for stormwater / groundwater ingress into the system is greatly reduced (SA = 0.012 L/s/ET).

Design flows calculated using the above parameters are summarised below in **Table 5-3**.

Table 5-3 –Vacuum wastewater design flows

Stage	Lots	Units	Employment	Total	ADWF	r	PDWF	SA	PWWF
	ET	ET	ET	ET	L/s		L/s	L/s	L/s
Α	85			85	0.4	3.3	1.4	1.0	2.4
В	76			76	0.4	3.4	1.3	0.9	2.2
С	82			82	0.4	3.4	1.4	1.0	2.4
D	67	58		125	0.6	3.1	2.0	1.5	3.5
Е	76			76	0.4	3.4	1.3	0.9	2.2
F	91			91	0.5	3.3	1.5	1.1	2.6
G	75			75	0.4	3.4	1.3	0.9	2.2
Н	74			74	0.4	3.4	1.3	0.9	2.2
I	74			74	0.4	3.4	1.3	0.9	2.2
J	75			75	0.4	3.4	1.3	0.9	2.2
K	64			64	0.3	3.5	1.1	0.8	1.9
L	76			76	0.4	3.4	1.3	0.9	2.2
VC	55	98		153	0.8	3.0	2.3	1.8	4.2
M	73			73	0.4	3.4	1.3	0.9	2.1
N	82			82	0.4	3.4	1.4	1.0	2.4
0	63			63	0.3	3.5	1.1	0.8	1.9
Р	69			69	0.3	3.5	1.2	0.8	2.0



Stage	Lots	Units	Employment	Total	ADWF	r	PDWF	SA	PWWF
Q	42			42	0.2	3.8	0.8	0.5	1.3
R	70			70	0.4	3.5	1.2	0.8	2.1
S	76			76	0.4	3.4	1.3	0.9	2.2
Т	80			80	0.4	3.4	1.4	1.0	2.3
U	75			75	0.4	3.4	1.3	0.9	2.2
V	72			72	0.4	3.4	1.2	0.9	2.1
W	78			78	0.4	3.4	1.3	0.9	2.3
Х	65	44		109	0.5	3.2	1.8	1.3	3.1
Υ	66			66	0.3	3.5	1.2	0.8	1.9
Z	42			42	0.2	3.8	0.8	0.5	1.3
E1			90	90	0.5	3.3	1.5	1.1	2.6
E2			90	90	0.5	3.3	1.5	1.1	2.6
Sub-	1923	200	180						
Total	21	23	180						
Total		230	03	2303	11.5		38.8	27.6	66.5

5.4 Preliminary Wastewater Reticulation Design

The preliminary wastewater system design has been based on the site Master Plan (see **Figure 2**) and is described in **Sections 5.4.1** and **5.4.2**. The options assessment is included in **Section 7**.

5.4.1 Option A - Gravity Sewerage System

Based on the available topographic survey and bulk earthworks design prepared by SMEC, the development site has been divided into six catchment areas. The gravity sewerage system in each catchment area would drain into its own internal wastewater pumping station (WWPS). Ultimately, there would be a system of six internal WWPSs transporting flow via rising mains and gravity mains into a Central WWPS.

The Central WWPS would be constructed during Stage A in the southern portion of the development site.

The Central WWPS would transport wastewater from the development site into the MidCoast Water wastewater system.

The Option A preliminary wastewater system layout is shown on Figures 3 and 4.

Until Stage Y is constructed, the detention time of the pumped system would be longer than 4 hours. As a result odour control will be required.

5.4.2 Option B – Vacuum Sewerage System

Wastewater from each property would gravitate to a collection chamber. When the collection chamber sump fills to a pre-determined level, an automatic pneumatically operated vacuum interface valve opens. Pneumatic pressure forces the wastewater from the collection chamber into collection lines.

A series of pipes connect each of the chambers to the Central Vacuum Pumping Station. The Vacuum Station would have duty and standby vacuum pumps that create a vacuum in the vacuum sewer lines and an enclosed collection tank. When the vacuum mains deliver sewage and air to the pump station, sewage pumps would then transfer the sewage from the collection tank through a rising main to the existing MidCoast Water wastewater infrastructure.



The initial ten stages of the development (833 ET) would be serviced by a temporary skid mounted vacuum pumping station. The vacuum pumping station would be constructed during Stage A. The Option B initial wastewater system layout is shown on **Figure 5**.

As the development proceeds, the temporary vacuum pumping station would be replaced by a permanent station. The Option B ultimate wastewater system layout is shown on **Figure 6**.

Until Stage Y is constructed, the detention time in the system would be longer than 4 hours. As a result, odour control will be required.

6 WASTEWATER SERVICING STRATEGY – TRUNK MAIN

6.1 Loadings

The ultimate wastewater loadings summarised in **Table 6-1** have been adopted for design of the infrastructure.

Table 6-1 –Wastewater Loadings

Option	Equivalent Tenements ET	Average Dry Weather Flow ADWF (L/s)	Peak Dry Weather Flow PDWF (L/s)	Storm Allowance SA (L/s)	Peak Weather Flow PWWF (L/s)
Option A – Gravity System	2303	11.5	38.8	66.8	105.6
Option B – Vacuum System	2303	11.5	38.8	27.6	66.5

6.2 Options

Existing MidCoast Water wastewater infrastructure located in proximity to the development site is listed in **Table 6-2**. It includes the Hallidays Point Wastewater Treatment Plant (WWTP) and the Tuncurry No. 23 WWPS and rising main.

Table 6-2 - MidCoast Water Wastewater Infrastructure

Item	Spare Capacity	Distance from the site
Hallidays Point WWTP	Could accept the ultimate flow	11 km from the northern boundary
Tuncurry No. 23 WWPS transporting wastewater to Hallidays Point WWTP	Could accept the ultimate flow, however upgrade of the pumping station will be required	1.8 km from the southern boundary
Tuncurry No. 23 rising main transporting wastewater to Hallidays Point WWTP	Could accept the ultimate flow, however upgrade of the pumping station will be required	200 metres from the western boundary



The following options for transportation of wastewater from the NTDP site have been investigated:

- Option 1 new NTDP WWPS and rising main transporting wastewater to the Hallidays Point WWTP.
- Option 2 new NTDP WWPS and rising main transporting flow to the Tuncurry No. 23 WWPS. The
 Tuncurry No. 23 WWPS would transport the existing flow and flow from the NTDP site to the
 Hallidays Point WWTP.
- Option 3 new NTDP WWPS and rising main transporting flow to the Tuncurry No. 23 rising main.
 As a result, the Tuncurry No. 23 WWPS and the new NTDP Central WWPS would pump into a common rising main.

Each of the above options has been investigated for a PWWF of 105.6 L/s (option A) and a PWWF of 66.5 L/s (option B).

The wastewater trunk main options are shown on Figure 7.

6.2.1 Option 1

Under Option 1 a new rising main would transport wastewater from the NTDP site to the Hallidays Point WWTP. The rising main would be approximately 11 km long located parallel to the existing Tuncurry No. 23 rising main. The main would run within the existing road easement along The Lakes Way and the access road to the Hallidays Point WWTP.

Under Option 1A (gravity sewerage reticulation system, PWWF=105.6 L/s) the rising main would be DN300. A new NTDP Central WWPS wet well would be a 3.0 metre diameter precast concrete structure, 7.5 metres deep. The wet well would accommodate two pumps (duty and stand-by) with an operating duty of 105.6 L/s at 71 metres head and an approximate motor rating of 123 kW.

Under Option 1B (vacuum sewerage reticulation system, PWWF=66.5 L/s) the rising main would be DN225. The sewage pump duty condition would be 66.5 L/s at 108 metres head. It would be difficult to establish sewage pumps in the Central Vacuum Pump Station that can deliver against a 108 metre head to the Hallidays Pont WWTP with the vacuum (negative pressure) that would exist on the pump inlet. Therefore, a new Central WWPS would be required to transport flow from the Vacuum Pump Station to the Hallidays Point WWTP.

A new Central WWPS wet well would be a 2.4 metre diameter precast concrete structure, 3.5 metres deep. The wet well would accommodate two pumps (duty and stand-by) with an operating duty of 66.5 L/s at 108 metres head and an approximate motor rating of 118 kW.

6.2.2 Option 2

Under Option 2 a new rising main would transport wastewater from the NTDP site into the Tuncurry No. 23 WWPS. The rising main would be approximately 1.8 km long located parallel to the existing Tuncurry No. 23 rising main. The main would run within the existing road easement along The Lakes Way and Grey Gum Road.

Under Option 2A (gravity sewerage reticulation system, PWWF=105.6 L/s) the rising main would be DN300. The Central WWPS wet well would be a 3.0 metre diameter precast concrete structure, 7.5 metres deep. The wet well would accommodate two pumps (duty and stand-by) with an operating duty of 105.6 L/s at 22 metres head and an approximate motor rating of 37 kW.

Under Option 2B (vacuum sewerage reticulation system, PWWF=66.5 L/s) the rising main would be DN225. A new Central WWPS would not be required as sewage pumps with an operating duty of 66.5 L/s at 21 metres head can be established in the Central Vacuum Pumping Station to transport flow to Tuncurry No. 23 WWPS - the vacuum on the pump inlet would be manageable with the modest delivery head.



Additionally, the existing pumps and discharge pipework in the Tuncurry No. 23 WWPS would have to be upgraded due to the increased flow. The existing DN450 DICL rising main transporting flow from Tuncurry No. 23 WWPS into the Hallidays Point WWTP has sufficient capacity to transport the additional peak wet weather flow (PWWF) of 105.6 L/s. It currently transports 237 L/s and after adding the flow from the NTDP site the velocity achieved in the rising main would be 1.9 m/s (Option A – gravity sewerage system) and 1.6 m/s (Option B – vacuum sewerage system). This velocity is within the normal operating velocities for the rising main and would not have any significant adverse effect on the pipeline.

6.2.3 Option 3

Under Option 3 a new NTDP rising main would transport wastewater from the NTDP site into the Tuncurry No. 23 rising main located west of the development site. The new rising would be approximately 650 metres long. The new NTDP Central WWPS and the Tuncurry No. 23 WWPS would pump into a common rising main.

Under Option 3A (gravity sewerage reticulation system, PWWF=105.6 L/s) the rising main would be DN300. The Central WWPS wet well would be a 4.6 metre diameter cast in-situ structure, 7 metres deep and would accommodate two pumps (duty and stand-by) with an approximate motor rating of 128 kW. The pumps would have an operating duty of 94L/s at 75 metres head when operating at the same time as the Tuncurry No. 23 WWPS and 194 L/s at 48 metres head when operating alone.

Under Option 3B (vacuum sewerage reticulation system, PWWF=66.5 L/s) the rising main would be DN225. The duty conditions for the sewage pumps would vary depending on whether the pump station operates at the same time as Tuncurry No. 23 WWPS or alone. It would be difficult to establish sewage pumps in the Central Vacuum Pump Station capable of delivering at different duties with the vacuum (negative pressure) on the pump inlet. Therefore, a new Central WWPS transporting flow from the Central Vacuum Pump Station to the Tuncurry No. 23 rising main would be required. The Central WWPS wet well would be a 3.8 metre diameter cast in-situ structure, 3 metres deep and would accommodate two pumps (duty and stand-by) with an approximate motor rating of 98 kW. The pumps would have an operating duty of 67 L/s at 62 metres head when operating at the same time as the Tuncurry No. 23 WWPS and 139 L/s at 50 metres head when operating alone.

The wet well for the new WWPS under this option is larger than the wet well under Options 1 and 2. This is due to the requirement for common pumping with the Tuncurry No. 23 WWPS. When the new NTDP Central WWPS operates at the same time as the Tuncurry No. 23 WWPS it will pump close to the design flow rate and pressure (94L/s at 75 metres head under Option 3A and 67 L/s at 62 metres head under Option 3B). However, when the new NTDP Central WWPS operates alone, the pressure in the common rising main will be lower and as a result the pumps will operate at higher flow rate (approximately at 194 L/s at 48 metres head for Option 3A and 139 L/s at 50 metres head for Option 3B). The wet well control volume will need to be sized for the highest pumping rate.

As a result of common pumping (and increased delivery head), the pump rate of the existing Tuncurry No. 23 pumps will be reduced when pumping with the new NTDP Central WWPS. (The existing Tuncurry No. 23 pump duty is 237 L/s at 58 metres head, under Option 3A the new duty would be approximately 185 L/s at 63 metres head and under Option 3B approximately 205 L/sat 61 metres head). Also, if the new duty point is close to the shut off head, the existing pumps would have to be upgraded. The specific requirements for the Tuncurry No. 23 WWPS upgrade are to be confirmed during the concept design.



7 OPTIONS ASSESSMENT

7.1 Cost Benefit Analysis

The preliminary capital cost estimates and net present value (NPV) analysis of the capital and operation and maintenance costs have been developed for the following options:

- Option 1 Central WWPS and rising main transporting wastewater to the Hallidays Point WWTP.
 - Option 1A gravity sewerage reticulation system.
 - Option 1B vacuum sewerage reticulation system.
- Option 2 Central WWPS and rising main transporting flow to the Tuncurry No. 23 WWPS.
 - Option 2A gravity sewerage reticulation system.
 - Option 2B vacuum sewerage reticulation system.
- Option 3 Central WWPS and rising main transporting flow to the Tuncurry No. 23 rising main.
 - Option 3A gravity sewerage reticulation system.
 - Option 3B vacuum sewerage reticulation system.

The capital cost estimates and NPV analysis of the capital and operation and maintenance costs are included in **Appendix A** and summarised in **Table 7-1**.

Table 7-1 - Capital Cost Estimates and Net Present Values of the Capital and O&M Costs

Option	Option A – G	iravity System	Option B – Vacuum System		
	Capital Cost	NPV at 7% over 30 years	Capital Cost	NPV at 7% over 30 years	
Option 1	\$20.8 M	\$15.1 M	\$19.3 M	\$19.0 M	
Option 2	\$17.9 M	\$12.0 M	\$16.2 M	\$15.5 M	
Option3	\$18.2 M	\$12.5 M	\$17.0 M	\$16.8 M	

Below **Table 7-2** provides a breakdown of the capital and operation and maintenance costs.

Table 7-2 – Options Capital Costs and Operation & Maintenance Costs

	Capital Cost (\$	M)		O&M Cost o	ver 30 years (\$N	v I)	
Option	Reticulation System	Transportation System	Total	Retic.	Transport.	Odour Control	Total
Option 1A	\$16.1	\$4.8	\$20.8	\$2.7	\$1.2	\$1.4	\$4.7
Option 1B	\$15.1	\$4.1	\$19.3	\$15.4	\$ 1.1	\$1.4	\$17.8
Option 2A	\$16.1	\$1.8	\$17.9	\$2.7	\$0.8	\$1.4	\$4.3
Option 2B	\$15.1	\$1.0	\$16.2	\$15.4	\$0.1	\$1.4	\$16.8
Option 3A	\$16.1	\$2.1	\$18.2	\$2.7	\$1.2	\$1.4	\$4.7
Option 3B	\$15.1	\$1.9	\$17.0	\$15.4	\$1.1	\$1.4	\$17.8



Note:

- 1. The capital cost estimates within this study are based on the Hunter Water Cost Estimating Manual. Use of a common estimating framework allows for cost estimates to be compared between options, but cost estimates cannot be guaranteed as SMEC has no control over contractor's prices, market forces and competitive bids from tenderers. The cost estimates may exclude items which should be considered in a cost plan. Cost estimates are not to be relied upon in any way. If reliable cost estimates are required, then an appropriately qualified Quantity Surveyor should be engaged.
- 2. Operation and maintenance costs are based on MidCoast Water advice included in Appendix C.

Option 2B has the lowest capital cost (\$16.2M). It includes the vacuum sewerage reticulation system and trunk rising main discharging into the existing Tuncurry No.23 WWPS.

Option 2A has slightly higher capital cost (\$17.9M) than Option 2B. However, Option 2A has the lowest operation and maintenance costs (\$4.3M) and net present value (\$12M). It includes the gravity sewerage reticulation system and trunk rising main discharging into the existing Tuncurry No.23 WWPS.

Option 3B has the second lowest capital cost (\$17M).

Option 3A has the second lowest NPV (\$12.5M).

7.2 Non-Cost Benefit Analysis - Reticulation System

7.2.1 Leakage and Exfiltration

The vacuum sewer system has a lower infiltration rate during storms than the gravity system because it is designed to operate as a closed airtight and watertight system. For the same reason a vacuum sewer system is less likely than a gravity system to exfiltrate sewage to the environment. In a conventional gravity network, cracked pipes and manholes will exfiltrate sewage to the environment. In the specific case of the NTDP site, minimising exfiltration is advantageous as the site is located above extensive aquifers and in proximity to Nine Mile Beach.

7.2.2 Emergency Overflows

The gravity system, including the six catchment pump stations and the Central, WWPS presents a higher risk for emergency overflows than the vacuum system that includes a Central Vacuum Pump Station. During emergency situations when a pump station is inoperable for longer than the emergency storage time provided, sewage would overflow via the pump station and the lowest laying manhole cover (or via the WWPS flow relief structure if included in the design of the WWPS). These overflows may potentially lead to the transport of untreated sewage into waterways.

7.2.3 Dewatering

The gravity sewers would be constructed significantly deeper (up to approximately 5.5 metres deep) than the vacuum mains. It is expected that deep trenching required for the gravity mains would be undertaken in water charged ground.

Choosing vacuum sewer might not completely avoid dewatering costs. In particular the vacuum pits would be excavated to about 2.5 metres depth and may require dewatering. However, this option would require significantly less dewatering than the gravity sewer option.

There are number of construction risks associated with dewatering, examples of which include potential disruption to slope stability, potential water inrush and contamination of receiving waters.



A Dewatering Management Plan will be required during the construction. It should include an assessment of the potential geotechnical and hydrological impacts of groundwater extraction. It should demonstrate that nearby sites remain stable during and after dewatering. Details of dewatering volume, rate, duration, equipment and procedures should be included in the plan.

Works that interfere with the water table (such as continuous dewatering) require a licence under Part 5 of the Water Act 1912.

7.2.4 **Odour**

The gravity system would include a total of six vent stacks located at the rising main discharge manholes (for the six catchment pump stations) and seven vent stacks located at the seven WWPS sites (also includes the Central WWPS). The vent stacks would be located in public spaces and have the potential to release minor odour from the sewerage system. The vacuum system is designed to operate as a closed airtight and watertight system and does not require vent stacks.

7.2.5 Visual Impact

The vacuum system, except for the vacuum pump station, would be located underground. The gravity sewer system would include above ground pump station switchboards and vent stacks that would have a visual impact on the environment. There would be seven WWPSs with vent stacks and six rising main discharge manholes with vent stacks.

7.2.6 Energy Consumption

Based on the operating cost estimates detailed in **Section 7.1**, the pumps in the gravity sewer system would have lower annual energy consumption than the pumps in the vacuum sewer system.

7.3 Non-Cost Benefit Analysis - Transportation System

7.3.1 Environmental Factors

The Option 1 rising main discharging into the Hallidays Point WWTP is the longest trunk main alignment and is located mostly within a rural area. The rising main would be constructed parallel to the existing Tuncurry No. 23 rising main within the existing road easement and as a result it is expected that there would not be any significant impact on the existing environment both during and after the construction period.

The Option 2 rising main discharging into the Tuncurry No. 23 WWPS is shorter than the Option 1 rising main. However, this rising main would be constructed partly within an existing built up area and as a result there would be some impact on the local community during construction.

The Option 3 rising main has the shortest route and is located mostly within the development site. As a result, there would be minimal additional impact on the environment resulting from construction of the rising main.

In summary, Option 3 would have the least impact on the existing environment.

7.3.2 Impact on the Existing Wastewater Infrastructure

The Option 1 rising main would transport wastewater to the Hallidays Point WWTP. Modification to the WWTP inlet arrangement to accommodate a new rising main would be required. As a result, there would be an impact on the operation of the WWTP. However, it is expected that the modification would be of a minor scale and could be executed in a short timeframe.

The Option 2 rising main would transport flow to the Tuncurry No. 23 WWPS. Upgrade of the WWPS would be required including the construction of a new inlet, pumps and discharge pipework and an electrical upgrade.



The Option 3 rising main would transport flow to the existing Tuncurry No. 23 rising main. The connection would be undertaken in a short period of time and would not result in a significant impact on the Tuncurry No. 23 WWPS operating cycles. However, mechanical and electrical upgrade at the Tuncurry No. 23 WWPS would have to be undertaken due to pumping into a common rising main.

7.3.3 Construction Time

The Option 1 rising main has the longest alignment (11 km) and therefore would result in the longest construction time. The Option 2 rising main (1.8 km) and the Option 3 rising main (0.7 km) are significantly shorter and therefore would result in a significantly shorter construction time.

7.3.4 Opportunity for the Upgrade

Ultimately, all three options transport flow into the Hallidays Point WWTP. Option 2 and Option 3 discharge into the existing Tuncurry No. 23 WWPS and rising main. As a result the viability of Options 2 and 3, and the potential for future upgrade to these options, is dependent on (and limited by) the available capacity of the Tuncurry No. 23 WWPS and rising main.

8 SERVICING THE INITIAL STAGES OF THE DEVELOPMENT

The NTDP site is expected to be developed over thirty years with in excess of 25 development stages currently envisaged. The ultimate NTDP wastewater infrastructure will therefore involve considerable capital cost as well as ongoing operation and maintenance costs. Accordingly a more modest and cost effective means of servicing the development in the early years, when the number of developed lots is relatively low, has been investigated and discussed below.

8.1 Existing Wastewater Infrastructure

The nearest existing wastewater infrastructure is the Tuncurry No. 22 WWPS located approximately 40 metres from the southern boundary of the site. This pump station transports flow from the Great Lakes College to Tuncurry No. 23 WWPS (located 1.8 km from the NTDP southern boundary).

MidCoast Water have advised that the Tuncurry No. 22 WWPS has a spare capacity of 230 ET (gravity system basis) equal to Peak Wet Weather Flow of 9.9 L/s and could service the initial stages of the development. Refer **Appendix C**.

A vacuum sewerage system has lower stormwater infiltration than a gravity system, and therefore Tuncurry No. 22 WWPS (TU22) could service a greater number of equivalent tenements for the vacuum system. The spare capacity and theoretical flows determined for the gravity and vacuum reticulation systems are shown in **Table 8-1**.

Table 8-1 - Spare Capacity in Tuncurry No. 22 WWPS

System		ADWF	r	PDWF	SA	PWWF
	ET	L/s		L/s	L/s	L/s
Gravity	230	1.2	2.8	3.3	6.7	9.9
Vacuum	395	2.0	2.6	5.2	4.7	9.9

The following options have been identified for servicing the initial stages of the development site using the spare capacity of TU22:

- Option 1 Gravity System discharging into Tuncurry No. 22 WWPS.
- Option 2 Vacuum System discharging into Tuncurry No. 22 WWPS.



Option 3 – Combined Gravity and Vacuum System discharging into Tuncurry No. 22 WWPS.

These options and the implications for staging the provision of the NTDP wastewater infrastructure are discussed below.

8.1.1 Option 1 - Gravity System Discharging into Tuncurry No. 22 WWPS

Based on the preliminary Master Plan shown on **Figure 2** and the current site grading plan, part of Stage A and part of Stage C (47 ET in total) could gravitate to Tuncurry No. 22 WWPS. This gravity catchment is shown on figure included in **Appendix D**.

The initial 47 ET could be developed in the first year of the development.

The theoretical flows calculated for the above ETs are summarised below in Table 8-2.

Table 8-2 - Gravity System Flow to Tuncurry No. 22 WWPS

System		ADWF	r	PDWF	SA	PWWF
	ET	L/s		L/s	L/s	L/s
Gravity	47	0.2	3.7	0.9	1.4	2.2

8.1.2 Option 2 - Vacuum System Discharging into Tuncurry No. 22 WWPS

Based on the preliminary Master Plan shown on **Figure 2** and the current site grading plan there is an opportunity to build a small vacuum pumping station transporting all flow from the areas of Stage A, Stage B, Stage C and possibly Stage D to the Tuncurry No. 22 WWPS, amounting to 368 ET. (The discharged PWWF would be less than the spare capacity of TU22). This catchment area is shown on figure included in **Appendix D**.

The initial 368 ET could be developed in the first five years of the development.

The theoretical flows calculated for the above scenario are summarised below in Table 8-3.

Table 8-3 – Vacuum System Flow to Tuncurry No. 22 WWPS

Stage		ADWF	r	PDWF	SA	PWWF
	ET	L/s		L/s	L/s	L/s
Α	85	0.4	3.3	1.4	1.0	2.4
В	76	0.4	3.4	1.3	0.9	2.2
С	82	0.4	3.4	1.4	1.0	2.4
D	125	0.6	3.1	2.0	1.5	3.5
Total	368	1.8		4.9	4.4	9.3 ¹

Note 1 - Due to the way the peaking factor (r) is calculated, calculations for PDWF and PWWF using the total 368 ET do not give the same values as adding the PDWF and PWWF values for the individual stages (A, B, C and D).



8.1.3 Option 3 - Combined Gravity and Vacuum System Discharging into Tuncurry No. 22 WWPS

Based on the preliminary Master Plan shown on **Figure 2** and the current site grading plan, there is an opportunity to combine a gravity system and a vacuum system. Part of Stage A and part of Stage C could be serviced via a gravity system discharging into the Tuncurry No. 22 WWPS. A small vacuum pumping station could transport flow from the remaining area of Stages A and C and the whole of Stages B and D to the Tuncurry No. 22 WWPS, amounting to 368 ET. (The discharged PWWF would be only about 0.5 L/s higher than the spare capacity). This catchment area is shown on figure included in **Appendix D**.

The initial 368 ET could be developed in the first five years of the development.

The theoretical flows calculated for the above scenario are summarised below in Table 8-4.

Table 8-4 - Combined Gravity and Vacuum Flows to Tuncurry No. 22 WWPS

System		ADWF	r	PDWF	SA	PWWF
	ET	L/s		L/s	L/s	L/s
Gravity	47 ¹	0.2	3.7	0.9	1.4	2.2
Vacuum	321 ²	1.6	2.7	4.3	3.9	8.2
Total	368					10.4

Note 1 - part of Stage A and part of Stage C

Note 2 - remainder of Stages A and C, plus all of Stages B and D.

9 CONCLUSION

9.1 Reticulation System

Options for servicing the development site investigated in this report include:

- Option A gravity reticulation sewerage system; and
- Option B vacuum reticulation sewerage system.

Option B (vacuum reticulation system) has a lower capital cost and potential environmental impact than Option A (gravity reticulation system).

However, Option A has significantly lower operating and maintenance costs and a lower net present value (refer Table 7-1). It is considered that the potential environmental impacts of the gravity system could be minimised during design and construction (e.g. allowing for a larger WWPS emergency storage, targeting high quality construction, providing sufficient cover to the reticulation pipes to minimise movement and cracking, etc.)

As a result, it is considered that a gravity reticulation sewerage system is preferable for the North Tuncurry site.

9.2 Transportation System

The following options for transporting wastewater from the NTDP site have been investigated:

Option 1 – new NTDP WWPS and rising main transporting wastewater to the Hallidays Point WWTP.



- Option 2 new NTDP WWPS and rising main transporting wastewater to the Tuncurry No. 23 WWPS.
 The Tuncurry No. 23 WWPS would transport the existing flow and flow from the NTDP site to the Hallidays Point WWTP.
- Option 3 new NTDP WWPS and rising main transporting flow to the Tuncurry No. 23 rising main. As a
 result, the Tuncurry No. 23 WWPS and the new NTDP Central WWPS would pump into a common
 rising main.

The Option 2 NTDP rising main discharging into the Tuncurry No. 23 WWPS has the lowest capital cost, operation and maintenance costs and NPV. It would have some impact on the local community during the construction phase and on the existing Tuncurry No. 23 WWPS during operation. The impact can be minimised by selecting trenchless technology for construction of the new NTDP rising main road crossings. The specific requirements for upgrading the Tuncurry No. 23 WWPS are to be further investigated during the concept design stage.

10 REFERENCES

- Priority Sewerage Program Appin Douglas Park Wilton Sewerage Options Study (Patterson Britton & Partners, January 2003).
- Sewerage Code of Australia (WSA02) MidCoast Water Edition, Version 2.2.
- Hunter Water Pipeline and Pumping Station Estimating Guideline, Hunter Water Corporation, version 2.03
- North Tuncurry Development Project Assessment Report, JBA urban development services, 2014
- Information provided by MidCoast Water and included in Appendix C.

We trust the enclosed information enables an informed decision about the preferred option for the NTDP wastewater reticulation and transportation system, and we await your instruction on proceeding with the concept design.

Please do not hesitate to contact the undersigned with any further questions.

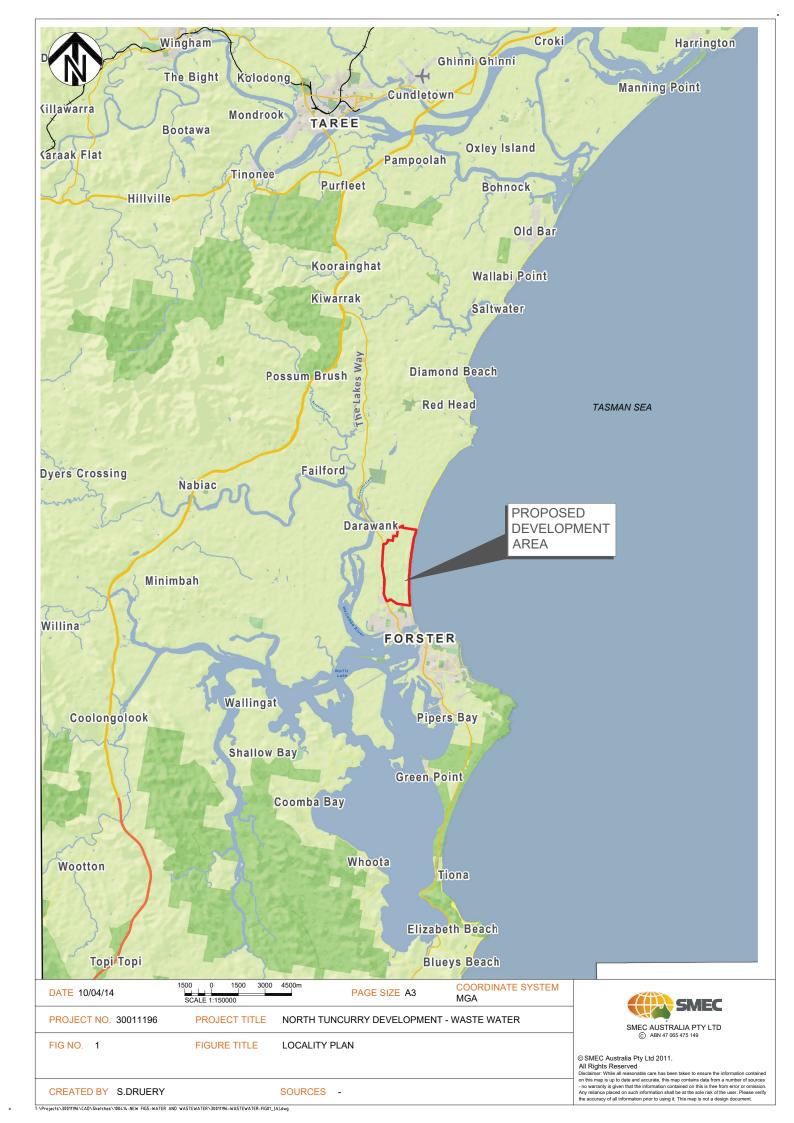
Yours sincerely,

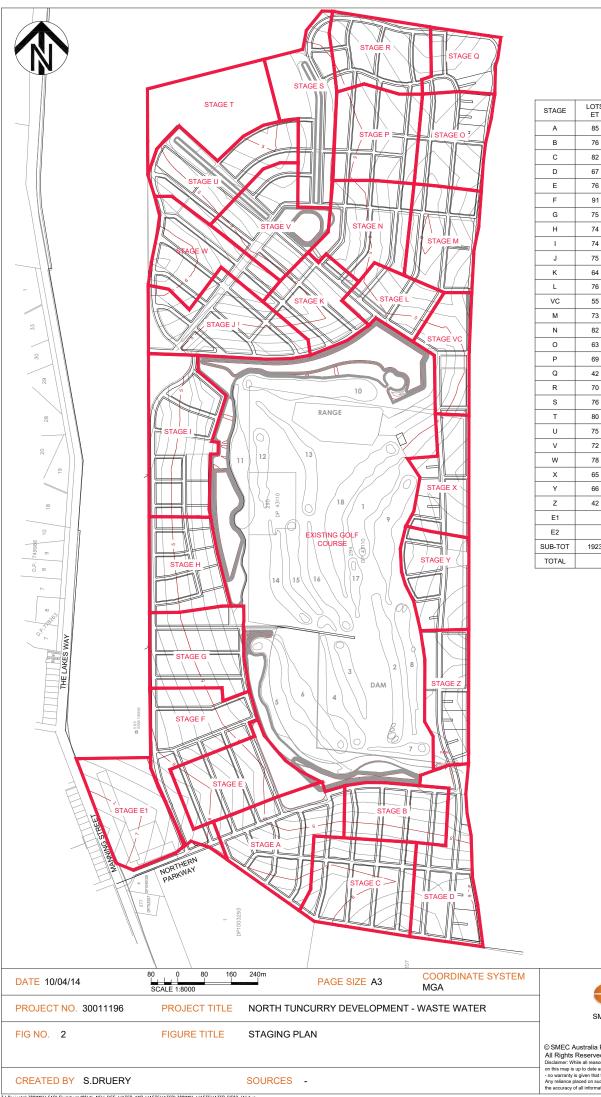
Marketa McCarthy

Senior Water Infrastructure Engineer



FIGURES

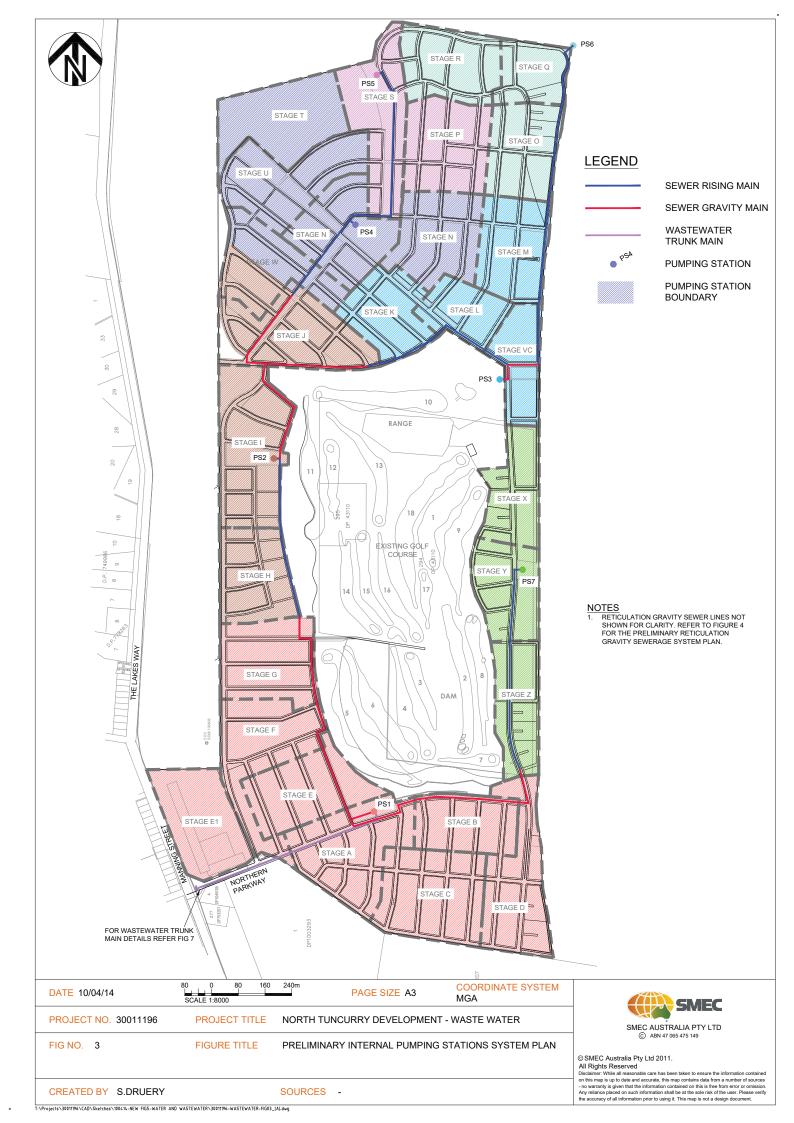


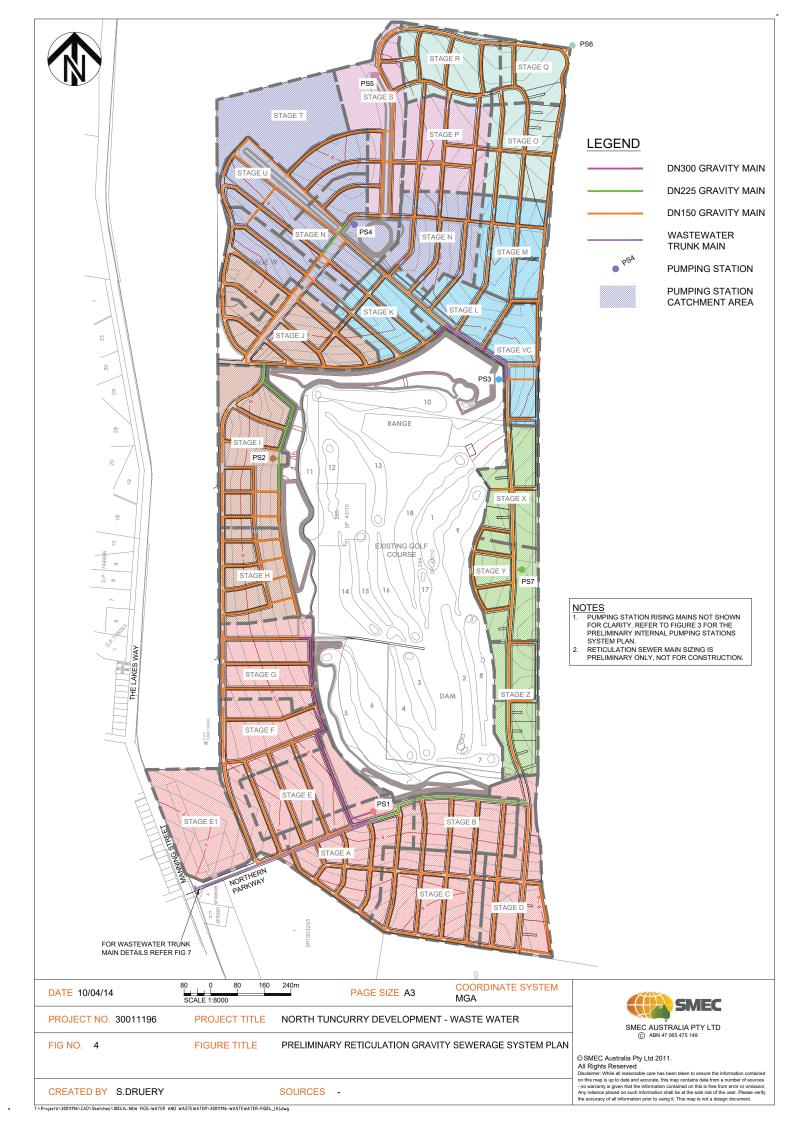


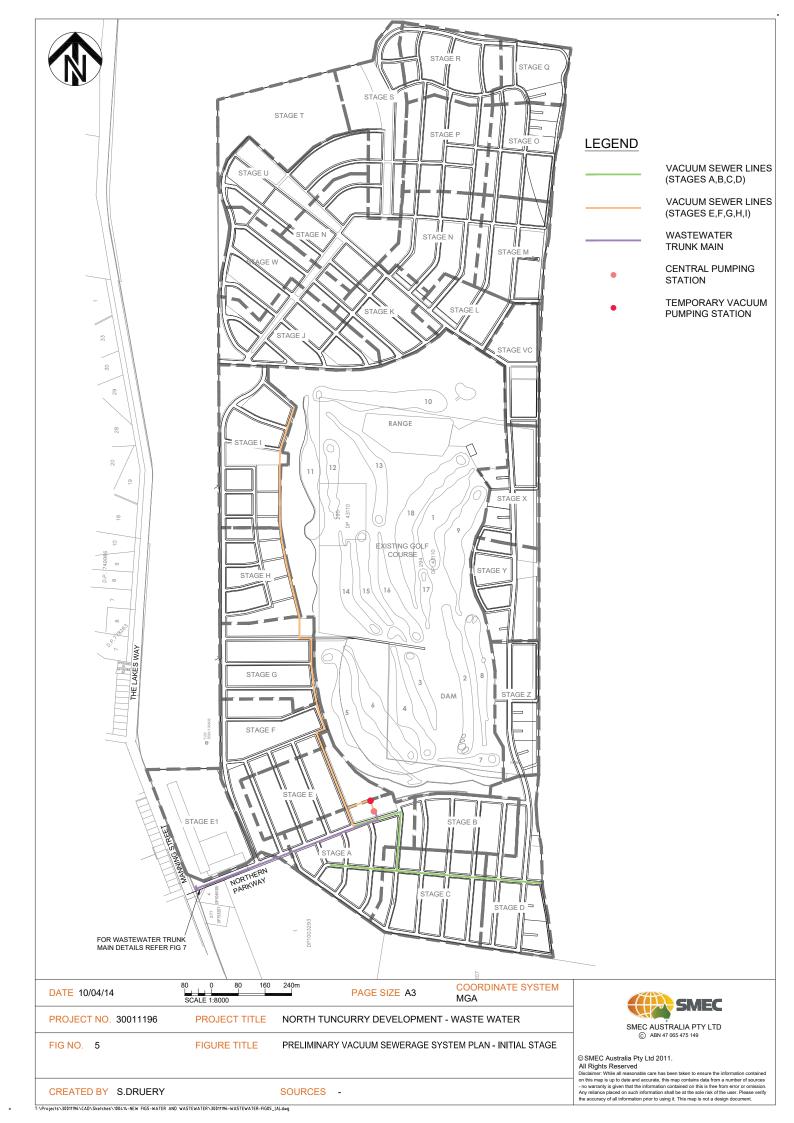
STAGE	LOTS ET	UNITS ET	EMPLOYMENT ET
Α	85		
В	76		
С	82		
D	67	58	
Е	76		
F	91		
G	75		
н	74		
I	74		
J	75		
К	64		
L	76		
VC	55	98	
М	73		
N	82		
0	63		
Р	69		
Q	42		
R	70		
S	76		
Т	80		
U	75		
V	72		
W	78		
Х	65	44	
Υ	66		
Z	42		
E1			90
E2			90
SUB-TOT	1923	200	180
TOTAL		2303	

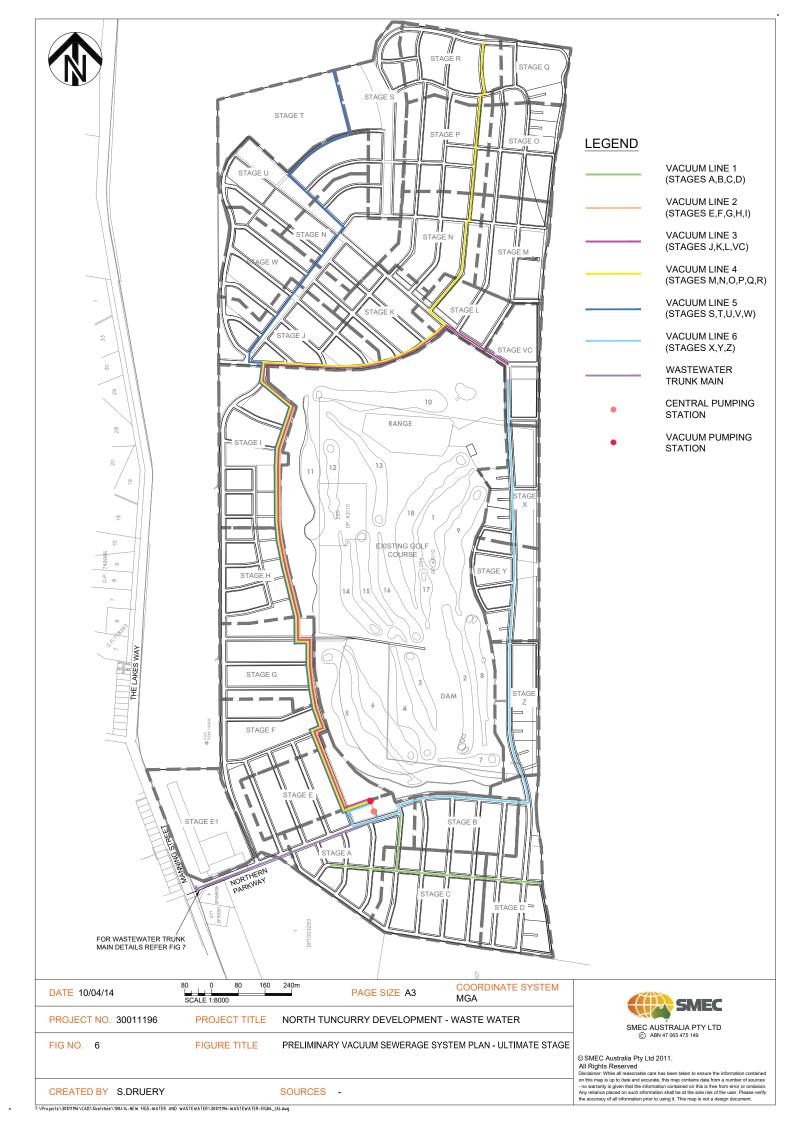


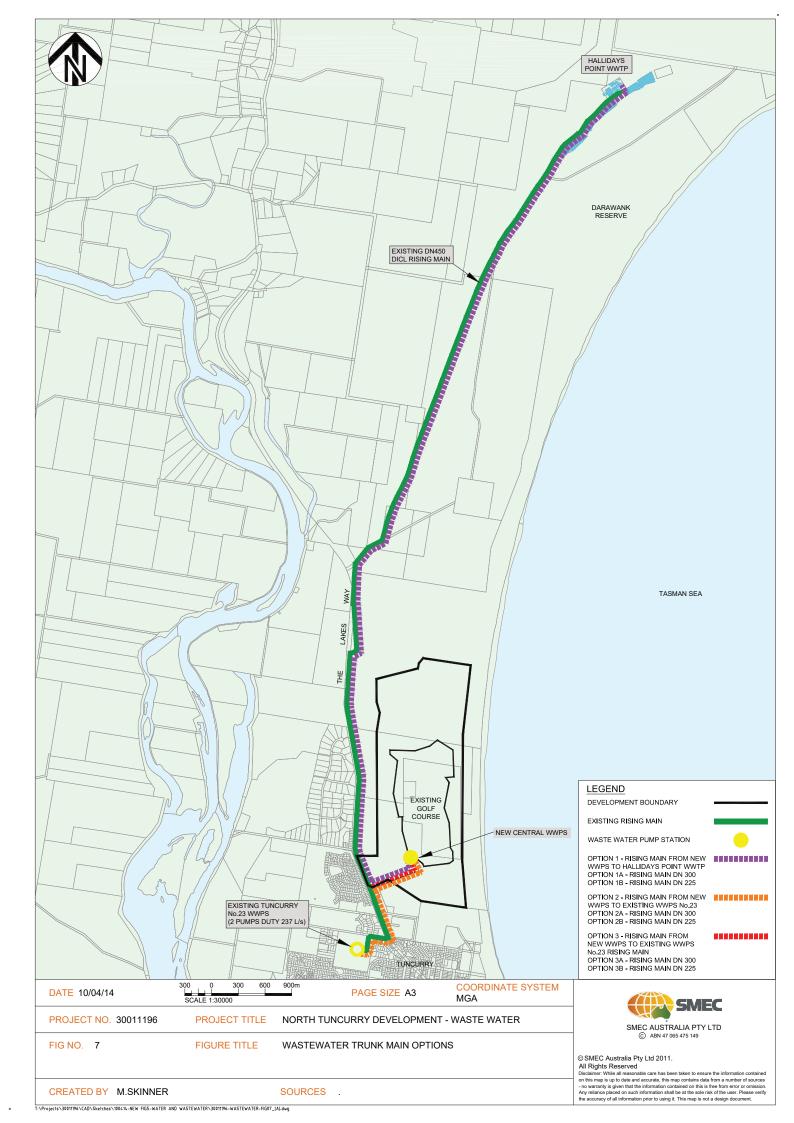
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APPENDIX A -	COST	FSTIMATES	AND NPV	ΔΝΔΙ ΥSIS
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North Tuncurry Development Project - Options for Sewer System

TRUNK SYSTEM OPTION	EM OPTION	RETICULATION OPTION	DPTION	Capital Cost	NPV Capital Cost (Capital+O&M) at 7% 30 yrs
Option 1	Central WWPS pumping to	Option 1A	Gravity system with internal PSs	\$ 20,822,742 \$	\$ 15,108,937
	Hallidays Point WWTP	Option 1B	Vacuum system	\$ 19,274,254 \$	\$ 19,022,982
Option 2	Central WWPS pumping to	Option 2A	Gravity system with internal PSs	\$ 17,891,362 \$	17,891,362 \$ 12,008,742
	Tuncurry No. 23 WWPS	Option 2B	Vacuum system	\$ 16,150,720 \$	16,150,720 \$ 15,482,036
Option 3	Central WWPS pumping to	Option 3A	Gravity system with internal PSs	\$ 18,209,608	\$ 12,481,776
	Tuncurry No. 23 rising main	Option 3B	Vacuum system	\$ 17,023,762	\$ 16,766,202

		Capital Cost (\$M)	t (\$M)				O&M Cost	over 3	O&M Cost over 30 years (\$M)		
Option	Reticulation	Transportation	tion	Sub-Total		O&M Cost	O&M Cost	. ب	Odour Control		Sub-Total
	System	System			1	Reticulation	Transportation	ion			
Option 1A	\$ 16.1	\$ 1	4.8	\$ 2	20.8	\$ 2.69	\$	1.22	\$ 1.44	٠٨-	5.3
Option 1B	\$ 15.1	\$ 1	4.1		19.3	\$ 15.41	\$	1.09	\$ 1.35	٠٨-	17.8
Option 2A	\$ 16.1	\$ 1	1.8		17.9	\$ 2.69	\$	0.81	\$ 1.44	·›	4.9
Option 2B	\$ 15.1	\$ 1	1.0	\$ 1	16.2	\$ 15.41	\$	0.08	\$ 1.35	٠٨.	16.8
Option 3A	\$ 16.1	\$ 1	2.1		18.2	\$ 2.69		1.18	\$ 1.44	·›	5.3
Option 3B	\$ 15.1	\$ 1	1.9	\$	17.0	\$ 15.41 \$	\$	1.07	\$ 1.35	\$	17.8

Central WWPS pumping to Hallidays Point WWTP

Gravity Sewerage Reticulation System

OPTION 1 Option 1A

203 21 22 23 24 25 26 2/ 28 29 30 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044	PS7	83,510 264,806 693,593 314,250 158,311 0 0 0 0	6 166,660 314,250 158,311	0 0			52,439 52,439 52,439 52,439	2,309 2,309	96,053 96,053 96,053	32,275 3	8,318 8,318 8,318			26,170,876
21 22 23 24 25 26 2/1 28 2035 2036 2037 2038 2039 2040 2041 2042	PS7	264,806 693,593 314,250	166,660 314,250	0 0 0			52,439	2,309						
21 22 23 24 25 26 2/1 28 2035 2036 2037 2038 2039 2040 2041 2042	PS7	264,806 693,593 314,250	166,660 314,250	0 0 0					96,053	32,275	8,318			L
2035 2036 2037 2038 2039 2040 2041	PS7	264,806 693,593 314,250	166,660 314,250	0 0 0			52,439	_						
2035 2036 2037 2038 2039	PS7	264,806 693,593 314,250	166,660 314,250	0 0				2,309	96,053	32,275	8,318			t
2035 2036 2037 2038	PS7	264,806 693,593	166,660	333 0			52,439	2,309	94,866	32,275	8,318			t
2035 2036 2037	PS7	264,806		333			52,439	2,309	92,509	32,275	8,318			t
2035 2036		L	10	526,9			44,691	1,852	91,259	32,275	8,318			T
2035		,510	264,806	0			44,691	1,852	89,273	32,275	8,318	30,000		T
		83	83,510	0			44,691	1,852	88,646	32,275	8,318	30,000		T
2034		370,335	370,335	0			44,691	1,852	85,869	32,275	8,318	30,000		T
		73,133	73,133	0			44,691	1,852	85,320	32,275	8,318	30,000		T
2033		680'066	680'066	0			44,691	1,852	77,895	32,275	8,318	30,000		t
2032	Ħ	417,151	417,151	0			44,691	1,852	74,766	32,275	8,318	30,000		T
2031		978,782	978,782	0			44,691	1,852	67,425	32,275	8,318	30,000		T
2030	PS6	922,339	409,471	512,868			36,723	1,455	64,354	32,275	8,318	30,000		T
15 2029	PS5	902,210	403,410	498,800			29,187	1,046	61,329	32,275	8,318	30,000		T
2028	PS4	1,003,520	525,508	478,012			21,064	753	57,387	32,275	8,318	30,000		T
2027		296,784	296,784	0			21,064	753	55,161	32,275	8,318	30,000		T
12 2026		448,984	448,984	0			21,064	753	51,794	32,275	8,318	30,000		T
2025	П	402,042	402,042	0			21,064	753	48,779	32,275	8,318	30,000		I
2024	PS3	789,810	266,582	523,228	_		10,983	595	46,779	32,275	8,318	30,000		
9 2023		794,323	794,323	0			10,983	565	40,822	32,275	8,318	30,000		T
2022		1,910,941	1,910,941	0			10,983	565	26,490	32,275	8,318	110,000		T
	PS2	1,065,300	351,013	714,287					23,857	32,275	8,318	110,000		T
2020		337,645	337,645	0					21,325	32,275	8,318	110,000		Ī
5 2019		217,543	217,543	0					19,693	32,275	8,318	110,000		I
2018		370,938		0					16,911	32,275	8,318			ſ
3 2017				0						5 32,275				
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				0	458				6,31	32,27;	8,316	220,00		-
2014			841,9		4,761,5									
10%		11,159,313					5 252,968	10,486	351,385	304,257	78,411	793,291		12,950,111
NP.		12,789,067					348,311 \$	14,467 \$	534,696 \$	400,507	103,215 \$	918,673 \$	1	\$ 18,413,745 \$ 15,108,937 \$ 12,950,111
4%		5,240,114 \$					498,106	20,762 \$	862,731 \$	\$ 107	143,831 \$	\$ 1090,090	49	1,413,745 \$
4		\$ 15.	'ion	vins	ROM	×	69	69	49	49	49	\$	69	\$ 18
		Total	Reticulat	v WWP Sincl Rising Ma.	Central WWPS and I		st 2.25%	0.25%	ost 0.75%	2.25%	0.25%		not included	
2		ipital Cost		Interna		eration and Maintenance Cost	emal Pumping Stations O&M Cos.	ernal Rising Mains O&M Cost	avity Mains Maintenance O&M Co.	Intral WWPS O&M Cost	unk Rishg Main O&M Cost	lour Control	mual GHG Abatement Cost	TOTAL
	10% 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2028 2029 2030 2031 202 2033	4% 7% 10% 2014 2015 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2016 2017 2018 2018 2018 2018 2018 2018 2018 2018	4% 7% 10% 2014 2016 2017 2018 2014 2018 2014 2018 2017 2018 2017 2018 2018 2018 2018 2018 2018 2018 2018	445 Total 4 5 15,240,14 5 12,128,667 5 1 1145,513 5 2 15 2 15 2 15 2 15 2 15 2 15 2 15	44. The problem of th	4% Fig. 10% 10% 10% 10% 10% 10% 10% 10% 10% 10%	45. Fig. 10 10 10 10 10 10 10 10 10 10 10 10 10	44. The first and marking shared CAMPA Share	45. Fig. 10 4 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	4.6 This is a second to the control of the control	44. 44. 44. 44. 44. 44. 44. 44. 44. 44.	44 45 45 45 45 45 45 45	44. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	This This

Option 1B Vacuum Sev	Vacuum Sewerage Reticulation System	System		Note:	Under th	his option	the Vacut	um Pumpii	g Station	would no	t be able t	o transpor	t wastewa	ter to Halli	idays Poin	Under this option the Vacuum Pumping Station would not be able to transport wastewater to Halildays Point WMTP and Central WWPS and RM would be required.	id Central	WWPS and	a RM woul	d be requi	ired.													
																		Ϋ́ε	Year															
NPV	4%	NPV 7%	10%	2014	2015	2 2016	3 2017	4 2018	5 2019	6 2020	7 2021	2022	9 2023	2024 2	2025 2	12 1 2026 20	13 1-	14 11 2028 20	15 16 2029 2030	17 17 030 2031	7 18 31 2032	19 2033	2034	2035	22 2036	23	24 2038	25	26	27	28 2042	29	30	TOTAL
	1			-1		ı		1		ı	- 1			H			ı	ı	ı	-1	L	4	ı	ı	Į	ı	ı	ı	-1			l		
Capital Cost Total	49	14,759,348 \$ 12,715,086 \$ 11,321,542	\$ 11,321,542	9			394,320 314,088	253,180	351,684	348,751			082,259	_								_								0	0	0	0	19,274,254
Reticulation Temporary & Permanent Vacuum Pump Stations	vlation			1,900,000	295,563		314,088	394,320 314,088 253,180 351,684 348,751	351,684	348,751	387,316	448,917 8	3,100,000	307,571	243,139	246,038 1,07	1,079,979	281,368 31	314,709 266	266,704 189	189,312 319,051	1,044,064	113,763	63 417,191	98,959	9 273,362	2 243,113	268,765	175,990					10,127,660
Central WWPS and FM	d RM			4,146,594	4																													4,146,594
Cost % of Ca													-																					
Vacuum Reticulation Network 5% Vacuum Sewage Pump Station 7.75%	\$ 4,265,235 \$	\$ 2,608,468 \$ 2,375,356 \$	\$ 1,689,922		23,425	38,203	147,250	73,624	147,250 1	103,867	121,305	140,670 1	163,116	240,250 24	240,250 24	239,765 252	252,067 306	306,065 320 240,250 240	320,134 335, 240,250 240,	335,869 349, 240,250 240,	349,205 358,670 240,250 240,250	570 374,623	23 426,826 50 240,250	50 240,250	453,374	240,250	240,250	240,250	240,250	240,250	240,250	240,250	240,250	9,034,932
	\$ 502,464	\$ 360,576	69		29,058	29,058	29,058	29,058		29,058	29,058		29,058			29,058 28	29,058 28		_					58 29,058		29,058		29,058	29,058	29,058	29,058	29,058	29,058	871,726
Trunk Rising Main O&M Cost 0.25%	\$ 123,428	\$ 88,574	\$ 67,288		7,138	7,138	7,138	7,138	7,138	7,138	7,138	7,138	7,138	7,138	7,138	7,138	7,138	7,138 7	7,138 7,	7,138 7,	7,138 7,1	7,138 7,1	7,138 7,138	38 7,138	7,138	7,138	7,138	7,138	7,138	7,138	7,138	7,138	7,138	214,136
Odour Control	\$ 1,032,304 \$	\$ 874,923 \$	\$ 759,058		220,000		110,000	110,000 110,000 110,000		90,000	90,000	90,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	0								1,350,000
Annual GHG Abatement Cost not included	· · · · · · · · · · · · · · · · · · ·																													_				0
TOTAL	\$ 24,145,704	\$ 24,145,704 \$ 19,022,982 \$ 15,840,960	\$ 15,840,960					Ī	t	l	t	t	-	l	-	$\frac{1}{1}$	H			-	\mid	L		L				Ĺ		I				37,115,549

Gravity Sewerage Reticulation System

OPTION 2 Option 2A

Π	-	į		1,362	7,056	3,254,128	0,178		855,279	5,882	9,178	6,456	53,213	440000		>	1371
	TOTA			0 17,891,362	12,80	3,25	1,83				_			1 44			22831371
	30	2044		_					4,			25,215					
	53	2043							52,439	2,309	96,053	64	1,774				
	28	2042							52,439		96,053	25,215	1,774				
	27	2041		0					52,439		96,053	25,215	1,774				
	97	2040		158,311	158,311	0			52,439	2,309	94,866	25,215	1,774				
	25	2039		314,250	314,250	0			52,439	2,309	92,509	25,215	1,774				
	24	2038	PS7	693,593	166,660	526,933			44,691	1,852	91,259	25,215	1,774				
	23	2037		264,806	264,806	0			44,691	1,852	89,273	25,215	1,774	30,000			
	22	2036		83,510	83,510	0			44,691	1,852	88,646	25,215	1,774	30 000			
	21	2035		370,335	370,335	0			44,691	1,852	85,869	25,215	1,774	30,000			
	20	2034		73,133	73,133	0			44,691	1,852	85,320	25,215	1,774	30 000			
	19	2033		680'066	990,089	0			44,691	1,852	77,895	25,215	1,774	30,000			
	18	2032		417,151	417,151	0			44,691	1,852	74,766	25,215	1,774	30 000			ľ
	17	2031		978,782	978,782	0			44,691	1,852	67,425	25,215	1,774	30 000			
	16	2030	PS6	922,339	409,471	512,868			36,723	1,455	64,354	25,215	1,774	30000			ľ
Year	15	2029	PS5	902,210	403,410	498,800	_		29,187	1,046	61,329	25,215	1,774	30 000			Ī
	14	2028	PS4	1,003,520	525,508	478,012			21,064	753	57,387	25,215	1,774	30000			ľ
	13	2027		296,784	296,784	0			21,064	753	55,161	25,215	1,774	30 000			t
	12	2026		448,984	448,984	0			21,064	753	51,794	25,215	1,774	30,000			İ
	11	2025		402,042	402,042	0			21,064	753	48,779	25,215	1,774	30 000			ľ
	10	2024	PS3	789,810	266,582	523,228			10,983	565	46,779	25,215	1,774	30 000			
	6	2023		794,323	794,323	0			10,983	565	40,822	25,215	1,774	30 000			f
	8	2022		1,910,941	1,910,941	0			10,983	565	26,490	25,215	1,774	110 000			İ
	7		PS2	337,645 1,065,300	351,013	714,287					23,857	25,215	1,774	110 000			t
	9	2020 2021		337,645	337,645	0					21,325	25,215	1,774				İ
	9	2019		217,543	217,543	0					19,693	25,215	1,774	110000			ľ
	4			370,938	370,938	0					16,911	25,215	1,774	110 000 110 000			
	8	2016 2017 2018		9 336,890	9 336,890	0					8 14,385	5 25,215	1,774	110 000			Ĺ
	2			350,259	350,259	_					11,758	25,215	1,774	110 000			L
	-	2015		33 725,780	14 725,780	0	18				6,314	25,215	1,774	220 000			L
	0	2014		2,672,093	841,914		1,830,178										
		10%		8,227,933					252,968	10,486	351,385	237,702	16,721	793 291			9 890 486
	NPV	7%		12,308,734 \$ 9,857,687 \$					348,311 \$	14,467	534,696 \$	312,897 \$	22,011 \$	918673	0	9	12008742 \$
				1,734 \$					498,106	20,762 \$	862,731 \$	436,022 \$	30,672 \$	1000004	6	9	15 247 122 \$ 1
		44%		\$ 12,308					\$ 498	\$ 20	\$ 862	\$ 436	\$ 30	1000		9	\$ 15247
					Reticulation	Internal WWPS incl Rising Mains	Central WWPS and RM	% of Cap. Cost PA	2.25%	0.25%	0.75%	2.25%	0.25%		and in disided	nanna	
				Total		val WWPS in	Central V.		st		ost				out how	101	
				Capital Cost		interns		Operation and Maintenance Cost	Internal Pumping Stations O&M Cos	Internal Rising Mains O&M Cost	Gravity Mains Maintenance O&M Cost	Central WWPS O&M Cost	Trunk Rising Main O&M Cost	Odour Control	Annual Old Abstract Date	tall Grid Adalement Cost	16
	ΝPV			Capits				Opera	Interna	Interna	Gravity	Centra	Trunk) I	3000	Allin	TOTAL

Option 2B Vac	Vacuum Sewerage Reticulation System	e Reticulation S	ystem		Note:	Under this option the Vaccuum Pumping Station will transport wastewater to Tuncurry No. 23 WWPS and therefore Central WWPS will not be required.	option the	e Vacuum	Pumping:	Station wil	II transpor	t wastewa	ter to Tunc	curry No. 2	3 WWPS a	andtheref	ore Centra	WWPS w.	III not be re	equired.														
NPV		4%	VPV	10%	2014	1 2015	2 2016	3 2017 2	2018	5 6 2019 2020	5 7 20 2021	8 8 2022	9 2023	10 10	11 2025	12 2026	13 2027	14 2028	Year 15 2029	16 2030	17 2031	18 2032	19 2033	2034	2035	22 2036 2	23 2037 20	24 2020	25 26 2039 2040	27 2041	28 2042	2043	30	TOTAL
Gaptal Cost Total Reticulation Temporary & Permanent Vacuum Pump Stations	Reticulation on Pump Stations	\$ 11,635,614 \$ 9,691,651 \$ 8,198,008 3,391,641 294,645 395,593 468,504 295,593 315,593,504 295,593 315,593,504 295,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593 315,593,593,593,593,593,593,593,593,593,59	9,591,551	8,198,008	3,391,564 468,504 1,900,000		0.0	314,088 25 314,088 25	253,180 35 253,180 35				448,917 4,082,2 448,917 982,2 3,100,0	259 259 000	307,571 243,139		246,038 1,079,979 246,038 1,079,979	281,368 379 281,368	314,709 38 314,709	266,704 9 266,704	189,312	319,051	1,044,064	113,763	417,191	6 9	273,362 2 273,362 2	243,113 26 243,113 26	268,765 175 268,765 175	175,990 175,990	0	0	0	0 16,150,720 10,127,660 5,000,000
770	Trunk Rising Main				1,023,060																													1,023,060
Operation and Maintenance Cost % of Vacuum Reficulation Network Vacuum Sewage Pump Station Trunk Rising Main O&M Cost	% of Cap. Cost PA 5% 7.75% 6.25%	\$ 4,265,235 \$ \$ 3,462,925 \$ \$ 44,227	2,608,468 \$ 2,375,356 \$ 31,738 \$	1,689,922 1,729,227 24,111		23,425 147,250 2,558	38,203 (147,250 142,258	57,919 7 147,250 14 2,558	73,624 86 147,250 147 2,558	86,283 103,867 147,250 147,250 2,558 2,558		121,305 140,670 147,250 147,250 2,558 2,558	163		212,229 227,608 240,250 240,250 2,558 2,558	239,765 250 240,250 358 2,558	65 252,067 240,250 558 240,250 258 2,558	57 306,065 50 240,250 58 2,558	5 320,134 0 240,250 8 2,558	335,869 0 240,250 8 2,558	349,205 240,250 2,558	358,670 240,250 2,558	374,623 240,250 2,558	426,826 240,250 2,558	432,514 240,250 2,558	453,374 4 240,250 2 2,558	458,322 47 240,250 24 2,558	471,990 484 240,250 240 2,558 2	484,145 497,583 240,250 240,250 2,558 2,558	% %	8 %	6,383 506,383 0,250 240,250 2,558 2,558	50 240,250 50 240,250 58 2,558	9,034,932 0 6,370,500 76,730
Odour Control Annual GHG Abatement Cost not in	\$ not included \$	\$ 1,032,304 \$	874,923 \$	759,058		220,000	110,000	110,000 110,000 110,000	110,000 1:	110,000 90	06 000'06	90,000	90,000		30,000	30,000	000 30'000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000								1,350,000
TOTAL	**	\$ 20,440,505 \$	15,482,036 \$	12,400,325		H	\parallel	\parallel	\parallel	H	$ \parallel $	H	\mathbb{H}	Н	$\ $	\coprod	H	Ц	L				T	Ħ	H	H	H			+	ļ			32,982,882

Central WWPS pumping to Tuncurry No. 23 Rising Main

Gravity Sewerage Reticulation System

Option 3A

OPTION 3

52,439 2,309 96,053 38,353 1,110 27 52,439 2,309 94,866 38,353 1,110 158,311 26 2040 2,309 2,309 92,509 38,353 1,110 25 2039 44,691 1,852 91,259 38,353 1,110 44,691 1,852 89,273 38,353 1,110 23 83,510 22 2036 44,691 1,852 88,646 38,353 1,110 44,691 1,852 85,869 38,353 1,110 21 2035 44,691 1,852 85,320 38,353 1,110 20 990,089 44,691 1,852 77,895 38,353 1,110 30,000 417,151 1,852 1,852 74,766 38,353 1,110 18 2032 978,782 44,691 1,852 67,425 38,353 1,110 30,000 16 2030 PS6 **922,339** 409,471 512,868 36,723 1,455 64,354 38,353 1,110 15 2029 PS5 **902,210** 403,410 498,800 29,187 1,046 61,329 38,353 1,110 14 2028 PS4 ,003,520 525,508 478,012 21,064 753 57,387 38,353 1,110 296,784 21,064 753 55,161 38,353 1,110 448,984 21,064 753 51,794 38,353 1,110 12 2026 402,042 21,064 753 48,779 38,353 1,110 11 10 2024 PS3 **789,810** 266,582 523,228 10,983 565 46,779 38,353 1,110 10,983 565 40,822 38,353 1,110 10,983 565 26,490 38,353 1,110 23,857 38,353 1,110 337,645 21,325 38,353 1,110 6 2020 19,693 38,353 1,110 16,911 38,353 1,110 14,385 38,353 1,110 350,259 11,758 38,353 1,110 725,780 6,314 38,353 1,110 252,968 10,486 351,385 361,552 10,460 793,291 8,546,179 10,175,933 348,311 14,467 534,696 475,926 13,769 918,673 NPV 7% 498,106 20,762 862,731 663,205 19,187 12,626,981 Resculation Internal WWPS ind Rising Mains Central WWPS and RM % of Cap. Cost PA 2.25% 0.25% 0.75% 2.25% 0.25% Operation and Maintenance Cost 7, Internal Pumping Stations O&M Cost Internal Resign Mainten So&M Cost Geavily Main is Maintenance O&M Cost Central WWPS O&M Cost Trufk Rising Main O&M Cost

855,279 35,882 1,799,178 1,150,596 33,288 1,440,000

52,439 2,309 96,053 38,353 1,110

52,439 2,309 96,053 38,353 1,110

52,439 2,309 96,053 38,353 1,110

18,209,608 12,807,056 3,254,128 2,148,424

TOTAL

30 2044

29

28

Vacuum Sewerage Reticulation System

Option 3B

Note: Under this option the Vacuum Pumping Station would not be able to transport wastewater to common rising main and therefore Central WWPS and RM would be required

	TOTAL	17,023,762	5,000,000	1,896,102	9,034,932 6,370,500 1,044,510 26,151	1,350,000	34,849,855
30	2044	0			506,383 240,250 34,817 872		Ī
29	2043	0			506,383 240,250 34,817 872		Ì
28	2042	0			506,383 240,250 34,817 872		Ť
22	2041	0			506,383 240,250 34,817 872		Ť
96	2040	175,990	175,990		497,583 240,250 34,817 872		T
25	2039		268,765		484,145 240,250 34,817 872		Ť
24	2038	243,113	243,113		471,990 240,250 34,817 872		İ
23	2037	273,362	273,362		458,322 240,250 34,817 872		İ
22	2036	98,959	98,959		453,374 240,250 34,817 872	30,000	
24	2035	417,191	417,191		432,514 240,250 34,817 872	30,000	İ
30	2034	113,763	113,763		426,826 240,250 34,817 872	30,000	Ī
19	2033		1,044,064		374,623 240,250 34,817 872	30,000	Ī
18	2032		319,051		358,670 240,250 34,817 872	30,000	İ
17	2031	189,312	189,312		349,205 240,250 34,817 872	30,000	ĺ
16	2030	266,	266,704		335,869 240,250 34,817 872	30,000	J
Year 15	2029	314,709	314,709		320,134 240,250 34,817 872	30,000	Ī
14	2028		281,368		306,065 240,250 34,817 872	30,000	İ
13	2027	1,079,979	1,079,979		252,067 240,250 34,817 872	30,000	ĺ
13	2026	246,	246,038		239,765 240,250 34,817 872	30,000	ļ
11	2025	243	243,139		227,608 240,250 34,817 872	30,000	I
10	2024	307,571	307,571		212,229 240,250 34,817 872	30,000	
σ	2023	4,082,259	3,100		163,116 147,250 34,817 872	30,000	ĺ
æ	2022	448,917	448,917		140,670 147,250 34,817 872	90,000	İ
7	2021		387,316		121,305 147,250 34,817 872	000'06	İ
9	2020		348,751		103,867 147,250 34,817 872	000'06	j
4	2019		351,684		86,283 147,250 34,817 872	110,000 110,000 110,000 110,000	I
4	2018		8 253,180		73,624 147,250 34,817 872	110,000	ĺ
8	2017		314,088		57,919 147,250 7 34,817 872	110,000	1
6	2016		3 394,320		38,203 147,250 34,817 872		
-	2015		04 295,563 00	12	23,425 147,250 34,817 872	220,000	
U	2014	4,264,606	468,504	1,896,102			
	10%	9,071,050			1,689,922 1,729,227 328,217 8,217	759,058	13.585.691
AdN	7%	12,508,856 \$ 10,464,593 \$			2,608,468 \$ 2,375,356 \$ 432,045 \$ 10,817 \$	874,923 \$	16.766.202 \$
	4%	2,508,856 \$			4,265,235 \$ 3,462,925 \$ 602,057 \$ 15,073 \$	1,032,304 \$	\$ 21.886.450 \$
		9	Resculation Vacuum Pump Stations	Central WWPS and RM	5% \$ 4 7.75% \$ 3 2.25% \$ 0.25%	\$ 1	\$ 24
AdN		Capital Cost	Re sculation Temporary & Permanent Vacuum Pump Stations	ر	Operation and Maintenance Cost Vacuum Reticul ation Network Vacuum Sewingse Pump Station Central WWPS O.8M. Cost Trunk Resig Main O&M. Cost	Odour Control Annual GHG Abatement Cost	OTAL

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage A

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 8,642.00	\$ 8,642.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 15,000.00	\$ 15,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 15,000.00	\$ 15,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 27,000.00	\$ 27,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 6,000.00	\$ 6,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 5,120.78	\$ 5,120.78
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

Sewer Pipeline - Gravity - section will be present if one or more gravity mains are specified

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 1,076.25	\$ 1,076.25
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	1450	m	\$ 12.00	\$ 17,400.00
016VSS	Nominal DN225 PVC pipe	150	m	\$ 35.00	\$ 5,250.00
01EVSS	Nominal DN300 PVC pipe	155	m	\$ 68.00	\$ 10,540.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
00FV03	Nominal DN150 PVC (Trench type 3)	750	m	\$ 85.40	\$ 64,050.00
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
00FV03	Nominal DN150 PVC (Trench type 3)	700	m	\$ 136.40	\$ 95,480.00
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
016V03	Nominal DN225 PVC (Trench type 3)	150	m	\$ 377.40	\$ 56,610.00
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
01EV03	Nominal DN300 PVC (Trench type 3)	155	m	\$ 765.25	\$ 118,613.75
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				

HWG010	Extra over rate for installation for Additional		m3	\$ 76.50		
	compaction					
HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 78.75		
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3			
HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 337.50		
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3			
HWG015	Supply & place ballast		tonnes	\$ 90.00		
HWG016	External Dewatering of trench including establishment & disestablishment	305	m3	\$ 7.42	\$	2,262.90
HWG017	Supply and place treated timber piling for pipe support		m			
HWG018	Road / creek crossings					
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m			
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:					
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:					
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each			
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$	-
HWG024	Flow Relief Structures		Each			
HWG025	EMPTY					
HWG026	Supply and construct vent stacks		each			
HWG027	Preparation of line sheets	1755	each	\$ 1.00	\$	1,755.00
HWG028	Acceptance testing - gravity main		m			
HWG029	Miscellaneous					
104/0000					-	2070.000
HWG000	Sub Total				1	373,038

Item No.	Item Description	Qty	Unit		Amount	
					\$	
HW0009	Restoration - Pipelines:					
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$	╗
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$	-
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$	7
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$	-
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$	-
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$	-

HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HW0009.11	Grass seeding		m2		
HW0009.12	Hydromulch		m2		
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3		
HW0011	Acid sulphate soil				
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test		
HW0011.02	Establish treatment facility		Item		
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3		
HW0011.04	Disposal off site of acid sulphate soil		tonne		
HW0012	Preconstruction record				
HW0012.01	Photographic	Item	Lump Sum		\$ -
HW0012.02	Video	Item	Lump Sum		\$ -
HW0012.03	CCTV	Item	Lump Sum		\$ -
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 14,040.00	\$ 14,040.0
A.	TOTAL ESTIMATED CONTRACT AWARD SU	IM			\$ 475,840.68
В.	PRE-CONSTRUCTION COST (Table 10)				
HW0016	Design				\$ 95,168.14
HW0017	Project Management of Design				\$ 29,033.63
HW0018	Land Matters				\$ -
HW0024	Community Consultation				
	Sub Total(B1)				\$ 124,201.76
	Pre construction contingency (30% of I	31)			\$ 37,260.53
	TOTAL PRE-CONSTRUCTION COST (B)				\$ 161,462.29
C.	CONSTRUCTION COST				
С.	Total Estimated Contract Award Sum (A)				\$ 475,840.68
	Total Estimated Contract Award Sulli (A)				,

C.	CONSTRUCTION COST				
	Total Estimated Contract Award Sum (A)			\$	475,840.68
HW0019	Principal Supplied Pipe (as applicable)			\$	-
HW0020	Principal Supplied Valves and Flowmeters (as applicable)				-
HW0021	Principal Supplied Fittings (as applicable)				-
HW0022	Pump Station HV Power Supply				-
HW0023	Construction Management (Table 11)			\$	47,584.07
	Sub Total (C1)			\$	523,424.75
	Construction contingency			\$	157,027.43
	(Table 12) (30% of C1)	Preliminary Estimate			
TOTAL CONSTRUCTION COST (C)				\$	680,452.18

TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)	\$	841,914.47
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Note:

Pumping station PS1 included in a separate estimate.

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage B

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 7,347.00	\$ 7,347.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 15,000.00	\$ 15,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 15,000.00	\$ 15,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 4,473.53	\$ 4,473.53
HW0008	Community Consultation	Item	Lump Sum	\$ 1	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 571.80	\$ 571.80
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	640	m	\$ 12.00	\$ 7,680.00
016VSS	Nominal DN225 PVC pipe	313	m	\$ 35.00	\$ 10,955.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
00FV03	Nominal DN150 PVC (Trench type 3)	640	m	\$ 136.40	\$ 87,296.00
016V03	Nominal DN225 PVC (Trench type 3)	313	m	\$ 150.90	\$ 47,231.70
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 30.60	

HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3		
HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWG015	Supply & place ballast		tonnes	\$ 90.00	
HWG016	External Dewatering of trench including establishment & disestablishment	953	m3	\$ 183.67	\$ 175,041.44
HWG017	Supply and place treated timber piling for pipe support		m		
HWG018	Road / creek crossings				
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:				
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each		
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWG024	Flow Relief Structures		Each		
HWG025	EMPTY		Ī		
HWG026	Supply and construct vent stacks		each		
HWG027	Preparation of line sheets	953	each	\$ 1.00	\$ 953.00
HWG028	Acceptance testing - gravity main		m		
HWG029	Miscellaneous				
LIMOSSS					Ф220 7 20
HWG000	Sub Total				\$329,729

Item No.	Item Description	Qty	Unit		Amount
					\$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		

HW0009.09	Pavers		m2			
HW0009.10	Turf		m2			
HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 7,624.00	\$	7,624.00
Α.	TOTAL ESTIMATED CONTRACT AWARD SU	JM			\$	409,173.47
В.	PRE-CONSTRUCTION COST (Table 10)				r.	04 004 00
HW0016 HW0017	Design				\$	81,834.69 26,366.94
HW0017	Project Management of Design				\$ \$	20,300.94
HW0024	Land Matters				φ	-
11000024	Community Consultation				\$	108,201.63
	Sub Total(B1)	D4.\			\$	32,460.49
	Pre construction contingency (30% of E	81)			\$	140,662.12
	TOTAL PRE-CONSTRUCTION COST (B)				Ψ	140,002.12
C.	CONSTRUCTION COST					
. .	Total Estimated Contract Award Sum (A)				\$	409,173.47
HW0019	Principal Supplied Pipe (as applicable)				\$	-
HW0020	Principal Supplied Valves and Flowmeter	re (ac annl	icahla)		\$	_
11110020	i inicipal supplied valves and Flowilleter	is (as appi	icable)			

Construction contingency (Table 12) (30% of C1)	Preliminary Estimate	\$	135,027.24
TOTAL CONSTRUCTION COST (C)	\$	585,118.06	
TOTAL PRELIMINARY PROJECT ESTIMAT	\$	725,780.18	
		-	

Sub Total (C1)

40,917.35

450,090.81

Principal Supplied Fittings (as applicable)

Pump Station HV Power Supply

Construction Management (Table 11)

HW0021

HW0022

HW0023

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage C

Item No.	Item Description	Qty	Unit	R	Rate \$/Unit	Amount
						\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	3,619.00	\$ 3,619.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	4,000.00	\$ 4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	2,000.00	\$ 2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	2,609.57	\$ 2,609.57
HW0008	Community Consultation	Item	Lump Sum	\$	1	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 930.60	\$ 930.60
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	1551	m	\$ 12.00	\$ 18,612.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
00FV03	Nominal DN150 PVC (Trench type 3)	1551	m	\$ 85.40	\$ 132,455.40
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3		

HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWG015	Supply & place ballast		tonnes	\$ 90.00	
HWG016	External Dewatering of trench including establishment & disestablishment		m3		
HWG017	Supply and place treated timber piling for pipe support		m		
HWG018	Road / creek crossings				
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:				
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each		
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWG024	Flow Relief Structures		Each		
HWG025	EMPTY				
HWG026	Supply and construct vent stacks		each		
HWG027	Preparation of line sheets	1551	each	\$ 1.00	\$ 1,551.00
HWG028	Acceptance testing - gravity main		m		
HWG029	Miscellaneous				
HWG000	Sub Total				\$ 153,549

Item No.	Item Description	Qty	Unit		Amount
					\$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HW0009.11	Grass seeding		m2		
HW0009.12	Hydromulch //11662\Documents\Projects\North Tuncurry Developme		m2		

HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3		
HW0011	Acid sulphate soil				
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test		
HW0011.02	Establish treatment facility		Item		
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3		
HW0011.04	Disposal off site of acid sulphate soil		tonne		
HW0012	Preconstruction record				
HW0012.01	Photographic	Item	Lump Sum		\$ -
HW0012.02	Video	Item	Lump Sum		\$ -
HW0012.03	CCTV	Item	Lump Sum		\$ -
HW0013	Work as Constructed Information <insert \$="" min=""></insert>	Item	Lump Sum	\$ 12,408.00	\$ 12,408.0
A.	TOTAL ESTIMATED CONTRACT AWARD SU	M			\$ 205,185.57
3.	PRE-CONSTRUCTION COST (Table 10)				
HW0016	Design				\$ 41,037.11
HW0017	Project Management of Design				\$ 18,207.42
HW0018	Land Matters				\$ _
HW0024	Community Consultation				
	Sub Total(B1)				\$ 59,244.54
	Pre construction contingency (30% of B	31)			\$ 17,773.36
	TOTAL PRE-CONSTRUCTION COST (B)				\$ 77,017.90
C.	CONSTRUCTION COST Total Estimated Contract Award Sum (A)				\$ 205,185.57
HW0019	Principal Supplied Pine (as applicable)				\$ _

C.	CONSTRUCTION COST				
	Total Estimated Contract Award Sum (A)			\$	205,185.57
HW0019	Principal Supplied Pipe (as applicable)			\$	-
HW0020	HW0020 Principal Supplied Valves and Flowmeters (as applicable)				-
HW0021	HW0021 Principal Supplied Fittings (as applicable)				-
HW0022	W0022 Pump Station HV Power Supply				-
HW0023	Construction Management (Table 11)			\$	5,000.00
	Sub Total (C1)			\$	210,185.57
	Construction contingency			\$	63,055.67
	(Table 12) (30% of C1)	Preliminary Estimate			
TOTAL CONSTRUCTION COST (C)				\$	273,241.24

TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)	\$ 350,259.14
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PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage D

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 3,458.00	\$ 3,458.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 2,529.05	\$ 2,529.05
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 780.00	\$ 780.00
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	1270	m	\$ 12.00	\$ 15,240.00
016VSS	Nominal DN225 PVC pipe	30	m	\$ 35.00	\$ 1,050.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
00FV03	Nominal DN150 PVC (Trench type 3)	1270	m	\$ 85.40	\$ 108,458.00
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
016V03	Nominal DN225 PVC (Trench type 3)	30	m	\$ 150.90	\$ 4,527.00
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 30.60	

HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$	63.00		
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3				
HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$	270.00		
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3				
HWG015	Supply & place ballast		tonnes	\$	90.00		
HWG016	External Dewatering of trench including establishment & disestablishment	30	m3	\$	38.33	\$	1,150.00
HWG017	Supply and place treated timber piling for pipe support		m				
HWG018	Road / creek crossings						
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m				
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:						
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:						
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each				
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$	-	\$	-
HWG024	Flow Relief Structures		Each	Î			
HWG025	EMPTY		Ī				
HWG026	Supply and construct vent stacks		each				
HWG027	Preparation of line sheets	1300	each	\$	1.00	\$	1,300.00
HWG028	Acceptance testing - gravity main		m				
HWG029	Miscellaneous						
1114/0000						4	132 F05
HWG000	Sub Total					1	3132,505

Item No.	Item Description	Qty	Unit		Amount
					\$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		

HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HW0009.11	Grass seeding		m2		
HW0009.12	Hydromulch		m2		
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3		
HW0011	Acid sulphate soil				
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test		
HW0011.02	Establish treatment facility		Item		
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3		
HW0011.04	Disposal off site of acid sulphate soil		tonne		
HW0012	Preconstruction record				
HW0012.01	Photographic	Item	Lump Sum		\$ -
HW0012.02	Video	Item	Lump Sum		\$ -
HW0012.03	CCTV	Item	Lump Sum		\$ -
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 10,400.00	\$ 10,400.00
Α.	TOTAL ESTIMATED CONTRACT AWARD SU	М			\$ 196,892.05
В.	PRE-CONSTRUCTION COST (Table 10)				
HW0016	Design				\$ 39,378.41
HW0017	Project Management of Design				\$ 17,875.68
HW0018	Land Matters				\$ -
HW0024	Community Consultation				
	Sub Total(B1)				\$ 57,254.09
	Pre construction contingency (30% of B	31)			\$ 17,176.23
	TOTAL PRE-CONSTRUCTION COST (B)				\$ 74,430.32
C.	CONSTRUCTION COST				
	Total Estimated Contract Award Sum (A)				\$ 196,892.05
HW0019	Principal Supplied Pine (as applicable)				\$ _

C.	CONSTRUCTION COST				
	Total Estimated Contract Award Sum (A)			\$	196,892.05
HW0019	Principal Supplied Pipe (as applicable)			\$	-
HW0020	HW0020 Principal Supplied Valves and Flowmeters (as applicable)				-
HW0021	HW0021 Principal Supplied Fittings (as applicable)				-
HW0022	HW0022 Pump Station HV Power Supply				-
HW0023	Construction Management (Table 11)			\$	5,000.00
	Sub Total (C1)			\$	201,892.05
	Construction contingency			\$	60,567.61
	(Table 12) (30% of C1)	Preliminary Estimate			
	TOTAL CONSTRUCTION COST (C)				262,459.67

TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate) \$ 336,889.98

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage E

Item No.	Item Description	Qty	Unit	F	Rate \$/Unit	Amount \$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	3,868.00	\$ 3,868.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	2,734.12	\$ 2,734.12
HW0008	Community Consultation	Item	Lump Sum	\$	-	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$	
HWG001	Service Location	Item	Lump Sum	\$ 480.75	\$ 480.75	
HWG002	Supply all valves	Item	Lump Sum		\$ -	
HWG003	Supply all fittings	Item	Lump Sum		\$ -	
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:					
00FVSS	Nominal DN150 PVC pipe	560	m	\$ 12.00	\$ 6,720.00	
01EVSS	Nominal DN300 PVC pipe	193	m	\$ 68.00	\$ 13,124.00	
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.					
00FV03	Nominal DN150 PVC (Trench type 3)	410	m	\$ 85.40	\$ 35,014.00	
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR					
00FV03	Nominal DN150 PVC (Trench type 3)	150	m	\$ 136.40	\$ 20,460.00	
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR					
01EV03	Nominal DN300 PVC (Trench type 3)	193	m	\$ 408.25	\$ 78,792.25	
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR					
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:					
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 57.38		

HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 78.75	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3		
HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 337.50	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWG015	Supply & place ballast		tonnes	\$ 90.00	
HWG016	External Dewatering of trench including establishment & disestablishment	343	m3	\$ 5.96	\$ 2,043.78
HWG017	Supply and place treated timber piling for pipe support		m		
HWG018	Road / creek crossings				
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:				
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each		
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWG024	Flow Relief Structures		Each		
HWG025	EMPTY				
HWG026	Supply and construct vent stacks		each		
HWG027	Preparation of line sheets	753	each	\$ 1.00	\$ 753.00
HWG028	Acceptance testing - gravity main		m		
HWG029	Miscellaneous				
HWG000	Sub Total				\$ 5157,388

Item No.	Item Description	Qty	Unit		Amount	
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HW0009	Restoration - Pipelines:					
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$	-
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$	-
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$	-
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$	-
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$	-
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$	-
HW0009.07	Bitumen pavement		m2			
HW0009.08	AC pavement		m2			

HW0009.09	Pavers		m2			
HW0009.10	Turf		m2			
HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	
HW0012.03	CCTV	Item	Lump Sum		\$	
HW0013	Work as Constructed Information <insert \$="" min=""></insert>	Item	Lump Sum	\$ 6,024.00	\$	6,024.0
λ.	TOTAL ESTIMATED CONTRACT AWARD SU	M			\$	218,013.90
3.	PRE-CONSTRUCTION COST (Table 10)					40.000 =
HW0016	Design				\$	43,602.78
HW0017	Project Management of Design				\$	18,720.56
HW0018	Land Matters				\$	-
HW0024	Community Consultation				\$	62,323.3
	Sub Total(B1)	11\			\$	18,697.0
	Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B))) T)			\$	81,020.3
	TOTAL FRE-CONSTRUCTION COST (B)				Ψ	01,020.0
2.	CONSTRUCTION COST					
	Total Estimated Contract Award Sum (A)				\$	218,013.90
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C.	CONSTRUCTION COST				
	Total Estimated Contract Award Sum (A)			\$	218,013.90
HW0019	9 Principal Supplied Pipe (as applicable)				-
HW0020	HW0020 Principal Supplied Valves and Flowmeters (as applicable)				-
HW0021	HW0021 Principal Supplied Fittings (as applicable)				-
HW0022	HW0022 Pump Station HV Power Supply				-
HW0023	HW0023 Construction Management (Table 11)				5,000.00
	Sub Total (C1)			\$	223,013.90
	Construction contingency			\$	66,904.17
	(Table 12) (30% of C1) Preliminary Estimate				
	TOTAL CONSTRUCTION COST (C)				289,918.07

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	TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)	\$ 370,938.41

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage F

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 2,020.00	\$ 2,020.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 1,810.25	\$ 1,810.25
HW0008	Community Consultation	Item	Lump Sum	\$ 1	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 279.00	\$ 279.00
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	265	m	\$ 12.00	\$ 3,180.00
01EVSS	Nominal DN300 PVC pipe	160	m	\$ 68.00	\$ 10,880.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
00FV03	Nominal DN150 PVC (Trench type 3)	265	m	\$ 85.40	\$ 22,631.00
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
01EV03	Nominal DN300 PVC (Trench type 3)	160	m	\$ 181.75	\$ 29,080.00
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 38.25	

HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 78.75	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3		
HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 337.50	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWG015	Supply & place ballast		tonnes	\$ 90.00	
HWG016	External Dewatering of trench including establishment & disestablishment	160	m3	\$ 7.19	\$ 1,150.00
HWG017	Supply and place treated timber piling for pipe support		m		
HWG018	Road / creek crossings				
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:				
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each		
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWG024	Flow Relief Structures		Each		
HWG025	EMPTY				
HWG026	Supply and construct vent stacks		each		
HWG027	Preparation of line sheets	425	each	\$ 1.00	\$ 425.00
HWG028	Acceptance testing - gravity main		m		
HWG029	Miscellaneous				
HWG000	Sub Total				\$67,625

Item No.	Item Description	Qty	Unit		Amount
					\$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		

HW0009.09	Pavers		m2			
HW0009.10	Turf		m2			
HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert \$="" min=""></insert>	Item	Lump Sum	\$ 3,400.00	\$	3,400.00
A.	TOTAL ESTIMATED CONTRACT AWARD SU	М			\$	122,855.25
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B. HW0016	PRE-CONSTRUCTION COST (Table 10)				¢	24,571.05
	Design				\$	14,914.21
HW0017 HW0018	Project Management of Design				\$ \$	14,914.21
HW0024	Land Matters				Ψ	-
ПVVUU2 4	Community Consultation				\$	39,485.26
	Sub Total(B1)				\$	11,845.58
	Pre construction contingency (30% of B	31)				51,330.84
	TOTAL PRE-CONSTRUCTION COST (B)				\$	31,330.04
c.	CONSTRUCTION COST					
	Total Estimated Contract Award Sum (A)				\$	122,855.25
HW0019	Principal Supplied Pipe (as applicable)				\$	-
HW0020	Principal Supplied Valves and Flowmeter	s (as app	licable)		\$	-
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	Timelpar supplied valves and Howinete	is (as applicable)		Τ	
HW002	Principal Supplied Fittings (as applicable	e)		\$	-
HW002	Pump Station HV Power Supply			\$	-
HW002	3 Construction Management (Table 11)			\$	5,000.00
	Sub Total (C1)				127,855.25
	Construction contingency			\$	38,356.58
	(Table 12) (30% of C1)	Preliminary Estimate			
	TOTAL CONSTRUCTION COST (C)			\$	166,211.83

TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)	\$ 217,542.66

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage G

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 3,467.00	\$ 3,467.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 2,533.60	\$ 2,533.60
HW0008	Community Consultation	Item	Lump Sum	\$ ı	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 736.50	\$ 736.50
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	940	m	\$ 12.00	\$ 11,280.00
01EVSS	Nominal DN300 PVC pipe	230	m	\$ 68.00	\$ 15,640.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
00FV03	Nominal DN150 PVC (Trench type 3)	940	m	\$ 85.40	\$ 80,276.00
01EV03	Nominal DN300 PVC (Trench type 3)	230	m	\$ 108.25	\$ 24,897.50
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 19.13	

HWG029	Miscellaneous		-		
HWG028	Acceptance testing - gravity main		m		
HWG027	Preparation of line sheets	1170	each	\$ 1.00	\$ 1,170.00
HWG026	Supply and construct vent stacks		each		
HWG025	EMPTY				
HWG024	Flow Relief Structures		Each		
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each		
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:				
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWG018	Road / creek crossings				
HWG017	Supply and place treated timber piling for pipe support		m		
HWG016	External Dewatering of trench including establishment & disestablishment		m3		
HWG015	Supply & place ballast		tonnes	\$ 90.00	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 337.50	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3		
HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 78.75	

Item No.	Item Description	Qty	Unit		Amount
					\$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		

HW0009.09	Pavers		m2			
HW0009.10	Turf		m2			
HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	
HW0012.02	Video	Item	Lump Sum		\$	
HW0012.03	CCTV	Item	Lump Sum		\$	
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 9,360.00	\$	9,360.0
٨.	TOTAL ESTIMATED CONTRACT AWARD SU	М			\$	197,360.6
3.	PRE-CONSTRUCTION COST (Table 10)					
HW0016	Design				\$	39,472.1
HW0017	Project Management of Design				\$	17,894.42
HW0018	Land Matters				\$	-
HW0024	Community Consultation				_ው	F7 000 F
	Sub Total(B1)	41			\$	57,366.5
	Pre construction contingency (30% of B	1)			\$	17,209.9
	TOTAL PRE-CONSTRUCTION COST (B)				\$	74,576.5
· ·	CONSTRUCTION COST					
	Total Estimated Contract Award Sum (A)				\$	197,360.6
HW0019	Principal Supplied Pipe (as applicable)				\$	-
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C.	CONSTRUCTION COST			
	Total Estimated Contract Award Sum (A)		\$	197,360.60
HW0019	HW0019 Principal Supplied Pipe (as applicable)			
HW0020	Principal Supplied Valves and Flowmete	ers (as applicable)	\$	-
HW0021	Principal Supplied Fittings (as applicable	2)	\$	-
HW0022	Pump Station HV Power Supply		\$	-
HW0023	Construction Management (Table 11)		\$	5,000.00
	Sub Total (C1)		\$	202,360.60
	Construction contingency		\$	60,708.18
	(Table 12) (30% of C1)	Preliminary Estimate		
	TOTAL CONSTRUCTION COST (C) \$			

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ı	TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)	\$ 337,645.29

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage H

Item No.	Item Description	Qty	Unit	R	Rate \$/Unit	Amount
						\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	3,628.00	\$ 3,628.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	4,000.00	\$ 4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	2,000.00	\$ 2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	2,614.11	\$ 2,614.11
HW0008	Community Consultation	Item	Lump Sum	\$	-	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	П	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 883.8	0 \$	883.80
HWG002	Supply all valves	Item	Lump Sum		\$	-
HWG003	Supply all fittings	Item	Lump Sum		\$	-
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:					
00FVSS	Nominal DN150 PVC pipe	1473	m	\$ 12.0	0 \$	17,676.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.					
00FV03	Nominal DN150 PVC (Trench type 3)	1323	m	\$ 85.4	0 \$	112,984.20
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR					
00FV03	Nominal DN150 PVC (Trench type 3)	150	m	\$ 136.4	0 \$	20,460.00
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR					
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				T	
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:					
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 16.8	6	
HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.0	0	

HWG000	Sub Total				,	6154,627
HWG029	Miscellaneous		İ			
HWG028	Acceptance testing - gravity main	-	m			
HWG027	Preparation of line sheets	1473	each	\$ 1.00	\$	1,473.00
HWG026	Supply and construct vent stacks		each			
HWG025	EMPTY					
HWG024	Flow Relief Structures		Each			
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$	-
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each			
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:					
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:					
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m			
HWG018	Road / creek crossings					
HWG017	Supply and place treated timber piling for pipe support		m			
HWG016	External Dewatering of trench including establishment & disestablishment	150	m3	\$ 7.67	\$	1,150.00
HWG015	Supply & place ballast		tonnes	\$ 90.00		
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3			
HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00		
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3			

Item No.	Item Description	Qty	Unit		Amount
					\$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		

HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	
HW0012.02	Video	Item	Lump Sum		\$	
HW0012.03	CCTV	Item	Lump Sum		\$	
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 11,784.00	\$	11,784.0
Α.	TOTAL ESTIMATED CONTRACT AWARD SU	M			\$	205,653.1
11	TOTAL ESTIMATED SCITTIAGE ATTAINS				Ψ	200,000.1
В.	PRE-CONSTRUCTION COST (Table 10)					
HW0016	Design				\$	41,130.6
HW0017	Project Management of Design				\$	18,226.12
HW0018	Land Matters				\$	-
HW0024	Community Consultation					
	Sub Total(B1)				\$	59,356.7
	Pre construction contingency (30% of E	31)			\$	17,807.0
	TOTAL PRE-CONSTRUCTION COST (B)				\$	77,163.7
<u></u> С.	CONSTRUCTION COST					
	Total Estimated Contract Award Sum (A)				\$	205,653.1
H\\\\0010	Principal Supplied Ding (as applicable)				\$	_

C.	CONSTRUCTION COST				
	Total Estimated Contract Award Sum (A)			\$	205,653.11
HW0019	Principal Supplied Pipe (as applicable)			\$	-
HW0020	Principal Supplied Valves and Flowmete	ers (as applicable)		\$	-
HW0021	Principal Supplied Fittings (as applicable	2)		\$	-
HW0022	Pump Station HV Power Supply			\$	-
HW0023	Construction Management (Table 11)			\$	5,000.00
	Sub Total (C1)			\$	210,653.11
	Construction contingency			\$	63,195.93
	(Table 12) (30% of C1)	Preliminary Estimate			
	TOTAL CONSTRUCTION COST (C)				

TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)	\$ 351,012.81

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage I

Item No.	Item Description	Qty	Unit	Rate \$/Unit		Amount \$		
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	21,608.00	\$	21,608.00	
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	30,000.00	\$	30,000.00	
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	30,000.00	\$	30,000.00	
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	8,000.00	\$	8,000.00	
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	18,000.00	\$	18,000.00	
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	4,000.00	\$	4,000.00	
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	11,603.85	\$	11,603.85	
HW0008	Community Consultation	Item	Lump Sum	\$	-	\$	-	

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$		
HWG001	Service Location	Item	Lump Sum	\$ 1,203.75	\$ 1,203.75		
HWG002	Supply all valves	Item	Lump Sum		\$ -		
HWG003	Supply all fittings	Item	Lump Sum		\$ -		
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:						
00FVSS	Nominal DN150 PVC pipe	1450	m	\$ 12.00	\$ 17,400.00		
01EVSS	Nominal DN300 PVC pipe	445	m	\$ 68.00	\$ 30,260.00		
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.						
00FV03	Nominal DN150 PVC (Trench type 3)	1150	m	\$ 85.40	\$ 98,210.00		
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR						
00FV03	Nominal DN150 PVC (Trench type 3)	300	m	\$ 136.40	\$ 40,920.00		
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR						
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR						
01EV03	Nominal DN300 PVC (Trench type 3)	445	m	\$ 765.25	\$ 340,536.25		
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:						
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 76.50			

HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 78.75	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3		
HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 337.50	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWG015	Supply & place ballast		tonnes	\$ 90.00	
HWG016	External Dewatering of trench including establishment & disestablishment	745	m3	\$ 677.58	\$ 504,800.28
HWG017	Supply and place treated timber piling for pipe support		m		
HWG018	Road / creek crossings				
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:				
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each		
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWG024	Flow Relief Structures		Each		
HWG025	EMPTY		Ī		
HWG026	Supply and construct vent stacks		each		
HWG027	Preparation of line sheets	1895	each	\$ 1.00	\$ 1,895.00
HWG028	Acceptance testing - gravity main		m		
HWG029	Miscellaneous				
1,114,6000					 4 005 005
HWG000	Sub Total				\$ 1,035,225

Item No.	Item Description	Qty	Unit		Amount
					\$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		

					4	
HW0009.10	Turf		m2			
HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert \$="" min=""></insert>	Item	Lump Sum	\$ 15,160.00	\$	15,160.00
					<u></u>	
Α.	TOTAL ESTIMATED CONTRACT AWARD SU	М			\$	1,173,597.13
				1		
3. HW0016	PRE-CONSTRUCTION COST (Table 10)				\$	140,831.66
HW0017	Design				\$	38,166.33
HW0017	Project Management of Design Land Matters				\$	30,100.33
HW0024					Ψ	
1100024	Community Consultation Sub Total(B1)				\$	178,997.99
	Pre construction contingency (30% of E	21\			\$	53,699.40
	TOTAL PRE-CONSTRUCTION COST (B)	21)			\$	232,697.38
	TOTALT RE-CONSTRUCTION COST (b)				· ·	,,
C.	CONSTRUCTION COST					
	Total Estimated Contract Award Sum (A)				\$	1,173,597.13
HW0019	Principal Supplied Pipe (as applicable)				\$	-
HW0020	Principal Supplied Valves and Flowmeter	rs (as appl	icable)		\$	-
HW0021	Principal Supplied Fittings (as applicable)		,		\$	-
HW0022	Pump Station HV Power Supply	•			\$	-
HW0023	Construction Management (Table 11)				\$	117,359.71
	Sub Total (C1)				\$	1,290,956.84
	Construction contingency				\$	387,287.05
	(= 11, 40) (000(f.04)				1	,

m2

HW0009.09

Pavers

(Table 12) (30% of C1)

TOTAL CONSTRUCTION COST (C)

TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)

Preliminary Estimate

1,678,243.90

1,910,941.28

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage J

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount \$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 8,111.00	\$ 8,111.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 15,000.00	\$ 15,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 15,000.00	\$ 15,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 4,855.54	\$ 4,855.54
HW0008	Community Consultation	Item	Lump Sum	\$ 1	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 1,044.00	\$ 1,044.00
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	1300	m	\$ 12.00	\$ 15,600.00
016VSS	Nominal DN225 PVC pipe	440	m	\$ 35.00	\$ 15,400.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
00FV03	Nominal DN150 PVC (Trench type 3)	1000	m	\$ 85.40	\$ 85,400.00
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
00FV03	Nominal DN150 PVC (Trench type 3)	300	m	\$ 136.40	\$ 40,920.00
016V03	Nominal DN225 PVC (Trench type 3)	440	m	\$ 150.90	\$ 66,396.00
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 30.60	

HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3		
HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWG015	Supply & place ballast		tonnes	\$ 90.00	
HWG016	External Dewatering of trench including establishment & disestablishment	740	m3	\$ 182.61	\$ 135,134.09
HWG017	Supply and place treated timber piling for pipe support		m		
HWG018	Road / creek crossings				
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:				
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each		
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWG024	Flow Relief Structures		Each		
HWG025	EMPTY				
HWG026	Supply and construct vent stacks		each		
HWG027	Preparation of line sheets	1740	each	\$ 1.00	\$ 1,740.00
HWG028	Acceptance testing - gravity main		m		
HWG029	Miscellaneous				
104/0000					Ф004 004
HWG000	Sub Total				\$361,634

Item No.	Item Description	Qty	Unit		Amount
					\$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		

HW0009.09	Pavers		m2			
HW0009.10	Turf		m2			
HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	
HW0012.02	Video	Item	Lump Sum		\$	
HW0012.03	CCTV	Item	Lump Sum		\$	
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 13,920.00	\$	13,920.0
λ.	TOTAL ESTIMATED CONTRACT AWARD SUI	M			\$	448,520.63
3.	PRE-CONSTRUCTION COST (Table 10)					
HW0016	Design				\$	89,704.13
HW0017	Project Management of Design				\$	27,940.83
HW0018	Land Matters				\$	-
HW0024	Community Consultation					447.044.0
	Sub Total(B1)				\$	117,644.9
	Pre construction contingency (30% of B	1)			\$	35,293.4
	TOTAL PRE-CONSTRUCTION COST (B)				\$	152,938.4
	CONSTRUCTION COST					
	Total Estimated Contract Award Sum (A)				\$	448,520.6
HW0019	Principal Supplied Pipe (as applicable)				\$	-
11110000	Trincipal Supplied Tipe (as applicable)	,			ф.	

\$

\$

44,852.06

Principal Supplied Valves and Flowmeters (as applicable)

Principal Supplied Fittings (as applicable)

Pump Station HV Power Supply

HW0020

HW0021

HW0022

HW0023

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage K

Item No.	Item Description	Qty	Unit	R	tate \$/Unit	Amount
						\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	2,611.00	\$ 2,611.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	4,000.00	\$ 4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	2,000.00	\$ 2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	2,105.60	\$ 2,105.60
HW0008	Community Consultation	Item	Lump Sum	\$	1	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 648.00	\$ 648.00
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	1080	m	\$ 12.00	\$ 12,960.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
00FV03	Nominal DN150 PVC (Trench type 3)	1080	m	\$ 85.40	\$ 92,232.00
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3		

HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWG015	Supply & place ballast		tonnes	\$ 90.00	
HWG016	External Dewatering of trench including establishment & disestablishment		m3		
HWG017	Supply and place treated timber piling for pipe support		m		
HWG018	Road / creek crossings				
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:				
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each		
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWG024	Flow Relief Structures		Each		
HWG025	EMPTY				
HWG026	Supply and construct vent stacks		each		
HWG027	Preparation of line sheets	1080	each	\$ 1.00	\$ 1,080.00
HWG028	Acceptance testing - gravity main		m		
HWG029	Miscellaneous				
HWG000	Sub Total				\$ 106,920

Item No.	Item Description	Qty	Unit		Amount
					\$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HW0009.11	Grass seeding		m2		
HW0009.12	Hydromulch //11662\Documents\Projects\North Tuncurry Developme		m2		

HW0010 Extra over item for Excavation in rock and disposal of excess excavated material HW0011 Acid sulphate soil HW0011.01 Initial testing for acid sulphate soils and prepare and submit report HW0011.02 Establish treatment facility HW0011.03 Handling, treatment and testing of acid sulphate soils HW0011.04 Disposal off site of acid sulphate soil HW0012 Preconstruction record	
HW0011 Acid sulphate soil HW0011.01 Initial testing for acid sulphate soils and prepare and submit report HW0011.02 Establish treatment facility HW0011.03 Handling, treatment and testing of acid sulphate soils HW0011.04 Disposal off site of acid sulphate soil HW0012 Preconstruction record	
HW0011.01 Initial testing for acid sulphate soils and prepare and submit report HW0011.02 Establish treatment facility HW0011.03 Handling, treatment and testing of acid sulphate soils HW0011.04 Disposal off site of acid sulphate soil HW0012 Preconstruction record	
prepare and submit report HW0011.02 Establish treatment facility HW0011.03 Handling, treatment and testing of acid sulphate soils HW0011.04 Disposal off site of acid sulphate soil HW0012 Preconstruction record	
HW0011.02 Establish treatment facility Item HW0011.03 Handling, treatment and testing of acid sulphate soils m3 HW0011.04 Disposal off site of acid sulphate soil tonne HW0012 Preconstruction record	
HW0011.03 Handling, treatment and testing of acid sulphate soils HW0011.04 Disposal off site of acid sulphate soil tonne HW0012 Preconstruction record	
sulphate soils HW0011.04 Disposal off site of acid sulphate soil tonne HW0012 Preconstruction record	
HW0012 Preconstruction record	
HW0012.01 Photographic Item Lump Sum \$	
HW0012.02 Video Item Lump Sum \$	
HW0012.03 CCTV Item Lump Sum \$	
HW0013 Work as Constructed Information <insert min<="" td=""><td>8,640.0</td></insert>	8,640.0
	153,276.6
A. TOTAL ESTIMATED CONTRACT AWARD SUM \$	
A. TOTAL ESTIMATED CONTRACT AWARD SUM \$	
B. PRE-CONSTRUCTION COST (Table 10)	30,655.3
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design \$	30,655.3 16,131.0
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design HW0017 Project Management of Design \$	
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design HW0017 Project Management of Design HW0018 Land Matters \$	
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design \$ HW0017 Project Management of Design \$ HW0018 Land Matters \$ HW0024 Community Consultation	
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design HW0017 Project Management of Design HW0018 Land Matters HW0024 Community Consultation Sub Total(B1) Sub Total(B1)	16,131.0 -
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design \$ HW0017 Project Management of Design \$ HW0018 Land Matters \$ HW0024 Community Consultation \$ Sub Total(B1) \$ Pre construction contingency (30% of B1) \$	16,131.0 - 46,786.3
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design \$ HW0017 Project Management of Design \$ HW0018 Land Matters \$ HW0024 Community Consultation \$ Sub Total(B1) \$ Pre construction contingency (30% of B1) \$	16,131.0 - 46,786.3 14,035.9
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design HW0017 Project Management of Design HW0018 Land Matters HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	16,131.0 - 46,786.3 14,035.9
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design HW0017 Project Management of Design HW0018 Land Matters HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) S C. CONSTRUCTION COST	16,131.0 - 46,786.3 14,035.9 60,822.3
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design HW0017 Project Management of Design HW0018 Land Matters HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A)	16,131.0 - 46,786.3 14,035.9
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design HW0017 Project Management of Design Land Matters Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable)	16,131.0 - 46,786.3 14,035.9 60,822.3
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design \$ HW0017 Project Management of Design \$ HW0018 Land Matters \$ HW0024 Community Consultation Sub Total(B1) \$ Pre construction contingency (30% of B1) \$ TOTAL PRE-CONSTRUCTION COST (B) \$ C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ HW0019 Principal Supplied Pipe (as applicable) \$ HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$	16,131.0 - 46,786.3 14,035.9 60,822.3
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design HW0017 Project Management of Design Land Matters Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable)	16,131.0 - 46,786.3 14,035.9 60,822.3

C.	CONSTRUCTION COST			
	Total Estimated Contract Award Sum (A)		\$	153,276.60
HW0019	Principal Supplied Pipe (as applicable)		\$	-
HW0020	Principal Supplied Valves and Flowmete	rs (as applicable)	\$	-
HW0021	Principal Supplied Fittings (as applicable	2)	\$	-
HW0022	Pump Station HV Power Supply		\$	-
HW0023	Construction Management (Table 11)		\$	5,000.00
	Sub Total (C1)		\$	158,276.60
	Construction contingency		\$	47,482.98
	(Table 12) (30% of C1)	Preliminary Estimate		
	TOTAL CONSTRUCTION COST (C)		\$	205,759.58

TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)	\$	266,581.88
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PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage L

Item No.	Item Description	Qty	Unit	F	Rate \$/Unit	Amount
						\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	4,126.00	\$ 4,126.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	12,000.00	\$ 12,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	12,000.00	\$ 12,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	2,863.20	\$ 2,863.20
HW0008	Community Consultation	Item	Lump Sum	\$	-	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 468.00	\$ 468.00
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	555	m	\$ 12.00	\$ 6,660.00
01EVSS	Nominal DN300 PVC pipe	180	m	\$ 68.00	\$ 12,240.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
00FV03	Nominal DN150 PVC (Trench type 3)	555	m	\$ 136.40	\$ 75,702.00
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
01EV03	Nominal DN300 PVC (Trench type 3)	180	m	\$ 408.25	\$ 73,485.00
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 57.38	

HWG000	Sub Total					\$ 170,440
HWG029	Miscellaneous					
HWG028	Acceptance testing - gravity main	-	m			
HWG027	Preparation of line sheets	735	each	\$	1.00	\$ 735.00
HWG026	Supply and construct vent stacks		each			
HWG025	EMPTY					
HWG024	Flow Relief Structures		Each			
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$	-	\$ -
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each			
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:					
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:					
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m			
HWG018	pipe support Road / creek crossings		 	\vdash		
HWG017	Supply and place treated timber piling for		m			
HWG016	External Dewatering of trench including establishment & disestablishment	180	m3	\$	6.39	\$ 1,150.00
HWG015	place and compact aggregate Supply & place ballast		tonnes	\$	90.00	
HWG014	(14:1) backfill Extra over rate for installation for Supply,		m3			
HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement		m3	\$	337.50	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3			
HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$	78.75	

Item No.	Item Description	Qty	Unit		Amount
					\$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		

#W0009.12 Hydromulch m2 HW0010 Extra over item for Excavation in rock and disposal of excess excavated material m3 HW0011 Acid sulphate soil HW0011.01 Initial testing for acid sulphate soils and prepare and submit report perpare and submit report lest prepare and submit report m4 HW0011.02 Establish treatment facility letem m3 HW0011.03 Handling, treatment and testing of acid sulphate soil tonne letwootic. HW0011.04 Preconstruction record letem Lump Sum \$ HW0012.01 Photographic letem Lump Sum \$ HW0012.02 Video letem Lump Sum \$ HW0012.03 CCTV letem Lump Sum \$ HW0013 Work as Constructed Information <insert \$="" (30%="" (b)="" (table="" -="" 10)="" 19,492.3="" 20,086.2="" 47,461.8="" 87,040.4<="" b1)="" community="" construction="" consultation="" contingency="" cost="" design="" e-construction="" for="" hw0016="" hw0017="" hw0018="" land="" letem="" lump="" management="" matters="" min="" of="" pre="" pre-construction="" project="" sub="" sum="" th="" total="" total(b1)=""><th>LIM/0000 10</th><th></th><th></th><th></th><th></th><th></th><th></th></insert>	LIM/0000 10						
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HW0011 Extra over item for Excavation in rock and disposal of excess excavated material m3 m3 m3 m3 m3 m3 m4 m4	HW0009.11	Grass seeding		m2			
disposal of excess excavated material HW0011.01 Acid sulphate soil W0011.02 Establish treatment facility Item W0011.03 Handling, treatment and testing of acid sulphate soil m3 sulphate soils m3 W0011.04 Disposal off site of acid sulphate soil tonne HW0012.01 Preconstruction record W0012.02 Video Item Lump Sum \$ W0012.03 CCTV Item Lump Sum \$ W0012.03 CCTV Item Lump Sum \$ W0012.03 CCTV Item Lump Sum \$ W0012.03 Work as Constructed Information <insert \$="" (30%="" (a)="" (as="" (b)="" (tabl<="" (table="" -="" 10)="" 11)="" 19,492.3="" 20,086.2="" 237,309.2="" 47,461.8="" 5,000.00="" 66,954.2="" 87,040.4="" <insert="" applicable)="" as="" award="" b1)="" cctv="" constructed="" construction="" contingency="" contract="" cost="" design="" estimated="" fittings="" for="" fre="" frincipal="" hw00019="" hw00020="" hw00021="" hw00022="" hw00023="" hw0016="" hw0017="" hw0018="" information="" item="" land="" lump="" management="" matters="" min="" of="" pipe="" pre-construction="" principal="" project="" span="" struction="" sum="" supplied="" td="" total="" vork="" w0012.03="" w0012.04="" w0012.05="" w0014="" =""><td>HW0009.12</td><td>Hydromulch</td><td></td><td>m2</td><td></td><td></td><td></td></insert>	HW0009.12	Hydromulch		m2			
Initial testing for acid sulphate soils and prepare and submit report	HW0010			m3			
prepare and submit report	HW0011	Acid sulphate soil					
#W0011.03 Handling, treatment and testing of acid sulphate soils tonne HW0011.04 Disposal off site of acid sulphate soil tonne HW0012.01 Preconstruction record HW0012.01 Photographic Item Lump Sum \$ \$ \$ \$ \$ \$ \$ \$ \$	HW0011.01	·		per test			
Sulphate soils Disposal off site of acid sulphate soil tonne	HW0011.02	Establish treatment facility		Item			
HW0012 Preconstruction record	HW0011.03			m3			
W0012.01 Photographic Item Lump Sum \$ \$ \$ \$ \$ \$ \$ \$ \$	HW0011.04	Disposal off site of acid sulphate soil		tonne			
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HW0013 Work as Constructed Information <insert \$="" \$<="" 5,880.00="" item="" lump="" min="" sum="" td=""><td>HW0012.02</td><td>Video</td><td>Item</td><td>Lump Sum</td><td></td><td>\$</td><td>-</td></insert>	HW0012.02	Video	Item	Lump Sum		\$	-
TOTAL ESTIMATED CONTRACT AWARD SUM PRE-CONSTRUCTION COST (Table 10) HW0016 Design \$ 47,461.8 HW0017 Project Management of Design \$ 19,492.3 HW0018 Land Matters \$ - Sub Total(B1) \$ 66,954.2 Pre construction contingency (30% of B1) \$ 20,086.2 TOTAL PRE-CONSTRUCTION COST (B) \$ 87,040.4 CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 237,309.2 HW0019 Principal Supplied Pipe (as applicable) \$ - HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ - HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) \$ 5,000.0	HW0012.03	CCTV	Item	Lump Sum		\$	-
PRE-CONSTRUCTION COST (Table 10) HW0016 Design \$ 47,461.8 HW0017 Project Management of Design \$ 19,492.3 HW0018 Land Matters \$ - Community Consultation Sub Total(B1) \$ 66,954.2 Pre construction contingency (30% of B1) \$ 20,086.2 TOTAL PRE-CONSTRUCTION COST (B) \$ 87,040.4 CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 237,309.2 HW0019 Principal Supplied Pipe (as applicable) \$ - HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ - HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - HW0023 Construction Management (Table 11) \$ 5,000.0	HW0013		Item	Lump Sum	\$ 5,880.00	\$	5,880.0
HW0016 Design HW0017 Project Management of Design \$ 19,492.3 HW0018 Land Matters \$ Sub Total(B1) Pre construction contingency (30% of B1) **TOTAL PRE-CONSTRUCTION COST** Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) \$ 47,461.8 \$ 47,461.8 \$ 19,492.3 \$ 20,086.2 \$ 87,040.4		•					
HW0017 Project Management of Design Land Matters Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) Some applicable of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of the word of th	A .		М			\$	237,309.20
HW0018 Land Matters HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) \$ 66,954.2 \$ 66,954.2 \$ 87,040.4	A. 3.	TOTAL ESTIMATED CONTRACT AWARD SU	M			\$	237,309.20
HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) **TOTAL PRE-CONSTRUCTION COST** Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) **5,000.00	3.	TOTAL ESTIMATED CONTRACT AWARD SU PRE-CONSTRUCTION COST (Table 10)	М				237,309.20 47,461.84
Sub Total(B1) \$ 66,954.2 Pre construction contingency (30% of B1) \$ 20,086.2 TOTAL PRE-CONSTRUCTION COST (B) \$ 87,040.4 CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 237,309.2 HW0019 Principal Supplied Pipe (as applicable) \$ - HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ - HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - HW0023 Construction Management (Table 11) \$ 5,000.0	3. HW0016	TOTAL ESTIMATED CONTRACT AWARD SU PRE-CONSTRUCTION COST (Table 10) Design	M			\$	47,461.84
Pre construction contingency (30% of B1) **TOTAL PRE-CONSTRUCTION COST (B) **CONSTRUCTION COST** Total Estimated Contract Award Sum (A) **HW0019** Principal Supplied Pipe (as applicable) HW0020** Principal Supplied Valves and Flowmeters (as applicable) **HW0021** Principal Supplied Fittings (as applicable) **HW0022** Pump Station HV Power Supply **HW0023** Construction Management (Table 11) **5,000.00	3. HW0016 HW0017	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design	M			\$	47,461.84
TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) \$ 87,040.4	3. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters	M			\$	47,461.84
CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 237,309.2 HW0019 Principal Supplied Pipe (as applicable) \$ - HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ - HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - HW0023 Construction Management (Table 11) \$ 5,000.0	3. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation	M			\$ \$	47,461.84 19,492.37 -
Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) \$ 237,309.2 \$ -	3. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1)				\$ \$ \$	
Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) \$ 237,309.2 \$ -	3. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E				\$ \$ \$ \$	47,461.84 19,492.37 - 66,954.21
HW0019 Principal Supplied Pipe (as applicable) \$ - HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ - HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - HW0023 Construction Management (Table 11) \$ 5,000.0	3. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E				\$ \$ \$ \$	47,461.84 19,492.37 - 66,954.21 20,086.26
HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) \$ 5,000.0	3. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E				\$ \$ \$ \$ \$	47,461.84 19,492.37 - 66,954.21 20,086.26 87,040.47
HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - HW0023 Construction Management (Table 11) \$ 5,000.0	3. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A)				\$ \$ \$ \$ \$ \$	47,461.84 19,492.37 - 66,954.21 20,086.26
HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) \$ 5,000.0	3. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable)	31)	icable		\$ \$ \$ \$ \$ \$	47,461.8 ² 19,492.37 - 66,954.2 ² 20,086.26 87,040.47
HW0023 Construction Management (Table 11) \$ 5,000.0	HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter	31) rs (as appl	icable)		* * * * * * * * * * * * * * * * * * * *	47,461.84 19,492.37 - 66,954.21 20,086.26 87,040.47
	HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable)	31) rs (as appl	icable)		***	47,461.84 19,492.37 - 66,954.21 20,086.26 87,040.47
	HW0016 HW0017 HW0018 HW0024 HW0020 HW0020 HW0021 HW0022	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply	31) rs (as appl	icable)		***	47,461.84 19,492.37 - 66,954.21 20,086.26 87,040.47 237,309.20 - -

m2

HW0009.09

Pavers

TOTAL CONSTRUCTION COST (C)	\$ 315,001.96
TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)	\$ 402,042.43

Preliminary Estimate

Sub Total (C1)

Construction contingency

(Table 12) (30% of C1)

\$

242,309.20

72,692.76

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage VC

Item No.	Item Description	Qty	Unit	Rate \$/Unit		Amount
						\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	4,378.00	\$ 4,378.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	12,000.00	\$ 12,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	12,000.00	\$ 12,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	2,989.11	\$ 2,989.11
HW0008	Community Consultation	Item	Lump Sum	\$	-	\$ -

Item	Construction of Sewer Gravity Mains Qty Unit	Qty	Rate \$/Unit	Amount \$		
HWG001	Service Location	Item	Lump Sum	\$ 456.30	\$ 456.30	
HWG002	Supply all valves	Item	Lump Sum		\$ -	
HWG003	Supply all fittings	Item	Lump Sum		\$ -	
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:					
00FVSS	Nominal DN150 PVC pipe	573	m	\$ 12.00	\$ 6,876.00	
01EVSS	Nominal DN300 PVC pipe	150	m	\$ 68.00	\$ 10,200.00	
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.					
00FV03	Nominal DN150 PVC (Trench type 3)	573	m	\$ 85.40	\$ 48,934.20	
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR					
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR					
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR					
01EV03	Nominal DN300 PVC (Trench type 3)	150	m	\$ 765.25	\$ 114,787.50	
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:					
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 76.50		

HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 78.75	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3		
HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 337.50	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWG015	Supply & place ballast		tonnes	\$ 90.00	
HWG016	External Dewatering of trench including establishment & disestablishment	150	m3	\$ 7.67	\$ 1,150.00
HWG017	Supply and place treated timber piling for pipe support		m		
HWG018	Road / creek crossings				
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:				
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each		
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWG024	Flow Relief Structures		Each		
HWG025	EMPTY				
HWG026	Supply and construct vent stacks		each		
HWG027	Preparation of line sheets	723	each	\$ 1.00	\$ 723.00
HWG028	Acceptance testing - gravity main		m		
HWG029	Miscellaneous				
HWG000	Sub Total				\$ 183,127

Item No.	Item Description	Qty	Unit		Amount
					\$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		

HW0009.09	Pavers		m2			
HW0009.10	Turf		m2		_	
HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 5,784.00	\$	5,784.00
A.	TOTAL ESTIMATED CONTRACT AWARD SU	M			\$	250,278.11
B.	PRE-CONSTRUCTION COST (Table 10)					
HW0016	Design				\$	50,055.62
HW0017	Project Management of Design				\$	20,011.12
HW0018	Land Matters				\$	-
HW0024	Community Consultation					70 000 75
	Sub Total(B1)	\			\$	70,066.75
	Pre construction contingency (30% of E	31)			\$	21,020.02
	TOTAL PRE-CONSTRUCTION COST (B)				\$	91,086.77
C.	CONSTRUCTION COST				¢.	250 270 44
HW0019	Total Estimated Contract Award Sum (A)				\$ \$	250,278.11
ПИИОГІЭ	Principal Supplied Pipe (as applicable)				Ψ	-

Construction contingency (Table 12) (30% of C1)	Preliminary Estimate	\$ 82,591.78
TOTAL CONSTRUCTION COST (C)	\$ 357,897.70	
TOTAL PRELIMINARY PROJECT ESTIMAT	\$ 448,984.47	

\$

25,027.81

275,305.92

Principal Supplied Valves and Flowmeters (as applicable)

Sub Total (C1)

Principal Supplied Fittings (as applicable)

Pump Station HV Power Supply

Construction Management (Table 11)

HW0020

HW0021

HW0022

HW0023

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage M

Item No.	Item Description	Qty	Unit	F	Rate \$/Unit	Amount
						\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	2,975.00	\$ 2,975.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	4,000.00	\$ 4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	2,000.00	\$ 2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	2,287.50	\$ 2,287.50
HW0008	Community Consultation	Item	Lump Sum	\$	1	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 750.00	\$ 750.00
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	1250	m	\$ 12.00	15,000.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
00FV03	Nominal DN150 PVC (Trench type 3)	1250	m	\$ 85.40	\$ 106,750.00
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3		

HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWG015	Supply & place ballast		tonnes	\$ 90.00	
HWG016	External Dewatering of trench including establishment & disestablishment		m3		
HWG017	Supply and place treated timber piling for pipe support		m		
HWG018	Road / creek crossings				
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:				
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each		
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWG024	Flow Relief Structures		Each		
HWG025	EMPTY				
HWG026	Supply and construct vent stacks		each		
HWG027	Preparation of line sheets	1250	each	\$ 1.00	\$ 1,250.00
HWG028	Acceptance testing - gravity main		m		
HWG029	Miscellaneous				
HWG000	Sub Total				\$ 123,750

Item No.	Item Description	Qty	Unit			Amount
						\$
HW0009	Restoration - Pipelines:					
HW0009.01	Concrete kerb & gutter	0	m	\$	110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$	178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$	220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$	155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$	117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$	69.00	\$ -
HW0009.07	Bitumen pavement		m2			
HW0009.08	AC pavement		m2			
HW0009.09	Pavers		m2			
HW0009.10	Turf		m2			
HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2	SIGN C - 3		

HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	
HW0012.02	Video	Item	Lump Sum		\$	
HW0012.03	CCTV	Item	Lump Sum		\$	
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 10,000.00	\$	10,000.
Α.	TOTAL ESTIMATED CONTRACT AWARD SU	M			\$	172.012.5
A .	TOTAL ESTIMATED CONTRACT AWARD SU	М			\$	172,012.5
	TOTAL ESTIMATED CONTRACT AWARD SU PRE-CONSTRUCTION COST (Table 10)	M			\$	172,012.5
		M			\$	
3.	PRE-CONSTRUCTION COST (Table 10)	M				34,402.5
3. HW0016	PRE-CONSTRUCTION COST (Table 10) Design	M			\$	34,402.5
3. HW0016 HW0017	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design	M			\$	172,012.5 34,402.5 16,880.5
HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters	M			\$	34,402.5 16,880.5 - 51,283.0
3. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation				\$ \$	34,402.5 16,880.5 - 51,283.0 15,384.9
3. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1)				\$ \$ \$	34,402.5
3. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E				\$ \$ \$	34,402.5 16,880.5 - 51,283.0 15,384.9
3. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E				\$ \$ \$	34,402.5 16,880.5 - 51,283.0 15,384.9
3. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E				\$ \$ \$ \$	34,402.5 16,880.5 - 51,283.0 15,384.9 66,667.9

C.	CONSTRUCTION COST				
	Total Estimated Contract Award Sum (A)			\$	172,012.50
HW0019	Principal Supplied Pipe (as applicable)				-
HW0020	Principal Supplied Valves and Flowmeters (as applicable)				-
HW0021	Principal Supplied Fittings (as applicable)				-
HW0022					-
HW0023	Construction Management (Table 11)			\$	5,000.00
	Sub Total (C1)			\$	177,012.50
	Construction contingency			\$	53,103.75
	(Table 12) (30% of C1) Preliminary Estimate				
	TOTAL CONSTRUCTION COST (C)				230,116.25

TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)	\$	296,784.15
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PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage N

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 5,231.00	\$ 5,231.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 27,000.00	\$ 27,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 6,000.00	\$ 6,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 3,415.60	\$ 3,415.60
HW0008	Community Consultation	Item	Lump Sum	\$ 1	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 627.75	\$ 627.75
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	885	m	\$ 12.00	\$ 10,620.00
016VSS	Nominal DN225 PVC pipe	130	m	\$ 35.00	\$ 4,550.00
01EVSS	Nominal DN300 PVC pipe	25	m	\$ 68.00	\$ 1,700.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
00FV03	Nominal DN150 PVC (Trench type 3)	485	m	\$ 85.40	\$ 41,419.00
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
00FV03	Nominal DN150 PVC (Trench type 3)	400	m	\$ 136.40	\$ 54,560.00
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
016V03	Nominal DN225 PVC (Trench type 3)	130	m	\$ 377.40	\$ 49,062.00
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
01EV03	Nominal DN300 PVC (Trench type 3)	25	m	\$ 765.25	\$ 19,131.25
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				

				=	
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 76.50	
HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 78.75	
	Extra over rate for installation to supply, place & compact non cohesive material.		m3		
HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 337.50	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWG015	Supply & place ballast		tonnes	\$ 90.00	
HWG016	External Dewatering of trench including establishment & disestablishment	555	m3	\$ 46.00	\$ 25,530.00
HWG017	Supply and place treated timber piling for pipe support		m		
HWG018	Road / creek crossings				
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:				
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each		
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWG024	Flow Relief Structures		Each		
HWG025	EMPTY				
HWG026	Supply and construct vent stacks		each		
HWG027	Preparation of line sheets	1040	each	\$ 1.00	\$ 1,040.00
HWG028	Acceptance testing - gravity main		m		
HWG029	Miscellaneous				
HWG000	Sub Total				\$208,240

Item No.	Item Description	Qty	Unit		Am	ount
						\$
HW0009	Restoration - Pipelines:					
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$	-
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$	-
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$	-
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$	-
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$	-
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$	-

11000003.07	Bitamon pavomont		1112				
HW0009.08	AC pavement		m2				
HW0009.09	Pavers		m2				
HW0009.10	Turf		m2				
HW0009.11	Grass seeding		m2				
HW0009.12	Hydromulch		m2				
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3				
HW0011	Acid sulphate soil						
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test				
HW0011.02	Establish treatment facility		Item				
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3				
HW0011.04	Disposal off site of acid sulphate soil		tonne				
HW0012	Preconstruction record						
HW0012.01	Photographic	Item	Lump Sum			\$	-
HW0012.02	Video	Item	Lump Sum			\$	-
HW0012.03	CCTV	Item	Lump Sum			\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$	8,320.00	\$	8,320.00
A .	TOTAL ESTIMATED CONTRACT AWARD SU	M				\$	294,206.60
3.	PRE-CONSTRUCTION COST (Table 10)						
HW0016	Design					\$	58,841.32
HW0017	Project Management of Design					\$	21,768.26
HW0018	Land Matters					\$	-
HW0024	Community Consultation						
	Sub Total(B1)					\$	80,609.58
	Pre construction contingency (30% of B	1)				\$	24,182.88
	TOTAL PRE-CONSTRUCTION COST (B)					\$	104,792.46
: .	CONSTRUCTION COST					¢	294,206.60
⊔\ \/∩∩10	Total Estimated Contract Award Sum (A)					\$	∠ ⊍+ ,∠∪∪.0U
HW0019 HW0020	Principal Supplied Pipe (as applicable)		Paralel A			\$ \$	-
HW0020	Principal Supplied Valves and Flowmeter	¢	-				
HVV0021	Principal Supplied Fittings (as applicable)		Ψ	-			

Bitumen pavement

HW0009.07

HW0022

HW0023

Pump Station HV Power Supply

Construction contingency

(Table 12) (30% of C1)

Construction Management (Table 11)

TOTAL CONSTRUCTION COST (C)	\$ 420,715.44
TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)	\$ 525,507.90

Preliminary Estimate

Sub Total (C1)

\$

29,420.66

323,627.26

97,088.18

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage O

Item No.	Item Description	Qty	Unit	Rate \$/Unit		Amount \$	
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	4,143.00	\$	4,143.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	12,000.00	\$	12,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	12,000.00	\$	12,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	4,000.00	\$	4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	9,000.00	\$	9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	2,000.00	\$	2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	2,871.43	\$	2,871.43
HW0008	Community Consultation	Item	Lump Sum	\$	-	\$	-

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 630.00	\$ 630.00
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	1050	m	\$ 12.00	\$ 12,600.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
00FV03	Nominal DN150 PVC (Trench type 3)	550	m	\$ 85.40	\$ 46,970.00
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
00FV03	Nominal DN150 PVC (Trench type 3)	500	m	\$ 136.40	\$ 68,200.00
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 22.59	
HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	

HWG000	Sub Total					\$183,743
HWG029	Miscellaneous		Î	Ī		
HWG028	Acceptance testing - gravity main		m			
HWG027	Preparation of line sheets	1050	each	\$	1.00	\$ 1,050.00
HWG026	Supply and construct vent stacks		each			
HWG025	EMPTY					
HWG024	Flow Relief Structures		Each			
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$	-	\$ -
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each			
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:					
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:					
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m			
HWG018	Road / creek crossings					
HWG017	Supply and place treated timber piling for pipe support		m			
HWG016	External Dewatering of trench including establishment & disestablishment	500	m3	\$	108.59	\$ 54,292.86
HWG015	Supply & place ballast		tonnes	\$	90.00	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3			
HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$	270.00	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3			

Item No.	Item Description	Qty	Unit		Amount
					\$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2	_	
HW0009.10	Turf		m2		

HW0009.11	Grass seeding		m2				
HW0009.12	Hydromulch		m2				
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3				
HW0011	Acid sulphate soil						
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test				
HW0011.02	Establish treatment facility		Item				
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3				
HW0011.04	Disposal off site of acid sulphate soil		tonne				
HW0012	Preconstruction record						
HW0012.01	Photographic	Item	Lump Sum			\$	-
HW0012.02	Video	Item	Lump Sum			\$	-
HW0012.03	CCTV	Item	Lump Sum			\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$	8,400.00	\$	8,400.00
A.	TOTAL ESTIMATED CONTRACT AWARD SU	JM				\$	238,157.29
В.	PRE-CONSTRUCTION COST (Table 10)						
HW0016	Design					\$	47,631.46
HW0017	Project Management of Design					\$	19,526.29
HW0018	Land Matters					\$	-
HW0024	Community Consultation						
	Sub Total(B1)					\$	67,157.75
	Pre construction contingency (30% of I	B1)				\$	20,147.32
	TOTAL PRE-CONSTRUCTION COST (B)					\$	87,305.07
C.	CONSTRUCTION COST						
	Total Estimated Contract Award Sum (A)					\$	238,157.29
HW0019	Principal Supplied Pipe (as applicable)					\$ \$	-
HW0020	Principal Supplied Valves and Flowmeters (as applicable)						
HW0021	Timelpar supplied Tittings (as applied bie)						
HW0022	Pump Station HV Power Supply					\$	-
HW0023	Construction Management (Table 11)					\$	5,000.00
	Sub Total (C1)					\$	243,157.29
	Construction contingency					\$	72,947.19
	(Table 12) (30% of C1)	Prelimi	nary Estimate				
	TOTAL CONSTRUCTION COST (C)					\$	316,104.47

TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)

403,409.55

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage P

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 4,216.00	\$ 4,216.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 2,000.00	\$ 2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 2,907.94	\$ 2,907.94
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$	
HWG001	Service Location	Item	Lump Sum	\$ 654.00	\$ 654.00	
HWG002	Supply all valves	Item	Lump Sum		\$ -	
HWG003	Supply all fittings	Item	Lump Sum		\$ -	
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:					
00FVSS	Nominal DN150 PVC pipe	1090	m	\$ 12.00	\$ 13,080.00	
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.					
00FV03	Nominal DN150 PVC (Trench type 3)	590	m	\$ 85.40	\$ 50,386.00	
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR					
00FV03	Nominal DN150 PVC (Trench type 3)	500	m	\$ 136.40	\$ 68,200.00	
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR					
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR					
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:					
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 22.32		
HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00		

HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3			
HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$	270.00	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3			
HWG015	Supply & place ballast		tonnes	\$	90.00	
HWG016	External Dewatering of trench including establishment & disestablishment	500	m3	\$	107.33	\$ 53,663.76
HWG017	Supply and place treated timber piling for pipe support		m			
HWG018	Road / creek crossings					
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m			
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:					
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:					
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each			
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$	-	\$ -
HWG024	Flow Relief Structures		Each			
HWG025	EMPTY					
HWG026	Supply and construct vent stacks		each	ĺ		
HWG027	Preparation of line sheets	1090	each	\$	1.00	\$ 1,090.00
HWG028	Acceptance testing - gravity main		m			
HWG029	Miscellaneous					
HWG000	Sub Total					\$187,074

Item No.	Item Description	Qty	Unit		Amount
					\$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		

HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum			\$ -
HW0012.02	Video	Item	Lump Sum			\$ -
HW0012.03	CCTV	Item	Lump Sum			\$ -
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$	8,720.00	\$ 8,720.00
A.	TOTAL ESTIMATED CONTRACT AWARD SU	IM				\$ 241,917.70
В.	PRE-CONSTRUCTION COST (Table 10)					
HW0016	Design					\$ 48,383.54
HW0017	Project Management of Design					\$ 19,676.71
HW0018	Land Matters					\$ -
HW0024	Community Consultation					
	Sub Total(B1)					\$ 68,060.25
	Pre construction contingency (30% of E	31)				\$ 20,418.07
	TOTAL PRE-CONSTRUCTION COST (B)					\$ 88,478.32
c.	CONSTRUCTION COST					
	Total Estimated Contract Award Sum (A)					\$ 241,917.70
HW0019	Principal Supplied Pipe (as applicable)					\$ -
HW0020	Principal Supplied Valves and Flowmeter	rs (as appl	icable)			\$ -
HW0021	Principal Supplied Fittings (as applicable)		\$ -			
HW0022	Pump Station HV Power Supply	\$ -				
HW0023	Construction Management (Table 11)	\$ 5,000.00				
	Sub Total (C1)		\$ 246,917.70			
	Construction contingency					\$ 74,075.31
	(Table 12) (30% of C1)	Prelimi	nary Estimate			,
	TOTAL CONSTRUCTION COST (C)		, ,	_		220 002 04

TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)

320,993.01

409,471.33

TOTAL CONSTRUCTION COST (C)

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage Q

Item No.	Item Description	Qty	Unit	ı	Rate \$/Unit	Amount
						\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	10,672.00	\$ 10,672.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	15,000.00	\$ 15,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	15,000.00	\$ 15,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	4,000.00	\$ 4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	2,000.00	\$ 2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	6,135.90	\$ 6,135.90
HW0008	Community Consultation	Item	Lump Sum	\$	-	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit		Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$	403.20	\$ 403.20
HWG002	Supply all valves	Item	Lump Sum	Т		\$ -
HWG003	Supply all fittings	Item	Lump Sum			\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:					
00FVSS	Nominal DN150 PVC pipe	672	m	\$	12.00	\$ 8,064.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.					
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR					
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR					
00FV03	Nominal DN150 PVC (Trench type 3)	672	m	\$	343.40	\$ 230,764.80
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR					
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:					
HWG010	Extra over rate for installation for Additional compaction		m3	\$	45.90	
HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$	63.00	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3			

HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWG015	Supply & place ballast		tonnes	\$ 90.00	
HWG016	External Dewatering of trench including establishment & disestablishment	672	m3	\$ 406.71	\$ 273,310.00
HWG017	Supply and place treated timber piling for pipe support		m		
HWG018	Road / creek crossings				
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:				
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each		
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWG024	Flow Relief Structures		Each		
HWG025	EMPTY				
HWG026	Supply and construct vent stacks		each		
HWG027	Preparation of line sheets	672	each	\$ 1.00	\$ 672.00
HWG028	Acceptance testing - gravity main		m		
HWG029	Miscellaneous				
HWG000	Sub Total				\$513,214

Item No.	Item Description	Qty	Unit			Amount
						\$
HW0009	Restoration - Pipelines:					
HW0009.01	Concrete kerb & gutter	0	m	\$	110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$	178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$	220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$	155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$	117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$	69.00	\$ -
HW0009.07	Bitumen pavement		m2			
HW0009.08	AC pavement		m2			
HW0009.09	Pavers		m2			
HW0009.10	Turf		m2			
HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2	SIGN C - 3		

HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 5,376.00	\$	5,376.00
A.	TOTAL ESTIMATED CONTRACT AWARD SU	М			\$	580,397.90
В.	PRE-CONSTRUCTION COST (Table 10)					
HW0016	Design				\$	87,059.69
HW0017	Project Management of Design				\$	27,411.94
HW0018	Land Matters				\$	-
HW0024	Community Consultation					
	Sub Total(B1)				\$	114,471.62
	Pre construction contingency (30% of B	31)			\$	34,341.49
	TOTAL PRE-CONSTRUCTION COST (B)				\$	148,813.11
6	CONSTRUCTION COST					
C.	CONSTRUCTION COST				1	

C.	CONSTRUCTION COST					
	Total Estimated Contract Award Sum (A)			\$	580,397.90	
HW0019	Principal Supplied Pipe (as applicable)				-	
HW0020	W0020 Principal Supplied Valves and Flowmeters (as applicable)				-	
HW0021	HW0021 Principal Supplied Fittings (as applicable)				-	
HW0022	W0022 Pump Station HV Power Supply				-	
HW0023	Construction Management (Table 11)			\$	58,039.79	
	Sub Total (C1)			\$	638,437.69	
	Construction contingency			\$	191,531.31	
	(Table 12) (30% of C1)	Preliminary Estimate				
	TOTAL CONSTRUCTION COST (C)					

TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)	\$	978,782.11
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PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage R

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 4,308.00	\$ 4,308.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 2,000.00	\$ 2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 2,954.19	\$ 2,954.19
HW0008	Community Consultation	Item	Lump Sum	\$ 1	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$	
HWG001	Service Location	Item	Lump Sum	\$ 684.00	\$	684.00
HWG002	Supply all valves	Item	Lump Sum		\$	-
HWG003	Supply all fittings	Item	Lump Sum		\$	-
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:					
00FVSS	Nominal DN150 PVC pipe	1140	m	\$ 12.00	\$	13,680.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.					
00FV03	Nominal DN150 PVC (Trench type 3)	640	m	\$ 85.40	\$	54,656.00
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR					
00FV03	Nominal DN150 PVC (Trench type 3)	500	m	\$ 136.40	\$	68,200.00
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR					
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR					
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:					
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 22.01		
HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00		

HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3		
HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWG015	Supply & place ballast		tonnes	\$ 90.00	
HWG016	External Dewatering of trench including establishment & disestablishment	500	m3	\$ 105.88	\$ 52,939.47
HWG017	Supply and place treated timber piling for pipe support		m		
HWG018	Road / creek crossings				
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:				
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each		
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWG024	Flow Relief Structures		Each		
HWG025	EMPTY				
HWG026	Supply and construct vent stacks		each		
HWG027	Preparation of line sheets	1140	each	\$ 1.00	\$ 1,140.00
HWG028	Acceptance testing - gravity main		m		
HWG029	Miscellaneous				
HWG000	Sub Total				\$191,299
110000	Sub lotal				Ţ.01,200

Item No.	Item Description	Qty	Unit		Amount
					\$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		

HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 9,120.00	\$	9,120.00
A.	TOTAL ESTIMATED CONTRACT AWARD SU	M			\$	246,681.66
Α.	TOTAL ESTIMATED CONTRACT AWARD 30	IAI			φ	240,001.00
В.	PRE-CONSTRUCTION COST (Table 10)					
HW0016	Design				\$	49,336.33
HW0017	Project Management of Design				\$	19,867.27
HW0018	Land Matters				\$	-
HW0024	Community Consultation					

A.	TOTAL ESTIMATED CONTRACT AWARD SU	\$	246,681.66			
B.	PRE-CONSTRUCTION COST (Table 10)					
HW0016	Design		\$	49,336.33		
HW0017	Project Management of Design		\$	19,867.27		
HW0018	HW0018 Land Matters					
HW0024	HW0024 Community Consultation					
Sub Total(B1)				69,203.60		
Pre construction contingency (30% of B1)				20,761.08		
	TOTAL PRE-CONSTRUCTION COST (B)					
C.	CONSTRUCTION COST					
	Total Estimated Contract Award Sum (A)		\$	246,681.66		
HW0019	Principal Supplied Pipe (as applicable)		\$	-		
HW0020	Principal Supplied Valves and Flowmete	rs (as applicable)	\$	-		
HW0021	Principal Supplied Fittings (as applicable	·)	\$	-		
HW0022	Pump Station HV Power Supply		\$	-		
HW0023	Construction Management (Table 11)		\$	5,000.00		
	Sub Total (C1)					
	Construction contingency		\$	75,504.50		
	(Table 12) (30% of C1)	Preliminary Estimate				

TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate) \$ 417,150.84

327,186.16

TOTAL CONSTRUCTION COST (C)

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage S

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 10,804.00	\$ 10,804.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 15,000.00	\$ 15,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 15,000.00	\$ 15,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 2,000.00	\$ 2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 6,201.87	\$ 6,201.87
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 747.00	\$ 747.00
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	1245	m	\$ 12.00	\$ 14,940.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
00FV03	Nominal DN150 PVC (Trench type 3)	345	m	\$ 85.40	\$ 29,463.00
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
00FV03	Nominal DN150 PVC (Trench type 3)	300	m	\$ 136.40	\$ 40,920.00
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
00FV03	Nominal DN150 PVC (Trench type 3)	300	m	\$ 343.40	\$ 103,020.00
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
00FV03	Nominal DN150 PVC (Trench type 3)	300	m	\$ 638.90	\$ 191,670.00
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 37.42	

HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00		
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3			
HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00		
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3			
HWG015	Supply & place ballast		tonnes	\$ 90.00		
HWG016	External Dewatering of trench including establishment & disestablishment	600	m3	\$ 222.04	\$	133,222.29
HWG017	Supply and place treated timber piling for pipe support		m			
HWG018	Road / creek crossings					
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m			
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:					
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:					
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each			
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$	-
HWG024	Flow Relief Structures		Each			
HWG025	EMPTY		Ī			
HWG026	Supply and construct vent stacks		each			
HWG027	Preparation of line sheets	1245	each	\$ 1.00	\$	1,245.00
HWG028	Acceptance testing - gravity main		m			
HWG029	Miscellaneous					
HWG000	Sub Total				,	\$515,227

Item No.	Item Description	Qty	Unit		Amount
					\$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		

HW0009.09	Pavers		m2				
HW0009.10	Turf		m2				
HW0009.11	Grass seeding		m2				
HW0009.12	Hydromulch		m2				
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3				
HW0011	Acid sulphate soil						
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test				
HW0011.02	Establish treatment facility		Item				
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3				
HW0011.04	Disposal off site of acid sulphate soil		tonne				
HW0012	Preconstruction record						
HW0012.01	Photographic	Item	Lump Sum			\$	-
HW0012.02	Video	Item	Lump Sum			\$	-
HW0012.03	CCTV	Item	Lump Sum			\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$	9,960.00	\$	9,960.00
A.	TOTAL ESTIMATED CONTRACT AWARD SU	М				\$	587,193.16
В.	PRE-CONSTRUCTION COST (Table 10)						
HW0016	Design					\$	88,078.97
HW0017	Project Management of Design					\$	27,615.79
HW0018	Land Matters					\$	-
HW0024	Community Consultation						
	Sub Total(B1)					\$	115,694.77
	Pre construction contingency (30% of E	31)				\$	34,708.43
	TOTAL PRE-CONSTRUCTION COST (B)					\$	150,403.20
C.	CONSTRUCTION COST						
C.	Total Estimated Contract Award Sum (A)		\$	587,193.16			
HW0019	Principal Supplied Pipe (as applicable)		\$	-			
HW0020			\$	_			
HW0020	Principal Supplied Valves and Flowmeter		\$ \$	_			
HW0021	Principal Supplied Fittings (as applicable)		\$ \$	_			
11000022	Pump Station HV Power Supply		Ψ	-			

HW0022	Pump Station HV Power Supply		\$	-			
HW0023	HW0023 Construction Management (Table 11)						
	Sub Total (C1)						
	Construction contingency		\$	193,773.74			
	(Table 12) (30% of C1)	Preliminary Estimate					
	TOTAL CONSTRUCTION COST (C)		\$	839,686.22			
			•				
	TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)						
	TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)						

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage T

Item No.	Item Description	Qty	Unit	R	ate \$/Unit	Amount
						\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	514.00	\$ 514.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	3,000.00	\$ 3,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	3,000.00	\$ 3,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	4,000.00	\$ 4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	2,000.00	\$ 2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	1,057.00	\$ 1,057.00
HW0008	Community Consultation	Item	Lump Sum	\$	-	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 60.00	\$ 60.00
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	100	m	\$ 12.00	\$ 1,200.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
00FV03	Nominal DN150 PVC (Trench type 3)	100	m	\$ 85.40	\$ 8,540.00
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3		

HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWG015	Supply & place ballast		tonnes	\$ 90.00	
HWG016	External Dewatering of trench including establishment & disestablishment		m3		
HWG017	Supply and place treated timber piling for pipe support		m		
HWG018	Road / creek crossings				
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:				
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each		
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWG024	Flow Relief Structures		Each		
HWG025	EMPTY				
HWG026	Supply and construct vent stacks		each		
HWG027	Preparation of line sheets	100	each	\$ 1.00	\$ 100.00
HWG028	Acceptance testing - gravity main		m		
HWG029	Miscellaneous				
HWG000	Sub Total				\$ 9,900

Item No.	Item Description	Qty	Unit			Amount
						\$
HW0009	Restoration - Pipelines:					
HW0009.01	Concrete kerb & gutter	0	m	\$	110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$	178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$	220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$	155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$	117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$	69.00	\$ -
HW0009.07	Bitumen pavement		m2			
HW0009.08	AC pavement		m2			
HW0009.09	Pavers		m2			
HW0009.10	Turf		m2			
HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2	SIGN C - 3		

HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 800.00	\$	800.00
A.	TOTAL ESTIMATED CONTRACT AWARD SU	М			\$	33,271.00
B. HW0016	PRE-CONSTRUCTION COST (Table 10)				\$	6,654.20
HW0017	Design Project Management of Design				\$	11,330.84
HW0018	Land Matters				\$	- 1,000.01
HW0024	Community Consultation					
	Sub Total(B1)				\$	17,985.04
	Pre construction contingency (30% of E	R1)			\$	5,395.51
	TOTAL PRE-CONSTRUCTION COST (B)	, <u>+)</u>			\$	23,380.55
	TOTAL TRE-CONSTRUCTION COST (B)				, T	
C.	CONSTRUCTION COST					
	Total Estimated Contract Award Sum (A)				\$	33,271.00
HW0019	Principal Supplied Pipe (as applicable)				\$	-
HW0020	Principal Supplied Valves and Flowmeter		icable)		\$	-
HW0021	Principal Supplied Fittings (as applicable)				\$	-
HW0022	Pump Station HV Power Supply				\$	-
HW0023	Construction Management (Table 11)				\$	5,000.00
	Sub Total (C1)_				\$	38,271.00
	Construction contingency				\$	11,481.30
	(Table 12) (30% of C1)	Prelimi	nary Estimate			
	TOTAL CONSTRUCTION COST (C)				\$	49,752.30
	TOTAL PRELIMINARY PROJECT ESTIMATE				\$	73,132.85

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage U

Item No.	Item Description	Qty	Unit	R	Rate \$/Unit	Amount
						\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	3,861.00	\$ 3,861.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	4,000.00	\$ 4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	2,000.00	\$ 2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	2,730.48	\$ 2,730.48
HW0008	Community Consultation	Item	Lump Sum	\$	1	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 998.40	\$ 998.40
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	1664	m	\$ 12.00	\$ 19,968.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
00FV03	Nominal DN150 PVC (Trench type 3)	1664	m	\$ 85.40	\$ 142,105.60
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3		

HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWG015	Supply & place ballast		tonnes	\$ 90.00	
HWG016	External Dewatering of trench including establishment & disestablishment		m3		
HWG017	Supply and place treated timber piling for pipe support		m		
HWG018	Road / creek crossings				
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:				
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each		
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWG024	Flow Relief Structures		Each		
HWG025	EMPTY				
HWG026	Supply and construct vent stacks		each		
HWG027	Preparation of line sheets	1664	each	\$ 1.00	\$ 1,664.00
HWG028	Acceptance testing - gravity main		m		
HWG029	Miscellaneous				
HWG000	Sub Total				\$ 164,736

Item No.	Item Description	Qty	Unit		Amount
					\$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HW0009.11	Grass seeding		m2		
HW0009.12	Hydromulch #11662\Documents\Projects\North Tuncurry Developme		m2		

HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3		
	alopoodi oi oxoooo oxooratoa matemai				
HW0011	Acid sulphate soil				
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test		
HW0011.02	Establish treatment facility		Item		
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3		
HW0011.04	Disposal off site of acid sulphate soil		tonne		
HW0012	Preconstruction record				
HW0012.01	Photographic	Item	Lump Sum		\$ -
HW0012.02	Video	Item	Lump Sum		\$ -
HW0012.03	CCTV	Item	Lump Sum		\$ -
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 13,312.00	\$ 13,312.0
A.	TOTAL ESTIMATED CONTRACT AWARD SU	M			\$ 217,639.48
В.	PRE-CONSTRUCTION COST (Table 10)				
HW0016	Design				\$ 43,527.90
HW0017	Project Management of Design				\$ 18,705.58
HW0018	Land Matters				\$ -
HW0024	Community Consultation				
	Sub Total(B1)				\$ 62,233.48
	Pre construction contingency (30% of E	31)			\$ 18,670.04
	TOTAL PRE-CONSTRUCTION COST (B)				\$ 80,903.52

	TOTAL PRE-CONSTRUCTION COST (B)		Ф	80,903.52
C.	CONSTRUCTION COST			
	Total Estimated Contract Award Sum (A)		\$	217,639.48
HW0019	Principal Supplied Pipe (as applicable)	\$	-	
HW0020	Principal Supplied Valves and Flowmete	\$	-	
HW0021	⁰⁰²¹ Principal Supplied Fittings (as applicable)			
HW0022	022 Pump Station HV Power Supply			
HW0023	Construction Management (Table 11)		\$	5,000.00
	Sub Total (C1)		\$	222,639.48
	Construction contingency		\$	66,791.84
	(Table 12) (30% of C1)	Preliminary Estimate		
	TOTAL CONSTRUCTION COST (C)		\$	289,431.32

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ľ	TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)	\$ 370,334.84

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage V

Item No.	Item Description	Qty	Unit	R	ate \$/Unit	Amount
						\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	639.00	\$ 639.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	3,000.00	\$ 3,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	3,000.00	\$ 3,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	4,000.00	\$ 4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	2,000.00	\$ 2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	1,119.50	\$ 1,119.50
HW0008	Community Consultation	Item	Lump Sum	\$	1	\$ -

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 60.00	\$ 60.00
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	100	m	\$ 12.00	\$ 1,200.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
00FV03	Nominal DN150 PVC (Trench type 3)	100	m	\$ 136.40	\$ 13,640.00
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 30.60	
HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3		

HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00		
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3			
HWG015	Supply & place ballast		tonnes	\$ 90.00		
HWG016	External Dewatering of trench including establishment & disestablishment	100	m3	\$ 11.50	\$	1,150.00
HWG017	Supply and place treated timber piling for pipe support		m			
HWG018	Road / creek crossings					
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m			
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:					
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:					
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each			
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$	-
HWG024	Flow Relief Structures		Each			
HWG025	EMPTY					
HWG026	Supply and construct vent stacks		each			
HWG027	Preparation of line sheets	100	each	\$ 1.00	\$	100.00
HWG028	Acceptance testing - gravity main		m			
HWG029	Miscellaneous					
100000					-	16 150
HWG000	Sub Total				,	\$16,150

Item No.	Item Description	Qty	Unit			Amount
						\$
HW0009	Restoration - Pipelines:					
HW0009.01	Concrete kerb & gutter	0	m	\$	110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$	178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$	220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$	155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$	117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$	69.00	\$ -
HW0009.07	Bitumen pavement		m2			
HW0009.08	AC pavement		m2			
HW0009.09	Pavers		m2			
HW0009.10	Turf		m2			
HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2	SIGN C - 3		

	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 800.00	\$	800.00
Α.	TOTAL ESTIMATED CONTRACT AWARD SUI	VI			\$	39,708.50
B.	PRE-CONSTRUCTION COST (Table 10)					
HW0016	Design				\$	7,941.70
HW0017	Project Management of Design				\$	11,588.34
HW0018	Land Matters				\$	-
HW0024	Community Consultation					
	Sub Total(B1)				\$	19,530.04
	Pre construction contingency (30% of B	1)			\$	5,859.01
		1)				
C.	Pre construction contingency (30% of B	1)			\$	5,859.01
C.	Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B)	1)			\$	5,859.01
HW0019	Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST	1)			\$	5,859.01 25,389.05
.	Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeters	s (as appl	icable)		\$	5,859.01 25,389.05
HW0019 HW0020 HW0021	Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeters Principal Supplied Fittings (as applicable)	s (as appl	icable)		\$ \$ \$ \$ \$ \$	5,859.01 25,389.05
HW0019 HW0020 HW0021 HW0022	Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeters Principal Supplied Fittings (as applicable) Pump Station HV Power Supply	s (as appl	icable)		\$ \$ \$ \$ \$ \$ \$	5,859.01 25,389.05 39,708.50 - - -
HW0019 HW0020 HW0021	Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeters Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	s (as appl	icable)		\$ \$ \$ \$ \$ \$ \$ \$	5,859.01 25,389.05 39,708.50 - - - - 5,000.00
HW0020 HW0021 HW0022	Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeters Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	s (as appl	icable)		\$ \$ \$ \$ \$ \$ \$	5,859.01 25,389.05 39,708.50 - - - 5,000.00 44,708.50
HW0019 HW0020 HW0021 HW0022	Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeters Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	s (as appl			\$ \$ \$ \$ \$ \$ \$ \$	5,859.01 25,389.05 39,708.50 - - - - 5,000.00
HW0019 HW0020 HW0021 HW0022	Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeters Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	s (as appl	icable) nary Estimate		\$ \$ \$ \$ \$ \$ \$	5,859.01 25,389.05 39,708.50 - - - 5,000.00 44,708.50

TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)

83,510.10

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage W

Item No.	Item Description	Qty	Unit	F	Rate \$/Unit	Amount
						\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	2,590.00	\$ 2,590.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	4,000.00	\$ 4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	2,000.00	\$ 2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	2,094.90	\$ 2,094.90
HW0008	Community Consultation	Item	Lump Sum	\$	-	\$ -

·				Rate	Amount
Item	Construction of Sewer Gravity Mains	Qty	Unit	\$/Unit	\$
HWG001	Service Location	Item	Lump Sum	\$ 642.0	00 \$ 642.00
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	1070	m	\$ 12.0	00 \$ 12,840.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
00FV03	Nominal DN150 PVC (Trench type 3)	1070	m	\$ 85.4	91,378.00
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 15.3	30
HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.0	0
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3		

HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWG015	Supply & place ballast		tonnes	\$ 90.00	
HWG016	External Dewatering of trench including establishment & disestablishment		m3		
HWG017	Supply and place treated timber piling for pipe support		m		
HWG018	Road / creek crossings				
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:				
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each		
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWG024	Flow Relief Structures		Each		
HWG025	EMPTY				
HWG026	Supply and construct vent stacks		each		
HWG027	Preparation of line sheets	1070	each	\$ 1.00	\$ 1,070.00
HWG028	Acceptance testing - gravity main		m		
HWG029	Miscellaneous				
HWG000	Sub Total				\$ 105,930

Item No.	Item Description	Qty	Unit			Amount
						\$
HW0009	Restoration - Pipelines:					
HW0009.01	Concrete kerb & gutter	0	m	\$	110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$	178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$	220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$	155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$	117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$	69.00	\$ -
HW0009.07	Bitumen pavement		m2			
HW0009.08	AC pavement		m2			
HW0009.09	Pavers		m2			
HW0009.10	Turf		m2			
HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2	SIGN C - 3		

HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil		+			
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 8,560.00	\$	8,560.00
Α.	TOTAL ESTIMATED CONTRACT AWARD SU	М			\$	152,174.90
A. B.		M			\$	152,174.90
	TOTAL ESTIMATED CONTRACT AWARD SU PRE-CONSTRUCTION COST (Table 10) Design	M			\$	
3.	PRE-CONSTRUCTION COST (Table 10)	M			•	30,434.98
3. HW0016	PRE-CONSTRUCTION COST (Table 10) Design	М			\$	30,434.98
3. HW0016 HW0017	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design	M			\$	30,434.98
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters	М			\$	30,434.98 16,087.00 -
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation				\$ \$	30,434.98 16,087.00 - 46,521.98
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1)				\$ \$ \$	30,434.98 16,087.00 - 46,521.98 13,956.59
B. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B				\$ \$ \$	30,434.98 16,087.00 - 46,521.98 13,956.59
B. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B				\$ \$ \$	30,434.98 16,087.00 - 46,521.98 13,956.59 60,478.57
B. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A)				\$ \$ \$ \$	30,434.98 16,087.00 - 46,521.98 13,956.59 60,478.57
B. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B	31)	icable)		\$ \$ \$ \$	152,174.90 30,434.98 16,087.00 - 46,521.98 13,956.59 60,478.57 152,174.90 -

C.	CONSTRUCTION COST				
	Total Estimated Contract Award Sum (A)			\$	152,174.90
HW0019	W0019 Principal Supplied Pipe (as applicable)				-
HW0020	HW0020 Principal Supplied Valves and Flowmeters (as applicable)				-
HW0021	HW0021 Principal Supplied Fittings (as applicable)				-
HW0022	HW0022 Pump Station HV Power Supply				-
HW0023	Construction Management (Table 11)			\$	5,000.00
	Sub Total (C1)			\$	157,174.90
	Construction contingency			\$	47,152.47
	(Table 12) (30% of C1) Preliminary Estimate				
TOTAL CONSTRUCTION COST (C)				\$	204,327.37

TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)	\$ 264,805.94
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PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage X

Item No.	Item Description	Qty	Unit	Rate \$/Unit		Amount	
							\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	1,524.00	\$	1,524.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	6,000.00	\$	6,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	6,000.00	\$	6,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	4,000.00	\$	4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	9,000.00	\$	9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	2,000.00	\$	2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	1,562.04	\$	1,562.04
HW0008	Community Consultation	Item	Lump Sum	\$	1	\$	-

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 343.20	\$ 343.20
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	572	m	\$ 12.00	\$ 6,864.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
00FV03	Nominal DN150 PVC (Trench type 3)	572	m	\$ 85.40	\$ 48,848.80
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3		

HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00		
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3			
HWG015	Supply & place ballast		tonnes	\$ 90.00		
HWG016	External Dewatering of trench including establishment & disestablishment		m3			
HWG017	Supply and place treated timber piling for pipe support		m			
HWG018	Road / creek crossings					
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m			
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:					
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:					
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each			
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$	-
HWG024	Flow Relief Structures		Each			
HWG025	EMPTY					
HWG026	Supply and construct vent stacks		each			
HWG027	Preparation of line sheets	572	each	\$ 1.00	\$	572.00
HWG028	Acceptance testing - gravity main		m			
HWG029	Miscellaneous					
HWG000	Sub Total				\$5	56,628

Item No.	Item Description	Qty	Unit			Amount
						\$
HW0009	Restoration - Pipelines:					
HW0009.01	Concrete kerb & gutter	0	m	\$	110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$	178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$	220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$	155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$	117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$	69.00	\$ -
HW0009.07	Bitumen pavement		m2			
HW0009.08	AC pavement		m2			
HW0009.09	Pavers		m2			
HW0009.10	Turf		m2			
HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2	SIGN C - 3		

HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<="" td=""><td>Item</td><td>Lump Sum</td><td>\$ 4,576.00</td><td>\$</td><td>4,576.00</td></insert>	Item	Lump Sum	\$ 4,576.00	\$	4,576.00
	\$>					
Α.	TOTAL ESTIMATED CONTRACT AWARD SU	M			\$	91,290.04
	TOTAL ESTIMATED CONTRACT AWARD SU	М			\$	91,290.04
	TOTAL ESTIMATED CONTRACT AWARD SU PRE-CONSTRUCTION COST (Table 10)	M			\$	91,290.04
3.	TOTAL ESTIMATED CONTRACT AWARD SU	М				
3. HW0016	TOTAL ESTIMATED CONTRACT AWARD SU PRE-CONSTRUCTION COST (Table 10) Design	M			\$	18,258.01
B. HW0016 HW0017	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design	М			\$	18,258.01
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters	M			\$	18,258.01
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation				\$ \$ \$	18,258.01 13,651.60 -
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1)				\$ \$ \$	18,258.01 13,651.60 - 31,909.61 9,572.88
HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E				\$ \$ \$ \$	18,258.01 13,651.60 - 31,909.61 9,572.88
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E				\$ \$ \$ \$	18,258.01 13,651.60 - 31,909.61

C.	CONSTRUCTION COST				
	Total Estimated Contract Award Sum (A)				91,290.04
HW0019	Principal Supplied Pipe (as applicable)			\$	-
HW0020	Principal Supplied Valves and Flowmete	ers (as applicable)		\$	-
HW0021	Principal Supplied Fittings (as applicable	2)		\$	-
HW0022	Pump Station HV Power Supply			\$	-
HW0023	Construction Management (Table 11)			\$	5,000.00
	Sub Total (C1)			\$	96,290.04
	Construction contingency			\$	28,887.01
(Table 12) (30% of C1) Preliminary Estimate					
	TOTAL CONSTRUCTION COST (C)				125,177.05

ı	TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)	\$ 166,659.54

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage Y

Item No.	Item Description	Qty	Unit	F	Rate \$/Unit	Amount
						\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	3,185.00	\$ 3,185.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	4,000.00	\$ 4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	2,000.00	\$ 2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	2,392.70	\$ 2,392.70
HW0008	Community Consultation	Item	Lump Sum	\$	1	\$ -

Sewer Pipeline - Gravity - section will be present if one or more gravity mains are specified

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 456.00	\$ 456.00
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	760	m	\$ 12.00	\$ 9,120.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
00FV03	Nominal DN150 PVC (Trench type 3)	360	m	\$ 85.40	\$ 30,744.00
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
00FV03	Nominal DN150 PVC (Trench type 3)	200	m	\$ 136.40	\$ 27,280.00
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
00FV03	Nominal DN150 PVC (Trench type 3)	200	m	\$ 343.40	\$ 68,680.00
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 27.38	

HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3		
HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00	
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWG015	Supply & place ballast		tonnes	\$ 90.00	
HWG016	External Dewatering of trench including establishment & disestablishment	200	m3	\$ 5.75	\$ 1,150.00
HWG017	Supply and place treated timber piling for pipe support		m		
HWG018	Road / creek crossings				
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:				
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each		
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWG024	Flow Relief Structures		Each		
HWG025	EMPTY				
HWG026	Supply and construct vent stacks		each		
HWG027	Preparation of line sheets	760	each	\$ 1.00	\$ 760.00
HWG028	Acceptance testing - gravity main		m		
HWG029	Miscellaneous				
HWG000	Sub Total				\$ 138,190

Item No.	Item Description	Qty	Unit		Amount
					\$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		

HW0009.09	Pavers		m2			
HW0009.10	Turf		m2			
HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and		m3			
	disposal of excess excavated material					
HW0011	Acid sulphate soil				4	
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 6,080.00	\$	6,080.0
Α.	TOTAL ESTIMATED CONTRACT AWARD SU	М			\$	182,847.70
В.	PRE-CONSTRUCTION COST (Table 10)					
HW0016	Design				\$	36,569.54
HW0017	Project Management of Design				\$	17,313.91
HW0018	Land Matters				\$	-
HW0024	Community Consultation					
	Sub Total(B1)				\$	53,883.45
	Pre construction contingency (30% of E	31)			\$	16,165.03
	TOTAL PRE-CONSTRUCTION COST (B)				\$	70,048.48
C.	CONSTRUCTION COST				_e	100 017 70
LI\\/0040	Total Estimated Contract Award Sum (A)				\$	182,847.70
HW0019	Principal Supplied Pipe (as applicable)				\$	-

C.	CONSTRUCTION COST				
	Total Estimated Contract Award Sum (A)				182,847.70
HW0019	Principal Supplied Pipe (as applicable)				-
HW0020	Principal Supplied Valves and Flowmete	rs (as applicable)		\$	-
HW0021	HW0021 Principal Supplied Fittings (as applicable)				-
HW0022	HW0022 Pump Station HV Power Supply				-
HW0023	Construction Management (Table 11)			\$	5,000.00
	Sub Total (C1)			\$	187,847.70
	Construction contingency			\$	56,354.31
	(Table 12) (30% of C1) Preliminary Estimate				
	TOTAL CONSTRUCTION COST (C)			\$	244,202.01

ı	TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)	\$ 314,250.49

PROJECT DESCRIPTION: North Tuncurry Development Project - Gravity System - Stage Z

Item No.	Item Description	Qty	Unit	R	tate \$/Unit	Amount
						\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	1,424.00	\$ 1,424.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	6,000.00	\$ 6,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	6,000.00	\$ 6,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	4,000.00	\$ 4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	2,000.00	\$ 2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	1,511.75	\$ 1,511.75
HW0008	Community Consultation	Item	Lump Sum	\$	1	\$ -

Sewer Pipeline - Gravity - section will be present if one or more gravity mains are specified

Item	Construction of Sewer Gravity Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWG001	Service Location	Item	Lump Sum	\$ 315.00	\$ 315.00
HWG002	Supply all valves	Item	Lump Sum		\$ -
HWG003	Supply all fittings	Item	Lump Sum		\$ -
HWG004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
00FVSS	Nominal DN150 PVC pipe	525	m	\$ 12.00	\$ 6,300.00
HWG005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
00FV03	Nominal DN150 PVC (Trench type 3)	525	m	\$ 85.40	\$ 44,835.00
HWG006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m depth to invert in OTR				
HWG007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m depth to invert in OTR				
HWG008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m depth to invert in OTR				
HWG009	Excavate, backfill, supply and install access chambers including base, chamber, cover & surround and access ladder for the following nominal diameter access chambers:				
HWG010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWG011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWG012	Extra over rate for installation to supply, place & compact non cohesive material.		m3		

HWG013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00		
HWG014	Extra over rate for installation for Supply, place and compact aggregate		m3			
HWG015	Supply & place ballast		tonnes	\$ 90.00		
HWG016	External Dewatering of trench including establishment & disestablishment		m3			
HWG017	Supply and place treated timber piling for pipe support		m			
HWG018	Road / creek crossings					
HWG019	Extra over rate for installation of trenchless technique under existing rail line		m			
HWG020	Supply & installation of river crossing includes supply of MSCL pipe, welding, testing of welds, 150mm concrete encasement, mobilisation & demobilisation of dredge, excavation & disposal of excavated material, backfilling, lay, bed & test:					
HWG021	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:					
HWG022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206		Each			
HWG023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$	-
HWG024	Flow Relief Structures		Each			
HWG025	EMPTY					
HWG026	Supply and construct vent stacks		each			
HWG027	Preparation of line sheets	525	each	\$ 1.00	\$	525.00
HWG028	Acceptance testing - gravity main		m			
HWG029	Miscellaneous					
HWG000	Sub Total				\$5	51,975

Item No.	Item Description	Qty	Unit			Amount
						\$
HW0009	Restoration - Pipelines:					
HW0009.01	Concrete kerb & gutter	0	m	\$	110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$	178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$	220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$	155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$	117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$	69.00	\$ -
HW0009.07	Bitumen pavement		m2			
HW0009.08	AC pavement		m2			
HW0009.09	Pavers		m2			
HW0009.10	Turf		m2			
HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2	SIGN C - 3		

HW0010	Extra over item for Excavation in rock and		m3			
	disposal of excess excavated material					
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and		per test			
	prepare and submit report					
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<="" td=""><td>Item</td><td>Lump Sum</td><td>\$ 4,200.00</td><td>\$</td><td>4,200.00</td></insert>	Item	Lump Sum	\$ 4,200.00	\$	4,200.00
	\$>					
	<u> </u>					
					Φ.	00 110 75
A.	TOTAL ESTIMATED CONTRACT AWARD SU	IM			\$	86,110.75
В.	PRE-CONSTRUCTION COST (Table 10)				•	47,000,45
HW0016	Design				\$	17,222.15
HW0017	Project Management of Design				\$	13,444.43
HW0018	Land Matters				\$	-
HW0024	Community Consultation				_	00 000 50
	Sub Total(B1)				\$	30,666.58
	Pre construction contingency (30% of E	31)			\$	9,199.97
	TOTAL PRE-CONSTRUCTION COST (B)				\$	39,866.55
C.	CONSTRUCTION COST					
	Total Estimated Contract Award Sum (A)				\$	86,110.75
HW0019	Principal Supplied Pipe (as applicable)				\$	-
HW0020	Principal Supplied Valves and Flowmeter	s (as appl	icable)		\$	-
HW0021	Principal Supplied Fittings (as applicable)		,		\$	-
HW0022	Pump Station HV Power Supply				\$	-
HW0023						
	Construction Management (Table 11)				\$	5,000.00
	Construction Management (Table 11) Sub Total (C1)				\$	5,000.00 91,110.75

TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)	\$	158,310.53
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Preliminary Estimate

118,443.98

(Table 12) (30% of C1)

TOTAL CONSTRUCTION COST (C)

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 5,974.00	\$ 5,974.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 7,000.00	\$ 7,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 14,000.00	\$ 14,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 6,200.00	\$ 6,200.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 3,786.88	\$ 3,786.88
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

	eline - Rising - section will be present if one			Rate	Amount
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit	\$
HWR001	Service Location	Item	Lump Sum	\$ 297.00	\$ 297.00
HWR002	Supply all valves	Item	Lump Sum		\$ -
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
114VSS	Nominal DN200 PVC pipe	495	m	\$ 48.00	\$ 23,760.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
114V03	Nominal DN200 PVC (Trench type 3)	495	m	\$ 71.40	\$ 35,343.00
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		
HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00	
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of trench including establishment & disestablishment		m		
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings		1		
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				

HWR021	Supply and installation of pipe river crossing						
	including supply of MSCL pipe, internal and						
	external welding, testing of welds and 150						
	thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if						
	required) excavation & disposal of excavated						
	material, backfilling, lay, bed and test for the						
	following MSCL pipe sizes:						
HWR022	Bulkheads and Trenchstops in accordance	Item	Lump Sum			\$	-
	with WSAA drawing SEW-1206						
HWR023	Supply and Install valve pits (excluding	0	Each	\$		\$	
HVVKUZS	valves and fittings)	U	Lacii	Ψ	-	Ψ	-
HWR024	Flow Relief Structures		Each				
HWR025	EMPTY						
HWR026	Supply and construct vent stacks	1	each	\$	9,500.00	\$	9,500.00
HWR027	Preparation of line sheets	495	m	\$	1.00	\$	495.00
HWR028	Acceptance testing - rising main		m				
HWR029	Miscellaneous						
							·
HWR000	Sub Total						\$69,395

Item	Pump Station - Name	Qty	Unit	Rate \$/Unit	, ·	Amount \$
HW0201	PS2 2.1m dia 2 Pump(s)	,				•
	Clear, excavate & backfill in OTR conditions, construct precast pump station, lid and plugged with 1.5m of plain concrete.	Item	Lump Sum	\$ 30,343.51	\$	30,343.51
HW0202	Pumps for Pumping Stations - Supply and install pumps and associated fittings, connection to pipework, testing and commissioning.	2	Lump Sum	\$ 15,112.50	\$	30,225.00
HW0203	Pumping Station Electricals					
HW0203.01	Pit and Conduit System	Item	Lump Sum	\$ 4,812.50	\$	4,812.50
HW0203.02	LV Station Power Supply	Item	Lump Sum	\$ 6,875.00	\$	6,875.00
HW0203.03	Station By-Pass arrangements	Item	Lump Sum		\$	-
HW0203.04	Electrical Demolition works	Item	Lump Sum		\$	-
HW0203.05	Switchboard	Item	Lump Sum	\$ 52,937.50	\$	52,937.50
HW0203.06	PLC / Telemetry Hardware	Item	Lump Sum	\$ 14,437.50	\$	14,437.50
HW0203.07	PLC / Telemetry / Scada Engineering and Software Development	Item	Lump Sum	\$ 28,450.00	\$	28,450.00
HW0203.08	Stainless Steel Generator Box Cable Tray & Metering Box	Item	Lump Sum	\$ -	\$	-
HW0203.09	Building Services (Electrical)	Item	Lump Sum	\$ -	\$	-
HW0203.10	Pressure Transmitter/Gauge Board	Item	Lump Sum	\$ -	\$	-
HW0203.11	Installation/Cabling (Electrical)	Item	Lump Sum	\$ 10,737.50	\$	10,737.50
HW0204	Empty					
HW0205	Empty					
HW0206	Service Location	Item	Lump Sum	\$ 264.60	\$	264.60
HW0207	Excavation below design depth including disposal of excavated material (Contingent Item)	0	m3	\$ 70.00	\$	
HW0208	Extra over Civil Works for excavation in rock:	0	m3	\$ 120.00	\$	
HW0209	Cut and fill earthworks including compaction:	0	m3	\$ 25.00	\$	
HW0210	Supply & place ballast (Contingent Item)	0	tonne	\$ 90.00	\$	
HW0211	Import and place select fill including compaction <may be="" contingent="" item=""></may>	0	m3	\$ 65.00	\$	
HW0212	Construct access road and hardstand					
HW0212.01	Prepare subgrade		m2	\$ 4.20		
HW0212.02	Supply, place and compact 150mm thick basecourse		m2	\$ 37.00		

HW0212.03	Supply, place and compact 200mm thick basecourse		m2	\$	47.00		
HW0212.04	Supply, place and compact 250mm thick basecourse		m2	\$	51.00		
HW0212.05	Supply, place and compact two coat bitumen seal		m2	\$	26.00		
HW0212.06	Supply, place and compact 30mm thick asphalt bitumen seal		m2	\$	37.00		
HW0212.07	Concrete kerb & gutter	0	m	\$	110.00	\$	-
HW0212.08	Concrete driveway	0	m2	\$	178.00	\$	-
HW0213	Supply all plant, material and labour to						
HW0213.01	undertake the following Piling works: Treated timber mini piles		m				
HW0213.02	Reinforced concrete bored piles	Item	Lump Sum			\$	
	·	item	Lump Sum			Ψ	
HW0214	Supply all plant, material and labour to undertake the following Retaining Wall works:						
HW0214.01	Timber(Koppers Log) up to 1.5m high		m2	\$	300.00		
HW0214.02	Concrete Keystone up to 1m high		m2	\$	380.00		
HW0214.03	Concrete Keystone between 1m and 3m high		m2	\$	560.00		
HW0214.04	Concrete Keystone greater than 3m high		m2	\$	560.00		
HW0214.05	Concrete Crib Block up to 2m high		m2	\$	630.00		
HW0214.06	Concrete Crib Block between 2m and 3m high		m2	\$	704.00		
HW0215	Acid sulphate soil						
HW0215.01	Initial testing for acid sulphate soils and	5	per test	\$	110.00	\$	550.00
HW0215.02	prepare and submit report Establish treatment facility	Item	Lump Sum			\$	-
HW0215.03	Handling, treatment and testing of acid		m3	\$	60.00		
1111100115 01	sulphate soils		tonno	\$	122.00		
HW0215.04	Disposal off site of acid sulphate soil Series Pump Pit Structure	lá a ma	tonne	Ф	122.00	Φ.	
HW0216	·	Item	Lump Sum			\$	-
HW0217	Supply and Install valve pit concrete formwork, reinforced concrete complete with aluminium tread plate covers and including excavation and backfill	Item	Lump Sum	\$	-	\$	-
HW0218	Supply and install pipework items inside valve pit	Item	Lump Sum	\$	-	\$	-
HW0219	Supply and Install additional pipe Items outside station	Item	Lump Sum	\$	-	\$	-
HW0220	Supply and install pipework items inside station	Item	Lump Sum	\$	-	\$	-
HW0221	Supply and install Type 2 or 4 flow relief structures in accordance with Drgs SCP-502 and SCP-505	Item	Lump Sum			\$	-
HW0222	Supply and install emergency storage structures		L/m				
HW0223	Supply and install fan forced ventilation	Item	Lump Sum			\$	-
HW0224	Supply and install Soil Bed Filter	Item	Lump Sum			\$	-
HW0225	Supply and Install Strainers	Item	Lump Sum			\$	-
HW0226	Supply and Install Series Bypass	Item	Lump Sum			\$	-
HW0227	Landscaping	Item	Lump Sum	\$	-	\$	-
HW0228	Miscellaneous						
HW0229	Preparation and submission of Operation and Maintenance Information	Item	Lump Sum			\$	-
HW0230	Pre commissioning and commissioning	Item	Lump Sum	\$	8,000.00	\$	8,000.00
HW0231	Preparation and submission of Work as Constructed Information	Item	Lump Sum	\$	6,000.00	\$	6,000.00
HW2SP	Sub Total					\$1	93,633
	-						

Item No.	Item Description	Qty	Unit		Å	Amount \$	
HW0009	Restoration - Pipelines:						П
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$		╕

1 114 10000 00	O t - d	0	0	Φ.	470.00	Φ	
HW0009.02	Concrete driveway	0	m2	\$	178.00	\$	-
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$	220.00	\$	-
HW0009.04	Concrete footpath	0	m2	\$	155.00	\$	-
HW0009.05	Bitumen footpath	0	m2	\$	117.00	\$	-
HW0009.06	Gravel pavement	0	m2	\$	69.00	\$	-
HW0009.07	Bitumen pavement		m2				
HW0009.08	AC pavement		m2				
HW0009.09	Pavers		m2				
HW0009.10	Turf		m2				
HW0009.11	Grass seeding		m2				
HW0009.12	Hydromulch		m2				
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3				
HW0011	Acid sulphate soil						
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test				
HW0011.02	Establish treatment facility		Item				
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3				
HW0011.04	Disposal off site of acid sulphate soil		tonne				
HW0012	Preconstruction record						
HW0012.01	Photographic	Item	Lump Sum			\$	-
HW0012.02	Video	Item	Lump Sum			\$	-
HW0012.03	CCTV	Item	Lump Sum			\$	-
HW0013	Work as Constructed Information <insert \$="" min=""></insert>	Item	Lump Sum	\$	3,960.00	\$	3,960.00
A.	TOTAL ESTIMATED CONTRACT AWARD SU	JM				\$	327,948.99
	PRE-CONSTRUCTION COST (Table 10)						
HW0016	Design					\$,
HW0016 HW0017	Design Project Management of Design					\$,
HW0016 HW0017 HW0018	Design Project Management of Design Land Matters						•
HW0016 HW0017	Design Project Management of Design Land Matters Community Consultation					\$	23,117.96
HW0016 HW0017 HW0018	Design Project Management of Design Land Matters Community Consultation Sub Total(B1)	041				\$ \$	23,117.96
HW0016 HW0017 HW0018	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I	B1)				\$ \$	23,117.96 - 88,707.76 26,612.33
HW0016 HW0017 HW0018	Design Project Management of Design Land Matters Community Consultation Sub Total(B1)	B1)				\$ \$	23,117.96
HW0016 HW0017 HW0018 HW0024	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I	B1)				\$ \$	23,117.96 - 88,707.76 26,612.33
HW0016 HW0017 HW0018 HW0024	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I	B1)				\$ \$ \$	23,117.96 - 88,707.76 26,612.33 115,320.08
HW0016 HW0017 HW0018 HW0024	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A)	B1)				\$ \$ \$ \$ \$ \$ \$ \$	23,117.96 - 88,707.76 26,612.33
HW0016 HW0017 HW0018 HW0024	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable)		cable)			\$ \$ \$ \$ \$ \$ \$ \$	23,117.96 - 88,707.76 26,612.33 115,320.08
HW0016 HW0017 HW0018 HW0024	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter	rs (as appli	cable)			\$ \$ \$	23,117.96 - 88,707.76 26,612.33 115,320.08
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable)	rs (as appli	cable)			\$ \$ \$ \$ \$	23,117.96 - 88,707.76 26,612.33 115,320.08 327,948.99 - -
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply	rs (as appli	cable)			\$ \$ \$ \$ \$ \$	23,117.96 - 88,707.76 26,612.33 115,320.08 327,948.99 - - 100,000.00
HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	rs (as appli	cable)			\$ \$ \$ \$ \$ \$	23,117.96 - 88,707.76 26,612.33 115,320.08 327,948.99 - - 100,000.00 32,794.90
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	rs (as appli	cable)			\$ \$ \$ \$ \$ \$	23,117.96 88,707.76 26,612.33 115,320.08 327,948.99 - 100,000.00 32,794.90 460,743.89
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	rs (as appli)				\$ \$ \$ \$ \$ \$	23,117.96 88,707.76 26,612.33 115,320.08 327,948.99 - 100,000.00 32,794.90 460,743.89
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1)	rs (as appli)	cable)			\$ \$ \$ \$ \$ \$	23,117.96 88,707.76 26,612.33 115,320.08 327,948.99 - 100,000.00 32,794.90 460,743.89 138,223.17
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	rs (as appli)				\$ \$ \$ \$ \$ \$ \$	23,117.96 88,707.76 26,612.33 115,320.08 327,948.99 - - 100,000.00 32,794.90 460,743.89 138,223.17
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1)	rs (as appli) Prelimi	nary Estimate	timate		\$ \$ \$ \$ \$ \$ \$	23,117.96
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C)	rs (as appli) Prelimi	nary Estimate	timate		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	26,612.33 115,320.08 327,948.99 - 100,000.00 32,794.90 460,743.89 138,223.17 598,967.06
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C)	rs (as appli) Prelimi	nary Estimate	timate		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	23,117.96 88,707.76 26,612.33 115,320.08 327,948.99 - 100,000.00 32,794.90 460,743.89 138,223.17 598,967.06 714,287.14 224,113.44
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C)	rs (as appli) Prelimi	nary Estimate	timate		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	23,117.96 88,707.76 26,612.33 115,320.08 327,948.99 - 100,000.00 32,794.90 460,743.89 138,223.17 598,967.06 714,287.14
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) TOTAL PRELIMINARY PROJECT ESTIMATE WWPS Contract Award Cost RM Contract Award Cost WWPS Capital Cost	rs (as appli) Prelimi	nary Estimate	timate		\$\$ \$\$ \$\$	23,117.96
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) TOTAL PRELIMINARY PROJECT ESTIMATE WWPS Contract Award Cost RM Contract Award Cost	rs (as appli) Prelimi	nary Estimate	timate		\$\$ \$\$ \$\$	23,117.96 88,707.76 26,612.33 115,320.08 327,948.99 100,000.00 32,794.90 460,743.89 138,223.17 598,967.06 714,287.14 224,113.44 103,835.44

Item No.	Item Description	Qty	Unit	Rate \$/Unit		Amount \$	
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 5,293.00	\$	5,293.00	
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 12,000.00	\$	12,000.00	
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 12,000.00	\$	12,000.00	
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 7,000.00	\$	7,000.00	
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 14,000.00	\$	14,000.00	
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 6,200.00	\$	6,200.00	
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 3,446.58	\$	3,446.58	
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$	-	

	eline - Rising - section will be present if one			Rate	Amount
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit	\$
HWR001	Service Location	Item	Lump Sum	\$ 294.00	\$ 294.00
HWR002	Supply all valves	Item	Lump Sum		\$ -
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
10FVSS	Nominal DN150 PVC pipe	490	m	\$ 28.00	\$ 13,720.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
10FV03	Nominal DN150 PVC (Trench type 3)	490	m	\$ 67.40	\$ 33,026.00
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		
HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00	
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of trench including establishment & disestablishment		m		
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings		Ì		
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				

HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks	1	each	\$ 9,500.00	\$ 9,500.00
HWR027	Preparation of line sheets	490	m	\$ 1.00	\$ 490.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$57,030

Item	Pump Station - Name	Qty	Unit	Rate \$/Unit	· ·	Amount \$
HW0201	PS3 1.8m dia 2 Pump(s)			•		
	Clear, excavate & backfill in OTR conditions, construct precast pump station, lid and plugged with 1.5m of plain concrete.	Item	Lump Sum	\$ 22,751.18	\$	22,751.18
HW0202	Pumps for Pumping Stations - Supply and install pumps and associated fittings, connection to pipework, testing and commissioning.	2	Lump Sum	\$ 10,537.50	\$	21,075.00
HW0203	Pumping Station Electricals					
HW0203.01	Pit and Conduit System	Item	Lump Sum	\$ 4,812.50	\$	4,812.50
HW0203.02	LV Station Power Supply	Item	Lump Sum	\$ 5,625.00	\$	5,625.00
HW0203.03	Station By-Pass arrangements	Item	Lump Sum		\$	-
HW0203.04	Electrical Demolition works	Item	Lump Sum		\$	-
HW0203.05	Switchboard	Item	Lump Sum	\$ 49,375.00	\$	49,375.00
HW0203.06	PLC / Telemetry Hardware	Item	Lump Sum	\$ 14,437.50	\$	14,437.50
HW0203.07	PLC / Telemetry / Scada Engineering and Software Development	Item	Lump Sum	\$ 28,450.00	\$	28,450.00
HW0203.08	Stainless Steel Generator Box Cable Tray & Metering Box	Item	Lump Sum	\$ -	\$	-
HW0203.09	Building Services (Electrical)	Item	Lump Sum	\$ -	\$	-
HW0203.10	Pressure Transmitter/Gauge Board	Item	Lump Sum	\$ -	\$	-
HW0203.11	Installation/Cabling (Electrical)	Item	Lump Sum	\$ 10,737.50	\$	10,737.50
HW0204	Empty					
HW0205	Empty					
HW0206	Service Location	Item	Lump Sum	\$ 194.40	\$	194.40
HW0207	Excavation below design depth including disposal of excavated material (Contingent Item)	0	m3	\$ 70.00	\$	
HW0208	Extra over Civil Works for excavation in rock:	0	m3	\$ 120.00	\$	
HW0209	Cut and fill earthworks including compaction:	0	m3	\$ 25.00	\$	
HW0210	Supply & place ballast (Contingent Item)	0	tonne	\$ 90.00	\$	
HW0211	Import and place select fill including compaction <may be="" contingent="" item=""></may>	0	m3	\$ 65.00	\$	
HW0212	Construct access road and hardstand					
HW0212.01	Prepare subgrade		m2	\$ 4.20		
HW0212.02	Supply, place and compact 150mm thick basecourse		m2	\$ 37.00		

HW0212.03	Supply, place and compact 200mm thick basecourse		m2	\$ 47.00		
HW0212.04	Supply, place and compact 250mm thick basecourse		m2	\$ 51.00		
HW0212.05	Supply, place and compact two coat bitumen seal		m2	\$ 26.00		
HW0212.06	Supply, place and compact 30mm thick asphalt bitumen seal		m2	\$ 37.00		
HW0212.07	Concrete kerb & gutter	0	m	\$ 110.00	\$	-
HW0212.08	Concrete driveway	0	m2	\$ 178.00	\$	-
HW0213	Supply all plant, material and labour to undertake the following Piling works:					
HW0213.01	Treated timber mini piles		m			
HW0213.02	Reinforced concrete bored piles	Item	Lump Sum		\$	-
HW0214	Supply all plant, material and labour to undertake the following Retaining Wall works:					
HW0214.01	Timber(Koppers Log) up to 1.5m high		m2	\$ 300.00		
HW0214.02	Concrete Keystone up to 1m high		m2	\$ 380.00		
HW0214.03	Concrete Keystone between 1m and 3m high		m2	\$ 560.00		
HW0214.04	Concrete Keystone greater than 3m high		m2	\$ 560.00		
HW0214.05	Concrete Crib Block up to 2m high		m2	\$ 630.00		
HW0214.06	Concrete Crib Block between 2m and 3m high		m2	\$ 704.00		
HW0215	Acid sulphate soil					
HW0215.01	Initial testing for acid sulphate soils and prepare and submit report	5	per test	\$ 110.00	\$	550.00
HW0215.02	Establish treatment facility	Item	Lump Sum		\$	-
HW0215.03	Handling, treatment and testing of acid sulphate soils		m3	\$ 60.00		
HW0215.04	Disposal off site of acid sulphate soil		tonne	\$ 122.00		
HW0216	Series Pump Pit Structure	Item	Lump Sum		\$	-
HW0217	Supply and Install valve pit concrete formwork, reinforced concrete complete with aluminium tread plate covers and including excavation and backfill	Item	Lump Sum	\$ -	\$	-
HW0218	Supply and install pipework items inside valve pit	Item	Lump Sum	\$ -	\$	-
HW0219	Supply and Install additional pipe Items outside station	Item	Lump Sum	\$ -	\$	-
HW0220	Supply and install pipework items inside station	Item	Lump Sum	\$ -	\$	-
HW0221	Supply and install Type 2 or 4 flow relief structures in accordance with Drgs SCP-502 and SCP-505	Item	Lump Sum		\$	-
HW0222	Supply and install emergency storage structures		L/m			
HW0223	Supply and install fan forced ventilation	Item	Lump Sum		\$	
HW0224	Supply and install Soil Bed Filter	Item	Lump Sum		\$	
HW0225	Supply and Install Strainers	Item	Lump Sum		\$	
HW0226	Supply and Install Series Bypass	Item	Lump Sum		\$	-
HW0227	Landscaping	Item	Lump Sum	\$ -	\$	-
HW0228	Miscellaneous					
HW0229	Preparation and submission of Operation and Maintenance Information	Item	Lump Sum		\$	-
HW0230	Pre commissioning and commissioning	Item	Lump Sum	\$ 8,000.00	\$	8,000.00
HW0231	Preparation and submission of Work as Constructed Information	Item	Lump Sum	\$ 6,000.00	\$	6,000.00
HW2SP	Sub Total				\$1	72,008
	· · · · · · · · · · · · · · · · · · ·					

Item No.	Item Description	Qty	Unit		Å	Amount \$	
HW0009	Restoration - Pipelines:						П
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$		╕

1 114/0000 00	0 t di		0	Φ.	470.00	Φ	
HW0009.02	Concrete driveway	0	m2	\$	178.00	\$	
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$	220.00	\$	-
HW0009.04	Concrete footpath	0	m2	\$	155.00	\$	_
HW0009.05	Bitumen footpath	0	m2	\$	117.00	\$	
HW0009.06	Gravel pavement	0	m2	\$	69.00	\$	_
HW0009.07	Bitumen pavement		m2				
HW0009.08	AC pavement		m2				
HW0009.09	Pavers		m2				
HW0009.10	Turf		m2				
HW0009.11	Grass seeding		m2				
HW0009.12	Hydromulch		m2				
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3				
HW0011	Acid sulphate soil						
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test				
HW0011.02	Establish treatment facility		Item				
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3				
HW0011.04 HW0012	Disposal off site of acid sulphate soil Preconstruction record		tonne				
HW0012.01	Photographic	Item	Lump Sum			\$	
	ÿ .		,				
HW0012.02	Video	Item	Lump Sum			\$	-
HW0012.03	CCTV	Item	Lump Sum			\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$	3,920.00	\$	3,920.00
A.	TOTAL ESTIMATED CONTRACT AWARD SU	IM				\$	292,897.66
	225 624672467424674						
В.	PRE-CONSTRUCTION COST (Table 10)					¢.	E9 E70 E2
HW0016	Design					\$	58,579.53 21,715.91
HW0016 HW0017	Design Project Management of Design					\$	58,579.53 21,715.91
HW0016 HW0017 HW0018	Design Project Management of Design Land Matters						
HW0016 HW0017	Design Project Management of Design Land Matters Community Consultation					\$	21,715.91
HW0016 HW0017 HW0018	Design Project Management of Design Land Matters Community Consultation Sub Total(B1)	81)				\$	
HW0016 HW0017 HW0018	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B	B1)				\$ \$	21,715.91 - 80,295.44
HW0016 HW0017 HW0018	Design Project Management of Design Land Matters Community Consultation Sub Total(B1)	B1)				\$ \$ \$ \$	21,715.91 - 80,295.44 24,088.63
HW0016 HW0017 HW0018	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B	B1)				\$ \$ \$ \$	21,715.91 - 80,295.44 24,088.63
HW0016 HW0017 HW0018 HW0024	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B	B1)				\$ \$ \$ \$	21,715.91 - 80,295.44 24,088.63
HW0016 HW0017 HW0018 HW0024	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B)	B1)				\$ \$ \$	21,715.91 - 80,295.44 24,088.63 104,384.07
HW0016 HW0017 HW0018 HW0024	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A)		cable)			\$ \$ \$ \$ \$ \$ \$	21,715.91 - 80,295.44 24,088.63 104,384.07
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable)	rs (as appli	cable)			\$ \$ \$ \$ \$	21,715.91 - 80,295.44 24,088.63 104,384.07
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply	rs (as appli	cable)			\$ \$ \$ \$ \$ \$	21,715.91 - 80,295.44 24,088.63 104,384.07 292,897.66 - -
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	rs (as appli	cable)			\$ \$ \$ \$ \$ \$	21,715.91 - 80,295.44 24,088.63 104,384.07 292,897.66 - - - 29,289.77
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	rs (as appli	cable)			\$ \$ \$ \$ \$ \$ \$	21,715.91 - 80,295.44 24,088.63 104,384.07 292,897.66 - - - 29,289.77 322,187.43
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	rs (as appli)				\$ \$ \$ \$ \$ \$	21,715.91 - 80,295.44 24,088.63 104,384.07 292,897.66 - - - 29,289.77
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1)	rs (as appli)	cable)			\$ \$ \$ \$ \$ \$	21,715.91 - 80,295.44 24,088.63 104,384.07 292,897.66 - - - 29,289.77 322,187.43 96,656.23
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	rs (as appli)				\$ \$ \$ \$ \$ \$ \$	21,715.91 - 80,295.44 24,088.63 104,384.07 292,897.66 - - - 29,289.77 322,187.43
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1)	rs (as appli) Prelimir	nary Estimate	timate		\$ \$ \$ \$ \$ \$	21,715.91 - 80,295.44 24,088.63 104,384.07 292,897.66 - - - 29,289.77 322,187.43 96,656.23
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1)	rs (as appli) Prelimir	nary Estimate	timate)		\$ \$ \$ \$ \$ \$ \$	21,715.91 - 80,295.44 24,088.63 104,384.07 292,897.66 29,289.77 322,187.43 96,656.23 418,843.65
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1)	rs (as appli) Prelimir	nary Estimate	timate)		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	21,715.91 - 80,295.44 24,088.63 104,384.07 292,897.66 - - - 29,289.77 322,187.43 96,656.23 418,843.65
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C)	rs (as appli) Prelimir	nary Estimate	timate		\$ \$ \$ \$ \$ \$ \$	21,715.91
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) TOTAL PRELIMINARY PROJECT ESTIMATE WWPS Contract Award Cost RM Contract Award Cost	rs (as appli) Prelimir	nary Estimate	timate		\$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$	21,715.91 - 80,295.44 24,088.63 104,384.07 292,897.66 29,289.77 322,187.43 96,656.23 418,843.65 523,227.72 201,977.79 90,919.79
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C)	rs (as appli) Prelimir	nary Estimate	timate		\$\$ \$\$ \$\$ \$\$	21,715.91

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount \$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 4,789.00	\$ 4,789.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 7,000.00	\$ 7,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 14,000.00	\$ 14,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 6,200.00	\$ 6,200.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 3,194.58	\$ 3,194.58
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

Item	eline - Rising - section will be present if one Construction of Sewer Rising Mains	Qty	Unit	Rate \$/Unit		Amount \$
HWR001	Service Location			\$ 150.00	\$	150.00
HWR002	Supply all valves	Item	Lump Sum		\$	
	,				·	
HWR003	Supply all fittings	Item	Lump Sum		\$	-
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:					
10FVSS	Nominal DN150 PVC pipe	250	m	\$ 28.00	\$	7,000.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.					
10FV03	Nominal DN150 PVC (Trench type 3)	250	m	\$ 67.40	\$	16,850.0
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.					
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.					
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.					
HWR009	EMPTY					
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30		
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00		
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3			
HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00		
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3			
HWR015	Supply & place ballast		tonnes	\$ 90.00		
HWR016	External Dewatering of trench including establishment & disestablishment		m			
HWR017	Supply and place treated timber piling for pipe support		m			
HWR018	Road / creek crossings					
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m			
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:					

HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks	1	each	\$ 9,500.00	\$ 9,500.00
HWR027	Preparation of line sheets	250	m	\$ 1.00	\$ 250.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$33,750

Item	Pump Station - Name	Qty	Unit	Rate \$/Unit	, ·	Amount \$
HW0201	PS4 1.8m dia 2 Pump(s)					
	Clear, excavate & backfill in OTR conditions, construct precast pump station, lid and plugged with 1.5m of plain concrete.	Item	Lump Sum	\$ 22,751.18	\$	22,751.18
HW0202	Pumps for Pumping Stations - Supply and install pumps and associated fittings, connection to pipework, testing and commissioning.	2	Lump Sum	\$ 10,537.50	\$	21,075.00
HW0203	Pumping Station Electricals					
HW0203.01	Pit and Conduit System	Item	Lump Sum	\$ 4,812.50	\$	4,812.50
HW0203.02	LV Station Power Supply	Item	Lump Sum	\$ 5,625.00	\$	5,625.00
HW0203.03	Station By-Pass arrangements	Item	Lump Sum		\$	-
HW0203.04	Electrical Demolition works	Item	Lump Sum		\$	-
HW0203.05	Switchboard	Item	Lump Sum	\$ 49,375.00	\$	49,375.00
HW0203.06	PLC / Telemetry Hardware	Item	Lump Sum	\$ 14,437.50	\$	14,437.50
HW0203.07	PLC / Telemetry / Scada Engineering and Software Development	Item	Lump Sum	\$ 28,450.00	\$	28,450.00
HW0203.08	Stainless Steel Generator Box Cable Tray & Metering Box	Item	Lump Sum	\$ -	\$	-
HW0203.09	Building Services (Electrical)	Item	Lump Sum	\$ -	\$	-
HW0203.10	Pressure Transmitter/Gauge Board	Item	Lump Sum	\$ -	\$	-
HW0203.11	Installation/Cabling (Electrical)	Item	Lump Sum	\$ 10,737.50	\$	10,737.50
HW0204	Empty					
HW0205	Empty					
HW0206	Service Location	Item	Lump Sum	\$ 194.40	\$	194.40
HW0207	Excavation below design depth including disposal of excavated material (Contingent Item)	0	m3	\$ 70.00	\$	-
HW0208	Extra over Civil Works for excavation in rock:	0	m3	\$ 120.00	\$	-
HW0209	Cut and fill earthworks including compaction:	0	m3	\$ 25.00	\$	-
HW0210	Supply & place ballast (Contingent Item)	0	tonne	\$ 90.00	\$	-
HW0211	Import and place select fill including compaction <may be="" contingent="" item=""></may>	0	m3	\$ 65.00	\$	-
HW0212	Construct access road and hardstand					
HW0212.01	Prepare subgrade		m2	\$ 4.20		
HW0212.02	Supply, place and compact 150mm thick basecourse		m2	\$ 37.00		

HW0212.03	Supply, place and compact 200mm thick basecourse		m2	\$ 47.00		
HW0212.04	Supply, place and compact 250mm thick basecourse		m2	\$ 51.00		
HW0212.05	Supply, place and compact two coat bitumen seal		m2	\$ 26.00		
HW0212.06	Supply, place and compact 30mm thick asphalt bitumen seal		m2	\$ 37.00		
HW0212.07	Concrete kerb & gutter	0	m	\$ 110.00	\$	-
HW0212.08	Concrete driveway	0	m2	\$ 178.00	\$	-
HW0213	Supply all plant, material and labour to undertake the following Piling works:					
HW0213.01	Treated timber mini piles		m			
HW0213.02	Reinforced concrete bored piles	Item	Lump Sum		\$	-
HW0214	Supply all plant, material and labour to undertake the following Retaining Wall works:					
HW0214.01	Timber(Koppers Log) up to 1.5m high		m2	\$ 300.00		
HW0214.02	Concrete Keystone up to 1m high		m2	\$ 380.00		
HW0214.03	Concrete Keystone between 1m and 3m high		m2	\$ 560.00		
HW0214.04	Concrete Keystone greater than 3m high		m2	\$ 560.00		
HW0214.05	Concrete Crib Block up to 2m high		m2	\$ 630.00		
HW0214.06	Concrete Crib Block between 2m and 3m high		m2	\$ 704.00		
HW0215	Acid sulphate soil					
HW0215.01	Initial testing for acid sulphate soils and prepare and submit report	5	per test	\$ 110.00	\$	550.00
HW0215.02	Establish treatment facility	Item	Lump Sum		\$	-
HW0215.03	Handling, treatment and testing of acid sulphate soils		m3	\$ 60.00		
HW0215.04	Disposal off site of acid sulphate soil		tonne	\$ 122.00		
HW0216	Series Pump Pit Structure	Item	Lump Sum		\$	-
HW0217	Supply and Install valve pit concrete formwork, reinforced concrete complete with aluminium tread plate covers and including excavation and backfill	Item	Lump Sum	\$ -	\$	-
HW0218	Supply and install pipework items inside valve pit	Item	Lump Sum	\$ -	\$	-
HW0219	Supply and Install additional pipe Items outside station	Item	Lump Sum	\$ -	\$	-
HW0220	Supply and install pipework items inside station	Item	Lump Sum	\$ -	\$	-
HW0221	Supply and install Type 2 or 4 flow relief structures in accordance with Drgs SCP-502 and SCP-505	Item	Lump Sum		\$	-
HW0222	Supply and install emergency storage structures		L/m			
HW0223	Supply and install fan forced ventilation	Item	Lump Sum		\$	
HW0224	Supply and install Soil Bed Filter	Item	Lump Sum		\$	
HW0225	Supply and Install Strainers	Item	Lump Sum		\$	
HW0226	Supply and Install Series Bypass	Item	Lump Sum		\$	-
HW0227	Landscaping	Item	Lump Sum	\$ -	\$	-
HW0228	Miscellaneous					
HW0229	Preparation and submission of Operation and Maintenance Information	Item	Lump Sum		\$	-
HW0230	Pre commissioning and commissioning	Item	Lump Sum	\$ 8,000.00	\$	8,000.00
HW0231	Preparation and submission of Work as Constructed Information	Item	Lump Sum	\$ 6,000.00	\$	6,000.00
HW2SP	Sub Total				\$1	72,008
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Item No.	Item Description	Qty	Unit		Å	Amount \$	
HW0009	Restoration - Pipelines:						П
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$		╕

1040000 00	L O construction delicercons	0	0	Φ	470.00	Φ	
HW0009.02	Concrete driveway	0	m2	\$	178.00	\$	-
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$	220.00	\$	-
HW0009.04	Concrete footpath	0	m2	\$	155.00	\$	_
HW0009.05	Bitumen footpath	0	m2	\$	117.00	\$	_
HW0009.06	Gravel pavement	0	m2	\$	69.00	\$	
HW0009.07	Bitumen pavement		m2	•			
HW0009.08	AC pavement		m2				
HW0009.09	Pavers		m2				
HW0009.10	Turf		m2				
HW0009.11	Grass seeding		m2				
HW0009.12	Hydromulch		m2				
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3				
HW0011	Acid sulphate soil						
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test				
HW0011.02	Establish treatment facility		Item				
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3				
HW0011.04	Disposal off site of acid sulphate soil		tonne				
HW0012	Preconstruction record						
HW0012.01	Photographic	Item	Lump Sum			\$	-
HW0012.02	Video	Item	Lump Sum			\$	-
HW0012.03	CCTV	Item	Lump Sum			\$	-
HW0013	Work as Constructed Information <insert \$="" min=""></insert>	Item	Lump Sum	\$	2,000.00	\$	2,000.00
Α.	TOTAL ESTIMATED CONTRACT AWARD SU	JM				\$	266,941.66
В.	PRE-CONSTRUCTION COST (Table 10)						
						_	
HW0016	Design					\$	53,388.33
HW0017	Project Management of Design					\$	53,388.33 20,677.67
HW0017 HW0018	Project Management of Design Land Matters						
HW0017	Project Management of Design Land Matters Community Consultation					\$	20,677.67
HW0017 HW0018	Project Management of Design Land Matters Community Consultation Sub Total(B1)	24)				\$ \$	20,677.67 - 74,066.00
HW0017 HW0018	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I	B1)				\$ \$ \$ \$	20,677.67 - 74,066.00 22,219.80
HW0017 HW0018	Project Management of Design Land Matters Community Consultation Sub Total(B1)	B1)				\$ \$	20,677.67 - 74,066.00
HW0017 HW0018 HW0024	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I	B1)				\$ \$ \$ \$	20,677.67 - 74,066.00 22,219.80
HW0017 HW0018 HW0024	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST	B1)				\$ \$ \$	20,677.67 - 74,066.00 22,219.80 96,285.80
HW0017 HW0018 HW0024	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A)	B1)				\$ \$ \$ \$	20,677.67 - 74,066.00 22,219.80
HW0017 HW0018 HW0024	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable)		coblo)			\$ \$ \$ \$	20,677.67 - 74,066.00 22,219.80 96,285.80
HW0017 HW0018 HW0024	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter	rs (as appli	cable)			\$ \$ \$ \$ \$ \$	20,677.67 - 74,066.00 22,219.80 96,285.80
HW0017 HW0018 HW0024	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable)	rs (as appli	cable)			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20,677.67 - 74,066.00 22,219.80 96,285.80
HW0017 HW0018 HW0024 HW0021 HW0020 HW0021 HW0022	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply	rs (as appli	cable)			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20,677.67 - 74,066.00 22,219.80 96,285.80 266,941.66 - -
HW0017 HW0018 HW0024	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	rs (as appli	cable)			\$ \$ \$ \$ \$ \$ \$ \$	20,677.67 - 74,066.00 22,219.80 96,285.80 266,941.66 - - - 26,694.17
HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	rs (as appli	cable)			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20,677.67 - 74,066.00 22,219.80 96,285.80 266,941.66 - - - - - 26,694.17 293,635.83
HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	rs (as appli)				\$ \$ \$ \$ \$ \$ \$ \$	20,677.67 - 74,066.00 22,219.80 96,285.80 266,941.66 - - - 26,694.17
HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1)	rs (as appli)	cable) nary Estimate			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20,677.67 - 74,066.00 22,219.80 96,285.80 266,941.66 - - - 26,694.17 293,635.83 88,090.75
HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	rs (as appli)		,		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20,677.67 - 74,066.00 22,219.80 96,285.80 266,941.66 - - - - 26,694.17 293,635.83
HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1)	rs (as appli) Prelimi		timate)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20,677.67 - 74,066.00 22,219.80 96,285.80 266,941.66 - - - 26,694.17 293,635.83 88,090.75
HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C)	rs (as appli) Prelimi	nary Estimate	timate)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20,677.67 - 74,066.00 22,219.80 96,285.80 266,941.66 26,694.17 293,635.83 88,090.75 381,726.57
HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C)	rs (as appli) Prelimi	nary Estimate	timate)	\$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$	20,677.67 - 74,066.00 22,219.80 96,285.80 266,941.66 26,694.17 293,635.83 88,090.75 381,726.57 478,012.37
HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C)	rs (as appli) Prelimi	nary Estimate	timate)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20,677.67 - 74,066.00 22,219.80 96,285.80 266,941.66 26,694.17 293,635.83 88,090.75 381,726.57
HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C)	rs (as appli) Prelimi	nary Estimate	timate		\$\$ \$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	20,677.67 - 74,066.00 22,219.80 96,285.80 266,941.66 26,694.17 293,635.83 88,090.75 381,726.57 478,012.37
HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) TOTAL PRELIMINARY PROJECT ESTIMATE WWPS Contract Award Cost RM Contract Award Cost	rs (as appli) Prelimi	nary Estimate	timate		\$\$ \$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	20,677.67 74,066.00 22,219.80 96,285.80 266,941.66 26,694.17 293,635.83 88,090.75 381,726.57 478,012.37 201,599.79 65,341.79

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 5,178.00	\$ 5,178.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 7,000.00	\$ 7,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 14,000.00	\$ 14,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 6,200.00	\$ 6,200.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 3,388.84	\$ 3,388.84
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

Sewer Pipeline - Rising - section will be present if one or more rising mains are specified

Item	Construction of Sewer Rising Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWR001	Service Location	Item	Lump Sum	\$ 336.00	\$ 336.0
HWR002	Supply all valves	Item	Lump Sum		\$
HWR003	Supply all fittings	Item	Lump Sum		\$
HIMD004	Supply all pipe materials including detector				
HWR004	tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
108ESS	Nominal DN80 PE pipe	560	m	\$ 19.00	\$ 10,640.0
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
1.08E+05	Nominal DN80 PE (Trench type 3)	560	m	\$ 69.40	\$ 38,864.0
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		
HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00	
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of trench including establishment & disestablishment		m		
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings		Ì		
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				

HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks	1	each	\$ 9,500.00	\$ 9,500.00
HWR027	Preparation of line sheets	560	m	\$ 1.00	\$ 560.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$59,900

Item	Pump Station - Name	Qty	Unit	Rate \$/Unit	· ·	Amount \$
HW0201	PS5 1.5m dia 2 Pump(s)					
	Clear, excavate & backfill in OTR conditions, construct precast pump station, lid and plugged with 1.5m of plain concrete.	Item	Lump Sum	\$ 13,606.08	\$	13,606.08
HW0202	Pumps for Pumping Stations - Supply and install pumps and associated fittings, connection to pipework, testing and commissioning.	2	Lump Sum	\$ 10,537.50	\$	21,075.00
HW0203	Pumping Station Electricals					
HW0203.01	Pit and Conduit System	Item	Lump Sum	\$ 4,812.50	\$	4,812.50
HW0203.02	LV Station Power Supply	Item	Lump Sum	\$ 5,625.00	\$	5,625.00
HW0203.03	Station By-Pass arrangements	Item	Lump Sum		\$	-
HW0203.04	Electrical Demolition works	Item	Lump Sum		\$	-
HW0203.05	Switchboard	Item	Lump Sum	\$ 49,375.00	\$	49,375.00
HW0203.06	PLC / Telemetry Hardware	Item	Lump Sum	\$ 14,437.50	\$	14,437.50
HW0203.07	PLC / Telemetry / Scada Engineering and Software Development	Item	Lump Sum	\$ 28,450.00	\$	28,450.00
HW0203.08	Stainless Steel Generator Box Cable Tray & Metering Box	Item	Lump Sum	\$ -	\$	-
HW0203.09	Building Services (Electrical)	Item	Lump Sum	\$ -	\$	-
HW0203.10	Pressure Transmitter/Gauge Board	Item	Lump Sum	\$ -	\$	-
HW0203.11	Installation/Cabling (Electrical)	Item	Lump Sum	\$ 10,737.50	\$	10,737.50
HW0204	Empty					
HW0205	Empty					
HW0206	Service Location	Item	Lump Sum	\$ 135.00	\$	135.00
HW0207	Excavation below design depth including disposal of excavated material (Contingent Item)	0	m3	\$ 70.00	\$	-
HW0208	Extra over Civil Works for excavation in rock:	0	m3	\$ 120.00	\$	-
HW0209	Cut and fill earthworks including compaction:	0	m3	\$ 25.00	\$	-
HW0210	Supply & place ballast (Contingent Item)	0	tonne	\$ 90.00	\$	
HW0211	Import and place select fill including compaction <may be="" contingent="" item=""></may>	0	m3	\$ 65.00	\$	-
HW0212	Construct access road and hardstand					
HW0212.01	Prepare subgrade		m2	\$ 4.20		
HW0212.02	Supply, place and compact 150mm thick basecourse		m2	\$ 37.00		

HW0212.03	Supply, place and compact 200mm thick basecourse		m2	\$ 47.00		
HW0212.04	Supply, place and compact 250mm thick basecourse		m2	\$ 51.00		
HW0212.05	Supply, place and compact two coat bitumen seal		m2	\$ 26.00		
HW0212.06	Supply, place and compact 30mm thick asphalt bitumen seal		m2	\$ 37.00		
HW0212.07	Concrete kerb & gutter	0	m	\$ 110.00	\$	-
HW0212.08	Concrete driveway	0	m2	\$ 178.00	\$	-
HW0213	Supply all plant, material and labour to undertake the following Piling works:					
HW0213.01	Treated timber mini piles		m			
HW0213.02	Reinforced concrete bored piles	Item	Lump Sum		\$	-
HW0214	Supply all plant, material and labour to undertake the following Retaining Wall works:					
HW0214.01	Timber(Koppers Log) up to 1.5m high		m2	\$ 300.00		
HW0214.02	Concrete Keystone up to 1m high		m2	\$ 380.00		
HW0214.03	Concrete Keystone between 1m and 3m high		m2	\$ 560.00		
HW0214.04	Concrete Keystone greater than 3m high		m2	\$ 560.00		
HW0214.05	Concrete Crib Block up to 2m high		m2	\$ 630.00		
HW0214.06	Concrete Crib Block between 2m and 3m high		m2	\$ 704.00		
HW0215	Acid sulphate soil					
HW0215.01	Initial testing for acid sulphate soils and prepare and submit report	5	per test	\$ 110.00	\$	550.00
HW0215.02	Establish treatment facility	Item	Lump Sum		\$	-
HW0215.03	Handling, treatment and testing of acid sulphate soils		m3	\$ 60.00		
HW0215.04	Disposal off site of acid sulphate soil		tonne	\$ 122.00		
HW0216	Series Pump Pit Structure	Item	Lump Sum		\$	-
HW0217	Supply and Install valve pit concrete formwork, reinforced concrete complete with aluminium tread plate covers and including excavation and backfill	Item	Lump Sum	\$ -	\$	-
HW0218	Supply and install pipework items inside valve pit	Item	Lump Sum	\$ -	\$	-
HW0219	Supply and Install additional pipe Items outside station	Item	Lump Sum	\$ -	\$	-
HW0220	Supply and install pipework items inside station	Item	Lump Sum	\$ -	\$	-
HW0221	Supply and install Type 2 or 4 flow relief structures in accordance with Drgs SCP-502 and SCP-505	Item	Lump Sum		\$	-
HW0222	Supply and install emergency storage structures		L/m			
HW0223	Supply and install fan forced ventilation	Item	Lump Sum		\$	-
HW0224	Supply and install Soil Bed Filter	Item	Lump Sum		\$	
HW0225	Supply and Install Strainers	Item	Lump Sum		\$	-
HW0226	Supply and Install Series Bypass	Item	Lump Sum		\$	
HW0227	Landscaping	Item	Lump Sum	\$ -	\$	-
HW0228	Miscellaneous					
HW0229	Preparation and submission of Operation and Maintenance Information	Item	Lump Sum		\$	-
HW0230	Pre commissioning and commissioning	Item	Lump Sum	\$ 8,000.00	\$	8,000.00
HW0231	Preparation and submission of Work as Constructed Information	Item	Lump Sum	\$ 6,000.00	\$	6,000.00
HW2SP	Sub Total				\$1	62,804
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Item No.	Item Description	Qty	Unit		Å	Amount \$	
HW0009	Restoration - Pipelines:						П
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$		╕

1114/0000 00	Company de deixonos	0	0	ı.	470.00	Φ	
HW0009.02	Concrete driveway	0	m2	\$	178.00	\$	
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$	220.00	\$	-
HW0009.04	Concrete footpath	0	m2	\$	155.00	\$	-
HW0009.05	Bitumen footpath	0	m2	\$	117.00	\$	-
HW0009.06	Gravel pavement	0	m2	\$	69.00	\$	-
HW0009.07	Bitumen pavement		m2				
HW0009.08	AC pavement		m2				
HW0009.09	Pavers		m2				
HW0009.10	Turf		m2				
HW0009.11	Grass seeding		m2				
HW0009.12	Hydromulch		m2				
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3				
HW0011	Acid sulphate soil						
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test				
HW0011.02	Establish treatment facility		Item				
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3				
HW0011.04	Disposal off site of acid sulphate soil		tonne				
HW0012	Preconstruction record						
HW0012.01	Photographic	Item	Lump Sum			\$	-
HW0012.02	Video	Item	Lump Sum			\$	-
HW0012.03	CCTV	Item	Lump Sum			\$	-
HW0013	Work as Constructed Information <insert \$="" min=""></insert>	Item	Lump Sum	\$	4,480.00	\$	4,480.00
				•			
A.	TOTAL ESTIMATED CONTRACT AWARD SU	JM				\$	286,950.42
В.	PRE-CONSTRUCTION COST (Table 10)						
B. HW0016	PRE-CONSTRUCTION COST (Table 10) Design					\$	57,390.08
						\$	57,390.08 21,478.02
HW0016 HW0017 HW0018	Design Project Management of Design Land Matters						
HW0016 HW0017	Design Project Management of Design Land Matters Community Consultation					\$	21,478.02
HW0016 HW0017 HW0018	Design Project Management of Design Land Matters Community Consultation Sub Total(B1)					\$ \$	21,478.02 - 78,868.10
HW0016 HW0017 HW0018	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of	B1)				\$ \$ \$ \$	21,478.02 - 78,868.10 23,660.43
HW0016 HW0017 HW0018	Design Project Management of Design Land Matters Community Consultation Sub Total(B1)	B1)				\$ \$	21,478.02 - 78,868.10
HW0016 HW0017 HW0018 HW0024	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I	B1)				\$ \$ \$ \$	21,478.02 - 78,868.10 23,660.43
HW0016 HW0017 HW0018	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B)	B1)				\$ \$ \$	21,478.02 - 78,868.10 23,660.43 102,528.53
HW0016 HW0017 HW0018 HW0024	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A)	B1)				\$ \$ \$ \$	21,478.02 - 78,868.10 23,660.43
HW0016 HW0017 HW0018 HW0024	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable)					\$ \$ \$ \$	21,478.02 - 78,868.10 23,660.43 102,528.53
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete	rs (as appli	cable)			\$ \$ \$ \$ \$ \$	21,478.02 - 78,868.10 23,660.43 102,528.53
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable)	rs (as appli	cable)			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	21,478.02 - 78,868.10 23,660.43 102,528.53
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply	rs (as appli	cable)			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	21,478.02 78,868.10 23,660.43 102,528.53 286,950.42 - -
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	rs (as appli	cable)			\$ \$ \$ \$ \$ \$ \$ \$ \$	21,478.02 78,868.10 23,660.43 102,528.53 286,950.42 - - - 28,695.04
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of ITOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	rs (as appli	cable)			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	21,478.02
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of ITOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	rs (as appli)	·			\$ \$ \$ \$ \$ \$ \$ \$ \$	21,478.02 78,868.10 23,660.43 102,528.53 286,950.42 - - - 28,695.04
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1)	rs (as appli)	cable)			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	21,478.02
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of ITOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	rs (as appli)	·			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	21,478.02
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1)	rs (as appli) Prelimii	nary Estimate	timate)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	21,478.02
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1)	rs (as appli) Prelimii	nary Estimate	timate		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	21,478.02
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1)	rs (as appli) Prelimii	nary Estimate	timate)	\$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$	21,478.02 78,868.10 23,660.43 102,528.53 286,950.42 - - - 28,695.04 315,645.46 94,693.64
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C)	rs (as appli) Prelimii	nary Estimate	timate		\$\$ \$\$ \$\$ \$\$	21,478.02 - 78,868.10 23,660.43 102,528.53 286,950.42 28,695.04 315,645.46 94,693.64 410,339.10
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of ITOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C)	rs (as appli) Prelimii	nary Estimate	timate)	\$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$	21,478.02 - 78,868.10 23,660.43 102,528.53 286,950.42 28,695.04 315,645.46 94,693.64 410,339.10 512,867.63
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of ITOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) TOTAL PRELIMINARY PROJECT ESTIMATE WWPS Contract Award Cost RM Contract Award Cost	rs (as appli) Prelimii	nary Estimate	timate		\$\$ \$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	21,478.02

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount \$		
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 5,021.00	\$	5,021.00	
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 12,000.00	\$	12,000.00	
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 12,000.00	\$	12,000.00	
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 7,000.00	\$	7,000.00	
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 14,000.00	\$	14,000.00	
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 6,200.00	\$	6,200.00	
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 3,310.44	\$	3,310.44	
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$	-	

Item	eline - Rising - section will be present if one Construction of Sewer Rising Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWR001	Service Location	Item	Lump Sum	\$ 288.00	\$ 288.00
HWR002	Supply all valves	Item	Lump Sum		\$ -
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
108ESS	Nominal DN80 PE pipe	480	m	\$ 19.00	\$ 9,120.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
1.08E+05	Nominal DN80 PE (Trench type 3)	480	m	\$ 69.40	\$ 33,312.00
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		
HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00	
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of trench including establishment & disestablishment		m		
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings		T		
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				

HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:					
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum			\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$	-	\$ -
HWR024	Flow Relief Structures		Each			
HWR025	EMPTY					
HWR026	Supply and construct vent stacks	1	each	\$ 9,500	0.00	\$ 9,500.00
HWR027	Preparation of line sheets	480	m	\$	1.00	\$ 480.00
HWR028	Acceptance testing - rising main		m			
HWR029	Miscellaneous					
HWR000	Sub Total					\$52,700

PS6				Rate	Amount
Item	Pump Station - Name	Qty	Unit	\$/Unit	\$
HW0201	PS6 1.5m dia 2 Pump(s)				
	Clear, excavate & backfill in OTR conditions, construct precast pump station, lid and plugged with 1.5m of plain concrete.	Item	Lump Sum	\$ 13,606.08	\$ 13,606.08
HW0202	Pumps for Pumping Stations - Supply and install pumps and associated fittings, connection to pipework, testing and commissioning.	2	Lump Sum	\$ 10,537.50	\$ 21,075.00
HW0203	Pumping Station Electricals				
HW0203.01	Pit and Conduit System	Item	Lump Sum	\$ 4,812.50	\$ 4,812.50
HW0203.02	LV Station Power Supply	Item	Lump Sum	\$ 5,625.00	\$ 5,625.00
HW0203.03	Station By-Pass arrangements	Item	Lump Sum		\$ -
HW0203.04	Electrical Demolition works	Item	Lump Sum		\$ -
HW0203.05	Switchboard	Item	Lump Sum	\$ 49,375.00	\$ 49,375.00
HW0203.06	PLC / Telemetry Hardware	Item	Lump Sum	\$ 14,437.50	\$ 14,437.50
HW0203.07	PLC / Telemetry / Scada Engineering and Software Development	Item	Lump Sum	\$ 28,450.00	\$ 28,450.00
HW0203.08	Stainless Steel Generator Box Cable Tray & Metering Box	Item	Lump Sum	\$ -	\$ -
HW0203.09	Building Services (Electrical)	Item	Lump Sum	\$ -	\$ -
HW0203.10	Pressure Transmitter/Gauge Board	Item	Lump Sum	\$ -	\$ -
HW0203.11	Installation/Cabling (Electrical)	Item	Lump Sum	\$ 10,737.50	\$ 10,737.50
HW0204	Empty				
HW0205	Empty				
HW0206	Service Location	Item	Lump Sum	\$ 135.00	\$ 135.00
HW0207	Excavation below design depth including disposal of excavated material (Contingent Item)	0	m3	\$ 70.00	\$ -
HW0208	Extra over Civil Works for excavation in rock:	0	m3	\$ 120.00	\$
HW0209	Cut and fill earthworks including compaction:	0	m3	\$ 25.00	\$
HW0210	Supply & place ballast (Contingent Item)	0	tonne	\$ 90.00	\$
HW0211	Import and place select fill including compaction <may be="" contingent="" item=""></may>	0	m3	\$ 65.00	\$
HW0212	Construct access road and hardstand				
HW0212.01	Prepare subgrade		m2	\$ 4.20	
HW0212.02	Supply, place and compact 150mm thick basecourse		m2	\$ 37.00	

HW0212.03	Supply, place and compact 200mm thick basecourse		m2	\$ 47.00		
HW0212.04	Supply, place and compact 250mm thick basecourse		m2	\$ 51.00		
HW0212.05	Supply, place and compact two coat bitumen seal		m2	\$ 26.00		
HW0212.06	Supply, place and compact 30mm thick asphalt bitumen seal		m2	\$ 37.00		
HW0212.07	Concrete kerb & gutter	0	m	\$ 110.00	\$	-
HW0212.08	Concrete driveway	0	m2	\$ 178.00	\$	-
HW0213	Supply all plant, material and labour to undertake the following Piling works:					
HW0213.01	Treated timber mini piles		m			
HW0213.02	Reinforced concrete bored piles	Item	Lump Sum		\$	-
HW0214	Supply all plant, material and labour to undertake the following Retaining Wall works:					
HW0214.01	Timber(Koppers Log) up to 1.5m high		m2	\$ 300.00		
HW0214.02	Concrete Keystone up to 1m high		m2	\$ 380.00		
HW0214.03	Concrete Keystone between 1m and 3m high		m2	\$ 560.00		
HW0214.04	Concrete Keystone greater than 3m high		m2	\$ 560.00		
HW0214.05	Concrete Crib Block up to 2m high		m2	\$ 630.00		
HW0214.06	Concrete Crib Block between 2m and 3m high		m2	\$ 704.00		
HW0215	Acid sulphate soil					
HW0215.01	Initial testing for acid sulphate soils and prepare and submit report	5	per test	\$ 110.00	\$	550.00
HW0215.02	Establish treatment facility	Item	Lump Sum		\$	-
HW0215.03	Handling, treatment and testing of acid sulphate soils		m3	\$ 60.00		
HW0215.04	Disposal off site of acid sulphate soil		tonne	\$ 122.00		
HW0216	Series Pump Pit Structure	Item	Lump Sum		\$	-
HW0217	Supply and Install valve pit concrete formwork, reinforced concrete complete with aluminium tread plate covers and including excavation and backfill	Item	Lump Sum	\$ -	\$	-
HW0218	Supply and install pipework items inside valve pit	Item	Lump Sum	\$ -	\$	-
HW0219	Supply and Install additional pipe Items outside station	Item	Lump Sum	\$ -	\$	-
HW0220	Supply and install pipework items inside station	Item	Lump Sum	\$ -	\$	-
HW0221	Supply and install Type 2 or 4 flow relief structures in accordance with Drgs SCP-502 and SCP-505	Item	Lump Sum		\$	-
HW0222	Supply and install emergency storage structures		L/m			
HW0223	Supply and install fan forced ventilation	Item	Lump Sum		\$	-
HW0224	Supply and install Soil Bed Filter	Item	Lump Sum		\$	
HW0225	Supply and Install Strainers	Item	Lump Sum		\$	-
HW0226	Supply and Install Series Bypass	Item	Lump Sum		\$	
HW0227	Landscaping	Item	Lump Sum	\$ -	\$	-
HW0228	Miscellaneous					
HW0229	Preparation and submission of Operation and Maintenance Information	Item	Lump Sum		\$	-
HW0230	Pre commissioning and commissioning	Item	Lump Sum	\$ 8,000.00	\$	8,000.00
HW0231	Preparation and submission of Work as Constructed Information	Item	Lump Sum	\$ 6,000.00	\$	6,000.00
HW2SP	Sub Total				\$1	62,804
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Item No.	Item Description	Qty	Unit		Å	Amount \$	
HW0009	Restoration - Pipelines:						П
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$		╕

				•	4=0.00	•	
HW0009.02	Concrete driveway	0	m2	\$	178.00	\$	-
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$	220.00	\$	-
HW0009.04	Concrete footpath	0	m2	\$	155.00	\$	
HW0009.05	Bitumen footpath	0	m2	\$	117.00	\$	
HW0009.06	Gravel pavement	0	m2	\$	69.00	\$	
HW0009.07	Bitumen pavement		m2				
HW0009.08	AC pavement		m2				
HW0009.09	Pavers		m2				
HW0009.10	Turf		m2				
HW0009.11	Grass seeding		m2				
HW0009.12	Hydromulch		m2				
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3				
HW0011	Acid sulphate soil						
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test				
HW0011.02	Establish treatment facility		Item				
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3				
HW0011.04	Disposal off site of acid sulphate soil		tonne				
HW0012	Preconstruction record						
HW0012.01	Photographic	Item	Lump Sum			\$	-
HW0012.02	Video	Item	Lump Sum			\$	-
HW0012.03	CCTV	Item	Lump Sum			\$	-
HW0013	Work as Constructed Information <insert \$="" min=""></insert>	Item	Lump Sum	\$	3,840.00	\$	3,840.00
A.	TOTAL ESTIMATED CONTRACT AWARD SU	IM				\$	278,875.02
B.	PRE-CONSTRUCTION COST (Table 10)						
HW0016	Design					\$	55,775.00
HW0017	Project Management of Design					\$	21,155.00
HW0018	Land Matters					\$	-
HW0024	Community Consultation					•	70,000,00
	Sub Total(B1)	24)				\$	76,930.00
	Pre construction contingency (30% of I	B1)				\$	23,079.00
	TOTAL PRE-CONSTRUCTION COST (B)					Ф	100,009.01
6	CONSTRUCTION COST						
C.	CONSTRUCTION COST Total Estimated Contract Award Sum (A)					\$	278,875.02
HW0019	Principal Supplied Pipe (as applicable)					\$	-
HW0020	Principal Supplied Valves and Flowmeter	rc (ac annli	cahla)			\$	_
HW0021	Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable		cablej			\$	_
HW0022	Pump Station HV Power Supply	,				\$	_
HW0023	Construction Management (Table 11)					\$	27,887.50
	Sub Total (C1)					\$	306,762.52
	Construction contingency			Ī		\$	92,028.76
	(Table 12) (30% of C1)	Prelimir	nary Estimate				
	TOTAL CONSTRUCTION COST (C)		,			\$	398,791.28
							40
	TOTAL PRELIMINARY PROJECT ESTIMATE	(B+C) (Pr	eliminary Es	timate)	\$	498,800.28
	WWPS Contract Award Cost					\$	192,569.72
	RM Contract Award Cost					\$	86,305.72
	WWPS Capital Cost					\$	344,432.74
	RM Capital Cost					\$	154,367.55

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount \$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 5,334.00	\$ 5,334.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 7,000.00	\$ 7,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 14,000.00	\$ 14,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 6,200.00	\$ 6,200.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 3,467.24	\$ 3,467.24
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

	eline - Rising - section will be present if one			Rate	Amount
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit	\$
HWR001	Service Location	Item	Lump Sum	\$ 384.00	\$ 384.00
HWR002	Supply all valves	Item	Lump Sum		\$ -
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
108ESS	Nominal DN80 PE pipe	640	m	\$ 19.00	\$ 12,160.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
1.08E+05	Nominal DN80 PE (Trench type 3)	640	m	\$ 69.40	\$ 44,416.00
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		
HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00	
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of trench including establishment & disestablishment		m		
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings		1		
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				

HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:					
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum			\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$	-	\$ -
HWR024	Flow Relief Structures		Each			
HWR025	EMPTY					
HWR026	Supply and construct vent stacks	1	each	\$ 9,	500.00	\$ 9,500.00
HWR027	Preparation of line sheets	640	m	\$	1.00	\$ 640.00
HWR028	Acceptance testing - rising main		m			
HWR029	Miscellaneous			·		
HWR000	Sub Total					\$67,100

Item	Pump Station - Name	Qty	Unit	Rate \$/Unit	4	Amount \$
HW0201	PS7 1.5m dia 2 Pump(s)					
	Clear, excavate & backfill in OTR conditions, construct precast pump station, lid and plugged with 1.5m of plain concrete.	Item	Lump Sum	\$ 13,606.08	\$	13,606.08
HW0202	Pumps for Pumping Stations - Supply and install pumps and associated fittings, connection to pipework, testing and commissioning.	2	Lump Sum	\$ 10,537.50	\$	21,075.00
HW0203	Pumping Station Electricals					
HW0203.01	Pit and Conduit System	Item	Lump Sum	\$ 4,812.50	\$	4,812.50
HW0203.02	LV Station Power Supply	Item	Lump Sum	\$ 5,625.00	\$	5,625.00
HW0203.03	Station By-Pass arrangements	Item	Lump Sum		\$	-
HW0203.04	Electrical Demolition works	Item	Lump Sum		\$	-
HW0203.05	Switchboard	Item	Lump Sum	\$ 49,375.00	\$	49,375.00
HW0203.06	PLC / Telemetry Hardware	Item	Lump Sum	\$ 14,437.50	\$	14,437.50
HW0203.07	PLC / Telemetry / Scada Engineering and Software Development	Item	Lump Sum	\$ 28,450.00	\$	28,450.00
HW0203.08	Stainless Steel Generator Box Cable Tray & Metering Box	Item	Lump Sum	\$ -	\$	-
HW0203.09	Building Services (Electrical)	Item	Lump Sum	\$ -	\$	-
HW0203.10	Pressure Transmitter/Gauge Board	Item	Lump Sum	\$ -	\$	-
HW0203.11	Installation/Cabling (Electrical)	Item	Lump Sum	\$ 10,737.50	\$	10,737.50
HW0204	Empty					
HW0205	Empty					
HW0206	Service Location	Item	Lump Sum	\$ 135.00	\$	135.00
HW0207	Excavation below design depth including disposal of excavated material (Contingent Item)	0	m3	\$ 70.00	\$	
HW0208	Extra over Civil Works for excavation in rock:	0	m3	\$ 120.00	\$	
HW0209	Cut and fill earthworks including compaction:	0	m3	\$ 25.00	\$	
HW0210	Supply & place ballast (Contingent Item)	0	tonne	\$ 90.00	\$	
HW0211	Import and place select fill including compaction <may be="" contingent="" item=""></may>	0	m3	\$ 65.00	\$	
HW0212	Construct access road and hardstand					
HW0212.01	Prepare subgrade		m2	\$ 4.20		
HW0212.02	Supply, place and compact 150mm thick basecourse		m2	\$ 37.00		

HW0212.03	Supply, place and compact 200mm thick basecourse		m2	\$ 47.00		
HW0212.04	Supply, place and compact 250mm thick basecourse		m2	\$ 51.00		
HW0212.05	Supply, place and compact two coat bitumen seal		m2	\$ 26.00		
HW0212.06	Supply, place and compact 30mm thick asphalt bitumen seal		m2	\$ 37.00		
HW0212.07	Concrete kerb & gutter	0	m	\$ 110.00	\$	-
HW0212.08	Concrete driveway	0	m2	\$ 178.00	\$	-
HW0213	Supply all plant, material and labour to undertake the following Piling works:					
HW0213.01	Treated timber mini piles		m			
HW0213.02	Reinforced concrete bored piles	Item	Lump Sum		\$	-
HW0214	Supply all plant, material and labour to undertake the following Retaining Wall works:					
HW0214.01	Timber(Koppers Log) up to 1.5m high		m2	\$ 300.00		
HW0214.02	Concrete Keystone up to 1m high		m2	\$ 380.00		
HW0214.03	Concrete Keystone between 1m and 3m high		m2	\$ 560.00		
HW0214.04	Concrete Keystone greater than 3m high		m2	\$ 560.00		
HW0214.05	Concrete Crib Block up to 2m high		m2	\$ 630.00		
HW0214.06	Concrete Crib Block between 2m and 3m high		m2	\$ 704.00		
HW0215	Acid sulphate soil					
HW0215.01	Initial testing for acid sulphate soils and prepare and submit report	5	per test	\$ 110.00	\$	550.00
HW0215.02	Establish treatment facility	Item	Lump Sum		\$	-
HW0215.03	Handling, treatment and testing of acid sulphate soils		m3	\$ 60.00		
HW0215.04	Disposal off site of acid sulphate soil		tonne	\$ 122.00		
HW0216	Series Pump Pit Structure	Item	Lump Sum		\$	-
HW0217	Supply and Install valve pit concrete formwork, reinforced concrete complete with aluminium tread plate covers and including excavation and backfill	Item	Lump Sum	\$ -	\$	-
HW0218	Supply and install pipework items inside valve pit	Item	Lump Sum	\$ -	\$	-
HW0219	Supply and Install additional pipe Items outside station	Item	Lump Sum	\$ -	\$	-
HW0220	Supply and install pipework items inside station	Item	Lump Sum	\$ -	\$	-
HW0221	Supply and install Type 2 or 4 flow relief structures in accordance with Drgs SCP-502 and SCP-505	Item	Lump Sum		\$	-
HW0222	Supply and install emergency storage structures		L/m			
HW0223	Supply and install fan forced ventilation	Item	Lump Sum		\$	-
HW0224	Supply and install Soil Bed Filter	Item	Lump Sum		\$	
HW0225	Supply and Install Strainers	Item	Lump Sum		\$	-
HW0226	Supply and Install Series Bypass	Item	Lump Sum		\$	
HW0227	Landscaping	Item	Lump Sum	\$ -	\$	-
HW0228	Miscellaneous					
HW0229	Preparation and submission of Operation and Maintenance Information	Item	Lump Sum		\$	-
HW0230	Pre commissioning and commissioning	Item	Lump Sum	\$ 8,000.00	\$	8,000.00
HW0231	Preparation and submission of Work as Constructed Information	Item	Lump Sum	\$ 6,000.00	\$	6,000.00
HW2SP	Sub Total				\$1	62,804
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Item No.	Item Description	Qty	Unit		Å	Amount \$	
HW0009	Restoration - Pipelines:						П
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$		╕

11140000 00	Oto debuse		0	Φ.	470.00	Φ.	
HW0009.02	Concrete driveway	0	m2	\$	178.00	\$	
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$	220.00	\$	-
HW0009.04	Concrete footpath	0	m2	\$	155.00	\$	-
HW0009.05	Bitumen footpath	0	m2	\$	117.00	\$	-
HW0009.06	Gravel pavement	0	m2	\$	69.00	\$	_
HW0009.07	Bitumen pavement		m2				
HW0009.08	AC pavement		m2				
HW0009.09	Pavers		m2				
HW0009.10	Turf		m2				
HW0009.11	Grass seeding		m2				
HW0009.12	Hydromulch		m2				
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3				
HW0011	Acid sulphate soil						
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test				
HW0011.02	Establish treatment facility		Item				
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3				
HW0011.04	Disposal off site of acid sulphate soil		tonne				
HW0012	Preconstruction record						
HW0012.01	Photographic	Item	Lump Sum			\$	-
HW0012.02	Video	Item	Lump Sum			\$	-
HW0012.03	CCTV	Item	Lump Sum			\$	-
HW0013	Work as Constructed Information <insert \$="" min=""></insert>	Item	Lump Sum	\$	5,120.00	\$	5,120.00
A.	TOTAL ESTIMATED CONTRACT AWARD SU	M				\$	295,024.82
A.	TOTAL ESTIMATED CONTRACT AWARD SU	М				\$	295,024.82
A . B.	TOTAL ESTIMATED CONTRACT AWARD SU	M				\$	295,024.82
B. HW0016		M				\$	59,004.96
B. HW0016 HW0017	PRE-CONSTRUCTION COST (Table 10)	М				\$	
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters	M				\$	59,004.96
B. HW0016 HW0017	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation	M				\$	59,004.96 21,800.99 -
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1)					\$ \$ \$	59,004.96 21,800.99 - 80,805.96
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E					\$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1)					\$ \$ \$	59,004.96 21,800.99 - 80,805.96
B. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E					\$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E					\$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79 105,047.74
B. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A)					\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79
B. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable)	31)				\$ \$ \$ \$ \$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79 105,047.74
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter	31) rs (as appli	cable)			\$ \$ \$ \$ \$ \$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79 105,047.74
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable)	31) rs (as appli	cable)			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79 105,047.74
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply	31) rs (as appli	cable)			\$ \$ \$ \$ \$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79 105,047.74 295,024.82 - -
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	31) rs (as appli	cable)			\$ \$ \$ \$ \$ \$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79 105,047.74 295,024.82 - - - 29,502.48
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	31) rs (as appli	cable)	,		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79 105,047.74 295,024.82 - - - - 29,502.48 324,527.30
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	31) rs (as appli				\$ \$ \$ \$ \$ \$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79 105,047.74 295,024.82 - - - 29,502.48
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1)	31) rs (as appli	cable)			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79 105,047.74 295,024.82 - - - 29,502.48 324,527.30 97,358.19
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	31) rs (as appli				\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79 105,047.74 295,024.82 - - - - 29,502.48 324,527.30
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1)	31) rs (as appli)	nary Estimate	timato		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79 105,047.74 295,024.82 - - - 29,502.48 324,527.30 97,358.19
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1)	31) rs (as appli)	nary Estimate	timate		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79 105,047.74 295,024.82 - - - 29,502.48 324,527.30 97,358.19
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C)	31) rs (as appli)	nary Estimate	timate)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79 105,047.74 295,024.82 - - - 29,5024.83 324,527.30 97,358.19 421,885.49
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1)	31) rs (as appli)	nary Estimate	timate		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79 105,047.74 295,024.82 - - - 29,502.48 324,527.30 97,358.19
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) TOTAL PRELIMINARY PROJECT ESTIMATE WWPS Contract Award Cost RM Contract Award Cost	31) rs (as appli)	nary Estimate	timate		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79 105,047.74 295,024.82 - - 29,502.48 324,527.30 97,358.19 421,885.49 526,933.24 192,804.62 102,220.62
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C)	31) rs (as appli)	nary Estimate	timate		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	59,004.96 21,800.99 - 80,805.96 24,241.79 105,047.74 295,024.82 - - - 29,502.48 324,527.30 97,358.19 421,885.49 526,933.24

PROJECT DESCRIPTION: North Tuncurry Development Project - Vacuum System - Stage A

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 4,570.00	\$ 4,570.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 3,085.22	\$ 3,085.22
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

Sewer Pipeline - Rising - section will be present if one or more rising mains are specified

				Rate	Amount
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit	\$
HWR001	Service Location	Item	Lump Sum	\$ 1,124.29	5 \$ 1,124.25
HWR002	Supply all valves	Item	Lump Sum		-
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
11EVSS	Nominal DN300 PVC pipe	475	m	\$ 85.00	\$ 40,375.00
10AVSS	Nominal DN100 PVC pipe	1280	m	\$ 14.00	17,920.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
11EV03	Nominal DN300 PVC (Trench type 3)	475	m	\$ 85.25	\$ 40,493.75
10AV03	Nominal DN100 PVC (Trench type 3)	1280	m	\$ 63.80	81,664.00
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		

HWR000	Sub Total					\$	189,608.00
LIVA/DOGG						φ	400 000 00
HWR029	Miscellaneous						
HWR028	Acceptance testing - rising main		m				
HWR027	Preparation of line sheets	1755	m	\$	1.00	\$	1,755.00
	Supply and construct vent stacks	4755	each	.	4.00	φ	4 755 00
HWR026			occh				
HWR025	EMPTY		Lacii				
HWR024	valves and fittings) Flow Relief Structures		Each				
HWR023	Supply and Install valve pits (excluding	0	Each	\$	-	\$	-
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum			\$	-
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:						
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:						
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m				
HWR018	Road / creek crossings						
HWR017	Supply and place treated timber piling for pipe support		m				
HWR016	External Dewatering of pots including establishment & disestablishment	6	no.	\$	1,046.00	\$	6,276.00
HWR015	Supply & place ballast		tonnes	\$	90.00		
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3				
HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$	270.00		

		Qty	Unit		Amoun	t
					\$	
HW0009 F	Restoration - Pipelines:					
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$	-
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$	-
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$	-
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$	-
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$	_
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$	_
HW0009.07	Bitumen pavement		m2			
HW0009.08	AC pavement		m2			
HW0009.09	Pavers		m2			
HW0009.10	Turf		m2			
HW0009\11M1	.1 GPaSs:seeding rojects\North Tuncurry Developmen <u>Estimates_Reticulation Vacuum</u> ម្រ				vater Cost Estimat	es\Cost

HW0009.12	T						
	,		m2				
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3				
HW0011	Acid sulphate soil						
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test				
HW0011.02	Establish treatment facility		Item				
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3				
HW0011.04	Disposal off site of acid sulphate soil		tonne				
HW0012	Preconstruction record						
HW0012.01	Photographic	Item	Lump Sum			\$	-
HW0012.02	Video	Item	Lump Sum			\$	-
HW0012.03	CCTV	Item	Lump Sum			\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 1	4,040.00	\$	14,040.00
Δ	TOTAL ESTIMATED CONTRACT AWARD SU	LIM				<u> </u>	265 202
A.	TOTAL ESTIMATED CONTRACT AWARD SO	Olvi				\$	265,303
B.	PRE-CONSTRUCTION COST (Table 10)						
HW0016	Design	20%				\$	53,060.64
HW0017	Project Management of Design	variable	39%				
HW0018			3370			\$	20,800
	Land Matters		3370			\$ \$	20,800
HW0024	Land Matters Community Consultation		3370				20,800
HW0024			3370				20,800 - 73,860
HW0024	Community Consultation	B1)	3370				-
HW0024	Community Consultation Sub Total(B1)	B1)	3370			\$	73,860
	Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B)	B1)	3370			\$ \$ \$	73,860 22,158
HW0024	Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST	B1)	3370			\$ \$ \$	73,860 22,158 96,019
C.	Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A)	B1)	3370			\$ \$ \$ \$	73,860 22,158
C. HW0019	Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable)					\$ \$ \$ \$	73,860 22,158 96,019
C. HW0019 HW0020	Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter	rs (as appli				\$ \$ \$ \$ \$	73,860 22,158 96,019
C. HW0019 HW0020 HW0021	Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable)	rs (as appli				\$ \$ \$ \$ \$	73,860 22,158 96,019
C. HW0019 HW0020 HW0021 HW0022	Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply	rs (as appli	cable)			\$ \$ \$ \$ \$	73,860 22,158 96,019 265,303
C. HW0019 HW0020 HW0021	Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	rs (as appli				\$ \$ \$ \$ \$ \$ \$ \$	73,860 22,158 96,019 265,303
C. HW0019 HW0020 HW0021 HW0022	Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	rs (as appli	cable)			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	73,860 22,158 96,019 265,303 21,224 286,527
C. HW0019 HW0020 HW0021 HW0022	Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	rs (as appli	cable)			\$ \$ \$ \$ \$ \$ \$ \$	73,860 22,158 96,019 265,303
C. HW0019 HW0020 HW0021 HW0022	Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	rs (as appli	cable)			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	73,860 22,158 96,019 265,303 21,224 286,527

468,504

TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)

PROJECT DESCRIPTION: North Tuncurry Development Project - Vacuum System - Stage B

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 2,488.00	\$ 2,488.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 2,044.03	\$ 2,044.03
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

Sewer Pipeline - Rising - section will be present if one or more rising mains are specified

	Construction of Source Dising Mains			Rate	Amount
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit	\$
HWR001	Service Location	Item	Lump Sum	\$ 571.80	\$ 571.80
HWR002	Supply all valves	Item	Lump Sum		\$ -
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
10AVSS	Nominal DN100 PVC pipe	800	m	\$ 14.00	\$ 11,200.00
119VSS	Nominal DN250 PVC pipe	153	m	\$ 62.50	\$ 9,562.50
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
10AV03	Nominal DN100 PVC (Trench type 3)	800	m	\$ 63.80	\$ 51,040.00
119V03	Nominal DN250 PVC (Trench type 3)	153	m	\$ 80.40	\$ 12,301.20
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement		m3	\$ 270.00	
	(14:1) backfill				
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	15	no.	\$ 1,046.00	\$ 15,690.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	953	m	\$ 1.00	\$ 953.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 101,318.50

		Qty	Unit		Amoun	t
					\$	
HW0009 F	Restoration - Pipelines:					
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$	-
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$	-
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$	-
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$	-
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$	_
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$	_
HW0009.07	Bitumen pavement		m2			
HW0009.08	AC pavement		m2			
HW0009.09	Pavers		m2			
HW0009.10	Turf		m2			
HW0009\11M1	.1 GPaSs:seeding rojects\North Tuncurry Developmen <u>Estimates_Reticulation Vacuum</u> ម្រ				vater Cost Estimat	es\Cost

HW0009.12	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 7,624.00	\$	7,624.00
Α.	TOTAL ESTIMATED CONTRACT AWARD SU	JM			\$	161,475
A . B.	TOTAL ESTIMATED CONTRACT AWARD SU PRE-CONSTRUCTION COST (Table 10)	JM			\$	161,475
B. HW0016	PRE-CONSTRUCTION COST (Table 10) Design	JM 20%			\$	32,294.91
B. HW0016 HW0017	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design		54%		\$	32,294.91
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters	20%			\$	32,294.91
B. HW0016 HW0017	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation	20%			\$ \$ \$	32,294.91 17,439 -
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1)	20% variable			\$ \$ \$	32,294.91 17,439 - 49,734
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E	20% variable			\$ \$ \$ \$	32,294.91 17,439 - 49,734 14,920
B. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E	20% variable			\$ \$ \$	
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E	20% variable			\$ \$ \$ \$ \$	32,294.91 17,439 - 49,734 14,920 64,654
B. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A)	20% variable			\$ \$ \$ \$ \$	32,294.91 17,439 - 49,734 14,920
B. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable)	20% variable 31)	54%		\$ \$ \$ \$	32,294.91 17,439 - 49,734 14,920 64,654
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter	20% variable 31)	54%		\$ \$ \$ \$ \$ \$	32,294.91 17,439 - 49,734 14,920 64,654
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable)	20% variable 31)	54%		\$ \$ \$ \$ \$ \$	32,294.91 17,439 - 49,734 14,920 64,654
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply	20% variable 31)	cable)		\$ \$ \$ \$ \$ \$ \$	32,294.91 17,439 - 49,734 14,920 64,654
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	20% variable 31)	54%		\$ \$ \$ \$ \$ \$ \$ \$ \$	32,294.91 17,439 - 49,734 14,920 64,654 161,475
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	20% variable 31)	cable)		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	32,294.91 17,439 - 49,734 14,920 64,654 161,475
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	20% variable 31)	cable)		\$ \$ \$ \$ \$ \$ \$ \$ \$	32,294.91 17,439 - 49,734 14,920 64,654 161,475

PROJECT DESCRIPTION: North Tuncurry Development Project - Vacuum System - Stage C

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 3,884.00	\$ 3,884.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 2,742.22	\$ 2,742.22
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

				Rate	Amount		
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit		\$	
HWR001	Service Location	Item	Lump Sum	\$ 1,020.00	\$	1,020.00	
HWR002	Supply all valves	Item	Lump Sum		\$	-	
HWR003	Supply all fittings	Item	Lump Sum		\$	-	
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:						
114VSS	Nominal DN200 PVC pipe	376	m	\$ 48.00	\$	18,048.00	
10AVSS	Nominal DN100 PVC pipe	1324	m	\$ 14.00	\$	18,536.00	
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.						
114V03	Nominal DN200 PVC (Trench type 3)	376	m	\$ 71.40	\$	26,846.40	
10AV03	Nominal DN100 PVC (Trench type 3)	1324	m	\$ 63.80	\$	84,471.20	
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.						
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.						
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.						
HWR009	EMPTY						
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30			
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00			
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3				

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement		m3	\$ 270.00	
LINAIDOAA	(14:1) backfill				
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	0	no.	\$ 1,046.00	\$ -
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	1700	m	\$ 1.00	\$ 1,700.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 150,621.60

	· ·	Qty	Unit		Amount
					\$
HW0009 F	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HVW0009\11M11	.1 Grass:seeding rojects\North Tuncurry Developmen <u>Estimates_Reticulation Vacuum</u> (១				vater Cost Estimates\Cost

HW00110 Extra over item for Excavation in rock and disposal of excess excavaled material	HW0009.12	Hydromulch		m2			
HW0011 Acid sulphate soil HW0011.02 Establish treatment facility HW0011.03 Handling, treatment and testing of acid sulphate soils HW0011.04 Disposal off site of acid sulphate soil HW0012.01 Photographic HW0012.02 Video Item Lump Sum \$ HW0012.02 Video Item Lump Sum \$ HW0012.03 CCTV Item Lump Sum \$ HW0012.03 CCTV Item Lump Sum \$ HW0012.03 CCTV Item Lump Sum \$ HW0012.04 System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System System	HW0010	-					
HW0011.01		disposal of excess excavated material					
Prepare and submit report	HW0011	Acid sulphate soil					
HW0011.03	HW0011.01			per test			
Sulphate soils	HW0011.02	Establish treatment facility		Item			
HW0012 Preconstruction record HW0012.01 Photographic Item Lump Sum \$		sulphate soils		m3			
HW0012.02	HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012.02	HW0012	Preconstruction record					
HW0012.03 CCTV Item Lump Sum \$ HW0013 Work as Constructed Information <insert \$="" (30%="" (a)="" (as="" (b)="" (c1)="" (table="" -="" 10)="" 11)="" 13,600.="" 13,600.00="" 18,77="" 18,82="" 20%="" 218,84="" 240,73="" 43%="" 43,769.5="" 50b="" 62,59="" 72,22<="" 81,360="" a.="" applicable)="" award="" b.="" b1)="" c.="" community="" construction="" consultation="" contingency="" contract="" cost="" design="" estimated="" hv="" hw0016="" hw0017="" hw0018="" hw0019="" hw0020="" hw0021="" hw0022="" hw0023="" item="" land="" lump="" management="" matters="" min="" of="" pipe="" pittings="" power="" pre="" pre-construction="" principal="" project="" pump="" station="" sub="" sum="" supplied="" supply="" td="" total="" total(b1)="" variable=""><td>HW0012.01</td><td>Photographic</td><td>Item</td><td>Lump Sum</td><td></td><td>\$</td><td>-</td></insert>	HW0012.01	Photographic	Item	Lump Sum		\$	-
A. TOTAL ESTIMATED CONTRACT AWARD SUM B. PRE-CONSTRUCTION COST (Table 10) HW0017 Project Management of Design variable 43% HW0018 Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Fittings (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate Lump Sum \$ 13,600.00 \$ 13,600.00 \$ 218,84	HW0012.02	Video	Item	Lump Sum		\$	-
A. TOTAL ESTIMATED CONTRACT AWARD SUM B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$ 43,769.5 HW0017 Project Management of Design variable 43% \$ 18,82 HW0018 Land Matters \$ 5 - HW0024 Community Consultation Sub Total(B1) \$ 62,59 Pre construction contingency (30% of B1) \$ 18,77 TOTAL PRE-CONSTRUCTION COST (B) \$ 81,36 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate	HW0012.03	CCTV	Item	Lump Sum		\$	-
A. TOTAL ESTIMATED CONTRACT AWARD SUM B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% HW0017 Project Management of Design variable 43% HW0018 Land Matters Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Pipe (as applicable) HW0021 Principal Supplied Valves and Flowmeters (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate	HW0013		Item	Lump Sum	\$ 13,600.00	\$	13,600.00
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$ 43,769.5 HW0017 Project Management of Design variable 43% \$ 18,82 HW0018 Land Matters \$ \$ - Community Consultation Sub Total(B1) \$ 62,59 Pre construction contingency (30% of B1) \$ 18,77 TOTAL PRE-CONSTRUCTION COST (B) \$ 81,36 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 218,84 HW0019 Principal Supplied Pipe (as applicable) \$ - HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ - HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - HW0023 Construction Management (Table 11) \$ Sub Total (C1) \$ 240,73 Sub Total (C1) \$ 72,22 (Table 12) (30% of C1) Preliminary Estimate		Ψ					
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$ 43,769.5 HW0017 Project Management of Design variable 43% \$ 18,82 HW0018 Land Matters \$ \$ - Community Consultation Sub Total(B1) \$ 62,59 Pre construction contingency (30% of B1) \$ 18,77 TOTAL PRE-CONSTRUCTION COST (B) \$ 81,36 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 218,84 HW0019 Principal Supplied Pipe (as applicable) \$ - HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ - HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - HW0023 Construction Management (Table 11) \$ Sub Total (C1) \$ 240,73 Sub Total (C1) \$ 72,22 (Table 12) (30% of C1) Preliminary Estimate							
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$ 43,769.5 HW0017 Project Management of Design variable 43% \$ 18,82 HW0018 Land Matters \$ HW0024 Community Consultation Sub Total(B1) \$ 62,59 Pre construction contingency (30% of B1) \$ 18,77 TOTAL PRE-CONSTRUCTION COST (B) \$ 81,36 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 218,84 HW0019 Principal Supplied Pipe (as applicable) \$ HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ HW0021 Principal Supplied Fittings (as applicable) \$ HW0022 Pump Station HV Power Supply \$ HW0023 Construction Management (Table 11) \$ Sub Total (C1) \$ Construction contingency (Table 12) (30% of C1) Preliminary Estimate	A.	TOTAL ESTIMATED CONTRACT AWARD SU	JM			Ś	218 848
HW0016 Design HW0017 Project Management of Design HW0018 Land Matters HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate \$ 43,769.5 \$ 43,769.5 \$ 18,82 \$ 18,82 \$ 5 \$ 18,82 \$ 5 \$ 62,59 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 18,77 \$ \$ 1						<u> </u>	
HW0017 Project Management of Design variable 43% HW0018 Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate	B.	PRE-CONSTRUCTION COST (Table 10)					
HW0018 Land Matters HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate	HW0016	Design	20%]		\$	43,769.56
A Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate	HW0017	Project Management of Design	variable	43%		\$	18,821
Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Construction contingency (Table 12) (30% of C1) Sub Total (C1) Preliminary Estimate	HW0018	Land Matters				\$	-
Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate	HW0024	Community Consultation					
C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate							
C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate		•				\$	62,590
Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate		Sub Total(B1)	31)				62,590 18,777
Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate		Sub Total(B1) Pre construction contingency (30% of E	31)			\$	
HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate		Sub Total(B1) Pre construction contingency (30% of E	31)			\$	18,777
HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ - HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - HW0023 Construction Management (Table 11) \$ 21,88 Sub Total (C1) \$ 240,73 Construction contingency (Table 12) (30% of C1) Preliminary Estimate	C.	Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B)	31)			\$	18,777
HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - HW0023 Construction Management (Table 11) \$ 21,88 Sub Total (C1) \$ 240,73 Construction contingency (Table 12) (30% of C1) Preliminary Estimate	C.	Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST	31)			\$	18,777
HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate \$		Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A)	31)			\$ \$ \$	18,777 81,368
HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate	HW0019	Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable)		cable)		\$ \$ \$	18,777 81,368
Sub Total (C1) Construction contingency (Table 12) (30% of C1) Sub Total (C1) \$ 240,73 \$ 72,22	HW0019 HW0020	Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter	rs (as appli	cable)		\$ \$ \$ \$	18,777 81,368
Construction contingency (Table 12) (30% of C1) Preliminary Estimate \$ 72,22	HW0019 HW0020 HW0021 HW0022	Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable)	rs (as appli	cable)		\$ \$ \$ \$ \$	18,777 81,368
(Table 12) (30% of C1) Preliminary Estimate	HW0019 HW0020 HW0021 HW0022	Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply	rs (as appli			\$ \$ \$ \$ \$	18,777 81,368
	HW0019 HW0020 HW0021 HW0022	Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	rs (as appli			\$ \$ \$ \$ \$ \$ \$	18,777 81,368 218,848
TOTAL CONSTRUCTION COST (C) \$ 312,95	HW0019 HW0020 HW0021 HW0022	Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	rs (as appli	10%		\$ \$ \$ \$ \$ \$ \$ \$	18,777 81,368 218,848 21,885
	HW0019 HW0020 HW0021 HW0022	Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1)	rs (as appli	10%		\$ \$ \$ \$ \$ \$ \$ \$	18,777 81,368 218,848 21,885 240,733
	HW0019 HW0020 HW0021 HW0022	Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1)	rs (as appli	10%		\$ \$ \$ \$ \$ \$ \$ \$ \$	18,777 81,368 218,848 21,885 240,733

PROJECT DESCRIPTION: North Tuncurry Development Project - Vacuum System - Stage D

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 2,951.00	\$ 2,951.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 2,275.34	\$ 2,275.34
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

				Rate	Amount
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit	\$
HWR001	Service Location	Item	Lump Sum	\$ 778.80	778.80
HWR002	Supply all valves	Item	Lump Sum		-
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
10FVSS	Nominal DN150 PVC pipe	167	m	\$ 28.00	4,676.00
10AVSS	Nominal DN100 PVC pipe	1131	m	\$ 14.00	15,834.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
10FV03	Nominal DN150 PVC (Trench type 3)	167	m	\$ 67.40	11,255.80
10AV03	Nominal DN100 PVC (Trench type 3)	1131	m	\$ 63.80	72,157.80
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement		m3	\$ 270.00	
	(14:1) backfill				
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	3	no.	\$ 1,046.00	\$ 3,138.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	1298	m	\$ 1.00	\$ 1,298.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 109,138.40

	· ·	Qty	Unit		Amount
					\$
HW0009 F	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HVW0009\11M11	.1 Grass:seeding rojects\North Tuncurry Developmen <u>Estimates_Reticulation Vacuum</u> (១				vater Cost Estimates\Cost

HW0009.12	Hydromulch		m2			
	,					
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 10,384.00	\$	10,384.00
	1					
•	•					
A.	TOTAL ESTIMATED CONTRACT AWARD SU	JM			\$	172,749
					•	
В.	PRE-CONSTRUCTION COST (Table 10)					
HW0016	Design	20%			\$	34,549.75
HW0017	Project Management of Design	variable	49%		\$	17,033
HW0018	Land Matters				\$	_
HW0024	Community Consultation					
	Sub Total(B1)				\$	51,583
	Pre construction contingency (30% of I	B1)			\$	15,475
	TOTAL PRE-CONSTRUCTION COST (B)				\$	67,058
C.	CONSTRUCTION COST					
	Total Estimated Contract Award Sum (A)				\$	172,749
HW0019	Principal Supplied Pipe (as applicable)				\$	-
HW0020	Principal Supplied Valves and Flowmeter	rs (as appl	icable)		\$	-
HW0021	Principal Supplied Fittings (as applicable		- /		\$	-
HW0022	Pump Station HV Power Supply	,			\$	-
HW0023	Construction Management (Table 11)		10%		\$	17,275
	Sub Total (C1)				\$	190,024
	Construction contingency				\$	57,007
	(Table 12) (30% of C1)	Prelimir	nary Estimate			31,031
	TOTAL CONSTRUCTION COST (C)				\$	247,031
	TOTAL PRELIMINARY PROJECT ESTIMATE	(B+C) (P	reliminary E	stimate)	\$	314,088
						·

PROJECT DESCRIPTION: North Tuncurry Development Project - Vacuum System - Stage E

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 2,293.00	\$ 2,293.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 1,946.49	\$ 1,946.49
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

				Rate	Amount
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit	\$
HWR001	Service Location	Item	Lump Sum	\$ 480.45	\$ 480.45
HWR002	Supply all valves	Item	Lump Sum		\$ -
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
11EVSS	Nominal DN300 PVC pipe	191	m	\$ 85.00	\$ 16,235.00
10AVSS	Nominal DN100 PVC pipe	562	m	\$ 14.00	\$ 7,868.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
11EV03	Nominal DN300 PVC (Trench type 3)	191	m	\$ 85.25	\$ 16,282.75
10AV03	Nominal DN100 PVC (Trench type 3)	562	m	\$ 63.80	\$ 35,855.60
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00	
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	2	no.	\$ 1,046.00	\$ 2,092.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	753	m	\$ 1.00	\$ 753.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 79,566.80

Item No.	Item Description	Qty	Unit			Amount \$	ſ
HW0009	Restoration - Pipelines:			1			
HW0009.01	Concrete kerb & gutter	0	m	\$	110.00	\$	_
HW0009.02	Concrete driveway	0	m2	\$	178.00	\$	-
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$	220.00	\$	-
HW0009.04	Concrete footpath	0	m2	\$	155.00	\$	_
HW0009.05	Bitumen footpath	0	m2	\$	117.00	\$	_
HW0009.06	Gravel pavement	0	m2	\$	69.00	\$	
HW0009.07	Bitumen pavement		m2				
HW0009.08	AC pavement		m2				
HW0009.09	Pavers		m2				
HW0009.10	Turf		m2	Î			
HW0009\11\	11 GfàSs:seeding rojects\North Tuncurry Developme	t Project 2014\	INAL SU <u>P</u> MISS	ION Sep-20	14\Data\Wastew	vater Cost Estimate	es\Cos

A. TOTAL ESTIMATED CONTRACT AWARD SUM B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% HW0017 Project Management of Design variable 57% HW0018 Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Pipe (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction Contingency (Table 12) (30% of C1) Freliminary Estimate 137,830 \$ 137,830 \$ 15,755 \$ 27,566.06 \$ 27,566.06 \$ 43,141 \$ 43,141 \$ 43,141 \$ 43,141 \$ 12,942 \$ 56,083 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 137,830 \$ 5 6,083 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 137,830 \$ 137,830	HW0009.12	Hydromulch		m2			
HW0011.01 Initial testing for acid sulphate soils and prepare and submit report	HW0010			m3			
prepare and submit report HW0011.02 Establish treatment facility HW0011.04 Disposal off site of acid sulphate soil HW0012.01 Preconstruction record HW0012.02 Video Item Lump Sum \$ - HW0012.03 CCTV Item Lump Sum \$ - HW0012.03 CCTV Item Lump Sum \$ - HW0013 Work as Constructed Information <insert \$="" (30%="" (a)="" (as="" (b)="" (b1)="" (c)="" (c1)="" (table="" -="" 10)="" 11)="" 12,942="" 137,830="" 197,097<="" 27,566.06="" 57%="" applicable)="" award="" b1)="" bb.="" cc.="" community="" construction="" consultation="" contingency="" contract="" cost="" design="" estimate="" estimated="" fellminary="" hv="" hw0016="" hw0017="" hw0018="" hw0019="" hw0020="" hw0021="" hw0022="" item="" land="" lump="" management="" matters="" min="" of="" pipe="" power="" pre="" pre-construction="" principal="" project="" pump="" station="" sub="" sum="" supplied="" supply="" td="" total="" variable=""><td>HW0011</td><td>Acid sulphate soil</td><td></td><td></td><td></td><td></td><td></td></insert>	HW0011	Acid sulphate soil					
HW0011.03	HW0011.01			per test			
##W0011.04 Disposal off site of acid sulphate soil tonne ##W0012.01 Preconstruction record ##W0012.02 Video Item Lump Sum \$ ##W0012.03 CCTV Item Lump Sum \$ ##W0013 Work as Constructed Information <insert \$="" 6,024.00="" 6,024.0<="" item="" lump="" min="" sum="" td=""><td>HW0011.02</td><td>Establish treatment facility</td><td></td><td>Item</td><td></td><td></td><td></td></insert>	HW0011.02	Establish treatment facility		Item			
HW0012 Preconstruction record HW0012.01 Photographic Item Lump Sum \$	HW0011.03	sulphate soils		m3			
HW0012.02 Video Item Lump Sum \$	HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012.02	HW0012	Preconstruction record					
HW0012.03 CCTV Item Lump Sum \$	HW0012.01	Photographic	Item	Lump Sum		\$	-
A. TOTAL ESTIMATED CONTRACT AWARD SUM \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,024.00 \$ 6,02	HW0012.02	Video	Item	Lump Sum		\$	-
A. TOTAL ESTIMATED CONTRACT AWARD SUM B. PRE-CONSTRUCTION COST (Table 10)	HW0012.03	CCTV	Item	Lump Sum		\$	-
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$ 27,566.06 HW0017 Project Management of Design variable 57% \$ 15,575 HW0018 Land Matters \$ \$ - Community Consultation Sub Total(B1) \$ 43,141 Pre construction contingency (30% of B1) \$ 12,942 TOTAL PRE-CONSTRUCTION COST (B) \$ 56,083 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 137,830 HW0019 Principal Supplied Pipe (as applicable) \$ - HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ - HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - Construction Management (Table 11) \$ 10% \$ 13,783 Sub Total (C1) \$ 151,613 Construction contingency (Table 12) (30% of C1) Preliminary Estimate \$ 197,097	HW0013		Item	Lump Sum	\$ 6,024.00	\$	6,024.00
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$ 27,566.06 HW0017 Project Management of Design variable 57% \$ 15,575 HW0018 Land Matters \$ \$ - Community Consultation Sub Total(B1) \$ 43,141 Pre construction contingency (30% of B1) \$ 12,942 TOTAL PRE-CONSTRUCTION COST (B) \$ 56,083 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 137,830 HW0019 Principal Supplied Pipe (as applicable) \$ - HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ - HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - Construction Management (Table 11) \$ 10% \$ 13,783 Sub Total (C1) \$ 151,613 Construction contingency (Table 12) (30% of C1) Preliminary Estimate \$ 197,097							
HW0016 Design HW0017 Project Management of Design variable 57% HW0018 Land Matters HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 27,566.06 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,630 \$ 12,942	A.	TOTAL ESTIMATED CONTRACT AWARD SU	JM			\$	137,830
HW0017 Project Management of Design variable 57% \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575 \$ 15,575	В.	PRE-CONSTRUCTION COST (Table 10)					
HW0018 Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 197,097		Design	20%	6	1		27,566.06
HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeters (as applicable) Principal Supplied Fittings (as applicable) Principal Supplied Fittings (as applicable) Principal Supplied Fittings (as applicable) Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fittings (as applicable) Finding Supplied Fitting Supplied Fittings (as applicable) Finding Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied Fitting Supplied		-	variable	57%			15,575
Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 43,141 \$ 12,942 \$ 56,083 \$ 137,830 \$ -						\$	-
Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 12,942 \$ 137,830 \$ 137,830 \$	HW0024	•					
TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 56,083 \$ 137,830 \$ 137,830 \$							43,141
C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 137,830 \$			31)			\$	12,942
Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 137,830 \$		TOTAL PRE-CONSTRUCTION COST (B)				\$	56,083
HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 151,613	C.	CONSTRUCTION COST					
HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 151,613		Total Estimated Contract Award Sum (A)				\$	137,830
HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) Fump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Freliminary Estimate TOTAL CONSTRUCTION COST (C) \$	HW0019	Principal Supplied Pipe (as applicable)				\$	-
HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$	HW0020		rs (as app	icable)		\$	-
HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$	HW0021			,		\$	-
Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 13,783 \$ \$ 13,783 \$ \$ 45,484	HW0022		•			\$	-
Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 151,613 \$ 45,484	HW0023			10%		\$	13,783
Construction contingency (Table 12) (30% of C1) Preliminary Estimate * 45,484 * 197,097		_ · · · · · · · · · · · · · · · · · · ·					151,613
TOTAL CONSTRUCTION COST (C) \$ 197,097		Construction contingency					45,484
		· · · · · · · · · · · · · · · · · · ·	Prelimi	nary Estimate		A	46- 66-
TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate) \$ 253,180		TOTAL CONSTRUCTION COST (C)				\$	197,097
		TOTAL PRELIMINARY PROJECT ESTIMATE	(B+C) (F	reliminary E	stimate)	\$	253,180

PROJECT DESCRIPTION: North Tuncurry Development Project - Vacuum System - Stage F

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 3,286.00	\$ 3,286.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 2,442.76	\$ 2,442.76
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

		-		Rate	Amount
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit	\$
HWR001	Service Location	Item	Lump Sum	\$ 842.40	\$ 842.40
HWR002	Supply all valves	Item	Lump Sum		\$ -
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
119VSS	Nominal DN250 PVC pipe	160	m	\$ 62.50	\$ 10,000.00
10AVSS	Nominal DN100 PVC pipe	1244	m	\$ 14.00	\$ 17,416.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
119V03	Nominal DN250 PVC (Trench type 3)	160	m	\$ 80.40	\$ 12,864.00
10AV03	Nominal DN100 PVC (Trench type 3)	1244	m	\$ 63.80	\$ 79,367.20
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement		m3	\$ 270.00	
	(14:1) backfill				
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	7	no.	\$ 1,046.00	\$ 7,322.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	1404	m	\$ 1.00	\$ 1,404.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 129,215.60

	· ·	Qty	Unit		Amount
					\$
HW0009 F	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HVW0009\11M11	.1 Grass:seeding rojects\North Tuncurry Developmen <u>Estimates_Reticulation Vacuum</u> (១				vater Cost Estimates\Cost

HW0009.12	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and		m3			
	disposal of excess excavated material					
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert \$="" min=""></insert>	Item	Lump Sum	\$ 11,232.00	\$	11,232.00
	Ψ					
	<u> </u>					
A.	TOTAL ESTIMATED CONTRACT AWARD SU	JM			\$	194,176
					Ψ	154)170
В.	PRE-CONSTRUCTION COST (Table 10)					
HW0016	Design	20%			\$	38,835.27
HW0017	Project Management of Design	variable	47%		\$	18,097
HW0018	Land Matters				\$	-
HW0024	Community Consultation					
	Sub Total(B1)				\$	56,933
	Pre construction contingency (30% of E	31)			\$	17,080
	TOTAL PRE-CONSTRUCTION COST (B)				\$	74,012
C.	CONSTRUCTION COST					
	Total Estimated Contract Award Sum (A)				\$	194,176
HW0019	Principal Supplied Pipe (as applicable)				\$	-
HW0020	Principal Supplied Valves and Flowmeter	rs (as appli	cable)		\$	-
HW0021	Principal Supplied Fittings (as applicable))			\$	-
HW0022	Pump Station HV Power Supply				\$	-
HW0023	Construction Management (Table 11)		10%		\$	19,418
	Sub Total (C1)				\$	213,594
	Construction contingency (Table 12) (30% of C1)	Drolimin	- : .		\$	64,078
	(lable 12) (30% Of C1)	PIRMIT	ıarv ⊢stimat≏l			
	· · · · · · · · · · · · · · · · · · ·	Premiiii	ary Estimate		Ċ	277 672
	TOTAL CONSTRUCTION COST (C)	PIEIIIIIII	ary Estimate		\$	277,672

PROJECT DESCRIPTION: North Tuncurry Development Project - Vacuum System - Stage G

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 3,211.00	\$ 3,211.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 2,405.38	\$ 2,405.38
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

16	0 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	01	11.24	Rate	Amount
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit	\$
HWR001	Service Location	Item	Lump Sum	\$ 804.00	\$ 804.00
HWR002	Supply all valves	Item	Lump Sum		-
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
114VSS	Nominal DN200 PVC pipe	295	m	\$ 48.00	\$ 14,160.00
10AVSS	Nominal DN100 PVC pipe	1045	m	\$ 14.00	\$ 14,630.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
114V03	Nominal DN200 PVC (Trench type 3)	295	m	\$ 71.40	\$ 21,063.00
10AV03	Nominal DN100 PVC (Trench type 3)	1045	m	\$ 63.80	\$ 66,671.00
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement		m3	\$ 270.00	
	(14:1) backfill				
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	9	no.	\$ 1,046.00	\$ 9,414.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	1340	m	\$ 1.00	\$ 1,340.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 128,082.00

	· ·	Qty	Unit		Amount
					\$
HW0009 F	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HVW0009\11M11	.1 Grass:seeding rojects\North Tuncurry Developmen <u>Estimates_Reticulation Vacuum</u> (១				vater Cost Estimates\Cost

HW0009.12	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02			Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04			tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 10,720.00	\$	10,720.00
	<u> </u>					
A.	TOTAL ESTIMATED CONTRACT AWARD SU	JM			\$	192,418
В.	PRE-CONSTRUCTION COST (Table 10)					
HW0016	Design	20%	6	l	\$	38,483.68
HW0017	, 0	variable	47%		\$	18,126
HW0018	Land Matters				\$	-
HW0024	Community Consultation					
	Sub Total(B1)				\$	56,609
	Pre construction contingency (30% of I	B1)			\$	16,983
	TOTAL PRE-CONSTRUCTION COST (B)				\$	73,592
C.	CONSTRUCTION COST					
C.	Total Estimated Contract Award Sum (A)				۲,	102 410
HW0019					\$	192,418
	Principal Supplied Pipe (as applicable)	,				-
HW0020	Principal Supplied Valves and Flowmeter		licable)		\$	-
HW0021	Principal Supplied Fittings (as applicable		\$	-		
HW0022 HW0023	Pump Station HV Power Supply			l	\$	-
HVVUUフス	Construction Management (Table 11)		10%		\$	19,242
1100020	<u> </u>				C	
1100020	Sub Total (C1)			I	\$	211,660
1100020	Sub Total (C1) Construction contingency (Table 12) (30% of C1)	Prelimi	nary Estimate		\$	63,498
11111020	Construction contingency	Prelimi	nary Estimate			
11111020	Construction contingency (Table 12) (30% of C1)				\$	63,498

PROJECT DESCRIPTION: North Tuncurry Development Project – Vacuum System - Stage H

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 3,576.00	\$ 3,576.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 2,587.95	\$ 2,587.95
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

14	Or naturation of Original Bising Mains	Otro	1114	Rate	Amount
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit	\$
HWR001	Service Location	Item	Lump Sum	\$ 943.80	\$ 943.80
HWR002	Supply all valves	Item	Lump Sum		\$ -
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
114VSS	Nominal DN200 PVC pipe	272	m	\$ 48.00	\$ 13,056.00
10AVSS	Nominal DN100 PVC pipe	1301	m	\$ 14.00	\$ 18,214.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
114V03	Nominal DN200 PVC (Trench type 3)	272	m	\$ 71.40	\$ 19,420.80
10AV03	Nominal DN100 PVC (Trench type 3)	1301	m	\$ 63.80	\$ 83,003.80
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		

HWR000	Sub Total					\$	147,717.40
LIVAIDOOC						<u>_</u>	44774740
HWR029	Miscellaneous						
HWR028	Acceptance testing - rising main		m				
HWR027	Preparation of line sheets	1573	m	\$	1.00	\$	1,573.00
	Supply and construct vent stacks	1570	each	φ	4.00	<u></u>	1 570 00
HWR026			occh				
HWR025	EMPTY		Lauii				
HWR023 HWR024	Supply and Install valve pits (excluding valves and fittings) Flow Relief Structures	0	Each Each	\$	-	\$	-
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum	¢		\$	_
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:						
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:						
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m				
HWR018	Road / creek crossings						
HWR017	Supply and place treated timber piling for pipe support		m				
HWR016	External Dewatering of pots including establishment & disestablishment	11	no.	\$	1,046.00	\$	11,506.00
HWR015	Supply & place ballast		tonnes	\$	90.00		
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3				
HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$	270.00		

	Item Description	Qty	Unit		Amoun	it
					\$	
HW0009 F	Restoration - Pipelines:					
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$	-
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$	-
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$	-
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$	-
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$	_
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$	_
HW0009.07	Bitumen pavement		m2			
HW0009.08	AC pavement		m2			
HW0009.09	Pavers		m2			
HW0009.10	Turf		m2			
HW0009\MM1	1.1 GPaSs:seeding rojects\North Tuncurry Developmer <u>Estimates_Reticulation Vacuum</u> e				vater Cost Estimat	ces\Cost

HW0009.12						
	,		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 12,584.00	\$	12,584.00
Δ.	TOTAL ESTIMATED CONTRACT AWARD SU	184				
A.	TOTAL ESTIMATED CONTRACT AWARD SO	JIVI			\$	214,465
В.	PRE-CONSTRUCTION COST (Table 10)					
HW0016	Design	20%]		\$	42,893.07
HW0017	Project Management of Design	variable	45%		\$	10 120
HW0018	Land Matters					19,130
HW0024	Land Matters				\$	19,130
11110027	Community Consultation				\$	-
11440027					\$	62,023
11110027	Community Consultation	B1)			\$ \$ \$	-
11110027	Community Consultation Sub Total(B1)	B1)			\$	62,023
	Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B)	B1)			\$	- 62,023 18,607
C.	Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST	B1)			\$	- 62,023 18,607 80,630
C.	Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A)	B1)			\$ \$ \$	- 62,023 18,607
C. HW0019	Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable)				\$ \$ \$	- 62,023 18,607 80,630
C. HW0019 HW0020	Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter	rs (as appli	cable)		\$ \$ \$ \$	- 62,023 18,607 80,630
C. HW0019 HW0020 HW0021	Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable)	rs (as appli	cable)		\$ \$ \$ \$ \$	- 62,023 18,607 80,630
C. HW0019 HW0020 HW0021 HW0022	Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply	rs (as appli			\$ \$ \$ \$	- 62,023 18,607 80,630 214,465
C. HW0019 HW0020 HW0021	Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	rs (as appli	cable)		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- 62,023 18,607 80,630 214,465
C. HW0019 HW0020 HW0021 HW0022	Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	rs (as appli			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	21,447 235,912
C. HW0019 HW0020 HW0021 HW0022	Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	rs (as appli)			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- 62,023 18,607 80,630 214,465
C. HW0019 HW0020 HW0021 HW0022	Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	rs (as appli)	10%		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- 62,023 18,607 80,630 214,465 - - - 21,447 235,912

PROJECT DESCRIPTION: North Tuncurry Development Project - Vacuum System - Stage I

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 4,147.00	\$ 4,147.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 12,000.00	\$ 12,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 2,873.44	\$ 2,873.44
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

Item	Construction of Sewer Rising Mains	Qty	Unit	Rate \$/Unit		Amount \$
HWR001	Service Location	-		\$ 1,173.00	\$	1,173.00
		Item	Lump Sum		<u> </u>	
HWR002	Supply all valves	Item	Lump Sum		\$	-
HWR003	Supply all fittings	Item	Lump Sum		\$	-
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:					
10FVSS	Nominal DN150 PVC pipe	368	m	\$ 28.00	\$	10,304.00
10AVSS	Nominal DN100 PVC pipe	1587	m	\$ 14.00	\$	22,218.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.					
10FV03	Nominal DN150 PVC (Trench type 3)	368	m	\$ 67.40	\$	24,803.20
10AV03	Nominal DN100 PVC (Trench type 3)	1587	m	\$ 63.80	\$	101,250.60
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.					<u> </u>
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.					
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.					
HWR009	EMPTY					
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30		
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00		
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3			
HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00		
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3			
HWR015	Supply & place ballast		tonnes	\$ 90.00		
HWR016	External Dewatering of pots including establishment & disestablishment	11	no.	\$ 1,046.00	\$	11,506.00
HWR017	Supply and place treated timber piling for pipe support		m			
HWR018	Road / creek crossings					
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m			
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:					

HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:					
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$	-
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$	-
HWR024	Flow Relief Structures		Each			
HWR025	EMPTY				1	
HWR026	Supply and construct vent stacks		each			
HWR027	Preparation of line sheets	1955	m	\$ 1.00	\$	1,955.00
HWR028	Acceptance testing - rising main		m			
HWR029	Miscellaneous				\bot	
HWR000	Sub Total				\$	173,209.80

Item No.	Item Description	Qty	Unit		Amount \$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HW0009.11	Grass seeding		m2		
HW0009.12	Hydromulch		m2		
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3		
HW0011	Acid sulphate soil				
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test		
HW0011.02	Establish treatment facility		Item		
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3		
HW0011.04	Disposal off site of acid sulphate soil		tonne		
HW0012	Preconstruction record				
HW0012.01	Photographic	Item	Lump Sum		\$
HW0012.02	Video	Item	Lump Sum		\$
HW0012.03	CCTV	Item	Lump Sum		\$
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 15,640.00	\$ 15,640.

Α	A. TOTAL ESTIMATED CONTRACT AWARD SUM	\$ 249,870

B.	PRE-CONSTRUCTION COST (Table 10)			
HW0016	Design	20%		\$ 49,974.05
HW0017	Project Management of Design	variable	41%	\$ 20,489
HW0018	Land Matters		<u> </u>	\$ -
HW0024	Community Consultation			
	Sub Total(B1))		\$ 70,463
	Pre construction contingency (30% of	of B1)		\$ 21,139
	TOTAL PRE-CONSTRUCTION COST (B)			\$ 91,602

	47,672.85	
\$	19,534.57	0.40976300

C.	CONSTRUCTION COST			
	Total Estimated Contract Award Sum (A)	\$	249,870	
HW0019 C:\Users\	мм1 Principal Supplied Riper(as applicable) ent Project 2014\FINAL SUBMISSION Sep-2014\Data\Was	\$ ewater Cost I	Estimates\Co	st Estimates_Reticulation Vacuum\30011196_Co
	Estimates_Vacuum Retic_rev A			

HW0020	Principal Supplied Valves and Flowmet	ers (as applicable)	\$	-	
HW0021	/0021 Principal Supplied Fittings (as applicable)			-	
HW0022	Pump Station HV Power Supply	•	\$	-	
HW0023	Construction Management (Table 11)	10%	\$	24,987	
	Sub Total (C1)				
	Construction contingency		\$	82,457	
	(Table 12) (30% of C1)	Preliminary Estimate			
	TOTAL CONSTRUCTION COST (C)		\$	357,314	
			-		
	TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)				

PROJECT DESCRIPTION: North Tuncurry Development Project - Vacuum System - Stage J

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 10,196.00	\$ 10,196.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 15,000.00	\$ 15,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 15,000.00	\$ 15,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 5,898.20	\$ 5,898.20
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

Item	Construction of Sewer Rising Mains	Qty	Unit	Rate \$/Unit	Amount \$
HWR001	Service Location	Item	Lump Sum	\$ 2,363.85	5 \$ 2,363.85
HWR002	Supply all valves	Item	Lump Sum		\$ -
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
11EVSS	Nominal DN300 PVC pipe	1915	m	\$ 85.00	162,775.00
10AVSS	Nominal DN100 PVC pipe	1546	m	\$ 14.00	21,644.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
11EV03	Nominal DN300 PVC (Trench type 3)	1915	m	\$ 85.25	5 \$ 163,253.75
10AV03	Nominal DN100 PVC (Trench type 3)	1546	m	\$ 63.80	98,634.80
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement		m3	\$ 270.00	
	(14:1) backfill				
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	6	no.	\$ 1,046.00	\$ 6,276.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	3461	m	\$ 1.00	\$ 3,461.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 458,408.40

Item No.	Item Description	Qty	Unit		Amount \$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HW0009/11/1V	11 Gràss:seeding rojects\North Tuncurry Developmer Estimates_keticulation Vacuum\;				vater Cost Estimates\Cost

HW0009.12	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 27,688.00	\$	27,688.0
Α.	TOTAL ESTIMATED CONTRACT AWARD SU	JM			\$	562,191
A . B.	PRE-CONSTRUCTION COST (Table 10)	JM			\$	562,191
B. HW0016	PRE-CONSTRUCTION COST (Table 10) Design	JM 20%			\$	112,438.12
B. HW0016 HW0017	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design		32%		\$ \$	112,438.12
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters	20%			\$	112,438.12
B. HW0016 HW0017	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation	20%			\$ \$	112,438.12 35,980 -
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1)	20% variable			\$ \$ \$	112,438.12 35,980 - 148,418
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E	20% variable			\$ \$ \$ \$	112,438.12 35,980 - 148,418 44,525
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1)	20% variable			\$ \$ \$	112,438.12
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E	20% variable			\$ \$ \$ \$	112,438.12 35,980 - 148,418 44,525 192,944
B. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E	20% variable			\$ \$ \$ \$ \$	112,438.12 35,980 - 148,418 44,525
B. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable)	20% variable 31)	32%		\$ \$ \$ \$ \$	112,438.12 35,980 - 148,418 44,525 192,944
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter	20% variable 31)	32%		\$ \$ \$ \$ \$ \$	112,438.12 35,980 - 148,418 44,525 192,944
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable)	20% variable 31)	32%		\$ \$ \$ \$ \$ \$	112,438.12 35,980 - 148,418 44,525 192,944
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply	20% variable 31)	cable)		\$ \$ \$ \$ \$ \$ \$	112,438.12 35,980 - 148,418 44,525 192,944
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	20% variable 31)	32%		\$ \$ \$ \$ \$ \$ \$	112,438.12 35,980 - 148,418 44,525 192,944 562,191
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	20% variable 31)	cable)		\$ \$ \$ \$ \$ \$ \$ \$ \$	112,438.12 35,980
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	20% variable 31)	cable)		\$ \$ \$ \$ \$ \$ \$	112,438.12 35,980 - 148,418 44,525 192,944 562,191

PROJECT DESCRIPTION: North Tuncurry Development Project – Vacuum System - Stage K

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 2,748.00	\$ 2,748.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 2,174.16	\$ 2,174.16
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

ltom	Construction of Sewer Rising Mains	Qty	Unit	Rate \$/Unit	Amount \$
Item	· ·	Qty	Unit		·
HWR001	Service Location	Item	Lump Sum	\$ 651.60	\$ 651.60
HWR002	Supply all valves	Item	Lump Sum		\$ -
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
119VSS	Nominal DN250 PVC pipe	192	m	\$ 62.50	\$ 12,000.00
10AVSS	Nominal DN100 PVC pipe	894	m	\$ 14.00	\$ 12,516.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
119V03	Nominal DN250 PVC (Trench type 3)	192	m	\$ 80.40	\$ 15,436.80
10AV03	Nominal DN100 PVC (Trench type 3)	894	m	\$ 63.80	\$ 57,037.20
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$ 270.00		
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3			
HWR015	Supply & place ballast		tonnes	\$ 90.00		
HWR016	External Dewatering of pots including establishment & disestablishment	8	no.	\$ 1,046.00	\$	8,368.00
HWR017	Supply and place treated timber piling for pipe support		m			
HWR018	Road / creek crossings					
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m			
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:					
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:					
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$	-
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$	-
HWR024	Flow Relief Structures		Each			
HWR025	EMPTY					
HWR026	Supply and construct vent stacks		each			
HWR027	Preparation of line sheets	1086	m	\$ 1.00	\$	1,086.00
HWR028	Acceptance testing - rising main		m			
HWR029	Miscellaneous					
104/5000					Δ.	107.005.00
HWR000	Sub Total				\$	107,095.60

Item No.	Item Description	Qty	Unit			Amount \$	ſ
HW0009	Restoration - Pipelines:			1			
HW0009.01	Concrete kerb & gutter	0	m	\$	110.00	\$	_
HW0009.02	Concrete driveway	0	m2	\$	178.00	\$	-
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$	220.00	\$	-
HW0009.04	Concrete footpath	0	m2	\$	155.00	\$	_
HW0009.05	Bitumen footpath	0	m2	\$	117.00	\$	_
HW0009.06	Gravel pavement	0	m2	\$	69.00	\$	
HW0009.07	Bitumen pavement		m2				
HW0009.08	AC pavement		m2				
HW0009.09	Pavers		m2				
HW0009.10	Turf		m2	Î			
HW0009\11\	11 GfàSs:seeding rojects\North Tuncurry Developme	t Project 2014\	INAL SU <u>P</u> MISS	ION Sep-20	14\Data\Wastew	vater Cost Estimate	es\Cos

HW0009.12						
	,		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 8,688.00	\$	8,688.00
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<u> </u>	TOTAL ESTIMATED CONTRACT AWARD SU	184			_	
A.	TOTAL ESTIMATED CONTRACT AWARD SO	JIVI			\$	168,706
B.	PRE-CONSTRUCTION COST (Table 10)					
HW0016	Design	20%]		\$	33,741.15
HW0017						33,741.13
	Project Management of Design	variable	51%		\$	17,275
HW0018	Project Management of Design Land Matters	variable	51%			
HW0018 HW0024		variable	51%		\$	
	Land Matters	variable	51%		\$	
	Land Matters Community Consultation		51%		\$	17,275 -
	Land Matters Community Consultation Sub Total(B1)		51%		\$ \$ \$	17,275 - 51,017
HW0024	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I		51%		\$ \$ \$ \$	17,275 - 51,017 15,305
	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I		51%		\$ \$ \$ \$	17,275 - 51,017 15,305 66,322
HW0024	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A)		51%		\$ \$ \$ \$ \$	17,275 - 51,017 15,305 66,322
HW0024 C. HW0019	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable)	B1)			\$ \$ \$ \$	17,275 - 51,017 15,305 66,322
C. HW0019 HW0020	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter	B1) rs (as appli			\$ \$ \$ \$ \$ \$	17,275 - 51,017 15,305
C. HW0019 HW0020 HW0021	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable)	B1) rs (as appli			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	17,275 - 51,017 15,305 66,322
C. HW0019 HW0020 HW0021 HW0022	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply	B1) rs (as appli	cable)		\$ \$ \$ \$ \$ \$	17,275 - 51,017 15,305 66,322 168,706
C. HW0019 HW0020 HW0021	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	B1) rs (as appli			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	17,275 - 51,017 15,305 66,322 168,706
C. HW0019 HW0020 HW0021 HW0022	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	B1) rs (as appli	cable)		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	17,275 - 51,017 15,305 66,322 168,706 - 16,871 185,576
C. HW0019 HW0020 HW0021 HW0022	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	B1) rs (as appli	cable)		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	17,275 - 51,017 15,305 66,322 168,706
HW0024 C. HW0019 HW0020 HW0021 HW0022	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	B1) rs (as appli	cable)		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	17,275 - 51,017 15,305 66,322 168,706 - 16,871 185,576

PROJECT DESCRIPTION: North Tuncurry Development Project - Vacuum System - Stage L

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 2,028.00	\$ 2,028.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 1,813.90	\$ 1,813.90
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

				Rate	Amount
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit	\$
HWR001	Service Location	Item	Lump Sum	\$ 440.40	\$ 440.40
HWR002	Supply all valves	Item	Lump Sum		\$ -
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
114VSS	Nominal DN200 PVC pipe	174	m	\$ 48.00	\$ 8,352.00
10AVSS	Nominal DN100 PVC pipe	560	m	\$ 14.00	\$ 7,840.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
114V03	Nominal DN200 PVC (Trench type 3)	174	m	\$ 71.40	\$ 12,423.60
10AV03	Nominal DN100 PVC (Trench type 3)	560	m	\$ 63.80	\$ 35,728.00
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement		m3	\$ 270.00	
	(14:1) backfill				
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	8	no.	\$ 1,046.00	\$ 8,368.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	734	m	\$ 1.00	\$ 734.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 73,886.00

Item No.	Item Description	Qty	Unit		Amount \$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HW0009/11/1V	11 Gràss:seeding rojects\North Tuncurry Developmer Estimates_keticulation Vacuum\;				vater Cost Estimates\Cost

	1					
HW0009.12	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 5,872.00	\$	5,872.00
	TOTAL ESTIMATED CONTRACT AWARD SU	184				
A.	TOTAL ESTIMATED CONTRACT AWARD SO	JIVI			\$	131,600
B.	PRE-CONSTRUCTION COST (Table 10)					
HW0016	Design	20%			\$	26,319.98
HW0017	Project Management of Design	variable	61%		\$	15,950
HW0018	Land Matters				\$	-
HW0024	Community Consultation					
	Sub Total(B1)				<u> </u>	
					>	42,270
	Pre construction contingency (30% of I	B1)			\$	42,270 12,681
	Pre construction contingency (30% of I	B1)			\$ \$	
<u> </u>	TOTAL PRE-CONSTRUCTION COST (B)	B1)			•	12,681
C.	TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST	B1)			•	12,681 54,951
	TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A)	B1)			\$ \$	12,681
HW0019	TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable)		cable)		\$ \$ \$	12,681 54,951
HW0019 HW0020	TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter	rs (as appli	cable)		\$ \$ \$ \$	12,681 54,951
HW0019 HW0020 HW0021	TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable)	rs (as appli	cable)		\$ \$ \$ \$	12,681 54,951
HW0019 HW0020 HW0021 HW0022	TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply	rs (as appli	,		\$ \$ \$ \$	12,681 54,951 131,600
HW0019 HW0020 HW0021	TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	rs (as appli	cable)		\$ \$ \$ \$ \$ \$	12,681 54,951 131,600
HW0019 HW0020 HW0021 HW0022	TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	rs (as appli	,		\$ \$ \$ \$ \$ \$ \$	12,681 54,951 131,600 13,160 144,760
HW0019 HW0020 HW0021 HW0022	TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	rs (as appli)	,		\$ \$ \$ \$ \$ \$	12,681 54,951 131,600
HW0019 HW0020 HW0021 HW0022	CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	rs (as appli)	10%		\$ \$ \$ \$ \$ \$ \$	12,681 54,951 131,600 13,160 144,760

PROJECT DESCRIPTION: North Tuncurry Development Project - Vacuum System - Stage VC

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 2,082.00	\$ 2,082.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 1,840.93	\$ 1,840.93
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

16		01	11.4	Rate	Amount
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit	\$
HWR001	Service Location	Item	Lump Sum	\$ 487.80	\$ 487.80
HWR002	Supply all valves	Item	Lump Sum		\$ -
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
114VSS	Nominal DN200 PVC pipe	73	m	\$ 48.00	3,504.00
10AVSS	Nominal DN100 PVC pipe	740	m	\$ 14.00	10,360.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
114V03	Nominal DN200 PVC (Trench type 3)	73	m	\$ 71.40	5,212.20
10AV03	Nominal DN100 PVC (Trench type 3)	740	m	\$ 63.80	\$ 47,212.00
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement		m3	\$ 270.00	
	(14:1) backfill				
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	7	no.	\$ 1,046.00	\$ 7,322.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	813	m	\$ 1.00	\$ 813.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 74,911.00

	· ·	Qty	Unit		Amount
					\$
HW0009 F	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HVW0009\11M11	.1 Grass:seeding rojects\North Tuncurry Developmen <u>Estimates_Reticulation Vacuum</u> (១				vater Cost Estimates\Cost

HW0010 Extra over item for Excavation in rock and disposal of excess excavated material HW0011 Acid sulphate soil HW0011.01 Initial testing for acid sulphate soils and prepare and submit report HW0011.02 Establish treatment facility Item HW0011.03 Handling, treatment and testing of acid sulphate soils HW0011.04 Disposal off site of acid sulphate soil tonne HW0012 Preconstruction record HW0012.01 Photographic Item Lump Sum \$ HW0012.02 Video Item Lump Sum \$ HW0012.03 CCTV Item Lump Sum \$ HW0013 Work as Constructed Information < Insert Min Item Lump Sum \$ 6,504.00 \$ 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.00 \$. 6,504.0	HW0009.12	Hydromulch		m2			
disposal of excess excavated material HW001101 Acid sulphate soil HW001101 Initial testing for acid sulphate soils and per test prepare and submit report HW001102 Establish treatment facility HW001103 Handling, treatment and testing of acid sulphate soil HW001104 Disposal off site of acid sulphate soil HW001120 Preconstruction record HW001207 Photographic HW001208 CCTV Item Lump Sum \$ HW001208 CCTV Item Lump Sum \$ HW001209 CCTV Item Lump Sum \$ HW001209 Work as Constructed Information <insert \$="" hw0012="" item="" lump="" min="" se<="" service="" sum="" td=""><td></td><td>,</td><td></td><td></td><td></td><td></td><td></td></insert>		,					
HW0011.01 Initial testing for acid sulphate soils and prepare and submit report HW0011.02 Establish treatment facility Item HW0011.03 Handling, treatment and testing of acid sulphate soils Item HW0011.04 Handling, treatment and testing of acid sulphate soils Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item I	11110010						
prepare and submit report	HW0011	Acid sulphate soil					
HW0011.03	HW0011.01	·		per test			
Sulphate soils	HW0011.02	Establish treatment facility		Item			
HW0012 Preconstruction record HW0012.01 Photographic Item Lump Sum \$	HW0011.03			m3			
HW0012.02 Video Item Lump Sum \$	HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012.02	HW0012	Preconstruction record					
HW0012.03 CCTV Item Lump Sum \$ -	HW0012.01	Photographic	Item	Lump Sum		\$	-
A. TOTAL ESTIMATED CONTRACT AWARD SUM \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,504.00 \$ 6,50	HW0012.02	Video	Item	Lump Sum		\$	-
A. TOTAL ESTIMATED CONTRACT AWARD SUM B. PRE-CONSTRUCTION COST (Table 10) Design	HW0012.03	CCTV	Item	Lump Sum		\$	-
A. TOTAL ESTIMATED CONTRACT AWARD SUM B. PRE-CONSTRUCTION COST (Table 10) Design	HW0013		Item	Lump Sum	\$ 6,504.00	\$	6,504.00
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$ 26,667.59 HW0017 Project Management of Design variable 60% \$ 15,921 HW0018 Land Matters \$ - HW0024 Community Consultation Sub Total(B1) \$ 42,588 Pre construction contingency (30% of B1) \$ 12,776 TOTAL PRE-CONSTRUCTION COST (B) \$ 55,365 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 190,673		Ť t					
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$ 26,667.59 HW0017 Project Management of Design variable 60% \$ 15,921 HW0018 Land Matters \$ - HW0024 Community Consultation Sub Total(B1) \$ 42,588 Pre construction contingency (30% of B1) \$ 12,776 TOTAL PRE-CONSTRUCTION COST (B) \$ 55,365 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 190,673		<u> </u>					
B. PRE-CONSTRUCTION COST (Table 10) HW0016	A.	TOTAL ESTIMATED CONTRACT AWARD SU	JM			Ś	133 338
HW0016 Design HW0017 Project Management of Design variable 60% HW0018 Land Matters HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 26,667.59 \$ 15,921 \$ 42,588 \$ \$ 42,588 \$ 55,365 C. CONSTRUCTION COST (B) \$ 13,3338 \$ \$ 133,338 \$ \$ 133,338 \$ \$ 146,672 \$ 146,672 \$ 146,672 \$ 144,002						Ψ	
HW0016 Design HW0017 Project Management of Design variable 60% HW0018 Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 26,667.59 \$ 15,921 \$ 42,588 \$ 42,588 \$ 51,776 \$ 12,776 \$ 55,365	В.	PRE-CONSTRUCTION COST (Table 10)					
HW0017 Project Management of Design variable 60% HW0018 Land Matters Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) Principal Supplied Fittings (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Construction Contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 15,921 \$ 15,921 \$ 42,588 \$ 42,588 \$ 12,776 \$ 12,776 \$ 133,338 \$ 133,338 \$	HW0016	· · · · · · · · · · · · · · · · · · ·	20%	6		\$	26,667.59
HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeters (as applicable) Principal Supplied Fittings (as applicable) Principal Supplied Fittings (as applicable) Principal Supplied Fittings (as applicable) Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicable) Fincipal Supplied Fittings (as applicab	HW0017	Project Management of Design	variable	60%		\$	15,921
Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 42,588 \$ 42,588 \$ 42,588 \$ 12,776 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,38	HW0018	Land Matters				\$	_
Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 12,776 \$ 133,338 \$ 12,776 \$ 133,338 \$ 133,338 \$ 133,338 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334 \$ 133,334	HW0024	Community Consultation					
TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 55,365 \$ 133,338 \$		Sub Total(B1)				\$	42,588
C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 55,365 \$ 133,338 \$ 133,338 \$ 1 \$ 10% \$ 133,334 \$ 13,334 \$ 146,672 \$ 146,672 \$ 140,002		Pre construction contingency (30% of I	B1)			\$	
C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 133,338 \$ 133,338 \$ 100 \$ 133,338 \$ 100 \$ 100 \$ 13,334 \$ 100 \$ 146,672 \$ 146,672 \$ 190,673		TOTAL PRE-CONSTRUCTION COST (B)				\$	
Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 133,338 \$ 133,338 \$ 100,672							·
HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 190,673	C.	CONSTRUCTION COST					
HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$		Total Estimated Contract Award Sum (A)				\$	133,338
HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) Fump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Freliminary Estimate TOTAL CONSTRUCTION COST (C) \$	HW0019	Principal Supplied Pipe (as applicable)					-
HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$	HW0020		rs (as app	licable)		\$	-
HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$	HW0021	• • • • • • • • • • • • • • • • • • • •		,		\$	-
HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 13,334 \$ \$ 146,672 \$ \$ 44,002 \$ \$ 190,673	HW0022		,			\$	-
Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 146,672 \$ 44,002 \$ 190,673	HW0023			10%		\$	13.334
Construction contingency (Table 12) (30% of C1) Preliminary Estimate * 44,002 * 190,673							
(Table 12) (30% of C1) Preliminary Estimate **TOTAL CONSTRUCTION COST (C) \$ 190,673							
TOTAL CONSTRUCTION COST (C) \$ 190,673		(Table 12) (30% of C1)	Prelimi	nary Estimate		•	.,,,,,,,
TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate) \$ 246,038		TOTAL CONSTRUCTION COST (C)				\$	190,673
TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate) \$ 246,038							

PROJECT DESCRIPTION: North Tuncurry Development Project – Vacuum System - Stage M

Item No.	Item Description	Qty	Unit	Rate \$/Unit		Amount	
							\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	11,095.00	\$	11,095.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	15,000.00	\$	15,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	15,000.00	\$	15,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	8,000.00	\$	8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	18,000.00	\$	18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	4,000.00	\$	4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	6,347.70	\$	6,347.70
HW0008	Community Consultation	Item	Lump Sum	\$	-	\$	-

Item	Construction of Sewer Rising Mains	Qty	Unit	Rate \$/Uni		Amount \$	
HWR001	Service Location	Item	Lump Sum	\$ 2,	457.75	\$	2,457.75
HWR002	Supply all valves	Item	Lump Sum			\$	-
HWR003	Supply all fittings	Item	Lump Sum			\$	-
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:						
11EVSS	Nominal DN300 PVC pipe	2357	m	\$	85.00	\$	200,345.00
10AVSS	Nominal DN100 PVC pipe	1150	m	\$	14.00	\$	16,100.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.						
11EV03	Nominal DN300 PVC (Trench type 3)	2357	m	\$	85.25	\$	200,934.25
10AV03	Nominal DN100 PVC (Trench type 3)	1150	m	\$	63.80	\$	73,370.00
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.						
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.						
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.						
HWR009	EMPTY						
HWR010	Extra over rate for installation for Additional compaction		m3	\$	15.30		
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$	63.00		
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3				

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement		m3	\$ 270.00	
	(14:1) backfill				
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	16	no.	\$ 1,046.00	\$ 16,736.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	3507	m	\$ 1.00	\$ 3,507.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 513,450.00

Item No.	Item Description	Qty	Unit		Amount \$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HW0009/11/1V	11 Gràss:seeding rojects\North Tuncurry Developmer E stimates_Reticulation Vacuum\ ;				vater Cost Estimates\Cost

HW0009.12						
	,		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 28,056.00	\$	28,056.00
A.	TOTAL ESTIMATED CONTRACT AWARD S	UM			\$	618,949
В.	PRE-CONSTRUCTION COST (Table 10)					
HW0016	Design	20%	<u>′</u>		\$	123,789.74
HW0017		variable				
1.04/00/10		variable	31%		\$	
HW0018	Land Matters	variable	31%		\$	38,499
HW0018 HW0024	Land Matters	variable	31%		\$	
	Land Matters Community Consultation	variable	31%		\$	38,499
	Land Matters		31%		\$	38,499 - 162,288
	Land Matters Community Consultation Sub Total(B1)		31%		\$ \$ \$	38,499
HW0024	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of		31%		\$ \$ \$ \$	38,499 - 162,288 48,687
	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of		31%		\$ \$ \$ \$	38,499 - 162,288 48,687
HW0024	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B)		31%		\$ \$ \$ \$	38,499 - 162,288 48,687
HW0024	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST		31%		\$ \$ \$ \$	38,499 - 162,288 48,687 210,975
HW0024	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A)	B1)			\$ \$ \$ \$	162,288 48,687 210,975
HW0024 C. HW0019	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable)	B1) ers (as appl			\$ \$ \$ \$	162,288 48,687 210,975
C. HW0019 HW0020 HW0021 HW0022	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete	B1) ers (as appl			\$ \$ \$ \$ \$	162,288 48,687 210,975
C. HW0019 HW0020 HW0021	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	B1) ers (as appl			\$ \$ \$ \$ \$ \$ \$	162,288 48,687 210,975
C. HW0019 HW0020 HW0021 HW0022	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	B1) ers (as appl	icable)		\$ \$ \$ \$ \$ \$ \$	38,499 - 162,288 48,687 210,975
C. HW0019 HW0020 HW0021 HW0022	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	B1) ers (as appl	icable)		\$ \$ \$ \$ \$ \$ \$	38,499 - 162,288 48,687 210,975 618,949
C. HW0019 HW0020 HW0021 HW0022	Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	B1) ers (as appl	icable)		\$ \$ \$ \$ \$ \$ \$	38,499 - 162,288 48,687 210,975 618,949 - 49,516 668,465

1,079,979

PROJECT DESCRIPTION: North Tuncurry Development Project – Vacuum System - Stage N

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 2,412.00	\$ 2,412.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 2,006.23	\$ 2,006.23
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

16		01	11.24	Rate		Α	mount
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit			\$
HWR001	Service Location	Item	Lump Sum	\$ 50	02.80	\$	502.80
HWR002	Supply all valves	Item	Lump Sum			\$	-
HWR003	Supply all fittings	Item	Lump Sum			\$	-
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:						
119VSS	Nominal DN250 PVC pipe	267	m	\$	62.50	\$	16,687.50
10AVSS	Nominal DN100 PVC pipe	571	m	\$	14.00	\$	7,994.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				\Box		
119V03	Nominal DN250 PVC (Trench type 3)	267	m	\$ 8	80.40	\$	21,466.80
10AV03	Nominal DN100 PVC (Trench type 3)	571	m	\$	63.80	\$	36,429.80
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.						
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.						
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.						
HWR009	EMPTY						
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 1	15.30		
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 6	33.00		
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3				

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement		m3	\$ 270.00	
	(14:1) backfill				
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	10	no.	\$ 1,046.00	\$ 10,460.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	838	m	\$ 1.00	\$ 838.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 94,378.90

Item No.	Item Description	Qty	Unit			Amoun	t
HW0009	Restoration - Pipelines:						
HW0009.01	Concrete kerb & gutter	0	m	\$	110.00	\$	-
HW0009.02	Concrete driveway	0	m2	\$	178.00	\$	-
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$	220.00	\$	-
HW0009.04	Concrete footpath	0	m2	\$	155.00	\$	-
HW0009.05	Bitumen footpath	0	m2	\$	117.00	\$	-
HW0009.06	Gravel pavement	0	m2	\$	69.00	\$	-
HW0009.07	Bitumen pavement		m2				
HW0009.08	AC pavement		m2				
HW0009.09	Pavers		m2				
HW0009.10	Turf		m2				
HW0009:11	11 Grass:seeding rojects\North Tuncurry Developmer Estimates Rediculation Vacuumit		FINAL SM 2 MISS	SION Sep-20)14\Data\Wastev	rater Cost Estimate	es\Cos

A. TOTAL ESTIMATED CONTRACT AWARD SUM \$ 153,501	HW0009.12	Hydromulch		m2			
HW0011.01 Initial testing for acid sulphate soils and prepare and submit report HW0011.02 Establish treatment facility Item HW0011.03 Handling, treatment and testing of acid sulphate soils Item HW0011.04 Handling, treatment and testing of acid sulphate soils Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item Item I	HW0010			m3			
prepare and submit report HW0011.02 Establish treatment facility HW0011.03 Handling, treatment and testing of acid sulphate soil HW0012.01 Preconstruction record HW0012.01 Photographic CTV Item Lump Sum S - HW0012.03 CCTV Item Lump Sum S - HW0012.03 CCTV Item Lump Sum S - HW0013 Work as Constructed Information <insert beream="" min="" sundard="" sundard<="" td=""><td>HW0011</td><td>Acid sulphate soil</td><td></td><td></td><td></td><td></td><td></td></insert>	HW0011	Acid sulphate soil					
HW0011.03 Handling, treatment and testing of acid sulphate soils Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site off site of acid sulphate soil Disposal off site off site of acid sulphate soil Disposal off site off site off site off site off site off site off site off site off site off site off site off site off site off site off site off site off site off site off site off site off	HW0011.01	·		per test			
Sulphate soils	HW0011.02	Establish treatment facility		Item			
HW0012 Preconstruction record HW0012.01 Photographic Item Lump Sum \$		sulphate soils		m3			
HW0012.01 Photographic Item Lump Sum \$ HW0012.02 Video Item Lump Sum \$ HW0012.03 CCTV Item Lump Sum \$ HW0013 Work as Constructed Information <insert \$="" (30%="" (a)="" (as="" (b)="" (c)="" (c1)="" (table="" 10)="" 11)="" 12)="" 16,885="" 20%="" 219,507<="" 30,700.23="" 47,585="" 55%="" 6,704.00="" 61,861="" applicable)="" award="" b.="" b1)="" c.="" c1)="" community="" construction="" consultation="" contingency="" contract="" cost="" design="" estimate="" estimated="" hv="" hw0016="" hw0017="" hw0018="" hw0020="" hw0021="" hw0022="" hw0023="" item="" land="" lump="" management="" matters="" min="" of="" pipe="" pitings="" power="" pre="" pre-construction="" preliminary="" principal="" project="" pump="" station="" sub="" sum="" supplied="" supply="" td="" total="" total(b1)="" variable=""><td>HW0011.04</td><td>Disposal off site of acid sulphate soil</td><td></td><td>tonne</td><td></td><td></td><td></td></insert>	HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012.02	HW0012	Preconstruction record					
HW0012.03 CCTV Item Lump Sum \$ -	HW0012.01	Photographic	Item	Lump Sum		\$	-
A. TOTAL ESTIMATED CONTRACT AWARD SUM B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design Project Management of Design Variable Stand Matters HW0018 Land Matters HW0024 Community Consultation Sub Total (B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Fittings (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Sub Total (C1) Sub Total (C1) Sub Total (C1) Sub Total (C1) Sub Total (C1) Sub Total (C1) Sub Total (C1) Sub Total (C1) Sub Total (C1) Sub Total (C2) Sub Total (C3) Sub Total (C3) Sub Total (C4) Sub Total (C3) Sub Total (C4) Sub Total (C5) Sub Total (C6) Sub Total (C7) Sub Total (C9) Sub Total (C1) Sub Total (C1) Sub Total (C1) Sub Total (C3) Sub Total (C4) Sub Total (C5) Sub Total (C6) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total (C7) Sub Total	HW0012.02	Video	Item	Lump Sum		\$	-
A. TOTAL ESTIMATED CONTRACT AWARD SUM \$ 153,501 B. PRE-CONSTRUCTION COST (Table 10)	HW0012.03	CCTV	Item	Lump Sum		\$	-
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design	HW0013		Item	Lump Sum	\$ 6,704.00	\$	6,704.00
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design							
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design	<u>:</u>						
HW0016 Design HW0017 Project Management of Design HW0018 Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Construction Contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 30,700.23 \$ \$ 16,885 \$ 16,885 \$ 47,585 \$ 47,585 \$ 61,861 \$ 14,276 \$ 61,861 \$ 153,501 \$	A.	TOTAL ESTIMATED CONTRACT AWARD SU	JM			\$	153,501
HW0016 Design HW0017 Project Management of Design HW0018 Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Construction Contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 30,700.23 \$ \$ 16,885 \$ 16,885 \$ 47,585 \$ 47,585 \$ 61,861 \$ 14,276 \$ 61,861 \$ 153,501 \$							
HW0017 Project Management of Design variable 55% \$ 16,885 HW0018 Land Matters \$ HW0024 Community Consultation Sub Total(B1) \$ 47,585 Pre construction contingency (30% of B1) \$ 14,276 TOTAL PRE-CONSTRUCTION COST (B) \$ 61,861 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 153,501 HW0019 Principal Supplied Pipe (as applicable) \$ HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ HW0021 Principal Supplied Fittings (as applicable) \$ HW0022 Pump Station HV Power Supply \$ HW0023 Construction Management (Table 11) \$ Sub Total (C1) \$ Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ \$ 219,507	В.	PRE-CONSTRUCTION COST (Table 10)					
HW0018 Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 219,507	HW0016	Design	20%	6		\$	30,700.23
HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) PW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 47,585 \$ 14,276 \$ 51,861 \$ 153,501 \$	HW0017	Project Management of Design	variable	55%		\$	16,885
Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 47,585 \$ 14,276 \$ 153,501 \$ 153,501 \$	HW0018	Land Matters				\$	-
Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 14,276 \$ 61,861 \$ 153,501 \$ - \$ 153,501 \$ 1- \$ 153,501 \$ 1- \$ 153,501 \$ 1- \$ 153,501 \$ 1- \$ 153,501 \$ 1- \$ 153,501 \$ 1- \$ 153,501 \$ 1- \$ 153,501 \$ 1- \$ 153,501 \$ 1- \$ 153,501 \$ 1- \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501 \$ 153,501	HW0024	Community Consultation					
TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Construction Contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 61,861 \$ 153,501 \$ \$ 153,501 \$ 1 \$ 153,501 \$ 1 \$ 153,501 \$ 153,501 \$ 168,851 \$ 153,500 \$ 219,507		Sub Total(B1)					47,585
C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 153,501 HW0019 Principal Supplied Pipe (as applicable) \$ - HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ - HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - HW0023 Construction Management (Table 11) 10% \$ 15,350 Sub Total (C1) \$ 168,851 Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 219,507		Pre construction contingency (30% of	B1)			\$	14,276
Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 153,501 \$		TOTAL PRE-CONSTRUCTION COST (B)				\$	61,861
Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 153,501 \$							
HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$	C.						
HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ - HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - HW0023 Construction Management (Table 11) \$ 15,350 Sub Total (C1) \$ 168,851 Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 219,507		Total Estimated Contract Award Sum (A)				\$	153,501
HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - HW0023 Construction Management (Table 11) 10% \$ 15,350 Sub Total (C1) \$ 168,851 Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 219,507		Principal Supplied Pipe (as applicable)				\$	-
HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ - \$ 15,350 \$ \$ 168,851 \$ 50,655 Preliminary Estimate \$ 219,507				licable)		\$	-
HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 15,350 \$ 168,851 \$ 50,655 Preliminary Estimate \$ 219,507)				-
Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 168,851 \$ 50,655 \$ 219,507						_	-
Construction contingency (Table 12) (30% of C1) Preliminary Estimate * 50,655 * 219,507	HW0023	• • • • • • • • • • • • • • • • • • • •		10%			
(Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 219,507					,		
TOTAL CONSTRUCTION COST (C) \$ 219,507			Prelimi	nary Estimate		\$	50,655
TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate) \$ 281,368		· · · · · · · · · · · · · · · · · · ·				\$	219,507
TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate) \$ 281,368							
		TOTAL PRELIMINARY PROJECT ESTIMATE	(B+C) (F	reliminary E	stimate)	\$	281,368

PROJECT DESCRIPTION: North Tuncurry Development Project – Vacuum System - Stage O

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 2,658.00	\$ 2,658.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 2,128.77	\$ 2,128.77
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

		0.1		Rate	Amount
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit	\$
HWR001	Service Location	Item	Lump Sum	\$ 630.00	\$ 630.00
HWR002	Supply all valves	Item	Lump Sum		\$ -
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
114VSS	Nominal DN200 PVC pipe	267	m	\$ 48.00	\$ 12,816.00
10AVSS	Nominal DN100 PVC pipe	783	m	\$ 14.00	\$ 10,962.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
114V03	Nominal DN200 PVC (Trench type 3)	267	m	\$ 71.40	\$ 19,063.80
10AV03	Nominal DN100 PVC (Trench type 3)	783	m	\$ 63.80	\$ 49,955.40
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement		m3	\$ 270.00	
	(14:1) backfill				
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	16	no.	\$ 1,046.00	\$ 16,736.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	1050	m	\$ 1.00	\$ 1,050.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 111,213.20

	· ·	Qty	Unit		Amount
					\$
HW0009 F	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HVW0009\11M11	.1 Grass:seeding rojects\North Tuncurry Developmen <u>Estimates_Reticulation Vacuum</u> (១				vater Cost Estimates\Cost

HW0009.12	Hydromulch		m2				
HW0010	Extra over item for Excavation in rock and		m3				
1100010	disposal of excess excavated material		1113				
HW0011	Acid sulphate soil						
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test				
HW0011.02	Establish treatment facility		Item				
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3				
HW0011.04	Disposal off site of acid sulphate soil		tonne				
HW0012	Preconstruction record						
HW0012.01	Photographic	Item	Lump Sum			\$	-
HW0012.02	Video	Item	Lump Sum			\$	-
HW0012.03	CCTV	Item	Lump Sum			\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$	8,400.00	\$	8,400.00
Δ	TOTAL ESTIMATED CONTRACT AWARD SI	LIM				<u> </u>	470.400
Α.	TOTAL ESTIMATED CONTRACT AWARD S	Olvi				\$	172,400
В.	PRE-CONSTRUCTION COST (Table 10)						
HW0016	Design	20%				\$	34,479.99
HW0017	Project Management of Design	variable	52%			\$	17,964
HW0018	Land Matters					\$	-
HW0024	Community Consultation						
	Sub Total(B1)					\$	52,444
	Pre construction contingency (30% of	B1)				\$	15,733
	TOTAL PRE-CONSTRUCTION COST (B)					\$	68,177
6	CONSTRUCTION COST						
C.	CONSTRUCTION COST					<u>,</u>	472.400
LIM/0010	Total Estimated Contract Award Sum (A)					\$	172,400
HW0019	Principal Supplied Pipe (as applicable)	, ,				\$	-
HW0020	Principal Supplied Valves and Flowmete		cable)			\$	-
HW0021	Principal Supplied Fittings (as applicable	2)				\$	-
HW0022	Pump Station HV Power Supply			1		\$	-
HW0023	Construction Management (Table 11)		10%			\$	17,240
	Sub Total (C1)			I		\$	189,640
	Construction contingency (Table 12) (30% of C1)	Prelimin	any Estimato			\$	56,892
	(ary Estimate				
	TOTAL CONSTRUCTION COST (C)		ary Estimate			\$	246,532

PROJECT DESCRIPTION: North Tuncurry Development Project – Vacuum System - Stage P

Item No.	Item Description	Qty	Unit	R	Rate \$/Unit		Amount \$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	2,205.00	\$	2,205.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	9,000.00	\$	9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	9,000.00	\$	9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	4,000.00	\$	4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	9,000.00	\$	9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	2,000.00	\$	2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	1,902.66	\$	1,902.66
HW0008	Community Consultation	Item	Lump Sum	\$	-	\$	-

					Rate		Amount
Item	Construction of Sewer Rising Mains	Qty	Unit		\$/Unit		\$
HWR001	Service Location	Item	Lump Sum	\$	654.00	\$	654.0
HWR002	Supply all valves	Item	Lump Sum			\$	
HWR003	Supply all fittings	Item	Lump Sum			\$	
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:						
10AVSS	Nominal DN100 PVC pipe	1090	m	\$	14.00	\$	15,260.0
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.						
10AV03	Nominal DN100 PVC (Trench type 3)	1090	m	\$	63.80	\$	69,542.0
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.						
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.						
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.						
HWR009	EMPTY						
HWR010	Extra over rate for installation for Additional compaction		m3	\$	15.30		
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$	63.00		
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3				
HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$	270.00		
HWR014 C:\Users\MM	Extra over rate for installation for Supply,	t Project 2014\	m3 FINAL SUBMISSI	DN Sep-2	2014\Data\Wastev	vater Co	st Estimates\Co

HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	12	no.	\$ 1,046.00	\$ 12,552.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	1090	m	\$ 1.00	\$ 1,090.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 99,098.00

Item No.	Item Description	Qty	Unit		Amount \$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HW0009.11	Grass seeding		m2		
HW0009.12	Hydromulch		m2		
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3		

A. TOTAL ESTIMATED CONTRACT AWARD SUM B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design Project Management of Design variable Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Fittings (as applicable) Function Contract Award Sum (A) Sub Total (B1) Sub Total(B1) Sub Total(B1) Sub Total(B1) Sub Total Pre-Construction Cost (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) Sub Total Estimated Contract Award Sum (A) Sub Total Estimated Contract Award Sum (A) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub Total Estimated Contract Award Sum (B) Sub							
Prepare and submit report						·	
HW0011.03 Handling, treatment and testing of acid sulphate soils HW0011.04 Disposal off site of acid sulphate soil HW0012.01 Preconstruction record HW0012.02 Video Item Lump Sum \$ HW0012.03 CCTV Item Lump Sum \$ HW0013 Work as Constructed Information <insert min<="" td=""><td></td><td></td><td></td><td>per test</td><td></td><td></td><td>HW0011.01</td></insert>				per test			HW0011.01
Sulphate soils HW0011.04 Disposal off site of acid sulphate soil tonne				Item		Establish treatment facility	HW0011.02
HW0012 Preconstruction record HW0012.01 Photographic Item Lump Sum \$ HW0012.02 Video Item Lump Sum \$ HW0012.03 CCTV Item Lump Sum \$ HW0013 Work as Constructed Information <insert \$="" item="" lump="" min="" s="" sum=""> A. TOTAL ESTIMATED CONTRACT AWARD SUM \$ B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% HW0017 Project Management of Design variable 58% HW0018 Land Matters HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$</insert>				m3			HW0011.03
HW0012.01 Photographic ltem Lump Sum \$ HW0012.02 Video ltem Lump Sum \$ HW0012.03 CCTV ltem Lump Sum \$ HW0013 Work as Constructed Information <insert \$="" \$<="" (30%="" (a)="" (as="" (b)="" (table="" 10)="" 20%="" 8="" 8,720.00="" a.="" applicable)="" award="" b.="" b1)="" c.="" community="" construction="" consultation="" contingency="" contract="" cost="" design="" estimated="" fittings="" hw0016="" hw0017="" hw0019="" hw0020="" hw0024="" land="" ltem="" lump="" management="" matters="" min="" of="" pipe="" pre="" pre-construction="" principal="" project="" sub="" sum="" supplied="" td="" total="" total(b1)="" variable=""><td></td><td></td><td></td><td>tonne</td><td></td><td>Disposal off site of acid sulphate soil</td><td>HW0011.04</td></insert>				tonne		Disposal off site of acid sulphate soil	HW0011.04
HW0012.02 Video Item Lump Sum \$ HW0012.03 CCTV Item Lump Sum \$ HW0013 Work as Constructed Information <insert \$="" (table="" 10)<="" 8="" 8,720.00="" a.="" award="" b.="" contract="" cost="" estimated="" item="" lump="" min="" pre-construction="" sum="" td="" total=""><td></td><td></td><td></td><td></td><td></td><td>reconstruction record</td><td>HW0012</td></insert>						reconstruction record	HW0012
HW0012.03 CCTV Item Lump Sum \$ HW0013 Work as Constructed Information <insert \$="" (30%="" (a)="" (as="" (b)="" (table="" 10)="" 14="" 20%="" 58%="" 8="" 8,720.00="" a.="" and="" applicable)="" applicable)<="" award="" b.="" b1)="" c.="" community="" construction="" consultation="" contingency="" contract="" cost="" design="" estimated="" fittings="" flowmeters="" hw0016="" hw0017="" hw0019="" hw0020="" hw0021="" item="" lump="" management="" min="" of="" pipe="" pre="" pre-construction="" principal="" project="" sub="" sum="" supplied="" td="" total="" total(b1)="" valves="" variable=""><td>-</td><td></td><td>\$</td><td>Lump Sum</td><td>Item</td><td>Photographic</td><td>HW0012.01</td></insert>	-		\$	Lump Sum	Item	Photographic	HW0012.01
HW0013 Work as Constructed Information <insert \$="" (table="" 10)="" 14="" 8="" 8,720.00="" a.="" award="" b.="" contract="" cost="" design<="" estimated="" item="" lump="" min="" pre-construction="" sum="" td="" total=""><td>-</td><td></td><td>\$</td><td>Lump Sum</td><td>Item</td><td>Video</td><td>HW0012.02</td></insert>	-		\$	Lump Sum	Item	Video	HW0012.02
A. TOTAL ESTIMATED CONTRACT AWARD SUM B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design HW0017 Project Management of Design variable Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable)	-		\$	Lump Sum	Item	CCTV	HW0012.03
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$ 28,9 HW0017 Project Management of Design variable 58% \$ 1 HW0018 Land Matters \$ \$ \$ \$ 1 Community Consultation Sub Total(B1) \$ 4 Pre construction contingency (30% of B1) \$ 1 TOTAL PRE-CONSTRUCTION COST (B) \$ 5 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 14 HW0019 Principal Supplied Pipe (as applicable) \$ 1 HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ 1 HW0021 Principal Supplied Fittings (as applicable) \$ 1	,720.00	8,7	\$ \$ 8,720.00	Lump Sum	Item		HW0013
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$ 28,9 HW0017 Project Management of Design variable 58% \$ 1 HW0018 Land Matters \$ \$ \$ \$ 1 Community Consultation Sub Total(B1) \$ 4 Pre construction contingency (30% of B1) \$ 1 TOTAL PRE-CONSTRUCTION COST (B) \$ 5 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 14 HW0019 Principal Supplied Pipe (as applicable) \$ 1 HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ 1 HW0021 Principal Supplied Fittings (as applicable) \$ 1							
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$ 28,9 HW0017 Project Management of Design variable 58% \$ 1 HW0018 Land Matters \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$			•				
HW0016 Design HW0017 Project Management of Design variable 58% Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) \$ 28,9 \$ 28,9 \$ 1 \$ 28,9 \$ 1 \$ 1 \$ 4 \$ 4 \$ 4 \$ 5 \$ 5 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 14 ### 14 ### 14 ### 15 ### 15 ### 16 ### 16 ### 17 ### 17 ### 17 ### 17 ### 18 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 1	4,926	144	\$		UM	OTAL ESTIMATED CONTRACT AWARD S	A.
HW0016 Design HW0017 Project Management of Design variable 58% Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) \$ 28,9 \$ 28,9 \$ 1 \$ 28,9 \$ 1 \$ 1 \$ 4 \$ 4 \$ 4 \$ 5 \$ 5 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 14 ### 14 ### 14 ### 15 ### 15 ### 16 ### 16 ### 17 ### 17 ### 17 ### 17 ### 18 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 19 ### 1			•				
HW0017 Project Management of Design variable 58% \$ 1 HW0018 Land Matters HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) \$ 14						RE-CONSTRUCTION COST (Table 10)	B.
HW0018 Land Matters Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) Sub Total(B1) \$ 4 \$ 4 \$ 4 \$ 4 \$ 4 \$ 4 \$ 5 \$ 4 \$ 5 \$ 4 \$ 5 \$ 4 \$ 5 \$ 4 \$ 5 \$ 4 \$ 5 \$ 4 \$ 5 \$ 6 \$ 6	85.13	28,98	\$		20%	Design	HW0016
HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) **TOTAL PRE-CONSTRUCTION COST (B) **Solution** C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Principal Supplied Pipe (as applicable) **Solution** **Principal Supplied Fittings (as applicable) **Solution** **Solution** **Solution** **Principal Supplied Fittings (as applicable) **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Principal Supplied Fittings (as applicable) **Solution** **Principal Supplied Fittings (as applicable) **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solution** **Solutio	6,753	16	\$	58%	variable	Project Management of Design	HW0017
Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) Sub Total(B1) \$ 44 \$ 12 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 14 \$ 1	-		\$			Land Matters	HW0018
Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) \$ \$ 14						Community Consultation	HW0024
C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) \$ \$ 14	5,739	45	\$			Sub Total(B1)	
C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) \$ \$	3,722	13	\$		B1)	Pre construction contingency (30% of	
Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) \$ \$ 14	9,460	59	\$			OTAL PRE-CONSTRUCTION COST (B)	
Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) \$ \$ 14							
HW0019 Principal Supplied Pipe (as applicable) \$ HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ HW0021 Principal Supplied Fittings (as applicable) \$						ONSTRUCTION COST	C.
HW0020 Principal Supplied Fittings (as applicable) \$ HW0021 Principal Supplied Fittings (as applicable) \$ \$	4,926	144	\$			otal Estimated Contract Award Sum (A)	
HW0021 Principal Supplied Fittings (as applicable) \$	-		\$			Principal Supplied Pipe (as applicable)	HW0019
Timespar Supplied Tittings (as applied size)	-		\$	cable)	rs (as appli	Principal Supplied Valves and Flowmete	HW0020
HW0022 Pump Station HV Power Supply \$	-		\$		<u>e)</u>	Principal Supplied Fittings (as applicable	HW0021
- amp station in the supply	-		\$			Pump Station HV Power Supply	HW0022
HW0023 Construction Management (Table 11) 10% \$ 1	4,493	14	\$	10%		onstruction Management (Table 11)	HW0023
	9,418	159	\$				
	7,825	47	\$				
(Table 12) (30% of C1) Preliminary Estimate				ary Estimate	Prelimin	(Table 12) (30% of C1)	
TOTAL CONSTRUCTION COST (C) \$ 20	7,244	207	\$			OTAL CONSTRUCTION COST (C)	

PROJECT DESCRIPTION: North Tuncurry Development Project – Vacuum System - Stage Q

Item No.	Item Description	Qty	Unit	R	Rate \$/Unit	Amount
						\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	1,475.00	\$ 1,475.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	6,000.00	\$ 6,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	6,000.00	\$ 6,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	4,000.00	\$ 4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	2,000.00	\$ 2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	1,537.33	\$ 1,537.33
HW0008	Community Consultation	Item	Lump Sum	\$	-	\$ -

					Rate		Amount
Item	Construction of Sewer Rising Mains	Qty	Unit		\$/Unit		\$
HWR001	Service Location	Item	Lump Sum	\$	403.20	\$	403.2
HWR002	Supply all valves	Item	Lump Sum			\$	
HWR003	Supply all fittings	Item	Lump Sum			\$	
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:						
10AVSS	Nominal DN100 PVC pipe	672	m	\$	14.00	\$	9,408.0
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.						
10AV03	Nominal DN100 PVC (Trench type 3)	672	m	\$	63.80	\$	42,873.6
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.						
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.						
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.						
HWR009	EMPTY				45.00		
HWR010	Extra over rate for installation for Additional compaction		m3	\$	15.30		
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$	63.00		
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3				
HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$	270.00		
HWR014 C:\Users\MM	Extra over rate for installation for Supply,	t Project 2014	m3 \FINAL SUBMISSI	DN Sep-2	2014\Data\Wastev	vater Co	st Estimates\Co

HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	11	no.	\$ 1,046.00	\$ 11,506.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	672	m	\$ 1.00	\$ 672.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 64,862.80

Item No.	Item Description	Qty	Unit		Amount \$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HW0009.11	Grass seeding		m2		
HW0009.12	Hydromulch		m2		
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3		

HW0011	Acid sulphate soil						
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test				
HW0011.02	Establish treatment facility		Item				
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3				
HW0011.04	Disposal off site of acid sulphate soil		tonne				
HW0012	Preconstruction record						
HW0012.01	Photographic	Item	Lump Sum			\$	-
HW0012.02	Video	Item	Lump Sum			\$	-
HW0012.03	CCTV	Item	Lump Sum			\$	-
HW0013	Work as Constructed Information <insert \$="" min=""></insert>	Item	Lump Sum	\$	5,376.00	\$	5,376.00
	Ψ						
A.	TOTAL ESTIMATED CONTRACT AWARD SI	JM				\$	100,251
						Υ	100,231
В.	PRE-CONSTRUCTION COST (Table 10)						
HW0016	Design	20%	6			\$	20,050.23
HW0017	-	variable	76%			\$	15,298
HW0018	Land Matters					\$	-
HW0024	Community Consultation						
	Sub Total(B1)					\$	35,349
	Pre construction contingency (30% of	B1)				\$	10,605
	TOTAL PRE-CONSTRUCTION COST (B)					\$	45,953
C.	CONSTRUCTION COST						
	Total Estimated Contract Award Sum (A)					\$	100,251
HW0019	Principal Supplied Pipe (as applicable)					\$	-
HW0020	Principal Supplied Valves and Flowmete	rs (as app	licable)			\$	-
HW0021	Principal Supplied Fittings (as applicable)				\$	-
HW0022	Pump Station HV Power Supply					\$	-
HW0023	Construction Management (Table 11)		10%			\$	10,025
	Sub Total (C1)			•		\$	110,276
	Construction contingency					\$	33,083
	(Table 12) (30% of C1)	Prelimi	nary Estimate				
	TOTAL CONSTRUCTION COST (C)					\$	143,359

PROJECT DESCRIPTION: North Tuncurry Development Project – Vacuum System - Stage R

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 2,663.00	\$ 2,663.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 2,131.56	\$ 2,131.56
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

				Rate	Amount
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit	\$
HWR001	Service Location	Item	Lump Sum	\$ 684.00	\$ 684.00
HWR002	Supply all valves	Item	Lump Sum		\$ -
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
10FVSS	Nominal DN150 PVC pipe	200	m	\$ 28.00	\$ 5,600.00
10AVSS	Nominal DN100 PVC pipe	940	m	\$ 14.00	\$ 13,160.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
10FV03	Nominal DN150 PVC (Trench type 3)	200	m	\$ 67.40	\$ 13,480.00
10AV03	Nominal DN100 PVC (Trench type 3)	940	m	\$ 63.80	\$ 59,972.00
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement		m3	\$ 270.00	
	(14:1) backfill				
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	18	no.	\$ 1,046.00	\$ 18,828.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	1140	m	\$ 1.00	\$ 1,140.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 112,864.00

	Item Description	Qty	Unit		Amoun	it
					\$	
HW0009 F	Restoration - Pipelines:					
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$	-
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$	-
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$	-
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$	-
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$	_
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$	_
HW0009.07	Bitumen pavement		m2			
HW0009.08	AC pavement		m2			
HW0009.09	Pavers		m2			
HW0009.10	Turf		m2			
HW0009\MM1	11 6 Pass seeding rojects\North Tuncurry Developmer <u>Estimates_Reticulation Vacuum</u>)				vater Cost Estimat	ces\Cost

HW0010 Extra over item for Excavation in rock and disposal of excess excavated material HW0011 Acid sulphate soil HW0011.01 Initial testing for acid sulphate soils and prepare and submit report HW0011.02 Establish treatment facility HW0011.03 Handling, treatment and testing of acid sulphate soils HW0011.04 Disposal off site of acid sulphate soil HW0012 Preconstruction record HW0012.01 Photographic Item Lump Sum \$ - HW0012.02 Video Item Lump Sum \$ -	HW0009.12	Hydromulch		m2				
disposal of excess excavated material HW0011 Acid sulphate soil HW001101 Initial testing for acid sulphate soils and per test prepare and submit report HW001102 Establish treatment facility HW001103 Handling, treatment and testing of acid sulphate soil HW001104 Disposal off site of acid sulphate soil HW0012 Preconstruction record HW0012 Preconstruction record HW001202 Video Item Lump Sum \$ - HW001203 CCTV Item Lump Sum \$ - HW001203 CCTV Item Lump Sum \$ 9,120.00 \$ 9,120.00 A TOTAL ESTIMATED CONTRACT AWARD SUM B. PRE-CONSTRUCTION COST (Table 10) Project Management of Design voriable 52% \$ 18,212 HW0018 Land Matters Community Consultation Sub Total (B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Valves and Flowmeters (as applicable) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeters (as applicable) Principal Supplied Fittings (as applicable) Principal Supplied Valves and Flowmeters (as applicable) Principal Supplied Fittings (as applicable) Principal Supplied Fittings (as applicable) Principal Supplied Fittings (as applicable) Principal Supplied Fittings (as applicable) Principal Supplied Fittings (as applicable) Principal Supplied Fittings (as applicable) Principal Supplied Fittings (as applicable) Sub Total (C1) Construction Contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) Sub Total Construction contingency (Table 12) (30% of C1) Preliminary Estimate		,						
HW0011.01 Initial testing for acid sulphate soils and prepare and submit report HW0011.02 Establish treatment facility Item HW0011.03 Handling, treatment and testing of acid sulphate soils HW0011.04 Disposal off site of acid sulphate soil tonne HW0012 Preconstruction record HW0012.01 Photographic Item Lump Sum \$ -	11110010			IIIO				
Prepare and submit report HW0011.02 Establish treatment facility Item HW0011.02 Establish treatment facility Item HW0011.03 Handling, treatment and testing of acid sulphate soils HW0011.04 Disposal off site of acid sulphate soil tonne HW0012.01 Preconstruction record HW0012.01 Photographic Item Lump Sum \$ -	HW0011	Acid sulphate soil						
HW0011.03 Handling, treatment and testing of acid sulphate soils Disposal off site of acid sulphate soils Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil HW0012.01 Photographic Item Lump Sum \$.	HW0011.01	·		per test				
Sulphate soils	HW0011.02	Establish treatment facility		Item				
HW0012 Proconstruction record HW0012.01 Photographic Item Lump Sum \$	HW0011.03	sulphate soils		m3				
HW0012.02 Video Item Lump Sum \$ - HW0012.02 Video Item Lump Sum \$ - HW0012.03 CCTV Item Lump Sum \$ - HW0012.03 Work as Constructed Information < Insert Min Item Lump Sum \$ 9,120.00 \$ 9,120.00 B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$ 34,955.71 HW0017 Project Management of Design variable 52% \$ 18,212 HW0018 Land Matters \$ 5 - Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) \$ 53,168 Pre construction contingency (30% of B1) \$ 15,950 TOTAL PRE-CONSTRUCTION COST (B) \$ 174,779 C. CONSTRUCTION COST (B) \$ 69,118 C. CONSTRUCTION COST (B) \$ 174,779 HW0019 Principal Supplied Pipe (as applicable) \$ - HW0020 Pump Station HV Power Supply \$ - HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - Construction contingency (Table 11) \$ 57,677 Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 249,933	HW0011.04	Disposal off site of acid sulphate soil		tonne				
HW0012.02 Video Item Lump Sum \$ -	HW0012	Preconstruction record						
HW0012.03 CCTV Item Lump Sum \$ -	HW0012.01	Photographic	Item	Lump Sum			\$	-
A. TOTAL ESTIMATED CONTRACT AWARD SUM \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,120.00 \$ 9,12	HW0012.02	Video	Item	Lump Sum			\$	-
A. TOTAL ESTIMATED CONTRACT AWARD SUM B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design Froject Management of Design Variable Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Pipe (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Freliminary Estimate 174,779 174,779 Preliminary Estimate 174,779 Preliminary Estimate	HW0012.03	CCTV	Item	Lump Sum			\$	-
A. TOTAL ESTIMATED CONTRACT AWARD SUM B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design	HW0013		Item	Lump Sum	\$ 9	,120.00	\$	9,120.00
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$34,955.71 HW0017 Project Management of Design variable 52% \$18,212 HW0018 Land Matters \$ Community Consultation Sub Total(B1) \$53,168 Pre construction contingency (30% of B1) \$15,950 TOTAL PRE-CONSTRUCTION COST (B) \$69,118 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$174,779 HW0019 Principal Supplied Pipe (as applicable) \$ HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ HW0021 Principal Supplied Fittings (as applicable) \$ HW0022 Pump Station HV Power Supply \$ Construction Management (Table 11) \$ Sub Total (C1) \$ Construction contingency \$ TOTAL CONSTRUCTION COST (C) \$								
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$34,955.71 HW0017 Project Management of Design variable 52% \$18,212 HW0018 Land Matters \$ Community Consultation Sub Total(B1) \$53,168 Pre construction contingency (30% of B1) \$15,950 TOTAL PRE-CONSTRUCTION COST (B) \$69,118 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$174,779 HW0019 Principal Supplied Pipe (as applicable) \$ HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ HW0021 Principal Supplied Fittings (as applicable) \$ HW0022 Pump Station HV Power Supply \$ Construction Management (Table 11) \$ Sub Total (C1) \$ Construction contingency \$ TOTAL CONSTRUCTION COST (C) \$								
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$34,955.71 HW0017 Project Management of Design variable 52% \$18,212 HW0018 Land Matters \$ Community Consultation Sub Total(B1) \$53,168 Pre construction contingency (30% of B1) \$15,950 TOTAL PRE-CONSTRUCTION COST (B) \$69,118 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$174,779 HW0019 Principal Supplied Pipe (as applicable) \$ HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ HW0021 Principal Supplied Fittings (as applicable) \$ HW0022 Pump Station HV Power Supply \$ Construction Management (Table 11) \$ Sub Total (C1) \$ Construction contingency \$ TOTAL CONSTRUCTION COST (C) \$	Α.	TOTAL ESTIMATED CONTRACT AWARD SI	JM				¢	17/1 770
HW0016 Design HW0017 Project Management of Design variable 52% HW0018 Land Matters Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0020 Principal Supplied Pipe (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) S 34,955.71 \$ 18,212 \$ 18,212 \$ 18,212 \$ 53,168 \$ 53,168 \$ 69,118 C. CONSTRUCTION COST (B) \$ 69,118 \$ 174,779 \$ -							Y	174,773
HW0016 Design HW0017 Project Management of Design variable 52% HW0018 Land Matters Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0020 Principal Supplied Pipe (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) S 34,955.71 \$ 18,212 \$ 18,212 \$ 18,212 \$ 53,168 \$ 53,168 \$ 69,118 C. CONSTRUCTION COST (B) \$ 69,118 \$ 174,779 \$ -	B.	PRF-CONSTRUCTION COST (Table 10)						
HW0017 Project Management of Design variable 52% HW0018 Land Matters HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 18,212 \$ 18,212 \$ 5 18,212 \$ 5 3,168 \$ 69,118 \$ 69,118 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 1		· · · · ·	20%	<u>′</u>			Ś	34.955.71
HW0018 Land Matters HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 249,933	HW0017	· ·						
HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 53,168 \$ 15,950 \$ 174,779 \$	HW0018			52.7		ľ		-
Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 53,168 \$ 569,118 \$ 174,779 \$ 174,779	HW0024					ľ	· ·	
Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 15,950 \$ 69,118 \$ 174,779 \$ - \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779		•					Ś	53.168
C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 69,118 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779			B1)			ľ		
C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 174,779 \$,					
Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779		,					T	
Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 174,779 \$ 174,779 \$ 174,779 \$ 174,779	C.	CONSTRUCTION COST						
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HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) Fump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Freliminary Estimate TOTAL CONSTRUCTION COST (C) \$	HW0019	` ,						-
HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - HW0023 Construction Management (Table 11) 10% \$ 17,478 Sub Total (C1) \$ 192,256 Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 249,933	HW0020		rs (as annl	icable)				_
HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ - \$ 17,478 \$ 192,256 \$ 57,677 Preliminary Estimate \$ 249,933				icabicj				_
HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 17,478 \$ 17,478 \$ 192,256 \$ 57,677 Preliminary Estimate \$ 249,933			,					_
Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 192,256 \$ 57,677 \$ 249,933				10%		ľ		17 478
Construction contingency (Table 12) (30% of C1) Preliminary Estimate * 57,677 Preliminary Estimate \$ 249,933		,		10/0	I	ľ		
(Table 12) (30% of C1) Preliminary Estimate **TOTAL CONSTRUCTION COST (C) \$ 249,933						ľ		
7 2 3 7 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		(Table 12) (30% of C1)	Prelimi	nary Estimate			,	37,077
TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate) \$ 319,051		TOTAL CONSTRUCTION COST (C)					\$	249,933
TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate) \$ 319,051								

PROJECT DESCRIPTION: North Tuncurry Development Project - Vacuum System - Stage S

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 10,628.00	\$ 10,628.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 15,000.00	\$ 15,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 15,000.00	\$ 15,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 6,113.93	\$ 6,113.93
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

Item	Construction of Sewer Rising Mains	Qty	Unit	Rate \$/Unit	Т	Amount \$
HWR001	Service Location	,		\$ 2,382.	75 \$	2,382.75
		Item	Lump Sum			•
HWR002	Supply all valves	Item	Lump Sum		\$	-
HWR003	Supply all fittings	Item	Lump Sum		\$	-
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:					
11EVSS	Nominal DN300 PVC pipe	2181	m	\$ 85.	00 \$	185,385.00
10AVSS	Nominal DN100 PVC pipe	1245	m	\$ 14.	00 \$	17,430.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.					
11EV03	Nominal DN300 PVC (Trench type 3)	2181	m	\$ 85	25 \$	185,930.25
10AV03	Nominal DN100 PVC (Trench type 3)	1245	m	\$ 63.	30 \$	79,431.00
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.					
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.					
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.					
HWR009	EMPTY					
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.3	30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.0	00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3			

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement		m3	\$ 270.00	
	(14:1) backfill				
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	19	no.	\$ 1,046.00	\$ 19,874.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	3426	m	\$ 1.00	\$ 3,426.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 493,859.00

	Item Description	Qty	Unit		Amoun	it
					\$	
HW0009 F	Restoration - Pipelines:					
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$	-
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$	-
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$	-
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$	-
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$	_
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$	_
HW0009.07	Bitumen pavement		m2			
HW0009.08	AC pavement		m2			
HW0009.09	Pavers		m2			
HW0009.10	Turf		m2			
HW0009\MM1	11 6 Pass seeding rojects\North Tuncurry Developmer <u>Estimates_Reticulation Vacuum</u>)				vater Cost Estimat	ces\Cost

■ U\\/\∩∩∩∩ 1∩	Hydromulch		m2			
HW0009.12						
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	_
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 27,408.00	\$	27,408.00
	Ψ					
۸	TOTAL ESTIMATED CONTRACT AWARD SI	IM			4	E00.000
A .	TOTAL ESTIMATED CONTRACT AWARD SU	JM			\$	598,009
A . B.	PRE-CONSTRUCTION COST (Table 10)	JM —			\$	598,009
		20%			\$	598,009
В.	PRE-CONSTRUCTION COST (Table 10) Design		32%			
B. HW0016	PRE-CONSTRUCTION COST (Table 10) Design	20%			\$	119,601.79
B. HW0016 HW0017	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design	20%			\$	119,601.79
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters	20%			\$	119,601.79
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation	20% variable			\$ \$	119,601.79 37,675
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1)	20% variable			\$ \$ \$	119,601.79 37,675 - 157,276
B. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of	20% variable			\$ \$ \$ \$	119,601.79 37,675 - 157,276 47,183
B. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B)	20% variable			\$ \$ \$ \$ \$	119,601.79 37,675 - 157,276 47,183 204,459
B. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A)	20% variable			\$ \$ \$ \$ \$	119,601.79 37,675 - 157,276 47,183
B. HW0016 HW0017 HW0018 HW0024 C. HW0019	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable)	20% variable B1)	32%		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	119,601.79 37,675 - 157,276 47,183 204,459
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete	20% variable B1) rs (as appl	32%		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	119,601.79 37,675 - 157,276 47,183 204,459
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable)	20% variable B1) rs (as appl	32%		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	119,601.79 37,675 - 157,276 47,183 204,459
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply	20% variable B1) rs (as appl	icable)		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	119,601.79 37,675 - 157,276 47,183 204,459 598,009
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	20% variable B1) rs (as appl	32%		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	119,601.79 37,675 - 157,276 47,183 204,459 598,009
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	20% variable B1) rs (as appl	icable)		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	119,601.79 37,675 - 157,276 47,183 204,459 598,009 47,841 645,850
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	20% variable B1) rs (as appl	icable)		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	119,601.79 37,675 - 157,276 47,183 204,459 598,009
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmete Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	20% variable B1) rs (as appl	icable)		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	119,601.79 37,675 - 157,276 47,183 204,459 598,009 - - - 47,841 645,850

1,044,064

PROJECT DESCRIPTION: North Tuncurry Development Project – Vacuum System - Stage T

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount \$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 991.00	\$ 991.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 3,000.00	\$ 3,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 3,000.00	\$ 3,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 2,000.00	\$ 2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 1,295.60	\$ 1,295.60
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

					Rate		Amount
Item	Construction of Sewer Rising Mains	Qty	Unit		\$/Unit		\$
HWR001	Service Location	Item	Lump Sum	\$	144.00	\$	144.00
HWR002	Supply all valves	Item	Lump Sum			\$	-
HWR003	Supply all fittings	Item	Lump Sum			\$	-
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:						
11EVSS	Nominal DN300 PVC pipe	192	m	\$	85.00	\$	16,320.0
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.						
11EV03	Nominal DN300 PVC (Trench type 3)	192	m	\$	85.25	\$	16,368.0
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.						
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.						
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.						
HWR009	EMPTY			•	10.10		
HWR010	Extra over rate for installation for Additional compaction		m3	\$	19.13		
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$	78.75		
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3				
HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$	337.50		
HWR014 C:\Users\MN	Extra over rate for installation for Supply,	t Project 2014	m3 \FINAL SUBMISSI	DN Sep-	2014\Data\Wastey	vater Co	st Estimates\Co

HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	0	no.	\$ 1,046.00	\$ -
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	192	m	\$ 1.00	\$ 192.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 33,024.00

Item No.	Item Description	Qty	Unit			Amount \$
HW0009	Restoration - Pipelines:					
HW0009.01	Concrete kerb & gutter	0	m	\$	110.00	\$
HW0009.02	Concrete driveway	0	m2	\$	178.00	\$
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$	220.00	\$
HW0009.04	Concrete footpath	0	m2	\$	155.00	\$
HW0009.05	Bitumen footpath	0	m2	\$	117.00	\$
HW0009.06	Gravel pavement	0	m2	\$	69.00	\$
HW0009.07	Bitumen pavement		m2			
HW0009.08	AC pavement		m2			
HW0009.09	Pavers		m2	1		
HW0009.10	Turf		m2			
HW0009.11	Grass seeding		m2			
HW0009.12	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			

HW0011	Acid sulphate soil						
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test				
HW0011.02	Establish treatment facility		Item				
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3				
HW0011.04	Disposal off site of acid sulphate soil		tonne				
HW0012	Preconstruction record						
HW0012.01	Photographic	Item	Lump Sum			\$	-
HW0012.02	Video	Item	Lump Sum			\$	-
HW0012.03	CCTV	Item	Lump Sum			\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$	1,536.00	\$	1,536.00
A.	TOTAL ESTIMATED CONTRACT AWARD SI	JM				\$	57,847
В.	PRE-CONSTRUCTION COST (Table 10)						
HW0016	Design	20%	ó			\$	11,569.32
HW0017	, 8	variable	106%			\$	12,310
HW0018	Land Matters					\$	-
HW0024	Community Consultation						
	Sub Total(B1)					\$	23,879
	Pre construction contingency (30% of	B1)				\$	7,164
	TOTAL PRE-CONSTRUCTION COST (B)					\$	31,043
_							
C.	CONSTRUCTION COST					_	
1.0040040	Total Estimated Contract Award Sum (A)					\$	57,847
HW0019	Principal Supplied Pipe (as applicable)					\$	-
HW0020	Principal Supplied Valves and Flowmete		icable)			\$	-
HW0021	Principal Supplied Fittings (as applicable)				\$	-
HW0022	Pump Station HV Power Supply			ı		\$	-
HW0023	Construction Management (Table 11)		10%			\$	5,785
	Sub Total (C1)			1		\$	63,631
	Construction contingency (Table 12) (30% of C1)	Prelimi	nary Estimate			\$	19,089
	TOTAL CONSTRUCTION COST (C)		, , , , , , , , , , , , , , , , , , , ,			\$	82,721
						т	3-,

PROJECT DESCRIPTION: North Tuncurry Development Project - Vacuum System - Stage U

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 3,951.00	\$ 3,951.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 2,775.68	\$ 2,775.68
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

		-		Rate	Amount
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit	\$
HWR001	Service Location	Item	Lump Sum	\$ 998.40	\$ 998.40
HWR002	Supply all valves	Item	Lump Sum		\$ -
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
119VSS	Nominal DN250 PVC pipe	340	m	\$ 62.50	\$ 21,250.00
10AVSS	Nominal DN100 PVC pipe	1324	m	\$ 14.00	\$ 18,536.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
119V03	Nominal DN250 PVC (Trench type 3)	340	m	\$ 80.40	\$ 27,336.00
10AV03	Nominal DN100 PVC (Trench type 3)	1324	m	\$ 63.80	\$ 84,471.20
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement		m3	\$ 270.00	
	(14:1) backfill				
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	9	no.	\$ 1,046.00	\$ 9,414.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	1664	m	\$ 1.00	\$ 1,664.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 163,669.60

	· ·	Qty	Unit		Amount
					\$
HW0009 F	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HVW0009\11M11	.1 Grass:seeding rojects\North Tuncurry Developmen <u>Estimates_Reticulation Vacuum</u> (១				vater Cost Estimates\Cost

HW0009.12	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 13,312.00	\$	13,312.00
A.	TOTAL ESTIMATED CONTRACT AWARD SU	JM			\$	231,708
В.	PRE-CONSTRUCTION COST (Table 10)					
HW0016	Design	20%	ó		\$	46,341.66
HW0017	Project Management of Design	variable	43%		\$	19,695
HW0018	Land Matters				\$	-
HW0024	Community Consultation					
	Sub Total(B1)				\$	66,037
	Pre construction contingency (30% of I	B1)			\$	19,811
	TOTAL PRE-CONSTRUCTION COST (B)				\$	85,848
C.	CONSTRUCTION COST				ı	
	Total Estimated Contract Award Sum (A)				\$	231,708
HW0019	Principal Supplied Pipe (as applicable)				\$	-
HW0020	Principal Supplied Valves and Flowmeter		icable)		\$	-
HW0021	Principal Supplied Fittings (as applicable)			\$	-
HW0022	Pump Station HV Power Supply				\$	-
HW0023	Construction Management (Table 11)		10%		\$	23,171
1	Sub Total (C1)				\$	254,879
				1		
	Construction contingency (Table 12) (30% of C1)	Prelimi	nary Estimate		\$	76,464
	Construction contingency	Prelimi	nary Estimate			
	Construction contingency (Table 12) (30% of C1)	Prelimii	nary Estimate		\$	76,464

PROJECT DESCRIPTION: North Tuncurry Development Project – Vacuum System - Stage V

Item No.	Item Description	Qty	Unit	Rate \$/Unit		Amount \$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	475.00	\$ 475.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	3,000.00	\$ 3,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	3,000.00	\$ 3,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	4,000.00	\$ 4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	2,000.00	\$ 2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	1,037.40	\$ 1,037.40
HW0008	Community Consultation	Item	Lump Sum	\$	-	\$ -

					Rate	Amount	
Item	Construction of Sewer Rising Mains	Qty	Unit		\$/Unit		\$
HWR001	Service Location	Item	Lump Sum	\$	60.00	\$	60.0
HWR002	Supply all valves	Item	Lump Sum			\$	
HWR003	Supply all fittings	Item	Lump Sum			\$	
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:						
10AVSS	Nominal DN100 PVC pipe	100	m	\$	14.00	\$	1,400.0
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.						
10AV03	Nominal DN100 PVC (Trench type 3)	100	m	\$	63.80	\$	6,380.0
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.						
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.						
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.						
HWR009	EMPTY		0		45.00		
HWR010	Extra over rate for installation for Additional compaction		m3	\$	15.30		
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$	63.00		
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3				
HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$	270.00		
HWR014 C:\Users\MM	Extra over rate for installation for Supply,	t Project 2014	m3 \FINAL SUBMISSI	DN Sep-2	2014\Data\Wastev	vater Cos	st Estimates\Co

HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	18	no.	\$ 1,046.00	\$ 18,828.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	100	m	\$ 1.00	\$ 100.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 26,768.00

Item No.	Item Description	Qty	Unit		Amount \$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HW0009.11	Grass seeding		m2		
HW0009.12	Hydromulch		m2		
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3		

HW0011	Acid sulphate soil						
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test				
HW0011.02	Establish treatment facility		Item				
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3				
HW0011.04	Disposal off site of acid sulphate soil		tonne				
HW0012	Preconstruction record						
HW0012.01	Photographic	Item	Lump Sum			\$	-
HW0012.02	Video	Item	Lump Sum			\$	-
HW0012.03	CCTV	Item	Lump Sum			\$	-
HW0013	Work as Constructed Information <insert \$="" min=""></insert>	Item	Lump Sum	\$ 8	00.00	\$	800.00
A.	TOTAL ESTIMATED CONTRACT AWARD S	UM				\$	50,080
						Υ	30,000
В.	PRE-CONSTRUCTION COST (Table 10)						
HW0016	Design	20%	6			\$	10,016.08
HW0017		variable	110%			\$	11,018
HW0018	Land Matters					\$	-
HW0024	Community Consultation						
	Sub Total(B1)					\$	21,034
	Pre construction contingency (30% of	B1)				\$	6,310
	TOTAL PRE-CONSTRUCTION COST (B)					\$	27,344
C.	CONSTRUCTION COST						
	Total Estimated Contract Award Sum (A)					\$	50,080
HW0019	Principal Supplied Pipe (as applicable)					\$	-
HW0020	Principal Supplied Valves and Flowmete	rs (as app	licable)			\$	-
HW0021	Principal Supplied Fittings (as applicable		,			\$	-
HW0022	Pump Station HV Power Supply	,				\$	-
HW0023	Construction Management (Table 11)		10%			\$	5,008
	Sub Total (C1)					\$	55,088
	Construction contingency (Table 12) (30% of C1)	Prolimi	nary Estimate		ľ	\$	16,527
	TOTAL CONSTRUCTION COST (C)	T TOTAL	nary Estimate			\$	71,615

PROJECT DESCRIPTION: North Tuncurry Development Project - Vacuum System - Stage W

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 2,537.00	\$ 2,537.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 2,068.46	\$ 2,068.46
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

				Rate	Т	Amount
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit		\$
HWR001	Service Location	Item	Lump Sum	\$ 64	2.00	\$ 642.00
HWR002	Supply all valves	Item	Lump Sum			\$ -
HWR003	Supply all fittings	Item	Lump Sum			\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:					
114VSS	Nominal DN200 PVC pipe	80	m	\$ 4	8.00	\$ 3,840.00
10AVSS	Nominal DN100 PVC pipe	990	m	\$ 1	4.00	\$ 13,860.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.					
114V03	Nominal DN200 PVC (Trench type 3)	80	m	\$ 7	1.40	\$ 5,712.00
10AV03	Nominal DN100 PVC (Trench type 3)	990	m	\$ 6	3.80	\$ 63,162.00
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.					
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.					
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.					
HWR009	EMPTY					
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 1	5.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 6	3.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3			

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement		m3	\$ 270.00	
LUADOAA	(14:1) backfill				
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	0	no.	\$ 1,046.00	\$ -
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	1070	m	\$ 1.00	\$ 1,070.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 88,286.00

	· ·	Qty	Unit		Amount
					\$
HW0009 F	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HVW0009\11M11	.1 Grass:seeding rojects\North Tuncurry Developmen <u>Estimates_Reticulation Vacuum</u> (១				vater Cost Estimates\Cost

A. TOTAL ESTIMATED CONTRACT AWARD SUM B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% HW0017 Project Management of Design variable 54% HW0018 Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Pipe (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate \$ 149,451 \$ 149,452 \$ 149,452 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$ 149,453 \$	HW0009.12	Hydromulch		m2			
HW0011	HW0010			m3			
HW0011.01 Initial testing for acid sulphate soils and prepare and submit report		disposal of excess excavated material					
Prepare and submit report	HW0011	Acid sulphate soil					
HW0011.03 Handling, treatment and testing of acid sulphate soils Disposal off site of acid sulphate soils tonne	HW0011.01			per test			
Sulphate solls	HW0011.02			Item			
HW0012 Preconstruction record HW0012.01 Photographic Item Lump Sum S S S S S S S S S	HW0011.03			m3			
HW0012.02	HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012.02	HW0012	Preconstruction record					
HW0012.03 CCTV Item Lump Sum \$ HW0013 Work as Constructed Information < Insert Min Item Lump Sum \$ B. PRE-CONSTRUCTION COST (Table 10)	HW0012.01	Photographic	Item	Lump Sum		\$	-
A. TOTAL ESTIMATED CONTRACT AWARD SUM Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Sol	HW0012.02	Video	Item	Lump Sum		\$	-
A. TOTAL ESTIMATED CONTRACT AWARD SUM B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% HW0017 Project Management of Design variable 54% HW0018 Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Pipe (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction Contingency (Table 12) (30% of C1) Freliminary Estimate \$ 149,451 \$ 149,452 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$ 149,445 \$	HW0012.03	CCTV	Item	Lump Sum		\$	-
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$ 29,890.25 HW0017 Project Management of Design variable 54% \$ 15,991 HW0018 Land Matters \$ \$ - Sub Total(B1) \$ 45,885 Pre construction contingency (30% of B1) \$ 13,766 TOTAL PRE-CONSTRUCTION COST (B) \$ 59,646 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 149,455 HW0019 Principal Supplied Pipe (as applicable) \$ - HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ - HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - Construction Management (Table 11) \$ 10% \$ 14,945 Sub Total (C1) \$ 164,397 Construction contingency (Table 12) (30% of C1) Preliminary Estimate	HW0013		Item	Lump Sum	\$ 8,560.00	\$	8,560.00
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$ 29,890.25 HW0017 Project Management of Design variable 54% \$ 15,991 HW0018 Land Matters \$ \$ - Sub Total(B1) \$ 45,885 Pre construction contingency (30% of B1) \$ 13,766 TOTAL PRE-CONSTRUCTION COST (B) \$ 59,646 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 149,455 HW0019 Principal Supplied Pipe (as applicable) \$ - HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ - HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - Construction Management (Table 11) \$ 10% \$ 14,945 Sub Total (C1) \$ 164,397 Construction contingency (Table 12) (30% of C1) Preliminary Estimate							
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$ 29,890.25 HW0017 Project Management of Design variable 54% \$ 15,991 HW0018 Land Matters \$ \$ - Sub Total(B1) \$ 45,885 Pre construction contingency (30% of B1) \$ 13,766 TOTAL PRE-CONSTRUCTION COST (B) \$ 59,646 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 149,455 HW0019 Principal Supplied Pipe (as applicable) \$ - HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ - HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - Construction Management (Table 11) \$ 10% \$ 14,945 Sub Total (C1) \$ 164,397 Construction contingency (Table 12) (30% of C1) Preliminary Estimate							
HW0016 Design HW0017 Project Management of Design variable Land Matters HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 29,890.29 \$ 15,993 \$ 45,883 \$ 45,883 \$ 45,883 \$ 59,646 \$ 13,766 \$ 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$	A.	TOTAL ESTIMATED CONTRACT AWARD SU	JM			\$	149,451
HW0016 Design HW0017 Project Management of Design variable Land Matters HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 29,890.29 \$ 15,993 \$ 45,883 \$ 45,883 \$ 45,883 \$ 59,646 \$ 13,766 \$ 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$ - 149,453 \$							
HW0017 Project Management of Design variable 54% \$ 15,991 HW0018 Land Matters \$ \$ - HW0024 Community Consultation Sub Total(B1) \$ 45,882 Pre construction contingency (30% of B1) \$ 13,764 TOTAL PRE-CONSTRUCTION COST (B) \$ 59,646 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$ 149,451 HW0019 Principal Supplied Pipe (as applicable) \$ - HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ - HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - HW0023 Construction Management (Table 11) \$ 10% \$ 14,945 Sub Total (C1) \$ 164,397 Construction contingency \$ 49,315 TOTAL CONSTRUCTION COST (C) \$ 213,716	В.	_		_			
HW0018 Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 13,716			20%	6		_	
HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 45,883 \$ 45,883 \$ \$ 45,883 \$ \$ 13,764 \$ \$ 149,451 \$ \$ 149,451 \$ \$ - HW0021 \$ - Freliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 213,716			variable	54%			15,991
Sub Total(B1) Pre construction contingency (30% of B1) **TOTAL PRE-CONSTRUCTION COST (B) **C.** CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019						\$	-
Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 13,766 \$ 149,451 \$	HW0024	•					
TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 59,646 \$ 149,451 \$		• • •					45,882
C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 149,451 \$			B1)			\$	13,764
Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 149,451 \$		TOTAL PRE-CONSTRUCTION COST (B)				\$	59,646
Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 149,451 \$							
HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 164,397 \$ 49,319	C.						
HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) Fump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) Preliminary Estimate *		Total Estimated Contract Award Sum (A)				\$	149,451
HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) Preliminary Estimate \$		Principal Supplied Pipe (as applicable)				\$	-
HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) Sub Total (C1) Preliminary Estimate \$	HW0020	Principal Supplied Valves and Flowmeter	rs (as app	licable)		\$	-
HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 14,945 \$ 14,945 \$ \$ 164,397 \$ \$ 49,315 \$ \$ 213,716	HW0021	Principal Supplied Fittings (as applicable)			\$	-
Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 164,397 \$ 49,319 \$ 213,716	HW0022	Pump Station HV Power Supply				\$	-
Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 49,319 \$ 213,716	HW0023	Construction Management (Table 11)		10%		\$	14,945
(Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 213,716						\$	164,397
TOTAL CONSTRUCTION COST (C) \$ 213,716		Construction contingency				\$	49,319
		(Table 12) (30% of C1)	Prelimi	nary Estimate			
TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate) \$ 273,362		TOTAL CONSTRUCTION COST (C)				\$	213,716
TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate) \$ 273,362							
		TOTAL PRELIMINARY PROJECT ESTIMATE	(B+C) (F	reliminary E	stimate)	\$	273,362

PROJECT DESCRIPTION: North Tuncurry Development Project – Vacuum System - Stage X

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 1,970.00	\$ 1,970.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 6,000.00	\$ 6,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 6,000.00	\$ 6,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 1,785.05	\$ 1,785.05
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

ltom	Construction of Course Bising Mains	Otro	Unit	Rate \$/Unit	Amount
Item	Construction of Sewer Rising Mains	Qty	Unit		\$
HWR001	Service Location	Item	Lump Sum	\$ 343.20	\$ 343.20
HWR002	Supply all valves	Item	Lump Sum		\$ -
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
114VSS	Nominal DN200 PVC pipe	445	m	\$ 48.00	\$ 21,360.00
10AVSS	Nominal DN100 PVC pipe	127	m	\$ 14.00	\$ 1,778.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
114V03	Nominal DN200 PVC (Trench type 3)	445	m	\$ 71.40	\$ 31,773.00
10AV03	Nominal DN100 PVC (Trench type 3)	127	m	\$ 63.80	\$ 8,102.60
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement		m3	\$ 270.00	
	(14:1) backfill				
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	16	no.	\$ 1,046.00	\$ 16,736.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	572	m	\$ 1.00	\$ 572.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 80,664.80

	· ·	Qty	Unit		Amount
					\$
HW0009 F	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HVW0009\11M11	.1 Grass:seeding rojects\North Tuncurry Developmen <u>Estimates_Reticulation Vacuum</u> (១				vater Cost Estimates\Cost

HW0009.12	Lludromudele		O			
	Hydromulch		m2			
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3			
HW0011	Acid sulphate soil					
HW0011.01	Initial testing for acid sulphate soils and prepare and submit report		per test			
HW0011.02	Establish treatment facility		Item			
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3			
HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012	Preconstruction record					
HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0012.02	Video	Item	Lump Sum		\$	-
HW0012.03	CCTV	Item	Lump Sum		\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$ 4,576.00	\$	4,576.00
٨	TOTAL ESTIMATED CONTRACT AWARD SI	II./I			<u> </u>	420.006
A.	TOTAL ESTIMATED CONTRACT AWARD SU	UM			\$	130,996
A. B.	TOTAL ESTIMATED CONTRACT AWARD SU	UM			\$	130,996
		UM 20%			\$	130,996 26,199.17
В.	PRE-CONSTRUCTION COST (Table 10) Design		64%		\$ \$ \$	
B. HW0016	PRE-CONSTRUCTION COST (Table 10) Design	20%			\$	26,199.17
B. HW0016 HW0017	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design	20%			\$	26,199.17
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters	20%			\$	26,199.17
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation	20% variable			\$ \$ \$	26,199.17 16,715 -
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1)	20% variable			\$ \$ \$	26,199.17 16,715 - 42,914
B. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of total PRE-CONSTRUCTION COST (B)	20% variable			\$ \$ \$ \$	26,199.17 16,715 - 42,914 12,874
B. HW0016 HW0017 HW0018	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of International Control (B1) CONSTRUCTION COST	20% variable			\$ \$ \$ \$	26,199.17 16,715 - 42,914 12,874 55,789
B. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of Internation Cost (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A)	20% variable			\$ \$ \$ \$ \$	26,199.17 16,715 - 42,914 12,874
B. HW0016 HW0017 HW0018 HW0024	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable)	20% variable B1)	64%		\$ \$ \$ \$	26,199.17 16,715 - 42,914 12,874 55,789
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of 1) TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter	20% variable B1) rs (as appli	64%		\$ \$ \$ \$ \$ \$	26,199.17 16,715 - 42,914 12,874 55,789
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of Internal Pre-Construction Cost (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable)	20% variable B1) rs (as appli	64%		\$ \$ \$ \$ \$ \$	26,199.17 16,715 - 42,914 12,874 55,789
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of Internal Pre-Construction Cost (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply	20% variable B1) rs (as appli	cable)		\$ \$ \$ \$ \$ \$	26,199.17 16,715 - 42,914 12,874 55,789
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to	20% variable B1) rs (as appli	64%		\$ \$ \$ \$ \$ \$ \$ \$ \$	26,199.17 16,715 - 42,914 12,874 55,789 130,996
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of Internal Pre-Construction Cost (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	20% variable B1) rs (as appli	cable)		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	26,199.17 16,715 - 42,914 12,874 55,789 130,996
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to Internation to	20% variable B1) rs (as appli	cable)		\$ \$ \$ \$ \$ \$ \$ \$ \$	26,199.17 16,715 - 42,914 12,874 55,789 130,996
B. HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	PRE-CONSTRUCTION COST (Table 10) Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of I TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency	20% variable B1) rs (as appli	cable)		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	26,199.17 16,715 - 42,914 12,874 55,789 130,996 - - - 13,100 144,095

\$

243,113

PROJECT DESCRIPTION: North Tuncurry Development Project - Vacuum System - Stage Y

Item No.	Item Description	Qty	Unit	Rate \$/Unit	Amount
					\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$ 2,120.00	\$ 2,120.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$ 9,000.00	\$ 9,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$ 8,000.00	\$ 8,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$ 18,000.00	\$ 18,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$ 4,000.00	\$ 4,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$ 1,860.16	\$ 1,860.16
HW0008	Community Consultation	Item	Lump Sum	\$ -	\$ -

16		01	11.4	Rate	Amount
Item	Construction of Sewer Rising Mains	Qty	Unit	\$/Unit	\$
HWR001	Service Location	Item	Lump Sum	\$ 456.00	\$ 456.00
HWR002	Supply all valves	Item	Lump Sum		\$ -
HWR003	Supply all fittings	Item	Lump Sum		\$ -
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:				
10FVSS	Nominal DN150 PVC pipe	545	m	\$ 28.00	\$ 15,260.00
10AVSS	Nominal DN100 PVC pipe	215	m	\$ 14.00	\$ 3,010.00
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.				
10FV03	Nominal DN150 PVC (Trench type 3)	545	m	\$ 67.40	\$ 36,733.00
10AV03	Nominal DN100 PVC (Trench type 3)	215	m	\$ 63.80	\$ 13,717.00
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.				
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.				
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.				
HWR009	EMPTY				
HWR010	Extra over rate for installation for Additional compaction		m3	\$ 15.30	
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$ 63.00	
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3		

HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement		m3	\$ 270.00	
	(14:1) backfill				
HWR014	Extra over rate for installation for Supply, place and compact aggregate		m3		
HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	17	no.	\$ 1,046.00	\$ 17,782.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	760	m	\$ 1.00	\$ 760.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 87,718.00

Item No.	Item Description	Qty	Unit		Amount \$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$ -
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$ -
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$ -
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$ -
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$ -
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$ -
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HW0009/11/1V	11 Gràss:seeding rojects\North Tuncurry Developmer E stimates_Reticulation Vacuum\ ;				vater Cost Estimates\Cost

A. TOTAL ESTIMATED CONTRACT AWARD SUM B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design HW0017 Project Management of Design variable 59% HW0018 Land Matters HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) \$ 145,778 \$ 29,155.63 \$ 17,231 \$ 46,387 \$ 145,778	HW0009.12	Hydromulch		m2			
HW0011.01 Initial testing for acid sulphate soils and prepare and submit report HW0011.02 Establish treatment facility Item	HW0010			m3			
Prepare and submit report	HW0011	Acid sulphate soil					
HW0011.03 Handling, treatment and testing of acid sulphate soils HW001104 Disposal off site of acid sulphate soil tonne	HW0011.01	·					
HW0011.04 Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site of acid sulphate soil Disposal off site off site of acid sulphate soil Disposal off site of acid sulphate soil Disposa	HW0011.02	Establish treatment facility		Item			
HW0012 Preconstruction record Item Lump Sum \$	HW0011.03	sulphate soils					
HW0012.02 Video Item Lump Sum \$	HW0011.04	Disposal off site of acid sulphate soil		tonne			
HW0012.02 Video	HW0012	Preconstruction record					
HW0012.03 CCTV Item Lump Sum \$ -	HW0012.01	Photographic	Item	Lump Sum		\$	-
HW0013	HW0012.02	Video	Item	Lump Sum		\$	-
A. TOTAL ESTIMATED CONTRACT AWARD SUM \$ 145,778 B. PRE-CONSTRUCTION COST (Table 10)	HW0012.03	CCTV	Item	Lump Sum		\$	-
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$29,155.63 HW0017 Project Management of Design variable 59% \$17,231 HW0018 Land Matters \$ Community Consultation Sub Total(B1) \$46,387 Pre construction contingency (30% of B1) \$13,916 TOTAL PRE-CONSTRUCTION COST (B) \$60,303 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$145,778 HW0019 Principal Supplied Pipe (as applicable) \$ HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ HW0021 Principal Supplied Fittings (as applicable) \$ HW0022 Pump Station HV Power Supply \$ Construction Management (Table 11) \$	HW0013		Item	Lump Sum	\$ 6,080.00	\$	6,080.00
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$29,155.63 HW0017 Project Management of Design variable 59% \$17,231 HW0018 Land Matters \$ Community Consultation Sub Total(B1) \$46,387 Pre construction contingency (30% of B1) \$13,916 TOTAL PRE-CONSTRUCTION COST (B) \$60,303 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$145,778 HW0019 Principal Supplied Pipe (as applicable) \$ HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ HW0021 Principal Supplied Fittings (as applicable) \$ HW0022 Pump Station HV Power Supply \$ Construction Management (Table 11) \$							
B. PRE-CONSTRUCTION COST (Table 10) HW0016 Design 20% \$29,155.63 HW0017 Project Management of Design variable 59% \$17,231 HW0018 Land Matters \$ Community Consultation Sub Total(B1) \$46,387 Pre construction contingency (30% of B1) \$13,916 TOTAL PRE-CONSTRUCTION COST (B) \$60,303 C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) \$145,778 HW0019 Principal Supplied Pipe (as applicable) \$ HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ HW0021 Principal Supplied Fittings (as applicable) \$ HW0022 Pump Station HV Power Supply \$ Construction Management (Table 11) \$							
HW0016 Design HW0017 Project Management of Design HW0018 Land Matters HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.	A.	TOTAL ESTIMATED CONTRACT AWARD SU	\$	145,778			
HW0016 Design HW0017 Project Management of Design HW0018 Land Matters HW0024 Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.63 \$ 29,155.							
HW0017 Project Management of Design variable 59% HW0018 Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) Principal Supplied Fittings (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply Construction Management (Table 11) Construction Contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 208,463	В.	PRE-CONSTRUCTION COST (Table 10)					
HW0018 Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B1) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) Principal Supplied Fittings (as applicable) Principal Supplied Fittings (as applicable) Principal Supplied Fittings (as applicable) Sub Total (C1) Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 208,463	HW0016	Design	\$	29,155.63			
C. CONSTRUCTION COST HW0024 Principal Supplied Pipe (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Construction Management (Table 11) Construction contingency (Table 12) (30% of C1) Freliminary Estimate TOTAL CONSTRUCTION COST (\$ 46,387 \$ 46,387 \$ 46,387 \$ 46,387 \$ 46,387 \$ 13,916 \$ 145,778 \$ 145,778 \$ 145,778 \$	HW0017	Project Management of Design	\$	17,231			
Sub Total(B1) Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 46,387 \$ 46,387 \$ 46,387 \$ 13,916 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 5 \$ 145,778 \$ 145,778 \$ 145,778 \$ 145,778 \$ 145,778 \$ 145,778 \$ 145,778 \$ 145,	HW0018	Land Matters	\$	-			
Pre construction contingency (30% of B1) TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 13,916 \$ 60,303	HW0024	Community Consultation					
TOTAL PRE-CONSTRUCTION COST (B) C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 60,303 \$ 145,778 \$ - \$ 145,778 \$ 145,778 \$ 145,778 \$ 145,778 \$ 145,778 \$ 145,778 \$ 145,778 \$ 145,778 \$ 145,778		Sub Total(B1)		46,387			
C. CONSTRUCTION COST Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 145,778 \$		Pre construction contingency (30% of	\$	13,916			
Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 145,778 \$ 145,778 \$ 145,778		TOTAL PRE-CONSTRUCTION COST (B)	\$	60,303			
Total Estimated Contract Award Sum (A) HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ 145,778 \$ 145,778 \$ 145,778							
HW0019 Principal Supplied Pipe (as applicable) HW0020 Principal Supplied Valves and Flowmeters (as applicable) HW0021 Principal Supplied Fittings (as applicable) HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$	C.						
HW0020 Principal Supplied Valves and Flowmeters (as applicable) \$ - HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - HW0023 Construction Management (Table 11) \$ 14,578 Sub Total (C1) \$ 160,356 Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 208,463		Total Estimated Contract Award Sum (A)	\$	145,778			
HW0021 Principal Supplied Fittings (as applicable) \$ - HW0022 Pump Station HV Power Supply \$ - HW0023 Construction Management (Table 11) 10% \$ 14,578 Sub Total (C1) \$ 160,356 Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 208,463		Principal Supplied Pipe (as applicable)	\$	-			
HW0022 Pump Station HV Power Supply HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) TOTAL CONSTRUCTION COST (C) \$ - \$ 14,578 \$ 160,356 \$ 48,107 Preliminary Estimate \$ 208,463			\$	-			
HW0023 Construction Management (Table 11) Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 14,578 \$ 14,578 \$ 160,356 \$ \$ 48,107 \$ \$ 208,463				-			
Sub Total (C1) Construction contingency (Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 160,356 \$ 48,107 \$ 208,463			·	-			
Construction contingency (Table 12) (30% of C1) Preliminary Estimate * 48,107 Preliminary Estimate \$ 208,463	HW0023	• • • • • • • • • • • • • • • • • • • •					
(Table 12) (30% of C1) Preliminary Estimate TOTAL CONSTRUCTION COST (C) \$ 208,463							
TOTAL CONSTRUCTION COST (C) \$ 208,463			Prelimi	nary Estimate		\$	48,107
TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate) \$ 268,765		TOTAL CONSTRUCTION COST (C)				\$	208,463
TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate) \$ 268,765							
		TOTAL PRELIMINARY PROJECT ESTIMATE	(B+C) (F	reliminary E	stimate)	\$	268,765

PROJECT DESCRIPTION: North Tuncurry Development Project – Vacuum System - Stage Z

Item No.	Item Description	Qty	Unit	F	Rate \$/Unit	Amount
						\$
HW0001	All work not included elsewhere in this schedule	Item	Lump Sum	\$	1,324.00	\$ 1,324.00
HW0002	Site Establishment <insert \$="" max=""></insert>	Item	Lump Sum	\$	6,000.00	\$ 6,000.00
HW0003	Site Disestablishment <insert \$="" min=""></insert>	Item	Lump Sum	\$	6,000.00	\$ 6,000.00
HW0004	Preparation and implementation of the Construction EMP	Item	Lump Sum	\$	4,000.00	\$ 4,000.00
HW0005	Preparation and implementation of the Safety Management Plan.	Item	Lump Sum	\$	9,000.00	\$ 9,000.00
HW0006	Preparation and implementation of the Traffic Control Plan.	Item	Lump Sum	\$	2,000.00	\$ 2,000.00
HW0007	Preparation and Implementation of Quality Management Plan	Item	Lump Sum	\$	1,462.16	\$ 1,462.16
HW0008	Community Consultation	Item	Lump Sum	\$	-	\$ -

					Rate		Amount
Item	Construction of Sewer Rising Mains	Qty	Unit		\$/Unit		\$
HWR001	Service Location	Item	Lump Sum	\$	351.60	\$	351.6
HWR002	Supply all valves	Item	Lump Sum			\$	
HWR003	Supply all fittings	Item	Lump Sum			\$	
HWR004	Supply all pipe materials including detector tape, pipe protection wrapping, rubber rings and lubricant for following pipe sizes:						
10AVSS	Nominal DN100 PVC pipe	586	m	\$	14.00	\$	8,204.0
HWR005	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Up to 1.5 m depth to invert in OTR.						
10AV03	Nominal DN100 PVC (Trench type 3)	586	m	\$	63.80	\$	37,386.8
HWR006	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >1.5m to 3.0m to invert in OTR.						
HWR007	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >3.0m to 4.5m to invert in OTR.						
HWR008	Clear, excavate, lay, join, bed, backfill & test pipelines (installation). Nominal depth >4.5m to invert in OTR.						
HWR009	EMPTY		0	Φ.	45.00		
HWR010	Extra over rate for installation for Additional compaction		m3	\$	15.30		
HWR011	Excavate below specified design depth where directed including disposal of excess excavated material		m3	\$	63.00		
HWR012	Extra over rate for installation to Supply & place & compact non cohesive material.		m3				
HWR013	Extra over rate for installation for supply, place and compact stabilised sand cement (14:1) backfill		m3	\$	270.00		
HWR014 C:\Users\MM	Extra over rate for installation for Supply,	t Project 2014	m3 \FINAL SUBMISSI)N Sep-2	2014\Data\Wastev	vater Co	st Estimates\Co

HWR015	Supply & place ballast		tonnes	\$ 90.00	
HWR016	External Dewatering of pots including establishment & disestablishment	11	no.	\$ 1,046.00	\$ 11,506.00
HWR017	Supply and place treated timber piling for pipe support		m		
HWR018	Road / creek crossings				
HWR019	Extra over rate for installation of trenchless technique under existing rail line		m		
HWR020	Supply and installation of pipe aerial creek crossing including supply of MSCL pipe with protection coating, internal and external welding, testing of welds. For the following MSCL pipe sizes:				
HWR021	Supply and installation of pipe river crossing including supply of MSCL pipe, internal and external welding, testing of welds and 150 thick concrete encasement. Also includes mobilisation and demobilisation of dredge(if required) excavation & disposal of excavated material, backfilling, lay, bed and test for the following MSCL pipe sizes:				
HWR022	Bulkheads and Trenchstops in accordance with WSAA drawing SEW-1206	Item	Lump Sum		\$ -
HWR023	Supply and Install valve pits (excluding valves and fittings)	0	Each	\$ -	\$ -
HWR024	Flow Relief Structures		Each		
HWR025	EMPTY				
HWR026	Supply and construct vent stacks		each		
HWR027	Preparation of line sheets	586	m	\$ 1.00	\$ 586.00
HWR028	Acceptance testing - rising main		m		
HWR029	Miscellaneous				
HWR000	Sub Total				\$ 58,034.40

Item No.	Item Description	Qty	Unit		Amount \$
HW0009	Restoration - Pipelines:				
HW0009.01	Concrete kerb & gutter	0	m	\$ 110.00	\$
HW0009.02	Concrete driveway	0	m2	\$ 178.00	\$
HW0009.03	Exposed aggregate & stamped driveway	0	m2	\$ 220.00	\$
HW0009.04	Concrete footpath	0	m2	\$ 155.00	\$
HW0009.05	Bitumen footpath	0	m2	\$ 117.00	\$
HW0009.06	Gravel pavement	0	m2	\$ 69.00	\$
HW0009.07	Bitumen pavement		m2		
HW0009.08	AC pavement		m2		
HW0009.09	Pavers		m2		
HW0009.10	Turf		m2		
HW0009.11	Grass seeding		m2		
HW0009.12	Hydromulch		m2		
HW0010	Extra over item for Excavation in rock and disposal of excess excavated material		m3		

HW0011	Acid sulphate soil						
HW0011.01	Initial testing for acid sulphate soils and		per test				
1100011.01	prepare and submit report		per test				
HW0011.02	Establish treatment facility		Item				
HW0011.03	Handling, treatment and testing of acid sulphate soils		m3				
HW0011.04	Disposal off site of acid sulphate soil		tonne				
HW0012	Preconstruction record						
HW0012.01	Photographic	Item	Lump Sum			\$	-
HW0012.02	Video	Item	Lump Sum			\$	-
HW0012.03	CCTV	Item	Lump Sum			\$	-
HW0013	Work as Constructed Information <insert min<br="">\$></insert>	Item	Lump Sum	\$	4,688.00	\$	4,688.0
	Ψ						
A.	TOTAL ESTIMATED CONTRACT AWARD SU	IM				\$	92,509
						Ÿ	32,303
В.	PRE-CONSTRUCTION COST (Table 10)				1		
ь.	PRE-CONSTRUCTION COST (Table 10)		_				
нw0016	Design	20%	6	1		\$	18,501.71
HW0016 HW0017	Design	20% variable	82%			\$ \$	
HW0016 HW0017 HW0018	Design					\$ \$ \$	
HW0016 HW0017	Design Project Management of Design Land Matters Community Consultation						
HW0016 HW0017 HW0018	Design Project Management of Design Land Matters					\$	15,11 6
HW0016 HW0017 HW0018	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B	variable					15,116 - 33,618
HW0016 HW0017 HW0018	Design Project Management of Design Land Matters Community Consultation Sub Total(B1)	variable				\$	18,501.71 15,116 - 33,618 10,085 43,703
HW0016 HW0017 HW0018 HW0024	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of E	variable				\$ \$ \$	15,116 - 33,618 10,085
HW0016 HW0017 HW0018 HW0024	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B)	variable				\$ \$ \$	15,116 - 33,618 10,085 43,703
HW0016 HW0017 HW0018 HW0024	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A)	variable				\$ \$ \$	15,116 - 33,618 10,085
HW0016 HW0017 HW0018 HW0024	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable)	variable 31)	82%			\$ \$ \$ \$	15,116 - 33,618 10,085 43,703
HW0016 HW0017 HW0018 HW0024	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter	variable 31) rs (as app	82%			\$ \$ \$ \$	15,116 - 33,618 10,085 43,703
HW0016 HW0017 HW0018 HW0024	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable)	variable 31) rs (as app	82%			\$ \$ \$ \$ \$	15,116 - 33,618 10,085 43,703
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply	variable 31) rs (as app	licable)			\$ \$ \$ \$ \$	15,116 - 33,618 10,085 43,703
HW0016 HW0017 HW0018 HW0024	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	variable 31) rs (as app	82%			\$ \$ \$ \$ \$ \$	15,116 - 33,618 10,085 43,703 92,509
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11) Sub Total (C1)	variable 31) rs (as app	licable)			\$ \$ \$ \$ \$ \$ \$	15,116 - 33,618 10,085 43,703 92,509 - - - 9,251 101,759
HW0016 HW0017 HW0018 HW0024 C. HW0019 HW0020 HW0021 HW0022	Design Project Management of Design Land Matters Community Consultation Sub Total(B1) Pre construction contingency (30% of B TOTAL PRE-CONSTRUCTION COST (B) CONSTRUCTION COST Total Estimated Contract Award Sum (A) Principal Supplied Pipe (as applicable) Principal Supplied Valves and Flowmeter Principal Supplied Fittings (as applicable) Pump Station HV Power Supply Construction Management (Table 11)	variable 31) rs (as app	licable)			\$ \$ \$ \$ \$ \$	15,116 - 33,618 10,085 43,703

175,990

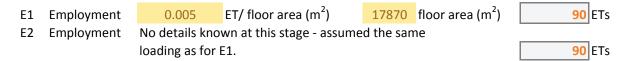
TOTAL PRELIMINARY PROJECT ESTIMATE (B+C) (Preliminary Estimate)



APPENDIX B - DESIGN CALCULATIONS

Gravity Wastewater System Loadings

Stage	Lots	Units	Employment	Total	ADWF	r	PDWF	SA	PWWF
	ET	ET	ET	ET	L/s		L/s	L/s	L/s
Α	85			85	0.4	3.3	1.4	2.5	3.9
В	76			76	0.4	3.4	1.3	2.2	3.5
С	82			82	0.4	3.4	1.4	2.4	3.8
D	67	58		125	0.6	3.1	2.0	3.6	5.6
Е	76			76	0.4	3.4	1.3	2.2	3.5
F	91			91	0.5	3.3	1.5	2.6	4.1
G	75			75	0.4	3.4	1.3	2.2	3.5
Н	74			74	0.4	3.4	1.3	2.1	3.4
- 1	74			74	0.4	3.4	1.3	2.1	3.4
J	75			75	0.4	3.4	1.3	2.2	3.5
K	64			64	0.3	3.5	1.1	1.9	3.0
L	76			76	0.4	3.4	1.3	2.2	3.5
VC	55	98		153	0.8	3.0	2.3	4.4	6.8
М	73			73	0.4	3.4	1.3	2.1	3.4
N	82			82	0.4	3.4	1.4	2.4	3.8
0	63			63	0.3	3.5	1.1	1.8	2.9
Р	69			69	0.3	3.5	1.2	2.0	3.2
Q	42			42	0.2	3.8	0.8	1.2	2.0
R	70			70	0.4	3.5	1.2	2.0	3.2
S	76			76	0.4	3.4	1.3	2.2	3.5
Т	80			80	0.4	3.4	1.4	2.3	3.7
U	75			75	0.4	3.4	1.3	2.2	3.5
V	72			72	0.4	3.4	1.2	2.1	3.3
W	78			78	0.4	3.4	1.3	2.3	3.6
Χ	65	44		109	0.5	3.2	1.8	3.2	4.9
Υ	66			66	0.3	3.5	1.2	1.9	3.1
Z	42			42	0.2	3.8	0.8	1.2	2.0
E1			90	90	0.5	3.3	1.5	2.6	4.1
E2			90	90	0.5	3.3	1.5	2.6	4.1
Sub-	1923	200	180						
Total	21	23	180						
Total		23	03	2303	11.5		38.8	66.8	105.6



Gravity Wastewater System - Pumping Stations Duties

Area	Lots	Units	Employment		Total ET	ADWF	_	PDWF	SA -	PWWF	PWWF/ PS			
						L/S		L/S	L/S		s/1			
∢	82				82	0.4	3.3	1.4	2.5	3.9	3.9		L/EP/d	240
В	9/				92	0.4	3.4	1.3	2.2	3.5	7.4		EP/ET	1.8
U	82				82	0.4	3.4	1.4	2.4	3.8	11.1	ADWF	L/s/ET	0.005
۵	29	28			125	9.0	3.1	2.0	3.6	5.6	16.7			
ш	92				92	0.4	3.4	1.3	2.2	3.5	20.2	Pumpin	Pumping Stations Staging:	
ш	91				91	0.5	3.3	1.5	2.6	4.1	24.4			
ŋ	75				75	0.4	3.4	1.3	2.2	3.5	27.8 PS1	Stage 1	PS 1 pumping to MidCoas	MidCoas
I	74				74	0.4	3.4	1.3	2.1	3.4	3.4	Stage 2	PS 2 pumping to PS	PS 1
_	74				74	0.4	3.4	1.3	2.1	3.4	6.8	Stage 3	PS 3 pumping to PS) PS 2
_	75			223	75	0.4	3.4	1.3	2.2	3.5	10.3 PS2	Stage 4	PS 4 pumping to PS 2) PS 2
¥	64				64	0.3	3.5	1.1	1.9	3.0	3.0	Stage 5	PS 5 pumping to PS 4) PS 4
_	92				9/	0.4	3.4	1.3	2.2	3.5	6.5	Stage 6		PS 3
۸C	55	86			153	0.8	3.0	2.3	4.4	6.8	13.2	Stage 7		PS 1
Σ	73			366	73	0.4	3.4	1.3	2.1	3.4	16.6 PS3			
z	82				82	0.4	3.4	1.4	2.4	3.8	3.8			
0	63				63	0.3	3.5	1.1	1.8	2.9	2.9			
Ь	69				69	0.3	3.5	1.2	2.0	3.2	3.2			
ď	42				42	0.2	3.8	8.0	1.2	2.0	4.9			
~	70				70	0.4	3.5	1.2	2.0	3.2	8.2 PS6			
S	92				9/	0.4	3.4	1.3	2.2	3.5	6.7 PS5			
⊢	80				80	0.4	3.4	1.4	2.3	3.7	7.4			
D	75				75	0.4	3.4	1.3	2.2	3.5	10.9			
>	72				72	0.4	3.4	1.2	2.1	3.3	14.2			
>	78			302	78	0.4	3.4	1.3	2.3	3.6	17.8 PS4			
×	65	44			109	0.5	3.2	1.8	3.2	4.9	4.9			
>	99				99	0.3	3.5	1.2	1.9	3.1	8.0			
2	42				42	0.2	3.8	8.0	1.2	2.0	10.0 PS7			
E1			06		06	0.5	3.3	1.5	2.6	4.1				
E2			06		06	0.5	3.3	1.5	2.6	4.1				
					2303.0	11.5		38.8	8.99	105.6		105.6		
Sub-Total	1923	200	180											
	2123	33	180											

ADWF	L/s/ET	0.005	
Pumping	Pumping Stations Staging:	:Buj	
Stage 1	PS 1 pumpir	PS 1 pumping to MidCoast Water system	105.6
Stage 2	PS 2 pumping to PS 1	ng to PS 1	67.8 L/s
Stage 3	PS 3 pumping to PS 2	ng to PS 2	24.8 L/s
Stage 4	PS 4 pumping to PS 2	ng to PS 2	24.5 L/s
Stage 5	PS 5 pumping to PS 4	ng to PS 4	6.7 L/s
Stage 6	PS 6 pumping to PS 3	ng to PS 3	8.2 L/s
Stage 7	PS 7 pumping to PS 1	ng to PS 1	10.0 L/s

Total

North Tuncurry Development Project

Gravity Wastewater System - Pumping Stations Preliminary Design

	Pump motor rating	kW		17.0	5.5	3.9	1.3	1.9	3.6
PUMPS	Effic.	%		%02	%02	%02	%02	%02	%02
	Pump Rate	m3/s		0.067798	0.024803	0.024503	0.006699	0.00819	0.009991
	RM Head (m)	ш		17.9	15.9	11.2	14.3	16.7	25.9
	Minor	ш		0.7	0.4	0.1	0.1	0.1	0.3
	Friction	m		9.7	9.6	4.8	6.6	11.8	21.0
	Friction Factor			0.017	0.021	0.021	0.028	0.026	0.023
	Velocity Reynold's Head Number			427709	223536	220832	93909	114820	140064
	Velocity Head	ш		0.2	0.1	0.1	0.1	0.1	0.1
HEAD	Velocity	s/w		2.2	1.6	1.6	1.1	1.3	1.6
RISING MAIN HEAD	Loss Coe.	estimate		3	3	1	2	1	2
RISI	Roughness	mm		0.1	0.1	0.1	0.3	0.2	0.1
	RM Pipe Size Roughness Loss Coe.	mm		200	140	140	90	06	06
	RM Length	m		495	490	250	260	480	640
	Static	m		7.4	5.9	6.3	4.3	4.9	4.6
	High Point	RLm		5.2	4.2	4.4	3.2	3.2	3.4
	(TWL+BWL)/ 2	RLm		-2.2	-1.7	-1.9	-1.1	-1.7	-1.2
	PS Depth	m	7.1	7.3	6.7	6.7	5.7	6.3	5.9
	Min Subm. PS Depth	m	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	BWL	RLm	-2.70	-2.90	-2.13	-2.32	-1.30	-1.87	-1.46
	Control Depth	ш	1.35	1.35	0.88	0.87	0.35	0.42	0.51
DESIGN	Control Control Volume Depth	7	9056	6102	2232	2205	603	737	899
WET WELL DESIGN	TWL	RLm	-1.35	-1.55	-1.25	-1.45	-0.95	-1.45	-0.95
	IL Depth	RLm	-1.2	-1.4	-1.1	-1.3	-0.8	-1.3	-0.8
	Surface	RLm	4.2	4.2	4.4	4.2	4.2	4.2	4.2
	Wet Well Dia.	m	3	2.4	1.8	1.8	1.5	1.5	1.5
	Ultimate Pump Rate	m3/s	0.106	0.068	0.025	0.025	0.007	0.008	0.010
	Pumping Station		1	2	e	4	2	9	7

North Tuncurry Development Project

Gravity Wastewater System - Pumping Stations and Rising Mains Detention Times

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Vacuum Wastewater System Loadings

Stage	Lots	Units	Employment	Total	ADWF	r	PDWF	SA	PWWF
	ET	ET	ET	ET	L/s		L/s	L/s	L/s
Α	85			85	0.4	3.3	1.4	1.0	2.4
В	76			76	0.4	3.4	1.3	0.9	2.2
С	82			82	0.4	3.4	1.4	1.0	2.4
D	67	58		125	0.6	3.1	2.0	1.5	3.5
Е	76			76	0.4	3.4	1.3	0.9	2.2
F	91			91	0.5	3.3	1.5	1.1	2.6
G	75			75	0.4	3.4	1.3	0.9	2.2
Н	74			74	0.4	3.4	1.3	0.9	2.2
I	74			74	0.4	3.4	1.3	0.9	2.2
J	75			75	0.4	3.4	1.3	0.9	2.2
K	64			64	0.3	3.5	1.1	0.8	1.9
L	76			76	0.4	3.4	1.3	0.9	2.2
VC	55	98		153	0.8	3.0	2.3	1.8	4.2
М	73			73	0.4	3.4	1.3	0.9	2.1
N	82			82	0.4	3.4	1.4	1.0	2.4
0	63			63	0.3	3.5	1.1	0.8	1.9
Р	69			69	0.3	3.5	1.2	0.8	2.0
Q	42			42	0.2	3.8	0.8	0.5	1.3
R	70			70	0.4	3.5	1.2	0.8	2.1
S	76			76	0.4	3.4	1.3	0.9	2.2
Т	80			80	0.4	3.4	1.4	1.0	2.3
U	75			75	0.4	3.4	1.3	0.9	2.2
V	72			72	0.4	3.4	1.2	0.9	2.1
W	78			78	0.4	3.4	1.3	0.9	2.3
Х	65	44		109	0.5	3.2	1.8	1.3	3.1
Υ	66			66	0.3	3.5	1.2	0.8	1.9
Z	42			42	0.2	3.8	0.8	0.5	1.3
E1			90	90	0.5	3.3	1.5	1.1	2.6
E2			90	90	0.5	3.3	1.5	1.1	2.6
Sub-	1923	200	180						
Total	21	23	180						
Total		23	03	2303	11.5		38.8	27.6	66.5

Preliminary Vacuum Mains Sizing

Area	Lots	Units	Employment	TOTAL	Vac main assigned	Accum. ET	Line Size
Α	85			85	1	368	300
В	76			76	1	283	225
С	82			82	1	207	200
D	67	58		125	1	125	160
Е	76			76	2	390	300
F	91			91	2	314	225
G	75			75	2	223	200
H	74			74	2	148	200
1	74			74	2	74	160
J	75			75	3	368	300
K	64			64	3	293	225
L	76			76	3	229	200
VC	55	98		153	3	153	200
M	73			73	4	399	300
N	82			82	4	326	225
0	63			63	4	244	200
Р	69			69	4	181	200
Q	42			42	4	112	160
R	70			70	4	70	125
S	76			76	5	471	300
Т	80			80	5	395	300
U	75			75	5	315	225
V	72			72	5	240	200
W	78			78	5	168	200
X	65	44		109	6	217	200
Υ	66			66	6	108	150
Z	42			42	6	42	110
E1			90	90	1		
E2			90	90	5	90	

Sub-Total	1923	200	180
	21	23	180
Total			

Option 1 and Option 2 Central WWPS Rising Main Sizing

1. OPTION A - GRAVITY SEWER SYSTEM

1.1 Discharge Pipework Sizing

m³/s 0.1056 0.1056 0.1056 0.1056 0.1056 0.1056 0.1056 0.1056 Design Flow DN1 DN2 DN4 DN5 DN6 DN7 DN8 Internal Diameter 102 157 212 239 322 401 480 265 mm Velocity achieved m/s NO!!! NO!!! Yes Yes Yes Yes Is velocity < 4m/s (max recommended velocity)? |s| = 2m/s min recommended velocity)?

Selected discharge pipework diameter: 212 mm

1.2 Rising Main Sizing

Design Flow	m ³ /s	0.1056	0.1056	0.1056	0.1056	0.1056	0.1056
		DN1	DN2	DN3	DN4	DN5	DN6
Internal Diameter	mm	160	210	235	260	313	387
Velocity achieved	m/s	5.3	3.0	2.4	2.0	1.4	0.9
Is velocity < 3m/s (max recommended velocity)?		NO!!!	NO!!!	Yes	Yes	Yes	Yes
Slime Control Velocity	m/s	0.96	1.00	1.01	1.02	1.05	1.08
Is velocity ≥ the slime control velocity?		Yes	Yes	Yes	Yes	Yes	NO!!!
Minimum Slime Control Velocity	m/s	0.56	0.58	0.60	0.60	0.62	0.64
Is velocity ≥ the slime control velocity?		Yes	Yes	Yes	Yes	Yes	Yes
Is velocity ≥ 0.6m/s (min velocity for solids transport)?		Yes	Yes	Yes	Yes	Yes	Yes

Selected rising main diameter: 313 mm

2. OPTION B- VACUUM SEWER SYSTEM

2.1 Discharge Pipework Sizing

Design Flow	m³/s	0.0665	0.0665	0.0665	0.0665	0.0665	0.0665	0.0665	0.0665
		DN1	DN2	DN3	DN4	DN5	DN6	DN7	DN8
Internal Diameter	mm	102	157	212	239	265	322	401	480
Velocity achieved	m/s	8.1	3.4	1.9	1.5	1.2	0.8	0.5	0.4
Is velocity < 4m/s (max recommended velocity)?		NO!!!	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Is velocity $\geq 2m/s$ min recommended velocity)?		Yes	Yes	NO!!!	NO!!!	NO!!!	NO!!!	NO!!!	NO!!!

Selected discharge pipework diameter: 157 mm

2.2 Rising Main Sizing

Design Flow	m ³ /s	0.0665	0.0665	0.0665	0.0665	0.0665	0.0665	0.0665	0.0665
		DN1	DN2	DN3	DN4	DN5	DN6		
Internal Diameter	mm	160	210	235	260	313	387		
Velocity achieved	m/s	3.3	1.9	1.5	1.3	0.9	0.6		
Is velocity < 3m/s (max recommended velocity)?		NO!!!	Yes	Yes	Yes	Yes	Yes		
Slime Control Velocity	m/s	0.96	1.00	1.01	1.02	1.05	1.08		
Is velocity ≥ the slime control velocity?		Yes	Yes	Yes	Yes	NO!!!	NO!!!		
Minimum Slime Control Velocity	m/s	0.56	0.58	0.60	0.60	0.62	0.64		
Is velocity ≥ the slime control velocity?		Yes	Yes	Yes	Yes	Yes	NO!!!		
Is velocity \geq 0.6m/s (min velocity for solids transport)?		Yes	Yes	Yes	Yes	Yes	NO!!!		

Selected rising main diameter: 235 mm

Option 1 and Option 2 Central WWPS Wet Well Sizing

1. OP1	TION A -	GRAVITY	SEWER :	SYSTEM
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Design Flow	m³/s	0.1056						
		DN1	DN2	DN3	DN4	DN5	DN6	DN7
Wet Well Diameter	m	1.8	2.1	2.4	2.7	3	3.8	4.6
Control Depth	m	3.73	2.74	2.10	1.66	1.34	0.84	0.57
		Max control de	oth 1.5m, min	0.3m				
Sewer Invert Level MTWL TWL BWL Minimum Submergence FL	RLm RLm RLm RLm m RLm	-1.20 -1.20 -1.35 -2.69 0.55 -3.24	Se	elected Wet W	/ell Diameter	3	m	
SL WWPS Depth	RLm m	4.2 7.44						

2. OPTION B - VACUUM SEWER SYSTEM

Design Flow	m³/s	0.0665						
		DN1	DN2	DN3	DN4	DN5	DN6	DN7
Wet Well Diameter	m	1.8	2.1	2.4	2.7	3	3.8	4.6
Control Depth	m	2.35	1.73	1.32	1.05	0.85	0.53	0.36
		Max control dep	oth 1.5m, min	0.3m				
Sewer Invert Level	RLm	2.90						
MTWL	RLm	2.90	S	elected Wet V	Vell Diameter	2.4	m	
TWL	RLm	2.75						
BWL	RLm	1.43						
Minimum Submergence	m	0.55						
FL	RLm	0.88						
SL	RLm	4.2						
WWPS Depth	m	3.32						

Option 1 Central WWPS Rising Main Preliminary Design

1. OPTION A - GRAVITY SEWER SYSTEM

1.1 STATIC HEAD

 m^3/s Discharge Flow 0.1056 Average Liquid Level RLm Highest Level RLm Static Head 9.92 m

HWC Design Manual						
velocity	k (mm)					
2.00	0.06					
1.50	0.15					
1.00	0.30					

1.2 FRICTION LOSSES

٥С Temperature 20 m²/s Kinematic Viscosity

Pipe	Design Flow	Length of Pipe	Pipe Material	Pipe Size ID	Roughness	Loss Coefficient (Table)	Velocity	Velocity Head	Reynolds Number	Friction Factor	Friction Loss	Minor Loss	Pipe Loss
	m³/s	m		mm	mm		m/s	m			m	m	m
Discharge - A	0.106	0.55	DICL	212.0	0.060	1.2	2.99	0.46	628478	0.0160	0.0	0.5	0.5
Discharge - B	0.106	3.00	DICL	212.0	0.060	0.0	2.99	0.46	628478	0.0160	0.1	0.0	0.1
Discharge - C	0.106	9.50	DICL	212.0	0.060	0.4	2.99	0.46	628478	0.0160	0.3	0.2	0.5
Rising Main - D	0.106	10521		313.0	0.188	2.6	1.37	0.10	425678	0.0185	59.8	0.2	60.1

			Discharge	Pipe A	Discharge	Discharge Pipe B		Pipe C	Rising Main D	
Loss Coefficient		Each	Input No. of	Total k	Input No. of	Total k	Input No. of	Total k	Input No. of	Total k
Entry Loss	Sharp edged	0.5	0	0.0	0	0.0	0	0.0	0	0.0
Bends	22.5	0.2	0	0.0	0	0.0	0	0.0	3	0.6
	45	0.4	0	0.0	0	0.0	1	0.4	0	0.0
	90	1	0	0.0	0	0.0	0	0.0	2	2.0
Tees	90 Allow	1.2	0	0.0	0	0.0	0	0.0	0	0.0
	45 Allow	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Expansion	Large expansion Allow	0.8	0	0.0	0	0.0	0	0.0	0	0.0
	Small expansion Allow	0.2	0	0.0	0	0.0	0	0.0	0	0.0
Contraction	Large contraction Allow	0.5	0	0.0	0	0.0	0	0.0	0	0.0
	Small contraction Allow	0.2	0	0.0	0	0.0	0	0.0	0	0.0
Tapers	Contraction	0.1	0	0.0	0	0.0	0	0.0	0	0.0
	Large expansion allow	0.12	0	0.0	0	0.0	0	0.0	0	0.0
	Small expansion allow	0.03	0	0.0	0	0.0	0	0.0	0	0.0
Exit loss	Sharp edged	1	0	0.0	0	0.0	0	0.0	0	0.0
Valves	Gate (fully open)	0.15	1	0.2	0	0.0	0	0.0	0	0.0
	Globe	10	0	0.0	0	0.0	0	0.0	0	0.0
	Reflux	1	1	1.0	0	0.0	0	0.0	0	0.0
	Three valve	5	0	0.0	0	0.0	0	0.0	0	0.0
Total				1.2		0.0		0.4		2.6

1.3 TOTAL HEAD

1.4 PUMPS kW RATING

m³/s Pump flow 0.1056 m³/s ADWF Pump efficiency 0.6 kW 122.85 Power

2. OPTION B - VACUUM SEWER SYSTEM

2.1 STATIC HEAD

m³/s 0.0665 Discharge Flow RLm Average Liquid Level 2 09 Highest Level RLm 7.9 Static Head m 5.81

HWC Design Manual						
velocity	k (mm)					
2.00	0.06					
1.50	0.15					
1.00	0.30					

2.2 FRICTION LOSSES

		 . T		
Kinematic Viscos	sity		m /s	1.01E-06
10 0 10			m ² /s	4.045.00
remperature			C	20

Pipe	Design Flow	Length of Pipe	Pipe Material		Roughness	Loss Coefficient (Table)	Velocity	Velocity Head	Reynolds Number	Friction Factor	Friction Loss	Minor Loss	•
	m³/s	m		mm	mm		m/s	m			m	m	m
Discharge - A	0.067	0.55	DICL	157.0	0.060	1.2	3.44	0.60	534421	0.0169	0.0	0.7	0.7
Discharge - B	0.067	3.00	DICL	157.0	0.060	0.0	3.44	0.60	534421	0.0169	0.2	0.0	0.2
Discharge - C	0.067	9.50	DICL	157.0	0.060	0.4	3.44	0.60	534421	0.0169	0.6	0.2	0.9
Rising Main - D	0.067	10521		235.0	0.144	2.6	1.53	0.12	357039	0.0188	100.7	0.3	101.0

			Discharge	Pipe A	Discharge	Pipe B	Discharge I	Pipe C	Rising N	lain D
Loss Coefficient		Each	Input No. of	Total k	Input No. of	Total k	Input No. of	Total k	Input No. of	Total k
Entry Loss	Sharp edged	0.5	0	0.0	0	0.0	0	0.0	0	0.0
Bends	22.5	0.2	0	0.0	0	0.0	0	0.0	3	0.6
	45	0.4	0	0.0	0	0.0	1	0.4	0	0.0
	90	1	0	0.0	0	0.0	0	0.0	2	2.0
Tees	90 Allow	1.2	0	0.0	0	0.0	0	0.0	0	0.0
	45 Allow	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Expansion	Large expansion Allow	0.8	0	0.0	0	0.0	0	0.0	0	0.0
	Small expansion Allow	0.2	0	0.0	0	0.0	0	0.0	0	0.0
Contraction	Large contraction Allow	0.5	0	0.0	0	0.0	0	0.0	0	0.0
	Small contraction Allow	0.2	0	0.0	0	0.0	0	0.0	0	0.0
Tapers	Contraction	0.1	0	0.0	0	0.0	0	0.0	0	0.0
	Large expansion allow	0.12	0	0.0	0	0.0	0	0.0	0	0.0
	Small expansion allow	0.03	0	0.0	0	0.0	0	0.0	0	0.0
Exit loss	Sharp edged	1	0	0.0	0	0.0	0	0.0	0	0.0
Valves	Gate (fully open)	0.15	1	0.2	0	0.0	0	0.0	0	0.0
	Globe	10	0	0.0	0	0.0	0	0.0	0	0.0
	Reflux	1	1	1.0	0	0.0	0	0.0	0	0.0
	Three valve	5	0	0.0	0	0.0	0	0.0	0	0.0
Total				1.2		0.0		0.4		2.6

2.3 TOTAL HEAD m **108.6**

1.4 PUMPS kW RATING

 Pump flow
 m³/s
 0.0665

 ADWF
 m³/s
 0.012

 Pump efficiency
 0.6

 Power
 kW
 118.09

Option 2 Central WWPS Rising Main Preliminary Design

1. OPTION A - GRAVITY SEWER SYSTEM

1.1 STATIC HEAD

Discharge Flow	m³/s	0.1056
Average Liquid Level	RLm	-2.02
Highest Level	RLm	4.6
Static Head	m	6.62

HWC Design Manual								
velocity	k (mm)							
2.00	0.06							
1.50	0.15							
1.00	0.30							

1.2 FRICTION LOSSES

Temperature °C 20
Kinematic Viscosity m²/s 1.01E-06

Pipe	Design Flow	Length of Pipe	Pipe Material	Pipe Size ID	Roughness	Loss Coefficient (Table)	Velocity	Velocity Head	Reynolds Number	Friction Factor	Friction Loss	Minor Loss	Pipe Loss
	m³/s	m		mm	mm		m/s	m			m	m	m
Discharge - A	0.106	0.55	DICL	212.0	0.060	1.2	2.99	0.46	628478	0.0160	0.0	0.5	0.5
Discharge - B	0.106	3.00	DICL	212.0	0.060	0.0	2.99	0.46	628478	0.0160	0.1	0.0	0.1
Discharge - C	0.106	9.50	DICL	212.0	0.060	0.4	2.99	0.46	628478	0.0160	0.3	0.2	0.5
Rising Main - D	0.106	1801		313.0	0.188	6.6	1.37	0.10	425678	0.0185	10.2	0.6	10.9
Common	0.371	10		401.0	0.060	6.6	2.93	0.44	1166065	0.0140	0.2	2.9	3.0

			Discharge	Pipe A	Discharge	Pipe B	Discharg	e Pipe C	Rising N	lain D	Common	
Loss Coefficient		Each	Input No. of	Total k	Input No. of	Total k	Input No. of	Total k	Input No. of	Total k	Input No. of	Total k
Entry Loss	Sharp edged	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Bends	22.5	0.2	0	0.0	0	0.0	0	0.0	7	1.4	1	0.2
	45	0.4	0	0.0	0	0.0	1	0.4	2	0.8	6	2.4
	90	1	0	0.0	0	0.0	0	0.0	3	3.0	1	1.0
Tees	90 Allow	1.2	0	0.0	0	0.0	0	0.0	1	1.2	0	0.0
	45 Allow	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Expansion	Large expansion Allow	8.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Small expansion Allow	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Contraction	Large contraction Allow	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Small contraction Allow	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tapers	Contraction	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Large expansion allow	0.12	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Small expansion allow	0.03	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Exit loss	Sharp edged	1	0	0.0	0	0.0	0	0.0	0	0.0	1	1.0
Valves	Gate (fully open)	0.15	1	0.2	0	0.0	0	0.0	1	0.2	1	0.2
	Globe	10	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Reflux	1	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0
	Three valve	5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total				1.2		0.0		0.4		6.6		4.8

1.3 TOTAL HEAD m 21.7

1.4 PUMPS kW RATING

 $\begin{array}{cccc} \text{Pump flow} & \text{m}^3\text{/s} & 0.1056 \\ \text{ADWF} & \text{m}^3\text{/s} & 0.012 \\ \text{Pump efficiency} & & 0.6 \\ \text{Power} & \text{kW} & 37.43 \end{array}$

2. OPTION B - VACUUM SEWER SYSTEM

2.1 STATIC HEAD

 Discharge Flow
 m³/s
 0.0665

 Pump Level
 RLm
 4.20

 Highest Level
 RLm
 4.60

 Static Head
 m
 0.40

HWC Design Manual							
velocity	k (mm)						
2.00	0.06						
1.50	0.15						
1.00	0.30						

2.2 FRICTION LOSSES

 $\begin{array}{ccc} \text{Temperature} & \quad ^{\circ}\text{C} & \quad 20 \\ \text{Kinematic Viscosity} & \quad m^2/\text{s} & \quad 1.01\text{E-}06 \end{array}$

Pipe	Design Flow	Length of Pipe	Pipe Material	Pipe Size ID	Roughness	Loss Coefficient (Table)	Velocity	Velocity Head	Reynolds Number	Friction Factor	Friction Loss	Minor Loss	Pipe Loss
	m³/s	m		mm	mm		m/s	m			m	m	m
Discharge - A	0.067	15.00	DICL	157.0	0.060	1.2	3.44	0.60	534421	0.0169	1.0	0.7	1.7
Rising Main - D	0.067	1801		235.0	0.144	6.6	1.53	0.12	357039	0.0188	17.2	0.8	18.0
Common	0.265	10		401.0	0.060	4.8	2.10	0.22	833803	0.0144	0.1	1.1	1.1

			Discharge Pipe A		Discharge	Pipe B	Discharge	e Pipe C	Rising M	lain D	Common	
Loss Coefficient		Each	Input No. of	Total k	Input No. of	Total k	Input No. of	Total k	Input No. of	Total k	Input No. of	Total k
Entry Loss	Sharp edged	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Bends	22.5	0.2	0	0.0	0	0.0	0	0.0	7	1.4	1	0.2
	45	0.4	0	0.0	0	0.0	1	0.4	2	0.8	6	2.4
	90	1	0	0.0	0	0.0	0	0.0	3	3.0	1	1.0
Tees	90 Allow	1.2	0	0.0	0	0.0	0	0.0	1	1.2	0	0.0
	45 Allow	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Expansion	Large expansion Allow	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Small expansion Allow	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Contraction	Large contraction Allow	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Small contraction Allow	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tapers	Contraction	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Large expansion allow	0.12	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Small expansion allow	0.03	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Exit loss	Sharp edged	1	0	0.0	0	0.0	0	0.0	0	0.0	1	1.0
Valves	Gate (fully open)	0.15	1	0.2	0	0.0	0	0.0	1	0.2	1	0.2
	Globe	10	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Reflux	1	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0
	Three valve	5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total				1.2		0.0		0.4		6.6		4.8

2.3 TOTAL HEAD m 21.2

2.4 PUMPS kW RATING

 Pump flow
 m³/s
 0.0665

 ADWF
 m³/s
 0.012

 Pump efficiency
 0.6

 Power
 kW
 23.09

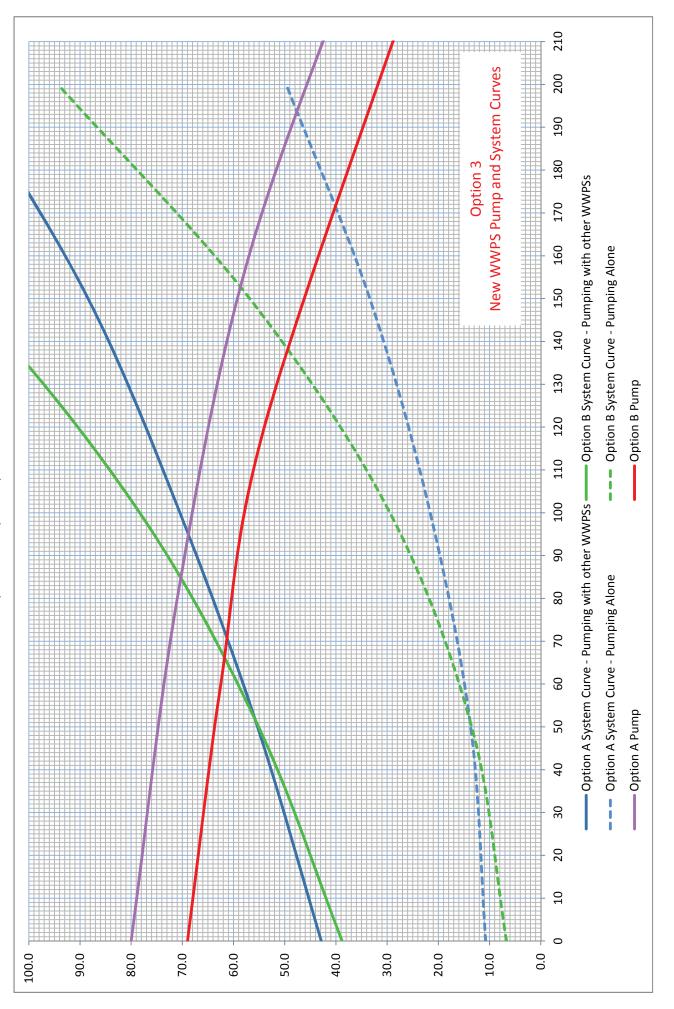
Option 3 Central WWPS Wet Well Sizing

1. OPTION A - GRAVITY SEWER SYSTEM

Design Flow	m³/s	0.194	(pumping a	lone)				
		DN1	DN2	DN3	DN4	DN5	DN6	DN7
Wet Well Diameter	m	1.8	2.1	2.4	2.7	3	3.8	4.6
Control Depth	m	6.86	5.04	3.86	3.05	2.47	1.54	1.05
		Max contro	ol depth 1.5	m, min 0.3n	1			
Sewer Invert Level MTWL TWL BWL Minimum Submergence FL	RLm RLm RLm RLm m RLm	-1.20 -1.20 -1.35 -2.40 0.63 -3.03	S	elected Wet W	/ell Diameter	4.6	m	
SL WWPS Depth	RLm m	4.2 7.23						

2. OPTION B - VACUUM SEWER SYSTEM

Design Flow	m³/s	0.139	pumping a	lone)				
		DN1	DN2	DN3	DN4	DN5	DN6	DN7
Wet Well Diameter	m	1.8	2.1	2.4	2.7	3	3.8	4.6
Control Depth	m	4.92	3.61	2.77	2.18	1.77	1.10	0.75
		Max control	depth 1.5r	n, min 0.3n	7			
Sewer Invert Level	RLm	2.90						
MTWL	RLm	2.90	Se	lected Wet W	lell Diameter	3.8	m	
TWL	RLm	2.75						
BWL	RLm	1.65						
Minimum Submergence	m	0.63						
FL	RLm	1.02						
SL	RLm	4.2						
WWPS Depth	m	3.18						



Option 3A Central WWPS Pumping with Other WWPS

Kinematic Viscosity (m²/s) Temperature(°C)

1.01E-06

Rising Main IL at the WWPS Rising Main Discharge Level at WWTP

Common Rising Main Discharge Level at WWTP

Tuncurry No. 23WWPS Flow Flow from WWPS 1, 10, 6

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237

OPTION 3A - Gravity Wastewater Reticulation System

with Other WWPS

Pumping with Other WWPS																
Flow		0.05				0.1				0.15				0.2		
Pipe Description	Discharge Pipework	Rising Main	Rising Main Common RM	Discharge	Discharge Pipework	Rising Main	Common RM	Discharge	Discharge Pipework	Rising Main	Common RM	Discharge	Discharge Pipework	Rising Main	Common RM	Discharge
Design Flow (m3/s)	0:020	0:020	0.287	0.645	0.100	0.100	0.337	0.695	0.150	0.150	0.387	0.745	0.200	0.200	0.437	0.795
Length of Pipe (m)	13.05	655	9986	3	13.05	655	9986	3	13.05	655	9986	3	13.05	655	9986	3
Pipe Material																
Pipe Size ID (mm)	212	313	480	480	212	313	480	480	212	313	480	480	212	313	480	480
Roughness (mm)	0.175	0.300	0.135	090.0	090.0	0.210	0.085	090.0	090'0	690.0	090.0	090.0	090.0	090'0	090'0	090.0
Loss Coeficient (Table)	1.6	2.0	2.0	2.0	1.6	2.0	2.0	2.0	1.6	2.0	2.0	2.0	1.6	2.0	2.0	2.0
Velocity (m/s)	1.42	0.65	1.59	3.56	2.83	1.30	1.86	3.84	4.25	1.95	2.14	4.12	2.67	2.60	2.41	4.39
Velocity Head (m)	0.10	0.02	0.13	0.65	0.41	60.0	0.18	0.75	0.92	0.19	0.23	98.0	1.64	0.34	0:30	0.98
Reynold's Number	297575	201552	754401	1695431	595149	403104	885830	1826860	892724	604656	1017259	1958289	1190298	806209	1148688	2089718
Friction Factor	0.0200	0.0210	0.0158	0.0134	0.0160	0.0189	0.0146	0.0134	0.0157	0.0155	0.0138	0.0133	0.0155	0.0149	0.0137	0.0133
Friction Loss (m)	0.1	6.0	41.7	0.0	0.4	3.4	53.2	0.1	6.0	6.3	66.4	0.1	1.6	10.7	83.9	0.1
Minor Loss (m)	0.2	0.0	0.3	1.3	9.0	0.2	0.4	1.5	1.4	0.4	0.5	1.7	2.5	0.7	9.0	2.0
Pipe Friction Loss(m)	0.3	1.0	41.9	1.3	1.0	3.6	53.5	1.6	2.3	6.7	6.99	1.8	4.1	11.4	84.5	2.0
Static Head (m)		7.28		3.5		7.28		3.5		7.28		3.5		7.28		3.5
Total Head (m)		55	55.3			70.5	5			88.4	4.			112.9	.9	

000	Head (m)	Head (m	Head (m
	Head (m	Head (m	ow (L/s) Head (m

	42.9	55.3	70.5	88.4	112.9
1-1-1	0	20	100	150	200

Option 3A Central WWPS Pumping Alone

Kinematic Viscosity (m²/s) Temperature(°C)

1.01E-06

Common Rising Main Discharge Level at WWTP Rising Main IL at the WWPS Rising Main Discharge Level at WWTP

Tuncurry No. 23WWPS Flow Flow from WWPS 1, 10, 6

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OPTION 3A - Gravity Wastewater Reticulation System

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Pumping Alone																
Flow		0.05				0.1				0.15				0.2		
Pipe Description	Discharge Pipework	Rising Main	Rising Main Common RM	Discharge	Discharge Pipework	Rising Main	Common RM	Discharge	Discharge Pipework	Rising Main	Common RM	Discharge	Discharge Pipework	Rising Main	Common RM	Discharge
Design Flow (m3/s)	0.050	0.050	0.050	0.050	0.100	0.100	0.100	0.100	0.150	0.150	0.150	0.150	0.200	0.200	0.200	0.200
Length of Pipe (m)	13.05	655	9986	3	13.05	655	9986	3	13.05	655	9986	3	13.05	655	9986	3
Pipe Size ID (mm)	212	313	480	480	212	313	480	480	212	313	480	480	212	313	480	480
Roughness (mm)	0.175	0.300	0.300	0.300	090'0	0.210	0.300	0.300	090.0	0.069	0.300	0.300	090'0	090'0	0.268	0.268
Loss Coeficient (Table)	1.6	2.0	2.0	2.0	1.6	2.0	2.0	2.0	1.6	2.0	2.0	2.0	1.6	2.0	2.0	2.0
Velocity (m/s)	1.42	0.65	0.28	0.28	2.83	1.30	0.55	0.55	4.25	1.95	0.83	0.83	2.67	2.60	1.11	1.11
Velocity Head (m)	0.10	0.02	00:00	0.00	0.41	60.0	0.02	0.05	0.92	0.19	0.04	0.04	1.64	0.34	90.0	90.0
Reynold's Number	297575	201552	131429	131429	595149	403104	262858	262858	892724	604656	394286	394286	1190298	806209	525715	525715
Friction Factor	0.0200	0.0210	0.0203	0.0203	0.0160	0.0189	0.0192	0.0192	0.0157	0.0155	0.0187	0.0187	0.0155	0.0149	0.0181	0.0181
Friction Loss (m)	0.1	6.0	1.6	0.0	0.4	3.4	6.1	0.0	6.0	6.3	13.5	0.0	1.6	10.7	23.2	0.0
Minor Loss (m)	0.2	0.0	0.0	0.0	9.0	0.2	0.0	0.0	1.4	0.4	0.1	0.1	2.5	0.7	0.1	0.1
Pipe Friction Loss(m)	0.3	1.0	1.6	0.0	1.0	3.6	6.2	0.0	2.3	6.7	13.6	0.1	4.1	11.4	23.3	0.1
Static Head (m)		7.28		3.5		7.28		3.5		7.28		3.5		7.28		3.5
Total Head (m)		13.7	.7			21.6	9			33.4	4			49.7		

Head (m)	1
Flow (L/s)	0
System Curve	

Head (m) 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10	_		_		-	-
2	Head (m)	10.8	13.7	21.6	33.4	49.7
		0	50	100	150	200

Option 3B Central WWPS Pumping with Other WWPS

Kinematic Viscosity (m²/s) Temperature(°C)

1.01E-06

Rising Main IL at the WWPS Rising Main Discharge Level at WWTP

Common Rising Main Discharge Level at WWTP

5.4

Tuncurry No. 23WWPS Flow Flow from WWPS 1, 10, 6

r's L's

237

OPTION 3B - Vacuum Wastewater Reticulation System

with Other WWPS

Pumping with Other WWPS																
Flow		0.05				0.1				0.15				0.2		
Pipe Description	Discharge Pipework	Rising Main	Rising Main Common RM Discharge	Discharge	Discharge Pipework	Rising Main	fain Common RM	Discharge	Discharge Pipework	Rising Main	Common RM	Discharge	Discharge Pipework	Rising Main	Common RM	Discharge
Design Flow (m3/s)	0.050	0:020	0.287	0.645	0.100	0.100	0.337	0.695	0.150	0.150	0.387	0.745	0.200	0.200	0.437	0.795
Length of Pipe (m)	13.05	655	9986	3	13.05	655	9986	3	13.05	655	9986	3	13.05	655	9986	3
Pipe Material																
Pipe Size ID (mm)	157	235	480	480	157	235	480	480	157	235	480	480	157	235	480	480
Roughness (mm)	090.0	0.254	0.135	090.0	090.0	090'0	0.085	090.0	090'0	090'0	090'0	090.0	090.0	090'0	090'0	090.0
Loss Coeficient (Table)	1.6	2.0	2.0	2.0	1.6	2.0	2.0	2.0	1.6	2.0	2.0	2.0	1.6	2.0	2.0	2.0
Velocity (m/s)	2.58	1.15	1.59	3.56	5.17	2.31	1.86	3.84	7.75	3.46	2.14	4.12	10.33	4.61	2.41	4.39
Velocity Head (m)	0.34	0.07	0.13	0.65	1.36	0.27	0.18	0.75	3.06	0.61	0.23	98.0	5.44	1.08	0:30	0.98
Reynold's Number	401821	268450	754401	1695431	803641	536901	885830	1826860	1205462	805351	1017259	1958289	1607282	1073801	1148688	2089718
Friction Factor	0.0172	0.0212	0.0158	0.0134	0.0166	0.0159	0.0146	0.0134	0.0163	0.0155	0.0138	0.0133	0.0162	0.0153	0.0137	0.0133
Friction Loss (m)	0.5	4.0	41.7	0.0	1.9	12.0	53.2	0.1	4.2	26.4	66.4	0.1	7.3	46.2	83.9	0.1
Minor Loss (m)	0.5	0.1	0.3	1.3	2.1	0.5	0.4	1.5	4.7	1.2	0.5	1.7	8.4	2.2	9.0	2.0
Pipe Friction Loss(m)	1.0	4.1	41.9	1.3	4.0	12.6	53.5	1.6	6.8	27.6	6.99	1.8	15.8	48.4	84.5	2.0
Static Head (m)		3.20		3.5		3.20		3.5		3.20		3.5		3.20		3.5
Total Head (m)		55	55.1			78.3	3			111.9	6.1			157.4	.4	

Head (m) 38.8	Flow (L/s) Head (m) 38.8
	low (L/s)

ווכממ (ווו)	38.8	55.1	78.3	111.9	157.4
(5/3)	0	20	100	150	200
2					

Option 3B Central WWPS Pumping Alone

Kinematic Viscosity (m²/s) Temperature(°C)

1.01E-06

Common Rising Main Discharge Level at WWTP Rising Main IL at the WWPS Rising Main Discharge Level at WWTP

Tuncurry No. 23WWPS Flow Flow from WWPS 1, 10, 6

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OPTION 3B - Vacuum Wastewater Reticulation System

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rumping Alone																
Flow		0.05				0.1				0.15				0.2		
Pipe Description	Discharge Pipework	Rising Main	Rising Main Common RM Discharge	Discharge	Discharge Pipework	Rising Main	Common RM	Discharge	Discharge Pipework	Rising Main	Common RM	Discharge	Discharge Pipework	Rising Main	Common RM	Discharge
Design Flow (m3/s)	0.050	0.050	0.050	0.050	0.100	0.100	0.100	0.100	0.150	0.150	0.150	0.150	0.200	0.200	0.200	0.200
Length of Pipe (m)	13.05	655	9986	3	13.05	655	9986	3	13.05	655	9986	3	13.05	655	9986	3
Pipe Material																
Pipe Size ID (mm)	157	235	480	480	157	235	480	480	157	235	480	480	157	235	480	480
Roughness (mm)	090'0	0.254	0.300	0.300	090'0	090'0	0.300	0.300	090'0	090'0	0.300	0.300	090'0	090'0	0.268	0.268
Loss Coeficient (Table)	1.6	2.0	2.0	2.0	1.6	2.0	2.0	2.0	1.6	2.0	2.0	2.0	1.6	2.0	2.0	2.0
Velocity (m/s)	2.58	1.15	0.28	0.28	5.17	2.31	0.55	0.55	7.75	3.46	0.83	0.83	10.33	4.61	1.11	1.11
Velocity Head (m)	0.34	0.07	00.00	0.00	1.36	0.27	0.02	0.02	3.06	0.61	0.04	0.04	5.44	1.08	90.0	90.0
Reynold's Number	401821	268450	131429	131429	803641	536901	262858	262858	1205462	805351	394286	394286	1607282	1073801	525715	525715
Friction Factor	0.0172	0.0212	0.0203	0.0203	0.0166	0.0159	0.0192	0.0192	0.0163	0.0155	0.0187	0.0187	0.0162	0.0153	0.0181	0.0181
Friction Loss (m)	0.5	4.0	1.6	0.0	1.9	12.0	6.1	0.0	4.2	26.4	13.5	0.0	7.3	46.2	23.2	0.0
Minor Loss (m)	0.5	0.1	0.0	0.0	2.1	0.5	0.0	0.0	4.7	1.2	0.1	0.1	8.4	2.2	0.1	0.1
Pipe Friction Loss(m)	1.0	4.1	1.6	0.0	4.0	12.6	6.2	0.0	8.9	27.6	13.6	0.1	15.8	48.4	23.3	0.1
Static Head (m)		3.20		3.5		3.20		3.5		3.20		3.5		3.20		3.5
Total Head (m)		13.5	.5			29.5	2			56.8	80			94.3	•	

He	
Flow (L/s)	
System Curve	

Head (m)	<i>L</i> '9	13.5	29.5	8.95	94.3
Flow (L/s)	0	09	100	150	200
۸e					



APPENDIX C – DATA FROM MIDCOAST WATER

McCarthy, Marketa

From: Brendan Guiney <Brendan.Guiney@MidCoastWater.com.au>

Sent: Monday, 28 October 2013 4:12 PM

To: McCarthy, Marketa

Cc: Kuczera, Chris; Kniest, John; Daniel Brauer; David McKellar; Tracey Hamer; Michael

Pring (Mpring@urbangrowth.nsw.gov.au)

Subject: RE: North Tuncurry Development Project - Water and Wastewater Servicing

Strategies

Hi Marketa,

I would confirm that I met with Michael Pring on the same day as your email. Our answers to your questions follow:

- A plan of the gravity system is shown in the sketch below. Gravity sewers are dark green, sewer rising mains in red.
- The connection point would be the stub sewer provided out of Sewerage Pump Station TU22, located within the Great Lakes Education Campus. The system capacity nominally is about 300ET, so after the Great Lakes Education campus (70 ET) is catered for, it could accommodate a further 230 ET. The pump station itself has a generous volume, but the limitation would be the 150mm receiving sewer in Douglas Avenue. Any upgraded pumping arrangements after that would be recommended to be pumped past TU06 direct to Tuncurry's main sewerage pump station, SPS TU23.
- The existing gravity sewer level is nominally about 4 metres deep, and should be confirmed by survey. The potential sewer catchment area for this sewer pump station would depend on final fill levels for the development, since the site is relatively flat and will be re-graded during development. I believe this is to be resolved with local surveyors Lidbury Summers Whiteman.
- There is an existing 250mm water main located in The Northern Parkway, which would be satisfactory for a first stage up to the limit of the sewer capacity mentioned above. Given the size of the North Tuncurry Development Project our long term expectation is that the development be fed by at least two water main connections.
- Recycled water mains are also available in this vicinity. The recycled water undergoes membrane
 microfiltration and is suitable for unrestricted use in public open spaces. A modest treatment upgrade would
 probably be required for residential use to meet the Australian Recycled Water Guidelines.



Cheers,

Brendan Guiney

Executive Manager, Infrastructure Development

p 6591 7503 **m** 0407 894 765

e Brendan.Guiney@MidCoastWater.com.au

www.midcoastwater.com.au

Mail: PO Box 671, TAREE, NSW 2430, Australia Office: 16 Breese Parade, Forster, NSW, Australia



From: McCarthy, Marketa [mailto:Marketa.McCarthy@smec.com]

Sent: Tuesday, 22 October 2013 9:21 AM

To: Brendan Guiney

Cc: Kuczera, Chris; Kniest, John

Subject: North Tuncurry Development Project - Water and Wastewater Servicing Strategies

Hi Brendan,

This is regarding the North Tuncurry Development Project. I am working on the Water and Wastewater Servicing Strategies for the development and was wondering if you could provide me some additional information.

In your comments on the strategies (letter of 6th September 2013) and previous discussions with SMEC you mentioned possibility to negotiate connections of the early stages of the development. It is understood that there may be potential to connect some southern portions of the development to the existing gravity sewer system.

We would like to investigate this option and I was wondering if you could provide me the following:

- A plan showing the existing gravity sewer system.
- Potential connection point, existing sewer invert levels at this point.
- Available capacity in the sewer system.

Could you please also advise us on the following:

- If there is an opportunity to connect the southern portions of the development to existing sewer system, would there be also an opportunity to supply the southern portions from the existing nearby water main.

Thank you,

Marketa McCarthy

Marketa McCarthy | Senior Water Infrastructure Engineer

SMEC Australia

74 Hunter Street, Newcastle, NSW, 2300, Australia (PO Box 1346, Newcastle, NSW, 2059, Australia) **T** +61 2 4925 9600 | **M** 0405 792 474 | **F** +61 2 4925 3888 Marketa.McCarthy@smec.com | www.smec.com |

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McCarthy, Marketa

From: Brendan Guiney <Brendan.Guiney@MidCoastWater.com.au>

Sent: Tuesday, 29 October 2013 4:15 PM

To: McCarthy, Marketa

Cc: mpring@landcom.nsw.gov.au; Kniest, John; Kuczera, Chris

Subject: RE: North Tuncurry Development Project - Water and Wastewater Servicing

Strategies

Hi Marketa.

Arguably, yes you could squeeze in some more ET's based on your suggestion.

Our current recommendation however is to make use of the existing gravity sewer pump station rather than incur the high up-front cost of a new pump station (even if it is a 'temporary' or 'skid mounted' vacuum pump station). Now that a layout and indicative staging plan has been provided, MidCoast Water can provide a bit more information on scope and indicative cost of a vacuum pump station that would address MCW requirements. We would need about a further week to do so.

Regards,

Brendan

Brendan Guiney

Executive Manager, Infrastructure Development

p 6591 7503 **m** 0407 894 765

e Brendan.Guiney@MidCoastWater.com.au

www.midcoastwater.com.au

Mail: PO Box 671, TAREE, NSW 2430, Australia Office: 16 Breese Parade, Forster, NSW, Australia



From: McCarthy, Marketa [mailto:Marketa.McCarthy@smec.com]

Sent: Tuesday, 29 October 2013 4:09 PM

To: Brendan Guiney

Cc: mpring@landcom.nsw.gov.au; Kniest, John; Kuczera, Chris

Subject: RE: North Tuncurry Development Project - Water and Wastewater Servicing Strategies

Hi Brendan,

Thank you for your email.

I just was wondering, would it be possible to discharge into the SPS TU22 more ETs if we use vacuum sewer reticulation system?

The below tables show, that 230 ET will result in PWWF of 9.9 L/s when conveyed via conventional gravity sewer system and PWWF of 6 L/s when conveyed via vacuum sewer system (lower storm allowance). The vacuum sewers could convey 395 ET with PWWF of 9.9 L/s.

Gravity

ET	ADWF	PDWF	SA	PWWF	
	L/s	L/s	L/s	L/s	
230	1.15	3.3	6.67	9.94	

Vacuum

ET	ADWF	PDWF	SA	PWWF	
	L/s	L/s	L/s	L/s	
230	1.15	3.3	2.76	6.0	
395	1.975	5.2	4.74	9.91	

Please could you provide us your advice.

Thank you,

Marketa

Marketa McCarthy | Senior Water Infrastructure Engineer SMEC Australia 74 Hunter Street, Newcastle, NSW, 2300, Australia (PO Box 1346, Newcastle, NSW, 2059, Australia) T +61 2 4925 9600 | M 0405 792 474 | F +61 2 4925 3888 Marketa.McCarthy@smec.com | www.smec.com |

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McCarthy, Marketa

From: David McKellar < David.McKellar@MidCoastWater.com.au>

Sent: Friday, 15 August 2014 4:23 PM **To:** McCarthy, Marketa; Brendan Guiney

Subject: RE: North Tuncurry Development Project - Indicative O&M's

Marketa,

I've attached a table of indicative O&M costs for various asset classes.

Sewerage Pump Station Maintenance 2.25% Capital Cost PA
Gravity Sewerage Reticulation Mains Maintenance 0.75% Capital Cost PA
Gravity Sewerage Truck Mains Maintenance 0.50% Capital Cost PA

Pressure Sewerage Network Maintenance 0.25% Capital Cost PA (excludes pressure unit maintenance)

0.25% Capital Cost PA

Vacuum Sewerage Pump Station Maintenance 7.75% Capital Value PA

Vacuum Reticulation Network Maintenance 5.00% Capital Value PA (includes vac valve & pit)

BG,

Note the vacuum numbers look way too high but are not a mistake, they are based upon our analysis at Harrington as described below:

Pump station O&M tending to 90K per annum (around \$200 per property) - assetic value for HR09 just under 1M, then I have assumed we can draw down the O&M with modern design.

Vac Retic O&M at Harrington trending the 50k per annum (around \$100 per property). I have assumed 5 properties (average) per pit, with valve, pit & associated vac retic of estimated value \$8,500 per 5 properties, again drawing down the % slightly for better design.

Regards,

David McKellar

Development Engineer

Sewerage Rising Main Maintenance

ph: 02 6591 7543 **fax:** 02 6555 8516 **e** david.mckellar@midcoastwater.com.au



----Original Message-----

From: McCarthy, Marketa [mailto:Marketa.McCarthy@smec.com]

Sent: Wednesday, 25 June 2014 9:45 PM

To: David McKellar

Cc: Mpring@urbangrowth.nsw.gov.au; Mounser, Glenn

Subject: North Tuncurry Development Project

Hi David,

I am just following up on our previous conversation regarding the North Tuncurry Development Project.

Could you please let me know how you are going with the gravity and vacuum sewers maintenance costs estimates and if you need anything from us?

Thank you,

Marketa

Marketa McCarthy | Senior Water Infrastructure Engineer SMEC Australia
74 Hunter Street, Newcastle, NSW, 2300, Australia (PO Box 1346, Newcastle, NSW, 2300, Australia) T +61 2 4925 9600 |
F +61 2 4925 3888 Marketa.McCarthy@smec.com | www.smec.com | LinkedIn

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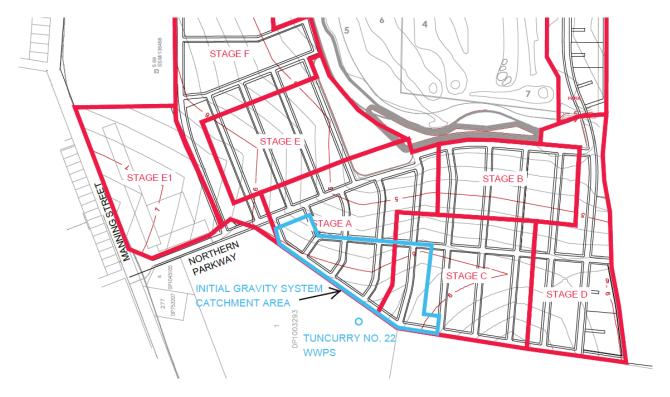
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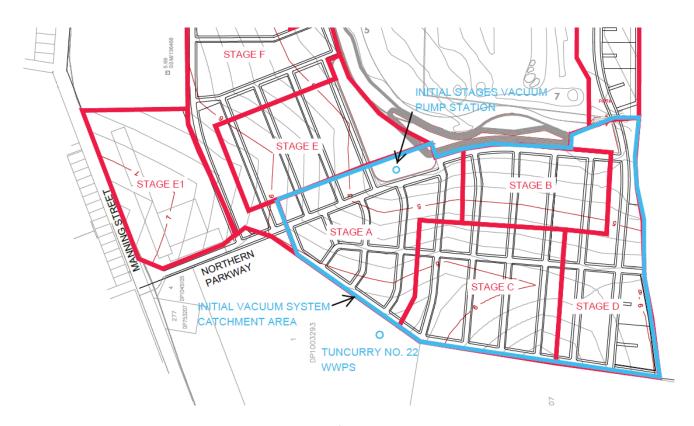
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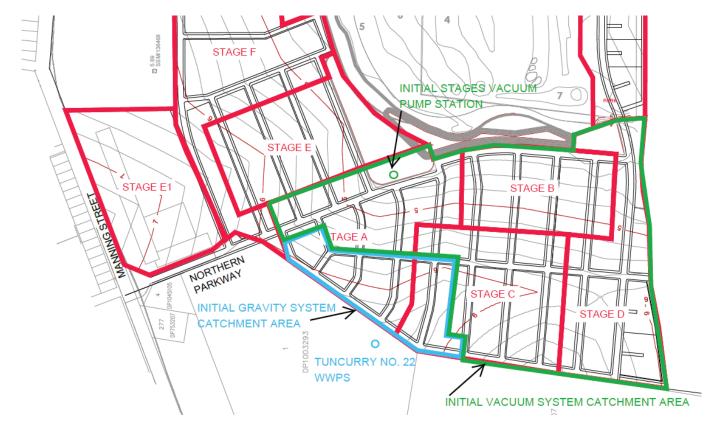
APPENDIX D -	INITIAL	STAGES	OF THE	DEVEL	OPMENT
APPENDIA D =	IIVIIAL	SIAGES	OF INE	DEVEL	OPIVIEIN I



OPTION 1 – Servicing Initial Stages of the Development via Gravity System



OPTION 2 – Servicing Initial Stages of the Development via Vacuum System



OPTION 3 – Servicing Initial Stages of the Development via Gravity and Vacuum Systems

Ref: A663854



18 February 2019

Michael Pring
Development Director
Landcom
Level 14, 60 Station Street
Parramatta NSW 2150

Dear Michael

Water and Sewerage Development Standards

I confirm that Council's development standards for water and sewerage have not changed since we commenced discussing the project in 2011.

Yours sincerely

Brendan Guiney

Director Water Services