CHARLES TOWN UTILITY BOARD
AGENDA

WEDNESDAY, FEBRUARY 12, 2020

Regular Meeting | **661 South George Street, Charles Town, WV 25414** | **4:00 PM**

REVISED

****NOTE THE LOCATION CHANGE****

CALL TO ORDER

I. APPROVAL OF MINUTES

I.1 Approval of January 22, 2020 Meeting Minutes

01-22-2020 Minutes.pdf

II. PUBLIC COMMENT

This portion of the agenda is designed for members of the general public to share thoughts on items of interest in the community. By law, Board members may ask clarifying questions or discuss procedural matters but are not permitted to discuss the policy merits of any issue unless it is scheduled for discussion.

III. ACTION ITEM(S)

III.1 Verizon 2nd Amendment - 6th Avenue (One for One Equipment)

2nd Amendment to Lease Agreement.pdf

III.2 RK&K Task Order No.04 - Modified Flowing Springs Project

Task Order No. 4.pdf

IV. COMMITTEE REPORT

IV.1 Update on the February 6, 2020 Safe Drinking Water Collaborative Steering Committee Meeting

V. UTILITY MANAGER REPORT

VI. APPROVAL OF BILLS

January 22, 2020

The Charles Town Utility Board held a regular meeting on January 22, 2020 at 4:00 p.m. at 101 E. Washington Street. Members of the Board present were Daryl Hennessey, Pete Kubic, Duke Pierson, Kevin Tester, and Jacquelyn Milliron. Also present were Jane Arnett, Kristen Stolipher, Michael George and Hoy Shingleton. The Chairman called for changes or corrections to the January 8, 2020 regular meeting minutes. By motion from Kevin, second by Pete, the Board approved the minutes with two corrections. Public comment was received.

The Chairman next opened the floor for discussion on Resolution 2019-07 – Discussion of EDU Allocation Examples. By motion from Kevin, second by Jacquelyn, the Board removed the item from the table per the last meeting. Discussion included staff briefing the Board on the prepared examples of EDU analysis from the last meeting. Jacquelyn had several comments on staff's draft resolution and also reviewed her own draft resolution. The Chairman and other Board members provided comments on both resolutions as well. By motion from Duke, second by Pete, with discussion from Jaquelyn, the Board approved Resolution 2019-07 as proposed by staff. Jaquelyn voted against the motion.

The Chairman next opened the floor for discussion on the Utility Manager report that included an update on the January 21, 2020 City Council meeting including tariff changes. The Utility Manager noted the tariff discussions were not on the agenda, but will be forwarded to the Public Service Commission for processing since being recently approved. Council did have the second reading of the 2020A Bond that will refinance the 2013B, 2014C, 2014D, and 2014E series bonds. The Public Hearing and 3rd Reading will be held at the February 18th City Council meeting. The Chairman mentioned that a Council workshop is scheduled for February 12th at 6:00 p.m. to discuss the Rockwool plumbing plans.

Next discussed was the FlexNet Base Station Upgrade Approval – Locust Hills Tank. The Manager provided a single source quote for approval that will replace the Locust Hill communication with the Sensus water meters. By motion from Kevin, second by Duke, the Board approved the quote for the FlexNet Base Station upgrade for the Locust Hill tank.

Other items from the Manager's Report mentioned were the FY20 budget revision to be provided at the February 12th meeting and the FY19 Audit has been completed by Perry & Associates, with no findings, and will be forwarded to DAC. The Manager also noted having a presentation in February by John Knuckle on moving forward with rate equalization. The Board was briefed on the Tuscawilla Plant temporary shutdown to perform routine maintenance, cleaning and membrane/filter replacement ahead of the Renewal & Replacement project. The costs for that will be available to the Board at the next meeting. All with the approval from DEP, the flows rerouted to the Charles Town plant remain well below the 1.75 permitted mgd. Lastly, the Manager briefed the Board on a sewer service request from Shenandoah Junction Public Sewer, Inc. with a task order to be brought to the Board in February.

By motion from Kevin, second by Pete, the Board approved the payment of bills with discussion from Jacquelyn. Jacquelyn requested a reconsideration to amend Resolution 2019-07, but the Chairman expressed the motion is closed and it would have to come back at a subsequent meeting for reconsideration.

The next item discussed was Summary of Accomplishments/Review and, Personnel Hiring Action – Possible Executive Session under: the WV State Code Section §6-9A-4(b)(2)(A) – Matters arising from the appointment, employment of an employee. By motion from Kevin, second by Pete, the Board convened into executive session at 5:25 p.m. The Chairman declared the executive session over at 6:14 p.m.

By motion from Kevin, second by Duke, the January 22, 2020 regular meeting adjourned at 6:14 p.m. The February 12th meeting will be held at the CTUB office located at 661 S. George Street.

_____ _____

Chairman Secretary

TENANT Site ID: Ranson

SECOND AMENDMENT TO LEASE AGREEMENT

Site Name/Location: **The City of Charles Town – WV-004 6th Avenue**
6th Avenue, Charles Town, Jefferson County, West Virginia

This First Amendment to Lease Agreement (the "Second Amendment"), dated as of _____, is made and entered into by and between CELLCO PARTNERSHIP d/b/a Verizon Wireless ("Tenant"), a Delaware general partnership, with its principal offices at One Verizon Way, Mail Stop 4AW100, Basking Ridge, New Jersey 07920; and the CITY OF CHARLES TOWN, WEST VIRGINA ("Landlord"), a Municipal Corporation, with an address at 101 East Washington Street, Charles Town, West Virginia 25414.

RECITALS

WHEREAS, Landlord and Tenant are parties to that Lease Agreement dated as of April 23, 2008 (the "Agreement") pursuant to which Tenant is leasing from Landlord space on Landlord's water tank (the "Tank") and within Landlord's Property located off 6th Avenue, Charles Town, West Virginia for the purposes of operating certain communications antennas and related equipment thereat (collectively the "Premises"); and

WHEREAS, Landlord and Tenant are parties to a First Amendment to that Lease Agreement dated as of September 9, 2015 (the "First Amendment") whereby Tenant modified the configuration of its antennas and equipment at the Premises and within the Property in accordance with the terms of the Lease and First Amendment, and Landlord was amenable to such changes in configuration in accordance with the terms thereof; and

WHEREAS, Tenant desires to change the configuration of its antennas and related equipment at the Premises and within the Property in accordance with the terms hereof; and

NOW, THEREFORE, in consideration of the foregoing recitals and the agreements and covenants set forth herein, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

1. Paragraph 4(a) is hereby deleted in its entirety and the following are hereby incorporated into the Agreement in lieu thereof:

4. **RENT.** (a) In consideration of Lessor's consent to the equipment modifications referenced in Exhibit 2 of this Second Amendment, the monthly rent is hereby affirmed for the current term expiring July 31, 2023 and shall be Two Thousand Three Hundred Eighty-Nine Dollars and Twenty-Three Cents ($2,389.23). On each August 1st thereafter throughout this renewal term or any other renewal terms exercised by Lessee, the monthly rent shall be increased subject to the annual monthly rental increase set forth in Section 4(b) hereof.

   In the event that this Agreement continues beyond the expiration of the initial Agreement term and any renewal terms provided for herein, the monthly rental payment shall be increased on August 1st of each year during any month-to-month term to an amount equal to 103% of the previous year's term, and said rent shall be payable monthly through any month-to-month tenancy.

2. **Exhibit 2** to the Agreement is hereby deleted in its entirety, and the new **Exhibit 2** to the Agreement, the Colocation Application of Tenant, is hereby incorporated into the Agreement in lieu thereof.

3. **Exhibit 3** to the Agreement is hereby deleted in its entirety, and the new **Exhibit 3** to the Agreement, the Tenant As-Built Construction Drawings, is hereby incorporated into the Agreement in lieu thereof.

4. Except as expressly amended herein, the Agreement, First Amendment and Second Amendment terms and provisions thereof shall remain in full force and effect. Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the Agreement.

5. This Amendment may be executed in multiple counterparts, each of which, when executed, shall be deemed an original instrument, but all of which taken together shall constitute one and the same agreement.

IN WITNESS WHEREOF, the parties have executed this Amendment as of the day and year first above written.

Witness

Print Name: _____

TENANT:

CELLCO PARTNERSHIP d/b/a Verizon Wireless
a Delaware general partnership

By: _____

Name: Stefanie Lewis

Title: Sr Mgr-RE/Regulatory

Witness

_____

Print Name: _____

LANDLORD:

CITY OF CHARLES TOWN
a Municipal Corporation

By: _____

Name: _____

Title: _____

EXHIBIT 2

CO-LOCATION APPLICATION OF TENANT

[See Attached Co-location Application of Tenant]

☐ NEW LEASE	☑ AMENDMENT TO EXISTING LEASE	☐ ANCHOR TENANT	☐ RECONTRACT	INTERNAL USE ONLY	
				APP VERSION #	2
				LEASE #	11
				AMENDMENT #	2

PLEASE RETURN THIS APPLICATION VIA EMAIL TO:			
Wireless Networks Group, Inc. 2926 Rohrersville Road Rohrersville, Maryland 21779-1214 Attn: Michael Hofe	E-Mail: mhofe@wirelessnetworksgroup.com Phone: 301-667-0001	Charles Town Site Number:	WV-004 (Elevated Tank)
		Charles Town Site Name:	6th Avenue
		Application Date:	08/29/2019
		Revision Dates:	10/30/2019
		OPS Approval:	Michael P Hofe 12/31/19

APPLICANT / CARRIER INFORMATION			
Carrier Name:	Verizon Wireless	**Contact Name:**	Donald Bart
Carrier Site Number:	15010327	**Contact Number:**	856-220-3453
Carrier Site Name:	Ranson	**Contact Fax:**	
Carrier Legal Entity Name:	Cellco Partnership d/b/a Verizon Wireless	**Contact Address:**	6095 Marshalee Drive, Elkridge, MD 21117
State of registration:	Delaware		
Type of entity (LP, LLC, Corp) d/b/a (If applicable)	General Partnership		
Notice Address for Lease:	180 Washington Valley Road, Bedminster, NJ, 07921	**Contact E-mail:**	dbart@nbcllc.com
With copies to:	N/A	**Additional E-mail:**	rbrown@nbcllc.com
Carrier Invoice Address:	10170 Junction Drive,Annapolis Junction, MD	**Desired Install Date:**	01/01/2019
Carrier Invoice Contact - Name, Title, Phone No.	Katy Fialkewicz,443 622 7943,Title-RE/Real Estate	**Carrier NOC#**	888-363-9835

ADDITIONAL CONTACT INFORMATION	
Leasing Contact Name/Number:	Don Bart- 856-220-3453
RF Contact Name/Number:	Luke Neiswander -301-512-2415
Construction Contact Name/Number:	Robin Brown-410-703-8010
Emergency Contact Name/Number:	Katy Fialkewicz-443-622-7943

SITE INFORMATION				
Latitude:	39.298428	N	**Existing Structure Type:**	Water Tank (Elevated)
Longitude:	-77.857892	W	**Existing Structure Height:**	94'
Site Address:	215 East 6th Avenue, Ranson, WV 25438			

FREQUENCY/TECHNOLOGY INFORMATION		
Type of Technology for all equipment (i.e., 3G, LTE, CMDA, MW, WiFi, TV, etc.)		4G, AWS, PCS, 850,750
TX Frequency (MHz)	Licensed	746-757, 1895-1910,1720-1740
RX Frequency (MHz)	Licensed	776-787 1975-1990, 2120-2140
Tenants using an unlicensed band must provide exact Frequency Channels and Call Sign(s) to be utilized. (Providing the band range only will not be accepted.)		N/A

PLEASE PROVIDE A BRIEF DESCRIPTION OF GENERAL SCOPE OF WORK
Removing (3) antennas, one at each sector. Installing (6) antennas, two at each sector. Installing (3) remote radio heads, (1) at each sector.

EXISTING EQUIPMENT Applicant's Existing Equipment Configuration and Specifications										
Equipment Type (ex: panel, TMA, RRU)	RAD (feet)	Mount Height (feet)	Mount Type	Equip Qty	Equipment Manufacturer	Equipment Model #	Equip Dim (HxWxD) (ft or in)	Equip Weight (lbs)	Az	Remain
Panel	103	107' 6"	Pipe Mount	1	JMA	X7-FRO-860	96"x14.6"x8"	48.5	4	No
RRU	103	107' 6"	Pipe Mount	1	Nokia	B13 RRH4x30	20.9"x11.8"x7.5"	55.6	4	Yes
Panel	103	107' 6"	Pipe Mount	1	JMA	X7-FRO-860	96"x14.6"x8"	48.5	124	No
RRU	103	107' 6"	Pipe Mount	1	Nokia	B13 RRH4x30	20.9"x11.8"x7.5"	55.6	124	Yes
Panel	103	107' 6"	Pipe Mount	1	JMA	X7-FRO-860	96"x14.6"x8"	48.5	244	No
RRU	103	107' 6"	Pipe Mount	1	Nokia	B13 RRH4x30	20.9"x11.8"x7.5"	55.6	244	Yes
Panel	103	107'6"	Pipe Mount	3	Unkown	Unkown	47.4x4.1x5.9	48.5	4	Yes
Panel	103	107'6"	Pipe Mount	3	Unkown	Unkown	47.4x4.1x5.9	48.5	124	Yes
Panel	103	107'6"	Pipe Mount	3	Unkown	Unkown	47.4x4.1x5.9	48.5	244	Yes

EXISTING LINES Applicant's Existing Lines and Specifications					
Line Type	Line Size (inches)	Total # of Lines	Coax interior or exterior (for monopoles)	Remain	Comments:
Coax		6	N/A	No	Not in use
Hybrid		1	N/A	Yes	In use

PROPOSED EQUIPMENT Applicant's Proposed Equipment Configuration and Specifications									
Equipment Type (ex: panel, TMA, RRU, ice shields)	RAD (feet)	Mount Height (feet)	Mount Type	Equip Qty	Equipment Manufacturer	Equipment Model #	Equip Dim (HxWxD) (ft or in)	Equip Weight (lbs)	Azimuth
Panel	103	107' 6"	Pipe Mount	1	JMA	MX06FRO860	95.9"x 15.4"x10.7"	79	4
Panel	103	107' 6"	Pipe Mount	1	JMA	MX06FRO860	95.9"x 15.4"x10.7"	79	4
RRU	103	107' 6"	Pipe Mount	1	Nokia	AHFIC Airscale Dual RRH B2/B66	22.05'x 12.12'x 5.12"	61.72	4
Panel	103	107' 6"	Pipe Mount	1	JMA	MX06FRO860	95.9"x 15.4"x10.7"	79	124
Panel	103	107' 6"	Pipe Mount	1	JMA	MX06FRO860	95.9"x 15.4"x10.7"	79	124
RRU	103	107' 6"	Pipe Mount	1	Nokia	AHFIC Airscale Dual RRH B2/B66	22.05'x 12.12'x 5.12"	61.72	124
Panel	103	107' 6"	Pipe Mount	1	JMA	MX06FRO860	95.9"x 15.4"x10.7"	79	244
Panel	103	107' 6"	Pipe Mount	1	JMA	MX06FRO860	95.9"x 15.4"x10.7"	79	244
RRU	103	107' 6"	Pipe Mount	1	Nokia	AHFIC Airscale Dual RRH B2/B66	22.05'x 12.12'x 5.12"	61.72	244
Panel	103	107' 6"	Pipe Mount	2	Unknown	Unknown	47.4x4.1x5.9	48.5	4
Panel	103	107' 6"	Pipe Mount	2	Unknown	Unknown	47.4x4.1x5.9	48.5	124
Panel	103	107' 6"	Pipe Mount	2	Unknown	Unknown	47.4x4.1x5.9	48.5	244

PROPOSED LINES Applicant's Proposed Lines and Specifications				
Line Type	Line Size (Inches)	Total # of Lines	Coax interior or exterior (for monopoles)	Comments:
Coax		3	N/A	
RET Home Run Cable				
Fiber				
DC Power				

PROPOSED FINAL CONFIGURATION TOTALS	
EQUIPMENT TYPE	TOTAL
Panel Antennas	6
Omni/Whip Antennas	0
RRU	6
TMA	0
Diplexer / Triplexer	0
Bias T	0
Surge Suppressor	1
MW Dish	0
Ice Shield	1
ODU	1
Filter	0
Combiner	0
Junction Box	1
RET	0
Equipment Cabinets	0
Other (Please specify) Relay Racks	3
Other (Please specify)	
Other (Please specify)	
Other (Please specify)	
Other (Please specify)	

PROPOSED FINAL CONFIGURATION TOTALS	
LINE TYPE	TOTAL
Coax	0
Hybrid	1
CAT5	0
DC/Power	1
RET	0
Fiber	0

ADDITIONAL EQUIPMENT INFORMATION
• RRUs, TMAs and ODUs are required to be installed directly behind the antennas / MW dish. Otherwise there will be an additional charge. • All equipment lines are required to be installed inside the tower when space is available. Carriers will be charged an additional $25.00 per line per month if equipment lines are installed on the outside of the tower even though there is available space inside the tower. Vertical Bridge must approve any installation of lines on the outside of the tower. • All tenant equipment must be installed within one continuous 10 ft vertical envelope. Exceeding this vertical space will be subject to additional rent.

GROUND / INTERIOR SPACE REQUIREMENTS						
Total Ground / Interior Area Dimensions: **L' x W' = Total Square Feet Required**	0 X 0	(Including all Equipment (i.e., Shelter, Equipment Platform or Pad, Generator Pad, Generator Fuel Tank Pad, Antenna Sleds, etc. – provide details below)				
Cabinet Area Dimensions (Pad/Platform)	0 X 0	Cabinet Installation Type				
Shelter Pad Dimensions	0 X 0	Shelter Manufacturer				
Rooftop Antenna Total Area Required	0 X 0	Antenna Sled Dimensions (per sector)	0 X 0	Antenna Wall Mount Dimensions (per sector)	0 X 0	

EQUIPMENT CABINET REQUIREMENTS (Required for rooftops or Vertical Bridge interior space)					
Number of Cabinets Required	0	Cabinet Dimensions (L' x W' x H')	N/A	Manufacturer:	N/A
Number of Cabinets Required	0	Cabinet Dimensions (L' x W' x H')	N/A	Manufacturer:	N/A
Number of Cabinets Required	0	Cabinet Dimensions (L' x W' x H')		Manufacturer:	N/A
Equipment Cabinet Comments	N/A				

GENERATOR REQUIREMENTS					
Generator Required?:	Existing	Generator Fuel Type		Generator Size	N/A
Generator Pad Dimensions	N/A		Generator Manufacturer	N/A	
Generator Fuel Tank Pad Dimensions	N/A		Fuel Tank Manufacturer	N/A	

AC POWER REQUIREMENTS			
Meter Type	Existing Tenant Meter	Estimated Monthly Utility Usage Amount	
Voltage		Total Amperage	

FIBER / BACKHAUL					
Fiber Installation Status	Existing (No Change)	Fiber Provider			
Cable Type		Number of Points of Entry		Conduit/Riser Size (in inches)	

STRUCTURAL ANALYSIS DETAILS			
Structural Hardcopies Required?	No N/A	If wet seals required, please provide address:	

ADDITIONAL COMMENTS
VZW will require a Structural Analysis and the attached OA Form to be completed so that the building permit can be acquired.

EXHIBIT 3

TENANT APPROVED CONSTRUCTION DRAWINGS

[See Attached Approved Construction Drawings]

CHARLES TOWN UTILITY BOARD
WATER/SEWER SYSTEMS UPGRADE PROJECTS

RUMMEL, KLEPPER & KAHL, LLP

TASK NO. 04

PROFESSIONAL ENGINEERING & SURVEYING SERVICES

MODIFIED FLOWING SPRING PROJECT

January 30, 2020

Being a part of Agreement Between
Charles Town Utility Board and Rummel, Klepper & Kahl, LLP
dated November 13, 2019

Task No. 04 dated January 30, 2020 to Agreement between Charles Town Utility Board (CTUB) and Rummel, Klepper & Kahl, LLP (RK&K) dated November 13, 2019 is to provide professional engineering and surveying services for designing the necessary modifications to the existing collection system for redirecting sewage into the new Route 9 Sewer Project. The specific areas of the collection system include the gravity system flowing into the Edmond PS; discharge force main from Edmond PS; force main along Shenandoah Junction Road (CO Route 20); and force main along Charles Town Road (CO Route 115/5). In addition to the modifications, RK&K anticipates modifications to the pumps within the Edmond PS and evaluating the available capacity of the force main along Shenandoah Junction Road to handle sewage flow from the Shenandoah Junction Public Sewer Wastewater Treatment Plant (SJPS WWTP).

Scope of Services

The following summarizes RK&K's anticipated scope of services as part of this effort:

1. RK&K will review available mapping of the existing collection system for use in developing modification alternatives.

2. RK&K will work with CTUB employees to analyze the existing collection system for determining available capacity. This effort will consist of both flow monitoring the existing gravity collection system and reviewing pump runtimes and operational flow data for the various sewage lift stations.

3. RK&K will study and development alternatives for modifying the existing collection system and review with CTUB staff, incorporating any comments received.

4. RK&K will perform a field survey to locate existing utilities, topographic features, rights-of-way, property lines and other relevant features necessary for design purposes.

    a. RK&K will submit a scope of work change to this task order for preparation of easements, if necessary, once the overall project has been defined.

5. RK&K will prepare preliminary plans based on the selected alternative, identifying the necessary modifications, including preparing plan and profile sheets.

6. RK&K will submit the preliminary design to the Charles Town Utility Board for review, approval and authorization to proceed to final design and contract plans.

7. RK&K will prepare the plans, specifications and contract document in accordance with Charles Town Utility Board standards.

8. RK&K will contact environmental review agencies and other stakeholders, if needed, to obtain clearances for construction of project.

9. RK&K will submit the final design to the Charles Town Utility Board for review and approval.

10. RK&K will revise the final design, incorporating review comments, and prepare the necessary bidding related documents.

11. RK&K will assist Charles Town Utility Board in advertising project for bid, conducting prebid meeting, preparing minutes of meeting, issuing addendums, attending bid opening, preparing bid tabulation and recommending award of contract.

12. RK&K will prepare notice of award for submission to Contractor, agreement, review of contract documents (bonds, insurance, etc.) and notice to proceed.

13. Construction Engineering Services

    a. RK&K will submit a scope of work change to this task order for construction phase services once the overall project has been defined.

Schedule

Subject to weather, RK&K anticipates four (4) months to perform the field survey, study, preparation of drawing, permitting, etc. from issuance of notice to proceed. Impacts to the schedule may occur outside of RK&K's and CTUB ability to control (i.e. regulatory and permitting approvals).

Estimated Person-Hours per Phase by Category, Engineer's Consultant Costs and Other Direst Costs

A fee derivation is attached as Page 5 which includes RK&K's estimated person-hours per Phase by category and other direct costs anticipated to complete the work for this project.

Materials and Resources Required of CTUB

- CTUB will be responsible for providing available mapping to facilitate RK&K's review of the existing collection system.

- CTUB will be responsible for installing temporary flow meters within sewer manholes designated by RK&K over the 30-day period. Responsibilities also include periodic downloading and processing of data for distribution to RK&K.
- CTUB will be responsible for providing the necessary pump runtime and flow monitoring (if available) for the sewage pump stations.
- CTUB will be responsible for paying any permitting fees and regulatory agency costs.
- CTUB will be responsible for any and all construction related materials and equipment.

Estimated Not-To-Exceed Fee

RK&K will provide the scope of services described above at an amount equal to Engineer's Direct Labor Costs times a factor of 2.7 for the services of Engineer's personnel engaged on the Project, plus Reimbursable Expenses, estimated to be $800.00. RK&K's current certified payrates for personnel to be assigned to this project is included as Exhibit B to Original Agreement dated November 13, 2019.

The total estimated Not-to-Exceed fee to perform the work is $55,000.00 as shown on RK&K's enclosed fee derivation.

Authorization

Task No. 04, Modified Flowing Springs Project dated January 30, 2020 and being a part of the Agreement between Charles Town Utility Board and Rummel, Klepper & Kahl, LLP for Engineering Services for Water/Sewer Systems Upgrade Projects dated November 13, 2019, is approved by the following duly authorized officials:

Engineer: RUMMEL, KLEPPER & KAHL, LLP

_____ _____
John W. Cole, PE Date
Manager, Municipal Engineering

Owner: Charles Town Utility Board

_____ _____
Daryl Hennessy Date
City Manager, Chairman

RUMMEL, KLEPPER KAHL, LLP
FEE DERIVATION
CHARLES TOWN UTILITY BOARD
TASK 04
MODIFIED FLOWING SPRINGS PROJECT

January 30, 2020

Scope of Services	Manager	Engineer	CADD	Survey Technician - Office	Survey Technician - Lead	Survey Technician	Misc. Exp.	Task Total Hours
Technical Assistance								
Meeting	5	8					$ 100.00	**13**
Surveying / Mapping		2	12	4	24	24	$ 300.00	**66**
Study / Analysis / Plan Review	20	30	40				$ 200.00	**90**
Preliminary Design								
Title Page			2					**2**
General Notes	1	4	8					**13**
Quanties / R-W Easements			4	4				**8**
Sheet Index			4					**4**
Plan and Profile (5 sheets)	4	16	40					**60**
Pump Station (3 sheets)	4	30	10					**44**
Road Bore (1 sheet)		2	8					**10**
Erosion & Sediment Control		8	16					**24**
Traffic Control		4	16					**20**
Details		2	16					**18**
Technical Specifications	8	24						**32**
Permitting / Regulatory Review								
C&H	0.5	6	8					**15**
DOH	0.5	4	4					**9**
DEP	0.5	6	2					**9**
Health	0.5	4	6					**11**
Final Design	5	20	40					**65**
Bidding Assistance	6	30	10				$ 200.00	**46**
Award	4							**4**
Total Hours	**59**	**200**	**246**	**8**	**24**	**24**	**$ 800.00**	**561**
Hourly Rate (including 2.7 multiplier)	**$ 194.40**	**$ 94.50**	**$ 83.70**	**$ 63.72**	**$ 62.37**	**$ 51.30**		
Total Fee	**$ 11,469.60**	**$ 18,900.00**	**$ 20,590.20**	**$ 509.76**	**$ 1,496.88**	**$ 1,231.20**	**$ 800.00**	**$ 54,997.64**

NTE Cost	**$ 55,000.00**