



**CITY OF BURLINGTON
DEPARTMENT OF PUBLIC WORKS**

645 Pine Street, Suite A
Post Office Box 849
Burlington, VT 05402-0849
802.863.9094 VOICE
802.863.0466 FAX
802.863.0450 TTY
www.burlingtonvt.gov/dpw

Chapin Spencer
DIRECTOR OF PUBLIC WORKS

MEMORANDUM

To: Tenzin Chokden, Clerks Office
From: Chapin Spencer, Director
Date: April 13, 2018
Re: Public Works Commission Agenda

Please find information below regarding the next Commission Meeting.

Date: **April 18, 2018**
Time: 6:30 – 9:00 p.m.
Place: **645 Pine St – Main Conference Room**

AGENDA

ITEM

- 1 Call to Order – Welcome – Chair Comments
- 2 5 Min Agenda
- 3 10 Min Public Forum (3 minute per person time limit)
- 4 5 Min Consent Agenda
 - A Traffic Status Report
 - B Taxicab Stand/Loading Zone Dual Use & Proposed Parking Meter Zones
 - C Accessible Space Johnson Street
 - D Meters on Lower Church St & King St
 - E 15- Minute Parking on North Willard Street
 - F Truck Loading on North Street
 - G No Right Turn on Red on North Union Street at Pearl Street

Non-Discrimination

The City of Burlington will not tolerate unlawful harassment or discrimination on the basis of political or religious affiliation, race, color, national origin, place of birth, ancestry, age, sex, sexual orientation, gender identity, marital status, veteran status, disability, HIV positive status or genetic information. The City is also committed to providing proper access to services, facilities, and employment opportunities. For accessibility information or alternative formats, please contact Human Resources Department at 865-7145.

- 5 30 Min Conceptual Plans for Bank Street & Cherry Street
A Communication, L. Wheelock & K. Merriman-Shapiro
B Commissioner Discussion
C Public Comment
D Action Requested –None
- 6 15 Min Water Billing Update
A Communication, C. Spencer & M. Moir
B Commissioner Discussion
C Public Comment
D Action Requested –None
- 7 5 Min Approval of Draft Minutes of 3-21-18
- 8 10 Min Director's Report
- 9 10 Min Commissioner Communications
- 10 **Adjournment & Next Meeting Date – May 16, 2018**



MEMORANDUM

April 09, 2018

TO: Public Works Commission
FROM: Phillip Peterson, DPW Engineering Technician *PMP 4/9/18*
CC: Nicole Losch PTP, Senior Transportation Planner *NL 4/11/18*
RE: Traffic Request Status Report

Number of Requests 03/06/18 = 51
New Requests since 03/06/18 = 7
Requests closed since 03/06/18= 4
Number of Requests 04/09/18 = 54

RFS BREAKDOWN BY TYPE*

		Last Month	Change
Accessible Space:	3		
Resident Only Parking:	5	4	+1
Crosswalks:	20		
Driveway Encroachments:	2		
Signage:	11	10	+1
Loading Zone:	2		
Area/Intersection Study:	4	3	+1
Parking Prohibition:	3		
Bus Stop:	0		
Geometric Issues:	1		
Parking Meters:	3		
Other:	0		
TOTAL:	54		



April 11, 2018

TO: Public Works Commission

FROM: Phillip Peterson, DPW Engineer Technician *PPM 4/11/18*

CC: Nicole Losch PTP, Senior Transportation Planner *NL 4/11/18*

RE: Consent Agenda Item: Taxicab Stand / Loading Zone Dual Use & Proposed Parking Meter Zones

Recommendation:

Staff recommends that the Commission adopt

(25) The following locations are designated as taxicab stands:

1. On the south side of Main Street seventy (70) feet west of Church Street extending 50 feet west from midnight to 6:00 a.m.
2. In the first space on the north side of Main Street immediately west of South Winooski Avenue from midnight to 6:00 a.m.

Staff recommends that the Commission remove

(25) The following locations are designated as taxicab stands:

4. On the east side of South Winooski Avenue, in the two (2) spaces next southerly of Main Street, between 8:00 p.m. and 6:00 a.m.

Purpose & Need:

The purpose of this request is to balance parking needs in the downtown core. The need was identified by the Vehicle for Hire Board, the Flynn Theater, and the City's Downtown Parking & Transportation Management Plan: increase public safety of late night taxicab passengers, increase taxicab usage opportunities, improve the locations of taxicab stands, provide access to designated tour bus parking and charging stations, and designate unused parking areas for public use by downtown visitors.

Project Checklist:

	N/A	Yes	No	Reference
Aligns with MUTCD standards and/or established City Policy?	X			
Aligns with City plans?		X		
Followed Public Engagement Plan?		X		This project falls under INVOLVE on the Spectrum of Engagement and the minimum engagement strategies were met.

Summary and Conclusion:

Staff received a request in January 2017 from the Vehicle for Hire Board (VHB), asking the existing truck and vehicle loading zones located in the downtown core be designated as taxicab stands during non-loading zone hours. The intent is to increase taxicab usage opportunities for downtown visitors. The VHB believe adding taxicab stands to the downtown core will also increase safety, as most of the late night taxicab passengers will be patrons from downtown bars. DPW Staff attended a meeting in June which included leadership from VHB, staff from the City of Burlington Attorney's Office, and Parking Enforcement.

This recommendation was presented at the March DPW Commission Meeting, where safety concerns related to the amount of commingling between vehicles and pedestrians at or near the cross walk / sidewalk areas on the north side of Church and Main; the mere interface, the line of sight issues, access for emergency vehicles, etc. DPW Staff propose a dual use taxicab stand at the loading zone in front of Mr. Mikes Pizza to replace the two taxicab stands on the east side of South Winooski Avenue. DPW Staff met with Aaron Chiaravelotti, one of the owners of Mr. Mikes Pizza; Mr. Mikes does deliveries until 11 pm, so Mr. Chiaravelotti would be fine with the dual use taxicab stand in front of his business as long as the taxicab stands are not effective in front of Mr. Mikes until midnight. Due to these changes, staff recommend maintaining the taxicab stands on lower Church by the court house; however, those taxicab spaces and the adjacent metered spaces can be occupied when the Flynn Theater needs to park tour buses using an obstruction permit.

Attachments:

1. Site map



NOTES:

Staff recommends the Commission adopt: (25) Taxicab stands. The following locations are designated as taxicab stands:

3. On the south side of Main Street seventy (70) feet west of Church Street extending 50 feet west from midnight to 6:00 a.m.

4. In the first space on the north side of Main Street immediately west of South Winooski Avenue from midnight to 6:00 a.m.

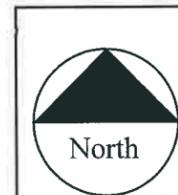
NOTES:

Staff recommends the Commission remove: (25) Taxicab stands. The following locations are designated as taxicab stands:

4. On the east side of South Winooski Avenue, in the two (2) spaces next southerly of Main Street, between 8:00 p.m. and 6:00 a.m.



SCALE: 1" = 40'



PROPOSED DUAL USE
LOADING ZONE/TAXICAB STANDS



**BURLINGTON
PUBLIC WORKS
ENGINEERING DIV.**

645 PINE STREET
BURLINGTON, VT 05401
(802) 863-9064
(802) 863-0486 (Fax)

DESIGNED PMP	RFS NO. 14149
DRAWN PMP	SCALE 1"=40'
CHECKED NL	DRAWING NO.
DATE 04/08/18	SHEET 1 OF 1



April 11, 2018

TO: Public Works Commission

FROM: Phillip Peterson, DPW Engineer Technician *PMP 4/11/18*

CC: Nicole Losch PTP, Senior Transportation Planner *u 4/11/18*

RE: Consent Agenda Item: ADA (Americans with Disabilities Act) Accessible Space at 1 Johnson Street

Recommendation:

Staff recommends that the Commission adopt

7A Accessible spaces designated. No person shall park any vehicle at any time in the following locations, except automobiles displaying special handicapped license plates issued pursuant to 18 V.S.A. § 1325, or any amendment or renumbering thereof:

167. In the space in front of 1 Johnson Street.

Purpose & Need:

The purpose is to provide accessible parking on street as recommended by the Public Rights-of-Way Accessibility Guidelines (PROWAG). The need for accessible parking in this location will be close to several homes which would benefit the disabled community in this area.

Project Checklist:

	N/A	Yes	No	Reference
Aligns with MUTCD standards and/or established City Policy?		X		PROWAG
Aligns with City plans?		X		
Followed Public Engagement Plan?		X		This project falls under INVOLVE on the Spectrum of Engagement and the minimum engagement strategies were met.

Summary and Conclusion:

Staff received a request in July 2017 from Chris Sweeney of 1 Johnson Street, a local resident, to install an on-street accessible parking space close to his home. Mr. Sweeney states the space is necessary so his mother-in-law, another resident of 1 Johnson Street, may have reasonable access to her home. Staff distributed forty (40) flyers to the homes on Johnson Street on April 6th, 2018. Staff received five (5)

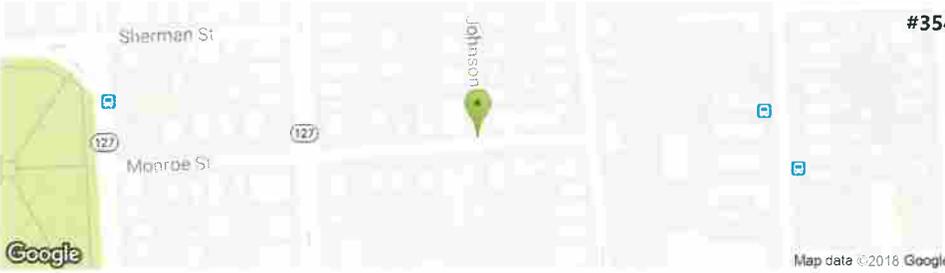
responses from local residents, all were over the phone; all of the responses support the proposed changes. Furthermore, the majority of the respondents identified as ADA qualified and would benefit from the new accessible space.

Attachments:

1. Initial request
2. Site map (1 Johnson Street)

In Progress

Change Status



#3541753 (<https://seeclickfix.com/issues/3541753>)

44.4814931380634, -73.2161099463701

Other

Created Date:
07/07/2017 3:09 AM

2-8 Johnson Street Burlington, Vermont

Details

need to put handicap sign at begining of johnson st there are a few handicap people who live there and not enough spots and there is no handicap sign on johnson at all

This request has no associated secondary questions.

0 4

Category:
Other

Recategorize

Assigned to:
You

Assign

Due Date:
07/27/2017

Change Due Date

SLA Expires at:
07/27/2017

Priority:
Normal

Prioritize



(<https://seeclickfix.com/accounts/297/prints/>)

Status Log

Opened: 9 months ago

Acknowledged: 9 months ago

Work Orders

New Work Order

Comments

All Public Only Internal Only

An anonymous SeeClickFix user | Registered User Opened

need to put handicap sign at begining of johnson st there are a few handicap people who live there and not enough spots and there is no handicap sign on johnson at all



IMPORTANT: REMOVE BEFORE
DRIVING VEHICLE



P93145

Disabled Parking Identification



EXPIRES:

**NO
EXPIRATION**

VERMONT

PERMANENT

Chris Sweeney

1A Johnson St

RECEIVED

APR -4 2010

BURLINGTON PUBLIC
WORKS



NOTES:

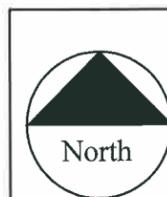
Staff recommends amendment of the following ordinance:

Appendix C: Rules and Regulations of the Traffic Commission

7A Accessible spaces designated. No person shall park any vehicle at any time in the following locations, except automobiles displaying special handicapped license plates issued pursuant to 18 V.S.A. § 1325, or any amendment or renumbering thereof: In the space in front of 1 Johnson Street.



SCALE: 1" = 40'



JOHNSON STREET
ACCESSIBLE PARKING SPACE



**BURLINGTON
PUBLIC WORKS
ENGINEERING DIV.**
645 PINE STREET
BURLINGTON, VT 05401
(802) 863-9094
(802) 863-0486 (Fax)

DESIGNED PMP	SCF NO. 3541753
DRAWN PMP	SCALE 1"=40'
CHECKED NB	DRAWING NO.
DATE 04/08/18	SHEET 1 OF 1



April 13, 2018

TO: Public Works Commission

FROM: Phillip Peterson, DPW Engineer Technician *M P PP 4/13/18*

CC: Nicole Losch PTP, Senior Transportation Planner

RE: Consent Agenda Item: Parking Meter Zones on King Street and Church Street

Recommendation:

Staff recommends the Commission approve:

1. Designation of parking meter zones:
 - (f) Ten (10) hour zones. The following streets or portions of streets are hereby designated as ten (10) hour parking meter zones: **(20)** On the east side of Church Street beginning 120 feet north of Maple Street to a point 71 feet south of King Street.

2. Designation of parking meter zones:
 - (e) Three (3) hour zones. The following streets or portions of streets are hereby designated as three (3) hour parking meter zones: **(38)** The third, fourth and fifth parking spaces east of St. Paul Street on the north side of King Street.

Purpose & Need:

The purpose of this request is to temporarily increase the number of downtown parking meters during the 2018 construction season. The need is to offset parking loss during construction activities.

Project Checklist:

	N/A	Yes	No	Reference
Aligns with MUTCD standards and/or established City Policy?	X			
Aligns with City plans?		X		
Followed Public Engagement Plan?		X		This project falls under INVOLVE on the Spectrum of Engagement and the minimum engagement strategies were met.

Summary and Conclusion:

During the planning phase for the 2018 construction projects, a need to temporarily increase parking meter opportunities. There will be a loss of 44 metered parking spaces on St Paul Street during construction. The loss of parking on St Paul Street during the construction season will have cascading effects on the surrounding streets. Due to this, DPW Staff are recommending temporary changes to the existing parking meters on King Street; specifically, staff are recommending the temporary change of three meters from ten-hour meters to three-hour meters. Additionally, staff is recommending temporarily adding eight ten-hour metered spaces on the east side of Church Street between King Street and Maple Street.

Once construction operations are complete all traffic regulations will revert back to what existed prior to construction. The construction schedule for St. Paul Street work is estimated to complete in June of 2019.

Attachments:

1. Site map
2. Public input correspondence (will be provided in advance of the Commission meeting)

PUBLIC COMMENT #1

From: Shawn M
Sent: Tuesday, April 10, 2018 10:22 AM
To: Phillip Peterson
Subject: Re: DPW Church Street Parking Meter Proposal

The St. Paul street construction has been an ongoing process for the past several months now, so I am curious as to why this is just now being implemented? Furthermore, Burlington loses a large majority of the resultant college student traffic for the summer so it seems ridiculous to think meters would be needed at this time. I'm also insulted as I know others who have received the same, seemingly automated response, regardless of their initial email. I will ask again: How much revenue do you really seem to think these spaces will bring in? I'd also love to know how many spaces you'll be "losing" compared to how many you're adding.

Thank you,

Shawn Musial

On Tue, Apr 10, 2018 at 8:51 AM, Phillip Peterson wrote:

Shawn,

Due to construction work this Summer, St. Paul Street metered spaces will be unavailable. The proposed meters on Church would be temporary, however they are necessary due to the likely parking demand as a consequence of all the construction. The meters will promote turnover, and prevent commuters from using your street as a place to park on a long-term basis. Feel free to call me should you have any further questions.

Best,

Phillip Peterson, Engineering Technician
Burlington Department of Public Works
645 Pine Street
Burlington, VT 05402
802-865-5832 (phone)
ppeterson@burlingtonvt.gov

From: Shawn M
Sent: Monday, April 09, 2018 7:14 PM
To: Phillip Peterson
Subject: DPW Church Street Parking Meter Proposal

Hello,

In response to the proposal to add anywhere from 9 to 10 parking meters to the east side of Church Street, I'd like to express my concern and disapproval. Most of the parking in the downtown area

requires some form of payment, which I have no problem with as these locations are popular and work to inhibit long-term parking. However, this proposal would add meters to a residential area, ultimately eliminating the few spaces available for street parking. I've relied on these spots for daily parking as I do not have an off-street parking space. It's hard enough competing for those 10 spots, let alone have to fight for another one several blocks up the road. All of this seems a bit greedy. How much revenue would these spots actually bring in?? Consider the fact that the majority of these spots are used by residents on a daily basis. As it is, there are 2 spots near Burlington Telecom that are rarely being utilized at the same time. Once the meters go in, you will have forced residents to relocate in an otherwise crowded residential area, and for nothing more than *maybe* a couple bucks a day, if that. It just doesn't seem practical to me.

Thank you for your time,

Shawn Musial

PUBLIC COMMENT #2

From: matthew robinson

Sent: Sunday, April 08, 2018 2:57 PM

To: Phillip Peterson

Subject: Lower church parking

Hello well over a decade of living on lower church street. And I am strongly against this. The price of living in Burlington is crazy as is. And most people are making the same money weekly as they were 10 years ago.

I am not a 9 to 5 worker, I work many jobs and different hours. No way shape or form do I think I should have to pay to park close to my home. Nor do I think I should have to set a alarm to pay the meter in the morning. Strongly against parking meters on lower church street.

And I may add as a retail worker on church street the raise of meter cost and extended hours of meters downtown as majorly decreased business for us on the marketplace.

Does any of the funds made from parking go directly to making church street a safer place for people to shop?

Matt Lower church resident

PUBLIC COMMENT #3

From: Lauren Warner

Sent: Monday, April 09, 2018 9:56 AM

To: Phillip Peterson

Subject: Re: DPW meter proposal for Church Street

Also, if Church Street is metered, then the commuters from construction (or wherever) would just park on streets farther out. Which then just pushes residents of Church Street to park even farther away. I am having a really hard time seeing how this fixes anything other than making the city more money with the St. Paul meters closed.

On Mon, Apr 9, 2018 at 9:49 AM, Lauren Warner wrote:

I understand that they may be necessary for the construction. However, given that construction *rarely* is done by the time predicted, I have a strong suspicion that these proposed meters will be everything but temporary. If there was some way to assure that this construction will be in fact finished and the meters will be temporary for the summer, I would feel better about this. However, given the way construction projects usually go, I have very little faith in this.

Lauren

On Mon, Apr 9, 2018 at 7:41 AM, Phillip Peterson wrote:

Lauren,

Due to construction work this Summer, St. Paul Street metered spaces will be unavailable. The proposed meters on Church would be temporary, however they are necessary due to the likely parking demand as a consequence of all the construction. The meters will promote turnover, and prevent commuters from using your street as a place to park on a long-term basis. Feel free to call me should you have any further questions.

Best,
Phillip Peterson, Engineering Technician
Burlington Department of Public Works
645 Pine Street
Burlington, VT 05402
802-865-5832 (phone)
ppeterson@burlingtonvt.gov

From: Lauren Warner
Sent: Sunday, April 08, 2018 3:40 PM
To: Phillip Peterson
Subject: DPW meter proposal for Church Street

Hello,

I received the flyer about adding meters to the east side of Church Street between Maple and King. I am *begging* you NOT TO DO THIS. My friend lives, and I will be living, in the building directly across from

those proposed meter spots. We only get 1 spot off-street parking, and sometimes not even then. That is the main location in which I will be parking because I do not get an off-street parking spot. I cannot park in those metered locations all the time I will run out of money very quickly.

I do not have an off-street parking location for my home. I cannot afford to park in a metered spot, and I cannot afford to have to find another location to park up to a mile away. Please do not meter at these parking spots.

This is a residential area, people rely on those spots for their *homes*.

I sincerely hope my feedback will be taken into account.

Thank you,

Lauren Warner



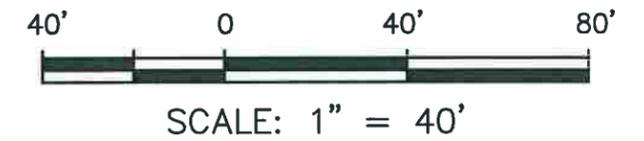
NOTES:

Staff recommends the Commission temporarily amend:

17 Designation of parking meter zones:

(f) Ten (10) hour zones. The following streets or portions of streets are hereby designated as ten (10) hour parking meter zones:

(20) On the east side of Church Street beginning 120 feet north of Maple Street to a point 71 feet south of King Street.



LOWER CHURCH STREET
PROPOSED
TEN (10) HOUR METER ZONE



**BURLINGTON
PUBLIC WORKS
ENGINEERING DIV.**

645 PINE STREET
BURLINGTON, VT 05401
(802) 863-2004
(802) 863-0486 (Fax)

DESIGNED PMP	RFS NO. NA
DRAWN PMP	SCALE 1"=40'
CHECKED NL	DRAWING NO.
DATE	
02/28/18	SHEET 1 OF 1



NOTES:

Staff recommends the Commission approve the modification:

Designation of parking meter zones:

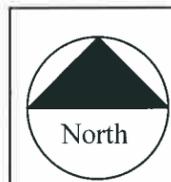
Designation of parking meter zones:

(e) Three (3) hour zones. The following streets or portions of streets are hereby designated as three (3) hour parking meter zones:

(38) The third, fourth and fifth parking west of St. Paul Street on the north side of King Street.



SCALE: 1" = 30'



**KING STREET
PROPOSED
METER CHANGES**



**BURLINGTON
PUBLIC WORKS
ENGINEERING DIV.**

646 PINE STREET
BURLINGTON, VT 05401
(802) 863-9094
(802) 863-0488 (Fax)

DESIGNED PMP	RFS NO. NA
DRAWN PMP	SCALE 1"=30'
CHECKED NL	DRAWING NO.
DATE 02/28/18	SHEET 1 OF 1



April 12, 2018

TO: Public Works Commission
FROM: Nicole Losch, Senior Planner
SUBJECT: Consent Agenda Item: 15-minute parking near Momo's Market

Recommendation

Staff recommends the Commission adopt:

§9(b)(4) No person shall park any vehicle, at any time, longer than fifteen (15) minutes on the east side of North Willard Street in the first two parking spaces south of North Street.

Purpose & Need

The purpose is to reduce illegal parking by delivery vehicles while also providing short-term parking for a neighborhood market. The need was identified by the owner of Momo's Market at 141 North Willard Street.

Project Checklist

	N/A	Yes	No	Describe
Aligns with MUTCD standards and/or established City Policy?		X		
Aligns with City plans?		X		Balances parking needs for businesses during daytime hours and residents during overnight hours.
Followed Public Engagement Plan?		X		This project falls under Involve on the Spectrum of Engagement.

Observations

The owner of Momo's Market, Erin Malone, requested bike parking and other parking improvements in coordination with the bike lane / parking lane reversal planned for Willard Street. During a site visit to evaluate bike parking opportunities, Ms. Malone described parking challenges that include delivery vehicles using the 15-minute parking space on North Willard Street or parking adjacent to Momo's Market on the south side of North Street (a No Parking zone). This impacts Momo's Market customer access, neighbors, and other drivers attempting to navigate around illegal parking near the North Street / North Willard Street intersection. Ms. Malone has contacted delivery companies to request drivers park legally, but this outreach has not resulted in successful parking changes. Momo's Market hours begin as early as 7am and extend as

late as 11pm. With the forthcoming Willard Street parking relocation to the east side of Willard Street, the proposed parking changes will support her small business and her neighbors by providing access for customers and deliveries during business hours but allowing unrestricted parking at other hours. The number of 15-minute parking spaces will increase and provide more customer parking, which is common at other neighborhood markets in Burlington. In addition, illegal parking impacts will be minimized as better parking alternatives will be provided.

Following the Public Engagement Plan, flyers were distributed to the immediate neighborhood. No public input has been received as of the time of this memo's writing, but any subsequent input will be shared with Commissioners in advance of the April 18, 2018 meeting.

Attachments:

1. Initial request
2. Site map

INITIAL REQUEST

From: Erin Malone

Sent: Monday, March 19, 2018 11:02 AM

To: DPW-Pine Customer Service <dpw-pinecustomerservice@burlingtonvt.gov>; Maxwell Tracy <mtracy@burlingtonvt.gov>

Subject: Bike Rack Installation + Permeable Surface Request

Good morning!

My name is Erin Malone; I own 141 N Willard Street that houses Momo's Market. One of your staff members, reach out to me early last fall about the change direction of parking on Willard Street. Much to my embarrassment, I cannot find the email exchange following our conversation. Sorry to send this to a general customer service email.

As you can imagine, the change of direction for car parking significantly impacts my business. My business is on the West side of the street and there is a 15 minute only parking spot in directly in front of my store. This spot is used a lot by customers throughout our work day from 7am - 10pm. With the change, the parking spot will be located across the street which makes a quick car stop much more difficult and likely decrease sales.

During separate discussions with your staff and with Councilor Tracy, we spoke about the City installing bike parking directly in front of my business on the green space between the sidewalk and the road. Bike parking will hopefully replace some of the lost car traffic. I am very interested moving forward with this project. Many of my customers come to the store on bikes and this would create a more welcoming place for them to securely leave their bike while shopping. And, hopefully it will grow my business by appealing to a new group of people.

Please let me know how I can begin to move this project forward.

Thank you for you time.

Erin



Momo's Market

141 North Willard
Street

PROPOSAL

1. 15-minute parking from 7am – 11pm
2. 15-minute parking from 7am – 11pm



April 12, 2018

TO: Public Works Commission
FROM: Nicole Losch, Senior Planner
SUBJECT: Consent Agenda Item: Truck Loading near Momo's Market

Recommendation

Staff recommends the Commission adopt:

§12(b)(3) No vehicle other than a truck actually engaged in loading or unloading shall use, for no more than thirty (30) minutes, the parking space on the north side of North Street beginning fifty (50) feet west of Willard Street and extending west to the driveway of 382 North Street, between the hours of 7:00 am and 2:00 pm, Monday through Friday;

Purpose & Need

The purpose is to reduce illegal parking by delivery vehicles while also providing short-term parking for a neighborhood market. The need was identified by the owner of Momo's Market at 141 North Willard Street.

Project Checklist

	N/A	Yes	No	Describe
Aligns with MUTCD standards and/or established City Policy?		X		
Aligns with City plans?		X		Balances parking needs for businesses during daytime hours and residents during overnight hours.
Followed Public Engagement Plan?		X		This project falls under Involve on the Spectrum of Engagement.

Observations

The owner of Momo's Market, Erin Malone, requested bike parking and other parking improvements in coordination with the bike lane / parking lane reversal planned for Willard Street. During a site visit to evaluate bike parking opportunities, Ms. Malone described parking challenges that include delivery vehicles using the 15-minute parking space on North Willard Street or parking adjacent to Momo's Market on the south side of North Street (a No Parking zone). This impacts Momo's Market customer access, neighbors, and other drivers attempting to navigate around illegal parking near the North Street / North Willard Street

intersection. Ms. Malone has contacted delivery companies to request drivers park legally, but this outreach has not resulted in any changes by drivers. Momo's Market hours begin as early as 7am and extend as late as 11pm. With the forthcoming Willard Street parking relocation to the east side of Willard Street, the proposed parking changes will support her small business and her neighbors by providing a dedicated space for deliveries but allowing unrestricted parking at other hours. In addition, illegal parking impacts will be minimized as better parking alternatives will be provided.

Following the Public Engagement Plan, flyers were distributed to the immediate neighborhood. No public input has been received as of the time of this memo's writing, but any subsequent input will be shared with Commissioners in advance of the April 18, 2018 meeting.

Attachments:

1. Initial request
2. Site map

INITIAL REQUEST

From: Erin Malone

Sent: Monday, March 19, 2018 11:02 AM

To: DPW-Pine Customer Service <dpw-pinecustomerservice@burlingtonvt.gov>; Maxwell Tracy <mtracy@burlingtonvt.gov>

Subject: Bike Rack Installation + Permeable Surface Request

Good morning!

My name is Erin Malone; I own 141 N Willard Street that houses Momo's Market. One of your staff members, reach out to me early last fall about the change direction of parking on Willard Street. Much to my embarrassment, I cannot find the email exchange following our conversation. Sorry to send this to a general customer service email.

As you can imagine, the change of direction for car parking significantly impacts my business. My business is on the West side of the street and there is a 15 minute only parking spot in directly in front of my store. This spot is used a lot by customers throughout our work day from 7am - 10pm. With the change, the parking spot will be located across the street which makes a quick car stop much more difficult and likely decrease sales.

During separate discussions with your staff and with Councilor Tracy, we spoke about the City installing bike parking directly in front of my business on the green space between the sidewalk and the road. Bike parking will hopefully replace some of the lost car traffic. I am very interested moving forward with this project. Many of my customers come to the store on bikes and this would create a more welcoming place for them to securely leave their bike while shopping. And, hopefully it will grow my business by appealing to a new group of people.

Please let me know how I can begin to move this project forward.

Thank you for you time.

Erin

From: Warren, Madeleine

Sent: Wednesday, April 11, 2018 4:34 PM

Subject: North Street/North Willard Street Parking

Hello Nicole,

If I am understanding this correctly, there would be a truck loading/unloading zone put in directly in front of my house (382 North Street), where there is currently parking for up to 3 cars. I would have to absolutely 100% oppose this, as I often use these spots to park my car and would be very unhappy to have to move my car while I am at work in the morning. If there is anything else that I can/should do to make sure that this does not happen, please let me know.

Thank You,

Madeleine Warren



Momo's Market
141 North Willard
Street

PROPOSAL
1. Truck loading/unloading from 7am – 2pm Mon - Fri



April 12, 2018

TO: Public Works Commission
FROM: Nicole Losch, Senior Planner
SUBJECT: Consent Agenda Item: No Right Turn on Red on Union Street at Pearl Street

Recommendation

Staff recommends the Commission adopt prohibition of turns on red signal at all times at:

§20(a) Union Street and Pearl Street, northbound

Purpose & Need

The purpose is to ensure compliance with national standards for design of bicycle facilities. The need is presented by plans to install a bike box on Union Street at Pearl Street in this year's work plan.

Project Checklist

	N/A	Yes	No	Describe
Aligns with MUTCD standards and/or established City Policy?		X		NACTO Urban Bikeway Design
Aligns with City plans?		X		Balances parking needs for businesses during daytime hours and residents during overnight hours.
Followed Public Engagement Plan?		X		This project does not require engagement through the Public Engagement Plan.

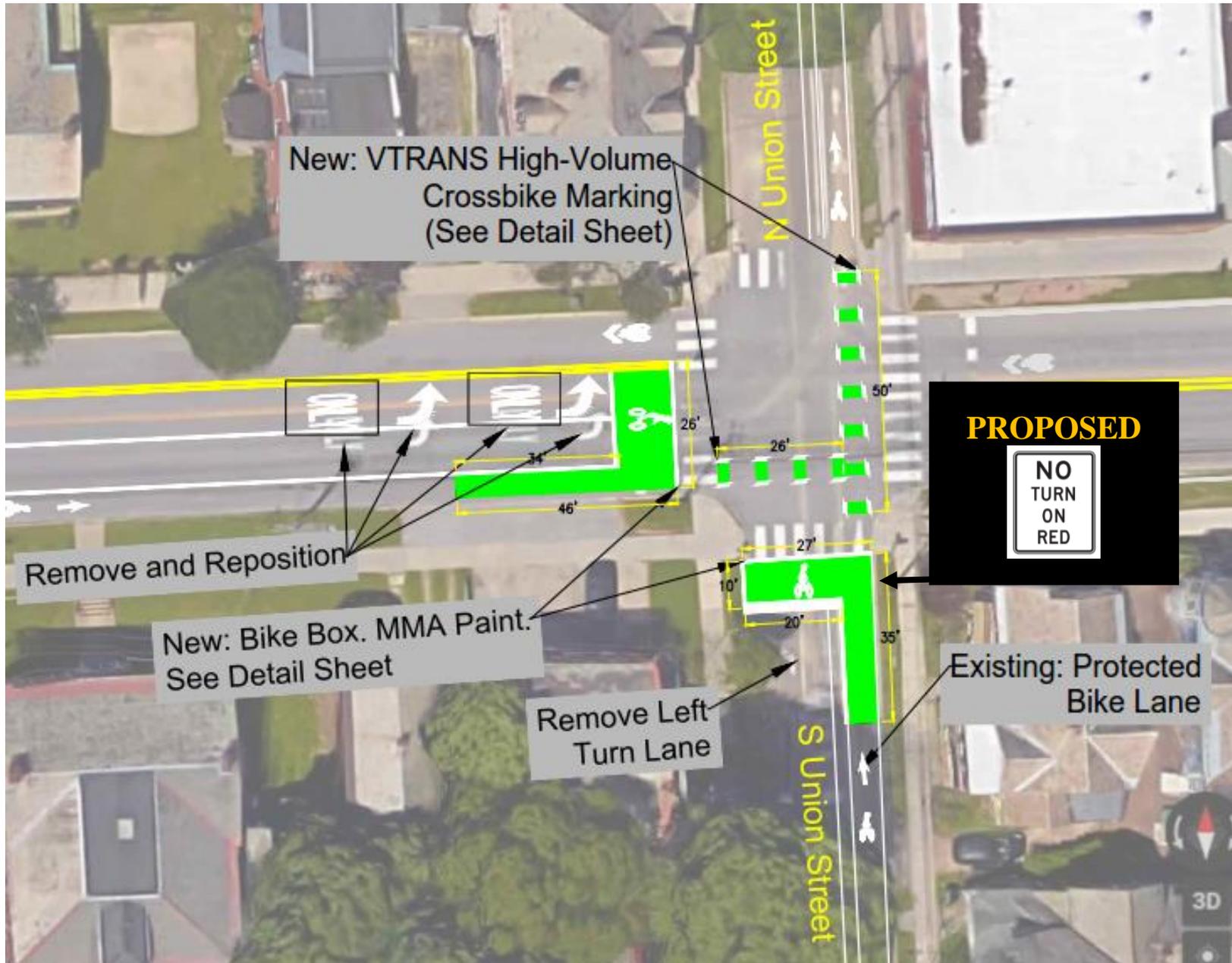
Observations and Summary

A bike box is a designated area at the head of a traffic lane at a signalized intersection that provides bicyclists with a safe and visible way to get ahead of queueing traffic during the red signal phase. With the creation of a protected bike lane on Union Street and plans for designated bike facilities on Pearl Street adjacent to Union Street, bike boxes have been planned for the northbound and eastbound approaches at this intersection. Following NACTO's Urban Bikeway Design Guide, required features include "No Right Turn on Red" to prevent vehicles from entering the bike box.

In some situations, "No Right Turn on Red" may cause substantial intersection delays. However, the narrow geometry at this intersection already limits the number of potential right turns on red. As a result, additional delays are anticipated to be very minimal and "No Right Turn on Red" should be established.

Attachments:

1. Site map



New: VTRANS High-Volume Crossbike Marking (See Detail Sheet)

PROPOSED
NO
TURN
ON
RED

Remove and Reposition

New: Bike Box. MMA Paint. See Detail Sheet

Remove Left Turn Lane

Existing: Protected Bike Lane

N Union Street

S Union Street

26'

46'

26'

50'

27'

10'

20'

35'

34'

3D



COMMUNITY & ECONOMIC DEVELOPMENT OFFICE

149 CHURCH STREET • ROOM 32 • CITY HALL • BURLINGTON, VT 05401
(802) 865-7144 • (802) 865-7024 (FAX)
www.burlingtonvt.gov/cedo

Noelle MacKay
Director, Community & Economic
Development Office



Chapin Spencer
Director, Public Works
Norman J. Baldwin, P.E.
Asst. Director Public Works

MEMO

TO: DPW Commission

FROM: Kirsten Merriman Shapiro, Senior Policy and Project Specialist, CEDO
Laura K. Wheelock P.E., Public Works Engineer

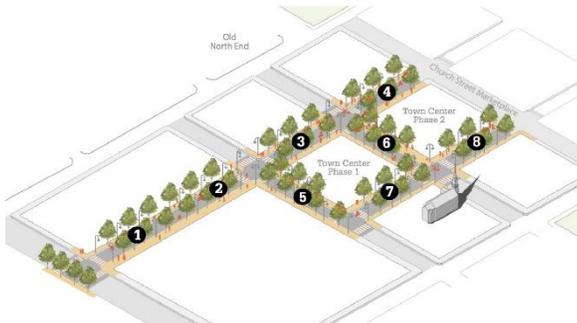
RE: Great Streets Bank and Cherry Street – Concept Plans

DATE: April 13, 2018

Bank and Cherry Streets Public Improvements

As part of Burlington’s ongoing effort to reinvest in our downtown and engage our community, we invite you to learn more about proposed improvements to Bank and Cherry Streets and upcoming public meetings. In 2016, Burlington voters approved [\\$22M in Tax Increment Financing \(TIF\)](#) for purchasing the reconstructed St. Paul and Pine Streets and improvements to Cherry and Bank Streets. The CityPlace Burlington (CPB) developer will be designing and constructing the new segments of St. Paul and Pine Streets prior to the City’s acquisition of these streets. The City is developing the conceptual designs for the future of Bank and Cherry Streets using the Great Streets Standards for Burlington’s Downtown. This is about place, space and designing a downtown for all Burlingtonians.

The City will be developing the conceptual designs for Bank and Cherry Streets, which can include the following:



- Cherry Street Streetscape Upgrades, including streetscape, stormwater, utility, lighting and multimodal transportation improvements.
- Bank Street Streetscape Upgrades, including streetscape, stormwater, utility, lighting and multimodal transportation improvements.

TIF will be used for public improvements to 8 street segments (above) around the CPB Site.

Design Process and Schedule

The City kicked off the design process for Bank and Cherry Streets in early 2018 utilizing the [Great Streets Design Standards for Burlington's Downtown](#) to generate the goals for the project and the base concept. The primary goals for the Streets are:

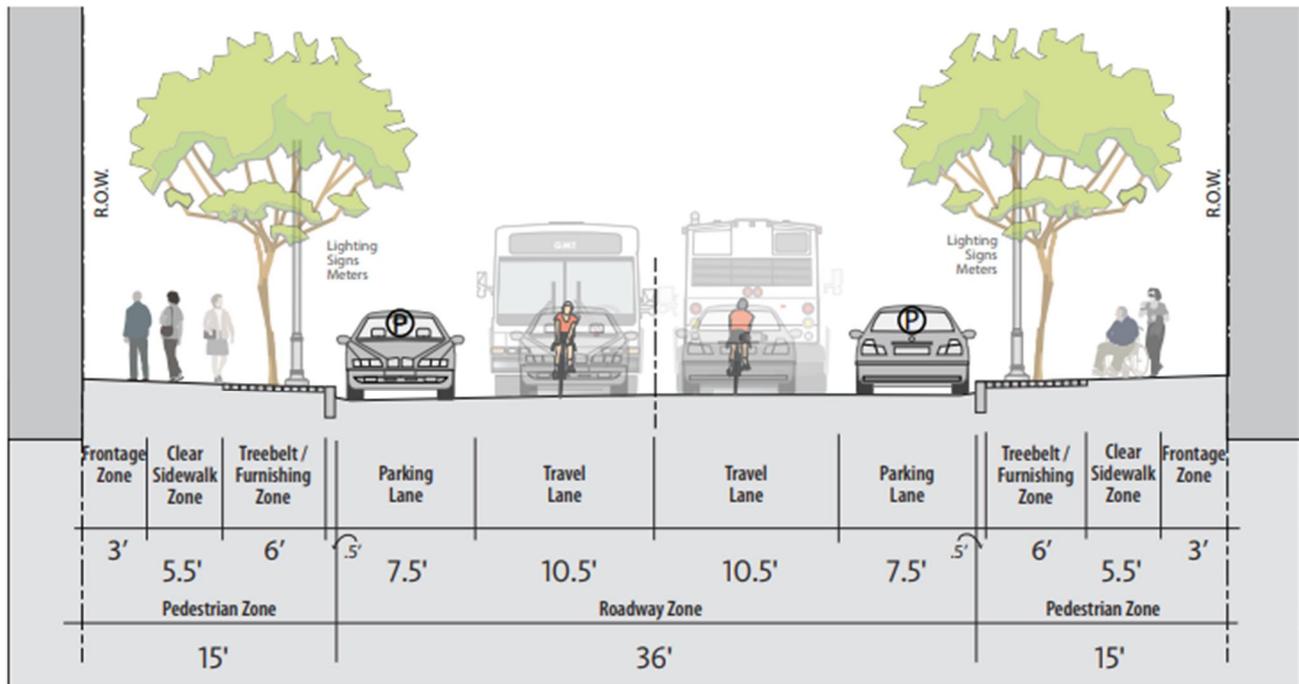
- Walkable and bikeable — safe for all modes and all levels of accessibility
- Sustainable — both environmentally sustainable, and long-lasting
- Vibrant — to support the downtown's diverse range of public and private activities
- Functional — work for all users, flexible, can be maintained, affordable

To balance the use public right of way among all users, pedestrians, motor vehicles, transit vehicles, bicycles delivery vehicles and utilities, where applicable the base concept will use the cross sections below.

Cherry Street

Commercial Slow Street with Transit (66' ROW, 36' Roadway)

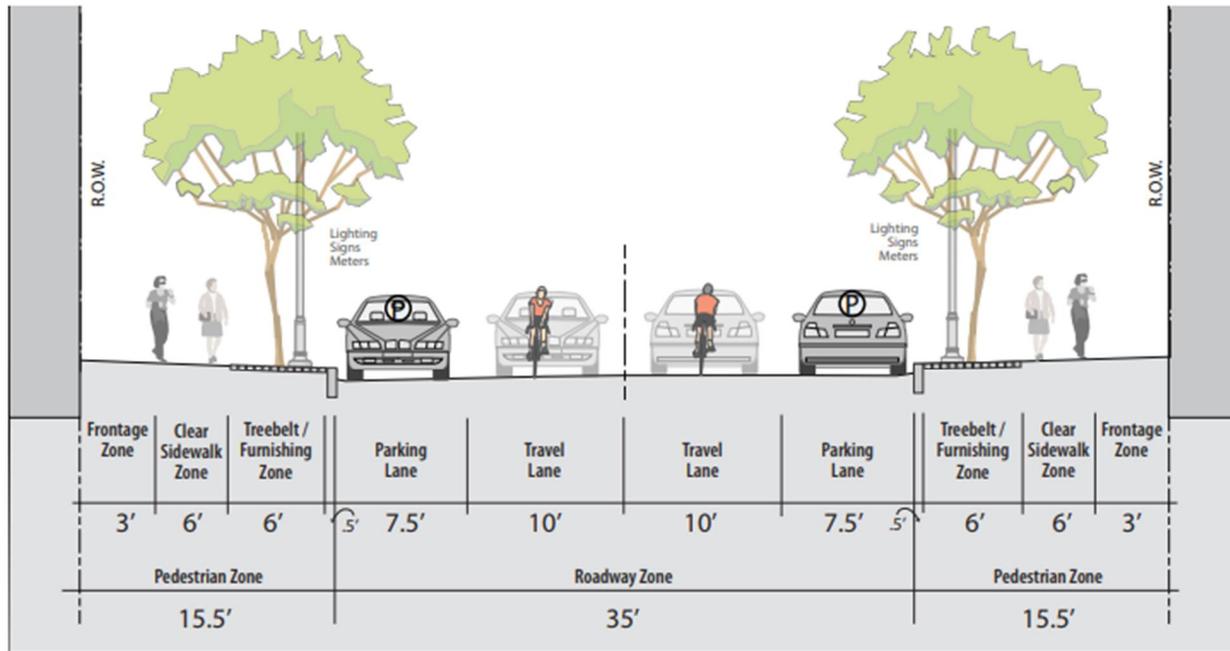
36' Roadway Zone—30' Pedestrian Zone



Bank Street

Commercial Slow Street (66' ROW, 35' Roadway)

35' Roadway Zone—31' Pedestrian Zone



Street Design Concept Plans

Draft conceptual plans have been developed for the two segments of Bank Street between Church and Pine Streets and for the four segments of Cherry Street between Church and Battery Streets. Initial draft base design concepts, and two design options for the potential intersection of Bank and St. Paul Streets are included as attachments.

We are seeking feedback focused on layering of streetscape amenities over the base design. These were the questions discussed in small groups with some sample images of possible amenities. We hope that people who were not able to join us at the public meetings will find these questions and examples via the website or by providing comments to us directly.

We have provided three weeks for public feed back with the comment period closing on April 30, 2018.

The City will also solicit feedback through various public meetings and outreach to abutting property owners and businesses. This process is time sensitive and the time for public participation and providing focused feedback is primarily in the month of April.

Events / Meetings

- April 18, 2018 - Public Works Commission Presentation at 6:30 at 645 Pine Street
- Late April (TBD) 2018 - Transportation Energy and Utility Committee Presentation, Approval and Recommendation
- May 16, 2018 - Public Works Commission Presentation at 6:30 at 645 Pine Street, Approval and Recommendation
- May 21, 2018 - City Council Presentation and Approval

Past Event/Meetings

- April 11, 2018 – Neighborhood meeting with Businesses and Property Owners
- April 10, 2018 - Public Meeting on Bank and Cherry Street Design Concepts, with presentation material posted on the website
- March 27, 2018 - Introduction of the base Bank and Cherry Street design concepts to the [Transportation Energy and Utility Committee](#)

If you have additional questions about the Great Streets Bank and Cherry Street Project or any of the individual efforts included in this phase of work, please feel free to contact any of the project managers directly:

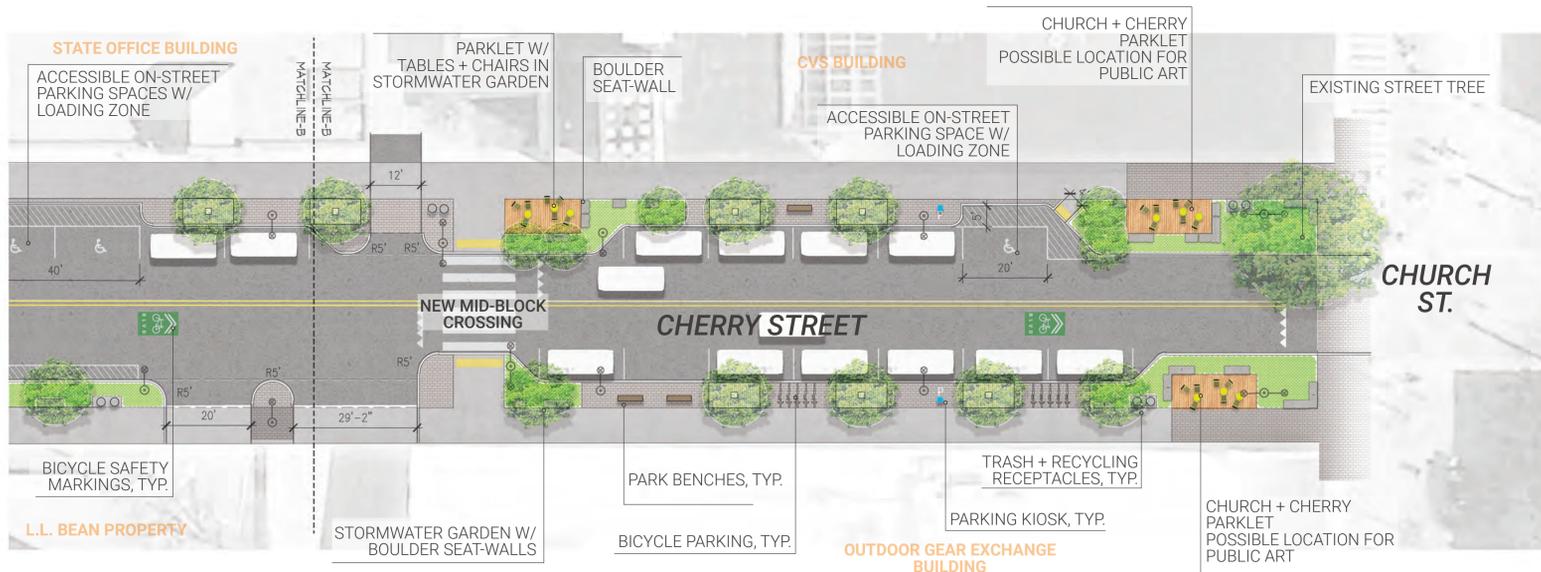
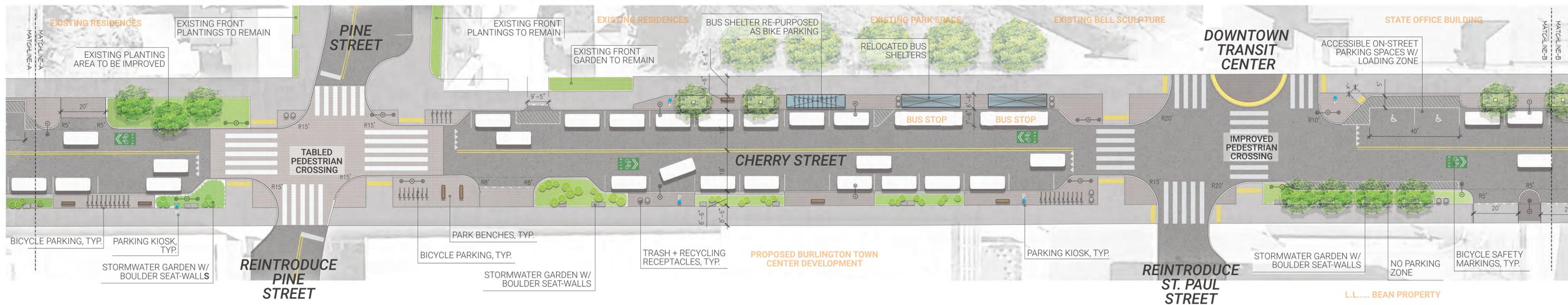
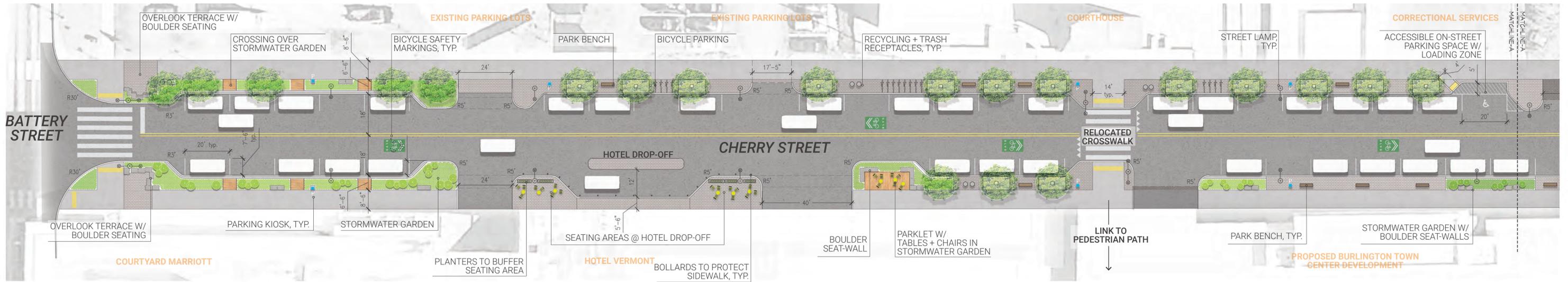
Laura Wheelock, lwheelock@burlingtonvt.gov or 802-540-0397

Kirsten Merriman Shapiro, kmerriman@burlingtonvt.gov or 802-865-7284

Thank you.

CHERRY STREET CONCEPT PLAN

Initial Concept Plan presented to community on 4/10/18 at Contois Auditorium and on 4/11/18 at Burlington City Arts



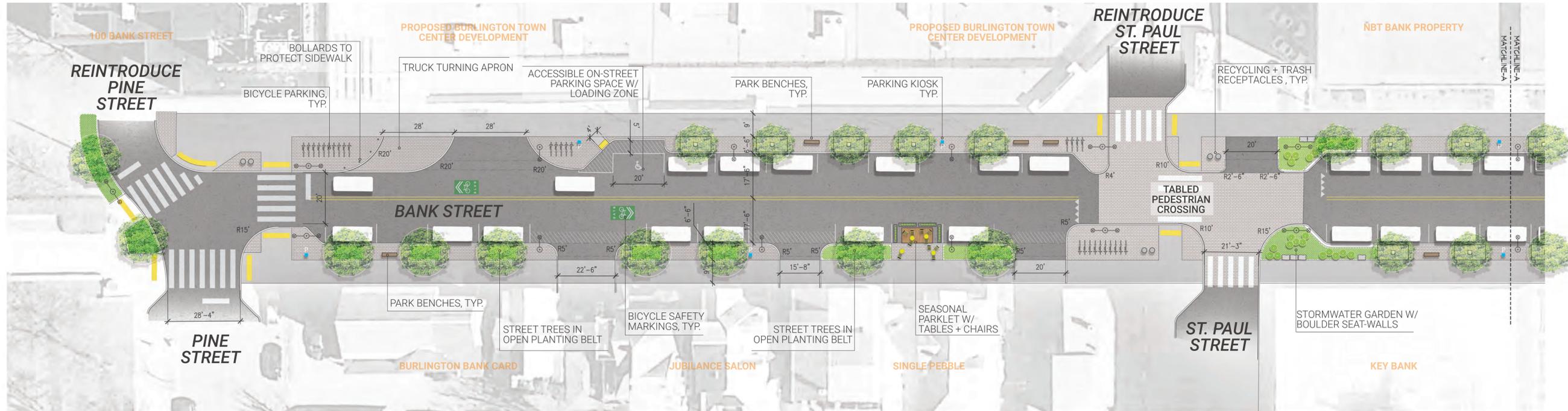
LEGEND

- TRASH + RECYCLING RECEPTACLES
- BOLLARD
- PARKING KIOSK
- PLANTED AREA
- BICYCLE PARKING
- BOULDER SEAT-WALL
- BICYCLE SAFETY MARKINGS
- STREET LAMP
- PARK BENCH
- PLANTER BOX
- MOVABLE TABLES AND CHAIRS



BANK STREET CONCEPT PLAN

Initial Concept Plan presented to community on 4/10/18 at Contois Auditorium and on 4/11/18 at Burlington City Arts



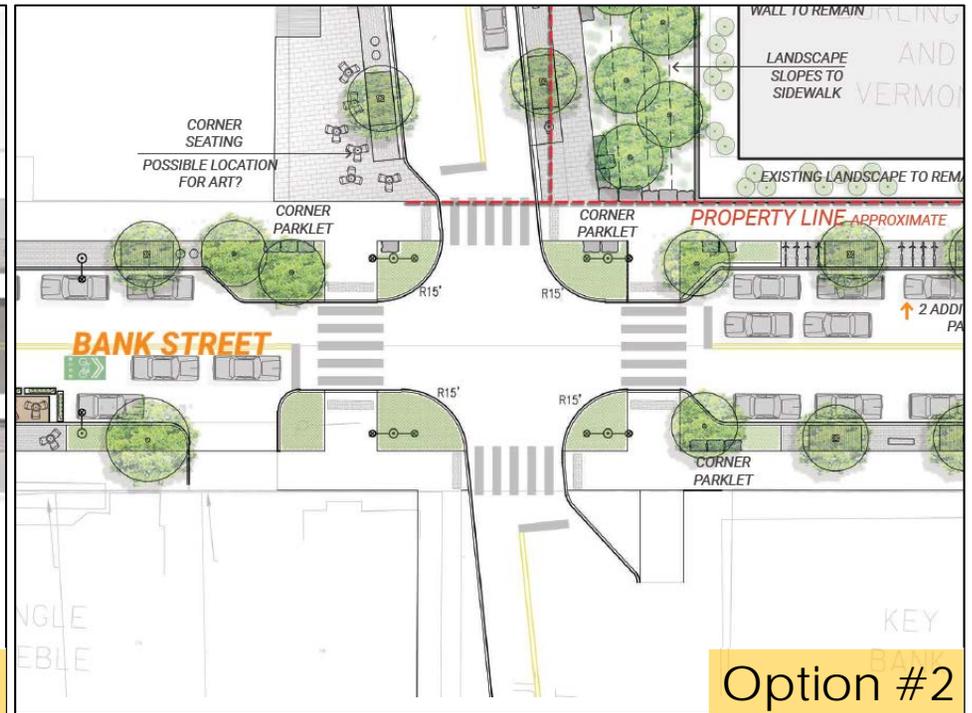
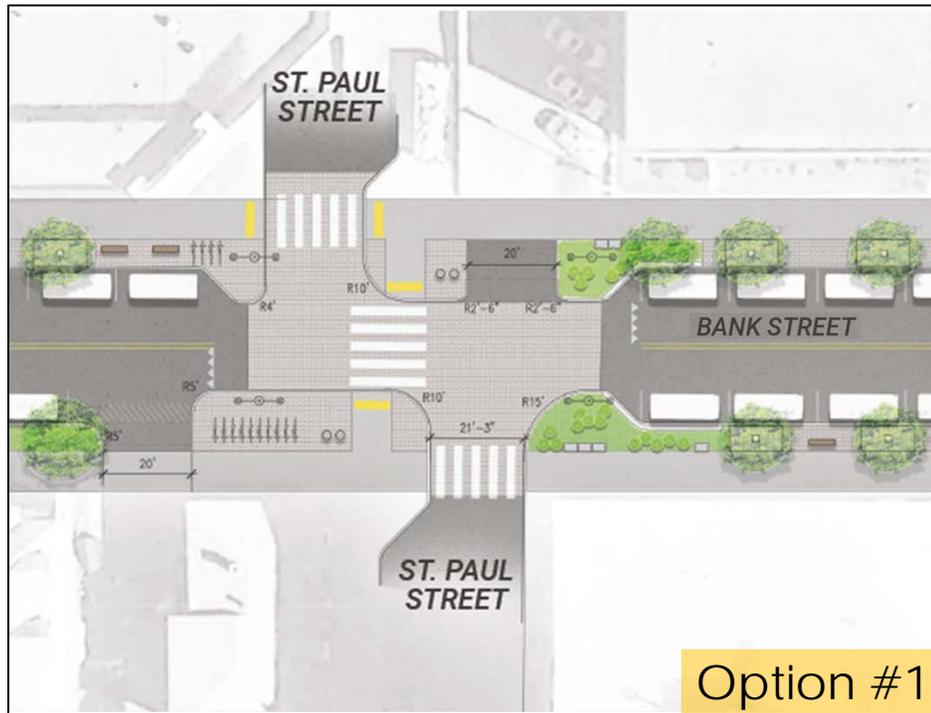
LEGEND

- | | | | |
|--|-------------------------------|--|-------------------|
| | TRASH + RECYCLING RECEPTACLES | | BOLLARD |
| | PARKING KIOSK | | PLANTED AREA |
| | BICYCLE PARKING | | BOULDER SEAT-WALL |
| | BICYCLE SAFETY MARKINGS | | STREET LAMP |
| | PARK BENCH | | PLANTER BOX |
| | MOVABLE TABLES AND CHAIRS | | |



St. Paul & Bank Street - Option Comparison

Presented to community on 4/10/18 at Contois Auditorium and on 4/11/18 at Burlington City Arts



Benefits:

- Can be constructed within City ROW

Considerations:

- Offset intersection can be confusing for pedestrians, bicycles, buses, and motorists
- Bank egress located in middle of intersection

Benefits:

- Intersection alignment more predictable for all users
- Accommodates bus movements
- Eliminates driveway within intersection
- Provides opportunity for public placemaking at northwest corner
- Improved access for emergency vehicles

Considerations:

- Requires easement from adjacent property



City of Burlington
Department of Public Works
Water Resources Division
235 Penny Lane
Burlington, VT 05401
802.863.4501 P
www.burlingtonvt.gov/DPW

Chapin Spencer
PUBLIC WORKS DEPARTMENT DIRECTOR

Megan Moir
WATER RESOURCES DIVISION HEAD

To: City Council
Public Works Commission
Mayor Miro Weinberger
Fr: Chapin Spencer, Director
Megan Moir, Assistant Director – Water Resources
Re: Water & Wastewater Billing Issue – Update and Next Steps
Date: March 20, 2018

Executive Summary:

- In November 2017, while reviewing water usage for an account at UVM’s request, DPW Water Resources identified a significant overcharge issue for the compound water meter at University Heights – South Complex.
 - The overcharge was the result of an error at the time of installation, which has now been corrected.
 - DPW alerted the Mayor’s Office, CAO, City Attorney, City’s auditor, and the credit rating agency. Given the limited operational impact the overbilling represented, the update did not impact Moody’s decision to upgrade the overall City credit rating to A2.
 - In addition, DPW put in place new protocols for compound meter installation and all account creation and change activity and alerted the City Council.
 - DPW has met with UVM to begin discussions regarding repayment of this overbilling.
- Additionally, because this compound meter overbilling issue was the second such issue identified in a short time period, DPW retained, with the Council’s approval, KPMG to conduct a systematic review of all City compound meters. Please see Attachments A and B for previous communications to the Board of Finance and Council that provide additional background detail.
 - That review identified 5 additional significant anomalies out of the remaining 98 compound meters which have resulted in overbilling some customers and underbilling others. (See Table 1 for a Summary and Attachment C for KPMG report)
 - In addition, on-going internal reviews of compound meter and a limited number of single head meter accounts have discovered an additional 9 account configuration errors (due to incorrect installation or incorrect billing system data), 6 stopped meter heads and 2 instances of damaged or tampered meter heads that have impacted how much customers were charged.

- In total, these newly identified issues include significant underbilling of 9 accounts and overbilling of 4 accounts (no impact for 4 accounts), although none to the magnitude of UVM's University-Heights South Complex. (See Attachment D)
 - Given that these errors were, at their root cause, due to human error, we have concluded that they can reasonably be prevented in the future by 1) improved internal controls (verification of field installations and account data changes by a separate staff person) and 2) photo documentation.
 - However, due to the diversity of the errors and the potential that more could exist, DPW believes it is prudent to conduct an overall systematic review of our water meter billing system.
- While DPW is confident that the new protocols we are implementing since identifying the initial error should prevent future meter issues, KPMG's initial review our draft comprehensive SOPs do reveal areas where we could make additional improvements. This, in conjunction with our commitment to billing accuracy, leads us to conclude that an organizational assessment focused on Water Resources' revenue assurance (including business processes and organizational structure/resources) and development of a continuous improvement plan would be of lasting value to the City and its Water Resources rate payers.
 - DPW values its customers, the residents of Burlington, above all else. We believe this additional, organizational assessment of the Water Resources system should be conducted in conjunction with an independent expert procured through a qualifications-based RFP. We plan to release this RFP by April 23. The RFP will be written to allow for additional phases of analysis into different aspects of Water Resources' work, but the primary focus will be on revenue assurance given the KPMG findings.
 - This memo serves to 1) summarize the findings of the attached KPMG report 2) provide information regarding other internal findings from our on-going internal review 3) summarize our analysis of the underlying causes, the immediate actions that we have already taken 4) identify next steps in the continuous improvement of our meter/billing program 5) request Council action on the approval of our proposed Billing Correction Policy and authorization to negotiate repayment plans with affected customers.

1. DPW/KPMG Compound Meter Assessment:

Since the initiation of work with KPMG in December of 2017, the following activities have occurred:

- DPW Water Resources inspected and compiled data for all 98 non-seasonal compound meters¹
- KPMG completed review of compound meter inspection data and performed validation inspections for 10 of the 98 meters to confirm that data was collected accurately by DPW staff.
- KPMG completed procedure review and provided initial recommendations regarding improvements to recently drafted (June 2017) Draft SOPs

DPW/KPMG Key Findings:

The DPW/KPMG Assessment process identified 5 significant anomalies among the 98 compound meters that have financial implications – see Table 1 below.

Additionally, KPMG flagged 17 meters which are in need of minor data corrections (no financial implications) in the billing system, including issues such as:

¹ One of the 99 compound meters is a seasonal meter at Starr Farm. This meter was pulled for the winter season prior to the beginning of the inspection period.

- Billing system lacks full service address details or uses building name rather than address
- Small head size in field not matching the billing system (no financial implication because there is no billing difference for a 5/8" vs. 3/4" meter).
- Unable to verify meter serial ID number from inspection photo (the meter itself does not have financial implications, as long as the head and radio box information is validated)

Please see Attachment C for KPMG’s full report.

Table 1: Meter to bill configuration errors identified by KPMG/DPW Meter Assessment process

	Meter	Reason for Failure	Customer and Explanation/Financial Implication
1	70074348	Large head wired to incorrect radio box; large head dial reading not reflected correctly in billing system	Subtraction meter and Large Head Radio Box MIUs crosswired. Financial implication \$164,557 net <u>overbilling</u> .
2	70092638	Large head size inaccurate in billing system	Billing System has 4" LH recorded but 3" in field. Financial implication \$35,903 <u>overbilling</u>
3	70093641	Large head size inaccurate in billing system	Billing System has 4" LH recorded but 3" in field; however, there are no financial implications because rate table (not evaluated by KPMG) set for 3" head.
4	70114744	Large and small head dial readings are not reflected accurately in billing system	6" large head, set up for 1 standing zero in billing system, in field there are 2 standing zeroes. Financial implication: \$234,865 <u>underbilling</u> and additionally (identified separately) small head confirmed to be stopped –\$14,239 <u>underbilling</u> .
5	70343418	Meter tied to incorrect customer (via service address) in billing system	Due to incorrect work order installation paperwork, billing system showed two meters installed at service location X and 1 meter at service location Y); in the field, 2 meters were installed at Y and 1 meter at X. Financial implication: <u>Net zero to Water/Wastewater</u> . Customer X will be given a credit for the \$314.30 they have paid to date (2/12/18) and that consumption will be charged to Customer Y.

2. Additional Internal Findings:

As part of DPW’s on-going increased internal review prior to, concurrent with and subsequent to the KPMG process, DPW Water Resources has identified and corrected the following additional issues on compound and single head meters. (see Attachment D for a table of all issues with potential financial implications discovered to date, inclusive of those in Table 1):

- Subtraction meter accounts configuration error
- 6" single meter head account configuration error
- Radio box crosswire
- Application of minimum charges

- Stopped meter registers² on compound meters
- Damaged/altered meter heads

Customer information has been redacted from the table in Attachment D as all customers have not yet been informed of these underbill/overbill issues.

DPW Water Resources staff have also identified a potential need for a shift in current ordinance interpretation/billing practice for how we apply minimum charges on compound meters. Staff are currently evaluating simpler and more efficient ways of capturing this “fixed” (vs. volumetric) revenue.²

Summary Statistics of All Issues Inclusive of Original Issue:

- Configuration (field and/or billing) errors for compound meters: 8 meter systems
- Configuration error for single head meters (inspected thus far): 2 meter systems
- Damaged/altered compound meter heads: 2 meters
- Stopped meter registers² on compound meters: 6 meters
- Total Net Over/Underbilling without UVM South original overbilling: \$434,403.14 owed to City

3. Looking Forward: Assessing Weaknesses and Finding Opportunities:

While the issues discovered to date impact only a small percentage of our total customer base, we strive for 100 percent billing accuracy. These issues have provided us the opportunity to closely examine our current business practices in the Water Resources Division and identify improvements in support of 1) maximizing consumer confidence through transparent and accurate billing processes and 2) minimizing any future revenue volatility or financial liability.

Root Cause Analysis of Billing Issues:

A specific root-cause analysis has been completed for each error. The issues identified thus far can be traced to the following system level causes:

- Human errors not caught due to lack of sufficiently robust and clear standard operating procedures that detail internal controls (such as verification of data by another staff person)
- Information silo-ed between billing services, field services, and engineering services
- Lack of well-defined and clearly prioritized revenue assurance program (billing errors prevention/troubleshooting; maximization of accuracy of meters through meter replacement planning; up to date meter technology evaluations; meter sizing/selection process; periodic meter testing programs)

Initial System Improvements to Address Root Causes:

- Development of the following draft/working SOPs:
 - Internal Controls
 - Compound meter installations shall be witnessed by two field staff members

² Stopped meters are a common issue for water utilities, especially those with older meter stock and in older distribution systems with tuberculation (naturally forming rust aggregation in pipes) which can cause slowing of the meter (meter reads less water than is being used) and in some case stoppage (failure to register any water usage). Stopped meters do not affect the flow of water to the customer. However, in our review of compound meter accounts we found some meters that had been stopped for a significant period of time without resolution. Thus the issue is not stopped meters per se, but rather the lack of timely resolution of these issues.

² Fixed revenue is an important component of many utilities financial strategy to provide more revenue stability and mitigate risks of revenue volatility. A current recommendation from our utility financial consultant involves doing away with minimum charges and moving to the industry standard approach for recovering fixed costs via revenue a stand-alone fixed (readiness to serve) charge by meter size. The impact of this approach (and its impact on various types of customers) is being evaluated as part of FY19 budgeting and would be vetted with the Council prior to implementation.

- All billing account changes and creations to be reviewed by two billing staff
 - Requirement for photo documentation in meter installation and troubleshooting process to bridge information gaps
 - Stopped meter resolution procedure
- Initial meetings and on-going collaboration between billing services, field services and engineering services

Future Improvement Plan:

While DPW is confident that we have resolved all identified issues with our compound meters and that the new protocols that we have put in place since identifying the initial error should prevent future compound meter issues, we do believe an additional independent assessment of existing revenue assurance and business processes work is warranted, along with a systematic review of our remaining meter accounts.

As such we are preparing a qualifications-based RFP (to be released by April 23, 2018) to hire a consulting firm with water resource utility business process and revenue assurance programmatic experience to accomplish the following in the coming months:

- **Organizational Assessment and Improvement Plan:**
 - Review SOPs and business practices
 - Review organizational structure and staff resources
 - Recommend improvements in support of the creation and maintenance of a sustainable and robust revenue assurance program
 - Proposal/cost estimate for support of mid-term and long-term continuous improvement strategies
- **Continued Meter Assessment Plan:**
 - Field visits to additional meters to verify accurate data collection and billing configuration
 - Initial focus on larger, multiple meter customers including but not limited to UVM, UVM Medical Center and Champlain College, as well as City buildings
 - Conduct meter technology evaluations to determine if technology improvements might assist in furthering revenue assurance goals so that technology upgrades might be accomplished simultaneously with meter assessments

DPW will report back to the City Council on progress made on these actions within 90 days (6/26/2018).

4. Billing Corrections and Refunds Policies

As part of the correction, the Water Division has drafted policies on how to address repayment for billing corrections and what notifications and approvals are necessary when refunds are made are detailed in Attachment E.

Billing Corrections Policy

As part of moving forward with the resolution of both overbilling and underbilling issues detailed in the Table in Attachment D and any issues we may find in the future, DPW Water Resources Division has drafted a recommended policy for how to address repayment both from DPW-Water Resources to the customer and to DPW-Water Resources from the customer. This policy is based on 1) existing ordinance language regarding stopped meters 2) ensuring that all ratepayers are treated fairly and 3) general consistency with past practice.

5. Resolution of Billing Corrections Discovered to Date

University of Vermont

- DPW Director Chapin Spencer and Assistant Director Megan Moir met with UVM on 3/1/2018 to discuss the University Heights – South overbilling and share the preliminary results of the KPMG/DPW Assessment and our other internal findings.
- Within the six-year statute of limitations period totals \$2,018,733.50 (\$814,507.66 for Water and \$1,204,225.84 for Wastewater)
- The additional issues discovered to date at UVM within the six-year period represent a net additional overbilling of \$46,782.78 owed to UVM.
- We are seeking authorization to negotiate a repayment plan with UVM through approval of the Motion below.

Other Customers

- The remaining meter issues (non-UVM customers) represent a net underbilling of: \$481,185.93 owed to City
 - Range of overbilling: \$2,845 to \$35,903 owed to customers
 - Range of underbilling: \$8,619 to \$256,456 owed to City
- In the coming weeks, DPW will be notifying and meeting with the additional affected customers where meter/billing issues have been identified. DPW will be developing refund/crediting plans for overbilled customers and repayment plans for underbilled customers in accordance with the policy discussed in Section 4 and detailed in Attachment E.

6. Request for Approval on Following Motions:

Motions for Board of Finance

To recommend to the City Council that it:

- 1) Authorize the DPW Director to enter into agreements to repay UVM and the other listed customers for the net amount overbilled by the Water Division as outlined in the March 20, 2018 memorandum and accompanying documents, subject to the approval of the Chief Administrative Officer and City Attorney; and
- 2) Authorize the DPW Director to enter into agreements to receive repayments from those customers who were underbilled, as outlined in the referenced documents, subject to the approval of the Chief Administrative Officer and City Attorney.

Motions for City Council

- 1) To authorize the DPW Director to enter into agreements to repay UVM and the other listed customers for the net amount overbilled by the Water Division as outlined in the March 20, 2018 memorandum and accompanying documents, subject to the approval of the Chief Administrative Officer and City Attorney; and
- 2) To authorize the DPW Director to enter into agreements to receive repayments from those customers who were underbilled, as outlined in the referenced documents, subject to the approval of the Chief Administrative Officer and City Attorney.

Don't hesitate to contact either of us prior to the Board of Finance and City Council meetings. Thank you.



City of Burlington
Department of Public Works
Water Resources Division
235 Penny Lane
Burlington, VT 05401
802.863.4501 P
www.burlingtonvt.gov/DPW

Chapin Spencer
PUBLIC WORKS DEPARTMENT DIRECTOR

Megan Moir
WATER RESOURCES DIVISION HEAD

MEMORANDUM

To: City Council
Fr: Chapin Spencer, Director
Megan Moir, Assistant Director – Water Resources
Re: Water & Wastewater Billing Issue – Analysis and Next Steps
Date: December 1, 2017

Overview

Approximately two weeks ago, in the course of investigating UVM's request to review the compound meter at University Heights – South Complex, DPW staff identified a likely billing error. For explanation, compound meters have two meter heads to handle the continuum of flows (ranging from small to large) typical of larger buildings and commercial customers. Based on our current understanding, it seems that when the University Heights – South Complex account was established in 2006, the radio box identification numbers for the small and large meters were transposed when entered into our billing system. As a result, account #70053600, set up for the large meter head, was recording and billing the readings from the small meter head resulting in overcharge on that account. Account #70053590, set up for the small meter head, was recording and billing the readings from the large meter head resulting in an undercharge on that account.

It appears that this error has resulted in a substantial net overcharge of over \$2 million to UVM for these metered accounts for Water and Wastewater. We have notified UVM of this issue, as well as the City's auditor and Moody's – our credit rating agency. While a significant issue, the total overbilling accumulated over a number of years and the City's credit rating agency upgraded the City's credit rating to A2 even after being alerted to this issue.

A billing issue of this significance demands a full and timely response. DPW management immediately alerted the City Attorney's Office, Chief Administrative Officer, and Mayor's Office after uncovering the 2006 error. At the direction of the Mayor, DPW has moved quickly to procure an independent third-party assessment of our compound meter system, conducted an intensive investigation into this issue, and reviewed and improved internal operational procedures. This comprehensive review by a third party as well as DPW staff will determine whether any additional compound meter issues exist and implement enhanced controls moving forward to protect against these errors.

After completing the preliminary investigation, DPW notified UVM Physical Plant on November 22 of this billing anomaly. We also told them that we would hold the upcoming bills on the University Heights accounts until the issue was better understood. We said we would be back in touch by December 15, 2017 with more information.

Additional Information on the Compound Meter System

There are 99 compound meters in the City's water distribution system. These meters represent a small percentage of the approximate 10,000 accounts city wide, but the compound meters represent a substantial portion of our community's water usage and resulting revenue to the Water and Wastewater enterprise funds. Given that the compound meters each have two meter heads, there is more complexity in the installation and billing set-up for these accounts.

This error marks the second issue we have uncovered related to the installation of a compound meter years ago. In October 2017, Councilors may recall that DPW made a presentation to the Board of Finance outlining a City refund to a commercial customer (Zero Gravity) when we discovered an installation documentation error in the compound meter serving that business. In this case, the error was different than that which caused the overbilling for UVM in that the radio box identification numbers were transposed on the installation documentation – resulting in a similar situation of overcharging the customer. As a result of this error, DPW Water Resources initiated an internal policy regarding compound meter installations that require two meter technicians to be present for the meter installation and radio box wiring – and for both meter technicians to confirm and sign off on the installation paperwork to ensure the radio box identification numbers are correctly listed.

Looking Forward: Assessing Weaknesses and Finding Opportunities

The UVM billing initiation error, while separate and distinct from the Zero Gravity installation issue, shares some common attributes that indicate the need for an in-depth review to ensure there are no additional issues. Our full system review will include:

- 1. Revising Policies & Procedures:** Earlier this year, in response to a FY2015 Audit Management Letter item (#3), DPW Water Resources worked with the Clerk/Treasurers office and auditing firm Sullivan & Powers to complete an internal audit of our Billing Standard Operating Policies and Procedures (SOPs). While these SOPs are still pending final review and acceptance, over the past week we have further enhanced our written policies and procedures to further codify distinct procedural improvements and strengthen internal controls particularly around compound meters. Additional controls may be recommended and incorporated through the third-party assessment below.
- 2. Hiring an Auditing Firm to Conduct an Independent Third-party Assessment:** We sought three assessment proposals, received two and are bringing KPMG's proposal forward for the Board of Finance's consideration on December 4th to undertake the scope of work summarized below. The full letter of engagement is in the Board of Finance packet. Staff recommends utilizing the fund balance from Water and Wastewater funds to pay for this assessment. The scope includes:
 - 1) Reviewing the installation and proper billing account set-up for our 99 existing compound meters – with an initial priority on UVM's 25 compound meters.
 - 2) Reviewing the meter-to-bill process, providing findings on any material weaknesses, and recommending further revisions to our policies and procedures that we will then implement.
- 3. Delivering Timely and Comprehensive Reports:** We will provide the Mayor, City Council, the Public Works Commission and our customers a full update report prior to the end of 2017 on our

findings and progress resolving outstanding issues. We will report every 60 days thereafter until we close out any remaining items on our punch list.

The customer is at the core of all we do at DPW. Team DPW is fully resolved to find the problems, address all identified issues, and work diligently to not let them happen again. We do want to commend DPW Water Resources staff for their effort to uncover and report these issues and quickly move to implement additional controls to strengthen our metering and billing systems.

Please don't hesitate to contact us with any questions. Thank you.



Water Resources Division Meter Billing Corrections Policies

There are multiple types of issues that may result in an over or underbilling of Water and/or Sewer customers:

1. Stopped meter (underbilling)
2. Tampered meter (underbilling)
3. Damaged meter (underbilling)
4. Configuration errors (meter is operating properly)
 - a. Not charging a customer for sewer service when they are connected to municipal sewer system (underbilling)
 - b. Incorrectly assigning water rate to sewer service or vice versa for one or more services (under or overbilling)
 - c. Incorrect billing configuration related to # of fixed zeros on meter (under or overbilling)
 - d. Cross-wiring or configuration of compound, subtraction or other meters (under or overbilling)

While usage for a stopped, damaged, or tampered meter must be estimated, configuration errors occur where the meter is operating properly, so can generally be directly calculated by correcting how the readings were billed.

Credits/Refunds for Overbilling:

Generally, it is the policy of the Water Resources Division that any overbilled amounts will be credited (or refunded at the customer's request) within the 6- year statute of limitations period. The City will generally try to repay or credit the customer within the fiscal year in which the error was discovered. However, if the credit or repayment amount is more than \$10,000, the City may spread the repayment or credit over time, taking into consideration factors such as the length of time over which the error occurred, the amount of the overbilling, the situation of the customer, and the financial health of the Water and Wastewater Divisions, but absent extreme circumstances will complete the credit or repayment within six years from discovery.

When a refund or credit is issued that involves a) an estimate, b) an amount over \$1000, c) less than the total amount overbilled to the customer, or d) a plan for repayment over time, the Division must consult the City Attorney's Office who may require documentation in writing reflecting the customer's agreement with a plan or acknowledgment that all sums owed have been paid.

Underbilling: Backbilling for Stopped, Tampered, or Damaged Meters

Chapter 31 requires that back charges be calculated and assessed when a meter has stopped due to mechanical failure or tampering (removal of head, damage to head etc.)

31-47 Faulty meter.

If from any cause a meter fails to register the amount of water passing through it, the owner shall be charged at the average daily rate as shown by the meter when in order.

(Rev. Ords. 1962, § 6023; Ord. of 8-10-15(1))

When calculating the “average daily rate as shown by the meter when in order” the Division will consult the calculation methodologies in the Division’s “No Consumption SOP” to determine which average daily rate most accurately reflects the expected rate during the period of stoppage.

In the case where a meter has been intentionally tampered with or damaged, the City reserves the right to pursue additional remedies.

Underbilling: Backbilling for Configuration Errors

In order to be consistent with past practice and ensure equity among all the Water Resource rate payers, generally any underbilled amounts will be back billed to the account in question within the 6 year statute of limitations period.

In cases where a customer has been underbilled and thus owes the City money, the Water Resources Division will work with the customer to develop an appropriate repayment plan specifying a repayment period, taking into consideration factors such as the length of time over which the error occurred, the amount of the overbilling, the situation of the customer, and the financial health of the Water and Wastewater Divisions. Repayment should be expected on a regular basis so as to be completed as soon as possible, but should generally be spread out no longer than the period for which the charges are being assessed.

When back billing is to be issued that involves a) an estimate, b) an amount over \$1000, c) less than the total amount underbilled to the customer, or d) a plan for repayment beyond the fiscal year, the Division must consult the City Attorney’s Office who may require documentation in writing of the arrangement or acknowledgment from the customer that all amounts owed have been paid.

Approval for Refunds:

A refund request memo originated by a Customer Service Associate (CSA) must be discussed with and signed by the Utility Billing Administrator (UBA). Likewise, a refund request memo originated by the UBA must be signed by the Water Resources Division Head.

- (a) When a refund is processed in excess of \$1,000 or the same customer receives more than one refund in a fiscal year totaling \$1,000 (cumulative to all three funds), a refund report detailing the amounts and customers is emailed to the both the Water Resources Division Head and the Director of Public Works at the end of the month in which it was processed. The Division Head or Director will notify the CAO and City Attorney.
- (b) All AP batches for Water Resources are reviewed and approved by the Water Resource Division Head and then submitted for processing to the City Hall Finance Team.

- (c) Any refund in excess of \$50,000 must have prior approval by the Board of Finance before being issued.
- (d) Any refund in excess of \$100,000 must have the prior approval by the Board of Finance and City Council before being issued.



City of Burlington
Department of Public Works
Water Resources Division
235 Penny Lane
Burlington, VT 05401
802.863.4501 P
www.burlingtonvt.gov/DPW

Chapin Spencer
PUBLIC WORKS DEPARTMENT DIRECTOR

Megan Moir
WATER RESOURCES DIVISION HEAD

To: City Council
Public Works Commission
Mayor Miro Weinberger
Fr: Chapin Spencer, Director
Megan Moir, Assistant Director – Water Resources
Re: Water & Wastewater Billing Issue – Update and Next Steps
Date: December 29, 2017

In our December 1, 2018 communication on the Water & Wastewater Billing Issue to the Board of Finance, we pledged to provide a “full update report on our findings and progress resolving any outstanding issues prior to the end of 2017”. This communication provides the end-of-year update. Previously provided information is reiterated in the “Background” section following the update.

Recent Progress and Next Steps:

1. Revising Policies and Procedures
 - a. The updated Billing Standard Operating Procedures and Policies document has been provided to KPMG for their review.
2. Third Party Assessment
 - a. A letter of engagement was executed with KPMG (see “Letter of Engagement”)
 - b. An initial kickoff work session was held December 11 – 13 with Water Resources and KPMG. Outcomes included: Training for KPMG on compound meter technology, Flexibill Billing system, review of existing SOPs, development of electronic form for inspection of meters, development of data comparison process, visit of a compound meter in the field to test inspection protocols. (See “Workshop Notes”)
 - c. To date, 26 of the 99 compound meters have been inspected, including 13 at UVM.
 - d. Additional UVM meter inspections are scheduled for the week of January 2.
 - e. An additional 31 meter inspections have been scheduled.
 - f. Next Steps: Continue completing and scheduling meter inspections. Select 10 sites for validation inspection by KPMG and complete validation inspection. KPMG to compare field data with billing date export.
3. Delivering Timely & Comprehensive Reports
 - a. We will deliver our next report on/before February 28. It is expected that the Compound Meter Assessment will be substantially complete by that date.

An Equal Opportunity Employer
This material is available in alternative formats for persons with disabilities. To request an accommodation, please call 802.863.9094 (voice) or 802.863.0450 (TTY).

Our current goal is to complete the Third Party Assessment by the end of January. However, scheduling challenges related to the holiday season may push the completion of the assessment into the first part of February. That being said, we have benefitted from substantial cooperation by our compound meter customers in scheduling the meter inspections.

Please do not hesitate to contact us with any questions. Thank you.

Background:

In mid-November, in the course of investigating UVM's request to review the compound meter at University Heights – South Complex, DPW staff identified a likely billing error. For explanation, compound meters have two meter heads to handle the continuum of flows (ranging from small to large) typical of larger buildings and commercial customers. Based on our current understanding, it seems that when the University Heights – South Complex account was established in 2006, the radio box identification numbers for the small and large meters were transposed when entered into our billing system. As a result, account #70053600, set up for the large meter head, was recording and billing the readings from the small meter head resulting in overcharge on that account. Account #70053590, set up for the small meter head, was recording and billing the readings from the large meter head resulting in an undercharge on that account.

It appears that this error has resulted in a substantial net overcharge of over \$2 million to UVM for these metered accounts for Water and Wastewater. We have notified UVM of this issue, as well as the City's auditor and Moody's – our credit rating agency. While a significant issue, the total overbilling accumulated over a number of years and the City's credit rating agency upgraded the City's credit rating to A2 even after being alerted to this issue.

A billing issue of this significance demands a full and timely response. DPW management immediately alerted the City Attorney's Office, Chief Administrative Officer, and Mayor's Office after uncovering the 2006 error. At the direction of the Mayor, DPW has moved quickly to procure an independent third-party assessment of our compound meter system, conducted an intensive investigation into this issue, and reviewed and improved internal operational procedures. This comprehensive review by a third party as well as DPW staff will determine whether any additional compound meter issues exist and implement enhanced controls moving forward to protect against these errors.

After completing the preliminary investigation, DPW notified UVM Physical Plant on November 22 of this billing anomaly. We also told them that we would hold the upcoming bills on the University Heights accounts until the issue was better understood. We said we would be back in touch by December 15, 2017 with more information.

Additional Information on the Compound Meter System

There are 99 compound meters in the City's water distribution system. These meters represent a small percentage of the approximate 10,000 accounts city wide, but the compound meters represent a substantial portion of our community's water usage and resulting revenue to the Water and Wastewater enterprise funds. Given that the compound meters each have two meter heads and two radio communication boxes, there is more complexity in the installation and billing set-up for these accounts.

This error was the second issue we uncovered this year related to the installation of a compound meter . In October 2017, we made a presentation to the Board of Finance outlining a City refund to a commercial customer (Zero Gravity) when we discovered an installation documentation error in the compound meter serving that business. In this case, the error was different than that which caused the overbilling for UVM in that the radio box identification numbers were transposed on the installation documentation – resulting

in a similar situation of overcharging the customer. As a result of this error, DPW Water Resources initiated an internal policy regarding compound meter installations that require two meter technicians to be present for the meter installation and radio box wiring – and for both meter technicians to confirm and sign off on the installation paperwork to ensure the radio box identification numbers are correctly listed.

Assessing Weaknesses and Finding Opportunities

The UVM billing initiation error, while separate and distinct from the Zero Gravity installation issue, shared some common attributes that indicate the need for an in-depth review to ensure there are no additional issues. As described at the December 4, 2018 presentation at the Board of Finance, our full system review includes three main steps:

- 1. Revising Policies & Procedures:** Earlier this year, in response to a FY2015 Audit Management Letter item (#3), DPW Water Resources worked with the Clerk/Treasurers office and auditing firm Sullivan & Powers to complete an internal audit of our Billing Standard Operating Policies and Procedures (SOPs). Our written policies and procedures have been enhanced to further codify distinct procedural improvements and strengthen internal controls particularly around compound meters. Additional controls may be recommended and incorporated through the third-party assessment below.
- 2. Hiring an Auditing Firm to Conduct an Independent Third-party Assessment:** We sought three assessment proposals, received two and brought KPMG’s proposal forward for the Board of Finance’s approval on December 4th to undertake the scope of work summarized below. The executed letter of engagement is attached. We will utilize fund balance from Water and Wastewater funds to pay for this assessment. The scope includes:
 - 1) Reviewing the installation and proper billing account set-up for our 99 existing compound meters – with an initial priority on UVM’s 25 compound meters.
 - 2) Reviewing the meter-to-bill process, providing findings on any material weaknesses, and recommending further revisions to our policies and procedures that we will then implement.
- 3. Delivering Timely and Comprehensive Reports:** We pledged to provide the Mayor, City Council, the Public Works Commission and our customers a full update report prior to the end of 2017 on our findings and progress resolving outstanding issues. Furthermore, we pledged to report every 60 days thereafter until we close out any remaining items on our punch list.

As mentioned in our initial memo, the customer is at the core of all we do at DPW. Team DPW remains fully resolved to find the problems, address all identified issues, and work diligently to not let them happen again. We do want to commend DPW Water Resources staff for their effort to uncover and report these issues and quickly move to implement additional controls to strengthen our metering and billing systems.



KPMG LLP
Two Financial Center
60 South Street
Boston, MA 02111
(617) 988-1278

December 8, 2017

Mr. Chapin Spencer
Director of Department of Public Works
645 Pine Street
Burlington, VT 05401

Dear Mr. Spencer:

On behalf of KPMG LLP (“KPMG”), we appreciate the opportunity to provide the City of Burlington, Department of Public Works (“BDPW”) with professional services to assess compound meters to help ensure that meters are correctly configured and assigned to customer accounts. This letter, which serves as our engagement letter, and the Standard Terms and Conditions (as defined below), set forth the terms of our engagement.

Background, Objectives, and Scope

BDPW has requested a review of their compound metering by an independent party to help ensure that compound meters are correctly configured and mapped to their radio transmitters, customer accounts, and meter multipliers. Compound meters are complex meter configurations used in the delivery of water to large consumption accounts where there are 2 sub-meters to measure high and low pressure water. BDPW has approximately 94 compound meters and they have identified an instance where one compound meter is incorrectly setup in the billing system resulting in potential inaccurate customer billing.

The objectives of this engagement are to inspect the configuration of each meter through photographs and geo-coding, document its settings based on a form provided by BDPW, compare the documented settings to the billing configuration in order to verify that the field meter configurations and billing configurations match. Further, KPMG will review BDPW’s new procedures for compound meter setup (field setup and billing configuration) and provide recommendations for potential improvements.

The scope for the engagement includes reviews of approximately 99 compound meters in and around the City of Burlington, VT, the review of the billing configuration of the meters in the billing system, and review of existing procedures. KPMG will physically visit a random sample of 10 meters and BDPW will visit and document the remaining meters.



Project Approach and Deliverables

We plan to achieve these objectives using the following approach:

Phase	Activities	Deliverables
1. Mobilize Team and Initiate Project (3 days)	<ul style="list-style-type: none"> • Mobilize team • Submit data requests • Identify and map the compound meters and work with BDPW to develop a site visit schedule starting with the University of Vermont • Work with BDPW to develop an electronic form with specific items to review on each compound meter configuration • Receive safety training, as appropriate • Receive training from Neptune on how to review meters and verify settings • Work with BDPW to schedule site visits • Develop draft deliverable templates and progress trackers 	<ul style="list-style-type: none"> • Data requests • Review of BDPW's compound meter inventory and site visit schedule • Standard compound meter review form • Draft deliverables templates • Project charter, schedule, and communications plan
2. Conduct Compound Meter Assessment (9 days)	<ul style="list-style-type: none"> • Review documentation including processes, procedures, and policies for meter setup and billing setup including controls and governance • Provide potential risks and recommendations on policies, procedures, and governance over meter setup procedures in the field, meter system, and billing system • Conduct compound meter site assessments and document the findings including pictures for 10 sample meters • Review and compile site assessment documentation gathered by BDPW • Review billing configurations and compare to meter site assessments • Document results and findings • Identify potential issues and risks • Provide updates to BDPW 	<ul style="list-style-type: none"> • Findings report with risks and recommendations based on a review of processes, policies, procedures, and governance for meter and billing configuration setup • Completed compound meter site assessment forms and pictures • Compound meter configuration comparison matrix between observed site information and billing configurations • Findings and recommendations • Status reports including progress, risks, and issues
3. Develop Report (3 days)	<ul style="list-style-type: none"> • Develop a final report documenting the procedures we performed, risks, findings, and recommendations with supporting documentation • Finalize and close out project 	<ul style="list-style-type: none"> • Final report documenting the procedures we performed, risks, recommendations, and findings with supporting documentation



Client Participation and Responsibilities

During the development of this engagement letter, we have been guided by certain assumptions about the project scope and level of BDPW's involvement and support.

BDPW's management will designate a Project Sponsor, a senior member of management who has the requisite skills and competencies for overseeing the services being provided. The Project Sponsor is responsible for establishing the objectives and scope and determine the nature, timing, and extent of testing procedures; for approving the delivery plan; and for maintaining appropriate day-to-day oversight of the KPMG team. In addition, the Project Sponsor will have responsibility for reviewing and approving the engagement documentation and/or deliverables prepared during the engagement that document the results; for reporting the results within BDPW's reporting structure; for evaluating the observations and recommendations that arise from the services; and for monitoring corrective action taken.

BDPW will provide adequate training on safety, meter configurations, and billing configurations. Furthermore, BDPW will schedule our site visits and provide an appropriate and qualified metering resource to escort KPMG resources to each compound metering site.

BDPW represents to KPMG that BDPW has the authority to award this contract to KPMG outside of a formal competitive process, and that award of this contract is made in accordance with all applicable law, regulations, rules, policies, and requirements.

BDPW will inspect and document each of the compound meters in the field including electronic photographs with geocoding, clear images of the meters and identifying information, configuration and so forth.

Other Matters

KPMG will provide our services in accordance with the terms and conditions of this letter. Our services as outlined in this letter constitute an Advisory Engagement conducted under the American Institute of Certified Public Accounts ("AICPA") Standards for Consulting Services. Such services are not intended to be an audit, examination, attestation, special report, or agreed-upon procedures engagement as those services are defined in AICPA literature applicable to such engagements conducted by independent auditors. Accordingly, these services will not result in the issuances of a written communication to third parties by KPMG directly reporting on financial data or internal control or expressing a conclusion or any other form of assurance. In providing these services, KPMG will undertake no role or view that could be considered public policy advocacy or lobbying.

Key KPMG Resources

Engagement Partner. I will be responsible for the overall engagement quality of service BDPW receives during the conduct of this engagement.

Engagement Director. Brian Benton will be the primary resource for coordinating our services, including all work procedures and deliverables.

Engagement Staff. We will also assign professionals with the necessary skills and experience to assist with on-site fieldwork as appropriate. We anticipate the use of a core team of resources to assist with project and site assessments, and one or more subject matter professionals to offer insights throughout the engagement, if needed.



Timing and Professional Fees

We are prepared to begin work upon client and engagement acceptance as well as receipt of a signed copy of this engagement letter at a time mutually determined by BDPW and KPMG.

KPMG professional fees are based upon the specified skill level of the professionals providing the Services and the amount of time and materials required to complete the SOW. KPMG will invoice on a Time & Materials basis monthly at the conclusion of each month.

Resource	Level	Rate/Hour	Estimated Hours	Estimated Cost
Todd Durocher	Partner	\$350	20	\$7,000
Brian Benton	Manager	\$300	60	\$18,000
Mariana Souza	Senior Associate	\$250	120	\$30,000
TBD	Associate	\$170	0	\$0
Estimated Hours & Fees			200	\$55,000
Estimated Expenses (15%)				\$8,250
Estimated Total				\$63,250

In addition to professional fees, KPMG will be reimbursed for out-of-pocket expense. Out-of-pocket expenses include but are not limited to airfare, meals, accommodations, and administrative expenses. Expenses are estimated to be 15% of fees. Throughout the engagement, we will submit monthly invoices for expenses incurred and professional fees based on the table above, with payment due upon receipt. You will be billed \$20,000 upon commencement of our services, which will be credited against future invoices.

The engagement is anticipated to start on December 11, 2017 and complete before January 31, 2018 including field meter documentation by BDWP. This timeline is dependent on the completion of field work by BDWP by January 19, 2018.

Scope changes or circumstances encountered during the engagement that warrant additional time and expense may cause us to adjust the above amounts. We will notify you of any such circumstances as they arise and obtain your approval and agreement before proceeding. Should management require additional hours, more professionals, or a change in the anticipated staffing complement for this engagement, fees for such additional professionals or hours will be commensurate with the experience levels requested and utilized.

Terms and Conditions

This engagement is subject to the KPMG LLP Standard Terms and Conditions (Government) for Advisory and Tax Services subject to the following:

Governing Law; Severability. *All disputes between the parties (whether based in contract, tort, statute, rule, regulation or otherwise and whether pending in court or in an arbitral forum) shall be governed by and construed in accordance with the substantive and procedural laws of the State of Vermont, including without limitation its statutes of limitations, without regard to the conflict of laws provisions of New York or any other state or jurisdiction. In the event that any term or provision of the Engagement Letter or these terms shall be held to be invalid, void or unenforceable, then the remainder of the Engagement Letter and these terms shall not be affected, and each such term and provision shall be valid and enforceable to the fullest extent permitted by law.*

* * * * *



If the terms of this engagement letter as set forth above are acceptable to you, please indicate your acceptance and authorization for KPMG to proceed with the related work by signing this letter in the appropriate space and returning a copy to me.

We look forward to working with Burlington Department of Public Works. If we can provide you with any additional information, please feel free to contact me at 978-360-5837.

Very truly yours,

KPMG LLP

Todd J. Durocher
Principal

Enclosure:

KPMG LLP Standard Terms and Conditions (Government) for Advisory and Tax Services
Livable Wage Certification KPMG

ACCEPTED BY:

City of Burlington Department of Public Works

Authorized Signature

Director - DPW

Title

KPMG LLP

Standard Terms and Conditions (Government) for Advisory and Tax Services

1. **Services; Client Responsibilities.**
 - (a) References herein to Client shall refer to the addressee of the Proposal or Engagement Letter to which these Standard Terms and Conditions are attached or incorporated (the "Engagement Letter") and references herein to KPMG shall refer to KPMG LLP, a Delaware registered limited liability partnership and the United States member firm of the KPMG network of independent firms (the "KPMG Network"). Client, its parent company and their affiliates, and their respective directors, officers, employees, and agents are collectively referred to herein as the "Client Parties." KPMG, the other member firms of the KPMG Network and firms and entities controlled by, or under common control with, one or more such member firms (collectively, the "Member Firms"), and their affiliates, and their respective partners, principals, employees, and agents are collectively referred to herein as the "KPMG Parties." Any work performed in connection with the engagement described in the Engagement Letter before its execution is also governed thereby and by these Standard Terms and Conditions.
 - (b) It is understood and agreed that KPMG's services may include advice and recommendations; but all decisions in connection with the implementation of such advice and recommendations shall be the responsibility of, and made by, Client. KPMG will not perform management functions or make management decisions for Client.
 - (c) If KPMG audits the financial statements of Client or provides any other attestation services to Client, the rules of the American Institute of Certified Public Accountants ("AICPA") require Client to agree to the following provisions of this Paragraph 1(c). In connection with KPMG's provision of services under the Engagement Letter, Client agrees that Client, and not KPMG, shall perform the following functions: (i) assume all management responsibilities and perform all management functions; (ii) oversee such services, by designating an individual, preferably within senior management, who possesses suitable skill, knowledge and/or experience; (iii) evaluate the adequacy and results of such services; (iv) accept responsibility for the results of such services; and (v) establish and maintain internal controls over the processes with which such services are concerned, including performing ongoing evaluations of Client's internal control as part of its monitoring activities.
 - (d) Subsequent to the completion of this engagement, KPMG will not update its Advice (as defined below) for changes or modifications to the law and regulations, or to the judicial and administrative interpretations thereof, or for subsequent events or transactions, unless Client separately engages KPMG to do so in writing after such changes or modifications, interpretations, events or transactions.
2. **Tax on Services.** All fees, charges and other amounts payable to KPMG under the Engagement Letter do not include any sales, use, excise, value added, income or other applicable taxes, tariffs or duties, payment of which shall be Client's sole responsibility, excluding any applicable taxes based on KPMG's net income or taxes arising from the employment or independent contractor relationship between KPMG and its personnel.
3. **Termination.** Either party may terminate the Engagement Letter at any time by giving written notice to the other party not less than 30 calendar days before the effective date of termination, provided that either party may terminate the Engagement Letter upon written notice to the other party if laws, rules, regulations or professional standards applicable to a party preclude it from continuing to perform or receive the Services thereunder.
4. **Ownership and Use of Deliverables.**
 - (a) Upon full and final payment to KPMG under the Engagement Letter, KPMG assigns and grants to Client, title in the tangible items specified as deliverables or work product in the Engagement Letter (the "Deliverables") and any copyright interest in the Deliverables; provided that if and to the extent that any KPMG property is contained in any of the Deliverables ("KPMG Property"), KPMG hereby grants Client, under KPMG's intellectual property rights in such KPMG Property, a royalty-free, non-exclusive, non-transferable, perpetual license to use such KPMG Property solely in connection with Client's use of the Deliverables. KPMG acknowledges that it shall obtain no ownership right in Confidential Information (as defined below) of Client.
 - (b) Should Client make a Deliverable bearing the "KPMG" name or logo available to a third party, it must be made available only in its entirety. KPMG may retain for its files copies of each of the Deliverables, subject to the provisions of Paragraph 11 below.
 - (c) Client acknowledges and agrees that notwithstanding Paragraph 4(a), any advice, recommendations, information, Deliverables or other work product ("Advice") provided by KPMG in connection with the services under the Engagement Letter is intended for Client's sole benefit and KPMG does not authorize any party other than Client to benefit from or rely upon such Advice, or make any claims against KPMG relating thereto. Any such benefit or reliance by another party shall be at such party's sole risk. KPMG may, in its sole discretion mark such Advice to reflect the foregoing. Except for disclosures that are required by law or that are expressly permitted by this Agreement, Client will not disclose, or permit access to such Advice to any third party without KPMG's prior written consent.
5. **Warranties.** KPMG's services under the Engagement Letter are subject to and will be performed in accordance with AICPA and other professional standards applicable to the services provided by KPMG under the Engagement Letter and in accordance with the terms thereof. KPMG disclaims all other warranties, either express or implied.
6. **Limitation on Damages.** Except for the respective indemnification obligations of Client and KPMG set forth herein, the liability of the Client Parties and the KPMG Parties to one another, on account of any actions, damages, claims, liabilities, costs, expenses or losses in any way arising out of or relating to the services performed under the Engagement Letter shall be limited to the amount of fees paid or owing to KPMG under the Engagement Letter. In no event shall any of the Client Parties or any of the KPMG Parties be liable for consequential, special, indirect, incidental, punitive or exemplary damages, costs, expenses, or losses (including, without limitation, lost profits and opportunity costs). The provisions of this Paragraph shall apply regardless of the form of action, damage, claim, liability, cost, expense, or loss asserted, whether in contract, statute, rule, regulation or tort (including but not limited to negligence) or otherwise.

KPMG LLP
Standard Terms and Conditions (Government) for Advisory and Tax Services

7. Infringement.

- (a) KPMG hereby agrees to indemnify, hold harmless and defend the Client Parties from and against any and all claims, liabilities, losses, expenses (including reasonable attorneys' fees), fines, penalties, taxes or damages (collectively "Liabilities") asserted by a third party against any of the Client Parties to the extent such Liabilities result from the infringement by the Deliverables (including any KPMG Property contained therein) of such third party's patents issued in the United States as of the date the Deliverables are delivered to Client, trademarks or copyrights. Such KPMG obligations shall not apply to any infringement to the extent arising out of (i) use of the Deliverables other than in accordance with applicable documentation or instructions supplied by KPMG or other than for Client's internal business purposes; (ii) any alteration, modification or revision of the Deliverables not expressly agreed to in writing by KPMG; or (iii) the combination or operation of the Deliverables with materials not supplied or approved by KPMG.
- (b) In case any of the Deliverables (including any KPMG Property contained therein) or any portion thereof is held, or in KPMG's reasonable opinion is likely to be held, to constitute infringement, KPMG may, within a reasonable time, at its option either: (i) secure for Client the right to continue the use of such infringing item; or (ii) replace, at KPMG's sole expense, such item with a substantially equivalent non-infringing item or modify such item so that it becomes non-infringing. In the event KPMG is, in its reasonable discretion, unable to perform either of the options described in clauses (i) or (ii) above, Client shall return the allegedly infringing item to KPMG, and KPMG's sole liability shall be to refund to Client the amount paid to KPMG for such item; provided that the foregoing shall not be construed to limit KPMG's indemnification obligation set forth in Paragraph 7(a) above.
- (c) The provisions of this Paragraph 7 state KPMG's entire liability and Client's sole and exclusive remedy with respect to any infringement or claim of infringement.

8. Reserved.

9. Cooperation; Use of Information.

- (a) Client agrees to cooperate with KPMG in the performance of the services under the Engagement Letter and shall provide or arrange to provide KPMG with timely access to and use of the personnel, facilities, systems, equipment, data and information necessary for KPMG to perform the services under the Engagement Letter. The Engagement Letter may set forth additional details regarding KPMG's access to and use of personnel, facilities, equipment, data and information.
- (b) The Engagement Letter may set forth additional obligations of Client in connection with the services under the Engagement Letter necessary for KPMG to perform its obligations under the Engagement Letter. Client acknowledges that its failure to satisfy these obligations could adversely affect KPMG's ability to provide the services under the Engagement Letter.
- (c) Client acknowledges and agrees that KPMG will, in performing the services under the Engagement Letter, base its conclusions on the facts and assumptions that Client furnishes and that KPMG may use data, material, and other information furnished by or at the request or direction of Client without any independent investigation or

verification and that KPMG shall be entitled to rely upon the accuracy and completeness of such data, material and other information. Inaccuracy or incompleteness of such data, material and other information furnished to KPMG could have a material adverse effect on KPMG's conclusions.

- 10. **Independent Contractor.** It is understood and agreed that each of the parties hereto is an independent contractor and that neither party is or shall be considered an agent, distributor or representative of the other. Neither party shall act or represent itself, directly or by implication, as an agent of the other or in any manner assume or create any obligation on behalf of, or in the name of, the other.

11. Confidentiality.

- (a) "Confidential Information" means all documents, software, reports, data, records, forms and other materials obtained by one party (the "Receiving Party") from the other party (the "Disclosing Party") or at the request or direction of the Disclosing Party in the course of performing the services under the Engagement Letter: (i) that have been marked as confidential; (ii) whose confidential nature has been made known by the Disclosing Party to the Receiving Party; or (iii) that due to their character and nature, a reasonable person under like circumstances would treat as confidential. Notwithstanding the foregoing, Confidential Information does not include information which: (1) is already known to the Receiving Party at the time of disclosure by the Disclosing Party; (2) is or becomes publicly known through no wrongful act of the Receiving Party; (3) is independently developed by the Receiving Party without benefit of the Disclosing Party's Confidential Information; (4) is permitted to be disclosed by Paragraphs 18(a) or (b); or (5) is received by the Receiving Party from a third party without restriction and without a breach of an obligation of confidentiality.
- (b) The Receiving Party will deliver to the Disclosing Party or destroy all Confidential Information of the Disclosing Party and all copies thereof when the Disclosing Party requests the same, except for copies retained in work paper files or records, anything that may be stored in back up media or other electronic data storage systems, latent data and metadata. Except as otherwise set forth in this Paragraph 11 or Paragraph 15 below, the Receiving Party shall not disclose to any person, firm or entity any Confidential Information of the Disclosing Party without the Disclosing Party's express, prior written permission; provided, however, that notwithstanding the foregoing, the Receiving Party may disclose Confidential Information to the extent that it is required or necessary to be disclosed pursuant to a statutory or regulatory provision or court or administrative order, or, subject to appropriate conditions of confidentiality, to fulfill professional obligations and standards (including quality and peer review) or to submit and process an insurance claim.
- (c) **Reserved.**
- (d) Each party shall exercise the same level of care to protect the other's information as it exercises to protect its own confidential information but in no event less than reasonable care, except to the extent that Client identifies applicable law, policies, or standards or KPMG identifies professional standards that impose a higher requirement.
- (e) If the Receiving Party receives a subpoena or other validly issued administrative, judicial, government or investigative regulatory

KPMG LLP

Standard Terms and Conditions (Government) for Advisory and Tax Services

- demand or request or other legal process (“Legal Demand”) requiring it to disclose the Disclosing Party’s Confidential Information, the Receiving Party shall, unless prohibited by law or such Legal Demand, provide prompt written notice to the Disclosing Party of such Legal Demand in order to permit it to seek a protective order. So long as the Receiving Party gives notice as provided herein, the Receiving Party shall be entitled to comply with such Legal Demand to the extent required by law, subject to any protective order or the like that may have been entered in the matter. In the event that KPMG is requested or authorized by Client, or is required by law, rule, regulation or Legal Demand in a proceeding or investigation to which KPMG is not a named party or respondent, to produce KPMG’s documents or personnel as witnesses or for interviews, or otherwise to make information relating to the services under the Engagement Letter available to a third party, or Client, Client shall reimburse KPMG for its professional time, at its then-current standard hourly rates, and expenses, including reasonable attorneys’ fees and expenses, incurred in responding to such requests, authorizations or requirements.
12. **Assignment.** Subject to Paragraph 15 below, neither party may assign, transfer or delegate any of its rights or obligations, claims or proceeds from claims arising under or relating to this Engagement Letter (including by operation of law, in which case the assigning party will, to the extent legally permissible, give as much advance written notice as is reasonably practicable thereof) without the prior written consent of the other party, such consent not to be unreasonably withheld. Any assignment, transfer or delegation in violation hereof shall be null and void.
13. **Governing Law; Severability.** All disputes between the parties (whether based in contract, tort, statute, rule, regulation or otherwise and whether pending in court or in an arbitral forum) shall be governed by and construed in accordance with the substantive and procedural laws of the State of , including without limitation its statutes of limitations, without regard to the conflict of laws provisions of New York or any other state or jurisdiction. In the event that any term or provision of the Engagement Letter or these terms shall be held to be invalid, void or unenforceable, then the remainder of the Engagement Letter and these terms shall not be affected, and each such term and provision shall be valid and enforceable to the fullest extent permitted by law.
14. **Alternative Dispute Resolution.**
- (a) Any dispute or claim between the parties shall be submitted first to non-binding mediation and, if mediation is not successful within 90 days after the issuance by one of the parties of a request for mediation then to a court of competent jurisdiction.
- (b) Mediation shall take place at a location to be designated by the parties using the Mediation Procedures of the IICPR, with the exception of paragraph 2 (Selecting the Mediator).
- (c) Damages that are inconsistent with any applicable agreement between the parties (including Paragraph 6 above), that are punitive in nature, or that are not measured by the prevailing party’s actual damages shall be unavailable in any forum. In no event, even if any other portion of these provisions is held to be invalid or unenforceable, shall a mediator make an award or impose a remedy that could not be made or imposed by a court deciding the matter in the same jurisdiction.
- (d) Either party may seek to enforce any written agreement reached by the parties during mediation in any court of competent jurisdiction, provided that any party moving to enforce, confirm or vacate any such agreement or award, as the case may be, will file such motion under seal unless prohibited under applicable court rules.
- (e) Notwithstanding the agreement to such procedures, either party may seek equitable relief to enforce its rights in any court of competent jurisdiction. Nothing herein shall preclude KPMG from filing a timely formal claim in accordance with applicable state law provided, however, that KPMG shall, if permitted, seek a stay of said claim during the pendency of any mediation.
15. **Use of Member Firms and Third Parties.**
- (a) Client acknowledges and agrees that the services under the Engagement Letter, including any applicable tax advice, may be performed by a Member Firm located outside of the United States. Client understands that each Member Firm is a separate, distinct and independent legal entity and is not a partner, principal, agent or affiliate of KPMG and KPMG is not a partner, principal, agent or affiliate of any other Member Firm.
- (b) Client further acknowledges and agrees that in connection with the performance of services under the Engagement Letter, KPMG and Member Firms, in their discretion or at Client’s direction, may utilize the services of third parties (“Vendors”) within and outside of the United States to complete the services under the Engagement Letter.
- (c) Client further acknowledges and agrees that KPMG Parties may have access to Confidential Information from offshore locations, and that KPMG uses Vendors within and outside of the United States to provide at KPMG’s direction administrative, clerical or analytical services to KPMG. These Vendors may in the performance of such services have access to Client’s Confidential Information. KPMG represents to Client that with respect to each Member Firm and Vendor, KPMG has technical, legal and/or other safeguards, measures and controls in place to protect Confidential Information of Client from unauthorized disclosure or use. KPMG shall be responsible to Client for their failure to comply.
- (d) Accordingly, Client’s agreement above extends to disclosure, ability to access, and use of its Confidential Information by the parties and Vendors for the purposes set forth in Paragraph 11 and this Paragraph 15.
- (e) Any services performed by a Member Firm or Vendor shall be performed in accordance with the terms of the Agreement and these Standard Terms and Conditions (Government), including Paragraph 11 (Confidentiality), but KPMG shall remain responsible to Client for the performance of such services. Client agrees that any claim relating to the services under the Agreement may only be made against KPMG and not any other Member Firm or Vendor referred to above.
16. **Miscellaneous.**
- (a) **Reserved.**
- (b) **Electronic Communications.** KPMG and Client may communicate with one another by electronic mail or otherwise transmit documents

KPMG LLP
Standard Terms and Conditions (Government) for Advisory and Tax Services

in electronic form during the course of this engagement. Each party accepts the inherent risks of these forms of communication (including the security risks of interception of or unauthorized access to such communications, the risks of corruption of such communications and the risks of viruses or other harmful devices). Client agrees that the final hardcopy or electronic version of a document, including a Deliverable, or other written communication that KPMG transmits to Client shall supersede any previous versions transmitted by KPMG to Client.

- (c) **California Accountancy Act.** For engagements where services will be provided by KPMG through offices located in California, Client acknowledges that certain of KPMG's personnel who may be considered "owners" under the California Accountancy Act and implementing regulations (California Business and Professions Code section 5079(a); 16 Cal. Code Regs. sections 51 and 51.1) and who may provide services in connection with this engagement, may not be licensed as certified public accountants under the laws of any of the various states.
- (d) **Volume Rebates.** Where KPMG is reimbursed for expenses, it is KPMG's policy to bill clients the amount incurred at the time the good or service is purchased. If KPMG subsequently receives a volume rebate or other incentive payment from a vendor relating to such expenses, KPMG does not credit such payment to Client. Instead, KPMG applies such payments to reduce its overhead costs, which costs are taken into account in determining KPMG's standard billing rates and certain transaction charges that may be charged to clients.
- (e) **Use of Names and Logos.** Except as permitted by law or as set forth in the Engagement Letter or this Paragraph 16(e), neither party shall acquire hereunder any right to use the name or logo of the other party or any part thereof, and any such use shall require the express written consent of the owner party. Client agrees that KPMG may list Client as a customer in KPMG's internal and external marketing materials, including KPMG websites and social media, indicating the general services rendered. In addition, Client gives KPMG the right to use Client's logo on the Deliverables and documents prepared for Client internally (e.g., internal presentations, etc.) or for internal KPMG presentations and intranet sites.
- (f) **Export Control.** KPMG and Client acknowledge and agree that each shall comply with all applicable United States export control laws and regulations in the performance of each party's respective activities under the Engagement Letter. Client shall not provide KPMG, or grant KPMG access to, (a) information (including technical data or technology), verbally, electronically, or in hardcopy, (b) software or (c) hardware, that is controlled for export by the United States government under the Arms Export Control Act of 1976, Export Administration Act of 1979, the International Traffic in Arms Regulations ("ITAR"), Export Administration Regulations ("EAR"), Department of Energy Part 810 Regulations or Nuclear Regulatory Commission Part 110 Regulations, except information, software or hardware that is classified as EAR99 under the EAR.
- (g) **Active Spreadsheets and Electronic Files.** KPMG may use models, electronic files and spreadsheets with embedded macros created by KPMG to assist KPMG in providing the services under the Engagement Letter. If Client requests a working copy of any such model, electronic file or spreadsheet, KPMG may, at its discretion, make such item available to Client for its internal use only on an as-is basis and such item shall be considered a Deliverable subject to

Paragraph 4 above; provided that Client is responsible for obtaining the right to use any third party products necessary to use or operate such item.

- (h) **Non-Solicitation.** During the term of the Engagement Letter and for one year thereafter, neither party shall solicit for hire as an employee, consultant or otherwise any of the other party's personnel who have had direct involvement with the services under the Engagement Letter, without such other party's express written consent. This prohibition shall not apply to any offers of employment which result from a general solicitation for employment, including without limitation, through the Internet, newspapers, magazines and radio.
17. **Entire Agreement.** The Engagement Letter and these Standard Terms and Conditions, and any exhibits, attachments, addenda and appendices hereto and thereto, and amendments to any of the foregoing that are agreed in writing between the parties, shall constitute the final, complete and exclusive agreement between the parties with respect to the subject matter of the foregoing, and supersede all other previous and contemporaneous oral and written representations, understandings or agreements relating to that subject matter.
18. **Additional Terms for Engagements Involving Tax Services.**
- (a) Notwithstanding anything to the contrary set forth herein, no provision in the Engagement Letter or these Standard Terms and Conditions is or is intended to be construed as a condition of confidentiality within the scope of the Internal Revenue Code of 1986 (the "IRC") section 6011 as implemented through Treasury Regulation 1.6011-4(b)(iii)(ii) (without regard to references to payment or receipt of a minimum fee) or under any similar or analogous provisions of the laws of a state or other jurisdiction. In particular, Client, its directors, officers, employees and agents may disclose to any and all persons, without limitation of any kind, tax information KPMG provides to Client, including all materials such as tax opinions, memoranda, or other written tax advice that describes or otherwise relates to, either or both of the tax treatment and tax structure of any transaction on which KPMG's services are provided. Client agrees to use commercially reasonable efforts to inform KPMG of any conditions of confidentiality imposed by third party advisors with respect to any transaction on which KPMG's services are requested. Such notification must occur prior to KPMG providing any advice with respect to the transaction.
 - (b) Treasury regulations under IRC section 6011 require taxpayers to disclose to the IRS their participation in reportable transactions and IRC section 6707A imposes strict penalties for noncompliance with IRC section 6011. IRC section 6111 and the laws of various states require a material advisor with respect to a reportable transaction to make a return containing specified information concerning the transaction to the IRS or a designated state tax authority by a prescribed date, and IRC section 6707 imposes penalties for noncompliance with IRC section 6111. IRC section 6112 and the laws of various states require the material advisor to maintain, and make available to the IRS or designated state tax authority upon request, a list containing prescribed information with respect to persons advised and other information with respect to the reportable transaction, and IRC section 6708 imposes penalties for noncompliance with IRC section 6112. Client agrees to use commercially reasonable efforts to inform KPMG if Client is required to disclose any transaction covered by the Engagement

KPMG LLP
Standard Terms and Conditions (Government) for Advisory and Tax Services

Letter as a reportable transaction to the IRS or to any state or other jurisdiction adopting similar or analogous provisions to IRC section 6011. KPMG will use commercially reasonable efforts to inform Client if KPMG provides Client's identifying information to the IRS under IRC section 6111 or 6112, or to any state tax authority or other jurisdiction adopting similar or analogous provisions thereto.

- (c) Unless expressly provided for, KPMG's services do not include representing Client in the event of a challenge by the IRS or other tax or revenue authorities.
- (d) In rendering tax advice, KPMG may consider, for example, the applicable provisions of the IRC, and the Employee Retirement Income Security Act of 1974, each as amended, and the relevant state, local and foreign statutes, the regulations thereunder, income tax treaties, and judicial and administrative interpretations, thereof. These authorities are subject to change, retroactively or prospectively, and any such changes could affect the validity of KPMG's advice

Certification of Compliance with the City of Burlington's Livable Wage Ordinance

I, Todd Durocher, on behalf of KPMG LLP ("the Contractor") in connection with a contract for Advisory services that we provide to the City, hereby certify under oath that the Contractor (and any subcontractors under this contract) is and will remain in compliance with the City of Burlington's Livable Wage Ordinance, B.C.O. 21-80 et seq., and

(1) as a condition of entering into this contract or grant, we confirm that all covered employees as defined by Burlington's Livable Wage Ordinance (including the covered employees of subcontractors) shall be paid a livable wage (as determined, or adjusted, annually by the City of Burlington's chief administrative officer) and provided appropriate time off for the term of the contract:

(2) a notice regarding the applicability of the Livable Wage Ordinance shall be posted in the workplace(s) or other location(s) where covered employees work;

(3) we will provide verification of an employee's compensation, produce payroll or health insurance enrollment records or provide other relevant documentation (including that of any subcontractor), as deemed necessary by the chief administrative officer, within ten (10) business days from receipt of a request by the City;

(4) we will reasonably cooperate in any investigation conducted by the City of Burlington's City Attorney's office pursuant to this ordinance; and

(5) we will not retaliate (nor allow any subcontractor to retaliate) against an employee or other person because an employee has exercised rights or the person has cooperated in an investigation conducted pursuant to this ordinance.

Date: 12/19/2017 By: Todd Durocher
Contractor

Subscribed and sworn to before me: Todd Durocher

Date: 12/19/2017 Cindy L. Hollerich
Notary

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Cindy L. Hollerich, Notary Public
City of Pittsburgh, Allegheny County
My Commission Expires Nov. 13, 2020
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES



Megan Moir

From: Benton, Brian <brianbenton@KPMG.com>
Sent: Monday, December 11, 2017 9:41 PM
To: Chapin Spencer; Megan Moir; Jessica Lavalette
Cc: Souza, Mariana T; Durocher, Todd J
Subject: Meeting Notes & Action Items: BPDW Meter Assessment Kickoff (12/11/17)

Hi all,

Below are the notes Mariana and I captured during today's kickoff session. I think our conversations went well and we're both looking forward to getting the ball rolling with your team.

ATTENDEES:

BDPW: Chapin Spencer, Megan Moir, Jessica Lavalette,
KPMG: Brian Benton, Mariana Souza
Ti SALES: Dave Harris (meter vendor)

QUICK MEETING RECAP:

1. Team conducted a high-level review of the components of a Neptune compound meter (Neptune), Harris Flexibill billing system screens, and BPDW's draft Compound Meter Assessment Form.
2. Conducted an initial review of inventory data associated with 99 compound meters (across 198 account numbers) within BDPW's service area. Of those 99 compound meters, 25 are on the University of Vermont Campus.
3. Near-term plan to kick-off meter assessment:
 - a. Megan Moir will convert the 'draft compound meter assessment form' (word document) into a digital form (Go Canvas), including updates resulting from our kickoff conversations.
 - b. Brian, Mariana and Megan will visit a meter on Tuesday 12/12/17 to validate the usability of the digital form.
 - c. After validation, the Compound Meter Assessment Form (vF) will be distributed to the field team of BDPW employees. Field team will conduct meter configuration, installation, and readings assessment and send results to BDPW and KPMG via email.
 - d. KPMG will catalog meter assessments and identify any discrepancies between the assessment and existing information in the billing system.
 - e. With the support of a BDPW representative, KPMG will conduct assessments of 10 randomly selected compound meters in order to provide quality assurance over the assessment process.
 - f. KPMG will provide Deliverable documentation throughout in support of a final report upon completion of the engagement. Final report will include risks and recommendations, in addition to the meter assessment, as outlined in the engagement letter.

ACTION ITEMS:

1. Jessica to work with KPMG to provide (1) inventory of compound meters and existing attributes for each account, and (2) definitions of fields in different billing screens.
 - a. Target Completion – 12/12
2. Megan to provide all available compound metering SOPs.
 - a. Target completion – 12/12
3. Brian to draft initial Project Schedule, Communication Plan, and Charter.
 - a. Target completion – 12/13
4. BDPW to conduct first site visits to begin assessment of installed meters.
 - a. Target start date – 12/14 to 12/18

Best Regards,

Brian Benton | Manager | Advisory Services | KPMG LLP | mobile: (206) 713-3934 | email:brianbenton@kpmg.com

Megan Moir

From: Benton, Brian <brianbenton@KPMG.com>
Sent: Monday, December 11, 2017 9:41 PM
To: Chapin Spencer; Megan Moir; Jessica Lavalette
Cc: Souza, Mariana T; Durocher, Todd J
Subject: Meeting Notes & Action Items: BPDW Meter Assessment Kickoff (12/11/17)

Hi all,

Below are the notes Mariana and I captured during today's kickoff session. I think our conversations went well and we're both looking forward to getting the ball rolling with your team.

ATTENDEES:

BDPW: Chapin Spencer, Megan Moir, Jessica Lavalette,
KPMG: Brian Benton, Mariana Souza
Ti SALES: Dave Harris (meter vendor)

QUICK MEETING RECAP:

1. Team conducted a high-level review of the components of a Neptune compound meter (Neptune), Harris Flexibill billing system screens, and BPDW's draft Compound Meter Assessment Form.
2. Conducted an initial review of inventory data associated with 99 compound meters (across 198 account numbers) within BDPW's service area. Of those 99 compound meters, 25 are on the University of Vermont Campus.
3. Near-term plan to kick-off meter assessment:
 - a. Megan Moir will convert the 'draft compound meter assessment form' (word document) into a digital form (Go Canvas), including updates resulting from our kickoff conversations.
 - b. Brian, Mariana and Megan will visit a meter on Tuesday 12/12/17 to validate the usability of the digital form.
 - c. After validation, the Compound Meter Assessment Form (vF) will be distributed to the field team of BDPW employees. Field team will conduct meter configuration, installation, and readings assessment and send results to BDPW and KPMG via email.
 - d. KPMG will catalog meter assessments and identify any discrepancies between the assessment and existing information in the billing system.
 - e. With the support of a BDPW representative, KPMG will conduct assessments of 10 randomly selected compound meters in order to provide quality assurance over the assessment process.
 - f. KPMG will provide Deliverable documentation throughout in support of a final report upon completion of the engagement. Final report will include risks and recommendations, in addition to the meter assessment, as outlined in the engagement letter.

ACTION ITEMS:

1. Jessica to work with KPMG to provide (1) inventory of compound meters and existing attributes for each account, and (2) definitions of fields in different billing screens.
 - a. Target Completion – 12/12
2. Megan to provide all available compound metering SOPs.
 - a. Target completion – 12/12
3. Brian to draft initial Project Schedule, Communication Plan, and Charter.
 - a. Target completion – 12/13
4. BDPW to conduct first site visits to begin assessment of installed meters.
 - a. Target start date – 12/14 to 12/18

FINAL REPORT

BDPW Compound Meter Assessment



EXECUTIVE SUMMARY

1. Overview

City of Burlington, Department of Public Works (“BDPW”) engaged KPMG to assess its compound meters to validate that meters are correctly configured and mapped to their radio transmitters, customer accounts, and meter multipliers in the field and billing system. Meter configuration was defined within and assessed by KPMG’s Compound Meter Assessment Program; this Program’s detailed objectives, criteria, and our findings are provided in this report.

KPMG’s activities for this engagement encompassed two activities:

1. “Meter Assessment” – a comparison of meter configurations in the field and billing configurations in BDPW’s billing system (“FlexiBill”).
2. “Procedure Review” – a high-level review of BDPW’s existing standard operating procedures in order to provide recommendations for process improvement.

2. Background

BDPW requested a review of their compound metering to validate that compound meters are correctly configured and mapped to the appropriate radio transmitters, customer accounts, and meter multipliers. Compound meters are complex meter configurations used in the delivery of water to large consumption accounts where there are 2 meter heads (Large Head and Small Head) to measure high and low-flow water. BDPW identified at least one instance of a compound meter that was incorrectly configured before requesting the review; the resulting customer impacts caused BDPW to initiate the request for review.

3. Scope

Meter Assessment

The scope of the Compound Meter Assessment included ninety-eight (98) compound meters. This reflects all compound meters within BDPW’s service area excluding one seasonal meter (70328497 at Starr Farm). Though BDPW has a total of 99 compound meters, the aforementioned seasonal meter was not installed at the time of this assessment and was thus omitted from scope.

BDPW was responsible for completing inspections for all 98 compound meters and providing subsequent inspection reports to KPMG for assessment activities. KPMG was responsible for completing assessments of all 98 compound meters using the inspection reports provided by BDPW. The inspection objectives were to collect meter and location data along with photographs to support assessment activities; these assessment activities included reviewing the inspection data, photographs, and geo-coding in the inspection reports and objectively addressing two main points:

1. That the meter is configured properly in the field (based on the configuration criteria in KPMG’s Assessment Program)
2. That the billing system data matches that which was collected via the field inspections

Furthermore, KPMG was responsible for conducting independent inspections and assessment activities for a random selection of 10 compound meters from the same set of 98 installed in the field.

Combined, this resulted in the completion of 108 inspections and 108 assessments. KPMG will provide only the meter assessment files for those which resulted in “Flag” or “Fail” as identified below.

FINAL REPORT

BDPW Compound Meter Assessment



The remaining assessments resulting in “Pass” will be retained by KPMG and made available to BDPW upon request.

Procedure Review

The scope of the Procedure Review included BDPW’s existing Standard Operating Procedures – “WR SOP Intro & Chapter Pages” and “Water Resources Comprehensive SOP”.

4. Summary of Findings

Out of 98 total meters assessed, KPMG found the following:

- 73 assessments resulted in Pass
- 5 assessments resulted in Fail – These failures have the potential to impact customer billing for the respective meters / accounts
- 20 assessments resulted in Flag – These flags do not impact billing, however, BDPW should address these from a data integrity standpoint

METER ASSESSMENT

5. Meter Assessment

5.1. Objectives

As previously mentioned, the overall objectives of the assessment were to determine if the compound meters are configured correctly in both the field and billing system. This was determined by leveraging KPMG’s Compound Meter Assessment Program (“Program”) which included 13 detailed objectives that compared the inspection and billing system data. KPMG assessed each of BDPW’s 98 compound meters via this Program, yielding the following final results:

- Pass – An objective resulted in “Pass” if measured objective steps resulted in “Pass”
- Flag – An objective resulted in “Flag” if one or more measured objective steps resulted in “Flag”
- Fail = An objective resulted in “Fail” if one or more measured objective steps resulted in “Fail”

Detailed objectives were “Pass / Flag” if a discrepancy has a non-financial impact but should be addressed from a data integrity perspective (i.e. incomplete address information). Detailed objectives were “Pass / Fail” if a discrepancy has a financial impact (i.e. the dial reading in field does not correlate to billing system).

FINAL REPORT
BDPW Compound Meter Assessment



Detailed Objectives

The following table represents the 13 detailed objectives, supporting criteria, and potential results found in KPMG's Assessment Program template.

Objective #	Objective Description	Assessment Type(s)	FlexiBill Field(s)	Meter Assessment Form Element(s)	Risk(s)	Risk Tolerance	Step	Process Step Description	Expected Result	Actual Result
Meter Installation										
1	Assessment to determine that the meter number in FlexiBill matches the meter number in the site inspection data & photo(s)	Meter Inspection Form Elements Comparison Meter Assessment Form Compared to FlexiBill	"MeterNo"	"Meter Serial ID" "Full Compound Meter Photo(s)"	Photo(s) may not be clear enough to read the meter number	Meter number in photo(s) must be legible in at least one of the inspection photos	1.1	Navigate to 'Full Compound Meter Photo' section of the meter's GoCanvas inspection file	1-3 photos of meter are available	
							1.2	Confirm 'Meter Serial ID' field and photos of the meter serial ID match	Meter Serial ID in photo matches field in form	(Input result)
					1.3	Launch Compound Meter Billing file. Find 'MeterNo' field	Field is populated			
					1.4	Confirm Billing file contains a match for 'Meter Serial ID' from Form	Meter Serial ID is found in MeterNo field in Billing file	(Input result)		
					1.5	Objective Pass / Flag		(Pass / Flag)		
2	Assessment to determine that the address in FlexiBill matches the onsite meter inspection's location coordinates	Meter Inspection Form Compared to FlexiBill	"MeterNo" 'StreetNo' 'Street'	"Location Name" "GPS Point of Access Door to Building"	FlexiBill Billing Address could represent a large building / site and may not match the geotag exactly, rather may represent an location in close proximity	Flexibill address and inspection geotag correlate to the same general location on Google Maps	2.1	Navigate to Overview section of meter's GoCanvas inspection file. Find 'Location Name' and 'GPS point of access door to building' fields	Both fields are populated	
							2.2	Launch Compound Meter Billing file. Find 'StreetNo' and 'Street' fields	Field is populated	
							2.3	Enter 'StreetNo' and 'Street' into maps.google.com	Results return single Google maps "pin"	
							2.4	Confirm that GoCanvas geotag and Google Maps results match	Inspection and FlexiBill location data correlate to the same	(Input result)

FINAL REPORT
BDPW Compound Meter Assessment



Objective #	Objective Description	Assessment Type(s)	FlexiBill Field(s)	Meter Assessment Form Element(s)	Risk(s)	Risk Tolerance	Step	Process Step Description	Expected Result	Actual Result
									general location	
							2.5	Objective Pass / Flag		(Pass / Flag)
3	Assessment to determine that the meter number in FlexiBill contains two Accounts associated to the same location ('StreetNo' and 'Street')	Meter Inspection Form Compared to FlexiBill	"MeterNo" "Account" "StreetNo" "Street"	"Meter Serial ID"	FlexiBill Accounts linked to a meter number may not have the same location data, indicating an error in the data and requiring an update	FlexiBill Accounts must have the same location data	3.1	Launch Compound Meter Billing file. Find 'Account' (two instances) fields	Boths fields are populated	
							3.2	Confirm that both Account instances have the same location data ("StreetNo" and "Street")	Fields have the same location data	(Input result)
							3.3	Objective Pass / Flag		(Pass / Flag)
4	Assessment to determine the meter body installation direction is correct based on the inflow pipe / service line location	Meter Inspection Form Elements Comparison	N/A	"Overall Meter Installation Inventory - Meter Photos"	Meter Heads could be configured correctly on meter body, but meter body could be installed backwards	Meter body must be installed with arrow in direction of flow	4.1	Navigate to 'Overall Meter Installation Inventory' section of the meter's GoCanvas inspection file	Multiple photos available	
							4.2	Confirm meter body is installed in the correct direction from the inflow pipe / service line <i>Note: Meter body's inflow can be determined with one of the following:</i> 1) Directional arrow on meter body should point downstream (away from the inflow pipe / service line) 2) Meter number stamped into meter body is closest to the outflow pipe	Meter body is installed with arrow in direction of flow	(Input result)
							4.3	Objective Pass / Fail		(Pass / Fail)
5	Assessment to determine the proper	Meter Inspection Form	N/A	"Full Compound	Meter body could be installed correctly (direction	Large Meter Head must be located on	5.1	Navigate to "Full Compound Meter Photo(s)" and 'Large	Multiple photos of	

FINAL REPORT
BDPW Compound Meter Assessment



Objective #	Objective Description	Assessment Type(s)	FlexiBill Field(s)	Meter Assessment Form Element(s)	Risk(s)	Risk Tolerance	Step	Process Step Description	Expected Result	Actual Result
	configuration of the Large Meter Head on the upstream section of the meter body	Elements Comparison		Meter Photo(s)"	from water main), but Meter Heads could be installed in incorrect locations on meter body	upstream section of the meter		Head Detail sections of the meter's GoCanvas inspection file	meter are available	
							5.2	Confirm Large Meter Head is located on the upstream section of the meter body	Large Meter Head is located on the upstream section of the meter body	(Input result)
							5.3	Objective Pass / Fail		(Pass / Fail)
6	Assessment to determine the overall meter setup (body size and LH) is appropriate for the inflow pipe size	Meter Inspection Form Elements Comparison	N/A	"Diameter Inflow Pipe" "Size Meter" "LH Size" "Large Head Detail" photo	The meter setup could be the improper size to accommodate the inflow pipe size	The meter setup must match the inflow pipe size	6.1	Navigate to 'Overall Meter Installation Inventory' section of the meter's GoCanvas inspection file. Find 'Diameter inflow pipe' and 'Size Meter' <i>Note: Meter size stamp may be visible in photos of the meter body</i>	Both fields are populated	
							6.2	Confirm meter body size matches inflow pipe size	Fields match	(Input result)
							6.3	Navigate to 'Large Head Detail' section of the meter's GoCanvas inspection file. Find 'LH Size'	Field is populated	
							6.4	Confirm "LH Size" matches the size on the Large Meter Head in the photo	Sizes match	(Input result)
							6.5	Confirm LH Size matches or accommodates the inflow pipe	LH size matches the "Diameter Inflow Pipe"	(Input result)
							6.6	Confirm LH Size matches or accommodates the meter size	LH size matches the "Size Meter"	(Input result)
							6.7	Objective Pass / Flag		(Pass / Flag)

FINAL REPORT
BDPW Compound Meter Assessment



Objective #	Objective Description	Assessment Type(s)	FlexiBill Field(s)	Meter Assessment Form Element(s)	Risk(s)	Risk Tolerance	Step	Process Step Description	Expected Result	Actual Result
7	Assessment to determine the meter head sizes in the field are in alignment based on installation convention	Meter Inspection Form Elements Comparison	N/A	"LH Size" "Large Head Detail" photo "SH Size" "Small Head Detail" photo	The large and small meter head sizes could be incorrect compared to the convention of which small head is associated with which size large head for compound meters.	The small and large dials must correlate according to the following convention: 2" LH = 5/8" SH 3" LH = 5/8" SH 4" LH = 3/4" SH 6" LH = 1" SH	7.1	Navigate to 'Large Head Detail' section of the meter's GoCanvas inspection file. Find 'LH Size'	Field is populated	
							7.2	Confirm "LH Size" matches the size on the Large Meter Head in the photo	Sizes match	(Input result)
							7.3	Navigate to 'Small Head Detail' section of the meter's GoCanvas inspection file. Find 'SH Size'	Field is populated	
							7.4	Confirm "SH Size" matches the size on the Small Meter Head in the photo	Sizes match	(Input result)
							7.5	Confirm LH Size and SH Size are in alignment. See risk tolerance (column G) for appropriate size correlations.	LH and SH sizes should correlate according to installation convention	(Input result)
							7.6	Objective Pass / Fail		(Pass / Fail)
Large Meter Head										
8	Assessment to determine the Large Meter Head Radio Box number in FlexiBill matches the Radio Box number in the field	Meter Inspection Form Compared to FlexiBill	"RegisterNo" for Large Head (correlating "Modid")	"Radio Box MIU #" "Large Head Detail" photo	RegisterNo in FlexiBill may not match MIU # from inspection, which may indicate a cross-wire or other issue	FlexiBill's RegisterNo must match the MIU # in the field	8.1	Navigate to 'Large Head Detail' section of the meter's GoCanvas inspection file. Find 'LH Associated Radio Box MIU # (look at sticker)'	Field is populated	
							8.2	Navigate to 'Large Head Detail' photo in the meter's GoCanvas inspection file	Photo available	
							8.3	Confirm MIU in photo matches the 'LH	MIU in photo matches LH associated	(Input result)

FINAL REPORT
BDPW Compound Meter Assessment



Objective #	Objective Description	Assessment Type(s)	FlexiBill Field(s)	Meter Assessment Form Element(s)	Risk(s)	Risk Tolerance	Step	Process Step Description	Expected Result	Actual Result
								Associated Radio Box MIU # field	radio box in inspection file	
					Radio Box in field may be placed in a location where the sticker is not visible, or the sticker is missing	If box is not visible or sticker is missing, validation of a match of radio box-to-meter head via a gun trace (without photo) is acceptable	8.4	Launch Compound Meter Billing file. Find 'RegisterNo' for large head by the appropriate meter number <i>Note: RegisterNo in the Compound Meter Billing file is synonymous with MIU from Meter Inspection Form</i>	Field is populated	
				8.5			Confirm Radio Box numbers from inspection and Billing file match	MIU matches RegisterNo	(Input result)	
				8.6			Objective Pass / Fail		(Pass / Fail)	
9	Assessment to determine that the Large Meter Head size in FlexiBill matches the size installed in the field	Meter Inspection Form Compared to FlexiBill	"Module ID" for Large Head (correlating "Modid")	"LH Size"	Large Head size (Module ID) in FlexiBill may not match the size installed in the field	FlexiBill's Module ID must match the LH Size in the field otherwise minimum charges will be incorrect.	9.1	Navigate to 'Large Head Detail' section of the meter's GoCanvas inspection file. Find 'LH Size'	Field is populated	
							9.2	Navigate to 'Large Head Detail' photo of the meter's GoCanvas inspection file	Photo available; size is visible	
							9.3	Confirm 'LH Size' matches the size on the Large Meter Head in the photo	Photo matches form	(Input Result)
							9.4	Launch Compound Meter Billing file. Find meter record and "Module ID" for Large Head <i>Note: FlexiBill's Module ID for Large Head is synonymous with LH Size from the GoCanvas Compound Meter Inspection Form</i>	Field is populated	

FINAL REPORT
BDPW Compound Meter Assessment



Objective #	Objective Description	Assessment Type(s)	FlexiBill Field(s)	Meter Assessment Form Element(s)	Risk(s)	Risk Tolerance	Step	Process Step Description	Expected Result	Actual Result
							9.5	Confirm Large Head size from inspection matches Billing file	LH Size field from matches Module ID in FlexiBill	(Input result)
							9.6	Objective Pass / Fail		(Pass / Fail)
10	Assessment to determine that: a) That the Large Meter Head reading in FlexiBill matches the reading of the Large Head manually collected in the field b) The meter reading multiplier in FlexiBill is correctly multiplying the readings obtained from the field	Meter Inspection Form Elements Comparison Meter Inspection Form Compared to FlexiBill	"Dial1 Curr" for Large Head (correlating "Modid")	"LH Meter Dial Reading" "Large Head Detail" photo	FlexiBill LH reading may not match LH reading in the field, potentially due to cross-wire or other issues	Inspection reading must be equal to or greater than the FlexiBill reading. Note: Inspections performed before the most current meter reading should reference the "Dial1Prev" field.	10.1	Launch Compound Meter Billing file. Find meter record and "Dial1 Curr" for large head	Field is populated	
							10.2	Navigate to 'Large Head Detail' photo of the meter's GoCanvas inspection file	Photo is available	
							10.3	Confirm Large Head dial reading in photo matches the "LH Meter Dial Reading" within the same section of the file	Photo reading matches reading input into form	(Input result)
							10.4	Navigate to 'Large Head Detail' section of the meter's GoCanvas inspection file. Find 'LH Meter Dial Reading'	Field is populated and includes 7 digits	
							10.5	Confirm Large Head readings from inspection and Billing file match or correlate and that the correct multiplier was applied	"LH Meter Dial Reading" is equal to or greater than "Dial1 Curr"	(Input result)
							10.6	Objective Pass / Fail		(Pass / Fail)
Small Meter Head										
11	Assessment to determine the Small Meter Head Radio Box number in FlexiBill matches	Meter Inspection Form Compared to FlexiBill	"RegisterNo" for Small Head (correlating "Modid")	"Radio Box MIU #" for small head "Small Head Detail" photo	RegisterNo in FlexiBill may not match MIU # from inspection, which may indicate a	FlexiBill's RegisterNo must match the MIU # in the field	11.1	Navigate to 'Small Head Detail' section of the meter's GoCanvas inspection file. Find 'SH Associated Radio	Field is populated	

FINAL REPORT
BDPW Compound Meter Assessment



Objective #	Objective Description	Assessment Type(s)	FlexiBill Field(s)	Meter Assessment Form Element(s)	Risk(s)	Risk Tolerance	Step	Process Step Description	Expected Result	Actual Result
	the Radio Box number in the field				cross-wire or other issue			Box MIU # (look at sticker)		
							11.2	Navigate to 'Small Head Detail' photo in the meter's GoCanvas inspection file	Photo available	
							11.3	Confirm MIU in photo matches 'Radio Box MIU#'	MIU in photo matches SH associated radio box in inspection file	(Input result)
							11.4	Launch Compound Meter Billing file. Find 'RegisterNo' for Small Head by the appropriate meter number <i>Note: RegisterNo in the Compound Meter Billing file is synonymous with MIU from Meter Inspection Form</i>	RegisterNo for Small Head is populated	
							11.5	Confirm Radio Box numbers from inspection and Billing file match	MIU matches RegisterNo	(Input result)
							11.6	Objective Pass / Fail		(Pass / Fail)
12	Assessment to determine that the Small Meter Head size in FlexiBill matches the size installed in the field	Meter Inspection Form Compared to FlexiBill	"Module ID" for Small Head (correlating "Modid")	"SH Size"	Small Head size (Module ID) in FlexiBill may not match the size installed in the field	Flexibill's Module ID must match the SH Size in the field	12.1	Navigate to 'Small Head Detail' section of the meter's GoCanvas inspection file. Find 'SH Size'	Field is populated	
							12.2	Navigate to 'Small Head Detail' photo of the meter's GoCanvas inspection file	Photo available; size is visible	
							12.3	Confirm 'SH Size' matches the size on the Small Meter Head in the photo	Photo matches form	(Input Result)



FINAL REPORT
BDPW Compound Meter Assessment



Objective #	Objective Description	Assessment Type(s)	FlexiBill Field(s)	Meter Assessment Form Element(s)	Risk(s)	Risk Tolerance	Step	Process Step Description	Expected Result	Actual Result
							12.4	Launch Compound Meter Billing file. Find meter record and "Module ID" for Small Head	Field is populated	
							12.5	Confirm Small Head size from inspection matches Billing file	Module ID in FlexiBill matches SH Size in field	(Input result)
							12.6	Objective Pass / Flag		(Pass / Flag)
13	Assessment to determine that Small Meter Head reading in FlexiBill matches the reading of the Small Head in the field	Meter Inspection Form Elements Comparison Meter Inspection Form Compared to FlexiBill	"Dial1 Curr" for Small Head (correlating "Modid")	"SH Meter Dial Reading" "Small Head Detail" photo	FlexiBill SH reading may not match SH reading in the field, potentially due to cross-wire or other issues	Inspection reading must be equal to or greater than the FlexiBill reading Note: Inspections performed before the most current meter reading should reference the "Dial1Prev" field.	13.1	Navigate to 'Small Head Detail' section of the meter's GoCanvas inspection file. Find 'SH Meter Dial Reading'	Field is populated and includes 6 digits	
							13.2	Navigate to 'Small Head Detail' photo of the meter's GoCanvas inspection file	Photo available	
							13.3	Confirm Small Head dial reading in photo matches the "SH Meter Dial Reading" within the same section of the file	Photo reading matches reading input into form	(Input result)
							13.4	Launch Compound Meter Billing file. Find meter record and "Dial1 Curr" for Small Head	Field is populated	
							13.5	Confirm Small Head readings from inspection and Billing file match or correlate	"SH Meter Dial Reading" is equal to or greater than "Dial1 Curr"	(Input result)
							13.6	Objective Pass / Fail		(Pass / Fail)

FINAL REPORT

BDPW Compound Meter Assessment



5.2. Information Requirements

Inspection Data: Photographic and geo-coding data was collected by BDPW field service teams with a web-based tool ("GoCanvas"). BDPW's leadership team developed custom data collection forms within GoCanvas for the field data collection. This form collects compound meter location data, installation configuration, radio transmitter data, and high-resolution photos of compound meter components and meter readings. The data collection form was reviewed by the KPMG to ensure that sufficient evidence would be available for the assessment. The results of the data collection for each meter is referred to as the "Inspection". There is one inspection file for each of the 98 compound meters. Inspections (both by BDPW and KPMG) were conducted over an approximately eight week period (December 14, 2017 through January 31, 2018)

Billing Data: Billing data was provided to KPMG via exports from FlexiBill. The Large and Small Heads of the compound meters are configured as individual meter accounts in FlexiBill and are linked by a shared meter serial ID (the identifier for the meter body). In total, 196 records were provided to account for two heads on each of the 98 compound meter bodies. BDPW's billing team provided the following fields for the entire inventory of compound meter heads: account number, service location, meter number, radio box/MIU, meter size ("Modid"), previous dial reading, current dial reading, and reading dates.

Billing data was provided in the following batches in support of assessment activities:

1. Batch 1 – Provided to KPMG by BDPW on January 2, 2018
2. Batch 2 – Provided to KPMG by BDPW on January 12, 2018
3. Batch 3 – Provided to KPMG by BDPW on January 17, 2018
4. Batch 4 – Provided to KPMG by BDPW on February 7, 2018

5.3. Meter Inspection Methodology

Inspection data was collected by both BDPW and KPMG using a consistent format and methodology. Meter inspections were completed using the GoCanvas inspection form. Inspectors were required to collect the previously-identified "Inspection Data". Inspectors were to make every effort to visually confirm the data they were collecting, as well as take clear photographs as required by the form. For instances where visual confirmation could not occur (i.e. wire-trace to Radio Transmitter by hand), the inspectors used approved alternate means for collecting data. With regard to tracing the Radio Transmitter to its meter head, every effort was made to conduct this via both meter gun as well as visual inspection (hand-trace) BDPW communicated to its inspectors a priority of conducting the Radio Transmitter trace using the gun. KPMG conducted all its inspections via gun-trace at a minimum, and both gun and hand-trace where possible. Upon completing an inspection, the Inspector(s) signed the electronic form before submitting it to KPMG.

5.4. Meter Assessment Methodology

The assessment was performed for each meter and compares elements from a single inspection file to two account records of billing data.

FINAL REPORT

BDPW Compound Meter Assessment



The assessment steps performed for each compound meter are outlined below:

1. **Prepare relevant data for assessment.**
 - Open relevant inspection file on GoCanvas.
 - Login to [gocanvas.com](https://www.gocanvas.com) (login credentials provided by BDPW)
 - Navigate to Submissions / Meters
https://www.gocanvas.com/submissions?folder_id=5953
 - Inspections are located in “Compound Meter Assessment Form” or “Dual Meter Compound Assessment (2nd Meter)”. Filenames are searchable by meter serial ID.
 - Use meter number to find two records (Large Head and Small Head) in FlexiBill data.
2. **Determine results for 13 detailed objectives.** Follow instructions in the Program to determine the results for the objectives. Objectives can result in a Pass, Flag, or Fail as outlined in the Program.
3. **Determine result for overall assessment.** Overall assessment result is automatically calculated by the Program file. An overall meter assessment will Fail if any objectives Fail, Flag if any objectives Flag (with no Fails), or Pass if all 13 objectives Pass (no Flags, no Fails).
4. **Collect (for distribution to BDPW) all assessment files that do not Pass.**
5. **Highlight Flags and Fails.** KPMG will provide separate assessment files which highlight the specific objective steps which resulted in either a Flag or Fail.

5.5. KPMG Independent Inspections / Assessments

As previously noted, in addition to BDPW’s 98 inspections, KPMG performed independent field inspections and subsequent assessments for a random sample of 10 compound meters from the same set of 98 meters. The assessment Program was used to validate that results from the KPMG independent Inspection / Assessment (“Validation”) yielded the same results for assessments completed using BDPW inspections. The KPMG Validation forms were uploaded to the “VALIDATION Compound Meter Assessment Form” folder within GoCanvas.

6. Meter Assessment Findings

The tables below provide summary and detailed information on KPMG’s findings as a result of assessments completed using data obtained from both BDPW and KPMG-led inspections. The Overall Assessment table includes summary assessment findings based on 98 inspections completed by BDPW, as well as 10 additional and independent inspections completed by KPMG on the same population of meters. As previously mentioned, inspection data was collected by both BDPW and KPMG using a consistent format and methodology. All 10 of the assessments completed using KPMG-led inspections (KPMG Validation) matched the overall findings that resulted from assessments completed using BDPW-led inspections*. As previously mentioned, of particular importance are the 5 assessments that resulted in Fail; these failures have the potential to impact customer billing associated with the respective meters.

*Note: As noted below in “Detailed Assessment Flags – KPMG Inspections”, one KPMG Validation assessment resulted in two Flags rather than only one Flag from the assessment completed using BDPW-led inspection data.

FINAL REPORT
BDPW Compound Meter Assessment



Overall Assessment

Overall Assessment	BDPW Inspection: Count of Meters	KPMG Validation: Count of Meters
Pass	73	7
Flag	20	3
Fail	5	0
Total	98	10

Detailed Assessment Fails & Flags – BDPW Inspections

The following represents the details of findings which resulted in Flag and Fail as a result of assessments completed using BDPW-led inspections. As shown in the Overall Assessment table, 73 assessments resulted in Pass, 5 resulted in Fail, and 20 resulted in Flag; only the Fail and Flag assessments are shown in the following table.

Meter	Reason for Failure
1 70074348	Large head wired to incorrect radio box; large head dial reading does not match billing system data
2 70092638	Large head size does not match billing system data
3 70093641	Large head size does not match billing system data
4 70114744	Large and small head dial readings do no match billing system data
5 70343418	Meter does not match customer (via service address) in billing system data
Meter	Reason for Flag
1 26257848	Small head size does not match billing system data
2 70088496	Unable to verify meter serial ID number from inspection photo
3 70336731	Unable to verify meter serial ID number from inspection photo
4 70008005	Meter serial ID in field does not match billing system data
5 31959309	Meter service address from inspection correlates with data in the billing system, but billing system may be lacking full service address details or using a building name rather than an address
6 70002876	
7 70041037	
8 70051180	
9 70074873	
10 70077357	
11 70093641	
12 70113518	
13 70115697	
14 26253015	
15 70008006	
16 70021780	
17 70110606	
18 70145964	
19 70148014	
20 70149564	

FINAL REPORT
BDPW Compound Meter Assessment



Detailed Assessment Flags – KPMG Inspections

The following represents the details of findings which resulted in Flag as a result of assessments completed using KPMG-led inspections. As shown in the Overall Assessment table, 7 assessments resulted in Pass, and 3 resulted in Flag; only the Flag assessments are shown in the table below.

	Meter	Reason for Flag
1	26257848	Small head size does not match billing system data
2	70008005*	Numerous Flags – Details to-be-provided separately in its Assessment file
3	70149564	

*Note: Of the assessments completed using KPMG-led inspections (KPMG Validation), one assessment finding did not match in its entirety the findings as a result of the assessment completed using BDPW-led inspection data. Meter serial ID 70008005 resulted in only one Flag during the assessment completed using BDPW-led inspection data, however, this same meter resulted in two Flags during the assessment completed using KPMG-led inspection data. This was the result of BDPW inspectors inputting an incorrect address (the FlexiBill address was used rather than the actual address in the field) in the inspection form which subsequently passed KPMG’s initial assessment objective; this same objective subsequently resulted in a second Flag during the assessment completed using KPMG-led inspection information.

Assessment Tracker and Files

The following embedded files provide both the detailed assessment results by meter number as well as the completed assessments resulting in either “Flag” or “Fail”.

Master Assessment Tracker	Assessment Files (Flags & Fails)
 BDPW Master Assessment Tracker_F	 Assessment Files (Flags & Fails).zip

7. Miscellaneous Assessment Observations

Observation	Details
Lack of consistent/ documented conventions for how compound meter data is reflected in FlexiBill	Two key issues were identified: (a) Similar data can be reflected in multiple fields (e.g. Sm/Lg Head can be in Comment 1 or Comment 2), and (b) similar data can be reflected with varied naming conventions (e.g. “Sm compound end” and “Sm”).
Small meter sizes larger than 5/8” are not reflected in FlexiBill	FlexiBill has the capability to include all Small Head sizes. This was not previously prioritized when setting up new compound meters
Location and service address data is not consistent	Locations at University of Vermont use building names instead of street addresses. Other service locations do not include the street number. It has been noted that some location data is limited by the Burlington Property Assessor’s database.

FINAL REPORT
BDPW Compound Meter Assessment



8. BDPW Standard Operating Procedures Review Methodology

KPMG reviewed BDPW’s Standard Operating Procedures (“SOP”) for compound meter setup, “WR SOP Intro & Chapter Pages” and “Water Resources Comprehensive SOP”, in order to provide recommendations for potential improvements. KPMG’s recommendations for these procedures will be provided separately, along with the meter assessment files for Flags and Fails.

9. SOP Review Observations and Recommendations

Observations

In reviewing BDPW’s Standard Operating Procedures, KPMG observed a significant opportunity for improvement that could be achieved by re-writing the SOPs leveraging an industry-proven format and structure to guide this effort; the templates provided in “Procedure Templates” below represent such a format and structure. The SOPs reviewed by KPMG were primarily narrative in content; the addition of detailed procedural steps / checklists would allow for these SOPs to be end-to-end tested for completeness and effectiveness, which could be realized upon the completion of an SOP re-writing effort. These observations and subsequent recommendations in the following slides represent an opportunity to create and maintain quality Standard Operating Procedures that support not only day-to-day business operations, but also employee onboarding / training activities. BDPW communicated to KPMG that these SOPs were in a working-draft state at the time they were provided for review.

The information below is a summary of our procedure findings and recommendations.

Key Recommendations

Topic	Key Recommendations
<p>Standardize SOPs</p>	<p>Recommend leveraging the narrative content in the current SOP to create standardized SOPs with detailed steps</p> <ul style="list-style-type: none"> • This SOP content is mostly narrative; it would benefit from procedural steps / checklists. Without detailed procedural steps / checklists, there’s no way to conduct an end-to-end test of this SOP • This SOP’s “Chapters” could be split into individual SOPs, leveraging the templates (or version of the templates) in the “Templates” slide <ul style="list-style-type: none"> • A Process à Activity à Task hierarchy should be used. For example, a Process for BDPW could be “Field Activities”, an Activity could be “Meter Reading”, and a Task could be “Obtain Manual Meter Reading” • Expanded content (i.e. detailed procedural steps, etc.) for these Chapters will likely remain localized (i.e. the Activity of “Landscaping” shouldn’t have an impact to or be impacted by the Activity of “Payment Processing & Posting”) • Include relevant system screenshots, as appropriate, to facilitate an intuitive procedure experience

FINAL REPORT
BDPW Compound Meter Assessment



Topic	Key Recommendations
Establish Responsibilities	Recommend establishing a responsibilities matrix for processes. Document who from BDPW will be Accountable, Responsible, Consulted and Informed for each process. Without a clear view of who is performing what step and how handoffs occur, KPMG cannot comment on segregation of duties or risk concerns.
Test SOPs	<p>Recommend conducting an end-to-end test of each SOP to confirm detailed steps are clearly defined, intuitive, without gaps, and execute an appropriate outcome based on the Activity / Task being tested</p> <ul style="list-style-type: none"> · SOP steps should be detailed enough that a new / in-training employee could navigate the steps with minimal support · This includes steps to account for exceptions / deviations from a normal process (i.e. how a Field Service Agent should handle a scenario where a reading won't load into the gun by entering a note code to indicate an issue for follow-up with Customer Service)
Establish / Document Controls	Recommend establishing or documenting controls for tasks, particularly those that impact billing (i.e. hand-written notes to Customer Service on N_Sight Reports during the meter reading verification Activity)
Establish Internal SOP Reviews	<p>Recommend establishing a periodic (frequency as appropriate) review of SOPs to ensure content is current and relevant</p> <ul style="list-style-type: none"> · Case in point – “WR SOP Intro Chapter Pages” indicated Automatic Debits are processed with TD’s eTreasury module, whereas “Water Resources Comprehensive SOP” indicated BDPW anticipating a migration to a Key Bank platform sometime in 2017.

Other Recommendations

Topic	Other Recommendations
Combine Content	Recommend combining content from “WR SOP Intro Chapter Pages” document with new SOPs, where appropriate. Much of the content from the former could be rolled into new SOP sections (i.e. Purpose & Scope, Key Control Activities, Key Policy References, etc.)
Expand Content	Recommend an increased focus on content about billing configuration and meter configuration
Add Content	<p>Recommend adding content for Section 1.3 – Service Installations in new SOP format</p> <ul style="list-style-type: none"> · This section is blank in the “Water Resources Comprehensive SOP” document

FINAL REPORT
BDPW Compound Meter Assessment



Topic	Other Recommendations
	<ul style="list-style-type: none"> This content is critical for any meter configuration risk assessment
Add Content	Recommend adding content for Section 6.3 – Field Services-Meter Installation Orders in new SOP format <ul style="list-style-type: none"> Details on missing information, assumptions, and other unclear details are included in the marked up “Water Resources Comprehensive SOP” found in the Marked Up Documents slide below
Naming Convention	Recommend adhering to a standardized naming convention for all SOPs to clearly identify and differentiate the Tasks. <ul style="list-style-type: none"> Example naming convention: FA-MR-Obtain_Manual_Read <ul style="list-style-type: none"> Process: Field Activity (FA), Activity: Meter Reading (MR), Task: Obtain_Manual_Read
Process Inputs / Outputs	Recommend documenting predecessor processes / inputs and successor processes / outputs
Process Technology	Recommend documenting software / systems required for processes, including user access credentials / log-ins, etc.
Process Frequency	Recommend documenting the frequency of which each process is to occur

KPMG’s Feedback to BDPW-provided SOPs

The following embedded files are the BDPW SOPs provided to KPMG for review & feedback. Though KPMG provided additional observations and recommendations in the table above, the following files contain mark-ups to the content as-provided.

BDPW-provided SOPs	
Water Resources Comprehensive SOP	WR SOP Intro Chapter Pages
 Water Resources Comprehensive SOP ( WR SOP Intro Chapter Pages (KPMG

KPMG SOP Observations & Recommendations

The following embedded file provides KPMG’s detailed observations of and recommendations for BDPW’s SOPs.

KPMG SOP Observations & Recommendations
 BDPW SOP Review - KPMG Observations &

Procedure Templates

The following embedded files provides industry-proven format and structure for developing Standard Operating Procedures

FINAL REPORT
BDPW Compound Meter Assessment



Procedure Templates	
SOP Template	Process Map Template
 BDPW SOP Template.docx	 BDPW Process Map Template.xlsx

CLOSING

10. KPMG has completed all activities as defined within the Engagement Letter, signed December 18, 2017, and the Engagement Extension Letter, signed February 1, 2018. KPMG made every effort to provide independent, objective assessments for each of BDPW’s 98 non-seasonal compound meters. The results as identified within the report and separate assessment files were completed in coordination with and approval from BDPW leadership. Upon receipt of all deliverables from KPMG, and after signing this report in the appropriate space below, BDPW considers the engagement scope to be fulfilled and the engagement complete.

APPENDIX

11. Appendix

11.1. Meter Assessment Program

The following embedded file is the Assessment Program template used by KPMG throughout each of its assessments.

Compound Meter Assessment Program
 KPMG CMPD Meter Assessment_BLANK.x

11.2. Meter Inspection and Validation

To ensure all meter inspections are collected, communicated, and subsequent assessments are completed in a common manner, the following process was followed to ensure all inspections and assessments were equal:

BDPW-Specific Onsite Meter Inspection Communication Details

- BDPW visually inspected all 98 compound meters using the GoCanvas Compound Meter Assessment Form
- KPMG collected all 98 inspection Forms completed by BDPW and conducted assessments of meter setup & configuration in comparison with associated configuration in Flexibill.

KPMG-Independent Onsite Meter Inspection Communication Details





FINAL REPORT

BDPW Compound Meter Assessment

- KPMG visually inspected a random set of 10 compound meters in the field using the same method for collecting data as BDPW (Compound Meter Assessment Form)
- KPMG conducted assessments of meter setup & configuration in comparison with associated meter setup & configuration in Flexibill for all 10 of these meters.

Common Onsite Meter Inspection Communication Details

- Once the inspections were complete (prior to assessments), the Forms were sent via email to the KPMG team as well as Megan Moir
- KPMG and BDPW completed their assessments of meter setup & configuration in comparison with associated meter setup & configuration in Flexibill.
- All assessments completed were documented and communicated via the weekly status meetings

11.3. Project Resources

The table below presents the resources performing the roles highlighted in the communications above as either communication owners or audiences.

Role	Resource
BDPW Project Owner	Chapin Spencer
BDPW Project Lead	Megan Moir
BDPW Billing Manager	Jessica Lavalette
KPMG Project Sponsor	Todd Durocher
KPMG Project Director	Brian Benton
KPMG Project Senior Analyst	Mariana Souza

REVIEW & APPROVAL

Approver Sign-Off

The Approver's signature below indicates that the contents of this document have been reviewed and accepted.

Chapin Spencer		
BDPW Director	Signature	Date
Todd Durocher		
KPMG Project Sponsor	Signature	Date

Diagnosis	Owner	Address	Meter Type	Meter#	Size	Account #	Last date of correct recorded usage (as applicable)	Date of Correction	Estimate of Unbilled/(Overbilled) Revenue ¹	Notes
Original Compound Meter Issue										
Original Compound Meter Configuration Issue	UVM	University Heights-South	Compound	70149564	3/4	70053590	n/a	11/30/2017	(\$2,018,733.50)	Large and small head radio box ID # transposition in billing system. Amounts DO NOT include pending payments for corrected usage since November 2017. Total overbill since installation of meter is \$2.659M
					4	70053600				
Issue identified and resolved as part of KPMG/DPW Compound Meter Assessment										
Configuration Issue	Customer 8	****	Compound	70074348	4	*****	n/a	2/28/2018	(\$164,566.80)	Radio boxes crosswired for large head and subtraction meter
			Subtraction (Water Only)	80283487	2	*****				
Configuration Issue	Customer 1	*****	Compound	70092638	3	*****	n/a	2/7/2018	(\$35,903.00)	Large meter head is 3" vs. 4" in billing system, thus rate table incorrect with 4" minimum set up. Additionally (not noted by KPMG) minimum set up on incorrect head.
Configuration Issue	Customer 1	*****	Compound	70114744	6	*****	n/a	2/7/2018	\$234,865.65	As part of Compound Meter Assessment, 6" meters discovered to have 2 standing zeros. Previously billed as having one standing zero.
Configuration Issue	Customer 1	*****	Compound	70093641	3"	*****	n/a	2/7/2018	\$0.00	While certain fields in billing system showed this meter to be a 4" meter, the rate table was <u>correctly</u> set for 3" (rate table affects minimum charges)
Configuration Issue	Customer 2	*****	Compound	70343418	2"	*****	n/a	2/28/2018	\$0.00	Incorrect work order installation paperwork indicated this meter was installed at a different location. Net zero impact to City, but one customer will be given a credit of \$314.30 for amounts paid to date and the customer where the meter was actually installed will be charged for this as they were underbilled.

Diagnosis	Owner	Address	Meter Type	Meter#	Size	Account #	Last date of correct recorded usage (as applicable)	Date of Correction	Estimate of Unbilled/(Overbilled) Revenue ¹	Notes
Other Compound Meter Configuration Issues Resolved since November 2017										
Configuration Issue	Customer 3	*****	Compound	70055034	2	*****	n/a	2/8/2018	(\$6,184.17)	Minimum charge applied incorrectly (on large vs. small head)
Configuration Issue	Customer 4	*****	Compound	70295698	5/8	*****	n/a	1/12/2018	(\$2,845.45)	Radio boxes crosswired for large and small head.
Other Meter (Single Head) Issues Resolved since November 2017 [Investigations prompted by findings in Compound Meter Assessment]										
Configuration Issue	Customer 8	*****	Single (Water Only -irrigation meter)	70146963	6	*****	n/a	2/28/2018	\$43,006.61	As part of Compound Meter Assessment, 6" meters discovered to have 2 standing zeros. Previously billed as having one standing zero.
Configuration Issue	Customer 8	*****	Subtraction (Water Only)	40274527	5/8	*****	7/6/2011	2/28/2018	\$0.00	Billing configuration issue discovered; however, because the valve has been off since 7/6/2011 (and this was reconfirmed recently) there are no financial implications. However, billing system has been corrected in the case that the valve is re-opened in the future.
			Single	70201939	2	*****	n/a			

Diagnosis	Owner	Address	Meter Type	Meter#	Size	Account #	Last date of correct recorded usage (as applicable)	Date of Correction	Estimate of Unbilled/(Overbilled) Revenue ¹	Notes	
Stopped or Damged/Altered Compound Meter Issues Resolved since November 2017 ²											
Damaged/Altered	Customer 5	*****	Compound (Water Only)	70041036	2	*****	6/1/2011	12/29/2017	\$8,618.53	Large head was not reporting usage since 2011. Presumed stopped. When visited prior to KPMG inspection it was determined that the large head had been removed.	
Damaged/Altered	Customer 8	*****	Compound	70145964	3/4	*****	8/2/2017	1/12/2018	\$18,515.99	Meter transmission errors noted in September 2017, confirmed in November 2017. Cause (mis-installation of meter heads likely after installation of Tricon heads by customer under meter head with out proper replacement of pins) confirmed 1/9/2018. Repaired 1/12/2018. So far after repair, it appears possible that usage was under reported since TriCon's installed.	
					4	*****	9/1/2017				
Stopped	Customer 1	*****	Compound	70114744	1	*****	11/2/2017	1/24/2018	\$14,239.29	Stopped meter head; addressed promptly	
Stopped	Customer 6	*****	Compound	70030098	5/8	*****	8/4/2014	1/22/2018	\$0.00	Stopped meter head; not caught by current no consumption verification procedures. \$0 financial impact because customer was charged the minimum charge. Calculated stop average is less than minimum so there is no additional charge. Note: Based on usage since repair, possible that stopped average calculation is much lower than actual consumption.	
Stopped	Customer 7	*****	Compound	70284673	5/8	*****	8/3/2015	1/12/2018	\$11,939.39	Stopped meter head; not caught by current no consumption verification procedures.	
Stopped	Customer 1	*****	Compound	70110606	4	*****	9/7/2016	Pending	\$256,455.69	Stopped meter head; not caught by current no consumption verification procedures.	
Stopped	Customer 8	*****	Compound	26253015	4	*****	6/1/2017	1/12/2018	\$9,969.55	Stopped meter head; not caught by current no consumption verification procedures.	
Stopped	Customer 8	*****	Compound	26253015	3/4	*****	7/6/2015	1/12/2018	\$46,291.87	Stopped meter head; not caught by current no consumption verification procedures.	
			SUMMARY								
									UVM South Original Overbilling	(\$2,018,733.50)	
									Net Under/(Overbilling) identified to date with UVM South	(\$1,584,330.36)	
									Total Net Under/(Overbilling) without UVM South original overbilling	\$434,403.14	
Note 1: All amounts listed are restricted to the 6 year statute of limitations											
Note 2: Any issues with stopped or damaged compound meters or configuration issues that had been previously identified were repaired prior to inspection											

Burlington Department of Public Works Commission Meeting
Draft Minutes, 21 March 2018
645 Pine Street

Commissioners Present: Robert Alberry; Tiki Archambeau (Chair); Jim Barr; Chris Gillman (Clerk); Solveig Overby; Jeff Padgett (*via phone*); Justine Sears (Vice Chair). **Commissioners Absent:** None.

Item 1 – Call to Order – Welcome – Chair Comments

Chair Archambeau calls meeting to order at 6:30pm and makes opening comments.

Item 2 – Agenda

Chair Archambeau requests moving Consent Agenda Item B to Agenda Item 4.1.

Action taken: motion approved;

“Ayes” are unanimous.

Item 3 – Public Forum (3 minute per person time limit)

Amir Jusufagic, Ward 3 business owner, speaks on Agenda Item 4.1.

Earl Handy, Ward 5 business owner, speaks on Agenda Item 6.

Item 4 – Consent Agenda

A. Traffic Status Report

Commissioner Barr makes motion to approve Consent Agenda and is seconded by Clerk Gillman.

Action taken: motion approved.

“Ayes” are unanimous.

Item 4.1 – Taxicab Stand/Loading Zone Dual Use & Proposed Parking Meter Zones

A) Communication by DPW Director Chapin Spencer and Senior Transportation Planner Nicole Losch who speak on various proposed parking changes downtown.

B) Commission Questions

Chair Archambeau and Commissioners Alberry and Overby ask questions on Item 4.1 with Director Spencer and Planner Losch answering.

C) Public Comment

Bill Keogh, Vice Chair of the Vehicle for Hire Licensing Board, speaks on Item 4.1.

D) Commissioner Discussion

Chair Archambeau, Commissioner Alberry, and Director Spencer engaged in a discussion over Item 4.1.

E) Motion made by Commissioner Alberry to accept staff’s recommendation while accepting the Friendly Amendment offered by Director Spencer: accept the slate of proposed changes with the exception of points 3, 4, 5 relating to taxicab stand adoptions and points 4 and 10 relating to taxicab stand removals, as presented.

Seconded by Commissioner Barr.

Discussion

Commissioner Overby and Mr. Keogh engaged in a discussion over Item 4.1.

Action taken: motion approved;

“Ayes” are unanimous.

Item 5 – Lower Downtown Capital Project

A) Communication by Director Spencer and DPW Public Information Manager Robert Goulding who speak on numerous 2018 projects in the lower downtown area.

B) Commission Questions

Vice Chair Sears and Commissioners Alberry and Overby ask questions on Item 5 with Director Spencer and Assistant DPW Director – Parking & Traffic Patrick Mulligan answering.

C) Public Comment

D) Commissioner Discussion

Commissioner Overby and Director Spencer engaged in a discussion over Item 5.

E) Action Requested – None.

Item 6 – Parking Zones on South Champlain St & Pine St

A) Communication by Planner Losch who speaks on the proposed parking zone changes on South Champlain St, between King St and Maple St, and Pine St, to the south of Maple St.

B) Commission Questions

Chair Archambeau asks questions on Item 6 with Director Spencer and Planner Losch answering.

C) Public Comment

Ilna Blanchard, Ward 5, speaks on Item 6.

Earl Handy, Ward 5 business owner, speaks on Item 6.

D) Commissioner Discussion

E) Motion made by Commissioner Barr to accept staff's recommendation: remove variously listed no parking areas on South Champlain St and Pine St, approve variously listed no parking areas on South Champlain St and Pine St, and approve variously listed thirty-minute parking spaces on South Champlain St, as presented.

Seconded by Commission Alberry.

Discussion

Action taken: motion approved;

“Ayes” are unanimous.

Item 7 – Water Revenue Bonds – Series

A) Communication by Director Spencer and Attorney Thomas Melloni who speak on water revenue bonds.

B) Commission Questions

Chair Archambeau and Commissioner Overby ask questions on Item 7 with Director Spencer, Assistant DPW Director – Water Resources Megan Moir, and Attorney Melloni answering.

C) Public Comment

D) Commissioner Discussion

E) Motion made by Commissioner Barr to accept staff's recommendation: approve the language of the resolution as presented to the Commission.

Seconded by Commissioner Alberry.

Discussion

Action taken: motion approved;

“Ayes” are unanimous.

Item 8 – Parking & Traffic Division Overview

A) Presentation by Assistant Director Mulligan who speaks on the Parking & Traffic Division.

B) Commission Questions

Chair Archambeau, Vice Chair Sears, Clerk Gillman, and Commissioners Barr and Overby ask questions on Item 8 with Director Spencer, City Engineer and Assistant DPW Director – Technical Services Norm Baldwin, and Assistant Director Mulligan answering.

C) Public Comment

Charlie Giannoni, Ward 3, speaks on Item 8.

D) Commissioner Discussion

E) Action Requested – None.

Item 9 – Approval of Draft Minutes of 2-21-18

Commissioner Barr makes motion to accept draft minutes of 2-21-18 and is seconded by Vice Chair Sears.

Action take: motion approved;
Commissioner Alberry: *abstains*
Chair Archambeau: Aye
Commissioner Barr: Aye
Clerk Gillman: *abstains*
Commissioner Overby: Aye
Commissioner Padgett: Aye
Vice Chair Sears: Aye

Item 10 – Director’s Report

Director Spencer reports on the redevelopment of streets in the downtown and needing to return to the Commission at a later date for votes on proposed parking alterations and the updated Water Billing Report being presented to the Board of Finance and City Council on Monday, 26 March 2018. Commissioner Overby asks a question on on-line trades inspection scheduling with City Engineer Baldwin responding.

Item 11 – Commissioner Communications

Commissioner Overby comments on the upcoming 2018 Operation Clean Sweep with Director Spencer responding.

Item 12 – Adjournment & Next Meeting Date – April 18, 2018

Motion to adjourn made by Commissioner Barr and seconded by Clerk Gillman.
Action taken: motion approved;
“Ayes” are unanimous.

Meeting adjourned at 8:37pm.



**CITY OF BURLINGTON
DEPARTMENT OF PUBLIC WORKS**

645 Pine Street, Suite A
Burlington, VT 05401
802.863.9094 VOICE
802.863.0466 FAX
802.863.0450 TTY
www.burlingtonvt.gov/dpw

To: DPW Commissioners
Fr: Chapin Spencer, Director
Re: **Director's Report**
Date: April 12, 2018

BANK & CHERRY STREETS CONCEPTUAL DESIGN PLANS

As part of Burlington's ongoing effort to reinvest in our downtown and engage our community, we invite the Commission and the public to learn more about proposed improvements to Bank and Cherry Streets. An initial public meeting was hosted on April 10 in Contois Auditorium. In 2016, Burlington voters approved [\\$22M in Tax Increment Financing \(TIF\)](#) for purchasing the reconstructed St. Paul and Pine Streets and improvements to Cherry and Bank Streets. The City is now developing the conceptual designs for the future of Bank and Cherry Streets using the Great Streets Standards for Burlington's Downtown. This is about place, space and designing a downtown for all Burlingtonians. **Public comment is open until April 30.** Once public comment has been received and we develop more detailed concept plans, we will return to the Commission for the approval to make any necessary regulatory changes required by the new design. For more information or questions or comments, visit <https://www.burlingtonvt.gov/CEDO/BTV-Mall-Redevelopment-Process/Bank-Cherry-Streets>

CHAMPLAIN PARKWAY RIGHT-OF-WAY PROCESS

The Parkway project continues to progress and the next task is to complete the acquisition of the rights necessary to construct the project. There are a total of 50 properties where temporary or permanent rights need to be acquired for the construction of the Champlain Parkway. VTrans is leading the acquisition effort and has sent offers to all of these property owners and has secured the rights for 27 properties. Of the remaining 23 properties, 13 require only temporary rights to be secured for the construction phase. There will be a City Council work session on April 16 to discuss the Champlain Parkway status generally and the Right-Of-Way acquisition process (see attached memo). A Council meeting will follow later the same evening where we will be asking the Council to proceed to Necessity and to set the hearing date and time – proposed Necessity Hearing and site visit - May 21, 2018 starting at 5:30pm. More information is on the City Council's Board Docs website: <http://www.boarddocs.com/vt/burlingtonvt/Board.nsf/goto?open&id=AXRJNV4BD055>.

WATER BILLING UPDATE:

We've included the full update to the Commission, City Council and Mayor in this month's Commission packet and have included an item on this month's agenda for the Commissioners to ask any questions.

PUBLIC ENGAGEMENT PLAN UPDATE:

We have been using the Public Engagement Plan for our 2018 projects and have found it a helpful resource. We've also found areas where after trying to apply it, we are suggesting modifications. This is the case with sidewalk reconstruction.

Public Works has nearly 4 miles of sidewalk tentatively planned for this construction year, including over 50 different segments of sidewalk. The goal of our Public Engagement Plan – presented to you

last year and the City Council in December 2017 – is to keep people reliably informed about positive changes and significant impacts in the public right of way. We will continue to meet ambitious goals of keeping residents informed, however we have to strike the right balance between notifications and staff resources (financial and administrative). Sidewalk reconstruction was bundled with roadway reconstruction in terms of outreach requirements, but they have very different levels of impact in terms of duration and impact to adjacent properties.

Given that sidewalk reconstruction normally has less disruption than roadway reconstruction, we are modifying our PEP to remove mailings and remove Council/Commission notification a requirement for sidewalk reconstruction – but keeping it for Major Maintenance / Road Reconstruction. For sidewalk reconstruction, residents and businesses will continue to be notified in advance through door-hangers, flyers or visits about sidewalk reconstruction directly adjacent to their property. In addition, we will modify front porch forum notifications to include one citywide post (at least once by April) about how to find out about planned sidewalk projects and will also plan that as a recurring feature on social media. We will continue to evaluate cumulative impacts to determine if higher levels of engagement are necessary.

2018 CONSTRUCTION SEASON:

Despite the unseasonably cold weather, we have gotten an early start to the construction season as we have another big season of infrastructure reinvestment. We're visiting each NPA to present the season's projects. We've updated the construction portal for the year's work:

<https://www.burlingtonvt.gov/construction>.

NEW REVENUE CONTROL SYSTEM IN GARAGES:

One of the many DPW items going to the City Council on April 16 is a request to execute a contract to install new revenue control equipment in the City garages. This equipment will give us an entirely new level of functionality and services to offer the public such as nighttime leases and a validation program. More information is on the City Council's Board Docs site:

<http://www.boarddocs.com/vt/burlingtonvt/Board.nsf/goto?open&id=AXRM6M5690E7>.

LOWER DOWNTOWN CAPITAL PROJECTS:

The Lower Downtown Capital Projects that we reported on last month have also begun. We've put up variable message signs around the project area, added the temporary parking that the Commission approved, and done extensive outreach in the neighborhood. There has been some confusion among members of the public and we have monitored the situation and made adjustments to our traffic control measures. There was a good article on the project in the Burlington Free Press:

<https://www.burlingtonfreepress.com/story/news/2018/04/01/burlington-streets-projects-pine-maple-st-paul-detours-delays-spring-summer-2018/438823002/>.

Feel free to reach out with any questions prior to Wednesday's Commission meeting. Thank you.