

October 30, 2023

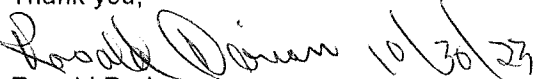
Via Electronic Filing
Administrative Law Judge Emily Devoe
Pennsylvania Public Utility Commission
400 North Street
Harrisburg, PA. 17120

RE: Ronald and Sheila Derian vs. Pennsylvania American Water Company
Docket # c-2023-3041252

Dear Judge Emily Devoe,

Included please find Exhibits 1 thru 7 to be entered concerning the above case # c-2023-3041252.

Thank you,


Ronald Derian


Sheila Derian

Exhibit 1



From: Sheila Derian Sam_rjd@yahoo.com
Subject: PAM non-revenue water leak causing damages and health concerns @
20 E. Miller Avenue Munhall PA 15120
Date: Apr 13, 2023 at 3:01:43 PM
To: ruben.e.rodriguez@amwater.com

Dear Mr. Rodriguez:

I am writing this e-mail with great concern and deep regret for the seemingly continued neglect of PAM to properly correct the known, test verified, PAM non-revenue water leak infiltrating into my property @ 200 E. Miller Avenue and 06/15/21 flooding by burst water main creating contaminated water causing injury and damage to our health and property for this long extended period of time.

PAM efforts of capping a portion of the line in September 13, 2022 did NOT resolve the leak issue as was reported to and observed by your field supervisor, Shane, [412-508-6422](tel:412-508-6422). We are experiencing significant, CONTINUAL infiltration into our foundation of test verified non-revenue PAM water to date, 04/12/23. For the past week our area has had no rain with higher than normal temperatures. The mold growth caused by the PAM water source is prolific! The foundation deterioration has increased causing further structural damages to our home.

The MOLD growth created by the extreme volume of contaminated water flooding into our foundation and home during the water main break on 6/15/21 and the continued PAM non-revenue water infiltration has severely, negatively impacted our health and home. MOST concerning is my husband's lung infection contracted from this MOLD exposure in 2021, confirmed by medical testing 09/2022, has now spread to BOTH lungs, confirmed by follow-up testing on 03/2023. THIS IS A MOST SERIOUS MATTER OF EXTREME CONCERN.

I was assured by PAM Customer Advocate, Carol, and Lutecia, New Jersey PAM 877-908-2666 @ 3:00 pm 08/23/22, that an expedited claim was sent to Travelers Insurance on 08/02/22 detailing the MOLD, increased water infiltration, and foundation, structural damage. Another expedited claim for another occurrence of significant water infiltration, MOLD GROWTH, foundation and structural damage, was sent to Travelers on 09/23/22. These claims have NOT been acknowledged to me by Travelers. They are additional separate claims from the one filed by PAM to Travelers on 06/15/21.

I received a response from Travelers Insurance on 01/19/23 (19 months after DOL) and an e-mail on 04/13/22 (10 months after DOL) both containing inaccurate information and the TOTAL lack of addressing ANY of the above serious issues and two separate claims dating 08/02/22 and 09/23/22. Carol, Customer Advocate, PAM, ASSURED me on 10/03/22 that all information of the 06/15/21, 08/02/22 and 09/23/22 dated claims were sent to Local and the Loss Departments of PAM to timely address and forwarded this information to your insurer.

Your professional attention to this most grievous matter would be appreciated.

Thank you,
Sheila Derian
200 E. Miller Avenue
Munhall, PA. 15120
412-969-3311

From: Sheila Derian Sam_rjd@yahoo.com
Subject: PAM non-revenue water infiltration and damage, 200 E. Miller Avenue,
Munhall, PA 15120
Sent from my iPhone
Date: Jan 6, 2023 at 9:20:26 AM
To: ruben.e.rodriguez@amwater.com

This e-mail is an update of my e-mail of 12/22/22.

I have received an automatic response from your office on 12/22/22 informing you will be out of your office from Dec. 21-27, 2022 and will return e-mails upon your return to the office. You have failed to respond to date. This confirms to me that you are indeed receiving my e-mails and you are indeed choosing to not respond.

1. PAM test verified non-revenue water from leak in PAM water line is STILL aggressively infiltrating my home's foundation further damaging property.
2. Mold is STILL propagating due to the damp wet conditions created by the water infiltration causing multiple problems.
3. PAM insurer, Travelers Insurance Company, has not contacted me concerning claims filed by PAM as stated by PAM Customer Advocate Department.

Sheila Derian
200 E. Miller Avenue
Munhall, Pa. 15120

Sent from my iPhone

From: Sheila Derian Sam_rjd@yahoo.com
Subject: PAM case #1053495918
Date: Dec 22, 2022 at 10:35:02 AM
To: ruben.e.rodriguez@amwater.com

Rueben Rodriguez:

This is an update of my e-mail of 12/6/22, to which you have failed to respond. As the contact representative for Mike Doran, current President of PAM and Cheryl Norton, PAM COO, I have requested you are making them aware of these most serious issues per my previous e-mails to you.

1. PAM has contracted CCSI to replace Hill Street pavement beginning on 12/21/22 and continuing today 12/22/22, where work to try to stop the aggressive infiltration of PAM non-revenue water into my home's foundation has been performed. Unfortunately, on 12/21/22 when CCSI began work, shortly thereafter an ambulance was called to the worksite for a medical emergency and treatment by medical personnel. Shortly following the arrival of the ambulance, the disgusting act of a CCSI employee occurred as he exposed himself by his utility vehicle parked on the side of my property and relieved himself by urinating in my yard! I witnessed this disgusting act as I was pouring a cup of coffee by my kitchen window. Notably upset, I immediately went outside to my yard and notified the CCSI employees that this indecent act of public urination will not be tolerated and will be reported. I feel it is your responsibility, as CCSI is working for PAM, that this incident will be seriously addressed by your company ASAP and necessary action taken.
2. The PAM non-revenue water is still aggressively infiltrating my home.
3. Mold from conditions continuing from the PAM non-revenue water is still proliferating it's growth.
4. Your insured, Travelers Insurance Company, has not responded to claims.

Your response to these MOST serious issues is expected.

Sheila Derian
200 E. Miller Avenue
Munhall, PA. 15120

Sent from my iPhone

From: Sheila Derian Sam_rjd@yahoo.com
Subject: PAM non-revenue water infiltration
Date: Dec 6, 2022 at 7:13:24 AM
To: ruben.e.rodriguez@amwater.com

Rueben Rodriguez:

You have not responded to my e-mail of 11/18/22. This is an update.

- 1). Test verified PAM non-revenue water is still aggressively infiltrating the foundation into my home. See attached photo.
- 2). The rapid mold growth is continuing due to wet damp conditions created by PAM non-revenue water infiltration.
- 3). Your insurer, Travelers Insurance Company, has not contacted me concerning these issues.

Sheila Derian
200 E. Miller Avenue
Munhall, Pa. 15120

From: Sheila Derian Sam_rjd@yahoo.com
Subject: PAM non-revenue water damage
Date: Nov 18, 2022 at 4:04:09 PM
To: ruben.e.rodriguez@amwater.com

ATTENTION: Ruben Rodriguez, Senior Director, External Communications
American Water

This e-mail is a follow-up to my phone calls to your office on 10/28/22, 10/14/22, 9/28/22, and 9/23/22 concerning property and personal loss caused by PAM non-revenue water infiltrating my home over an extensive period of time.

Most recently, on November 2, 2022, I alerted PAM to the significant increased infiltration of test verified PAM non-revenue water through our foundation into our home. Hundreds and hundreds of gallons of your non-revenue water have been pumped out of our home, as has been witnessed by PAM field workers, and continues to date. It is paramount that PAM locate and repair this line leaking to abate this infiltration into my home and stop the continuation of its destruction to my property.

PAM Field Supervisor, Shane, while inspecting property on 9/13/22, noted the continued infiltration of water into our home after completion of capping part of the Hill Street water line. PAM was not able to locate this line even after digging down 13ft. in reference to the line blueprints, so they capped off that section creating a dead line with no water flow to try to address the non-revenue water infiltrating into my home. Unfortunately, as stated above, the infiltration is continuing after the line capping which directs this problem as occurring yo another line leak. The Field Supervisor indicated PAM would take additional steps to locate and repair the leak. To date, no such action has taken place.

As a result of the above, additional foundation movement occurred on November 10, 2022 due to the continual infiltration of the PAM non-revenue

water. The continued wet, damp conditions occurring from this water is amplifying the mold growth and contamination.

As has previously been demonstrated in the past, in 2018, 2019, and 2021, this increased infiltration will most likely be followed by an eventual surface rupture of the line which will THEN be repaired by PAM.

PAM has submitted third party claims to your insurer, Travelers Insurance, for damages and loss to our property on August 2, 2022 and September 23, 2022 due to the ongoing infiltration of PAM non-revenue Water. Neither claim has been acknowledged to us by Travelers Insurance. It is now well past the 30 days Pennsylvania REQUIRES insurance companies to notify third party claimants WRITTEN confirmation of a submitted claim.

Your response and notification to all parties concerned to assist in this most serious matter is appreciated.

I have noted the announcement on October 31, 2022, that Mike Doran, currently the president of PAM, has been named Deputy Chief Operating Officer at American Water reporting to Executive Vice President and COO Cheryl Norton. Additionally, Justin Ladner, currently serving as president of Illinois American Water, has been named president of American Water. Cheryl Norton COO of American Water has stated, "She is excited to see the company promote these experienced employees. They know how to build teams effectively and THEY UNDERSTAND THE IMPORTANCE OF PUTTING OUR CUSTOMERS FIRST while making the communities we serve stronger." Perhaps, as you are the contact person for these new PAM leaders, making them aware of this serious problem and requesting their input on this matter would be of great value in reaching a resolve to our loss of more than

\$285,162.38 plus in damages incurred to my home due to the continued infiltration of PAM non-revenue water.

Confirmation of receipt of this e-mail is appreciated.

Respectfully,

Sheila Derian
200 E. Miller Avenue
Munhall, PA. 15120-3228
Phone:: 4129693311

Sent from my iPhone

From: Sheila Derian sam_rjd@yahoo.com
Subject: Fwd: PAM Case #1053495918, Travelers Ins. Claim #FQW2819
Date: Oct 21, 2022 at 1:25:29 PM
To: rachael.anne81@yahoo.com

Sent from my iPhone

Begin forwarded message:

From: PAW - Customer Advocacy/AWWSC <PAW-Customer-Advocacy@amwater.com>
Date: October 19, 2022 at 8:54:53 AM EDT
To: Sheila Derian <sam_rjd@yahoo.com>
Subject: RE: PAM Case #1053495918, Travelers Ins. Claim #FQW2819

Good morning Mrs. Derian,

This message is to confirm that your e-mail was received and has been forwarded to our AW Loss department who will then forward it to Travelers.

Thank you.

-----Original Message-----

From: Sheila Derian <sam_rjd@yahoo.com>
Sent: Tuesday, October 18, 2022 2:30 PM
To: PAW - Customer Advocacy/AWWSC <PAW-Customer-Advocacy@amwater.com>
Subject: Re: PAM Case #1053495918, Travelers Ins. Claim #FQW2819

EXTERNAL EMAIL: The Actual Sender of this email is sam_rjd@yahoo.com "Think before you click!".

ATTENTION: Carol

Good afternoon. It has been over two weeks since Rueben Rodriguez's office has referred the above PAM case to your office for handling. To date there has been no resolution. I phoned Mr. Rodriguez again on 10/14/22 to make him aware the problem has not been addressed with resolution.

- 1) The PAM non-revenue water is still infiltrating my property causing continued damage.
- 2) The MOLD contamination, which cannot be remediated because the source is generated

by the continuance of PAM non-revenue water infiltration into my home.

3) The MOLD colonies have contaminated everything in our living space including the AIR we breath causing serious health issues which have required medical intervention. We have also had to seek veterinarian care for our pet cat who has been suffering from ill effects of the mold contamination.

I would like to know to whom, specifically, this issue was transferred to from your office, and what contact information is available. The "hot potato" transfer of this most serious issue from one office and representative to another within PAM customer service in my opinion is most non-productive.

Your response to the matter would be appreciated.

Thank you,
Sheila Derian

Sent from my iPhone

On Oct 3, 2022, at 11:52 AM, PAW - Customer Advocacy/AWWSC <PAW-Customer-Advocacy@amwater.com> wrote:

Hello Mrs. Derian,

This is Carol and I apologize for not confirming receipt of your email.

Yes your e-mail was received and as we discussed, I forwarded to our Loss Department who works with Travelers as well as our Local office.

I'm waiting to hear back from Local to make sure that they have communicated what's going on to the insurance company and our Loss Department advised that they have forwarded the information to Travelers who should be reaching out to you.

Thank you.

-----Original Message-----

From: Sheila Derian <sam_rjd@yahoo.com>

Sent: Monday, October 3, 2022 10:45 AM

To: PAW - Customer Advocacy/AWWSC <PAW-Customer-Advocacy@amwater.com>

Subject: PAM Case #1053495918, Travelers Ins. Claim #FQW2819

EXTERNAL EMAIL: The Actual Sender of this email is sam_rjd@yahoo.com "Think before you click!".

ATTENTION: CAROL

This USA follow up to my e-mail sent to you on 9/29/22 in which we discussed the above subject by phone.

I have requested a confirmation of receipt of the 9/29/22 e-mail from you, but to date have not received confirmation.

HAS YOUR OFFICE, specifically, Carol, received my informational e-mail of 9/29/22?

A response is expected.

Thank you,

Sheila Derian

Sent from my iPhone

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Office 0532

From: RACHAEL anne <rachael.anne81@yahoo.com>
Sent: Monday, October 17, 2022 3:21 PM
To: Office 0532
Subject: [EXTERNAL] Fwd: claim # FQW2819
Attachments: AquaGuard Systems.pdf; Lane Plastering & Stucco.pdf; Renewal (windows).pdf; PODS.pdf

Caution! This email originated outside of FedEx. Please do not open attachments or click links from an unknown or suspicious origin.

Sent from my iPhone

Begin forwarded message:

From: Sheila Derian <sam_rjd@yahoo.com>
Date: September 28, 2022 at 3:11:34 PM EDT
To: rachael.anne81@yahoo.com
Subject: Fwd: claim # FQW2819

Sent from my iPhone

Begin forwarded message:

From: Sheila Derian <sam_rjd@yahoo.com>
Date: July 20, 2022 at 1:29:52 PM EDT
To: roravec@travelers.com
Cc: schnitzer@travelers.com
Subject: Fwd: claim # FQW2819

Date: July 20, 2022

You have FAILED to respond to my e-mail of 04/14/22 concerning claim #FQW2819. I have requested a copy of the e-mail you stated was sent to me by you on 10/21/21. You also stated per your investigation you were informed by PAM that they had no water leaks on Hill Street line prior to date of loss 06/15/21. I have

spoken to representatives in PAM office and field supervisors who assured me this statement would most likely not have been made to you because it is not factual as proven by viewing their records. What date and with whom did you speak at PAM that gave you this information during your investigation? These events lead me to be of the opinion that you are not acting in good faith concerning this most serious issue. Therefore, I feel compelled to send this e-mail to Alan D. Schnitzer, CEO of Traveler's Insurance Company as well to make him aware of the my unpleasant and fruitless experience with his adjuster concerning Claim #FQW2819.

As a result of the continuing PAM non revenue water infiltration into our homes foundation, on Monday, April 4, 2022, movement of foundation was felt and heard. Upon inspection corner vertical crack on outside of brick was revealed, foundation has a widened crack which has caused space opening to the outside, the foundation block have shifted loose from the home's main steel support beam, roof and peak trim movement, difficulty opening and closing windows due to frame shifting, difficulty in opening and locking patio door, screens in windows cannot be moved, front door difficult to close, lock, and open, plaster crack inside length of kitchen window, crack above sliding patio door has significantly increased by widening and moving across ceiling in kitchen, significant increase of foundation water infiltration, continued shearing and degradation of foundation, water coming up through crack in basement and garage cement floors.

April 5, 2022, 3:30 pm I alerted PAM to the significant increase of water infiltration taking place and an emergency work order #523468582 was generated. PAM field inspector arrived at property @ 5:30 pm, April 5, 2022. He noted the damage mentioned above, took a water sample at site, which was determined to be chlorinated and informed me he would schedule a crew with the proper GPS equipment to locate the leak causing this prominent flow of water.

May 12, 2022, at 2:54 p.m. I called PAM, speaking with Arial, about the April 5, 2022, work order for GPS leak location not being performed to date. I explained that thousands of gallons of non revenue water are still flooding through my foundation into my home. Arial generated another emergency work order #523737583 along with a case #1049201328. She stated all described above was placed in her notes and sent to the back office where she promised the matter would be

addressed promptly. PAM field worker visited property May 12, 2022, 4:30 pm. He viewed issue. Said he will turn issue over to his supervisor, Jason for handling. Gave me supervisor's phone # 412-862-9099 to contact him and explain problem. I did so and explained from beginning of approximately from 11/02/18 when my husband dug a trench to collect and direct the significant flow of water infiltrating foundation blocks to a sump pump to keep water from continual flooding of our already water damaged gameroom furnishings, carpeting, and paneling, basement, and garage. I explained on 02/11/19 when significant increase of water infiltration began causing our sump pump to run 24/7 nonstop to keep up with the water infiltrating until 6/15/21. Water infiltration continues until present date. Jason stated he was turning issue to his supervisor, Jack, for resolution. Jason in collaboration with his supervisor, Jack, stated a PAM work crew would collect water sample from residence, to which I agreed. May 13, 2022, 9:45 a.m. Matt from PAM arrived to collect water sample and take to lab for analysis. He returned at 1:15 pm and ran leak detection devices. He discovered the line with a high detection ping indicating a leak on Hill Street and E. Eugene. He stated he would report this information to his supervisor.

May 17, 2022, 10:30 a.m. PAM work crews arrived and Tom, PAM supervisor, asked for permission to take another water sample, to which I agreed, again tested as PAM non revenue water as previous test on May 13, 2022. At approximately 12:30 p.m. on May 13, 2022, another PAM crew arrived to assist to detect where leak was occurring, but it was not yet located.

May 18, 2022, Shane, PAM supervisor, arrived at our home 10:00 a.m. and requested another water sample for an additional testing to have done at a more elaborate lab, to which I agreed.

May 20, 2022, 10:30 a.m. ,Shane, PAM supervisor called to notify us after multiple testing, the water samples were VERIFIED PAM NON-REVENUE WATER that HAS been and CONTINUES infiltrating our property. He informed me that they will begin digging and leak detection again to try to find and make temporarily repair to stop the significant water flow we are experiencing. The Hill Street entire line replacement project has been placed on an emergency basis which is scheduled to start sometime in mid 2024.

June 7, 2022, 9:00 a.m. PAM work crews have started

work digging on Hill Street to try to find the leak to make a temporary repairs until the water line replacement project starts in 2024. PAM has not been able to locate the water line itself on the lower end of Hill Street to examine for leaks causing their non revenue water from infiltrating through our foundation.

On June 9, 2022, PAM crews did locate and repair a significant leak higher up on Hill Street which was contributing to the foundations infiltration, but it's repair did not end the infiltration of non revenue water through the foundation. They will continue to try to locate the water line on lower Hill Street to check for leaks and repair.

As our home has been negatively affected from PAM water intrusion for a very extended period of time, approximately October 2018 until present, and Travelers' delay from 06/15/2021 to present to remedy these most serious issues, the MOLD growth development has become significantly worsened allowing mold colonies to create which have contaminated our living environment and taking a negative toll on our health with mold exposure symptoms such as headaches, eye irritation, sneezing, itching, skin rashes, which have escalated to breathing disorders, chronic sinusitis, pain in muscles and joints, nausea, diarrhea, earaches, by our CONTINUED exposure to mold over such an extended period of time. This mold problem has been confirmed by having environmental tests of my home conducted by a professional mold remediation company. The mold has contaminated the subfloors and hardwood flooring of our home requiring removal. The mold has contaminated the air ducts requiring professional deep cleaning. Our air must be scrubbed and toxins removed.

Because of the extensive length of exposure to the mold, all organic materials stored in the lower level, clothes, coats, books, draperies, golf bags, stuffed toys, keepsakes, pictures, papers, carpets, bedding, pillows, cabinetry, wood paneling, wooden work shop table and cabinetry have been mold contaminated and dampness rotted wood items are dangerously contaminated by ascospores, aspergillois, basidia spores, cladosporium, pithomyces, smuts, mysomycetes, Stachybotrys, airborne toxins, and have required disposal with an estimated loss of \$29,400.00 (twenty-nine thousand four hundred dollars) and

many items that, to us, are considered IRREPLACEABLE . The main living space level of our home is also contaminated by the above mentioned mold and airborne toxins requiring disposal of clothes, upholstered living room furniture, draperies, carpeting, and bedding, with an estimated loss of \$35,500.00 (thirty-five thousand five hundred dollars).

The foundation of our home is dangerously corrupted from the constant hydrostatic pressure of the non ceasing water flow still occurring to date. All three walls, for which the estimate for repair is included herein, and are now near the point of collapse, opening crack to the outside due to the foundation slip on April 4, 2022, creating a dangerous condition. The estimate for the foundation rebuild is \$85, 850 (Eighty-five thousand eight hundred fifty dollars).

The April 4, 2022, foundation movement has created plumbing leaks in my bathroom and kitchen. The bathroom leak occurred behind the wall creating further mold contamination and need for plaster and tile removal and repair. The cost for repair will be updated due to inflationary costs and forwarded. The kitchen leak has mold contaminated damaged three of our wood cabinetry and deteriorated the wood requiring replacement. The repair estimate will be updated due to inflation costs and forwarded.

The constant and continuing to date hydrostatic pressure from water flow has caused movement and damage to my front steps and driveway, requiring replacement.

The wet and damp foundation condition due to PAM water infiltration has corrupted a natural gas pipe connected to the foundation causing needed replacement by the People's Natural Gas Company for our safety.

The wet, damp, humid conditions created by the PAM water infiltration has caused a biting mosquito presence to occur in and around our home.

The June 15, 2021, extreme volume of flooding produced by a burst water main on Hill Street has contaminated each and every block of my exterior walls with harmful contaminants. Contaminate-laden soil, animal waste, bird droppings, salt,pesticides, oil, fungi, and mold have filled my block wall. Proliferated growth of saplings, , plants, fungi, mold, and heavy moss has been caused by deposits of contaminants during the

flood necessitating the COMPLETE replacement of the walls with added drains under block footer and yard to prevent water flow from reaching homes foundation , not a mere reset of a piece of the wall as Travelers', Rose Horavec, offered. The wall is near collapse posing another hazard along with the health hazard. The estimate for repair, \$49, 465 (Forty-nine thousand four hundred sixty five dollars)is attached.

The estimate for the remediation of the dangerous mold hazard will be updated and forwarded due to inflation costs.

The repair estimate for kitchen ceiling and wall plastering repair, \$2100.00 (Two thousand one hundred dollars), is attached.

The repair estimate for our main roof, which is damaged due to foundation movement will be updated and forwarded due to inflation costs.

The repair estimate for the front porch, steps and driveway, due to shifts and movement caused by hydrostatic pressure and continuing infiltration of the water leak, front porch, \$9,750.00 (Nine thousand seven hundred fifty dollars), front steps \$10, 360.00 (Ten thousand three hundred sixty dollars), driveway \$13, 125.00 (Thirteen thousand one hundred twenty-five dollars), is attached.

The estimate for the repair of the windows, patio door, and front door due to foundation movement caused the PAM water infiltration is \$48, 945 (Forty-eight thousand nine hundred forty-five dollars)which is attached

The estimate for storage pods is \$667.38 (six hundred sixty-seven dollars and thirty-eight cents) which is attached.

The estimate for removing mold contaminated sub flooring and hardwood flooring will be updated due to inflation costs and forwarded .

The quotes submitted last year from Bakers Waterproofing and Franjo Construction are no longer valid due to time elapsed and increased damages and are to be disregarded.

June 9, 2022 PAM water Company called to notify me that one of the leaks was found and temporarily repaired on Hill Street to try to alleviate the water flow into our foundation, but this was to no avail in stopping

the infiltration of water. PAM stated they will continue to try to locate and repair the other leaks that their GPS is relaying until 2024 line replacement project is started.

THE ABOVE MENTIONED DAMAGES TO MY HOME THAT HAVE OCCURRED AND IS STILL OCCURRING DUE TO LAB VERIFIED PAM NON REVENUE WATER INFILTRATION IN AND AROUND OUR HOME AND PROPERTY IS NO LONGER TOLERABLE BY MYSELF AND FAMILY.

THE NEGATIVE IMPACT ON OUR HEALTH AND ADVERSE LIVING CONDITIONS CREATED BY MOLD CONTAMINATION CAUSED BY THE WET AND DAMP ENVIRONMENT CAUSE BY YOUR INSUREDS, PAM WATER COMPANY, NON REVENUE WATER INFILTRATION IS NO LONGER BEARABLE.

THIS SITUATION WITH YOUR INSURED, PAM, WATER INFILTRATION AND TRAVELERS CONTINUED DELAY IN REMEDY TO MAKE OUR LOSS WHOLE AGAIN HAS NEGATIVELY IMPACTED OUR LIVES AND HAS INFRINGED ON OUR PA CONSTITUTIONAL, ARTICLE 1 SECTION 27, RIGHT TO BREATHE CLEAN, NON TOXIC AIR AND INFRINGED ON OUR BASIC PURSUIT OF HAPPINESS IN OUR HOME.

Therefore, we DEMAND Travelers immediate response and payment of our quoted loss , at this time, of \$285, 162.38 (Two hundred eighty-five thousand one hundred sixty-two dollars and thirty-eight cents) to be received within seven days or we will contact legal counsel to assist in recovering our loss caused by your insured, PAM Water Company. Please be advised the above estimate of \$285, 162.38 (Two hundred eighty-five thousand one hundred sixty-two dollars and thirty-eight cents) does NOT include the estimates for repair of main roof, Peoples's Natural Gas Pipe replacement by plumber, removal and disposal of mold contaminated sub flooring , floor install, bathroom wall mold and install, and three mold rotted bottom kitchen cabinets as stated above due to rising inflation costs, and all needed permits required by Munhall Boro.

Any information needed to confirm water damage liability can be affirmed by contacting your insured, PAM Company.

Thank you,

Sheila Derian
200 E. Miller Avenue

Office 0532

From: RACHAEL anne <rachael.anne81@yahoo.com>
Sent: Monday, October 17, 2022 3:21 PM
To: Office 0532
Subject: [EXTERNAL] Fwd: Claim FQW2819 - Pennsylvania American Water

Caution! This email originated outside of FedEx. Please do not open attachments or click links from an unknown or suspicious origin.

Sent from my iPhone

Begin forwarded message:

From: Sheila Derian <sam_rjd@yahoo.com>
Date: October 12, 2022 at 1:40:55 PM EDT
To: rachael.anne81@yahoo.com
Subject: Fwd: Claim FQW2819 - Pennsylvania American Water

Sent from my iPhone

Begin forwarded message:

From: "Oravec, Rose" <RORAVEC@travelers.com>
Date: April 13, 2022 at 4:41:45 PM EDT
To: Sheila Derian <sam_rjd@yahoo.com>
Subject: Claim FQW2819 - Pennsylvania American Water

Good Afternoon Mrs. Derian,

I apologize for the delay in responding to your email.

As you know, Joe Fagan of Gateway Engineers was retained to inspect your property as a result of the water main break on June 15, 2021. He initially inspected on July 14, 2021. On 9/17/2021 I called you to go over the report - I left you a v/m message. On 10/21/2021 I phoned you again and got your voicemail so I sent you an email that I needed to discuss your claim with you. You called me on 11/3/2021 and I went over the report in detail as to the engineers findings. You disagreed with the report and stated you had on-going issues including further movement and cracking of the items that were initially alleged so I agreed to send the engineer back to go over your concerns with you. He reinspected on November 8, 2021. On December 21, 2021 I called you to discuss his findings and again left you a message.

I have reviewed your March 4, 2022 email and while you allege that the water main had been leaking for months, that is not what our investigation revealed. PAW has no record that this line was leaking prior to the break on June 15, 2021.

As to the engineers findings in his original report:

In summary, it is my opinion, within a reasonable degree of engineering certainty, that the only distresses to the Derian dwelling and property that could be attributable to runoff from the June 15, 2021, PAW water main break is possibly the bowing of the left or east portion of the rear yard retaining wall. Water infiltration into the basement has been occurring for several years as indicated by the need for a trench drain to be installed; the water stains and displaced paint on the basement walls; and, the continuous flow of water in the basement trench drain, about one month after the water main break repair.

During his second inspection he went over with you all the areas of concern. His subsequent report opined:

In summary, it is my opinion, within a reasonable degree of engineering certainty, that none of the distresses to the Derian dwelling and property that were claimed as having occurred since my July 14, 2021, site inspection are new nor the result of runoff from the PAW water main line break that occurred on or about June 15, 2021..

Water infiltration into the basement has been occurring for several years as indicated by: the need for a trench drain to be installed; the water stains and displaced paint on the basement walls; and, the continuous flow of water in the basement trench drain, almost five months after the water main break repair.

As to Travelers intent to handle your claim, we are willing to reset the left portion of the rear retaining wall to bring it to pre-loss condition. No consideration will be given to the estimate from Bakers Waterproofing for installation of an interior French drain nor your estimate from Franjo Specialty to replace the retaining walls nor the entire patio including the roof.

Please contact me at 412-338-3149 to discuss a resolution of the rear retaining wall.

Rose M. Oravec | Claim Professional | General Liability
Travelers Property Casualty Company of America
Mid-Atlantic Claim Center
Pittsburgh
W: 412-338-3149 F: 1-866-704-2713
Email: roravec@travelers.com

Mailing Address:
Travelers
PO Box 430
Buffalo, NY 14240-0430

-----Original Message-----

From: Sheila Derian <sam_rjd@yahoo.com>
Sent: Tuesday, April 12, 2022 1:49 PM
To: Oravec, Rose <RORAVEC@travelers.com>
Subject: [External] Claim FQW 2819

CAUTION: This email came from outside of Travelers. Please exercise caution when opening attachments, clicking links or responding to this email. The original sender of this email is sam_rjd@yahoo.com.

This e-mail is a follow-up to my e-mail inquiry sent on 03/04/22 regarding the above third party claim # FQW 2819 to which I have received no response from Travelers after these thirty days. In my opinion, I believe that due to this excessive delay in responding to the claim, that Travelers is acting in bad faith.

I will be forwarding my concerns and all information previously sent to you to Alan D. Schnitzer CEO of Travelers Insurance to schnitzer@travelers.com for his office's response toward resolving this issue.

Thank you,

Sheila Derian

200 E. Miller Avenue

Munhall, PA 15120

E-mail: sam_rjd@yahoo.com

Sent from my iPhone

This message (including any attachments) may contain confidential, proprietary, privileged and/or private information. The information is intended to be for the use of the individual or entity designated above. If you are not the intended recipient of this message, please notify the sender immediately, and delete the message and any attachments. Any disclosure, reproduction, distribution or other use of this message or any attachments by an individual or entity other than the intended recipient is prohibited.

TRVDiscDefault::1201

Office 0532

From: RACHAEL anne <rachael.anne81@yahoo.com>
Sent: Monday, October 17, 2022 3:22 PM
To: Office 0532
Subject: [EXTERNAL] Fwd: FQW2819

Caution! This email originated outside of FedEx. Please do not open attachments or click links from an unknown or suspicious origin.

Sent from my iPhone

Begin forwarded message:

From: Sheila Derian <sam_rjd@yahoo.com>
Date: September 28, 2022 at 3:09:11 PM EDT
To: rachael.anne81@yahoo.com
Subject: Fwd: FQW2819

Sent from my iPhone

Begin forwarded message:

From: Sheila Derian <sam_rjd@yahoo.com>
Date: April 15, 2022 at 5:39:07 PM EDT
To: roravec@travelers.com
Subject: FQW2819

Dear Rose Oravec:

Thank you for finally acknowledging my e-mail of 03/04/22 by responding on 04/14/22.

In response, I would say Joe Fagan is correct in stating that water infiltration has been occurring for several years. The PAW repair crew addressing the culminating act of a leaking line causing an above ground burst water main on 06/15/21 also had stated to me and my husband that the badly perforated line appeared to have been leaking for a long period of time PRIOR to the surface rupture. Joe Fagan retrieved a piece of the badly eroded water line (which demonstrated the bad condition of the line) from my property, weighing approximately 15lbs., which was thrust into my backyard along with other debris, by the rushing water on 06/15/21, for his examination.

You state that your investigation revealed there was no record by PAW that the HILL STREET water line was leaking prior to the break on 06/15/21. That is not an accurate statement. Two examples follow: A) 11/19/20 HILL STREET experienced a 6 in. Water main and line break prompting an emergency repair on 11/19/20, after leaking on street since January 2020 causing hazardous ice build up on street during winter. I followed up with complaints to the water company on 02/11/20 of a continuous flow of water

company chlorinated water (confirmed by HACH Chlorine DPD reagent test) in basement, with available dated photo. B) 11/06/20 The corners of HILL STREET and E. Eugene Street experienced a PAW 6 in. Water main and line break, on which date emergency repair was made after prior months of evident above ground leakage went unaddressed. Phone messages from PAW will CONFIRM that there has been prior leaking from HILL STREET water line on multiple dates. On 06/15/21 there was, again, a water main line break on HILL STREET causing massive amounts of water with hundreds of pounds of pressure to pound against my property, home, and foundation, loosening and removing foundation material creating an unsafe foundation to my home, causing destabilization of my hillside behind my home, wall damage, immense amounts of water penetrating under my patio causing serious damage cracking concrete, landscaping damage, yard sinkage, interior damage, and MOLD (Joe Fagan notes displacement of paint on basement wall, which was attributed from our scrubbing of wall to mitigate mold growth) which is known to cause serious health issues from exposure.

You state you e-mailed me on 10/21/21. I have no record of your e-mail. Please send copy of that e-mail for confirmation of your statement.

Joe Fagan states in his original report of July 14, 2021, you provided, "that water infiltration with a continuous flow of water was still occurring about one month after the water main break repair." That is incorrect. Approximately 5 days after the water main repair, the fast, flooding, significant water flow ceased. There was no "continuous flow of water" on July 14, 2021, as stated by Joe Fagan. There was very minimal water filtrating in from a natural pathway created by the several days long water surge from the PAW water line break. I have dated pictures confirming this no glowing water. Even through the '100 year rain event' on August 31, 2021, as documented by NOAA, our basement suffered very minimal water infiltration.

During his second inspection on November 8, 2021, per my request and your agreement during my November 3, 2021 phone call to Travelers, I directed Joe Fagan's attention to the side basement foundation of our home where I discovered water infiltrating on October 14, 2021. I expressed my deep concern about the main and water line on HILL STREET directly adjacent to the present water infiltration site in my home that it might completely burst like the other parts of the HILL STREET line had, as documented above, causing further severe damage to my property as it did on 06/15/21. He reiterated, as you have previously stated to me, that Travelers cannot compel PAW to check or dig up their lines. In my opinion, having information and history to perhaps prevent another negative event from occurring again and not acting upon it, borders on the side of negligence.

From approximately 06/21/21 until October 13, 2021, our basement foundation experienced NO significant water flowing; only infrequent, very minimal water, from a natural pathway created as described earlier. October 14, a noted change of increased water infiltration of the side foundation was observed.

I disagree with Joe Fagan's report of no new damage on his November 8, 2021 visual inspection.

I maintain all damages and estimates submitted for payment, thus far, are the responsibility of Travelers Insurance Company and your insured, Pennsylvania American Water Company.

Respectfully,
Sheila Derian
200 E. Miller Avenue
Munhall, Pa. 15120
E-mail: sam_rjd@yahoo.com
Sent from my iPhone

From: Sheila Derian sam_rjd@yahoo.com
Subject: Fwd: Property damage @ 200 E. Miller Ave., Munhall, PA 15120
Date: Oct 21, 2022 at 1:29:55 PM
To: rachael.anne81@yahoo.com

Sent from my iPhone

Begin forwarded message:

From: Sheila Derian <sam_rjd@yahoo.com>
Date: September 29, 2022 at 2:59:22 PM EDT
To: PAW-Customer-Advocacy@anwater.com
Subject: Property damage @ 200 E. Miller Ave., Munhall, PA 15120

ATTENTION: CAROL

Attached is the most recent contact with PAM per text. The attempted resolve of the stated issue is as follows:

September 12, 2022

PAM work crews arrived 9:00 am to dig up Hill St. water line and cap, placing shut off valves, to eliminate lower portion of leaking Hill St line infiltrating our four; crews left approx. 9:00 pm

September 13, 2022

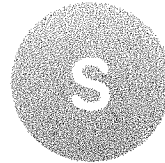
PAM work crews returned @ 9:00 am to continue work eliminating leaking lower portion of Hill St. water line. They dug up end section, capped line and installed valves. The fire hydrant on E. Miller Ave. was opened and used to flush water from discontinued portion of deteriorated water line.

September 21, 2022

I texted Shane, PAM supervisor, as per his request, to update him on water infiltration progress after 7 days of capping lower section of leaking Hill St. line. I stated side foundation wall has had no water flow since line capping. However, the back foundation wall is still being infiltrated same as when he observed on 9/13/22. mold generated by these conditions has become a grave concern of ours. I stated Travelers, your insurer, has not contacted me since PAM submitted the claim asked if he could direct me to a supervisor who is handling this issue for resolve.

cricket LTE

2:07 PM



Shane-PAM >

iMessage

Mon, Aug 29, 11:29 AM

Hi Shane,
This is Sheila Derian,



Shane-PAM ▾



audio

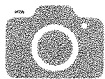


Facetime



info

Hi Shane,
This is Sheila Derian, 200 E. Miller Avenue, Munhall. We have had foundation movement today, August 27, 2022, which has been the most significant to date. This is what followed the foundation movement: Water infiltration has increased. This leads me to believe that the undetected water line leak has worsened significantly. The ceilings vibrated causing our chandelier crystals to shake for a few seconds accompanied by alarming loud cracking and banging sounds throughout the house. Our foundation block has separated from our main support beam in the basement. The basement stairs have shifted slightly to the left. The backyard walls bottom block has been completely pushed out of the wall, likely from hydrostatic pressure. Three large cracks in our yard have developed leading from the wall. The



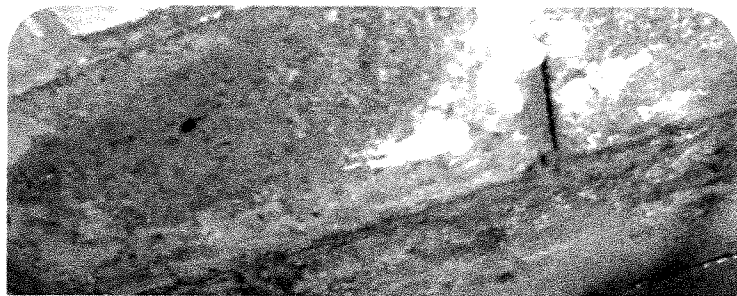
iMessage





Shane-PAM >

shifted slightly to the left. The backyard walls bottom block has been completely pushed out of the wall, likely from hydrostatic pressure. Three large cracks in our yard have developed leading from the wall. The outside corner brick 5 in. vertical crack has increased to over a 12 in. vertical crack with horizontal cracking. We are definitely experiencing ground movement from the continued water flow. The mold growth has escalated greatly with all this moisture, and in turn, as would be expected, has contaminated all areas of my home. I know you said you were taking this situation back to your supervisor. Has he been able to offer any resolution to these continuing issues?
Thanks you, Sheila Derian



Message





Shane-PAM >

This is a picture I took this morning just to give you an idea of the infiltration still occurring. Thanks, Sheila Derian

I am waiting on Duquesne light to hold a pole so we can cut and cap the main. Should be Wednesday Thursday this week

Thank you ,Shane.

Wed, Aug 31, 2:38 PM

We will not be out to do our work until next Wednesday. Just wanted to keep you posted

Thanks so much Shane, it is appreciated! Sheila Derian

Wed, Sep 21, 9:36 AM

Hi Shane,
This is Sheila Derian. As you requested, I wanted to update you on



Message





Shane-PAM >

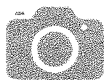
We will not be out to do our work until next Wednesday. Just wanted to keep you posted

Thanks so much Shane, it is appreciated! Sheila Derian

Wed, Sep 21, 9:36 AM

Hi Shane,
This is Sheila Derian. As you requested, I wanted to update you on the water leak. The side foundation wall has not had water flow since you capped the line. However, the back foundation wall is still being infiltrated as it was when you observed it on 9/13. The mold generated by these conditions have become a grave concern. Travelers Insurance has not contacted me to date. Can you direct me to a supervisor who is handling this issue.
Thank you

Read 9/21/22



Message



Office 0532

From: RACHAEL anne <rachael.anne81@yahoo.com>
Sent: Monday, October 17, 2022 3:22 PM
To: Office 0532
Subject: [EXTERNAL] Fwd: FQ2819

Caution! This email originated outside of FedEx. Please do not open attachments or click links from an unknown or suspicious origin.

Sent from my iPhone

Begin forwarded message:

From: Sheila Derian <sam_rjd@yahoo.com>
Date: September 28, 2022 at 3:07:58 PM EDT
To: rachael.anne81@yahoo.com
Subject: Fwd: FQ2819

Sent from my iPhone

Begin forwarded message:

From: Sheila Derian <sam_rjd@yahoo.com>
Date: March 4, 2022 at 2:08:06 PM EST
To: roravec@travelers.com
Subject: FQ2819

Travelers Insurance:

I am writing this email concerning claim number FQ2819 filed by Pennsylvania American Water Company on my behalf nearly nine months ago with regard to property damage caused by a badly deteriorated, perforated water main line leaking for many years underground and culminating with a surface rupture on 06/15/21 resulting in significant flooding. The Munhall Fire Marshal alerted Pennsylvania American Water Company to the flood situation and then visited our home to awaken us to make sure we were uninsured and alert us to the significant flooding occurring to our home.

I have previously submitted cost of repair estimates from certified contractors to restore the considerable property damage, which is on going.

We have allowed Travelers Insurance's independent engineer, Joe Fagan, Gateway Engineering, to perform two inspections of the damaged property. Both inspections, the only diagnostic equipment he utilized to assess damage was a flashlight, tape measure, and camera. He had no GPR nor GPS equipment to reveal underground voids caused by the leaking water main line as was indicated by suddenly appearing ground depressions and dying vegetation appearing on the property, all of which was brought to your attention and the attention of the engineer during his second inspection, which causes further structural damage.

Please send the engineer's findings and Travelers Insurance intent to handle the above

claim by email or regular mail. Your prompt attention to this matter is appreciated.

Sincerely,

Sheila Derian

200 E. Miller Avenue

Munhall, PA. 15120

Email: Sam_rjd@yahoo.com

Sent from my iPhone

Office 0532

From: RACHAEL anne <rachael.anne81@yahoo.com>
Sent: Monday, October 17, 2022 3:22 PM
To: Office 0532
Subject: [EXTERNAL] Fwd: Claim FQW 2819

Caution! This email originated outside of FedEx. Please do not open attachments or click links from an unknown or suspicious origin.

Sent from my iPhone

Begin forwarded message:

From: Sheila Derian <sam_rjd@yahoo.com>
Date: September 28, 2022 at 3:08:43 PM EDT
To: rachael.anne81@yahoo.com
Subject: Fwd: Claim FQW 2819

Sent from my iPhone

Begin forwarded message:

From: Sheila Derian <sam_rjd@yahoo.com>
Date: April 12, 2022 at 1:48:30 PM EDT
To: roravec@travelers.com
Subject: Claim FQW 2819

This e-mail is a follow-up to my e-mail inquiry sent on 03/04/22 regarding the above third party claim # FQW 2819 to which I have received no response from Travelers after these thirty days. In my opinion, I believe that due to this excessive delay in responding to the claim, that Travelers is acting in bad faith.

I will be forwarding my concerns and all information previously sent to you to Alan D. Schnitzer CEO of Travelers Insurance to schnitzer@travelers.com for his office's response toward resolving this issue.

Thank you,
Sheila Derian
200 E. Miller Avenue
Munhall, PA 15120
E-mail: sam_rjd@yahoo.com

Sent from my iPhone

Exhibit 2

AquaGuard Systems, Inc.

4240 Greensburg Pike, Suite 101
Pittsburgh, PA 15221
(412) 727-6218
FAX (412) 727-6219
PA HIC #8180

Date: July 15, 2022

Job Name: Sheila Derian

Job site: 200 E. Miller Street

City, State, Zip: Munhall, PA 15120

Phone: 412.969.3311

Total Cost: Dependent upon options chosen

Payment Schedule: Follow payment schedule on contract.

This proposal is valid for 30 days from the above date.

All material is guaranteed to be as specified. All work to be complete in a workmanlike manner according to standard practice. Any alteration or deviation from specifications below involving extra cost will be executed only upon written orders and will become an extra charge over the estimate. All agreements are contingent upon strikes, accidents, weather or delays beyond AquaGuard Systems, Inc. control. AquaGuard Systems, Inc. carries full liability and Workmen's compensation Insurance.

NOTE: This proposal describes additional work added to the original proposal dated July 12, 2022.

NOTE: Please refer to the included diagram for all aspects of this project.

FOUNDATION REPAIR

Furnish all labor and material necessary to make the following repairs to the foundation of the home.

- Brace structure as needed.
- Remove the concrete pad at the rear of the home as well as the roof above it.
- Excavate the entire right rear and left foundation walls of the home to footer depth.*
NOTE: The trench will continue approximately 32' from the front left corner of the home and then tap into the storm sewer at the street. It has yet to be determined if there is a storm sewer there, and if the Borough will allow tap in. If not, adjustments will be made to the scope of work regarding this issue, as well as price.
- Once excavation is complete, remove the entire right and rear foundation walls. NOTE: This will likely be done in sections to minimize movement to the structure.
- The new foundation sections will be constructed with same size concrete block. These new foundation sections will be reinforced by grouting and rodding every 4' on center. Grouting and rodding refers to installing steel rod and concrete vertically into the hollow cells of the block. This dramatically increases the lateral strength of the wall.
- New glass block windows with vents will be installed at current window locations.
- The below grade portions of the right rear and left foundation walls will be waterproofed with a permanent waterproof membrane, either Tuff-N-Dri or Mel-Rol will be used in this application.
- A new Schedule 35 4" perforated french drainpipe will be installed along the footer of the right, rear, and left foundation walls.
- A new downspout system will be installed for the back left and the front left downspouts. This system will be entirely constructed of 4" Schedule 35 solid pipe and fittings.
- The new downspout system and the new french drain system will merge into a single solid Schedule 35 pipe at the front left corner of the home and continue to the street.
- The right rear and left foundation walls will be backfilled to within approximately 12" of grade with 2B gravel. NOTE: Where the concrete pad will be installed along the rear foundation wall will receive a full gravel backfill to prevent settlement of the new pad. The gravel will be covered by a landscape fabric to help prevent soil intrusion into the new drainage system.

- The remainder of the trench will be backfilled with soil from the excavation and rough graded.
NOTE: AquaGuard recommends leaving the soil somewhat mounded for settlement.
- The concrete pad at the rear of the home will be replaced to previous dimensions.

Total job cost: \$85,850

NEW ROOF OVER REAR CONCRETE PAD

Furnish all labor and material necessary to construct a new shed style roof over the rear concrete pad which will be approximately 12'x25'.

- This new shed roof will include 2"x8" framing and rafters.
- A main beam which will be a triple 2"x6" beam with three (3) 4"x4" treated support posts.
- 7/16" OSB sheathing. This roof sheathing will be covered with ice and water shield to protect it. This will also protect the roof until the roofing contractor has the opportunity to install the new shingles.
- Also included are new gutters and downspouts. The downspout will be fed to the new main drainage system that AquaGuard will be installing throughout the property. Also included is vinyl soffit and fascia and aluminum trim.
NOTE: The vinyl soffit will be installed to the underside of the new roof.

Total job costs: \$14,475

RETAINING WALLS:

Included in the retaining walls portion of this project is the smaller retaining wall nearest the front left corner of the home measuring approximately 20 feet in length by approximately 38 inches in height as well as the large retaining wall at the rear of the property measuring approximately 78 in total length with a height that varies between approximately 36 inches to approximately 60 inches in height and the section of retaining wall from the new front porch to the sidewalk measuring approximately 22 feet in length by approximately 2 feet in height.

NOTE: There currently exists a two tier retaining wall at the rear of the property. The new retaining wall will be a single level.

- Both retaining walls will include all necessary drainage and reinforcing grid as needed.
- Both retaining walls will be constructed entirely of Versa-Lok Standards.
- The homeowner has the choice of colors. There is no difference in price for the different color choice.

Total cost both retaining walls: \$49,465

FRONT PORCH

- The existing front porch will be replaced.
- The upper pad will measure approximately 4 feet x 6 ½ feet.
- Included is all necessary demolition of the existing porch.
- Included are all new footers and any subbase preparation.
- The exposed block will be constructed with a split faced block for a more appealing appearance.
- NOTE: This proposal does not include the railing because there are too many varying railing options. This will be discussed with the homeowner during the project. The homeowner will be required to make the railing choice of color, material and style.

Total cost for front porch replacement: \$9,750

FRONT STEPS / WALKWAY

- The existing front walkway will be entirely removed and replaced with a more simple design. The new steps will be approximately 4 feet wide.
- All necessary subbase preparation will be included.
- The portion of the front walkway parallel to the front street is approximately 24 feet in length.
- The remaining portion of the front walkway is approximately 18 feet in length.
- All concrete for the walkways, rear porch and the driveway will be 4000 PSI reinforced with fibercrete and includes all necessary sealing at the end of the project.

Total cost for front steps: \$10,360

REAR PORCH

- The existing rear porch measures approximately 8 feet by 17 feet 3 inches will be removed along with the roof directly above.
- **NOTE:** This portion of the project **does not** include replacing the roof over the rear concrete porch. The cost to do so is not included in this proposal.
- The new concrete pad will measure approximately 25 feet by 12 feet.
- All necessary subbase preparation is included.
- The new pad will be 4000 PSI, reinforced with fibercrete and includes all necessary sealing at the end of the project.

Total cost for rear porch: \$7,860

DRIVEWAY REPLACEMENT

NOTE: This includes replacing approximately 11 feet x 6 feet of the existing garage slab.

- The existing driveway will be completely removed and replaced with a new driveway measuring approximately 31 feet in length x 11 feet wide.
- Included is all necessary subbase preparation, 4000 PSI concrete, reinforced with fibercrete and all necessary sealing at the end of the project.
- This part of the project will also include removing a section of the garage slab immediately adjacent to the driveway measuring approximately 11 feet x 6 feet.

Total cost for driveway replacement: \$13,125

JOB NOTE: The current plan for all necessary drainage is to tap into the existing storm system at the manhole located at the front left corner of the property. Please refer to the included diagram.

JOB NOTE: The homeowner has been asked to confirm with the borough that this is allowed. If the borough determines this option is not viable, a subsequent plan will be made based on borough requirements. Any additional cost will be discussed with the homeowner and a change order issued prior to any work being performed.

NOTE: Due to the fluctuation in material costs, prices quoted are subject to change at time of project installation. Any change in pricing will be discussed with the customer prior to job start.

A general clean-up of the job site will be performed and all job related debris will be hauled away.

This proposal does not include final yard repair i.e. topsoil and seed.

Please note the homeowner is responsible for contacting their local municipality to determine if a building permit is required and to obtain permits as needed.

Please note this proposal does not include permit costs if needed. AquaGuard will assist you in the permit application process if needed.

***In the rare occurrence that the footer exceeds eleven (11) courses, there will be an upcharge of \$40 per linear foot to dig to footer depth. These charges will be discussed with the customer at the time it is discovered and will be approved by a change order signed by the owner.**

During the process of lifting, leveling or replacing floor joists, band boards, sill plates or any structural repair AquaGuard will make every effort to prevent or minimize damage to walls, flooring, doors, windows and fixtures. AquaGuard is not responsible for any repair cost or restitution cost of any damage.

AquaGuard thanks you for the opportunity to earn your business! Please feel free to contact Tom Gallagher at 412.600.7774 should you have any questions concerning this proposal.



Lane Plastering & Stucco, LLC
 920 Thompson Run Road,
 West Mifflin, PA 15122
 Office: 412-205-3543
 Fax: 412-461-8398
 Office E-mail: glanestucco@gmail.com
 Website: www.lanestucco.com
 PA035224

Proposal

Number E3552
 Date 6/27/2022

Submitted To Sheila Derian 200 East Miller Ave Munhall, PA, 15120	Contact Number 412-969-3311	Project Location Sheila Derian 200 East Miller Ave Munhall, PA, 15120
---	---------------------------------------	---

Customer # 1606	Payment Terms Due day of completion	Project 200 East Miller Ave
---------------------------	---	---------------------------------------

Description	Amount
Repair plaster on kitchen ceiling & wall. - Match Existing Texture	\$2,100.00
* Please wait 30 days before applying paint or any other finishes to plaster.	

Total \$2,100.00

LIABILITY & WORKMANS COMP AVAILABLE UPON REQUEST

All material is guaranteed to be as specified. All work to be completed in a substantial workmanlike manner according to specifications submitted, per standard practices and guidelines and within a reasonable timeframe. Any alteration or deviation from above specifications involving extra costs will be executed only upon written order, and will become an extra charge over and above the estimate. Tent & heat are extra. Excludes flashing, permits, and bonds.

Prices good for 30 days. Prices subject to change after 30 days

Please sign & date below to accept price listed above

Customer _____
 Lane Plastering & Stucco _____

Date _____
 Date _____



Renewal Investment Planner
6.30.2022 C7-B



Sheila & Ronald Devuan

Quote

1 Year Investment

\$61,181 \$/MONTH

WINDOWS 10 DOORS 1



Pittsburgh Offer

x \$12,236

RENEWAL SAVINGS DISCOUNT 20%

SEE OFFER DETAILS

\$12,236
SAVINGS



Investment Amount

\$48,945 \$/MONTH

DEPOSIT

\$48,945 BALANCE

Payment Options

3:01

LTE

4 Messages

< Inbox

Bakers Proposal Claim...

Begin forwarded message:

From: Jon L Mitchell

<jmitchell@bakerswaterproofing.com>

Date: July 8, 2021 at 3:40:17 PM EDT

To: "sam_rjd@yahoo.com"

<sam_rjd@yahoo.com>

Subject: Bakers Proposal Claim # SQ2819

Hey Sheila,

Here is your proposal for the work we discussed. This will address the bowing and sheering walls caused by the Water main break. Your wall had 3 ½" of sheering on the back wall and 1 ¼" of bowing on the side wall. We are also addressing the water leakage issue that caused as well. We will be installing that system along the specific areas that were affected by the water break. The only thing we would need back to get the work started would be the deposit shown on proposal, as well as the signed contract. If you or Travelers have any questions don't hesitate to reach out at anytime! If I can't answer please leave me a voicemail and I will get back to you ASAP. Have a great day!

Jon Mitchell

Certified Field Inspector

Baker's Waterproofing & Foundation Repair



Contract

LICENSED CONTRACTOR: PA158514

Customer: Sheila Derian	Date: 7/8/2021
Address: 200 East Miller Ave Munhall PA 15120	
Project Location: 200 East Miller Ave Munhall PA 15120	
Phone (Work or Home) (412) 969-3311	E-Mail: sam_rjd@yahoo.com

Proposed Products	Quantity	Unit Price	Total
5 Year Annual Service Plan	1.0	\$890.00	\$890.00
AquaStop WallSeal	84.0	\$20.00	\$1,680.00
AquaStop BasementGutter	84.0	\$56.00	\$4,704.00
AquaStop Basement Triple	1.0	\$2,999.00	\$2,999.00
AquaStop Inspection Port	1.0	\$22.00	\$22.00
Buried Discharge Line	15.0	\$25.00	\$375.00
AquaStop Angled Yardwell	1.0	\$33.00	\$33.00
Additional Products			\$10,429.00
Subtotal:			\$21,132.00
Discount:			\$2,113.20
Contract Price:			\$19,018.80

This Contract, along with the Terms and Conditions, the Warranties, the Notice of Cancellation, and the Payment Terms form the Agreement (the "Agreement") between the Customer and Baker's Waterproofing & Foundation Repair (the "Contractor").

- | | |
|---|---|
| <input checked="" type="checkbox"/> Customer is responsible for removing all personal items from the work area. | <input checked="" type="checkbox"/> A full perimeter drainage system with sump pump was recommended. |
| <input checked="" type="checkbox"/> Customer assumes responsibility for damages to hidden or unmarked utility lines. | <input checked="" type="checkbox"/> Customer is aware of warranty and all addenda. |
| <input checked="" type="checkbox"/> Stabilization is warranted. Contractor can attempt to lift at Customer's request. | <input checked="" type="checkbox"/> Customer is responsible for providing all necessary electrical outlets. |

Acceptance of Contract - The above prices, specifications, conditions, and separate warranty are satisfactory and hereby accepted. You are authorized to do work as specified. Payment will be made as outlined above or in accordance with the attached addendum. Subject to the Terms and Conditions, Contractor shall endeavor to start work within one hundred fifty (150) days of the date of the Contract and shall endeavor to complete the work within an estimated one hundred twenty (120) days of the start date of the work..

Customer

Contractor

X _____

X _____

X _____

Date 7/8/2021

Date 7/8/2021

Proposed Products Continued	Quantity	Unit Price	Total
Discharge in trench	23.0	\$10.00	\$230.00
SettleStop Wall Anchor w/ 7' C-Channel	7.0	\$900.00	\$6,300.00
SettleStop Wall Anchor	5.0	\$760.00	\$3,800.00
Remove and replace laundry tub	1.0	\$99.00	\$99.00
Subtotal:			\$10,429.00

Product Specifications

5 Year Annual Service Plan

Five Years of service is included in this contract.

AquaStop Angled Yardwell

Install Angled Yard Well

AquaStop Basement Triple

null

AquaStop BasementGutter

Install Basement Gutter. This includes removing concrete as needed, drilling weep holes as necessary in the interior cores of the CMU's, installation of our non-clogging waterproofing drainage system, clean drainage rock and replacement of concrete. Customer understands the concrete will not be an exact match due to aging and different mixes of concrete. Customer responsible for removing and replacing finished walls unless otherwise specified in this contract. Customer will remove all personal items at least 4 feet away from the work area. Customer will remove at least 2' of finished flooring from the wall. Customer is responsible for replacing the finished flooring. Baker's Waterproofing is not responsible for finished flooring. Wallseal wall system is highly recommended to direct any water seepage from the walls into the drainage system. If Wallseal is not installed on the walls up to the height of the outside grade, Baker's Waterproofing cannot be held responsible in the event that water pushes through the walls and bypasses the drainage system.

AquaStop Inspection Port

Install inspection ports as described in the contract for access to Basement Gutter system.

Buried Discharge Line

Extend and bury sump discharge line. Additional linear footage indicated on the products page of the contract to direct sump discharge water away from structure.

SettleStop Wall Anchor

Install Wall Anchors to stabilize bowing walls. We can attempt to straighten the walls over time, but is not guaranteed. Final location of the Wall Anchors is subject to change. Customer understands that a trench will be dug in their yard and an excavator may be used. Any additional soil or seed required will be the responsibility of the Customer. Baker's Waterproofing is not responsible for damage to landscaping.

SettleStop Wall Anchor w/ 7' C-Channel

Install Wall Anchors to stabilize bowing walls. We can attempt to straighten the walls over time, but is not guaranteed. Final location of the Wall Anchors is subject to change. Customer understands that a trench will be dug in their yard and an excavator may be used. Any additional soil or seed required will be the responsibility of the Customer. Baker's Waterproofing is not responsible for damage to landscaping.

Contractor agrees to

- Remove and replace concrete as necessary in the work area. Customer understands concrete patch will not match existing concrete.

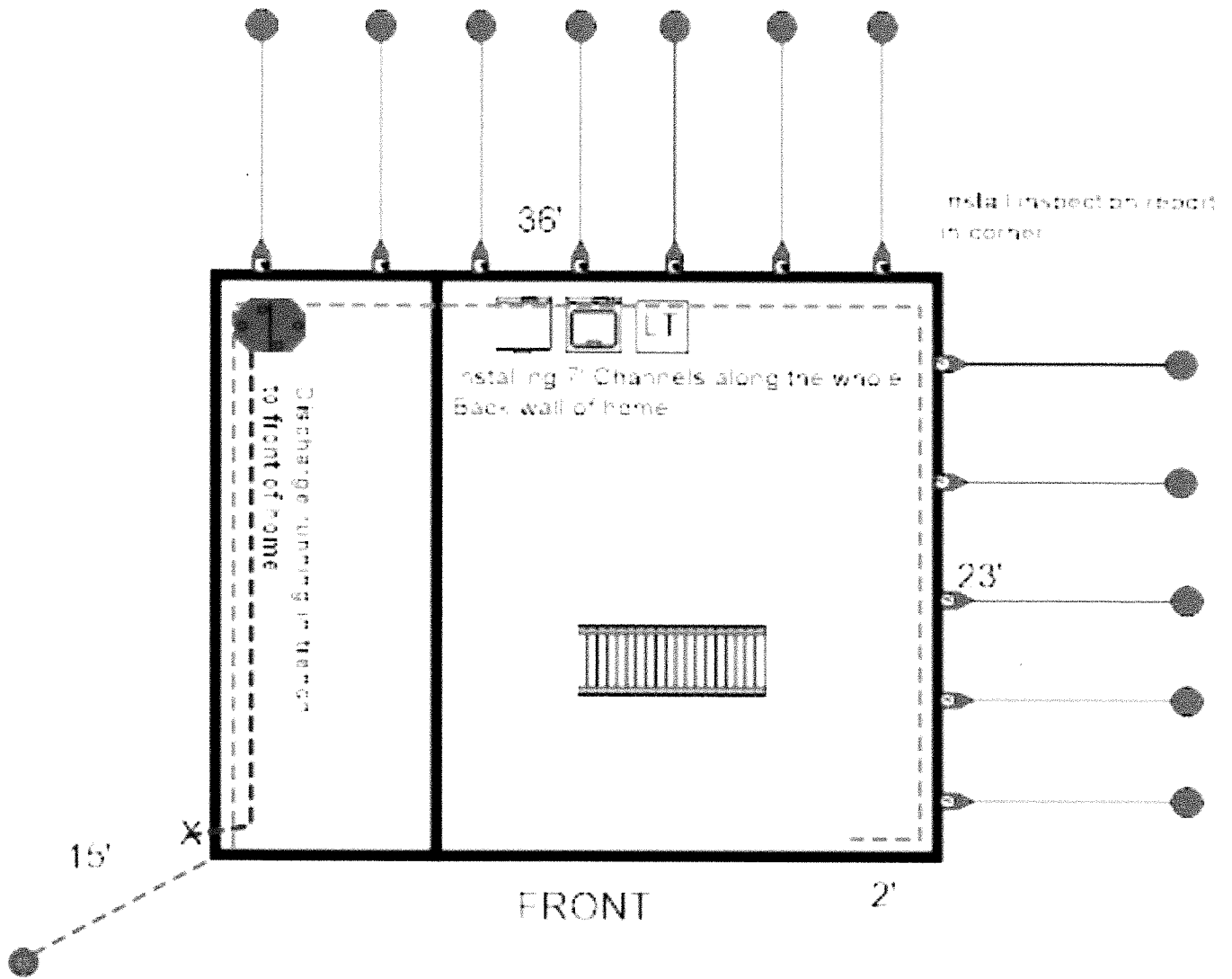
Installing 7' channels along back wall. Removing and replacing laundry tub.

Customer agrees to

- Make final payment to foreman after completion of work.
- Provide dedicated electrical for any sump pumps or dehumidifiers.

Customer to have cabinets on garage wall removed prior to installation. - Mark any private lines that may be hidden underground. Customer assumes all liability if damage should occur. - Obtain permits if required in area. - Move all stored items from area to be treated. - Protect personal items from dust. - Repair any sprinkler systems, grass and/or landscaping that may be damaged during installation. The use of excavators or trenchers may be required.

DRAWINGS





690 E WATERFRONT DR
 MUNHALL, PA 15120-5000
 (412) 461-8002

Date: 07/11/2022

Project #: 740584294 **Project name:** flooring sale
Customer Name: derian shlia
Customer Phone: (412) 969-3311
Customer Address: 200 E MILLER AVENUE .
 MUNHULL

MUNHALL PA 15120

Product List

Item Description	Availability	Qty	Unit Price	Total Price
BRC 3.25IN SLD BTRSCTCH OK 22SQFT				
Item #: 325828	<u>Out of Stock</u>	30	\$107.58	\$3,227.40
Model #: ABC1426				
Product Subtotal:				\$3,227.40

Installation

Installation Configuration	Total Price
Wood - Labor Configuration	
INSTALL TRANSITIONS HWOOD	
INSTALL QTR HWOOD	
BASIC LABOR HARDWOOD NAIL DOWN	
Project Level Fees Total	\$2,532.22
Deductible Detail #738955224	\$-0.01
Installation Subtotal:	\$2,532.21
Order Subtotal:	\$5,759.61

Salesperson: KIMBERLY WALLACE

Accepted By:

Date: 07/11/2022

This Quote is valid until 08/10/2022 This is an estimate only. This estimate does not include tax, special fees (e.g., White Goods Tax), or delivery charges. Delivery of all materials contained in this estimate are subject to availability from the manufacturer or supplier. All the above quantities, dimensions, specifications and accessories have been verified and accepted. I understand that this order will be placed according to these specifications and is non-refundable.



690 E WATERFRONT DR
 MUNHALL, PA 15120-5000
 (412) 461-8002

Date: 07/11/2022

Project #: 740585632 **Project name:** Tile
Customer Name: derian shlia
Customer Phone: (412) 969-3311
Customer Address: 200 E MILLER AVENUE
 MUNHULL
 MUNHALL PA 15120

Product List

Item Description	Availability	Qty	Unit Price	Total Price
12-24 WINDSOR WHITE POL Item #: 2240410 Manufacturer: Model #: 1001-0262-0	In Stock	112	\$4.99	\$558.88
6-12 STATUARY WHITE PORC TILE Item #: 1030379 Manufacturer: Model #: 1030379	In Stock	40	\$1.77	\$70.80
KERACOLOR S PEARL GRAY #19 25-LB Item #: 6488 Manufacturer: MAPEI Model #: 21925	In Stock	3	\$14.48	\$43.44
1/4-IN X 3-FT X 5-FT HARDIE BACKR Item #: 11640 Manufacturer: Model #: 469333023	In Stock	16	\$12.97	\$207.52
CERAMIC TILE THINSET WHITE 50-LB Item #: 12949 Manufacturer: Model #: 10750136	In Stock	6	\$17.88	\$107.28
Product Subtotal:				\$987.92

Installation

Installation Configuration	Total Price
Ceramic Tile / Stone - Floor - Labor Configuration	
INSTALL TRANSITIONS TILE	
INSTALL QTR TILE	
INSTALL BACKERBOARD TILE	
BASIC LABOR TILE INSTALL	
INSTALL WALL BASE TILE	
Project Level Fees Total	\$2,297.41

Deductible Detail #738955224

\$-0.01

Installation Subtotal: \$2,297.40

Order Subtotal: \$3,285.32

Salesperson: KIMBERLY WALLACE

Accepted By:

Date: 07/11/2022

This Quote is valid until 08/10/2022 This is an estimate only. This estimate does not include tax, special fees (e.g., White Goods Tax), or delivery charges. Delivery of all materials contained in this estimate are subject to availability from the manufacturer or supplier.

All the above quantities, dimensions, specifications and accessories have been verified and accepted.

I understand that this order will be placed according to these specifications and is non-refundable.

Exit



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855-789-7637

YOUR LOCAL SERVICE QUOTE

Quote Details

[Book Now](#)

Quote Number: 100371956

Quote expires: 07/26/2022

Container(s): 1 X 12-foot length container

Container 1

Empty Container Delivery Zip: 15120

Full Container Delivery Zip: 15120

Container 2

Empty Container Delivery Zip: 15120

Full Container Delivery Zip: 15120

First delivery date: August 2, 2022

Your total estimated moving price listed below **excludes all applicable taxes** and is based on the date(s), months of storage, and location(s) you provided. Your final price will be confirmed when you place your order.

Description	Price
Container Delivery	\$158.00 USD
Deliver Empty Container to Your Location	79.00
Deliver Empty Container to Your Location	79.00
Recurring	\$438.00 USD
Monthly Rental of Container at Your Location	209.00
Monthly Rental of Container at Your Location	209.00
Container Only Protection Option - Monthly Fee	10.00
Container Only Protection Option - Monthly Fee	10.00
Final Pickup	\$158.00 USD
Pickup Empty Container from Your Location	79.00
Pickup Empty Container from Your Location	79.00

Exhibit 3

C-2023-3041252

**PENNSYLVANIA
PUBLIC UTILITY COMMISSION
Harrisburg, PA 17105-3265**

Public Meeting held June 21, 2007

Commissioners Present:

Wendell F. Holland, Chairman, Statement attached
James H. Cawley, Vice Chairman
Kim Pizzingrilli
Terrance J. Fitzpatrick

In re: Investigation into Pennsylvania American
Water Company's Main Breaks in the Pittsburgh
Area and Related Incidents Statewide - Phase I

Docket No. I-00060112

**TENTATIVE INVESTIGATION ORDER
AND RELEASE OF STAFF REPORT**

BY THE COMMISSION:

At the December 21, 2006, Public Meeting, the Commission adopted the motion of Chairman Wendell F. Holland that directed the Law Bureau and the Bureau of Fixed Utility Services (FUS) to investigate a series of water main breaks that occurred at Pennsylvania American Water Company's (PAWC) Pittsburgh district in Allegheny County, Pennsylvania. These main breaks affected service to 1,469 customers in the Pittsburgh area. Specifically, 791 customers experienced service interruptions or outages for an extended period of time and 678 other customers experienced water pressure that was lower than the Commission-required minimum of 25 pounds per square inch (p.s.i.). The affected customers were located in three geographical areas, namely, the 31st Ward of Pittsburgh, the Borough of Munhall and the Borough of West Mifflin.

The Commission also directed Law Bureau and FUS to submit a report to the Commission within 90 days of the entry date of the order incorporating the motion.¹ That order was entered on January 5, 2007.

The order concluded that it was critically important that the Commission determine the following:

- (1) whether PAWC responded to the outages in an effective and timely manner;
- (2) whether adequate resources were available to effectively respond to the situation in a timely manner; whether adequate levels of staff were on hand locally and/or the adequacy of any time factor involved to obtain resources that were not local;
- (3) whether the public received adequate notice and were kept informed in a timely manner;
- (4) whether emergency response officials received notice and were kept informed in a timely manner;
- (5) whether critical care facilities, such as hospitals and nursing homes, received adequate notice and were kept informed in a timely manner;
- (6) whether schools received adequate notice and were kept informed in a timely manner;
- (7) whether adequate supplies of drinking water were provided and/or available at convenient locations;
- (8) whether PAWC's reserve supplies in storage tanks were available when needed;

¹ A second report pertaining to outages in Lackawanna County and other areas of the state will be submitted to the Commission within 120 days of the submission of the Phase I report.

(9) whether adequate pressures were being maintained prior to the outages;

(10) whether customers in this area had been experiencing a higher level of outages than others; if so, how improvements could be implemented to rectify the situation;

(11) whether enhancements are needed to the Company's criteria utilized to target and prioritize scheduling of mains slated for re-lining or replacement; *i.e.*, the degree to which the criteria realistically reflects actual local break occurrences;

(12) whether the funding levels were earmarked adequately to accomplish the projected upgrades; *i.e.*, whether money earmarked for main remediation have been re-allocated to other projects not involving mains; and/or whether projected funding levels were and, moving forward, are realistic;

(13) whether new technology, such as an advanced leak detection system,² could be utilized to help project and pinpoint future main failures prior to breakage; the projected costs savings that could result, along with expected improvements in service reliability; and whether such technology should be incorporated into main-break-prone areas on an expedited basis;

(14) whether adequate numbers and locations of emergency interconnections are available with neighboring water utilities; and

(15) whether additional steps can be taken by PAWC to mitigate main breaks to respond to future outages in a timely and effective manner.

² An advanced leak detection system is an automated meter reading network linked with sensors used to monitor the water distribution system on a continuous basis. The acoustic sensors analyze sound patterns to detect new, developing and pre-existing leaks. The information can be used to pinpoint leaks so that they can be repaired as quickly as possible, not only serving to reduce water loss, but also to prevent the leaks from becoming significant enough to result in main breaks. PAWC is currently piloting this technology in portions of its service territory.

The Commission expressly concluded in its order that this investigation was not prosecutory in nature, thus the scope of the investigation did not include the potential for any civil fines or penalties.

Staff Investigation And Findings

Pursuant to the January 5, 2007 order, Commission Staff conducted an investigation into the events leading to the Pittsburgh area outages, PAWC's actions related to these outages, and whether any corrective or remedial actions are warranted. Commission Staff³ also examined PAWC's main replacement policy, the Company's level of funding for main replacement and main rehabilitation, PAWC's level of compliance with the Public Utility Code and regulations with regard to safe and reliable water service, and PAWC's compliance with the applicable public notification procedures that were recently enunciated by the Commission.⁴ The investigation also addressed whether these notification procedures were complied with and whether any additional steps are necessary for PAWC to minimize future main breaks in the Pittsburgh area.

As part of its inquiry, Commission Staff met with representatives from numerous entities in the affected area. Specifically, Commission Staff met with representatives from the Allegheny County Health Department, the Allegheny County Emergency Management Services, the City of Pittsburgh, the 31st Ward of Pittsburgh, the West Mifflin Borough Emergency Management Services, the mayor of the Borough of West Mifflin, the Munhall Borough Emergency Management Services, several officials from the West Mifflin School District, and PAWC personnel. Commission Staff also made site visits to the location of main breaks on Interboro Avenue in the 31st Ward, the service

³ The Bureau of Audits was part of the "Commission Staff."

⁴ On November 9, 2006, the Commission adopted a final policy statement relating to unscheduled water service interruptions and associated actions. The policy statement, at 52 Pa. Code §§ 69.1601-69.1603, became effective on December 16, 2006.

territory of PAWC that was affected by the Interboro Avenue main breaks, and to PAWC's distribution and storage facilities in the Pittsburgh area.⁵ In addition, two public input hearings were held on January 22, 2007, at the Allegheny County Courthouse to solicit input from local officials and customers affected by the December 10th outages. The Office of Consumer Advocate and the Office of Small Business Advocate participated in soliciting valuable information from the individuals who testified at the hearings.⁶

Upon the completion of the initial phase of the investigation, Commission Staff documented its findings and recommendation in its report that is attached to this order. We will now summarize *in seriatim* the findings and recommendations that are included in the attached report.

(1) Whether PAWC Responded To The Outages In An Effective And Timely Manner?

As stated in the attached report, Commission Staff concluded that PAWC's initial response to the report of a leak at the VFW on November 8, 2006, was less than adequate. While PAWC may have correctly determined that the initial leak did not rise to the level of an emergency, as it was not causing property damage, affecting service or creating a risk to the health, safety or welfare of the public, PAWC initially failed to take any action whatsoever to even determine whether the water was coming from their mains, let alone identifying the location of the leak. On this particular point, PAWC has informed Commission Staff that as of March 2007, all Service Crew Drivers now have chlorine detection equipment for use during their initial investigation of a possible leak.

The delay in identifying and repairing this initial leak may have contributed to the events that unfolded on December 10, 2006. Based upon Commission Staff's

⁵ Commission Staff acknowledged that PAWC cooperated fully with this investigation. PAWC made its employees and facilities available upon request and responded fully to numerous data and document requests.

⁶ The individuals who testified were duly sworn and their testimony produced a 106-page transcript.

investigation, it appears that the additional breaks to the 10-inch, 16-inch and 30-inch mains that occurred on December 10th along Interboro Avenue may have been caused by land subsidence in the area that resulted from the initial leak.

Commission Staff's investigation revealed that this delayed response to the initial leak report was most likely the result of less than adequate local management oversight. This lack of oversight appears to be the unintended result of PAWC's otherwise commendable effort to empower its employees in the field to make critical decisions. Notwithstanding, it is clear that appropriate local management oversight would allow local management to identify and correct such problems before those problems escalated. To this end, the Commission will direct PAWC to develop, within thirty (30) days of the entry date of this order, an effective process for reviewing the daily actions of its Service Crew Drivers. In the interim, the Commission directs that issues associated with leak investigations that cannot be identified and resolved by Service Crew Drivers within the day should be reported to a supervisor.

As stated earlier, while it appears that PAWC's response to the initial leak complaint was less than adequate, the Company's responses to the breaks that occurred on and after December 10th were adequate based on the totality of the circumstances.

In the Commission Staff report, it was explained that while the events that occurred along Interboro Avenue in December 2006 were unique, to prevent a reoccurrence, PAWC has taken action to correct the problems that arose. Specifically, PAWC has placed temporary land fill along Interboro Avenue at the VFW parking lot to prevent further land subsidence and plans to erect a permanent retaining wall at that location. PAWC has installed a new 16-inch main on the up-hill side of Interboro Avenue that will replace the existing 10-inch and 16-inch mains, which will be removed to allow better access to the existing 30-inch main. The Company has slip-lined the broken portion of the 30-inch main and has placed it back into service.

In addition, PAWC is now aware of the pressure requirements at the West Mifflin schools and has the capability to connect pressurized water tankers or temporary booster pumps to the three schools located at the higher elevations. PAWC also intends to meet with West Mifflin School District officials to determine if a plan can be developed to reduce the schools' pressure requirements. To this end, the Commission will direct PAWC to schedule, within sixty (60) days of the entry date of this order, additional meetings with the West Mifflin School District

(2) Whether Adequate Resources Were Available To Effectively Respond To The Situation In A Timely Manner, Whether Adequate Levels Of Staff Were On Hand Locally And/Or The Adequacy Of Any Time Factor Involved To Obtain Resources That Were Not Local?

As concluded in the attached report, it appears that crews, both Company and sub-contractor employees, responded to the emergency in a timely manner prior to supervision arriving at the site. However, the original number of workers had to be supplemented with additional Company and sub-contractor personnel as the complexities of the situation became apparent.

Here, it is important to point out that in 2002, a total of 21 management personnel were assigned directly to the Pittsburgh district. The total number of salaried positions has not fluctuated significantly since that time. However, there was a reduction of two operations manager positions and one leak detection supervisor, as well as the elimination of one leak detection superintendent during this period. Also, several of these positions, which previously had responsibilities for only the Pittsburgh district, now have responsibilities covering not only the remaining service territories in Pennsylvania, but also the five states that make up the remainder of the Southeast Region of PAWC's parent, American Water.⁷

⁷ The other states currently within American Water Company's Southeast Region are West Virginia, Kentucky, Tennessee, Virginia and Maryland.

Based upon this fact, it appears that the number of supervisory positions within the Pittsburgh district has been effectively reduced as the remaining supervisors have responsibilities outside the Pittsburgh district. While the Commission cannot definitively state that this reduction affected PAWC's response to the December 2006 incident, it does raise concerns that need to be monitored. Thus, the Commission will direct that PAWC reevaluate its staff complement in the Pittsburgh district.

(3) Whether The Public Received Adequate Notice And Were Kept Informed In A Timely Manner?

A significant aspect of the investigation focused on both the sufficiency and timeliness of the notice provided by PAWC to the public. Based upon Commission Staff's review, PAWC appears to have met the minimum requirements contained in its tariff, Rule 14.1,⁸ and the applicable Department of Environmental Protection (DEP) regulations at 25 Pa. Code § 109.407, regarding public notification. However, in the report, Commission Staff observed that DEP is currently in the process of revising the applicable notification procedures for public water systems. Indeed, DEP is currently analyzing proposals that embrace current technological advances in the communications field that allow utilities to provide an opt-in system so customers can request to be contacted by e-mail, text message, beeper, cell phone or other personal electronic devices.

Second, and more importantly, on November 9, 2006, the Commission adopted a final policy statement relating to unscheduled water service interruptions and associated actions.⁹ See 52 Pa. Code §§ 69.1601-69.1603. The principal purpose of the policy statement was to provide clear guidance on the types of public notice necessary to meet the "reasonable service" standard of Section 1501 of the Public Utility Code. The final policy statement, which became effective upon publication in the *Pennsylvania Bulletin*,

⁸ Rule 14.1 of PAWC Tariff Water PA PUC No., at 35, states, in relevant part, that "[t]he Company will, so far as circumstances permit, notify Customers to be affected by any interruptions in the water service."

⁹ *Unscheduled Water Service Interruptions and Associated Actions*, Docket No. L-00061956.

advised water utilities of acceptable methods of public notification during unscheduled service interruptions, or situations that impact health and safety of water consumers such as “boil water” or “do not consume” orders.¹⁰

As explained in the report, PAWC indicated that the Company notified its customers through the Rapid Alert system, the Company’s website, e-mails, and media (TV, radio, newspaper). However, based upon the public input hearings and the subsequent interviews conducted by the Commission Staff, some customers indicated that they did not receive notification of the outages from PAWC. The Commission therefore will direct that PAWC, to the extent possible, update its customer notification system to ensure that the Company has current information for all ratepayers and occupants, including tenants, so that information can be sent to all of the occupants of residences affected. Specifically, the Commission will direct PAWC to send a direct mailing to approximately one-third of its customer base in 2007, 2008 and 2009, soliciting updated contact information of all ratepayers and occupants. Such action by PAWC would be consistent with the Commission’s aforementioned policy statement on public notification.

The Commission also directs that PAWC provide a Company spokesperson on site of major breaks to provide information on the effects and status of the breaks to customers and the media of the situation. To this end, the Commission will direct PAWC to develop guidelines for main breaks that fall within the category of “major breaks” within thirty (30) days of the entry date of this order and a process for the implementation of these guidelines within sixty (60) days of the entry date of this order.

¹⁰ Publication occurred on December 16, 2006 at 36 *Pa. Bulletin* 7624.

(4) Whether Emergency Response Officials Received Notice And Were Kept Informed In A Timely Manner?

In the report, Commission Staff concluded that while PAWC's initial notification was timely and adequate, local emergency management officials indicated that timely and accurate updates were less than adequate. Local emergency management personnel expressed the belief that PAWC should be more forthcoming with information, such as the scheduled time for repairs, estimated time for completion of repairs, and anticipated affects on service, to include reduced pressures as well as outages. PAWC on the other hand, stated that the Company provided updated information to local and county emergency management agencies as the information became available. PAWC provided this information through direct communications, telephone contacts and e-mail, as well as on the Company's website.

While Commission Staff commended PAWC for its efforts to improve communications with emergency management agencies, the forwarding of all break/leak notices to emergency management agencies within the Pittsburgh district may have a detrimental effect on responses to emergencies. Therefore, the Commission will direct that the PAWC Pittsburgh district coordinate with each emergency management agency and each municipality the e-mail notices to be targeted to each agency. Specifically, the Commission will direct PAWC to meet with affected municipalities and emergency management agencies within six (6) months of the entry date of this order to further discuss the appropriate notification requirements. Targeted e-mails will ensure that each agency and municipality only receives information regarding interrupted service in their particular territory.

In the Commission Staff report, it was noted that another area of concern voiced by both PAWC customers and local emergency management personnel is the perceived delayed response time and the lack of feedback after they contact PAWC's Customer Service Center (CSC). In fact, local officials and customers prefer to contact PAWC Pittsburgh district personnel directly to report customer complaints and potential leaks.

Whether these concerns are real or perceived, this issue needs to be addressed by PAWC. To this end, the Commission will direct PAWC to improve the training that is provided to CSC personnel to increase CSC responsiveness to customer inquiries as to the status of customer complaints. Although the Company has noted that it has ongoing customer service center training, the Commission will direct PAWC to review and update the training within ninety (90) days of the entry date of this order.

In the report, Commission Staff commended PAWC for its efforts in keeping the Commission apprised of the situation throughout the incident and for providing updates on the status of repairs. Furthermore, Commission Staff concluded that PAWC's emergency response plans are now complete and up-to-date. It was also determined that PAWC has a very comprehensive physical and cyber security plan, business continuity plan, and emergency response plan, all of which were tested by the Company in October and November 2006. These tests included tabletop exercises testing the physical security plan. These efforts demonstrate that PAWC is moving in the right direction and implementing the lessons learned from the fluoride incident with regards to emergency response plans.¹¹

(5) Whether Critical Care Facilities, Such As Hospitals And Nursing Homes, Received Adequate Notice And Were Kept Informed In A Timely Manner?

Overall, the Commission concludes, based upon Commission Staff's findings, that critical care facilities were provided adequate notice and timely notice. However, during the investigation, it was determined that PAWC's list of critical care customers for the Pittsburgh district was not complete and contained inaccurate information. In response, PAWC indicated that the Company compiles the list of critical care customers based solely on internally obtained data. PAWC has since informed Commission Staff that it has contacted the Department of Agriculture and the Department of Aging to update the list of critical care facilities.

¹¹ See *Investigation into Pennsylvania American Water Company's High Fluoride Concentration Incident*, Docket No. I-00050109 (Order entered March 10, 2006).

Based upon the findings in the report, the Commission will direct PAWC to continue its dialogue with outside sources, such as local and county emergency management officials and State agencies, to include the Departments of Public Welfare, Education, Aging, and Health, so as to compile a more complete and accurate list of critical care customers. In addition, the Commission will direct PAWC to establish direct communication with all critical care customers within sixty (60) days of the entry date of this order. The Commission will also direct PAWC to meet with all critical care customers within 12 months of the entry date of this order to identify and examine their unique pressure requirements.

(6) Whether Schools Received Adequate Notice And Were Kept Informed In A Timely Manner?

As stated earlier, the schools were among the list of notified persons provided by PAWC. PAWC stated that because of the continued lower-than-normal pressures at some locations in their system, PAWC maintained communication with officials from the West Mifflin School District throughout the outage and main repairs. PAWC stated that this communication and coordination continued for over a 3-week period (Dec.10, 2006 to Jan. 2, 2007). PAWC also claimed that it arranged for and installed temporary water tankers and portable pumping facilities to maintain adequate pressures at three locations in the school district (High School, New Emerson Elementary, and Homeville Elementary).

Commission Staff concluded in its investigation that there was inadequate communication between PAWC and the school district. In a meeting with the Assistant Superintendent of the West Mifflin School District, Commission Staff was told that the school district preferred to communicate directly with PAWC (as opposed to through emergency management) and for PAWC to be “more upfront” with the school district as far as repairs and other relevant information as opposed to getting information relayed to them through the local and county EMA officials. To address this issue, the Commission

will direct PAWC to meet with West Mifflin School District officials within six (6) months of the entry date of this order to develop a plan to meet the school's needs.

(7) Whether Adequate Supplies Of Drinking Water Were Provided And/Or Available At Convenient Locations?

As explained in the report, it appears that PAWC acted in a timely manner and maintained adequate supplies of drinking water throughout the December 2006 incident. This conclusion was supported by the fact that within approximately three hours of the outage, four water tankers or water buffaloes were ordered with local and county emergency personnel agreeing to take the lead in locating and maintaining the water tankers. It was also supported by testimony from the mayor of West Mifflin, who testified that water buffaloes and bottled water were made available to local residents.

(8) Whether PAWC's Reserve Supplies In Storage Tanks Were Available When Needed?

Commission Staff's investigation revealed that throughout the incident in December 2006, PAWC had adequate reserve supplies of water available in its storage tanks. Commission Staff confirmed that at no time was the West Mifflin tank empty during or after the main breaks at issue. PAWC records revealed that at its lowest recorded level the tank contained over two million gallons of water.¹² This reduced water level in the West Mifflin tank did not affect service to any customers, even those at the highest elevations, nor did it hinder fire fighting capabilities. In fact, PAWC noted that this tank has been taken out of service in the past for maintenance, inspections and painting without any interruptions in service.

¹² One vertical foot in the West Mifflin Tank equals 78,947 gallons of water, thus, $26.4 \times 78,947 = 2,084,200.8$ gallons.

(9) Whether Adequate Pressures Were Being Maintained Prior To The Outages?

Commission Staff's investigation found no evidence of less-than adequate water pressure in the Pittsburgh district prior to the December 2006 incident. Commission regulations at 52 Pa. Code § 65.6 requires water companies to maintain a minimum of 25 p.s.i. at the main (20 p.s.i. during periods of hourly peak demand). PAWC indicated that during the month of December 2006, it had received a total of 209 customer contacts that it defined as "main breaks, low pressure or no water." Most of these customer contacts were the result of the December 10th outage. The leakage observed prior to shutting down the mains on December 10th had little to no effect on the level of service to customers. Based on PAWC's detailed estimate, a total of 1,469 customers were affected. Approximately 50% of the affected customers had their service interrupted, while the other 50% never lost water service completely, but did experience reduced pressure that was less than 25 p.s.i.

According to the Commission Staff's investigation, it was the actual shutting off of the water service to the affected mains to facilitate repairs that caused the customer service interruptions and reduced pressures. The reduction in pressures was the result of air in the mains and having to route the flow of water around the mains being repaired, as well as the reduced overall flow caused by routing the water through smaller diameter mains. Once the 30-inch main was placed back into service, PAWC was able to maintain more than adequate pressures without the use of the temporary booster pumps or tanker trucks.

(10) Whether Customers In This Area Had Been Experiencing A Higher Level Of Outages Than Others; If So, How Improvements Could Be Implemented To Rectify The Situation?

As part of its investigation, Commission Staff presented to PAWC numerous questions relating to the perceived higher number of main breaks and outages in the Pittsburgh area as compared to the other service territories of PAWC. To this end,

Commission Staff specifically requested a comparison of the frequency of main breaks in the Pittsburgh area (in the years 2002 through 2006) with other water districts of PAWC. In reviewing that comparison, it is patently clear that the frequency of main breaks and outages in the Pittsburgh area is significantly higher than in any other PAWC district.

To PAWC's credit, in November of 2005, the Company hired the engineering firm of Gannett Fleming to conduct a study of the frequency of main breaks in the Pittsburgh area. The study, entitled *Analysis of Non-Revenue Water in Pittsburgh and Southwest Area Systems*, was completed in September 2006. The purpose of the study was, among other things, to analyze the Pittsburgh system main breaks/leak database to identify correlations and trends in the occurrence of main breaks. Another component of the analysis was to develop recommendations for reduced pressure zones in the distribution system with the objective of reducing the occurrence of breaks/leaks.

As explained in the Commission Staff report, approximately 52% of the total reported breaks/leaks in the Pittsburgh system between January 2003 and September 2005 occurred on mains 0.5-inch to 4-inches in diameter. Based upon this observation, PAWC's revised main replacement program now targets the small diameter (3-inches and less) galvanized and cast iron main, particularly in northern areas of the Pittsburgh system near the Hays Mine Water Treatment Plant and the Homestead Pressure Zone.

Another point mentioned in the Commission Staff report about the Pittsburgh system is the fact that because of the topography in this area, pressures in excess of 150 p.s.i. exist throughout the system. To the extent practicable, PAWC will be directed to continue its efforts at reducing the pressures in these areas. The Commission will also direct PAWC to continue its efforts of minimizing the occurrence of pressure surges originating from the Hays Mine production plant, also identified in the Gannett Fleming study as a problem.

Here, it should be noted that PAWC has agreed to continue the implementation of the Gannett Fleming study recommendations, all of which should reduce the number of main breaks in the Pittsburgh system.

(11) Whether Enhancements Are Needed To The Company's Criteria Utilized To Target And Prioritize Scheduling Of Mains Slated For Re-Lining Or Replacement; i.e., The Degree To Which The Criteria Realistically Reflects Actual Local Break Occurrences?

Although the Company does consider many factors in its decision-making process for repairing and replacing mains, based upon Commission Staff's investigation, it appears that this process has not accurately reflected actual local break occurrences. Therefore, the Commission will direct PAWC to develop, within sixty (60) days of the entry date of this order, an effective algorithm that fully recognizes the frequency of breaks/leaks on the smaller mains.

As noted in the report, the Company has agreed to consider adjusting the weighting factors in their capital criteria related to main size such that replacement of small diameter mains are given a higher priority.

(12) Whether The Funding Levels Were Earmarked Adequately To Accomplish The Projected Upgrades; i.e., Whether Money Earmarked For Main Remediation Have Been Re-Allocated To Other Projects Not Involving Mains; And/Or Whether Projected Funding Levels Were And, Moving Forward, Are Realistic?

As concluded in the Commission Staff report, it does not appear that the Pittsburgh system has had appropriate capital funding levels for the timeframe that was studied during this investigation. However, there is no evidence showing that PAWC is re-allocating money earmarked for main remediation to other projects.

Commission Staff's investigation also revealed that PAWC has been increasing its level of capital improvement within the Pittsburgh district. For the years 2003 through 2006, PAWC's DSIC qualifying capital investment in the Pittsburgh area was \$17.1

million, \$16.2 million, \$18.4 million, and \$21.2 million, respectively. This represents a steady increase in PAWC's capital investment in the Pittsburgh area since 2003. In addition, according to data provided by the Company, the planned main replacement in the Pittsburgh district for 2007 totals \$16 million representing 101,830 feet of water mains.¹³ This represents approximately one percent of the total miles of mains within the Pittsburgh district.

Historically, PAWC replaces about one-half of a percent (0.56%) of the total miles of mains within each district annually, on average. Thus, the 2007 planned main replacement efforts within the Pittsburgh area is double the PAWC district average. PAWC is planning to invest a total of \$58.5 million state-wide for 2008; however, PAWC has yet to determine how much of this total will be dedicated to the Pittsburgh region.

Based on all of the above, it appears to the Commission that PAWC recognizes there is a problem with the capital infrastructure in the Pittsburgh district and has agreed to continue to increase the Company's capital investment within that district.

(13) Whether New Technology, Such As An Advanced Leak Detection System, Could Be Utilized To Help Project And Pinpoint Future Main Failures Prior To Breakage; The Projected Costs Savings That Could Result, Along With Expected Improvements In Service Reliability; And Whether Such Technology Should Be Incorporated Into Main-Break-Prone Areas On An Expedited Basis?

Commission Staff's investigation revealed that PAWC has improved its leak detection efforts in the Pittsburgh district through new technology as well as more traditional methods. Specifically, in 2006, the Pittsburgh district has installed over 1,500 Permaloggers¹⁴ in main-break-prone areas, the majority of which were installed in the

¹³ This amount does not include other DSIC qualified expenditures.

¹⁴ Permaloggers are automated listening devices that are placed in contact with water mains and record sounds and transmits those recordings to a device located in a Company vehicle that queries the Permaloggers as it is driven by them.

West Mifflin and Munhall areas.¹⁵ Permaloggers are typically placed directly on valves or mains.

As explained in the Commission Staff report, this technology does have limitations. The Permaloggers have a limited range of 1,000 to 1,200 feet. Extraneous noise from increased flow due to high demand and surface noises, such as vehicle traffic, can create false leak detection or mask a leak. In fact, the Permaloggers did not detect the leak in the 16-inch main on Interboro Avenue; however, the Correlators¹⁶ were used to determine the location of the leak. Thus, trained leak detection personnel and more traditional leak detection methods are still required in order to have an effective and robust leak detection program.

Moreover, PAWC has recognized the need for an effective and robust leak detection program. Within the Pittsburgh district PAWC has four hourly personnel and two supervisors trained in leak detection. The Company plans to hire three more supervisors to assist with leak detection. PAWC has also increased its efforts in reducing unaccounted-for-water within the Pittsburgh district. The Company has increased the monitoring of unmetered fire services, pressure reducing valves, stream crossings, and rights-of-way, as well as the testing of meters. Finally, PAWC has retired over 2,600 feet of parallel mains within the Pittsburgh district in 2005 and 2006.

Based upon the above, it would appear to the Commission that PAWC appropriately recognizes the benefit of an effective and robust leak detection program and continues to increase its investment in this area.

¹⁵ This is a significant investment as each Permalogger costs between \$300 and \$500.

¹⁶ Correlators are automated listening devices that are also used by PAWC to determine the location of a leak.

(14) Whether Adequate Numbers And Locations Of Emergency Interconnections Are Available With Neighboring Water Utilities?

PAWC serves over 500,000 people in its Pittsburgh system. The Pittsburgh system's service area encompasses numerous municipalities in Allegheny, Beaver and Washington Counties, including portions of the City of Pittsburgh. As an urban water system with over 131,000 customers and in excess of 1,400 miles of water lines, the Pittsburgh system's distribution system is very large and complex. The Pittsburgh system obtains its entire water supply from two surface water treatment facilities that withdraw water from the Monongahela River. The Pittsburgh Water and Sewer Authority and the Westmoreland County Municipal Authority provide additional sources of water supply to the Pittsburgh system through interconnections. There are no ground water sources used in the Pittsburgh system.

PAWC also obtains treated water on a daily basis through two of its four interconnections with Westmoreland County Municipal Authority. However, this amount of water is limited to less than 5,000 gallons per day. PAWC sells approximately 1.5 mgd to interconnected municipally-owned satellite systems.¹⁷ In all, PAWC's Pittsburgh system contains 15 interconnections with local municipally or authority-owned systems, some of which are active while others are used only occasionally to provide assistance as needed. PAWC noted that the Pittsburgh Water and Sewer Authority is the only adjacent water system capable of providing sufficient emergency water supplies.

PAWC states that it has spent considerable time and energy to develop and maintain an emergency response plan because the Company recognizes the importance of maintaining a continuous water supply to its customers. This plan contains contingencies to supply water to customers utilizing water buffaloes placed at strategic locations and private haulers and tanks procured through coordination with local, county and state

¹⁷ The majority of the amount purchased is delivered to the Western Allegheny County Municipal Authority.

emergency management agencies. PAWC also has a contingency plan to deliver bottled water to customers with special needs.

Based on all of the above, the Commission concludes that PAWC has an adequate number of available emergency interconnections with neighboring water utilities to ensure an adequate supply of water to its customers.

(15) Whether Additional Steps Can Be Taken By PAWC To Mitigate Main Breaks To Respond To Future Outages In A Timely And Effective Manner?

Based upon this investigation, the Commission will direct PAWC continue to implement the findings and recommendations of the recently completed Gannett Fleming study. Specifically, by this tentative order, PAWC is directed to continue its focus on the replacing smaller diameter mains that are experiencing more frequent leaks and breaks. In addition, PAWC will be directed to complete the pressure zone reductions in the Pittsburgh district within three years of the entry date of this order.

Conclusion

Based upon this investigation, the Commission concludes that the Pittsburgh outage was caused by a sequential break of several large mains in a concentrated area. As stated previously, the repair of these breaks was exacerbated by the location of these mains. While we recognize that PAWC, of its own volition, has initiated several positive steps to ensure that this type of situation does not occur again, based upon the attached report that included numerous meetings and conversations with PAWC management, the Commission will direct PAWC to make several improvements, as already discussed in the body of this order.

Also, to provide assistance to utilities and consumers, the Commission Staff's investigation report will be made public. In this way, the Commission, in cooperation with utilities and other state agencies, can work together to improve every water utility's performance in this important area; **THEREFORE,**

IT IS ORDERED:

1. That this order will be issued in Tentative Form.
2. That the Commission Staff investigation report is released to the public.
3. That Pennsylvania American Water Company is directed to develop a process for the review of the daily actions of Service Crew Drivers within thirty (30) days of the entry date of this order. However, in the interim, the Commission directs that issues associated with leak investigations that cannot be identified and resolved by Service Crew Drivers within the day should be reported to a supervisor.
4. That Pennsylvania American Water Company is directed to schedule additional meetings with the West Mifflin School District within sixty (60) days of the entry date of this order.
5. That Pennsylvania American Water Company is directed to reevaluate its staff complement in the Pittsburgh district on an annual basis.
6. That Pennsylvania American Water Company is directed to contact all customers via bill inserts on a quarterly basis (starting in the third quarter of 2007) requesting updated contact information.
7. That Pennsylvania American Water Company is directed to send a direct mailing to approximately one-third of its customer base in 2007, 2008 and 2009 to update customer contact information. In addition, Pennsylvania American Water Company is directed to immediately send a direct mailing when the Company receives a failed number in the Rapid Alert System report.

8. That Pennsylvania American Water Company is directed to develop an effective process for providing updates to customers, local officials, emergency services and the media as to the status of main breaks and service interruptions within ninety (90) days of the entry date of this order.

9. That Pennsylvania American Water Company is directed to maintain, at a minimum, daily contact with municipal and state officials in affected areas, using e-mails when possible. The Company will be allowed ninety (90) to review this directive to determine which level of event this directive shall apply as it relates to the Commission and the Department of Environmental Protection public notification regulations and policy statement.

10. That Pennsylvania American Water Company is directed to provide a Company spokesperson on site at “major breaks” to inform customers and the media of the situation. Pennsylvania American Water Company is also directed to develop guidelines for main breaks that fall within the category of “major breaks” within thirty (30) days of the entry date of this order and a process for the implementation of these guidelines within sixty (60) days of the entry date of this order.

11. That Pennsylvania American Water Company is directed to meet with affected municipalities and emergency management agencies in the Pittsburgh district within six (6) months of the entry date of this order to further discuss the appropriate notification requirements.

12. That Pennsylvania American Water Company is directed to review and update the training of Customer Service Center personnel within ninety (90) days of the entry date of this order.

13. That Pennsylvania American Water Company is directed to establish direct communication with all critical care customers in the Pittsburgh district within sixty (60)

days of the entry date of this order. The Commission also directs Pennsylvania American Water Company to meet with all critical care customers in the Pittsburgh district within twelve (12) months of the entry date of this order to identify and examine their unique pressure requirements.

14. That Pennsylvania American Water Company is directed to develop an effective algorithm that fully recognizes the frequency of breaks/leaks on the smaller mains within sixty (60) days of the entry date of this order.

15. That Pennsylvania American Water Company is directed to complete the reduction of the various pressure zones in the Pittsburgh district within three (3) years of the entry date of this order.

16. That Pennsylvania American Water Company is directed to continue its efforts of minimizing the occurrence of pressure surges originating from the Hays Mine production plant.

17. That Pennsylvania American Water Company is directed to adjust the weighting factors in their capital criteria related to main size such that the replacement of small diameter mains are given a higher priority.

18. That Pennsylvania American Water Company is directed to comply with all of the directives that are within the body of this order but are not the subject of a specific ordering paragraph.

19. That Pennsylvania American Water Company is directed to submit to the Commission's Secretary Bureau and the Law Bureau semi-annual status reports on the directives contained in this order.

20. That Pennsylvania American Water Company is provided fifteen (15) days from the entry date of this tentative order to file comments to this order or to request a

hearing. If no comments or a request for a hearing are filed within fifteen (15) days, this tentative order shall become final without further action by the Commission.

21. That copies of this order be served on the Office of Trial Staff, the Office of Consumer Advocate, the Office of Small Business Advocate, the central and regional offices of the Pennsylvania Department of Environmental Protection, the Pennsylvania Chapter of the National Association of Water Companies and all jurisdictional water utilities. Copies of this order shall also be served on the individuals who testified at the public input hearings.

22. That this docket shall remain open pending the completion of Phase II of this investigation.

BY THE COMMISSION

James J. McNulty
Secretary

(SEAL)

ORDER ADOPTED: June 21, 2007

ORDER ENTERED: June 21, 2007

Exhibit 4
C-2023-3041252



PENNSYLVANIA
AMERICAN WATER

**PENNSYLVANIA-AMERICAN WATER
COMPANY**

IMPLEMENTATION PLAN

In Response to the

**2018 Management Efficiency
Investigation**

January 2019

Pennsylvania-American Water Company Implementation Plan January 2019

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Pennsylvania-American Water Company
Implementation Plan
January 2019

Chapter VII
Water Operations

Pennsylvania-American Water Company Implementation Plan January 2019

Chapter VII Water Operations

Recommendation VII-1 Develop a comprehensive damage prevention manual that incorporates all aspects of the damage prevention program.

PAWC Response The Company accepts this recommendation.

Benefit Medium

Discussion

The Company has formalized its Damage Prevention Committee with the following actions.

On a monthly basis have a statewide review meeting with the following topics

- 1) District Performance on locate responses
- 2) Damage reports and AVR submittals
- 3) Technology and Training updates
- 4) Root Cause Analysis Discussions

Milestones/Full Implementation Date

Milestones	Date [xx/xx/xxxx]	Delivery E=Estimate A=Actual O=Ongoing
Complete second draft of Damage Prevention Manual.	06/30/2019	E
Develop and deploy training program.	12/31/2019	E

Personnel Responsible

James Sheridan, Vice President, Operations

Pennsylvania-American Water Company Implementation Plan January 2019

Chapter VII Water Operations

Recommendation VII-2 Update the Corporate Valve Practice policy, define and assign valve criticality, and exercise all critical valves annually.

PAWC Response The Company accepts this recommendation.

Benefit High

Discussion

A work team will be formed to define critical valves, work with local Operations to assign valve criticality ratings, and develop a process for exercising critical valves annually.

Milestones/Full Implementation Date

Milestones	Date [xx/xx/xxxx]	Delivery E=Estimate A=Actual O=Ongoing
Update Corporate Valve Practice Policy.	12/31/2019	E
Define and assign ratings of critical valves.	12/31/2019	E
Commence annual exercising of critical values.	06/30/2019	E

Personnel Responsible

James Sheridan, Vice President, Operations

Pennsylvania-American Water Company Implementation Plan January 2019

Chapter VII Water Operations

Recommendation VII-3 Reduce NRW levels to 25%, focusing on the larger water producing districts.

PAWC Response The Company accepts this recommendation.

Benefit High

Discussion

PA American Water intends to make firm targets for each district, regardless of size, to reduce their NRW Levels by at least 2 percentage points per year until they individually reach 25%. PAWC two largest districts, WB/Scranton and Pittsburgh/McMurray should achieve this in seven years, the other districts should achieve it in three-five years.

2017	Percentage of Statewide production	Percentage of Total Water losses	NRW% 3-year average	ILI 3-year average
Pittsburgh	31.1%	34.8%	39.4%	2.97
WB/Scranton	24.6%	30.7%	40.3%	4.55
Mechanicsburg	5.9%	5.4%	27.9%	2.19
Norristown	4.9%	3.8%	32.4%	3.47
New Castle	3.7%	4.3%	35.1%	2.55
Butler	3.7%	3.2%	25.1%	2.70
Hershey/Palmyra	3.2%	1.6%	17.8%	1.58
Sub-Total	77.1%	83.6%	36.6%	3.22
System Total			33.7%	3.28

Milestones/Full Implementation Date

Milestones	Date [xx/xx/xxxx]	Delivery E=Estimate A=Actual O=Ongoing
Continue to deploy and repair leaks sensed by fixed based logger system.	12/31/2019	E
Emphasize gallons lost normalized for connection quantity, ie. ILI.	12/31/2019	E
Continue to improve equipment and training for our leak detection personnel.	12/31/2019	E
Pilot pressure control and monitoring in larger/higher pressure districts like Pittsburgh.	12/31/2019	E
Continue a multi-prong approach as defined in each districts charter.	12/31/2019	E

Personnel Responsible

James Sheridan, Vice President, Operations

Pennsylvania-American Water Company Implementation Plan January 2019

Chapter VII Water Operations

Recommendation VII-4 Perform a staffing study with cost/benefit components of the Operations Department that weights current and future workload, overtime utilization, and strategic usage of contractors.

PAWC Response The Company accepts, in part, this recommendation.

Benefit High

Discussion

The Company will perform a staffing study for our two largest service areas (Pittsburgh and Scranton). During 2019, we will define the scope of this study, parameters for conducting, and method of completion. Study to be completed by 12/31/2020.

Milestones/Full Implementation Date

Milestones	Date [xx/xx/xxxx]	Delivery E=Estimate A=Actual O=Ongoing
Define scope, parameters for conducting, and method of completion for staffing study.	12/31/2019	E
Perform a staffing study for two largest service areas (Pittsburgh and Scranton).	12/31/2020	E

Personnel Responsible

Carolyn Mount, Director, HR, AWWSC
James Sheridan, Vice President, Operations

Exhibit 5

C-2023-3041252

2018-2023 PENNSYLVANIA AMERICAN WATER MAIN BREAK EMERGENCY NOTIFICATIONS AND NRW DISCHARGED AMOUNTS FROM 200 E. MILLER AVENUE FOUNDATION

April 2018. Surface water leak occurred on E. Eugene/Hill St. Munhall, continuing without repair until August 7, 2019 10:17 a.m. when leak became significantly increased surface break. The leak continued all through the winter months of 2018 without repair causing the necessity for Pennsylvania American Water Company to treat the area and apply large amounts of salt multiple times to dissolve the ice hump on the road that formed as a result of the slow surface leak continuing in the frigid temperatures.

The amounts of test verified NRW significantly increased in our foundation approximately October 18, 2018, requiring a trench to have water directed to a 1/3 HP sump pump for discharge. The sump pump activated approximately 5 times daily to discharge 500 gallons of NRW per day.

January, 27, 2019. 4:46 p.m. PAM calls with cold weather warning. I called explaining the flow of NRW into foundation. A customer service representative replied that it seemed like a non emergency that is required to be handled by a plumber not Pennsylvania American Water and further stated covid-19 protocol prevented crews from in home visits except for true water emergencies.

August 7, 2019. 10:17 a.m. PAM called notifying there was a water main break on E. Eugene St., Munhall.

Sept. 20, 2019. 11:50 a.m. PAM called notifying water main break and calling for boil water advisory E. miller Avenue, E. Eugene Street, Hill Street, Munhall.

Sept. 22, 2019. 8:13 a.m. PAM called notifying water main break repaired and boil water advisory was lifted.

November 2019. Slow surface leak on E. Eugene and Hill Street, Munhall, reported. Leak was not addressed.

NRW WATER CONTINUES TO FLOW THROUGH OUR FOUNDATION DISCHARGING
APPROXIMATELY 400-500 GALLONS OF NRW PER DAY FROM OUR FOUNDATION

January 2020. E. Eugene St., Munhall, Slow surface leak from November 2019 continuing through. Winter causing formation of huge ice humps developing on pavement necessitating PAM to send crews to treat with large amounts of salt.

February 11, 2020 significant increase of amounts of NRW flowing through foundation—picture is provided—with still no help from PAM citing covid-19 protocol. The 1/3 hp sump pump we needed to install was discharging water @ the rate of 50 GPM for 2 minutes each time activated for an average of 18 times per day expelling 1800 gallons of NRW each day until June 15, 2021 for an approximate total of 664,000 gallons of NRW discharged from our foundation. On June 15, 2021, due to a water main break, it discharged continuously for 48 hrs discharging 144,000 gallons of water in a two day period.

November 6, 2020. 1:59 p.m. PAM called notifying of Water main break occurred on E. Eugene St. and Hill St, Munhall, requiring emergency repair by PAM

December 9, 2020. 4:47 p.m. PAM called notifying of 6 in. water main break occurring on E. Eugene St., Munhall.

June 15, 2021 5:30 a.m. significant water main break on Hill Street, Munhall.

September 12, 2022. 11:00 a.m. urgent notification by PAM of line repair on Hill Street, Munhall.

September 13, 2022. 12:45 p.m. urgent notification by PAM of water line leak repair on Hill Street, Munhall.

July 12, 2023. 1:30 p.m. water line break on E. Eugene Street, Munhall. Sump pump activated at minimum 9 times per day discharging approximately 900 NRW gallons of water per day during the prior 72 days, since e-mail notification to Reuben Rodriguez on May 30, 2023.

July 17, 2023. 2:00 p.m. water line leak repair on E. Eugene Street, Munhall.

August 24, 2023. 10:00 a.m. water main break on E. Miller Avenue, Munhall, PAM crews responded about 11:30 a.m. after notification by 911 call. Sump pump activated at minimum of 17 times per day discharging approximately 1,700 gallons of NRW from foundations during prior 38 days.

August 31, 2023. 2:00 p.m. water line leak E. Miller Avenue, Munhall.

September 14, 2023. 10:00 p.m. PAM emergency repair of water main leak on Main Street, Munhall.

September 15, 2023. 9:00 a.m. PAM 'emergency repair water main leak on Superior Street, Munhall

September 19, 2023. 2:00 p.m. PAM started repair on E. miller Avenue, Munhall, water line leak which began on August 31, 2023. Sump pump during prior 25 days activated at minimum 12 times per day discharging approximately 1,200 gallons of NRW each day.

October 26, 2023. 1:30 p.m. PAM emergency repair of water main leak on West Street, Munhall.



Exhibit 6

C-2023-3041252



Customer Name:	Mold Men of Pittsburgh	Sample Date:	May 25, 2022
Customer Address:	938 Constitution Blvd.	Date Received:	May 31, 2022
	New Kensington, PA 15068	Date of Report:	June 3, 2022
Customer Phone:	(724) 226-4191	Fax:	
PO Number:		Attention:	Bill Davis
Project Name/Number:	Derian		

Customer sample numbers below are uniquely identified by prefixing Laboratory # 55339-22

Airborne Spore Trap Analysis - Air-O-Cell
 Analytical Method: MIC 01

Total Volume (L)	75				75				30			
	# 1				# 2				# 3			
Location:	Right Side Basement				Left Side Basement				Exterior Baseline			
Particle ID	Raw ct.	AS	Spores/m ³	%	Raw ct.	AS	Spores/m ³	%	Raw ct.	AS	Spores/m ³	%
Alternaria-like												
Ascospores	23	13	299	33%	11	13	143	11%	77	33	2,541	37%
Aspergillus/Penicillium-like	1	13	13	1%	2	13	26	2%				
Basidiospores	33	13	429	47%	68	13	884	71%	98	33	3,234	47%
Bipolaris/Drechslera												
Cercospora												
Chaetomium-like												
Cladosporium	7	13	91	10%	11	13	143	11%	33	33	1,089	16%
Curvularia												
Epicoccum												
Helicomyces												
Nigrospora												
Oidium												
Pithomyces	1	13	13	1%								
Polythrincium												
Rusts												
Smuts/ Myxomycetes	5	13	65	7%	4	13	52	4%	3	13	39	1%
Stachybotrys												
Torula												
Trichoderma-like												
Unidentified dematiaceous conidia												
Unidentified hyaline conidia												
Total Mold (Spores/m³ of air)	70		910		96		1,248		211		6,903	
Pollen	0	13	< 13		0	13	< 13		17	33	561	
Hyphal Fragments												
Insect Fragments												
Plant Fragments									5	33	165	
Skin Cell Fragments			1				1				1	
Debris			2				2				1	
Analyst Initials			LS				LS				LS	
Date Analyzed			06/01/22				06/01/22				06/01/22	
Exp Date of Cassette:			04/2023				04/2023				04/2023	

Entire trace analyzed. Samples are in good condition unless otherwise noted. Results relate only to the samples tested as received. Results are reported as calculated. For biological data, the first and/or second digit should be considered significant. Total percentage may not equal 100% due to rounding. Percentages reported as 0% are greater than 0 and less than 0.5%. The *Aspergillus/Penicillium*-like category cannot be differentiated by non-viable sampling methods. Results are not blank corrected.
 Blank Lines = None Detected

When providing duplicates of this report, the document should be provided in total and not in section in accordance with AIHA-LAP, LLC. Any unauthorized or improper disclosure, copying, distribution, use, or falsification of these results is prohibited. USMS shall have no liability to the Customer or the Customer's customer for opinions stated, recommendations made, actions taken, or conduct implemented based on the test results reported.



Technical Manager: Deanna L. Kiska
 Deanna L. Kiska, Ph.D.

Exhibit 7

C-2023-3041252

UPDATED 10/22/2023 ESTIMATES OF STRUCTURAL LOSSES AND PERSONAL LOSS REPLACEMENT DUE TO PENNSYLVANIA AMERICAN WATER NRW CONTINUOUS LONG TIME FLOW INTO OUR FOUNDATION AND PROPERTY @ 200 E. MILLER AVENUE, MUNHALL, PA

Quinn Construction, LLC. \$15,000--Proposal for demolition of home, NOT including permit and fees and existing driveway.

Munhall Boro. \$1,700. ---Approximate demolition fees and permit

Columbus Brothers Construction. \$330,000 to rebuild home to current construction specifications.

Pack out \$89,000 --packout loss of mold contamination items

Living expense. \$18,400-- approximately 3 months living accommodation expense during construction of home

Roof and Patio. \$14,475. Rebuild

Backyard wall. \$49,465--outdoor wall rebuild with added water protective drains

Front porch stoop. \$9,750.00--rebuild

Front steps. \$10,360.00--rebuild

Driveway. \$13,125.00--rebuild

Landscaping. \$6,500.00--replace lawn, trees, bushes, and plants.

TOTAL ESTIMATE. \$557,775 -estimated amount need to make home and property whole

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

RONALD AND SHEILA DERIAN
complainants

Vs.

PENNSYLVANIA AMERICAN WATER COMPANY

respondent

CERTIFICATE OF SERVICE

I hereby certify that this day I have served a true copy VIA E-MAIL Exhibits 1, 2, 3, 4, 5, 6, and 7 to the party

Listed below in accordance with the requirements I'd 52 Pa. Code § 1.54

VIA E-MAIL

Administrative Law Judge Emily Devoe
Pennsylvania Public Utility Commission
400 North Street
Harrisburg, PA. 17120



Ronald Derian



Sheila Derian

Sheila Derian

DATED: October 30, 2023



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July 22, 2021
C-41370

Travelers
Mid-Atlantic Claim Center
P.O. Box 430
Buffalo, NY 14240-0434

Attn: Rose Oravec

Subject: Evaluation of Distresses to Derian Dwelling and Property
200 E. Miller Avenue
Homestead, PA 15120
Travelers Claim No.: FQW2819

At the request of Rose Oravec, on July 14, 2021, I examined distresses to the above dwelling and property, owned and occupied by Sheila and Ron Derian, allegedly due to runoff from a Pennsylvania American Water (PAW) water main break. I was accompanied on my inspection by Mrs. Derian, who provided me with a history of the dwelling and property, and their distresses. This report presents my findings and conclusions regarding causation of the claimed distresses.

BACKGROUND

The Derian dwelling is located south of E. Miller Avenue, east of its intersection with Hill Street in Munhall Borough, Allegheny County, Pennsylvania. Mrs. Derian reported that the dwelling was constructed in 1957 and they have owned it since 1973. The rear yard retaining walls were constructed about 30 years ago.

In August 2018, the Derians installed an interior trench drain with a sump pump along the bases of the basement rear and right walls and the garage rear and left walls. Mrs. Derian reported that a PAW water main break occurred in April or May 2020 in E. Eugene Avenue, southwest of their property. Although runoff from that break flowed across the Derian property, no damages to the dwelling or property were claimed by the Derians at that time.

On or about June 15, 2021, a water main break occurred in Hill Street upslope and south of the Derian property. The water reportedly flowed north through the Derian property, and some entered the basement and garage.

Mrs. Derian alleges that runoff from the water main break resulted in continuous water flow into the basement trench drain, bowing of the rear and left yard retaining walls, and a crack in the rear patio slab.

OBSERVATIONS

Conditions at the Derian property noted during my inspection on July 14, 2021, at which time the attached photos were taken, are described below. For orientation purposes, the dwelling front wall faces E. Miller Avenue to the north. All other directional references herein are with respect to facing the object being described.

Photo 1 shows the Derian property looking east from the intersection of E. Miller Avenue and Hill Street. Photos 2 and 3 show Hill Street looking southeast. The water main break occurred in the area of the dark pavement patch in the center background of Photo 3. Photos 4, 5, and 6 show the south portion of the Derian property, the area where runoff from the water main break reportedly flowed. Photo 7 shows the upper retaining wall in the rear (south) limit of the left (east) yard. Photo 8 shows E. Miller Avenue looking east from Hill Street, while Photo 9 shows the dwelling front (north) wall.

Interior Photo 10 shows the right (west) rear corner of the basement. Photo 11 shows the basement right wall right of Photo 10. Photos 12, 13, and 14 show a step crack in the blockwork mortar joints below the basement right wall rear window, reportedly repaired by Mr. Derian after the water main break in 2020. As noted in those photos, flexible caulking was installed in these cracks. However, the cracks have since recurred. Photos 15, 16, and 17 show horizontal cracks in the basement right wall blockwork mortar joints three courses and four courses below the top of the wall, some of which were covered with metallic paint. Photos 18 and 19 show the basement right wall front window and horizontal and step cracks in the blockwork mortar joints below the window opening. Photo 20 shows the basement right front corner and significant staining as well as areas where the paint has

been displaced. Photos 21, 22, and 23 show similar staining and displaced paint at the base of the center and rear portions of the right wall. Photo 23 also shows the north limit of the trench drain installed along the right wall in 2018.

Photo 24 shows a step crack in the blockwork mortar joints in the right limit of the basement rear wall. Photo 25 shows significant staining and paint displacement, as well as the trench drain, in the right rear corner of the basement. Photo 26 is a close-up of the above-mentioned step crack. Photos 27 and 28 show the continued staining along the basement rear wall and a significant gap in the mortar joint in this area. Photo 29 shows the above-described blockwork mortar joint step crack continuing to the left. Photos 30 thru 35 show the left portion of the basement rear wall, continued staining and paint displacement, and water in the trench drain. Photos 34 and 35 show the sump pit for the drain in the left rear portion of the basement.

Photo 36 shows the garage rear wall, while Photo 37 shows significant water staining and displaced paint along that wall. Photos 38 and 39 show similar conditions along the garage left wall.

Photo 40 shows the dwelling front wall garage entrance. Photos 41 and 42 show a gap in the blockwork east of the driveway where water from the trench drain exits the garage.

Photo 43 shows the dwelling rear wall patio slab. Photos 44 thru 48 show a crack in the slab, which evidences rounded and polished edges.

Photo 49 shows the dwelling right wall looking north.

Photo 50 shows the four-course-high dry-stack (non-mortared) retaining wall in the rear portion of the right yard. Photos 51, 52, and 53 show the four-course-high rear yard retaining wall, which evidences bowing in the eastern portion where the most significant erosion of the slope above and deposition of material behind the wall had occurred.

Photo 54 shows the left yard three-course-high retaining wall looking south. Photos 55 thru 58 show the two-tiered block retaining wall in the rear portion of the left yard. The upper wall includes occasional wooden perpendicular support members. Although both of these walls exhibit minor rotation, it does not appear that these walls experienced significant erosion or silt deposition behind them due to the runoff water. Therefore, this rotation pre-dated the water main break.

Photo 59 shows the retaining wall on the adjacent property to the east.

Photos 60 and 61 show the front portion of the lower left yard retaining wall and the dwelling left wall, respectively.

DISCUSSION AND CONCLUSIONS

In August 2018, the Derians installed an interior drain along the basement right and rear walls and the garage rear and left walls. This is an obvious indication that the basement was experiencing water infiltration prior to the 2021 water main break. A water main break occurred in April or May of 2020 which resulted in water flowing through the Derian property, however no damages were claimed by them at that time. Subsequently, Mr. Derian patched the blockwork mortar joint cracks below the basement right wall rear window. On or about June 15, 2021, a water main break occurred in Hill Street. Runoff from that break flowed through the Derian property and into the basement and garage. The cracks previously patched by Mr. Derian have since recurred. Mrs. Derian opines that the water main break has caused continuous water flow into their basement trench drain, bowing of the rear and left yard retaining walls, and a crack in the rear patio slab.

As the garage and basement rear walls and portions of their respective left and right walls extend up to about six feet below existing grade, they have been and continue to be subjected to lateral pressures which vary seasonally depending upon temperature and precipitation. For example, during normal dry "dormant" conditions, the lateral pressure on the basement and garage walls from the soil they support is about 900 lb/lin foot. When the water content of the soil increases following periods of precipitation, the lateral earth pressure increases correspondingly up to about 1080 lb/lin foot. The pressure reaches its maximum of up to about 1640 lb/lin ft when the soil voids are filled with water,

termed saturation, following periods of intense or extended precipitation, and/or significant snow melt. At that time, the soil cannot absorb any more water. Lateral pressure computations are attached. In addition to lateral pressures, at least the upper several feet of the walls experience lateral frost pressure during winter.

Since their construction, the dwelling and garage rear walls have experienced long-term saturated conditions on numerous occasions, which has resulted in the minor wall bowing and cracking as shown on the photos. The water stains and displaced paint in the blockwork are all evidence that water infiltration has long been affecting these walls. This is further substantiated by the trench drain installed along these walls. Also, patching cracks, without addressing the root cause of the distresses, is a cosmetic repair that will likely recur.

Mrs. Derian opines that the crack in the rear patio slab occurred after the water main break in June 2021. This crack evidences mostly polished and rounded edges indicating that it had occurred long before the recent water main break.

The rear yard retaining wall experienced the majority of the runoff water, which flowed through and over it. It is possible that the bowing of the east portion of this wall was caused by runoff from the water main break that occurred about one month prior to my inspection. The left yard, two-tiered retaining wall did not experience the magnitude of water or silt deposition. It is my opinion that the bowing of this wall predated the water main break.

In summary, it is my opinion, within a reasonable degree of engineering certainty, that the only distresses to the Derian dwelling and property that could be attributable to runoff from the June 15, 2021, PAW water main break is possibly the bowing of the left or east portion of the rear yard retaining wall.

Water infiltration into the basement has been occurring for several years as indicated by: the need for a trench drain to be installed; the water stains and displaced paint on the basement walls; and, the



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continuous flow of water in the basement trench drain, about one month after the water main break repair.

Should you have any questions regarding my findings or conclusions, please do not hesitate to contact me.

Respectfully submitted,
THE GATEWAY ENGINEERS, INC.

BY: Joseph P. Fagan
Joseph P. Fagan, P.E.
Project Manager

JPF/sl

Attachments

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PHOTO 1 - DERIAN PROPERTY LOOKING EAST FROM EAST MILLER AVENUE AT HILL STREET



PHOTO 2 - HILL STREET LOOKING SOUTHEAST FROM EAST MILLER AVENUE



PHOTO 3 - AREA SOUTHEAST OF PHOTO 2



PHOTO 4 - SOUTHEAST PORTION OF DERIAN PROPERTY VIEWED FROM HILL STREET

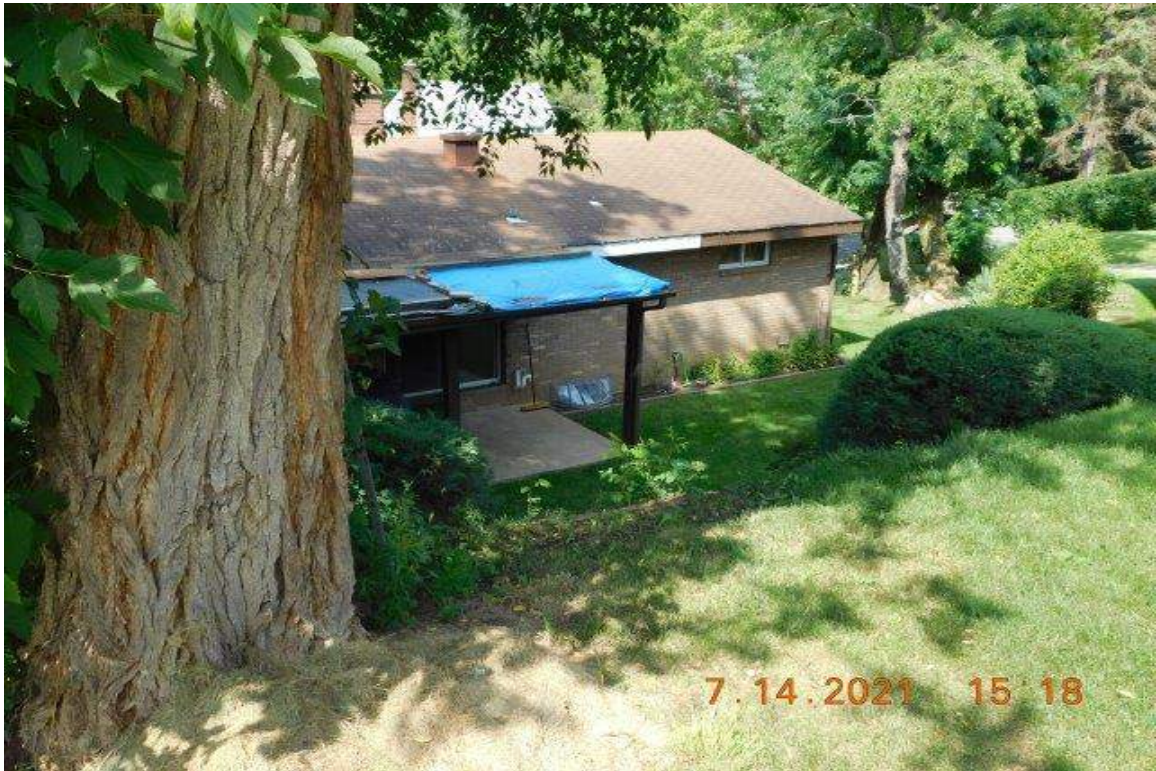


PHOTO 5 - CLOSE-UP OF AREA ON PHOTO 4



PHOTO 6 - LEFT (EAST) REAR (SOUTH) LIMIT OF DERIAN PROPERTY

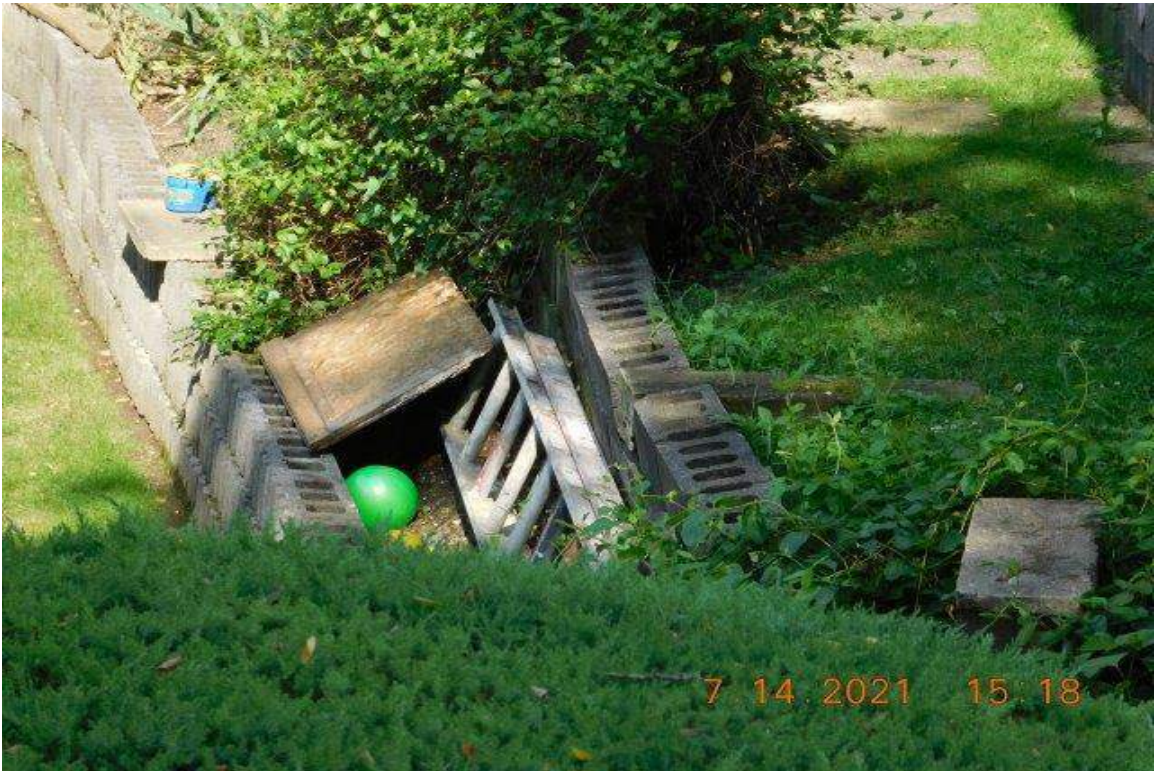


PHOTO 7 - CLOSE-UP OF AREA ON PHOTO

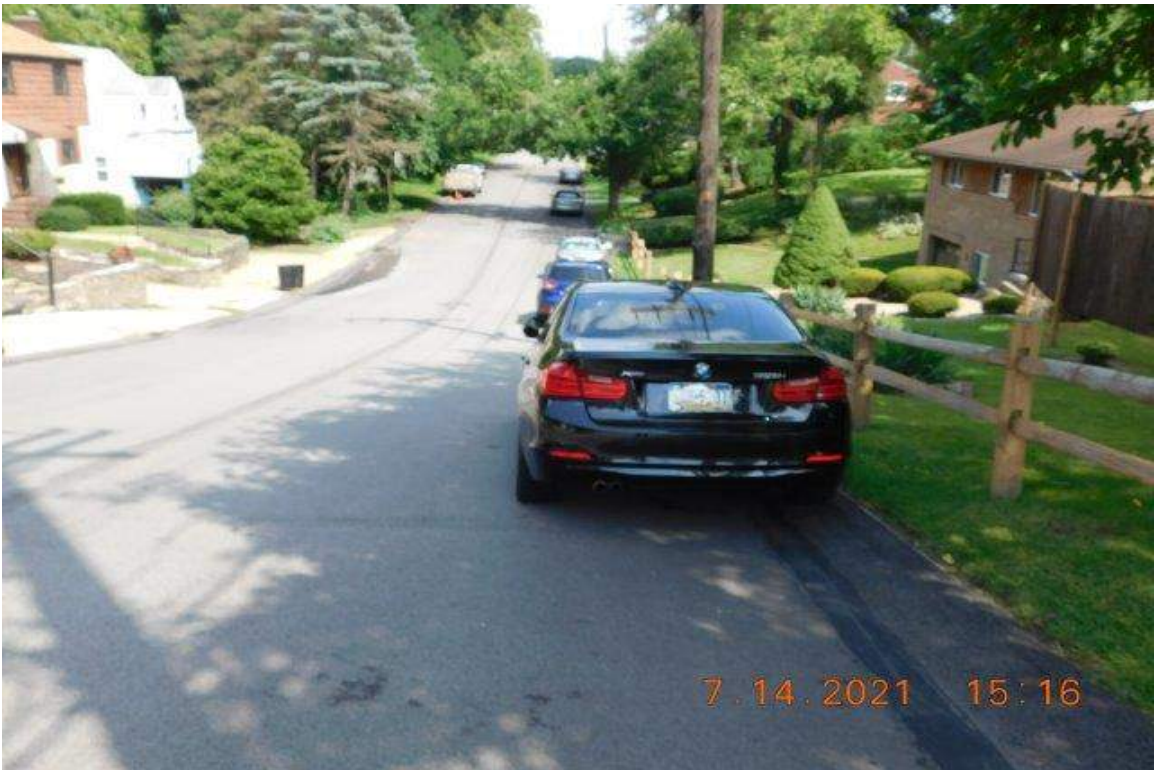


PHOTO 8 - EAST MILLER AVENUE LOOKING EAST FROM HILL STREET



PHOTO 9 - DERIAN DWELLING FRONT (NORTH) WALL



PHOTO 10 - RIGHT (WEST) REAR CORNER OF BASEMENT



PHOTO 11 - BASEMENT RIGHT WALL RIGHT OF PHOTO 10



PHOTO 12 - ANOTHER VIEW OF AREA ON PHOTO 10



PHOTO 13 - CLOSE-UP OF AREA ON PHOTO 12



PHOTO 14 - AREA BELOW PHOTO 13

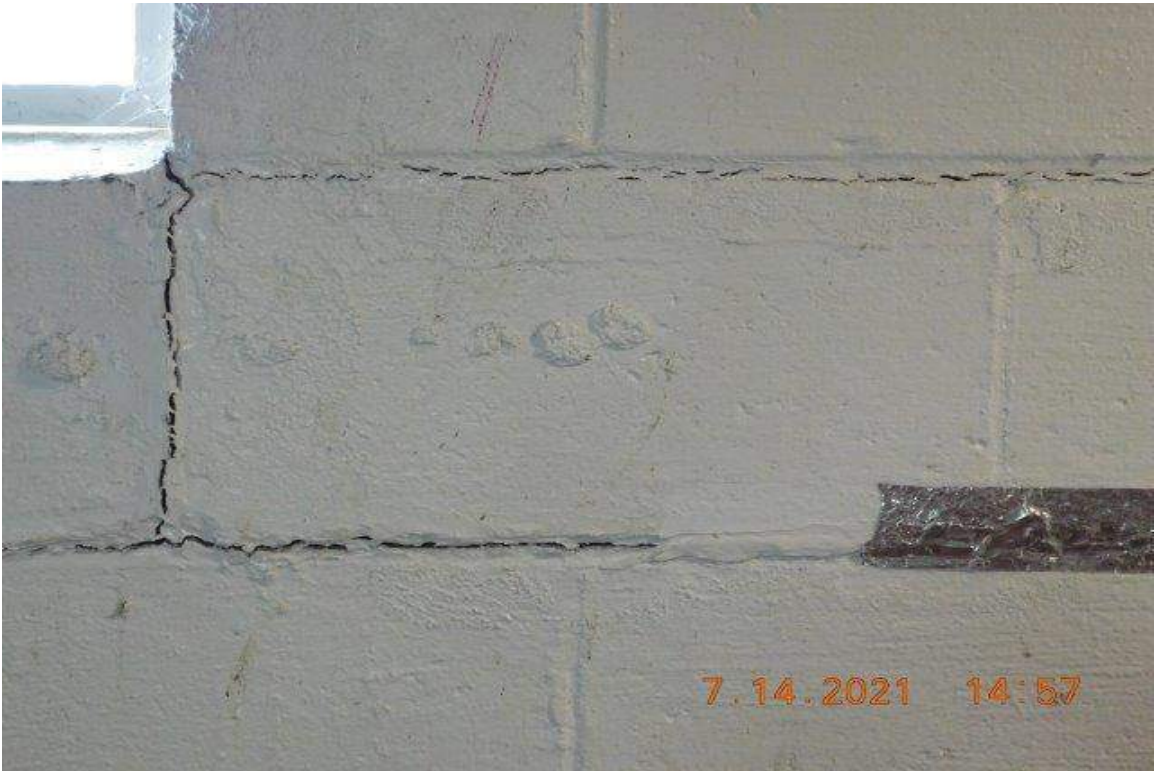


PHOTO 15 - AREA RIGHT OF PHOTO 13



PHOTO 16 - AREA RIGHT OF PHOTO 15



PHOTO 17 - AREA RIGHT OF PHOTO 16



PHOTO 18 - BASEMENT RIGHT WALL FRONT WINDOW



PHOTO 19 - AREA RIGHT OF PHOTO 18



PHOTO 20 - BASEMENT RIGHT FRONT CORNER



PHOTO 21 - CENTER OF BASEMENT RIGHT WALL AT FLOOR



PHOTO 22 - AREA LEFT OF PHOTO 21



PHOTO 23 - AREA LEFT OF PHOTO 22



PHOTO 24 - RIGHT REAR CORNER OF BASEMENT



PHOTO 25 - AREA BELOW PHOTO 24



PHOTO 26 - AREA LEFT OF PHOTO 24



PHOTO 27 - AREA BELOW PHOTO 26



PHOTO 28 - CLOSE-UP OF AREA ON PHOTO 27



PHOTO 29 - AREA LEFT OF PHOTO 26



PHOTO 30 - ANOTHER VIEW OF AREA ON PHOTO 29



PHOTO 31 - CLOSE-UP OF AREA ON PHOTO 30



PHOTO 32 - AREA LEFT OF PHOTO 31



PHOTO 33 - AREA LEFT OF PHOTO 32



PHOTO 34 - LEFT REAR PORTION OF BASEMENT



PHOTO 35 - CLOSE-UP OF AREA ON PHOTO 34



PHOTO 36 - GARAGE REAR WALL

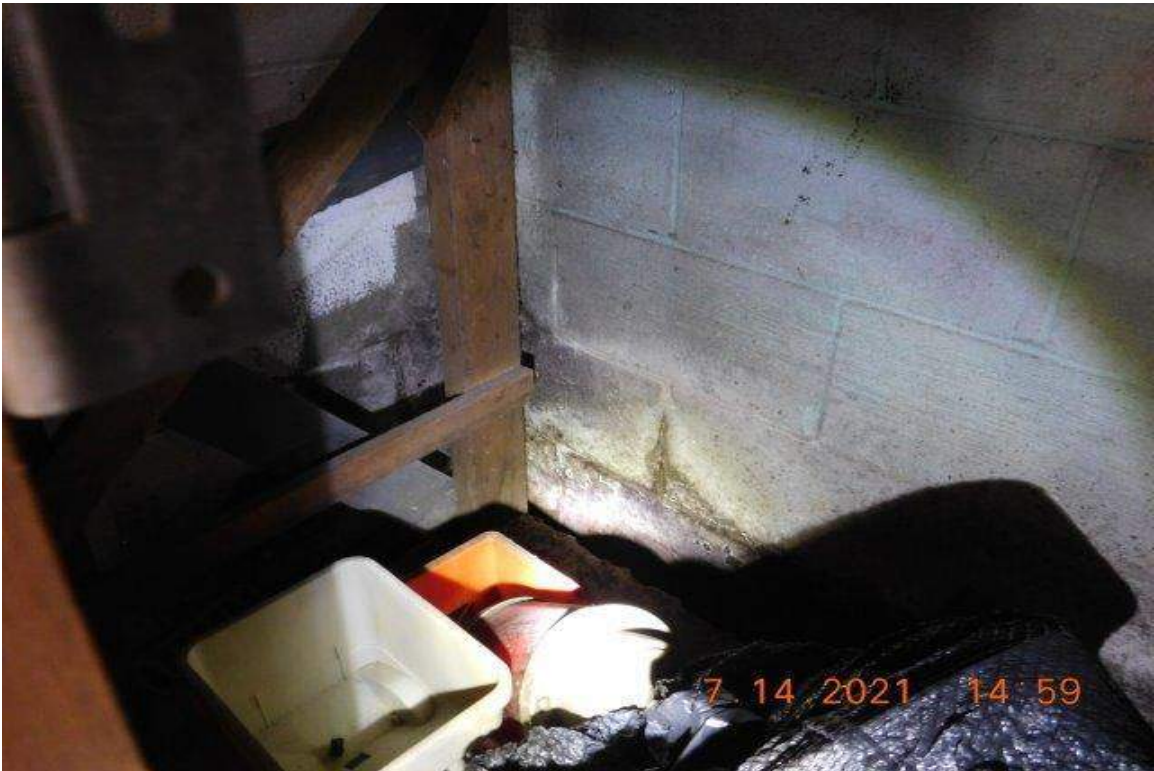


PHOTO 37 - CLOSE-UP OF GARAGE REAR WALL



PHOTO 38 - GARAGE LEFT WALL



PHOTO 39 - CLOSE-UP OF GARAGE LEFT WALL



PHOTO 40 - DWELLING FRONT WALL GARAGE ENTRANCE



PHOTO 41 - LEFT FRONT CORNER OF GARAGE



PHOTO 42 - CLOSE-UP OF AREA ON PHOTO 41



PHOTO 43 - DWELLING REAR WALL PATIO SLAB



PHOTO 44 - CLOSE-UP OF AREA ON PHOTO 43



PHOTO 45 - CLOSE-UP OF AREA ON PHOTO 44



PHOTO 46 - AREA TO FRONT OF PHOTO 44



PHOTO 47 - CLOSE-UP OF AREA ON PHOTO 46



PHOTO 48 - AREA TO FRONT OF PHOTO 47



PHOTO 49 - DWELLING RIGHT WALL LOOKING NORTH



PHOTO 50 - RETAINING WALL IN REAR PORTION OF RIGHT YARD



PHOTO 51 - REAR YARD RETAINING WALL LOOKING EAST



PHOTO 52 - CLOSE-UP OF AREA ON PHOTO 51



PHOTO 53 - CLOSE-UP OF AREA ON PHOTO 52



PHOTO 54 - LEFT YARD RETAINING WALL LOOKING SOUTH



PHOTO 55 - AREA ON PHOTO 54 LOOKING NORTH



PHOTO 56 - UPPER LEFT YARD RETAINING WALL



PHOTO 57 - REAR PORTION OF UPPER LEFT YARD RETAINING WALL LOOKING SOUTH



PHOTO 58 - CLOSE-UP OF AREA ON PHOTO 57



PHOTO 59 - REAR YARD RETAINING WALL ON PROPERTY TO THE EAST



PHOTO 60 - FRONT PORTION OF LOWER LEFT YARD RETAINING WALL



PHOTO 61 - AREA LEFT OF PHOTO 60

PAWC Exhibit 3



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November 22, 2021
C-41370

Travelers
Mid-Atlantic Claim Center
P.O. Box 430
Buffalo, NY 14240-0434

Attn: Rose Oravec

Subject: Re-Evaluation of Distresses to Derian Dwelling and Property
200 E. Miller Avenue
Homestead, PA 15120
Travelers Claim No.: FQW2819

Our July 22, 2021, Evaluation of Distresses to Derian Dwelling and Property report presents my opinion as to the causation of claimed distresses to the subject dwelling and property allegedly due to runoff from a Pennsylvania American Water (PAW) water main break. That report concluded that the only distresses to the Derian dwelling and property that could be attributable to runoff from the June 15, 2021, PAW water main break is possibly the bowing of the left or east portion of the rear yard retaining wall.

We were subsequently requested by Rose Oravec, to revisit the site to assess additional distresses to the dwelling and property that allegedly occurred after my initial inspection on July 14, 2021. I revisited the site on November 8, 2021, to observe the alleged new distresses. I was accompanied on my re-inspection by Mrs. Derian, who provided me with a history of the dwelling and property, and their recent distresses. This report presents my findings and conclusions regarding causation of the claimed new distresses.

This report should be considered a supplement to the July 22, 2021, report. Therefore, I will not reiterate the background information presented in that report.

ADDITIONAL BACKGROUND

Mrs. Derian reported that on October 3, 2021, her husband noticed uneven ground in the right, rear, and left yards while mowing the grass. They opined that this was a recent occurrence and that it may have been caused by water from the water main break that is migrating below the existing ground surface, eroding the subgrade - the layer supporting the surficial soil - and causing “subsidence” of the yard areas. It should be understood that the water main break was repaired on June 15, 2021.

On October 10, 2021, during a rain event, the Derians heard a loud “pop” and they believe that it was a result of shifting of the dwelling foundations, floor joists, and roof framing. They also observed water droplets in the attic at that time. Further, when walking across the wooden floors on the first floor they now hear creaking.

Mrs. Derian stated that at the time of the water main break repair, she recorded on a cell phone that a PAW employee told her that the water pipe in the area of the break was pitted (had several small holes in it) and that the line had been leaking for a while. I asked to hear the recording but she said that it was on her husband’s phone. I asked her if she forwarded the recording to Ms. Oravec and she said that she had not. Ms. Oravec reported to me that the PAW records indicate that the line was not pitted and that the soil adjacent to the break was not wet, which would have indicated that the water line had been leaking for a period of time. I retrieved a piece of the water line pipe that was on the Derian property for further evaluation. My evaluation of the piece is discussed below.

Mrs. Derian alleges that the following damages have occurred since my July 14, 2021, site visit: cracks and shifting of the driveway slabs; movement of the front yard sidewalk, steps, and front entry stoop; “subsidence” of areas of the right, rear, and left yards; widening of the crack in the rear porch slab; cracks in the basement front room floor slab; settlement of the floor slab along the right wall of the basement rear room; movement of foundation walls in the basement rear room, including widening of existing cracks in the walls; cracks in the garage floor slab; a crack in the kitchen wall above the exit to the rear patio; and, shifting of the dwelling foundation walls and roof framing in the attic.

OBSERVATIONS

Conditions at the Derian property noted during my re-inspection on November 8, 2021, at which time the attached photos were taken, are described below. For orientation purposes, the dwelling front wall faces E. Miller Avenue to the north. All other directional references herein are with respect to facing the object being described. As part of this evaluation, I reviewed photos presented in my July 22, 2021, report. Further, I reviewed the July 2016 Google Maps Street View of the area. Any distresses claimed as new but were visible in the Street View are identified “In Google Street View” (IGSV).

Photo 1 shows the Derian driveway looking north while Photo 2 shows a crack in the east side slab that Mrs. Derian claims is new (IGSV). Photos 3 thru 8 show the front (north) yard sidewalk and steps, which are uneven throughout. Photo 9 shows the blocks and slabs supporting the front stoop, which are not uniformly distributed. Mrs. Derian alleges that all of the unevenness is recent (IGSV).

Photos 10, 11, and 12 show the Derian right (west) side yard. Mrs. Derian identified this as one of the areas that have become uneven recently due to “subsidence”. It should be noted that when I compared photos taken for my July 22, 2021, report the area appears to be the same. However, the grass was more lush in July than it was in November. It is my opinion that the areas of alleged subsidence are the paths that the Derians follow when walking through the yard. Since the grass is thinner and the ground is wetter in the Fall of the year, the paths are getting slightly more compressed when being walked on, creating the shallow depressed area.

Photos 12, 13, and 14 show the significantly rotted bases of the posts supporting the porch roof. Photos 15, 16, and 17 show the roof of the porch which is very deteriorated in some areas and previously repaired in others. Photos 18 thru 21 show the crack in the rear patio slab, which does not appear to have changed since my July 14, 2021, inspection.

Photos 22, 23, and 24 show the left portion of the rear yard, the second area identified by Mrs. Derian as having become uneven recently due to “subsidence”. This area was not reviewed during my July

14, 2021, inspection. It is again my opinion that the grass was more lush in July than it was in November and that the areas of alleged subsidence are the paths that the Derians follow. Since the grass is thinner and the ground is wetter in November, the paths are getting slightly more compressed when being walked on, creating the shallow depressed area.

Photos 25 and 26 show the Derian left (east) side yard. Mrs. Derian identified this as the third area that has become uneven recently due to subsidence. It should be noted that when I compared photos taken for my July 22, 2021, report, the area's condition appears to be the same. However, the grass was more lush in July than it was in November. It is again my opinion that the areas of alleged subsidence are the paths that the Derians follow. Since the grass is thinner and the ground is wetter in the Fall, the paths are getting slightly more compressed when being walked on, creating the shallow depressed area.

Interior Photos 27 thru 30 show a crack in the basement front room floor slab that Mrs. Derian opined is new and due to runoff from the water main break. This area was not claimed during my July inspection. The crack is old as it exhibits rounded and polished edges.

Photos 31 and 32 show the right wall of the basement rear room. Mrs. Derian opined that the floor has dropped since my first inspection. Photos 33, 34, and 35 show the cracks in the blockwork below the window in the right wall of the basement rear room, which Mrs. Derian opined had widened since my previous inspection. I reviewed the photos in my July 22, 2021, report, and there does not appear to be any changes in these areas. Photos 36 and 37 show the right rear corner of the basement rear room. Mrs. Derian stated that the basement wall has shifted since my last inspection. Again, I reviewed the photos in my July 22, 2021, report, and there does not appear to be any changes in this area.

Photos 38, 39, and 40 show cracks in the garage floor slab, which Mrs. Derian opined are new. As noted in the photos, the cracks exhibit rounded and polished edges indicating that they are not new.

There were no claims of damage in this area during my initial inspection. A car was in the garage at the time.

Photos 41, 42, and 43, show a crack in the rear wall of the first floor kitchen above the exit to the patio, which Mrs. Derian opined was new. The crack had significant dust in it, therefore, it is not new.

Photos 44, 45, and 46 are views of the attic roof framing. I saw no evidence of any recent movement in the framing.

Photos 47, 48, and 49 show the exterior face of the piece of the broken water line cast iron pipe retrieved from the Derian property, while Photos 50, 51, and 52 show its interior face. As noted, there are no holes in the pipe that would be indicative of pitting.

DISCUSSION AND CONCLUSIONS

Mrs. Derian alleges that the following damages have occurred since my July 14, 2021, site visit: cracks and shifting of the driveway slabs; movement of the front yard sidewalk, steps, and front entry stoop; subsidence of areas of the right, rear, and left yards; widening of the crack in the rear porch slab; cracks in the basement front room floor slab; settling of the floor slab adjacent to the right wall of the basement rear room; movement of foundation walls in the basement rear room, including widening of existing cracks in the walls; cracks in the garage floor slab; a crack in the kitchen wall above the exit to the rear patio; and, shifting of the dwelling foundation walls and roof framing in the attic.

The cracks and shifting of the driveway slabs and the movement of the front yard sidewalk, steps, and front entry stoop were all visible in the July 2016 Google Maps Street View.

The “subsidence” in the right, rear, and left yards appear to be the paths the Derians follow when walking through these areas. Since the grass is thinner and the ground is wetter in the Fall, the paths are getting slightly more compressed when being walked on, creating the shallow depressed areas.

The cracks in the floor slabs of the basement front room and garage exhibit rounded and polished edges. Therefore, they are old and predated the water main line break. These cracks are due to a lack of control joints. As shown on the attached excerpt, which is based on the American Concrete Institute standards, a 4-in-thick concrete slab should include one control joint for each ten feet of slab length to accommodate curing shrinkage stresses. Hence, as the floors were constructed with neither control nor isolation joints, the slabs created their own “isolation joints” by cracking as shown on the photos.

The crack in the kitchen rear wall above the exit to the patio has significant dust in it. Therefore, it is old and predated the water main line break. This crack is due to minor interior sagging of the framing spanning the wall opening.

I saw no new cracks in any of the basement foundation walls, the first floor walls, or the roof framing that was viewed from the attic. Therefore, there is no evidence of recent movement of these structural elements.

In summary, it is my opinion, within a reasonable degree of engineering certainty, that none of the distresses to the Derian dwelling and property that were claimed as having occurred since my July 14, 2021, site inspection are new nor the result of runoff from the PAW water main line break that occurred on or about June 15, 2021..

Water infiltration into the basement has been occurring for several years as indicated by: the need for a trench drain to be installed; the water stains and displaced paint on the basement walls; and, the continuous flow of water in the basement trench drain, almost five months after the water main break repair.



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November 22, 2021


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Should you have any questions regarding my findings or conclusions, please do not hesitate to contact me.

Respectfully submitted,

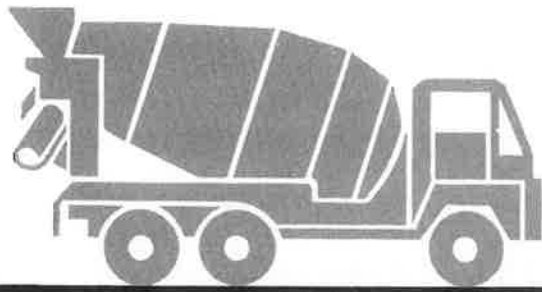
THE GATEWAY ENGINEERS, INC.

BY: 
Joseph P. Fagan, P.E.
Project Manager

JPF/sl

Attachments

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CONCRETE IN PRACTICE

CIP 4

What, Why & How? Cracking Concrete Surfaces

1. WHAT are Some Forms of Cracks?

Concrete, like other construction materials, contracts and expands with changes in moisture content and temperature and deflects depending on load and support conditions. When provisions for these movements are not made in design and construction, then cracks can occur. Some forms of common cracks are:

Figure A—Plastic Shrinkage Cracking (See CIP-5)

Figure B—Cracks Due to Improper Jointing (See CIP-6)

Figure C—Cracks Due to Continuous External Restraint (Example—Cast in place wall restrained along bottom edge of footing)

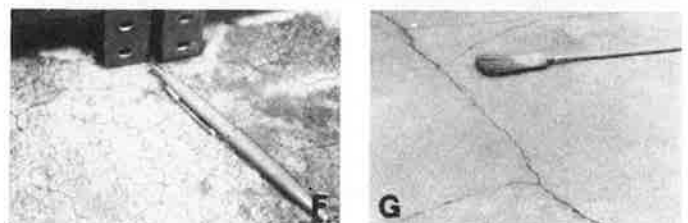
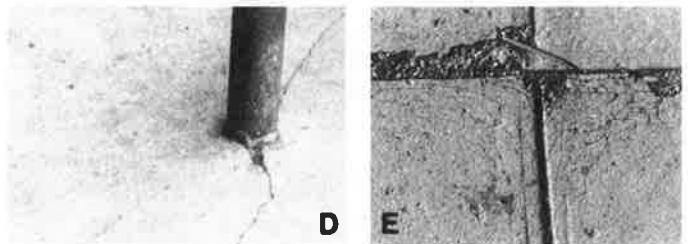
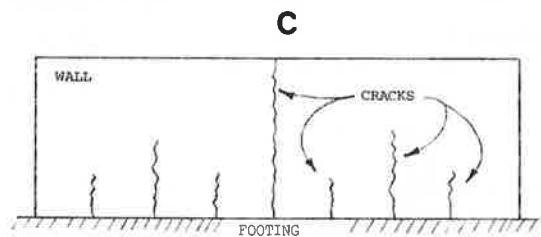
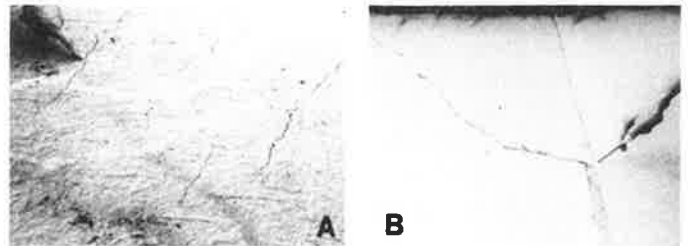
Figure D—Basement Floor Cracks (See CIP-6)

Figure E—D-Cracks from Freezing and Thawing

Figure F—Craze Cracks (See CIP-3)

Figure G—Settlement Cracks

Cracks rarely affect structural integrity. Most random individual cracks look bad and although they permit entrance of water they do not lead to progressive deterioration. They are simply unsightly. Closely spaced pattern cracks or D-cracks due to freezing and thawing are an exception and may lead to ultimate deterioration.



2. WHY Do Concrete Surfaces Crack?

The majority of concrete cracks usually occur due to improper design and construction practices, such as:

- a. Omission of isolation and control joints and improper jointing practices.
- b. Improper subgrade preparation.
- c. The use of high slump concrete or addition of water on the job.
- d. Improper finishing.
- e. Inadequate or no curing.

3. HOW to Prevent or Minimize Cracking

All concrete has a tendency to crack and it is not possible to consistently produce completely crack-free concrete. However, cracking can be reduced and controlled if the following basic safeguards are observed:

a. *Subgrade and Formwork.* All top soil and soft spots should be removed. Regardless of its type, the soil beneath the slab should be compacted soil or granular fill, well compacted by rolling, vibrating or tamping. The slab and, therefore, the subgrade should be sloped for proper drainage. Smooth, level subgrades help prevent cracking. All formwork must be constructed and braced so that it can withstand the pressure of the concrete without movement. Polyethylene vapor barriers increase bleeding and greatly increase cracking of high slump concrete. Cover the vapor barrier with 1 to 2 inches of damp sand to reduce bleeding. Immediately prior to concrete placement, dampen the subgrade, formwork, and the reinforcement.

b. *Concrete.* In general, use concrete with a moderate slump (not over 5 inches). Avoid retempering. If higher slump, up to 7 inches, is to be used, proportions will have to be changed and special mixtures developed to avoid excessive bleeding, segregation and low strength. Specify air-entrained concrete for outdoor slabs subjected to freezing weather. (See CIP-2)

c. *Finishing.* DO NOT perform finishing operations with water present on the surface. Initial screeding must be promptly followed by bullfloating. For better traction on exterior surfaces use a broom finish. If evaporation is excessive reduce it by some means to avoid plastic shrinkage cracking. Cover the concrete with

wet burlap or polyethylene sheets in between finishing operations if conditions are severe.

d. *Curing.* Start curing as soon as possible. Spray the surface with liquid membrane curing compound or cover it with damp burlap and keep it moist for at least 3 days. A second application of curing compound the next day is a good quality assurance step.

e. *Joints.* Provisions for contraction or expansion movements due to temperature and/or moisture change should be provided with construction of control joints by sawing, forming or tooling a groove about $\frac{1}{4}$ the thickness of the slab, no further apart than 30 times the thickness. Often closer spacing of control joints will be necessary to avoid long thin areas. The length of an area should not exceed about 1.5 times the width. Isolation joints should be provided whenever restriction to freedom of either vertical or horizontal movement is anticipated; such as where floors meet walls, columns, or footings. These are full-depth joints and are constructed by inserting a barrier of some type to prevent bond between the slab and the other elements.

f. *Cover Over Reinforcement.* Cracks in reinforced concrete caused by expansion of rust on reinforcing steel should be prevented by providing sufficient concrete cover (at least 2 inches) to keep salt and moisture from contacting the steel.

References

1. ACI Standard Recommended Practice for Concrete Floor and Slab Construction, ACI 302, ACI Manual of Concrete Practice, Part 1, 1978.
2. "Causes of Floor Failures," by A. T. Hersey, ACI Journal, June 1973.
3. "Cracks in Concrete: Causes, Prevention, Repair," A collection of articles from Concrete Construction Magazine, June 1973.
4. "Why and How: Joints for Floors on Ground," Report No. RP026.01B, Portland Cement Association, Skokie, Ill.

Follow These Rules to Minimize Cracking

1. Design the members to handle all anticipated loads.
2. Provide proper control and isolation joints.
3. In slab-on-grade work, prepare a stable subgrade.
4. Place and finish according to established rules.
5. Protect and cure the concrete properly.



Technical Information prepared by:

National Ready Mixed Concrete Association
900 Spring Street, Silver Spring, Maryland 20910



PHOTO 1 - DERIAN DRIVEWAY LOOKING NORTH



PHOTO 2 - CLOSE-UP OF AREA ON PHOTO 1



PHOTO 3 - FRONT (NORTH) YARD SIDEWALK LOOKING NORTHWEST



PHOTO 4 - ANOTHER VIEW OF AREA ON PHOTO 3



PHOTO 5 - CLOSE-UP OF AREA ON PHOTO 4



PHOTO 6 - SIDEWALK WEST OF PHOTO 5



PHOTO 7 - CLOSE-UP OF AREA ON PHOTO 6



PHOTO 8 - CLOSE-UP OF AREA ON PHOTO 7



PHOTO 9 - FRONT ENTRY STOOP LOOKING EAST



PHOTO 10 - RIGHT (WEST) SIDE YARD



PHOTO 11 - CLOSE-UP OF AREA ON PHOTO 12



PHOTO 12 - AREA SOUTH OF PHOTO 13



PHOTO 13 - CLOSE-UP OF REAR (SOUTH) PATIO RIGHT ROOF SUPPORT POST



PHOTO 14 - CLOSE-UP OF REAR PATIO CENTER ROOF SUPPORT POST



PHOTO 15 - AREA ABOVE PHOTO 14



PHOTO 16 - REAR PATIO ROOF LOOKING WEST



PHOTO 17 - CLOSE-UP OF AREA ON PHOTO 16



PHOTO 18 - REAR PATIO SLAB LOOKING NORTH



PHOTO 19 - CLOSE-UP OF AREA ON PHOTO 18

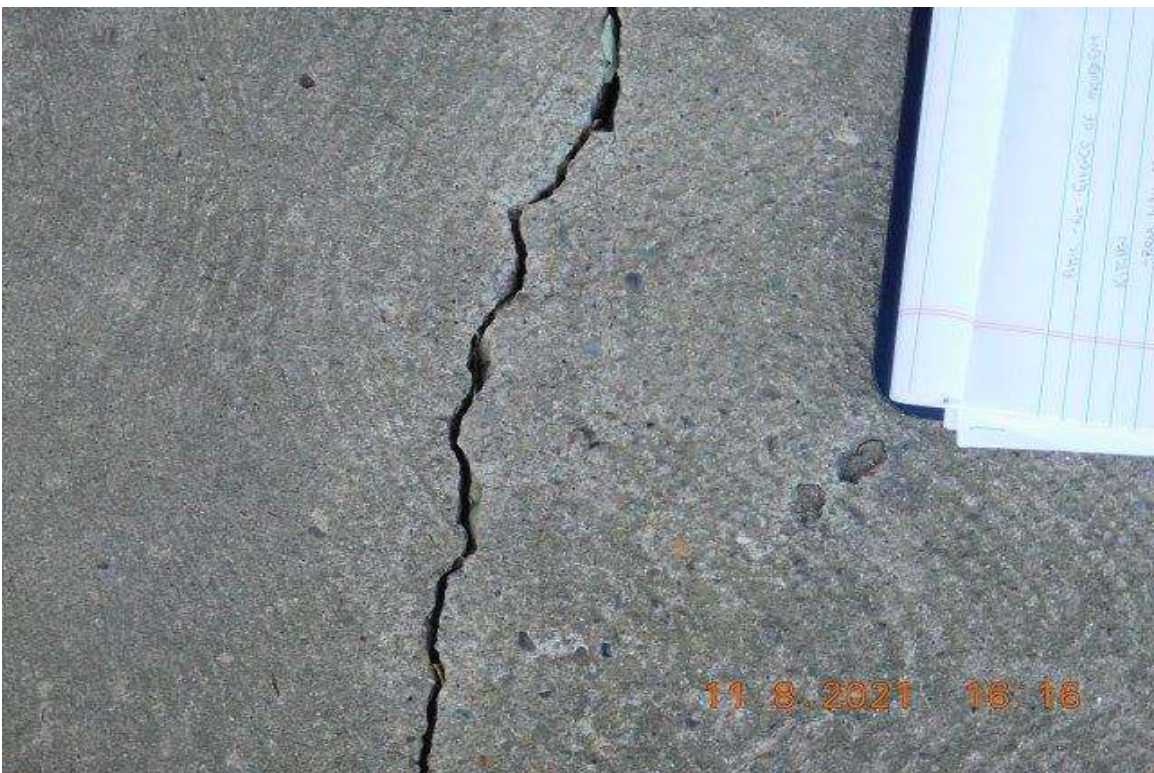


PHOTO 20 - AREA NORTH OF PHOTO 19



PHOTO 21 - AREA NORTH OF PHOTO 20



PHOTO 22 - EAST PORTION OF REAR YARD LOOKING EAST



PHOTO 23 - CLOSE-UP OF AREA ON PHOTO 22



PHOTO 24 - CLOSE-UP OF AREA ON PHOTO 23



PHOTO 25 - LEFT (EAST) SIDE YARD LOOKING NORTHEAST



PHOTO 26 - CLOSE-UP OF AREA ON PHOTO 25



PHOTO 27 - BASEMENT FRONT ROOM LOOKING NORTH



PHOTO 28 - CLOSE-UP OF AREA ON PHOTO 27



PHOTO 29 - CLOSE-UP OF AREA ON PHOTO 28

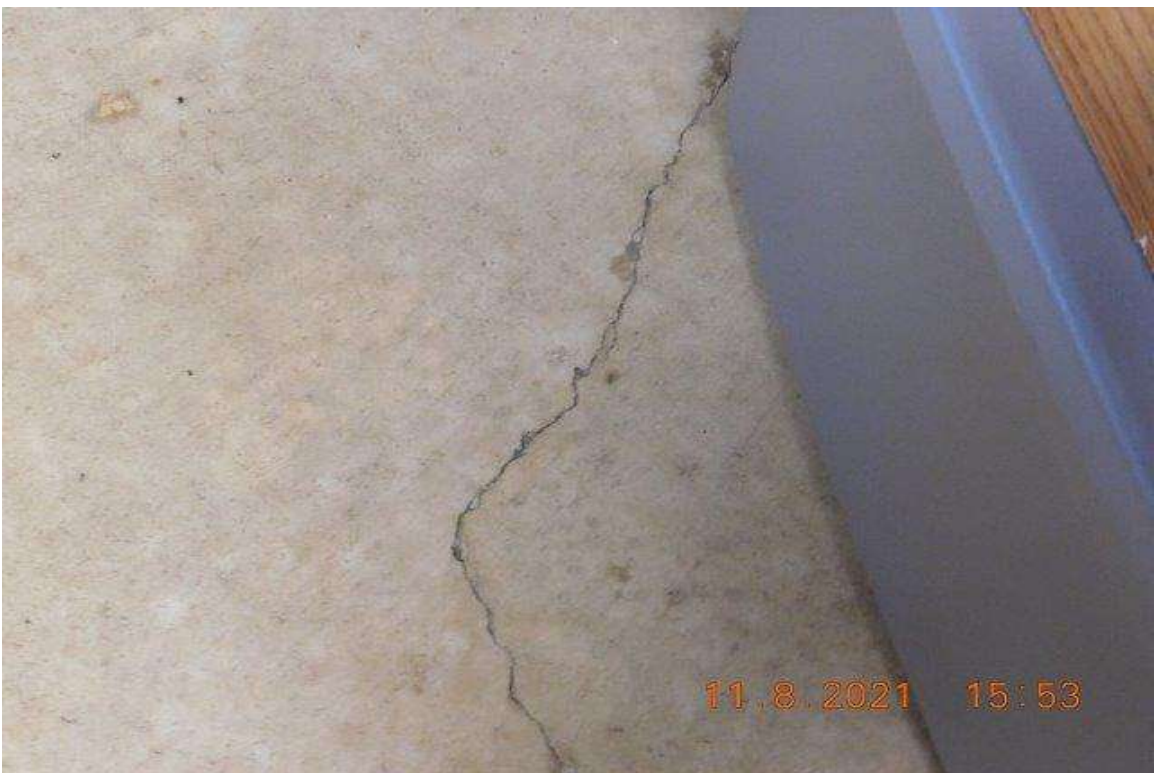


PHOTO 30 - AREA NORTH OF PHOTO 29



PHOTO 31 - RIGHT WALL OF BASEMENT REAR ROOM



PHOTO 32 - CLOSE-UP OF AREA ON PHOTO 31

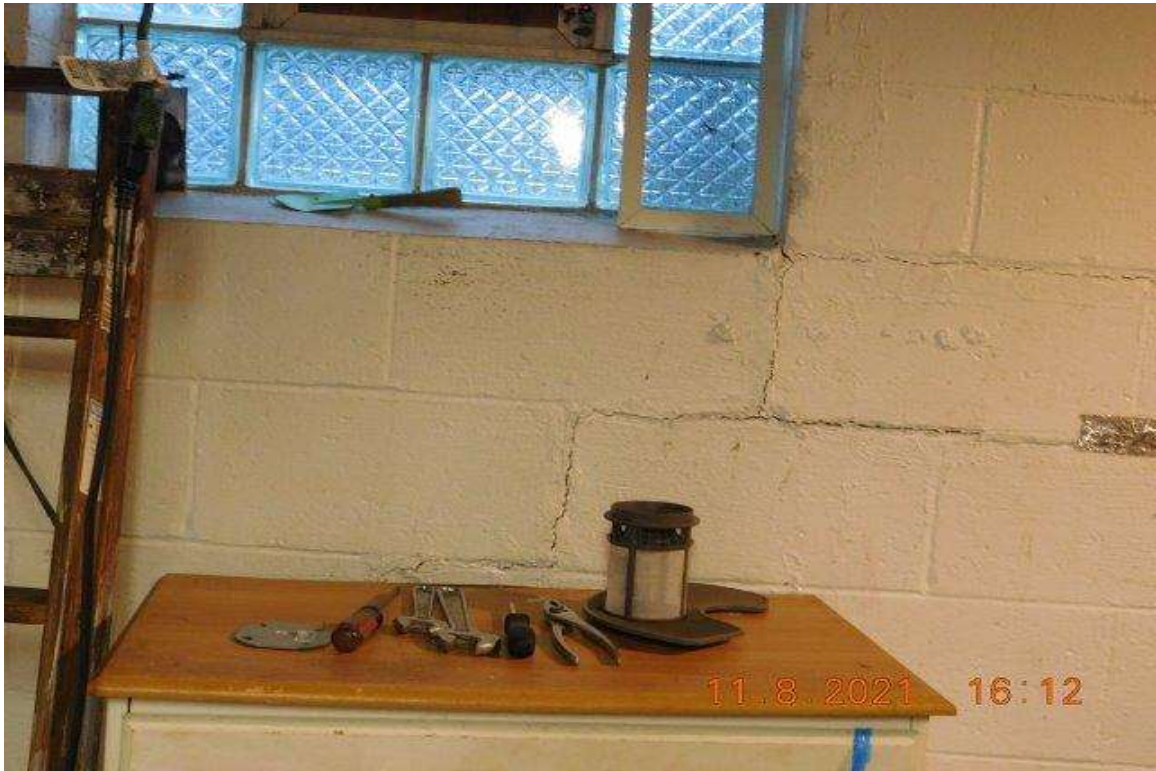


PHOTO 33 - AREA ABOVE PHOTO 31



PHOTO 34 - CLOSE-UP OF AREA ON PHOTO 33



PHOTO 35 - AREA BELOW PHOTO 34



PHOTO 36 - RIGHT REAR CORNER OF BASEMENT REAR ROOM



PHOTO 37 - CLOSE-UP OF AREA ON PHOTO 36



PHOTO 38 - GARAGE FLOOR LOOKING NORTH



PHOTO 39 - CLOSE-UP OF AREA ON PHOTO 38



PHOTO 40 - AREA EAST OF PHOTO 39



PHOTO 41 - AREA ABOVE REAR WALL EXIT TO PATIO



PHOTO 42 - CLOSE-UP OF AREA ON PHOTO 41



PHOTO 43 - CLOSE-UP OF AREA ON PHOTO 42



PHOTO 44 - ATTIC ROOF FRAMING



PHOTO 45 - ATTIC ROOF FRAMING



PHOTO 46 - CLOSE-UP OF AREA ON PHOTO 45



PHOTO 47 - EXTERIOR FACE OF PIECE OF BROKEN WATER LINE



PHOTO 48 - CLOSE-UP OF AREA ON PHOTO 47



PHOTO 49 - AREA LEFT OF PHOTO 48



PHOTO 50 - INTERIOR FACE OF PIECE OF BROKEN WATER LINE



PHOTO 51 - CLOSE-UP OF AREA ON PHOTO 50



PHOTO 52 - AREA LEFT OF PHOTO 51