A. ROLL CALL

B. PUBLIC HEARING ON SPECIAL ASSESSMENTS FOR 7100 BLOCK OF AIRLINE ROAD FOR FUTURE SEWER HOOKUPS

C. REQUEST TO ADDRESS THE BOARD

D. APPROVAL OF MINUTES
   • Approval of Minutes from December 18, 2017

E. MONTHLY REPORTS
   • Financial
   • Plant Operations
   • Field Operations
   • Engineering
   • Human Resources
   • Safety Report
   • General Manager’s

F. BUSINESS
   • Resolution No. 2018-01 – Future Reimbursement of Connections to the Bent Creek Estates Sewer Extension

G. EXECUTIVE SESSION – None Requested
PUBLIC HEARING

- Floor Open For Comments on Special Assessments For 7100 Block of Airline Road Pertaining to Future Sewer Hookups
REQUEST TO ADDRESS THE BOARD
ACTION MINUTES OF MEETING
December 18, 2017
ACTION MINUTES
DECEMBER 18, 2017
HENDERSON WATER & SEWER COMMISSION

A. ROLL CALL

Present at the meeting was Commissioner Paul Bird, Chairman, who presided over the meeting, along with Commissioners George Jones, John Henderson, Gary Jennings (arrived late), and Julie Wischer. Eric Shappell, Attorney was also present. General Manager, Tom Williams was unable to attend the meeting. Other Staff members present were Buzzy Newman, Kevin Roberts, Todd Bowley, Tim Fischbeck, John Baker, Cindy Bickwermert, and Deniese Jones. Also in attendance were Mayor, Steve Austin; City Manager, Russell Sights; and Donna Stinnett. No members of the media were present.

B. INVOCATION – Kevin Roberts

C. REQUEST TO ADDRESS THE BOARD - None

D. APPROVAL OF MINUTES

• Approval of Minutes from November 20, 2017

  Motion was made and approved to accept the minutes as submitted.

E. MONTHLY REPORTS

• Financial – Discussed and approved as submitted.

  Todd Bowley reviewed the financial statements with the board. He reported that November revenue came in a little over the budgeted amount, but usage is still below last year’s totals. Industrial usage was up while residential and commercial usages were below compared to last year. Year to date, cash has decreased by $872,000.

  Mr. Bowley also handed out a summary with graphs showing what contract rates have been doing the last 5 years for the various contract customers. He reviewed the information with the board and answered questions.

  o Debt Collection Authorization

  Mr. Bowley reported that there is an out of town plumbing vendor who has an outstanding debt that needs to be collected. The vendor worked on the Starbucks project and was billed in December 2016 for extra costs that were incurred over and above the estimated pre-payment amount. There has been contact made with them several times, including a letter sent by HWU’s attorney, but to date they have not made
the payment. After discussion, motion was made and approved to direct HWU’s attorney to proceed with collection of the debt and filing a lawsuit.

- **Plant Operations – Discussed and approved as submitted.**

  Kevin Roberts highlighted a few items in the plant operations report. He noted that the process has been changed for our bacteriological testing making results available in 18 hours instead of 24 hours. This should benefit all of our customers when there is a boil water advisory put into place and results are available 6 hours sooner.

  Mr. Roberts also pointed out the South water supply issue mentioned in the report and the steps that are being taken to find out what the problem is. Part of the process is determining if the problem is on HWU’s side or Big River’s side. It is probable that a new backwash pump will help the situation, and this will be investigated further.

- **Field Operations – Discussed and approved as submitted**

  Buzzy Newman reviewed the Field Operations report with the board. He mentioned that the Old Corydon Road sanitary sewer project should be complete within a few days, with the next goal being to start the Hackberry water main project, even though inclement weather could affect its progress. Another item on the list is a new sewer service for Audubon Metals, because they are undergoing a plant expansion.

  Mr. Newman directed the boards attention to a new CSO report that is in the packet, which shows the accumulation of overflows during storm events. John Baker pointed out that the CSO overflows are considerably better than they were a few years ago before all the projects were completed, showing a definite downward trend.

  Mr. Newman also commented on the number of leaks that have occurred due to the extremely cold weather. He said the crews have been working diligently to repair pipes and unfreeze meters. He also conveyed his appreciation to Deniese Jones for the excellent job she has done and her willingness to take over board meeting duties on an interim basis.

- **Engineering – Discussed and approved as submitted.**

  The board was informed that the consultant and a representative of the contractor that painted the Frontier Tank was on site last week to inspect the issue of discoloration of the tank paint. They have determined what the problem is and will be back in the spring when weather allows to correct the issue. Also, Mark Bowling, Inc. informed Tom Williams that they are going to be pulling in lights for the south wastewater plant, so they will be able to work through the night and get the pour done on Wednesday before the expected cold weather arrives.

- **Human Resources – Discussed and approved as submitted.**

- **Safety Report – Discussed and approved as submitted.**

- **General Manager’s – Discussed and approved as submitted.**
Kevin Roberts and Buzzy Newman answered questions pertaining to the water quality issue at the Community College. Kevin presented a graph showing the results of testing done inside the 3 buildings supplied by the old water line which shows questionable results. He stated that the college has been notified of these results. The college is supplied by two different lines, the one newer line does not have a problem. The problem is on the college’s side on the older portion of their system. It is proposed that a loop system be constructed to take care of this which will put the water from the newer line into the 3 oldest buildings. Commissioner Jennings asked why the utility should be obligated to pay for something that is on their side of the meter. Staff explained that this is something that needs to be taken care of right away and that the college administration is in the process of asking for funding. Buzzy explained that funding is always going to be an issue with the school and a meeting is planned for January to discuss this further with them and to see if there is emergency funding available in the community college system.

The board expressed their concern that the college has been notified in writing and that actions have been taken by the college to make sure the water in the buildings affected is not being consumed by anyone. They also suggested that the Health Department be notified to make sure that all the correct procedures were being followed by the college and that everyone is informed properly. Kevin Roberts reported that the college has been advised of the analysis data and they were informed of what we would do in that situation. The college has posted signs at HWU’s direction and it is our understanding that they have shut off the drinking fountains and are providing bottled water. Staff indicated that they will take care of informing the Health Department of this situation and that in the future any problem like this will be brought to the board’s attention by notification of each board member apart from including it in a monthly report.

F. BUSINESS

- Action Report #2017-43 – Bids for Materials – Inventory Repair Clamps

After discussion, motion was made and approved to accept Action Report #2017-43 – Bids for Materials – Inventory Repair Clamps, awarding the bid to the low bidder, J & J Supply in the amount of $40,146.79. The initial bid is for one year with the ability to renew for two additional one-year terms. Detailed tabulations of the bid are available upon request. These type bids are charged to the Operating Budget.

- Action Report #2017-44 – Analytical Laboratory Testing Services – Water

After discussion, motion was made and approved to accept Action Report #2017-44 – Analytical Laboratory Testing Services for Water, awarding the bid to the low bidder, Testamerica in the amount of $10,704.00. The cost of this service is within the approved FY 2017-2018 budget. Copies of the bid tabulations are available upon request.

- Reminder that the January 2018 Meeting will be moved to the fourth Monday, January 22nd, since the holiday falls on the third Monday.

Paul Bird reminded the board that as in the past, the January 2018 meeting will be moved to the fourth Monday, January 22nd, since the holiday falls on the third Monday.
G. EXECUTIVE SESSION – None Requested

Motion was made and approved to adjourn.

The next scheduled board meeting will be held on Monday, January 22, 2018.
FINANCIAL REPORT
Financial Summary

For the Six Months Ended December 31, 2017
### Henderson Water Utility

**Operating Revenues and Expenses Summary**

*For the Six Months Ended December 31, 2017*

<table>
<thead>
<tr>
<th></th>
<th>December Actual</th>
<th>December Budget</th>
<th>Year to Date Actual</th>
<th>Year to Date Budget</th>
<th>Fiscal Year Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPERATING REVENUES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Sales</td>
<td>$584,475</td>
<td>$568,546</td>
<td>$4,086,581</td>
<td>$3,969,759</td>
<td>$7,547,070</td>
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<tr>
<td>Water Penalties</td>
<td>3,680</td>
<td>2,417</td>
<td>22,035</td>
<td>14,500</td>
<td>29,000</td>
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<tr>
<td>Water Fees</td>
<td>1,140</td>
<td>4,167</td>
<td>21,020</td>
<td>25,000</td>
<td>50,000</td>
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<tr>
<td>Wastewater Services</td>
<td>796,961</td>
<td>801,946</td>
<td>5,604,576</td>
<td>5,599,428</td>
<td>10,645,300</td>
</tr>
<tr>
<td>Wastewater Penalties</td>
<td>4,878</td>
<td>3,208</td>
<td>28,266</td>
<td>19,250</td>
<td>38,500</td>
</tr>
<tr>
<td>Wastewater Fees</td>
<td>10,081</td>
<td>17,292</td>
<td>149,396</td>
<td>103,750</td>
<td>207,500</td>
</tr>
<tr>
<td>Stormwater Impact Fee</td>
<td>63,792</td>
<td>61,840</td>
<td>368,182</td>
<td>364,200</td>
<td>735,240</td>
</tr>
<tr>
<td><strong>Total Operating Revenues</strong></td>
<td>1,465,007</td>
<td>1,459,415</td>
<td>10,280,056</td>
<td>10,095,887</td>
<td>19,252,610</td>
</tr>
<tr>
<td><strong>OPERATING EXPENSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries and Wages</td>
<td>342,321</td>
<td>357,424</td>
<td>2,189,721</td>
<td>2,323,253</td>
<td>4,646,506</td>
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<tr>
<td>Payroll Taxes</td>
<td>25,303</td>
<td>27,284</td>
<td>163,396</td>
<td>177,347</td>
<td>354,693</td>
</tr>
<tr>
<td>Health Insurance</td>
<td>103,910</td>
<td>124,111</td>
<td>638,564</td>
<td>744,667</td>
<td>1,489,333</td>
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<tr>
<td>Pension Benefits</td>
<td>65,242</td>
<td>67,591</td>
<td>415,880</td>
<td>439,343</td>
<td>878,685</td>
</tr>
<tr>
<td>Workers Compensation</td>
<td>6,790</td>
<td>8,333</td>
<td>57,470</td>
<td>66,667</td>
<td>100,000</td>
</tr>
<tr>
<td>Other Employee Benefits</td>
<td>1,196</td>
<td>2,151</td>
<td>8,314</td>
<td>12,906</td>
<td>25,811</td>
</tr>
<tr>
<td>Car Allowance</td>
<td>1,350</td>
<td>1,350</td>
<td>8,550</td>
<td>8,550</td>
<td>16,650</td>
</tr>
<tr>
<td>Electricity</td>
<td>154,437</td>
<td>156,358</td>
<td>897,141</td>
<td>938,146</td>
<td>1,876,291</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>2,042</td>
<td>3,600</td>
<td>3,145</td>
<td>7,350</td>
<td>37,050</td>
</tr>
<tr>
<td>Chemicals</td>
<td>82,900</td>
<td>94,018</td>
<td>678,257</td>
<td>684,110</td>
<td>1,248,220</td>
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<tr>
<td>Inventory Expense</td>
<td>2,165</td>
<td>22,342</td>
<td>102,686</td>
<td>134,054</td>
<td>268,108</td>
</tr>
<tr>
<td>Fuel</td>
<td>5,931</td>
<td>7,554</td>
<td>44,186</td>
<td>45,325</td>
<td>90,650</td>
</tr>
<tr>
<td>Tools &amp; Small Equipment</td>
<td>5,430</td>
<td>13,356</td>
<td>55,933</td>
<td>80,138</td>
<td>175,275</td>
</tr>
<tr>
<td>Safety &amp; Clothing Supplies</td>
<td>1,211</td>
<td>3,988</td>
<td>14,127</td>
<td>23,925</td>
<td>47,850</td>
</tr>
<tr>
<td>Lab Supplies and Testing</td>
<td>76,515</td>
<td>29,405</td>
<td>174,270</td>
<td>176,429</td>
<td>208,857</td>
</tr>
<tr>
<td><strong>Total Operating Expenses</strong></td>
<td>1,564,853</td>
<td>1,555,424</td>
<td>8,915,623</td>
<td>9,417,560</td>
<td>18,711,936</td>
</tr>
<tr>
<td><strong>Operating Income (Loss)</strong></td>
<td>$ (99,846)</td>
<td>$ (96,009)</td>
<td>$ 1,364,433</td>
<td>$ 678,327</td>
<td>$ 540,674</td>
</tr>
</tbody>
</table>
Henderson Water Utility
Variance Analysis
For the Six Months Ended December 31, 2017

Operating Revenues
Actual $10,280,056
Budgeted 10,095,887
Favorable (Unfavorable) Variance $184,169
Percentage Difference 1.82%

Billable Gallons
Through 12/31/17 1,254,885,311
Through 12/31/16 1,244,938,262
Difference 9,947,049
Percentage Difference 0.80%

Operating Expenses
Actual $8,915,623
Budgeted 9,417,560
Favorable (Unfavorable) Variance $501,937
Percentage Difference 5.33%

Breakdown of Volumetric Differential For Six Months Ended
<table>
<thead>
<tr>
<th></th>
<th>Dec-17</th>
<th>Dec-16</th>
<th>Differential %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>299,042,717</td>
<td>306,749,510</td>
<td>-2.51%</td>
</tr>
<tr>
<td>Industrial (includes IP)</td>
<td>250,448,033</td>
<td>230,968,843</td>
<td>8.43%</td>
</tr>
<tr>
<td>Commercial (includes Tyson &amp; HCWD)</td>
<td>705,394,561</td>
<td>707,219,909</td>
<td>-0.26%</td>
</tr>
<tr>
<td>Total</td>
<td>1,254,885,311</td>
<td>1,244,938,262</td>
<td>0.80%</td>
</tr>
</tbody>
</table>

Notes
Revenue Summary:
Revenues continue to trend slightly above budget for year to date. Usage trend continues with overall flat usage. Increase in commercial usage being offset by reductions to both residential and industrial users.

Expense Summary:
Expenses were slightly over the monthly allocated budget totals, however, expenses year-to-date are under budget by approx. 5.3%. For December, expenses for Lab Supplies & Testing and Contractual Services were of significant note, due to quarterly billing receipts for lab services and the billing of the sewer line video inspection in the month. For year-to-date, vehicle repairs, contractual services and professional services are trending over budget. Depreciation expense will exceed budget based on revised info (this has been previously disclosed). Overall all other expenses trending below budget.
## Henderson Water Utility
### Capital Expenditures Report
For the Six Months Ended December 31, 2017

<table>
<thead>
<tr>
<th>Construction In Progress:</th>
<th>Action Report</th>
<th>Prior Years</th>
<th>FY 2018</th>
<th>Future</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Project No.</td>
<td>Appropriations</td>
<td>Appropriations</td>
<td>Appropriations</td>
<td>Budget</td>
</tr>
<tr>
<td>Previous Fiscal Year Initiated Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misc Stormwater Projects</td>
<td>1802-0015</td>
<td>17-10</td>
<td>$50,000</td>
<td>$24,000</td>
<td>$74,000 (3)</td>
</tr>
<tr>
<td>US 60 Reimbursable</td>
<td>1802-0019</td>
<td>16-08</td>
<td>1,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NWWTW Fence &amp; Gate</td>
<td>1802-0035</td>
<td>N/A</td>
<td>16,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SWTW Rehab</td>
<td>1802-0031</td>
<td>15-09</td>
<td>860,239</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Countryview Subdivision - HWU portion</td>
<td>200,000</td>
<td>-</td>
<td>-</td>
<td>200,000</td>
<td>24,793</td>
</tr>
<tr>
<td>Countryview Stormwater - City Contrib</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>200,000</td>
<td>45,585</td>
</tr>
<tr>
<td>Current Fiscal Year Capital Projects</td>
<td>200,000</td>
<td>14-53</td>
<td>200,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Previous Fiscal Year Initiated Projects</td>
<td>213,500</td>
<td>17-24</td>
<td>-</td>
<td>65,125</td>
<td>-</td>
</tr>
<tr>
<td>Hackberry-South Main Water Line</td>
<td>1802-0043</td>
<td>17-29</td>
<td>-</td>
<td>235,000</td>
<td>-</td>
</tr>
<tr>
<td>Gaslight-Stormwater</td>
<td>1802-0080</td>
<td>GM Rpt</td>
<td>-</td>
<td>51,000</td>
<td>-</td>
</tr>
<tr>
<td>Old Corydon Rd Sewer Extension</td>
<td>1802-0081</td>
<td>17-39</td>
<td>-</td>
<td>10,000</td>
<td>-</td>
</tr>
<tr>
<td>Door Access Security Upgrades</td>
<td>1802-0082</td>
<td>17-40</td>
<td>-</td>
<td>15,000</td>
<td>-</td>
</tr>
<tr>
<td>Unallocated Capital Funds</td>
<td>Prior Fiscal Year Carryover</td>
<td>Current Fiscal Year 2018</td>
<td>47,194</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Construction In Progress</td>
<td>2,612,326</td>
<td>3,163,481</td>
<td>1,144,351</td>
<td>6,872,964</td>
<td>1,365,571</td>
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<tr>
<td>Buildings and Improvements:</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Previous Fiscal Year Initiated Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NWWTW Office/Lab Remodel</td>
<td>1804-0016</td>
<td>17-13</td>
<td>39,100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NWWTW Demolition of Old Headworks</td>
<td>1804-0017</td>
<td>17-16</td>
<td>11,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Current Fiscal Year Capital Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Total Buildings and Improvements</td>
<td>50,100</td>
<td>-</td>
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<td>50,100</td>
<td>16,920</td>
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<tr>
<td>Equipment and Vehicles:</td>
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<td></td>
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<tr>
<td>Equipment:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THM-RR Lab Equipment</td>
<td>1700-0061</td>
<td>17-22</td>
<td>-</td>
<td>56,000</td>
<td>-</td>
</tr>
<tr>
<td>Vehicles:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Equipment and Vehicles</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>56,000</td>
<td>-</td>
</tr>
<tr>
<td>Total Capital Expenditures</td>
<td>$2,662,426</td>
<td>$3,219,481</td>
<td>$1,144,351</td>
<td>$6,979,064</td>
<td>$1,882,491</td>
</tr>
</tbody>
</table>

### Notes:
1. Project being fully reimbursed by KY Dept of Transportation, no budgeted appropriation.
2. Project being funded 50% by City of Henderson, no budgeted appropriation. Project total $400,000
3. Gaslight project - reclassified budget from approved Misc Stormwater projects, was separated for accounting and tracking purposes
4. Work ordered in April, funds appropriated in prior year allocations.
## ASSETS AND DEFERRED OUTFLOWS

**Current assets:**
- Cash: $5,933,472
- Unrestricted Investments: $55,741
- Restricted Investments: $0
- Accounts receivable: $1,401,559
- Inventories: $937,974
- Other current assets: $92,936
- **Total current assets:** $8,421,682

**Noncurrent assets:**
- Construction in progress: $3,374,777
- Utility plant and equipment, net of accumulated depreciation: $78,726,799
- Other assets: $21,664
- **Total noncurrent assets:** $82,123,240

**Deferred outflows of resources:**
- $2,052,846

**Total assets and deferred outflows:**
- $92,597,768

## LIABILITIES AND DEFERRED INFLOWS

**Current liabilities:**
- Accounts payable: $195,097
- Retainage payable: $144,543
- Deposits payable: $95,358
- Accrued liabilities: $1,934,662
- Current portion of long-term debt: $0
- **Total current liabilities:** $2,369,660

**Noncurrent liabilities:**
- Accrued pension liability: $8,132,373
- Long-term debt: $35,032,480
- **Total noncurrent liabilities:** $43,164,853

**Deferred inflows of resources:**
- $0

**Total liabilities and deferred inflows:**
- $45,534,513

## NET POSITION

**Net investment in capital assets:** $47,090,760
- Restricted for debt service: $0
- Unrestricted: $(27,505)

**Total net position:**
- $47,063,255
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPERATING REVENUES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water sales and fees</td>
<td>December Actual: $589,295</td>
<td>December Budget: $575,129</td>
</tr>
<tr>
<td>Wastewater services and fees</td>
<td>811,920</td>
<td>822,446</td>
</tr>
<tr>
<td>Stormwater impact fee</td>
<td>63,792</td>
<td>61,840</td>
</tr>
<tr>
<td>Total operating revenues</td>
<td>1,465,007</td>
<td>1,459,415</td>
</tr>
<tr>
<td><strong>OPERATING EXPENSES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries, wages, and benefits</td>
<td>546,112</td>
<td>588,244</td>
</tr>
<tr>
<td>Contractual services</td>
<td>236,869</td>
<td>157,642</td>
</tr>
<tr>
<td>Supplies and materials</td>
<td>174,152</td>
<td>170,663</td>
</tr>
<tr>
<td>Utilities expense</td>
<td>156,479</td>
<td>159,958</td>
</tr>
<tr>
<td>Repairs and maintenance</td>
<td>50,190</td>
<td>67,707</td>
</tr>
<tr>
<td>Other services and expenses</td>
<td>96,453</td>
<td>117,460</td>
</tr>
<tr>
<td>Depreciation</td>
<td>304,598</td>
<td>293,750</td>
</tr>
<tr>
<td>Total operating expenses</td>
<td>1,564,853</td>
<td>1,555,424</td>
</tr>
<tr>
<td>Operating income (loss)</td>
<td>(99,846)</td>
<td>(96,009)</td>
</tr>
<tr>
<td><strong>NONOPERATING REVENUES (EXPENSES)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment income</td>
<td>7,061</td>
<td>2,083</td>
</tr>
<tr>
<td>Other income</td>
<td>(1,710)</td>
<td>625</td>
</tr>
<tr>
<td>Interest expense</td>
<td>(73,500)</td>
<td>(73,565)</td>
</tr>
<tr>
<td>Total nonoperating revenues (expenses)</td>
<td>(68,149)</td>
<td>(70,857)</td>
</tr>
<tr>
<td>Income (loss) before capital contributions and distributions</td>
<td>(167,995)</td>
<td>(166,865)</td>
</tr>
<tr>
<td>Capital contributions</td>
<td>-</td>
<td>20,833</td>
</tr>
<tr>
<td>Distribution to City of Henderson</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Change in net position</td>
<td>$ (167,995)</td>
<td>$ (146,032)</td>
</tr>
<tr>
<td>Net position, beginning of period</td>
<td>47,231,250</td>
<td>46,601,150</td>
</tr>
<tr>
<td>Net position, end of period</td>
<td>$ 47,063,255</td>
<td>$ 46,455,118</td>
</tr>
<tr>
<td></td>
<td>December</td>
<td>Year to Date</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td><strong>CASH FLOWS FROM OPERATING ACTIVITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receipts from customers</td>
<td>$1,500,045</td>
<td>$10,522,089</td>
</tr>
<tr>
<td>Payments for goods and services</td>
<td>(760,663)</td>
<td>(3,668,905)</td>
</tr>
<tr>
<td>Payments for employees</td>
<td>(547,462)</td>
<td>(3,490,445)</td>
</tr>
<tr>
<td>Net cash provided (used) by operating activities</td>
<td>191,920</td>
<td>3,362,739</td>
</tr>
<tr>
<td><strong>CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distribution to City of Henderson</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net cash provided (used) by noncapital financing activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisition and construction of capital assets</td>
<td>(178,616)</td>
<td>(1,567,206)</td>
</tr>
<tr>
<td>Principal payments on long-term debt</td>
<td>-</td>
<td>(2,253,613)</td>
</tr>
<tr>
<td>Interest payments on long-term debt</td>
<td>-</td>
<td>(458,899)</td>
</tr>
<tr>
<td>Bond proceeds, net of closing costs</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Capital contributions</td>
<td>-</td>
<td>2,633</td>
</tr>
<tr>
<td>Net cash provided (used) by capital and related financing activities</td>
<td>(178,616)</td>
<td>(4,277,085)</td>
</tr>
<tr>
<td><strong>CASH FLOWS FROM INVESTING ACTIVITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment and other income received</td>
<td>5,351</td>
<td>60,653</td>
</tr>
<tr>
<td>Investments proceeds</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Investments purchases</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net cash provided (used) by investing activities</td>
<td>5,351</td>
<td>60,653</td>
</tr>
<tr>
<td>Net increase (decrease) in cash</td>
<td>18,655</td>
<td>(853,693)</td>
</tr>
<tr>
<td>Cash, beginning of period</td>
<td>$5,914,817</td>
<td>$6,787,165</td>
</tr>
<tr>
<td>Cash, end of period</td>
<td>$5,933,472</td>
<td>$5,933,472</td>
</tr>
</tbody>
</table>
PLANT OPERATIONS REPORT
General Operations:

A. Treatment Plants – Overview:

1. Regulatory:

   All quiet on the regulatory front.

2. Operational & Financial:

   **Annual Reports:** The annual reports on the quality, and quantity, of Biosolids leaving the wastewater plants are nearly complete and ready for submission.

3. System Water Quality:

   **Water Quality Calls:** There were no water quality complaint calls taken for this past month.

   **Water Quality Testing:** Lab services for regulatory compliance testing has been awarded to Testamerica Labs. This is a large lab, but it’s closest (and only, I think) water testing lab is in Savannah, GA. Previously, the lab that we contracted pulled all of the samples that were scheduled each month. With the change in lab services, HWU staff is pulling all of the required samples and sending them to the Testamerica lab. Results received from Testamerica will also be submitted to the Division of Water by HWU staff.

   **Legionella Testing:** We are now ready to test for Legionella and will begin to incorporate this into our sampling regimen.

4. Personnel:

   **Staffing Levels:**

   a. Water Quality: Full operational staff.

   b. Distribution System Operator: Ian Snow has been training with Water Quality Specialists and the Plant Operations staff. He is progressing very well.

   c. North Water: Full operational staff.

   d. North Wastewater: Full operational staff.

   e. South Water: Full operational staff.

   f. South Wastewater: Full operational staff.

   g. Environmental Compliance & Pretreatment: Full operational staff.

   h. Plant & Pump Station Maintenance: One Maintenance Tech II remains out due to a work-related injury.
i. Treatment Intern: This position was not filled this year due to lack of applications. We would like to explore broadening this position into partnering with HCHS as a mentoring and career-prep opportunity.

5. Projects:

    Plant Beautification Efforts: This effort is continuing throughout the plants on an ongoing basis.

B. North WTP:

1. Treatment Quality:

    Water Quality Goals: All regulatory and Partnership for Safe Water treatment goals were met.

    Distribution: Water quality has mainly consisted of thawing fire hydrants and collecting bacteriological samples from multiple line breaks and repairs.

2. Operations & Projects:

    Treatment Challenges: Cold weather has been our biggest challenge. Currently, there are two main heaters out of service and awaiting parts. Our Raw Water Supply line also has two leaks that are scheduled to be repaired once the weather permits.

    Plant Optimization: Operations staff continues to work on powdered activated carbon testing.

    Maintenance: Crews have been busy winterizing the outdoor and/or susceptible lines and equipment.

3. Average Water Treated and Water Pumped Data Trend:

![Average Water Treated and Water Pumped Data Trend](image)

Note: These values are current readings, but the actual billed readings are approximately 45 days behind.

C. North WWTP:

1. Treatment Quality:

    Effluent Quality: All regulatory treatment goals were met. Effluent quality continues to be very good.

    Biosolids Quality & Hauling: Hauling efficiency has declined with the extreme cold weather. But a decline had actually been noticeable prior to the bad weather setting in due to Hazex committing
to other jobs. Our storage building is full, the wooden retention wall has been damaged due to exceeding storage capacity, and one of the dry-beds is being used for the extra overflow. Hazex did place eight loads of sludge on their property to assist with the overflow volume.

Reports: All reports have been submitted.

2. Operations & Projects:

Budget: Expenditures for solids processing and fuel were under budget for the month; however, chemical expenditures were over budget due to continued need for bleach in treating filamentous.

Personnel: We are down a press operator. The current member has shifted to help cover maintenance needs while one of the other maintenance tech’s is out on a work-related injury.

Road Problems: A leak in a reuse water line, resulting in freeze/thaw in poorly compacted ground, has caused a collapse in the new concrete road between the UV and Construction buildings.

D. South WTP:

1. Treatment Quality:

Water Quality Goals: All monthly regulatory goals were met.

2. Operations & Projects:

Personnel: Nothing to report.

Filter Backwash: Consulting Engineers, JRWCO, have been on site obtaining detailed information for submitting a plan for this project and will potentially extend the hours each filter can remain in operation, reduce the amount of water used for cleaning them, and reduce the loss of water in storage, thus increasing the amount of water available to be sold.

Treatment Challenges: Low temperatures are taking their toll. There is a lot of ice build-up on the Low Service pumps and also a lot of ice forming on the ground around the pumps. This is the same area where the operators collect samples multiple times a day. No accidents so far, but it is a dangerous environment, especially at night. Winters are not usually this extreme, but because of the risk associated with the ice build-up on the pumps coupled with operator safety, we need to consider winterization procedures that include a heated shelter over these pumps.

Building Improvements: The chemical and filter buildings are both in need of having new insulation installed. There is also a need to have the metal skin on portions of the buildings replaced. Once the weather breaks, pricing will be obtained to include in the next budget.

Maintenance: Several of the permanent hanging heaters have failed and will need repair or replacement.
3. **Average Water Treated and Water Pumped Data Trend:**

Note: These values are current readings, but the actual billed readings are approximately 45 days behind.

4. **South WWTP:**

1. **Treatment Quality:**

   **Effluent Quality:** All treatment goals were met. Weekly calls with Tyson are still ongoing and productive.

   **Biosolids Quality:** Our press operations are typically suspended when temperatures are below freezing. However, with the extreme cold temperatures, the water supply line to the press burst. It has been repaired, but the entire office building and meeting room was flooded, again. Repairs are underway.

2. **Operations & Projects:**

   **Personnel:** Through the challenges of lines bursting, the Chief Operator being out of the office due to illness, and a basin liner failure, the new operators have received training that would have been impossible through any other reasonable means. They have performed very well through it and shown themselves to be level-headed and able to make good decisions at critical times.

   **Aeration Basin Repairs:** Updates have been provided regarding the liner failure in Basin #5 that is affecting Basin #4.

   **Sludge Press Belt:** A belt replacement is scheduled for this week on the older press.

5. **Plant & Pump Station Maintenance:**

1. **CSO Basin:** Waiting on the arrival of new pumps.

2. **Pump Station Control Panels:** With the help of the Automation Department, an effort is underway to begin replacing our pump station control panels. Some of these panels are in poor shape and contain a lot of extraneous wiring, switches, etc. from past years and different control panel builders. The new panels are going to be very simple inside. This will not only improve the aesthetic quality at some of the stations but will also help in troubleshooting when there are problems.
3. **North Pump Stations**: We are in the process of evaluating each station so that levels can be adjusted to allow the station to operate more efficiently. This is an ongoing process. Two stations have been adjusted to date. *(No Change)*

4. **NWWTP**: The #2 RAS pump is malfunctioning again before it can run a whole cycle. Straeffer Pump is investigating the problem.

5. **NWWTP**: Work is ongoing on removing the railings around the old primaries and any metal around the old headworks.

6. **South Plants**: Most of the lights have been repaired that were in critical need. Others will be repaired in the Spring.

7. **NWWTP LPS (Local Pump Station)**: The best type of pump for this application is being reviewed. A spare pump will also be purchased due to the need of having two pumps always running.

**G. Pretreatment Program & FOG Services:**

1. **Industrial Pretreatment Activity**: All inspections are completed, and our annual report is being readied for submission.

2. **Quarterly Compliance Sampling**: Fourth Quarter compliance sampling and billing has been sent to each industry.

**H. Distribution Operator Update:**

College Tank is scheduled to be disinfected and placed back into service this week.

Grantwood Hills subdivision water quality improvements are being studied. This will continue more when the weather breaks.
FIELD OPERATIONS REPORT
Field Operations Report  
01-22-2018

General Operations:

A. Overview:

1. Operational:

Cold weather has presented challenges for crews thawing meters and frozen service lines. While there have been line breaks, crews have managed to keep up. With the thaw-out coming this weekend, it may present a new list of repairs. We will keep our fingers crossed.

2. Financial:

   a. Inventory: Inventory is below budget for the month. I anticipate it being back to normal for January, due to the weather.

   b. Vehicle Repair: Vehicle Repair was within budget for the month, but the year-to-date is 20% over, mainly due to the vac truck repairs.

   c. Other Equipment: Repairs are within budget.

   d. Other Structures: Repairs are well under budget.

3. Personnel:

   a. USW I: Josh King accepted the last open position and started December 18.

   b. USW III: Orrin Givens has been promoted into the last open USW III position.

B. Automation Department:

Staff is working with Wauford on preliminary engineering work on Automation of the SWWTP, utilizing the grant funds.
C. SOC General / HWU General:

1. **Frozen water pipes – Out in the street**

   The bitterly cold weather we had during the first part of January caused disruptions throughout the city. HWU crews responded in typical fashion, Johnny-on-the-spot, day and night, and made repairs in a timely manner. TV-14 News interviewed our crews and covered the story on 01-09-2018. An HWU Facebook post at https://www.facebook.com/Henderson-Water-Utility-693325900678713/ generated a lot of attention and many positive comments about how our crews are fast, friendly, and efficient.

   Jeremy Duncan, Safety Coordinator, discusses water main breaks during the cold weather

   *The Gleaner*, Henderson’s local newspaper, also published a story that chronicled HWU’s efforts to keep on top of water and sewer problems brought on by the sub-freezing weather. The article’s headline reads ‘BATTLING THE BREAKS – As temperatures fall again, crews still trying to fix broken water lines’. A copy of the *Gleaner* article from 01-11-2018 is attached at the end of this Field Operations Report.

2. **Frozen water pipes – On the customers’ side of their service lines**

   HWU posted a story on social media (Facebook and Twitter) that listed tips for thawing out frozen pipes inside the customer’s home, and tips for keeping pipes from freezing in the first place. That post also generated a story that was published in *The Gleaner*. A copy of the 01-04-2018 *Gleaner* article entitled ‘Here’s how to prevent, or thaw, frozen pipes’ is also attached at the end of this Field Operations Report.
D. Customer Service: Customer Service Calls and Work Orders (NORTH):

1. The tabulation below shows calls we responded to last month. This tabulation by no means represents all of the calls that came in. We provided the following services:

<table>
<thead>
<tr>
<th>Water Line and Service Maintenance</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Main Repairs</td>
<td>9</td>
</tr>
<tr>
<td>Water Service Line Repairs</td>
<td>0</td>
</tr>
<tr>
<td>Water Meter Inspection</td>
<td>26</td>
</tr>
<tr>
<td>Water Meter Changes</td>
<td>18</td>
</tr>
<tr>
<td>Water Meter Repair</td>
<td>3</td>
</tr>
<tr>
<td>Water Meter Disconnected</td>
<td>3</td>
</tr>
<tr>
<td>Water Meter Reposition</td>
<td>0</td>
</tr>
<tr>
<td>Water Meter Box Cleaned</td>
<td>7</td>
</tr>
<tr>
<td>Water Meter Locate</td>
<td>0</td>
</tr>
<tr>
<td>Water Meter Leak Detection</td>
<td>9</td>
</tr>
<tr>
<td>Water Meter Consumption Check</td>
<td>3</td>
</tr>
<tr>
<td>Fire Hydrant Repairs</td>
<td>1</td>
</tr>
<tr>
<td>Low Water Pressure Calls</td>
<td>0</td>
</tr>
<tr>
<td>Water Leak Calls</td>
<td>25</td>
</tr>
<tr>
<td>Water Quality Calls</td>
<td>0</td>
</tr>
<tr>
<td>No Water Calls</td>
<td>6</td>
</tr>
<tr>
<td>Turn Water Off/On Calls</td>
<td>16</td>
</tr>
<tr>
<td>Install Temporary Hydrants</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stormwater Maintenance</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storm line Repairs</td>
<td>2</td>
</tr>
<tr>
<td>Storm Intake Repairs</td>
<td>2</td>
</tr>
<tr>
<td>Stormwater Flooding Calls</td>
<td>3</td>
</tr>
<tr>
<td>Clean/Unblock Intakes</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pump Station Maintenance</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump Station Repairs</td>
<td>9</td>
</tr>
<tr>
<td>Pump Station Inspections</td>
<td>1</td>
</tr>
<tr>
<td>Pump Station Cleaning</td>
<td>4</td>
</tr>
<tr>
<td>Pump Station Maintenance</td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sewer Line and Service Maintenance</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer Main Repairs</td>
<td>1</td>
</tr>
<tr>
<td>Sewer Service Line Repairs</td>
<td>1</td>
</tr>
<tr>
<td>Sewer Manhole Repairs</td>
<td>0</td>
</tr>
<tr>
<td>Sewer Main Cleaning</td>
<td>15</td>
</tr>
<tr>
<td>Sewer Main Grease Removal</td>
<td>0</td>
</tr>
<tr>
<td>Sewer Overflow Calls</td>
<td>1</td>
</tr>
<tr>
<td>Sewer Backup Calls</td>
<td>15</td>
</tr>
<tr>
<td>Sewer Blocked Calls</td>
<td>0</td>
</tr>
<tr>
<td>Sewer Odor Calls</td>
<td>1</td>
</tr>
<tr>
<td>Sewer Service Line Locates</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New Services</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Taps</td>
<td>1</td>
</tr>
<tr>
<td>Sewer Taps</td>
<td>0</td>
</tr>
<tr>
<td>Sewer Tap Locates</td>
<td>2</td>
</tr>
<tr>
<td>Water Meter Installation</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Miscellaneous Services</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sink Hole Calls</td>
<td>4</td>
</tr>
<tr>
<td>Inspect Misc. Items</td>
<td>8</td>
</tr>
<tr>
<td>Smoke Test Lines</td>
<td>1</td>
</tr>
<tr>
<td>Camera Inspect Lines</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regulatory Issues</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downspout Removal Letters Mailed</td>
<td>0</td>
</tr>
<tr>
<td>Downspout Letters Mailed To Date</td>
<td>226</td>
</tr>
<tr>
<td>Downspout Removal Requests:</td>
<td></td>
</tr>
<tr>
<td>Total Complied and Re-inspected</td>
<td>220</td>
</tr>
</tbody>
</table>

**HWU Service Call Summary**

- 1 - Water Line and Service Maintenance (Total Calls in 18 Sub-Categories)
- 2 - Stormwater Maintenance (Total Calls in 4 Sub-Categories)
- 3 - Pump Station Maintenance (Total Calls in 4 Sub-Categories)
- 4 - Sewer Line and Service Maintenance (Total Calls in 10 Sub-Categories)
- 5 - New Services (Total Calls in 4 Sub-Categories)
- 6 - Miscellaneous Services (Total Calls in 4 Sub-Categories)
- 7 - Regulatory Issues (Downspout Letters Mailed)
2. Rolling 2-Year History of Monthly HWU Service Calls.
E. Collection System:

The video work on the Canoe Creek Interceptor lines is 95% complete. This showed us valuable information going forward. The lines looked to be in very good condition. They have vacuumed out sediment between 5th and 2nd Streets.

The Old Corydon Road sanitary sewer project has been completed.

The work to provide a replacement sewer service to Audubon Metals is scheduled for the end of January, pending weather conditions.

F. Distribution System:

Leaks, leaks, and more leaks! The crews have spent countless hours repairing leaks due to the extreme temperatures. The Hackberry water line replacement project has received approval from KDOW. Work was scheduled to begin after the holidays; however, weather conditions have delayed this work. We met with Henderson Community College staff and their consulting engineer regarding the water distribution system on campus.

G. Stormwater Projects:

1. Countryview Subdivision: Bowling Construction has completed the project. The next phase to be bid out has been sent to Kathy Ambrose to add the front end documents to the package. Hopefully it can be advertised early next week.

2. Catalina Drive: Staff is putting together the bid package for this project.
H. Stormwater Phase II:

1. **MS4 KYG2000 General Permit: (No Change)**

   Kentucky MS4 communities are currently grandfathered under the 04-01-2010 version of the MS4 KYG2000 General Permit. That permit expired almost three years ago, on 03-31-2015.

   A new General Permit has been approved by KDOW, the Kentucky Division of Water, but has not yet been released. KDOW hoped to have the permit released before Thanksgiving, 2017, but formal issuance of the permit is still pending.

   The new permit meets Option 1 of the EPA's Remand Rule, meaning that the terms of the general permit are specific enough that each individual MS4 will not need to develop more specific goals or go through a public comment period. That is very good news for everyone, including KDOW and the local MS4 communities.

2. **KSA Quarterly Meeting to be held in Henderson**

   KSA, The Kentucky Stormwater Association, will hold its next quarterly meeting in Henderson on Thursday, February 8, 2018.

   We will meet at the Municipal Service Center at 1449 Corporate Court.

   The meeting is expected to attract around 80 attendees from MS4 communities all across Kentucky.

   Topics of discussion at the all-day meeting will include a session on Henderson’s Public Education and Awareness programs, and a tour of the Municipal Service Center. Other topics will include a discussion on the MS4 KYG2000 General Permit.

   KSA holds three (3) “quarterly” meetings and one large “annual conference” each year.

I. **Information Technology Department:**

   Door Security (UPDATE): The security system was installed the week of 8 January 2018. Key fob programing is underway and should be completed in a couple of days. This phase of the project should be wrapped by the board meeting. In the next phase, we are going to replace all our old-fashioned locks and get new master keys.

   VMWare Cluster: We upgraded the VMWare cluster to version 6.5 from version 5.x. No unplanned downtime was experienced during the upgrade. Improvements include enhanced administrative tools, proactive outage prevention, and enhanced security, just to name a few.
2017 SPAM Stats: Following is a chart showing incoming email threats for hkywater.org for the past 12 months. In summary, only about 14% of the email destined for hkywater.org was clean. The rest was SPAM, malware, ransomware, etc. and blocked or quarantined.

**J. GIS Department:**

No report this month.
HENDERSON – As the Tri-State area prepares to enter the deep freeze once again this weekend, with snow and ice also possible starting Thursday and lasting into Friday, local plumbers and water utility crews are still trying to catch up to the water-line damages done last week.

According to a social media post earlier this week from the Henderson Water Utility, “There have been a large number of water leaks the last three weeks due to the extremely cold weather. Since December 15th, HWU has responded to 17 confirmed water leaks, with 4 of those occurring over the last weekend (Friday, January 5th to Monday, January 8th, 2018). Over this period, crews were called out after hours on 32 occasions, and we recorded 118 man-hours of overtime.”
(Related note: The Gleaner tried to contact several local plumbers on Wednesday, to no avail. We’ll take that as a sign that they are keeping extremely busy.)

Meanwhile, the weather forecast is calling for chances of freezing rain and snow Thursday and Friday, with low temperatures dropping below 10 degrees every night starting Saturday night and lasting well into next week.

HWU reminded customers and area residents that “leaks are fixed on a priority basis, taking into account safety of the water supply and service to individuals. That is, a leak that is draining into a creek and not causing a service outage to a home may not be repaired for some time, while priority is given to leaks that impact water service to a home or business. Priority is also given to leaks that might impact public safety or a larger number of customers.

“Over the next few days, HWU crews will be attempting to catch up on the backlog of leak reports. Please bear with us as we work through this difficult period.”

If you see a water leak, on your property or in the street, residents are asked to call 270-826-2824 to report it. This number is answered 24 hours a day, seven days a week.
HENDERSON - Water pipes and temperatures near zero don’t mix well, and that is becoming more apparent by the hour in Henderson.

The Henderson Water Utility reports that residential pipes are bursting across the city.

And it’s not coming to an end anytime soon. The arctic temps are expected to last through this week. Actually, the next chance of above-freezing temperatures here will come at the beginning of next week — on Sunday.

To combat and prevent frozen water pipes, HWU has the following tips:

Frozen pipes
Thawing a frozen water pipe quickly is important. However, it is just as important to thaw the frozen pipe correctly.

Here are seven tips to follow to help you get the water flowing and to help you avoid a burst pipe and potentially damaging flood at your property.

Tip 1: Locate the frozen pipe
In order to thaw a frozen pipe, you must first determine which pipe or pipes are frozen. Turn on the faucets in your property. If no water comes out, or only a slight trickle escapes, then a pipe leading to the faucet is likely frozen. If one pipe is frozen, there is a chance others have frozen also.

If the pipes are exposed, such as pipes under sinks, in basements or along the exterior of the house, you may be able to see the frozen portion of the pipe. Frozen pipes often have frost on them or may have a slight bulge. If the blockage is located in
part of the pipe that you have access to, you will have more options for easily thawing the pipe than if the frozen portion is enclosed behind a wall.

**Tip 2: Open the faucet**

Before you begin attempting to thaw a frozen pipe, you will want to open the faucet that the pipe feeds water into. Make sure to open both the hot and cold handles. This will help to relieve pressure in the system and will allow the water to escape once you begin to thaw the pipe.

**Tip 3: Where to Begin the Thawing Process**

You should always begin the thawing process near the faucet then work your way down to the blockage. This will help ensure that the melting ice and steam is able to escape through the open faucet. If you start the thawing process closer to the blockage, the melting ice could get stuck behind the blockage, creating more pressure in the pipe and increasing the chances the pipe will burst.

**Tip 4: Thawing exposed pipes**

If the frozen pipe is located in an area you can easily access, you have several options for attempting to thaw the pipe. You should continue to apply the heat until the water escaping from the faucet returns to full strength. Here are four options for thawing an exposed pipe.

- **Hair Dryer:** One of the easiest ways to thaw a pipe is by using a hair dryer. Simply turn the dryer on and point the heat at the pipe, beginning with the portion closest to the faucet. As with any electrical product, take the proper precautions and avoid coming into contact with water when operating the device.

- **Heat Lamp or Portable Space Heater:** Another method to thaw the pipe is to use a heat lamp or portable space heater. Position the device so that the heat is able to reach the frozen pipe. This indirect heat can help to quickly thaw a pipe. Again, make sure to comply with the safety measures and precautions on the device you are using and keep the device away from water.

- **Hot Towels:** Another way to thaw a frozen pipe is to wrap towels that have been dipped in hot water around the pipe. This can help to slowly thaw the blockage.

- **Electrical Heating Tape:** A final option is to apply electrical heating tape directly to the pipe. This tape distributes heat throughout the pipe. You can purchase electrical heating tape that you plug in and unplug as needed or you can purchase heating tape that shuts off on its own.

**Tip 5: Thawing Enclosed Pipes**

If the frozen pipe is located in an area that you cannot easily access, you have three options for thawing the pipe.
- Turn the Heat Up in the Property: You can attempt to thaw the frozen pipe by increasing the temperature in the property. Turning the thermostat up may be all that is needed to allow the ice blockage to melt.

- Infrared Lamp: If you know where in the wall the frozen pipe is located, you can attempt to thaw the blockage by placing an infrared lamp in front of the portion of the wall where the pipe is located. The heat from the lamp may be able to penetrate the wall and allow the pipe to defrost.

- Cut out a Section of the Wall: If you are comfortable doing so, you can cut out the section of the drywall in front of the frozen pipe so that you can easily access the pipe. You can then use one of the methods for thawing out an enclosed pipe listed above.

Tip 6: Things to Avoid
Never attempt to thaw a pipe using an open flame, such as a propane torch. This can not only damage the pipe, it can also start a fire in your property.

Tip 7: If the Pipe Bursts
If a frozen water pipe does burst, the first thing you should do is shut off the main water line into your home. This will prevent additional water from flowing and damaging your property. You should know where the shut-off valves are for each of your properties and for each unit. There are usually smaller shutoff valves located near sinks and toilets, but the main shut-off valve is often located near the water meter.

Consider calling a professional.
If you are unable to thaw the pipe, unable to locate the frozen pipe, do not feel comfortable thawing a pipe yourself or if a pipe bursts, you should call a plumber or other professional. They will be able to remedy the problem for you.

Risks of Thawing a Frozen Pipe
There are two main risks you should be aware of when attempting to thaw a frozen water pipe.

- Fire: When using any heat source to thaw the frozen pipe, you can run the risk of starting a fire. Make sure to follow all safety instructions and never leave the product unattended.
- Burst Pipe: If you do not begin the thawing process correctly, you could cause the pipe to burst. Always start thawing closest to the faucet.

Preventing frozen pipes
Here are six tips to help keep your pipes from freezing in the first place.

Tip 1: Keep the Heat On
If you or your tenants are leaving for a period of time, make sure that the heat is kept on your property. It may be difficult to convince your tenants to leave their heat on when they are away, especially if they are responsible for paying their own utilities.
You should inform them that the heat can help prevent pipes from freezing, and if pipes freeze and burst, it can cause a lot of water damage to the property and to their possessions.

The heat does not have to be kept as high as you normally would keep it if you were actually in the property, but keeping it set above 50 degrees Fahrenheit is a good idea. This should provide enough heat to keep the pipes warm and to prevent any water inside from freezing.

Tip 2: Allow Faucet to Drip
If you are afraid a pipe will freeze, you can allow the faucet to drip slightly. Allowing the faucet to be open like this will relieve pressure in the system. If a pipe freezes, it is actually the pressure that is created between the blockage and the faucet that will cause the pipe to burst. Allowing the faucet to be open will prevent this pressure from building up and thus, keep the pipe from bursting.

Tip 3: Keep Interior Doors Open
Pipes are often located in cabinets. When the temperatures drop, it is a good idea to keep these cabinet doors open so that the heat from the rest of the house can keep the pipes warm as well. You should also keep all interior doors open so that the heat can flow throughout the home.

Tip 4: Seal Up Cracks and Holes
You should caulk any holes or cracks that exist near pipes. This should be done on both interior and exterior walls. Doing so can help keep the cold air out and the warm air in.

Tip 5: Apply Heating Tape
For pipes that are easily accessible, the electrical heating tape may be an option to keep them from freezing. This tape can be applied directly to the pipe. There are two types of heating tape. One type of heating tape turns on and off by itself when it senses heat is needed. The other type of heating tape needs to be plugged in when heat is needed and unplugged when not in use. Much like a space heater, these products can be dangerous, so you must follow the product’s direction and safety procedures exactly.

Tip 6: Add Extra Insulation
Pipes that are located in areas that do not have proper insulation, such as basements or attics, may need extra insulation to keep from freezing. Pipes in basements or attics are not the only ones that may not be properly insulated from the cold. If you have had a problem with pipes freezing anywhere in your home, extra insulation could be the cure. Pipes can be fitted with foam rubber or fiberglass sleeves to help decrease the chances of freezing. This can be an easy solution for pipes that are exposed but can get expensive if walls, floors or ceilings have to be opened in order to properly insulate the pipe. Additional insulation can also be added to walls and ceilings to keep the pipes warm.
ENGINEERING REPORT
1. South Wastewater Treatment Plant – Repair and Rehab of Extended Aeration Basins:

M. Bowling, Inc., started work at the plant on August 9th. The contract required one basin to be rehabbed and in service by the end of November, but this was not achieved. The sides of this first basin were in surprisingly good condition, but we still excavated and recompacted the fill, which took some additional time. The bottom also looked good, but here again to be on the safe side, we removed some material and replaced it. We also installed a drainage system, which will be monitored in a manhole near the southwest corner of all the basins. Any drainage into this system from the basins will be an indication of liner problems. We hope that one basin will be in service by the end of February, depending on weather. There is an ongoing issue at this point with a leak under the liner of the next basin (#5), which surfaced in the first week of January. The old drain line is allowing this leaking material to get into Basin 4, the first one we are working on. Bowling and Wauford are working on a plan to control that leakage, but it has required us to take Basin 5 out of service. That means we are running on 2 basins, which is difficult.

Due to timing issues, the grant we received from Delta Regional Authority ($285k) will not be used on the current project, but we have identified other needs at the plant that were not addressed in the rush to get the basin project underway. This will likely include reworking the existing belt presses, which we can do in the range of $50k (versus $250k for a new press), and some work related to automation (flow meters, other monitoring equipment) which will make the plant easier to operate. We will be working with GRADD and DRA to modify the grant and move forward with design and construction.
2. **Old Corydon Road Sewer Extension: (Completed project)**
   We were approached by two property owners in the 400 block of Old Corydon Road, about a sewer extension to their property, which they needed because of failing septic systems. We designed and have now constructed a short extension. Three property owners signed consents to annexation, and the annexation process has begun.

3. **North Wastewater Treatment Plant:**
   *Clarifier Repairs:* This project includes replacement of the metal rotating mechanisms on these two units, which we split out from the larger headworks project. Mark Bowling (MBI) is the contractor. Most work other than installation of the equipment has been completed. The first unit of the large equipment on this project arrived on site on 26 December, and installation went rather quickly and without major problems, after waiting 6 months for fabrication, which was a completely unjustified delay.

   The equipment supplier was not cooperative in sharing information about timing, and we won’t be allowing that company’s equipment on any future projects for a while. We expect the second unit of equipment to be delivered shortly. We will need to make a decision on assessing liquidated damages. In this case, the fault is not with Mark Bowling, but with the equipment supplier, subcontracted through Bowling. Not sure it would be fair to penalize MBI for the problem not of their making.

4. **Atkinson Park Sewershed Study - Myrene Drive Sewer Pump Station:**
   Phased in five sections, design of these projects is progressing. We have several easements appraised, and have four signed on the Myrene FM portion of the work, and one on the Atkinson Park FM, from the Hospital, just north of 14th Street.

   The construction of a revamped Myrene Drive pump station is being studied further, to see if there are better alternatives for location and/or arrangement of this station in a cramped location without much room to maneuver. This may require temporary easements from surrounding property owners, and we have met with all those and are adjusting our plans based on their concerns.
We have received the KDOW construction permit for the Spruce Drive portion of the project (which eliminates one pump station). This will not be bid until 2018 at the earliest. Have all easements for this segment signed and recorded.

Easement documents on the North Elm Street portion of the Myrene force main segment were appraised as both right of way and an easement, in anticipation of the City possibly wanting to team with us on property impacts in that section from Villa Drive to Springwood Drive. After the values on the two methods were compared, we agreed with the City that it makes no economic sense to purchase right of way. Letters have gone out to property owners on this section, meetings are being held, and some offers have been accepted.

5. **Countryview Subdivision Stormwater Project:**
   Some tree clearing adjacent to the subdivision has been performed, along with ditch construction on the outfall for the first phase. A contractor who bid on that first phase of excavation pulled out due to the work being outside their capacity to perform, so we awarded this to the second low bidder, and that first portion of the work is now complete. HWU Staff working on plans & bids, and hoping to start construction on a further part of this project, early in 2018. Have also received a Stream Construction Permit as required by KDOW (project area is in the flood plain) and the local Flood Plain permit that parallels the State permit, and have received our permit from the Corps of Engineers for the outfalls to Canoe Creek.

6. **College Tank Painting: (Completed project)**
   Painting work is complete, but some items of repair are still pending (fence, ladders, vent, etc.).

7. **Hackberry Neighborhood Water Main Replacement – Drury Ln to Yeaman Avenue:**
   This water line will replace an old cast iron main that provides inadequate pressure in this area of South Main Street. We approved the action report for this project at the August meeting, and since that time we’ve obtained 12 easements, and getting materials together to begin the project. Hope to start work as soon as staffing and workload allows. Some tree clearing in the easements has been
performed, and some large trees were removed in exchange for the value we offered for the easements.

8. **South Water Treatment Plant – Rehab Projects: (no change since last report)**

Several projects were included in a 2014 preliminary engineering report for the SWTP.

*Update on Clearwell Project:* Construction of the new 800,000-gallon prestressed tank is awaiting availability of funds, and we will likely not bid this until late in 2018, if then. It’s possible this project segment will receive some outside funding.

*Raw Water:* Plans for the Raw Water & Effluent Lines Relocations have received KDOW review and approval. New agreement with Big Rivers has cleared the way to bid this project, probably next fiscal year, when capital funds are available.

*We will drop these two pending projects from future reports, until we resurrect them when funding becomes available, or plant issues make them necessary.*

9. **Emergency Generators: (no change since last report)**

Kickoff of this project occurred on 2 June 2017. Siting of generators has been reviewed by Plant Operators and comments have been resubmitted to the Engineering Firm. Cost estimates for each location have being developed, and we are considering prioritization of the sub-projects.

10. **South Elm Street (Jefferson to Washington) Water Line: (no change since last report)**

Preparing to work on the two blocks that run from Clay to Washington, where we will be able to connect to a 20” line laid during the Downtown project. We have retired a problematic old 4” line in Green Street that dead ended at Norris Lane, which required work in the middle of Green Street to switch services over to another line. This was an appropriate time to perform that work, as KYTC plans to repave Green Street through town in 2018, so patching we do will be overlaid then.

11. **South Main Street Water Transmission Main – Hancock to Yeaman:**

Strand Associates has prepared preliminary plans for this project, and we held a review meeting on 17 October. This project is estimated at $1.5 million, and will be required to be constructed if a large water user locates in the South/College pressure zone (Riverport, KY 425 area). At this point, funds are not available for this project, but our model shows it to be a priority, even without new industrial use in the South/College pressure zone. While excavating to recover a coupon from an existing main in this area on 21 December, we ruptured a gas main. The good news is, the coupon showed that the existing main is in decent condition, and will not need to be replaced on this project.

12. **Riverdale Court: (no change since last report)**

Investigation in this area off South Main Street revealed a previously unknown storm sewer pipe that ties into the Downtown Interceptor near the River. Taking that line off the Interceptor and running a separated storm line to the River will allow about 2 acres of area to be taken off the combined system, at relatively low cost. Requires one easement.

13. **Frontier Tank: (project revisited)**

We’ve noticed a problem with a portion of the paint on the Frontier Tank. Near the top “knuckle” of the tank, there is an area where roller marks are visible, and the paint is discolored. We have a consultant and a representative of the contractor looking at this and determine if it is an application or product problem. They obtained samples on 8 September, and lab results were inconclusive. Any repairs/repainting should be covered by the contractor’s warranty.
14. Community College Water Line: (New Project)
   As we’ve discussed over the last few months, we are working up a project to loop existing water mains on the Henderson Community College campus, retiring some very old water lines, and improving water quality in four buildings. Plans are in progress, and must be forwarded to KDOW for review and a construction permit. Planning on a 1 April start date, tentatively.

15. South Water Treatment Plant – Backwash Pump System: (New Project)
   Review of operations in the South WTP show that the filters undergo backwash for extended periods, which reduces the production capacity of the plant. In a nutshell, the filters were designed to use clean water from the other filters to perform the backwash function. Since all the filters are at the same elevation, there is not sufficient “head” for the filters to efficiently clean themselves using this system. Another instance where the need to design a cheap plant, quickly, leads to inefficiencies in operation. To speed up the backwash process, we are looking at a pumped backwash system that will provide more head differential, speeding the process and allowing the filters to be returned to service much faster. J.R. Wauford has been retained to perform the preliminary engineering, and we hope to have a cost estimate and rough plans very soon.

   As this project will extend the life and increase the efficiency of the South water plant, it will be a priority moving into the new fiscal year.
HUMAN RESOURCE REPORT
HWU Human Resources Summary: January 22, 2018

Staffing Levels:

1. Maintenance Technician II [3 positions]: three people promoted January 1st
2. Utility System Worker III [1 position]: one person promoted January 15th
3. SOC – Seasonal Worker [5 positions]: no request for action
4. Treatment Plants – Seasonal Worker [2 positions]: no request for action
5. Seasonal Engineering Intern [1 position]: staffing agency employee worked December 15th – January 5th
6. Seasonal Treatment Intern [1 position]: no request for action

Safety Report (as of 12/31/2017):

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Incident Rates

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- 2012 NAICS is the classification for Utilities: Water, Sewage, and other systems
- DART = Days Away, Restricted, or Transferred
- DAFW = Days Away From Work
- How incident rates are calculated: [(# Cases x 200,000) / Employee Hours Worked]
- Change data compared to data at the end of the previous month.

- One lost time/restricted cases in December. Note there is one case waiting decision from workers’ compensation insurance carrier as to whether the incident is work related.

- The December comprehensive fixed facility safety audits were conducted at the South Water and South Wastewater Treatment plants. No significant issues noted at either location. Both locations were last audited in September 2017.

Other:

Upcoming City-wide Events:

- CPR/First Aid/AED training sessions are being scheduled with tentative January dates.
- Preventing Discrimination & Sexual Harassment online training is being scheduled for all employees beginning in January.
- HIPAA online training is also being scheduled in January for management identified employees that have access to other employees’ personal information.
SAFETY REPORT
A. Safety Committee:

There was a safety committee meeting held by phone in December. No issues were reported.

B. Training

Training performed in December:

1. Safety meetings are continuing for the crews at the SOC.

2. New employee training was held for 5 new crew workers covering Confined Space, Excavations, LO/TO, PPE, and Fork Lift.

C. Safety Inspections:

1. WTP South:
   - See facility audit below.

2. WWTP South:
   - See facility audit below.

3. WTP North:
   - There were no significant safety issues found during periodic site visits. These visits unlike the complete audits below may not cover every area of the facility on the day visited. Site visit dates in December were on the 4th, 7th, 15th, 19th, and 21st.

4. WWTP North:
   - There were no significant safety issues found during periodic site visits. These visits unlike the complete audits below may not cover every area of the facility on the day visited. Site visit dates in December were on the 4th, 7th, 15th, 19th, and 21st.
5. Administration Building
   - There were no safety issues found during periodic site visits.

6. Systems Operation Center (SOC):
   - There were no safety issues found during periodic site visits.

7. Water Distribution/ Collection System:
   - There were no major safety issues with employees observed during safety site visits and proper PPE and signage was being used.

D. Comprehensive Safety Audits:

1. WTP South:
   There were no significant issues noted.

2. WWTP South:
   There were no significant issues noted.

E. Recordable Injuries:

1. There were no recordable injuries in December. A Maintenance Tech stated that he turned his ankle while cleaning out the maintenance shop, but it didn’t initially bother him. He stated that the next day it was swollen and hurting and sought medical attention and has been off work since 12/5/17.
GENERAL MANAGER’S REPORT
General Manager Report  
22 January 2018

**Regulatory Issues**

**LTCP/CJ Termination, new KPDES Permit** and a **Local Plan Approval** agreed order are still outstanding. No discernable progress on that, or the issue of **Local Plan Review**, this month. With the Legislature in session until April, I don’t expect to see much coming out of Frankfort.

**Sewer Cleaning and Inspection**

This project to video all the sewers installed on the **Canoe Creek Phase I and III projects**, stretching from Second Street to Balmoral Acres, Braxton Park and Wathen Lane is probably 95% complete, with one section of line still to go. There were no major problems on any of the line segments, totaling more than 40,000 feet of sewers, ranging in size from 8” to 30”.

I reviewed most the videos during the weeks before and after Christmas when nothing was going on... yes, I lead an incredibly exciting life as your GM.

**Henderson Community College**

Work on and around the **Community College** property has led us into more communication with College leadership and staff, and we’ve identified some problems on their campus with old water lines, low pressure and possible water-age issues in some of their older buildings. In both our interests, this has led us to consider a small project to loop the existing water mains on campus, retire some very old, original mains, and hopefully provide better quality, flow and fire protection in the bargain. We’re working on plans for this effort, and will be bringing an action report to you at a future meeting. HCC is working on obtaining funding for this work, and we hope to be able to meet an April 1st start date.

**Spruce Drive Sewer Project**

One of the project segments in the **Atkinson-Myrene wastewater study** area is a plan to eliminate the **Spruce Drive** sewer pump station, which is located off Marywood Drive, downhill from the TV station. As part of that project, we had to obtain three easements, and for one of those, which is on a piece of property owned by a local developer, the easement was traded for 6 future water/sewer taps (6 total of either, not each). This will facilitate the developer’s plan to construct multi-family units on this lot at some point in the future. Wanted to report formally, even though the value was within Eric/my authorization to make based on the appraisal. This is just a bit out of the ordinary, so it needed to show up in a Board minute, so there’s a formal record of sorts.

**South WWTP Grant Project**

As stated in the Engineering Report, the grant we received from **Delta Regional Authority** ($ 285k) cannot be used on the **Basins** project, but we have identified other needs at the plant that were not addressed in the rush to get the basin project underway. This will include reworking the existing belt presses, which we can do in the range of $50k (versus $ 250k for a new press), and some work related to automation (flow meters, other monitoring equipment) which will make the plant easier to operate. We will be working with GRADD and DRA to modify the grant and move forward with design and construction.
It's difficult with this somewhat nebulous project description to know exactly what we're going to be able to do, and how much the engineering is going to cost, so we’re engaging J.R. Wauford to do this on an hourly-rate basis. We’ll do some preliminary surveying and engineering work, and then see what we can afford to build within the parameters of the grant. This will be money well spent, and is not just a way to use up the grant; there are several items of work that we can do under this project that will enhance operation of the plant, and extend the life of some of the more expensive unit processes. Replacing the older belt press, rather than rehabbing it, would require building modifications and extensive reworking of conveyors and other systems. Extending its life is a good investment.

A second project, this one at the South Water Plant, also bears some explanation. We currently backwash the water filters by using the clean water directly off the other filters, which is a slow process and means the filter being washed is out of service for an extended time. A backwash pumping system would reduce this time and allow for more water produced to be sold, rather than wasted in a prolonged backwash. Again, we can’t be sure on the amount of engineering costs, because of the nature of the project, and we have Wauford doing this at their hourly rates.

For both these projects, funds for the engineering will come out of our existing work with Wauford for the two plants, we’ll be tracking the costs, and coming back to you later with action reports that authorize bidding and actual construction, within our annual Capital appropriation.

**Pre-Treatment Consulting**

We’ve had a consulting relationship with Hall Environmental for several years (since at least 2013) and we recommend that it be renewed, at an annual cost not to exceed $40,000, which is more than previous but includes more work in the new year. All this was budgeted, and was last approved in a Board Action report in October 2014 (BAR 2014-46). A copy of the new task order associated with this work is attached; with your approval of this report, we will proceed with this work.

Our SOP has been to re-advertise most services on about a three-year schedule, so we may be doing an RFP for this item near the end of this calendar year.

A big part of what’s coming up in this area in 2018 is a required review of our Local Limits, which is the part of our regulatory program that most impacts local industry. We expect the limits for some constituents to be ratcheted down significantly (becoming stricter), which may be tough for a few industries to achieve. We set these limits ourselves, subject to review by KDOW, and there are complicated guidelines to follow, under Federal regulations. You'll be hearing much more about this, later in the year.

**Hydrant Bid**

We prepare annual bids for inventory items on varying cycles, depending on the items needed and how much we utilize them. For Fire Hydrants, we don’t use a lot of those in an average year (6 to 10, normally), and since the dollar amount is normally below $20,000 annually, it doesn’t require your approval. This year, we are renewing that bid with a partial 3% increase for the current vendor, Core and Main (formerly HD Supply); again, just wanted to include some mention in a report, for documentation.
Task Order No. 2018-01
Henderson Water Utility (OWNER) and Hall Environmental Consultants, LLC (Hall)

Pursuant to Master Agreement for Professional Services, dated 31 July 2013.

Project Information:

Project Name: Industrial Pre-Treatment Program Compliance

Services Description: Provide consulting services related to OWNER’s KPDES permit, in relation to the Industrial Pre-Treatment Program.

Scope of Services:

HALL will provide the following services to OWNER:

Annual Pretreatment Program Implementation

1. Attendance at all DOW Pretreatment Audits
2. Data entry, tracking and review
3. All correspondence with KDOW and EPA (through your office)
4. Local Limits Evaluation (both plants)/Sewer Use Ordinance Review
5. Lab Certification Support
6. Quarterly SNC Calculations as needed
7. Industrial Monitoring support
8. Review of enforcement actions including phone calls, letters, Notices of Violations, Administrative orders, etc.
9. Data Management/File Maintenance
10. Provide data/information for any KPDES permit issues

Proposed Cost – Not to exceed $25,000

Quarterly HWU Compliance Monitoring

1. Conduct all scheduled HWU compliance monitoring at Industrial Users
2. Tracking and review of lab analytical data and reports

Proposed Cost – Not to exceed $15,000
Compensation:
OWNER shall compensate ENGINEER for Services under this Task Order on an hourly rate basis plus expenses, estimated fee not to exceed a total of $40,000.

Schedule:
Services will begin upon execution of this Task Order, which is anticipated by 1 February 2018. Services are scheduled for completion by 31 January 2019.

TASK ORDER AUTHORIZATION AND ACCEPTANCE:

**HALL ENVIRONMENTAL CONSULTANTS, LLC:**

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<thead>
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<th>Cynthia M. Leasor</th>
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**OWNER:**

**HENDERSON WATER UTILITY**

<table>
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<tr>
<th>Tom Williams, P.E.</th>
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BUSINESS

- Resolution No. 2018-01 – Future Reimbursement of Connections to the Bent Creek Estates Sewer Extension
Resolution No. 2018 - 01
Future Reimbursement of Connections to the Bent Creek Estates Sewer Extension

The following Resolution was duly adopted by the Board of Commissioners of the Henderson Water & Sewer Commission at a regular meeting held on Monday, 22 January 2018, at which meeting a quorum was present.

WHEREAS, the Henderson Water Utility operates and maintains wastewater treatment and collection facilities serving the City of Henderson and portions of Henderson County; and

WHEREAS, the Henderson Water Utility has approved plans for a wastewater system extension submitted by BLD Development, LLC to serve portions of Bent Creek Estates subdivision located on Airline Road, outside the limits of the City of Henderson; and,

WHEREAS, the Henderson Water & Sewer Commission has adopted a policy on “Financing of Extensions to the Water and Sewer Systems”, as required by KRS 96.539, which establishes rules to govern extensions of service to unserved customers and areas; and,

WHEREAS, said policy allows private developers to recoup costs of installation when water or wastewater utility connections to other properties are made in the future; and

WHEREAS, BLD Development has petitioned the Henderson Water & Sewer Commission to adopt a reimbursement arrangement under the policy referenced above.
NOW, THEREFORE, BE IT RESOLVED, that the Henderson Water and Sewer Commission by and through its Board of Commissioners and under the authority granted to the Board of Commissioners under Chapter 23 Article II Division 3 Sections 23-36 through 23-45.1 of the City Code of Ordinances, hereby approves the attached Reimbursement Agreement, and adopts the schedule of fees shown below, to be assessed to surrounding properties at such times as these properties make future connection to the portions of the Henderson Water Utility’s wastewater system constructed by BLD Development and accepted into the HWU system.

The properties effected by this Agreement, and the costs of the future payments to BLD Development, LLC, are detailed in this table:

<table>
<thead>
<tr>
<th>Current Property Owner</th>
<th>PVA Parcel Number</th>
<th>Area Served (acres)</th>
<th>Reimbursement Amount (Based on Actual Costs)</th>
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<td>$ 12,298.27</td>
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<td>9.01</td>
<td>18,254.92</td>
</tr>
<tr>
<td><strong>Totals:</strong></td>
<td><strong>36.93</strong></td>
<td></td>
<td><strong>$ 74,822.90</strong></td>
</tr>
</tbody>
</table>

The General Manager of the Henderson Water Utility is hereby authorized to transmit this Resolution and the attached Reimbursement Agreement to the City of Henderson for adoption of an enabling ordinance by the Board of Commissioners; to cause the abovementioned fee schedule to be suitably recorded and indexed in the office of the Henderson County Clerk; and to forward same to the current owners of the properties affected.
The reimbursement arrangement will become effective upon the date of signature of a reimbursement agreement by the Board of Commissioners of the Henderson Water & Sewer Commission and the City of Henderson Board of Commissioners, and shall continue for a period of twenty years therefrom, without option for renewal.

**IN WITNESS WHEREOF,** having come before the Board of Commissioners on Monday, 22 January 2018, and upon Motion made by Commissioner ____________, and seconded by Commissioner ____________, the Board of Commissioners voted as follows:

<table>
<thead>
<tr>
<th>Commissioner</th>
<th>AYE</th>
<th>NAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commissioner, Paul Bird</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commissioner, George Jones</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commissioner, John Henderson</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commissioner, Gary Jennings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commissioner, Julie Wischer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

___________________________
Tom Williams, P.E.
General Manager
Henderson Water Utility
This AGREEMENT, made this _____ day of ___________, 2018, between BLD Development, LLC, 536 Blue Heron Lane, Henderson, KY 42420, (hereinafter “Developer”), and the City of Henderson, Kentucky, a Kentucky Municipality, 222 First Street, Henderson, KY 42420, for the use and benefit of the Henderson Water Utility (HWU), 111 Fifth Street, Henderson, KY 42420, (hereinafter “City”), collectively “the Parties”.

WITNESSETH:

1. The City owns and operates water and wastewater systems within and adjacent to its limits by and through the Henderson Water and Sewer Commission, commonly known as Henderson Water Utility (HWU).

2. Kentucky Revised Statute 96.539 requires municipally-owned utilities to develop rules to govern extensions of service to unserved customers and areas. HWU has adopted a policy outlining Henderson’s methods for financing and facilitating the extension of water and sewer facilities when and wherever, in the opinion of HWU, such extensions are warranted.

3. Developer has constructed or will construct, under the Subdivision Regulations of the Henderson City-County Planning Commission, a sewer line extension to serve property owned and being developed by Developer in Bent Creek Estates Subdivision, as shown on the attached Exhibit A – “Map of Properties - Bent Creek Estates Sewer Extension”.

4. The extension shown on Exhibit A is located within the area served by the City and will be accepted by the City for maintenance and operation, in accordance with the requirements of said Subdivision Regulations, after inspection and approval by HWU.

5. The cost to construct the extension shown on Exhibit A is detailed on Exhibit B – “Actual Construction Costs for Sewer Extension at Bent Creek Estates”, attached. The total cost of sewer main construction covered by this Agreement is $74,822.90.

6. The Parties acknowledge that there are no costs due to oversizing of the extensions which would benefit the entire City wastewater system, for which the City would normally reimburse the developer. This agreement is for the value of a City standard 8” sewer main.

7. The Parties agree that the total area benefited by said extension and shown on Exhibit A amounts to 36.93 acres, of which 9.01 acres are directly attributable to the Developer. The remaining benefited property consisting of 27.92 acres (Future Service Area) shown thereon resulting in a fair pro rata share of the cost of construction of said extensions of 75.60 %, to be collected from the owner or owners of any parcel benefiting thereby who decides to tap or connect to said system in the future.

8. Any such future connection shall be reimbursed on a per acre basis for the total lot area of the properties so connected. Based on this pro-rata sharing of benefits, the reimbursement payable to Developer shall be $2,026.07 per acre. Acreages shall be based on those shown in the records of the Henderson County Property Valuation...
Administrator, shall be computed to two decimal places, and shall include the applicable area of any lot to which the line is extended. The properties to which this reimbursement apply are detailed on the attached Exhibit C – “Airline Road Wastewater Service – Reimbursement Schedule”. Any property subsequently subdivided or consolidated will be charged a reimbursement based on the actual area of said lot at the time connection to the wastewater system is made.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereafter set forth it is agreed by and between the parties hereto as follows:

1. All of the recitals set forth above are adopted by the Parties as material terms of this agreement.

2. Developer shall dedicate the extension serving his properties shown in Exhibit A free and clear of all encumbrances, subject to acceptance of said extensions for maintenance by the City, and Developer shall warrant and defend the City against any claim of interest therein asserted by any third person, that it will guarantee the workmanship and materials in said facility for a period of one year after date of acceptance by the City, and that it warrants said extension to be fit for the use for which it is intended.

3. The City and the Developer desire to and intend by this agreement to provide for collection of the fair pro rata share of the cost of construction of said extension from the owner(s) of the benefited properties shown on Exhibit A who did not contribute to the original cost thereof, under the provisions of Kentucky Revised Statute 96.539 and Henderson Water Utility Policy, provided that nothing contained herein shall be construed to affect or impair in any manner the right of the City to regulate the use of its system(s). The imposition by the City of any such requirements shall not be deemed an impairment of this contract though it may be imposed in such manner as to refuse service to any owner of the benefited property to secure compliance with such requirements of the City.

4. The City shall pay to the Developer the sums agreed by it to be collected pursuant to the provisions of the preceding paragraphs as shown on Exhibit C, within sixty (60) days after receipt by the City, at the address of the Developer as set forth hereinafter or at such other address as the Developer shall provide by Certified mail. If said payments are returned to the City unclaimed by the Developer or if the City is unable to locate the Developer, after six (6) months, the City shall retain all sums received and all future sums collected under this agreement.

5. In the event of the assignment or transfer of the rights of the Developer voluntarily, involuntarily, or by the operation of law, the City shall pay any benefits accruing hereunder, after notice, to the successor of the Developer as the City, in its sole judgment, deems entitled to such benefits; and in the event conflicting demands are made upon the City for benefits accruing under this agreement, then the City may at its option commence
an action in interpleader joining any party claiming rights under this contract, or other parties which the City believes to be necessary or proper and the City shall be discharged from further liability upon paying the person or persons whom any court having jurisdiction of such interpleader action shall determine, and in such action the City shall be entitled to recover its reasonable attorney’s fees and costs, which fees and costs shall constitute a lien upon all funds accrued or accruing pursuant to this agreement.

6. The City agrees not to allow any owner or user of any benefited property as described in Exhibit A - “Map of Properties - Bent Creek Estates Sewer Extension” to tap onto said extension without such owner or user having first paid to the City a sum equal to the fair pro rata charge hereinabove set forth.

7. This agreement shall become operative upon its being recorded in the office of the Henderson County Clerk, at the expense of the Developer, and shall remain in full force and effect for a period of twenty years after the date of such recording, or until the Developer, or its successors or assigns, shall have been fully reimbursed as aforesaid, whichever event occurs earlier, provided, that in the event the Future Service Area shown on Exhibit A or any portions thereof shall, during the term of this agreement, be rendered useless by redesign or reconstruction in the absolute judgment of HWU, the City’s obligation to collect for the Developer the charges provided pursuant to this agreement shall cease.

8. If there is any dispute about or involving this agreement or the services provided hereunder, both parties agree that the dispute shall be governed by the laws of the State of Kentucky, and each agrees to exclusive personal jurisdiction and venue in the State of Kentucky, County of Henderson.

9. Developer agrees to Indemnify and hold harmless the City from any claims, costs or expenses incurred by them in connection with any claim by any person or entity with respect to this agreement, or the reimbursement costs.

10. All negotiations and agreements previously made by the parties and their agents with respect to this transaction are merged into this Agreement which completely sets forth the obligations of the parties.

11. For purposes of this agreement, any time written notice is required, the noticing party shall send their notices to the following:

   City of Henderson                  Henderson Water Utility
   C/O City Manager                  C/O General Manager
   222 First Street                  111 5th Street
   Henderson, KY 42420              Henderson, KY 42420

   BLD Development, LLC
   536 Blue Heron Lane
   Henderson, KY 42420
IN WITNESS WHEREOF, the parties have hereunto set their hands and official seals the day and year first above written.

WATER AND SEWER COMMISSION
OF THE CITY OF HENDERSON, KENTUCKY

By: _____________________________  Attest: _____________________________
   R. Paul Bird, Jr., Board Chairman  George Jones, III, Secretary-Treasurer

Date Signed: ____________

CITY OF HENDERSON, KENTUCKY

By: _____________________________  Attest: _____________________________
   Steve Austin, Mayor  Maree Collins, City Clerk

Date Signed: ____________

BLD DEVELOPMENT, LLC

By: _____________________________  Attest: _____________________________
   ________________, Title ___________  ________________, Title ___________

Date Signed: ____________
DEVELOPER’S AREA 9.01 ACRES
MORE OR LESS

MAP OF PROPERTIES - BENT CREEK
ESTATES SEWER EXTENSION

EXHIBIT "A"
<table>
<thead>
<tr>
<th>Date</th>
<th>Payment To</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/20/2016</td>
<td>Branson Surveys, Inc.</td>
<td>$700.00</td>
</tr>
<tr>
<td>6/30/2016</td>
<td>Arnold Consulting Engineering Services, Inc.</td>
<td>1,601.00</td>
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<tr>
<td>7/28/2016</td>
<td>Arnold Consulting Engineering Services, Inc.</td>
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<tr>
<td>8/31/2016</td>
<td>Branson Surveys, Inc.</td>
<td>525.00</td>
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<tr>
<td>10/7/2016</td>
<td>Berry's Backhoe Service</td>
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<tr>
<td>10/31/2016</td>
<td>Branson Surveys, Inc.</td>
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</tr>
<tr>
<td>9/26/2017</td>
<td>Berry's Backhoe Service</td>
<td>30,000.00</td>
</tr>
<tr>
<td>10/1/2017</td>
<td>Rural King</td>
<td>171.61</td>
</tr>
<tr>
<td>10/2/2017</td>
<td>Southern States</td>
<td>186.52</td>
</tr>
<tr>
<td>12/20/2017</td>
<td>Berry's Backhoe Service</td>
<td>10,425.00</td>
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</table>

**Total Cost for Sewer Project**  
$74,822.90

Cost per acre (36.93 acres)  
$2,026.07
Exhibit C - Airline Road Wastewater Service – Reimbursement Schedule

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Note: Reimbursement Amount for BLD Development shown for information only and will not be assessed upon connection, but is shown for purposes of reconciling column totals in this table.
EXECUTIVE SESSION

- None Requested