

Capital Projects
&
Engineering
Report
December 2019

TABLE A TOWN PROJECTS

PROJECT NAME	DESCRIPTION	STATUS	NEXT STEPS
CONSTRUCTION AND CAPITAL PROJECTS		<p>NOTE THAT A QUARTERLY STATUS REPORT WILL BE PROVIDED TO TOWN COUNCIL SHOWING IN GENERAL THE CURRENT PHASE, AND CURRENT STATUS OF EACH OF THE PW CIP PROJECTS. THE NEXT QUARTERLY REPORT WILL BE IN JANUARY 2020 AND WILL COVER UP TO THE END OF DECEMBER</p>	
32nd and A Street Improvements UPC 107080 Acct 30492850 Design	Proposed roundabout. Revenue Sharing grant, 50-50 split VDOT and Town. This project is in the 2009 Townwide Transportation Plan	<p>November 12, 2014. TC passed resolution to request Revenue Sharing Funding. Passed 7-0-0.</p> <p>August 7, 2015. Agreement between the Town and VDOT was executed.</p> <p>November 2016. AMT Study completed.</p> <p>February 28, 2017. Staff Report to TC for Engineering Services. Concept of roundabout endorsed 7-0-0 and engineering services contract approved.</p> <p>April 6, 2017. Kick off meeting with AMT.</p> <p>June 1, 2017. Preliminary geometric plans received.</p> <p>July 7, 2017. 30% plans received. Town & VDOT reviews.</p> <p>November 17, 2017. 90% plans received, to Town & VDOT for review.</p> <p>February 20, 2018. VDOT comments received.</p> <p>April 18, 2018. Town staff met with Hirst Farm HOA to update HOA.</p> <p>May 1, 2018. 100% plans submitted to VDOT.</p> <p>June 6, 2018. Public Informational Meeting.</p> <p>June - October, 2018. Final comments received and plans revised. Plats & deeds of easement prepared and sent to property owners. Applied for VSMP & ESC permits. Revised lighting design to address concerns of Hirst Farm residents.</p> <p>November 5, 2018. Received signed deed of easement from Cangiano. To TC for approval November 13, 2018, passed 7-0.</p> <p>November 14, 2018. Staff met with Hirst Farm HOA.</p> <p>November 21, 2018 Received signed deed of easement from Hirst Farm HOA. To TC for approval December 11, 2019, passed 6-0-1.</p> <p>May, 2019. Received approval from Loudoun County for E&S and VSMP approval.</p>	Design complete
32nd and A Street Improvements UPC 107080 Acct 30492850 Bidding	Proposed roundabout. Revenue Sharing grant, 50-50 split VDOT and Town. This project is in the 2009 Townwide Transportation Plan	<p>December 14, 2018. Advertised for (construction) Bids.</p> <p>January 11, 2019. Opened bids.</p> <p>January 11 - 16, 2019. Reviewed bids, called references. Determined that M&F Concrete was lowest responsive & responsible bidder.</p> <p>January 22, 2019. Took recommendation to award construction contract to TC. TC tabled pending additional information.</p> <p>February 26, 2019. Provided additional information to TC. TC passed award of construction contract with M&F Concrete.</p>	Bidding complete

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32nd and A Street Improvements UPC 107080 Acct 30492850 Construction UPDATE	Proposed roundabout. Revenue Sharing grant, 50-50 split VDOT and Town. This project is in the 2009 Townwide Transportation Plan	April, 2019. All paperwork received from low bidder, M&F Concrete. Pre-Construction Meeting held May 9, 2019. June, July, August. Under construction. August 6, 2019. Substantial completion walk through to generate punchlist. August 28, 2019. As-builts received and currently under review. September, 2019. Substantial completion issued and construction is generally complete.	Complete outstanding items noted on substantial completion punchlist and closeout items.
A Street Trail from BRMS to S. Maple Avenue Design	New multi-use trail from BRMS to Maple Avenue, Loudoun County CIP funding to Town	November 12, 2014. TC passed resolution to request Revenue Sharing Funding. Passed 7-0-0. August 7, 2015. Agreement between the Town and VDOT was executed. November 2016. AMT Study completed. February 28, 2017. Staff Report to TC for Engineering Services. Concept of roundabout endorsed 7-0-0 and engineering services contract approved. April 6, 2017. Kick off meeting with AMT. June 1, 2017. Preliminary geometric plans received. July 7, 2017. 30% plans received. Town & VDOT reviews. November 17, 2017. 90% plans received, to Town & VDOT for review. February 20, 2018. VDOT comments received. April 18, 2018. Town staff met with Hirst Farm HOA to update HOA. May 1, 2018. 100% plans submitted to VDOT. June 6, 2018. Public Informational Meeting. June - October, 2018. Final comments received and plans revised. Plats & deeds of easement prepared and sent to property owners. Applied for VSMP & ESC permits. Revised lighting design to address concerns of Hirst Farm residents. November 5, 2018. Received signed deed of easement from Cangiano. To TC for approval November 13, 2018, passed 7-0. November 14, 2018. Staff met with Hirst Farm HOA. November 21, 2018 Received signed deed of easement from Hirst Farm HOA. To TC for approval December 11, 2019, passed 6-0-1.	Design complete
A Street Trail from BRMS to S. Maple Avenue Bidding	New multi-use trail from BRMS to Maple Avenue, Loudoun County CIP funding to Town	February 8, 2019. Advertisement for bid March 7, 2019. Bid opening. Apparent low bidder is Arthur Construction; bids reviewed and recommendation from Engineer received for Arthur Construction. Bids were lower than engineer's estimate and within the approved budget. April 9, 2019. Recommendation from staff to TC for award of construction contract to Arthur Construction. Passed by TC. April 26, 2019 All paperwork received from Arthur Construction and Town executed Contract sent to Arthur.	Bidding complete

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PROJECT NAME	DESCRIPTION	STATUS	NEXT STEPS
<p>A Street Trail from BRMS to S. Maple Avenue Construction UPDATE</p>	<p>New multi-use trail from BRMS to Maple Avenue, Loudoun County CIP funding to Town</p>	<p>May 14, 2019. Town Preconstruction meeting held. June 10, 2019. Notice to Proceed issued. June, July, August. Under construction. August 21, 2019. Path in front of school was opened to pedestrians for the first day of school. August 22 - 30, 2019. remaining work - grading, ADA ramps, stabilization - ongoing. September, 2019. Some items remain to be addressed before substantial completion walkthrough. November 7, 2019. Substantial completion issued. Some punch list items remain. December 2019. Construction complete.</p>	<p>Remove all erosion and sedimentation controls upon approval of Loudoun County inspector. (likely not until Spring 2020)</p>
<p>Hirst Farm Pond Retrofit Design</p>	<p>Retrofit Hirst Farm pond for water quality benefits. Stormwater Local Assistance Funding, 50-50 split with Town. Loudoun County has contributed \$150,000 to Town's funding commitment.</p>	<p>Engineering design proposal has been reviewed. PO issued for initial survey work. Survey work complete, wetlands delineation complete and report received by Town. Met with Loudoun County to discuss possible funding assistance. County will provide \$\$ assistance to Town. MOU required (in attorney hands). Purchase Order issued to continue design work. Geotechnical investigation complete, 30% plan design is underway. Concept plan and geotechnical report received 6/15/2017. Concept plan sent to County for review. Purchase Order issued for final design 8/9/2017. Met with Engineer 8/24/17. Final design is underway. Met with Loudoun County 10/16/2017. 100% plans received; town is working on submissions for permits. Plans sent to DEQ for their review/approval; comments received and Engineer to address. Hirst Farm HOA meeting on 4/18/18; town updated HOA on progress and obtained signatures for zoning permit and grading permit. Town staff working on front end documents for the IFB. Engineer preparing technical specifications and required SWPPP for the VSMP permit. Received wetlands permit. Town submitted IFB document to DEQ for approval, and the Grading Permit application and the VSMP permit application to Loudoun County. VSMP comments received 5/30/18. Met with County on 6/13/18 to discuss comments. Submitted a waiver request to the VSMP Administrator on 7/12/18. Directed Engineer to revise plans and re-submitted to County and DEQ. Received Loudoun County VSMP comments. Reviewed comments with AECOM (engineer). Staff spoke with Loudoun County to request waiver for certain requirements. No change. May 3, 2019. staff met with Loudoun County VSMP staff. May 16, 2019 meeting with LC. Some redesign needed. June 21, 2019. Purchase Order for final design sent to Engineer. July, August, 2019. Design on-going. August 19, 2019. Revised plans and waiver request submitted to Loudoun County.</p>	<p>See continued below</p>

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PROJECT NAME	DESCRIPTION	STATUS	NEXT STEPS
<p>Hirst Farm Pond Retrofit Design (continued) UPDATE</p>	<p>Retrofit Hirst Farm pond for water quality benefits. Stormwater Local Assistance Funding, 50-50 split with Town. Loudoun County has contributed \$150,000 to Town's funding commitment.</p>	<p>June 21, 2019. Purchase Order for final design sent to Engineer. July, August, 2019. Design on-going. August 19, 2019. Revised plans and waiver request submitted to Loudoun County. September 19, 2019. Loudoun County review received. October 2. Revised plan sheets submitted to Loudoun County November 13, 2019. Submitted final waiver request to Loudoun County. Sent HOA concurrence to Loudoun County. December 2019. Received comments from Loudoun County B&D. Meeting to discuss is scheduled for January 2020.</p>	<p>January 2020 meeting with Loudoun County.</p>

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PROJECT NAME	DESCRIPTION	STATUS	NEXT STEPS
<p>Hirst Road Safety Improvements UPC 101305 Design</p>	<p>Improvements along Hirst Road from Hatcher Avenue to Hillsboro Road (Route 690). Includes guardrail and shoulder improvements, upgrade pedestrian ramps, new signs and markings. Funding is revenue sharing, 50-50 split VDOT and Town.</p>	<p>Agreement with VDOT for RS project has been executed. Town has met with Kimley Horn Associates (KHA) to clarify scope for the project. Met with VDOT for project scoping. Received final proposal from KHA. TC approved moving forward with design; purchase order issued for design services. Guardrail assessment by KHA completed and received by Town. Reviewed and comments sent. Staff met with KHA April 26 for update. Concept plan is under design. Requisition sent to VDOT. 30% preliminary plans submitted to VDOT & Town. Town review sent to KHA 8/11/2017. VDOT comments received 9/22/17. Progress meetings with Engineer 8/24 & 10/5. 60% plans received 11/1/2017 and the Town posted the notice of willingness to hold a public hearing. Public comment period is 12/8/17 - 1/15/18. Town comments sent to KHA, VDOT comments received February 20. Progress meeting held 4/4/18. RW plan set (90%) received 4/30/18. Final plans comments received. Title Searches completed and draft deeds of easement prepared. Letters sent to the four property owners that require temporary construction easements. Met with two of the owners. Phone call with other two owners. Following up with property owners; will need to provide BAR for some as they have requested it. Town has received and recorded two signed easement documents; the easements were presented to the Town Council in November for final signature and then recorded. Two remaining properties have agreed to sign, but the Town has not yet received the signed Deeds. 100% plans received 12/20/19.</p> <p>January 2019. 400 Browning Court deed signed 1/16/19. January 22, 2019 400 Browning Court to TC for approval. March 15, 2019. Preowned Motor Cars LLC deed signed by bank received by Town. Final owner signature anticipated week of March 18, 2019. (donation)</p>	<p>Design complete</p>
<p>Hirst Road Safety Improvements UPC 101305 Bidding</p>	<p>Improvements along Hirst Road from Hatcher Avenue to Hillsboro Road (Route 690). Includes guardrail and shoulder improvements, upgrade pedestrian ramps, new signs and markings. Funding is revenue sharing, 50-50 split VDOT and Town.</p>	<p>May 3, 2019. Advertised for Bids May 29, 2019 Bids opened. Lowest responsive and responsible bidder -Arthur Construction. June 4, 2019 Awarded contract to Arthur Construction. July 17, 2019. Pre-constuction meeting. August 5, 2019, Notice to Proceed issued.</p>	<p>Bidding complete</p>

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PROJECT NAME	DESCRIPTION	STATUS	NEXT STEPS
Hirst Road Safety Improvements UPC 101305 Construction UPDATE	Improvements along Hirst Road from Hatcher Avenue to Hillsboro Road (Route 690). Includes guardrail and shoulder improvements, upgrade pedestrian ramps, new signs and markings. Funding is revenue sharing, 50-50 split VDOT and Town.	August, 2019. Construction began. September, 2019. Most of asphalt has been placed. November 18, 2019. Construction complete. Issued punchlist. December, 2019. contractor working on punchlist items.	Substantial completion date 12/3/2019. Final completion date 1/2/2020
Main Street and Maple Avenue Safety Improvements Phase II UPC 112558 Request for Proposals	Sidewalk, curb & gutter along east side of S. Maple, upgrade pedestrian curb ramps, mid-block crossing, analysis of left turn signal phase, enclose drainage system along east side of S. Maple to carry storm to Main Street	October 24, 2017. Town Council voted to designate a phase II for Main Street and Maple Avenue Intersection Improvements project. May 25, 2018. RFP advertised. June 5, 2018 preproposal meeting. June 22, 2018. Proposal due. October 22, 2018. Clark Nexsen was recommended by staff and TC moved to award (contingent on VDOT approval). VDOT completed their audit and approved the award with some contingencies to be addressed. December 21, 2018. Design Contract signed. January 22, 2019. Project design kickoff meeting.	RFP COMPLETE
Main Street and Maple Avenue Safety Improvements Phase II UPC 112558 Design	Sidewalk, curb & gutter along east side of S. Maple, upgrade pedestrian curb ramps, mid-block crossing, analysis of left turn signal phase, enclose drainage system along east side of S. Maple to carry storm to Main Street	March 15, 2019. 15% design plans received. April 23, 2019 Town comments sent to design engineer (Clark Nexsen) May 28, 2019 Walking Tour conducted. June 6, 2019 30% design plans received. August 23, 2019. Town comments sent to Engineer. August 28, 2019. VDOT comments sent to Engineer. September, 2019. Engineer's sub is working on environmental submissions October 24, 2019. 60% plans received. December 2019. Town comments and VDOT comments sent to design engineer.	Design on-going.

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PROJECT NAME	DESCRIPTION	STATUS	NEXT STEPS
<p>Nursery Avenue Sidewalk & Drainage Improvements UPC 105581 Design</p>	<p>sidewalk , curb and gutter, stormwater collection and conveyance from the "teardrop" (20th Street) to the stream approx. 370 feet south of J Street. Funding is Revenue Sharing, 50-50 split Town and VDOT.</p>	<p>ATCS approved by Town Council to move forward with 100% design plans. Received Contract and Certificate of Insurance (COI). Purchase order issued, kickoff meeting held. Traffic counts conducted week of 1/27-2/3/2017. VDOT comments on 30% plans received. Design waiver (for sidewalk buffer strip width) approved by VDOT. Planning for public meeting; Public informational meeting held 6/7/2017. Any comments were requested by July 7, 2017. Some comments were received and forwarded to engineer for review; discussion with Town Staff will occur July. Requisitions sent to VDOT and NVTA. Staff has been meeting with individual property owners to discuss impacts to their property, easements that the Town will be requesting--at least half are willing to donate. Plans have been revised after property owner discussions. 100% plans received 2/13/2018. Received the property appraisals and also a proposal from a ROW negotiation firm (sub to ATCS). Town instructed on-call PM/CM contractor to conduct a constructability review of the 100% plan set. Town comments, results of constructability review, and VDOT comments have been sent to Engineer. Changer order issued to ATCS contract to add ROW acquisition services, bid phase and construction phase support services. Received final plats and prepared draft deeds of easements. Title searches completed 5/17/18 and deeds finalized. Revised final plans received 6/1/18. Continue meeting with property owners and going over plans, plats, deed of easements, and appraisals as applicable. Applied for E&S and VSMP permits. Revisions to design underway to avoid impacts to certain properties. Revised design received 12/31/18. Under review by staff. December 31, 2018. Revised design received. January 28, 2019. Staff met with Tom Priscilla (200 S Nursery Ave) and Michael Weber (210 S Nursery Ave), along with VDOT representatives, to discuss the changes to the plans. Changes eliminated or minimized the need for easements. After discussion, additional changes to be made to the plans.</p>	
<p>Nursery Avenue Sidewalk & Drainage Improvements UPC 105581 Design (cont'd)</p>	<p>sidewalk , curb and gutter, stormwater collection and conveyance from the "teardrop" (20th Street) to the stream approx. 370 feet south of J Street. Funding is Revenue Sharing, 50-50 split Town and VDOT.</p>	<p>March 15, 2019 update. Awaiting final plan changes from Engineer. April 4, 2019 received revised plans from ATCS May 1, 2019 received revised plats from ATCS May 5, 2019 Town comments to ATCS May 6, 2019 received revised plats from ATCS May 20, 2019 met with T. Priscilla, Mike Weber re: easements June 4, 2019 received proposal from ERM for addit. ROW negotiations June 10, 2019 met with Hall Funeral Home re: easements July, August, 2019. Continued to correspond and to meet with property owners re: easements. re-appraisals are needed in some cases, plats revised as needed. Offer packages set. November update. All but 2 easements recorded. Will continue dialog wth property owners. December 2019. No change.</p>	<p>Continue dialog with remaining property owners. Prepare bid documents for bidding in January/February 2020.</p>

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PROJECT NAME	DESCRIPTION	STATUS	NEXT STEPS
Water Tank Renovation	repairs, stripping and painting; temporary relocation of cell carriers	<p>All of the cell carriers have been moved to a temporary tower by B&T Services. Structural analysis for tower with proposed cell carrier equipment is complete (performed by TEP, through USCI. Cost is directly to carriers through USCI). Structural modifications are needed with proposed new antennas. Cell service update: AT&T reoriented antennas and this seems to have improved service some; Verizon suggested Wi-Fi calling or C16 boosters but this requires internet service; Sprint is working directly with customer. Interior tank painting has begun. Anticipated completion date December 10 week (weather dependent). Exterior painting expected to begin in March 2019. Interior painting complete; cure time 10-14 days. Water Tower disinfected and back on line December 20.</p> <p>May 2019. Anticipate sand blasting and painting exterior of tank.</p> <p>May 7, 2019 Contractor visited site.</p> <p>May, 2019. Installed containment system. Painting to begin week of June 10, 2019.</p> <p>July, August, 2019. Exterior sandblasting and painting completed. Interior touchup as needed completed. Logos placed on tower for schools, Town.</p> <p>July, August, 2019. Analysis for railing and structure is underway, by MRA (consultant through the carriers).</p> <p>September, 2019. Water Tower filled, disinfected and in service.</p> <p>September, 2019. Town received structural analysis and proposed modification. Under review by Town's Engineer.</p> <p>October, November 2019. Requested bids for modification. Received one bid, but it included conditions that were not approved by design engineer. Currently requesting updated numbers from contractors.</p> <p>December 2019. Awaiting quotes from contractors for structural modifications.</p>	<p>Continue dialogue with carriers regarding structural modifications.</p> <p>Awaiting bid costs from contractors for modifications.</p>

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PROJECT NAME	DESCRIPTION	STATUS	NEXT STEPS
<p>Pathway from LVHS to Sutton Place Design</p>	<p>Repair to an existing trail from Sutton Court to LVHS. This trail has continuing maintenance issues causing it to be impassable due to erosion causing mud to be on the trail. Serves multiple neighborhoods and town residents. Currently a privately owned and maintained trail, but will be Town owned & maintained after the project is complete. Funded through Loudoun County CIP funding, 2017 application</p>	<p>Engineering design to be done under traffic/transportation TOC. September 30, 2018. Engineer and staff met with HOA representatives December 6, 2018. Walking tour with community. Requesting assistance from HOA for easements from property owners. January 2019. Staff is contacting property owners to discuss easements and cooperation for the work. February, 2019. All property owners agreed to cooperate with Town for easements. March 2019. 60% plans received. April 24, 2019 Town review sent to Clark Nexsen May 14, 2019. 100% plans received. week of May 27 met with engineer to discuss comments. May 30, 2019. Staff met with Purcellville Ridge HOA. June 5, 2019. Meeting with residents affected. June 12, 2019. Final revised drawings received. June 21, 2019. Pre-bid meeting held. July 9, 2019. Bids opened. Only one bid received, it was nearly double the budget and the engineer's estimate. Will consider some changes to the Plans and re-bid. September, 2019. Submitted request to Loudoun County for additional funding. October 2019. Contacted HOA to discuss change to plans. December 2019. No change.</p>	<p>Consider changes to the Plans, rebid for 2020 construction. Await Loudoun County decision for funding.</p>
<p>Pedestrian Linkage 32nd Street Design</p>	<p>sidewalk across the Swan property. Sidewalk from the Ball property to Main Street to be incorporated into 32nd & Main Street Intersection Improvements.</p>	<p>October 11, 2018 met with Engineer to get proposal for survey and design. November 16, 2018. Notice to proceed issued. January 2019. Survey and design ongoing. April 16, 2019 Design plans received from Painter Lewis July 25, 2019. Met with engineer, Swans, Hazel Contracting on-site to discuss options for trail alignment. September, 2019. Received revised plans from Engineer. Under review by Town.</p>	<p>Review plans, prepare plats & deed of easement for Swan property.</p>

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PROJECT NAME	DESCRIPTION	STATUS	NEXT STEPS
12th Street Roadway and Drainage Improvements Design	Drainage and street improvements including storm sewer & inlets, curb & gutter, sidewalk and roadway improvements. Funding is VDOT Revenue sharing and NVTA.	<p>August 13, 2018 Town/VDOT agreement executed.</p> <p>November 30, 2019 RFP advertised.</p> <p>Proposals due 1/11/2019. 11 proposals received. Currently under staff review.</p> <p>April 9, 2019 Award of Design to Clark Nexsen approved by TC</p> <p>May 8, 2019 Received approval from VDOT to move forward with Contract</p> <p>May 28, 2019 Kickoff meeting with ClarkNexsen, VDOT, Town staff.</p> <p>May - contract executed.</p> <p>July, August, 2019. Field survey.</p> <p>September 13, 2019. 30% plans received. Under review by Town Staff.</p> <p>October, 2019. Town review is underway.</p> <p>December 2019. Town comments on 30% plans sent to design engineer. Awaiting VDOT comments.</p>	Send VDOT comments to engineer.
Hatcher Avenue Sidewalk Improvements Design	Completes missing sidewalk segments on the east side of Hatcher Avenue from north of Catoctin Creek to the W&OD Trail.	<p>August 13, 2018 Town/VDOT agreement executed.</p> <p>January 10, 2019 Received final proposal from TOC engineer, Kimley Horn & Associates.</p> <p>January 24, 2019 Notice to Proceed with design issued.</p> <p>February 26, 2019. Kick off meeting.</p> <p>April 2019. Survey completed, KHA working on design.</p> <p>May 10, 2019. Concept plans received.</p> <p>June 10, 2019 meeting with KHA to discuss design</p> <p>August 21, 2019. Met with KHA to go over draft 60% plans and discuss certain items.</p> <p>September 10, 2019. 60% plans and cost estimate received by Town. Uploaded to VDOT 9/25/2019.</p> <p>December 2019. Town comments sent to design engineer.</p>	Design underway.

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PROJECT NAME	DESCRIPTION	STATUS	NEXT STEPS
<p>32nd & Main Street Intersection Improvements Design</p>	<p>Design and construction of intersection improvements, potentially a traffic signal</p>	<p>August 13, 2018 Town/VDOT agreement executed. November 11, 2018 RFP advertised. December 14, 2018. Proposals due. January 2019. Proposals under review February 1, 2019. Review team meeting to discuss proposals and top three firms. February 21 & 22, 2019. Interviews. March 12, 2019. Recommendation to TC to award design to KHA; approved. April 26, 2019 Purchase Order and Notice to Proceed issued. May 8, 2019 kickoff meeting with KHA and VDOT June 2019 Traffic counts completed. July, August 2019. Survey completed. Town sent plans for Blue Ridge Estates to engineer to coordinate proposed options with plans. September 13, 2019. Concept plans and signal justification analysis received by Town. Under Town review. October 2019. Concept plans reviewed by Town, comments to engineer. SJR submitted to VDOT. November 11, 2019. Revised concepts received. Will be presented to the Town Council on December 10. December 2019. Concepts were presented to the Town Council on December 10. After hearing citizen comments, Council asked staff to further develop Option 1, to include sidewalk. Also to hold a public information meeting before the final option is chosen.</p>	<p>Further develop Option 1 to include sidewalks. Hold public information meeting.</p>
<p>West End Pump Station Design</p>	<p>The abandonment of the West End Pump Station (WEPS), and the connection of the sewer to the new Pumps Station on Blue Ridge Estates is included in the FY2019 budget.</p>	<p>November 19, 2018. Design work to be completed under the TOC for Engineering services. CHA provided proposal. December 12, 2019. Purchase order received and Notice to Proceed sent to CHA. January 2019. Survey work was scheduled but unable to occur due to snow. March 2019. Survey work completed. March 29, 2019 Staff met with design engineer to discuss project alternatives. May 9, 2019 Received revised layout for sanitary sewer from design engineer CHA. June 2019 met with property owners re: right of entry for soil borings September, 2019. Sent multiple communications to property owner to request right of entry to perform soil borings. October 2019. Obtained final ROE to allow work on properties. November 2019. Soil borings completed. December 2019. Geotech report received. Design engineer is reviewing the information .</p>	<p>Based on soil borings, determine path forward and design.</p>

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PROJECT NAME	DESCRIPTION	STATUS	NEXT STEPS
RECURRING PROJECTS AND TASKS			
GIS updates - water layer	As needed, updates to GIS for water main, water meters, hydrants. Based on as-built drawings for new construction, but also staff obtained points for existing features.	<p>Staff is collecting water meter location points, engineering is adding to GIS layer. Downloaded features, points from GPS information collected by Town Staff. To date, Town has added 1158 meter locations. Updates to GIS are being prepared by Town consultant CHA to add Mayfair residential and commercial subdivisions, Catoctin Corner, N. Maple Avenue watermain, and Allder School watermain. Reviewing updates received from CHA.</p> <p>January 25, 2019 Town review comments sent to CHA.</p> <p>January 28, 2019. Town staff requested and approved task order proposal for updates to GIS to include water and sewer easements for new development.</p> <p>May 9, 2019 Town review of easement layer sent</p> <p>June 17, 2019 Town received updated easement layer</p> <p>December 2019. S 20th Street water main shown as an 8-inch is actually a 6-inch. GIS to be revised for water modeling.</p>	Updates as needed.
GIS updates - sanitary sewer layer	As needed, updates to GIS for sanitary sewer main, laterals, cleanouts. Based on as-built drawings for new construction, but also staff obtained points for existing features.	<p>Staff is collecting cleanout location points, engineering is adding to GIS layer. Investigated areas where the mapping is possibly incorrect (areas noted when creating flow direction mapping). To date, Town has added 605 cleanouts. Updates to GIS are being prepared by Town consultant CHA to add Mayfair residential and commercial subdivisions, Catoctin Corner. Reviewing updates received from CHA.</p> <p>January 25, 2019 Town review comments sent to CHA.</p> <p>January 28, 2019. Town staff requested and approved task order proposal for updates to GIS to include water and sewer easements for new development.</p> <p>April 15, 2019 Town comments to CHA</p> <p>May 9, 2019 Town review of easement layer sent</p> <p>June 17, 2019 Town received updated easement layer</p>	Updates as needed.

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PROJECT NAME	DESCRIPTION	STATUS	NEXT STEPS
GIS updates - storm sewer layer	As needed, updates to GIS for storm sewer main, inlets, culverts. Based on as-built drawings for new construction.	J Street drainage improvements needs to be added to GIS. Updates to GIS are being prepared by Town consultant CHA to add Mayfair residential and commercial subdivisions, Catocin Corner. Reviewing updates received from CHA. January 25, 2019 Town review comments sent to CHA. January 28, 2019. Town staff requested and approved task order proposal for updates to GIS to include water and sewer easements for new development. May 9, 2019 Town review of easement layer sent June 17, 2017 Town received updated storm sewer layer	Updates as needed.
GIS updates - signs layer	As needed, updates to GIS for sign layer.	Created new sign layer. Downloaded features, points from GPS information collected by Town Staff. To date, 269 sign points added. No change. February 2019. Staff worked with VDOT and Contractor that is doing roadway evaluation (FUGRO). They will also provide a sign layer - anticipated for April 2019. April 2019. received a complete sign layer through pavement management contract with VDOT/FUGRO. May 2019. Sign layer added to GIS	
GPS unit	As needed, updates to mapping or software.		Updates as needed.
Map creation as requested	Create maps for presentations, web postings, reports, permit applications, etc. as needed	Created Christmas parade route map. Finalized map to be used with commission permit request to Loudoun County. Provided utility mapping for 730 E Main Street.	Maps as needed
Title/easement research as requested	Research easements and title information.	Research I Street ROW and sanitary sewer/water easements.	
Unidirectional Flushing (UDF) Program	The unidirectional flushing program serves to flush the water main. This program is generally implemented every other year.	The flushing commenced in March/April 2016, but the full program was not completed. Town staff met with MBI to request minor revisions to UDF for this year, and to request other revisions for future years. Reviewed, updated and printed UDF mapping documents. Inspections staff is assisted with valve exercising in advance of UDF. UDF began April 2, 2017.	UDF is completed for 2017. Updates to maps are still needed for future UDF programs. Evaluate flushing in 2019; likely will not be scheduled due to water tower maintenance/painting. Staff is anticipating flushing in 2020. Will be working with engineer to update flushing loops as needed for newly added areas.

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PROJECT NAME	DESCRIPTION	STATUS	NEXT STEPS
Backflow and Cross Connection Control Program	State regulations require the Town to collect inspection reports on testable backflow prevention devices. This is done annually. In 2019, letters were mailed to those with testable devices, requiring the inspection reports. A courtesy letter was mailed to those with non-testable devices that were more than 5 years old.	May 1, 2019. First letter requesting backflow testing reports was sent to 143 locations. Of these, 103 letters were for testable devices, 40 were courtesy letters reminding owners that their non-testable devices may be 5 years or older and should be considered for replacement. May 16, 2019 2nd letter sent to 60-65 locations for testable devices June 5 40-45 letters to be sent June 2019. Courtesy calls and visits to customers with outstanding reports July, August, 2019. Missing reports received. 100% of responses received.	Complete until 2020.
Grease Trap Inspection Program	Grease in the sanitary sewer system can cause backups in the mains. Grease traps need to be maintained so that grease does not enter the Town system. The Town requests businesses to submit forms to show that the grease trap has been serviced periodically.	January 4, 2019. Letter requesting service records sent to businesses with grease/grit traps. 43 letters sent. February, March, 2019. Follow-up with businesses that have not responded to the letter.	January 2020. Send out letter to businesses requesting service records.
Monthly Manhole Inspection - select manholes	Several manholes in the Town's system are known to have issues with solids build-up. These manholes are inspected monthly, and if issues are noted, the maintenance dept. is notified to clean the manholes	5 manhole inspections completed monthly.	Monthly inspections.
Business Utility Forms	Review business utility forms for new or remodeled businesses	3 business utility forms approved	Review and approve as submitted
Right-of-way Permits	Review and issue permits for work in the ROW. Collect bonds, inspect work, release as applicable	3 right of way permits submitted. Provided utility GIS info for specific areas for SEGRA fiber permit.	
Fire Flow test requests	Process applications and assist applicants with completion of applications for fire flow test requests		Return results to applicant after fire flow tests completed by maintenance
Miscellaneous		Provided asset information (water, sewer, storm, roads) to Maintenance division	

TABLE A TOWN PROJECTS

PROJECT NAME	DESCRIPTION	STATUS	NEXT STEPS
OTHER TASKS			
Application for Revenue Sharing Funding for FY2021 & 2022	Pre-application is due to VDOT by July 1, 2019.	<p>April 3, 2019 letter from VDOT notes the following dates for the process: May 15, 2015 application cycle for Revenue Sharing Program opens. July 1, 2019 Pre-applications are due to VDOT - Town submitted applications for additional funding for Nursery Avenue Improvements and 32nd & Main Street Improvements on June 17, 2019. August 15, 2019. Pre-application was approved for both projects. September 10, 2019. Resolution to approve VDOT applications presented and passed by Town Council. September 30, 2019. Two applications were submitted as follows: 32nd & Main Street additional funding \$206,000 Nursery Avenue additional funding \$212,500</p>	Await VDOT decision.
Application for funding through Loudoun County CIP	Applied for three grants as follows: Pedestrian Walkway from Sutton Drive to Loudoun Valley High School Property, additional funding request of \$91,100; Pedestrian Linkage along G Street from East E Street to 560 East G Street, \$2,460,363; SR 690/ N 21st Street Multiuse Trail, Phase 1, additional funding of \$1,010,000	September 30, 2019. Applications hand-delivered to Loudoun County government Department of Management and Budget	Await Loudoun County budget decisions
Water Resource Study update 2019	A study to determine the future demands for water on the Town's system, our current capacity for water and a plan to meet future needs	<p>April 2019. Staff met with Jacobs Engineering to go over the progress and to refine the information needed to predict future demands. Jacobs Engineering was chosen to provide the Town with the Water Resources Update. A summary of the anticipated demands was presented at the May 28, 2019 Town Council work session. July 2019. updated water demand report submitted. Town staff met with engineer to go over comments. Also received project ranking spreadsheet tool. September 16, 2019. Met with Jacobs Engineering. Received revised demand projection memo, also discussed Capital Project analysis. Under review by Town staff. December 2019. final draft of portions of study received. Under review by Town Staff.</p>	provide review comments to Jacobs

TABLE B PRIVATE PROJECTS

PROJECT NAME	DESCRIPTION	STATUS	NEXT STEPS
TP13-02 Catoclin Corner Frontage Improvements	Water main extensions along Berlin Turnpike and East Main Street, Sewer main extension along East Main Street, traffic signal modifications (VDOT oversight)	Utilities are complete. LEO construction is currently trenching for street lighting being completed by Dominion Power. Lighting installation completed. Dominion returned to plumb two leaning lights. Contractor is installing turn lanes and signal in VDOT ROW along Rt. 287. Base Paving of turn lanes at chick-fil-a and PHC completed. Traffic signal is complete and operational. Building development continues.	Final inspections and bond release; schedule is dependent on developer. No Change.
TP15-08 Catoclin Corner Site Plan	Commercial development. Site work including water, sanitary sewer, storm sewer, other grading and site work.	On-site water main is complete and tested. Sanitary sewer is complete, tested and CCTV'd. Site is complete. Occupancies are being issued for phase I. Storm sewer videos have been reviewed and comments sent to contractor. January 2019 update. Building 5 construction almost complete. Added 1 service for this building several months ago. Signal light at 287 complete and open.	Building construction. No Change.
TP14-06 Mayfair Residential Subdivision	262 dwelling units consisting of a mix of single family detached and single family attached dwelling units.	Single family and townhomes under construction. Phase 1 beneficial use approved; phase 2 beneficial use requested. Beneficial use inspection of Phase 2 water and sanitary sewer completed. Beneficial use inspection for sanitary sewer and water of partial Phase 3 (Upper Heyford Place only), approved 7/11/17. Water and sanitary sewer in Phase 3 is complete. All water has been tested and passed. Sanitary sewer in phase 3 has been partially tested and partially televised Upper Heyford only). Utilities are complete in all phases. Street lighting installation is complete. Bond reduction request approved by PW. January, 2019 update. All single family homes are complete. Only 9 townhomes are not under any phase of construction currently. 1 section of 5 and 1 section of 4. All others are under some phase of construction or are complete. March 15, 2019 update. All permits for residential construction have been issued. April 2019. Builder requested 10 meter crock inspections and meters. May 2019. 6 occupancy inspections September, 2019. All occupancy permits have been issued. Developer is installing road surface asphalt.	Final inspections and bond release; schedule is dependent on developer. No Change.
TP14-13 Vineyard Square site plan	Demolition of buildings and new construction on N. 21st Street	Easements recorded, bonds approved and site plan has been signed.	Construction at initiative of developer. No change
TP17-07 Morgan Meadow Subdivision	Construction plans for a 5 lot subdivision on N. Hall Ave.	PW comments completed 1/4/2018	Awaiting resubmission. No change

TABLE B PRIVATE PROJECTS

PROJECT NAME	DESCRIPTION	STATUS	NEXT STEPS
<p>TP15-10 Lot 6F - 37231 Richardson Lane, mini warehouse</p>	<p>site plan for mini warehouse. Includes storm drainage for off site lots in Valley Industrial Park.</p>	<p>Reviewed 9/19/2016. Meeting with applicant scheduled for 11/10/16. Town Council determination regarding drainage design requirements; applicant to resubmit. Revised plans submitted 3/31/2017. Plans reviewed, comments sent to applicant. 3/7/18 town staff met with developers engineer; engineer introduced proposed concept for development. Staff gathered data and organized it into a spreadsheet/timeline of events for the Interim Town Attorney. Staff met to determine a way forward; communication will be through the Town Attorney. Comments from all agencies have been submitted and are in the hands of the applicant. Met with developer's engineer 12/26/18; went over comments. 2/22/2019 submission. Town PW comments sent 3/22/2019 May 23, 2019 revised plans submitted. September, 2019. Test pitting over water utility in rear of lot. Revised plan submitted. October/November 2019. Town review of plans, plat and deed. November 11, 2019. Held meeting for property owners; developer, his engineer and attorney attended, plus Town Staff.</p>	<p>Public Hearing anticipated for January 2020.</p>

TABLE B PRIVATE PROJECTS

PROJECT NAME	DESCRIPTION	STATUS	NEXT STEPS
TP17-03 Ball Property (Blue Ridge Estates)	Proposed single family development, located on S. 32nd Street	<p>Plans received, and reviewed for completeness 4/26/2017. Revised plans received 5/30/2017. PW review sent 7/31/2017. Meeting between developer and neighboring properties scheduled for 8/22/2017. Revised plans submitted 10/6/2017; under review. 2/28/2018 Working with developer for possible oversizing agreement for pump station. Plats and deeds under review.</p> <p>Staff worked with interim Town attorney on Oversizing Agreement. Agreement approved by Town Council. Pre-construction Meetings (both Town and County ESC) held. Started Phase I E&S controls and clearing along S. 32nd Street. Contractor sent out pre-blast surveys to surrounding homes. Blasting permit issued and blasting for sanitary sewer installation is underway. Sanitary sewer, storm sewer and water main installation is underway.</p> <p>January 2019 update. Watermain tap and sewer main tap at W K Street completed.</p> <p>April update. Water and sanitary sewer partially installed and tested.</p> <p>May update. Infrastructure installation continues.</p> <p>June 2019. Tested wet well for pump station, tested all equipment, training and town staff involvement in anticipation of working pump station.</p> <p>September, 2019. Pump station complete. Residential building is on-going.</p> <p>October, November 2019. Bond reduction request submitted, Town review. Additional information submitted, Town review. Bond amount reduced.</p>	
O'Toole Property rezone	Rezoning, and comp plan amendment	PW review 8/8/2016. Revised application received 3/3/2017. Engr. Review completed 4/11/2017. 9/6/17 new submission; review completed 11/8/2017. no change	
TP17-02 Mayfair Industrial Lot 4 (McKim)	Site plan for office/vehicle maintenance building and associated outdoor storage lot and parking	<p>PW review 7/25/2017. E&S measures installed. ROW permit issued by Town.</p> <p>January 2019 update. Building construction is underway.</p> <p>September, 2019. Fire line installed, pressure tested.</p>	Bacteriological sampling for water line. Water domestic service line installation.
TP17-05 Mayfair Industrial Lot 3 Truckin' America	Site plan for building and associated parking.	<p>PW review 8/11/2017.</p> <p>January 2019 update.</p> <p>May 6, 2019. Preconstruction conference</p> <p>September 2019. Building is under construction.</p>	Construction inspections as needed.
TP17-06 Mayfair Industrial Lots 5&6	Site plan for storage unit buildings.	<p>PW review re: request for ESC work. PW email sent 2/25/2018. Pre-construction meeting held 4/10/18. Contractor installed E&S controls and began grading work.</p> <p>January 2019 update. No further work has occurred. No change</p> <p>September, 2019. Fire flow test request submitted.</p>	

TABLE B PRIVATE PROJECTS

PROJECT NAME	DESCRIPTION	STATUS	NEXT STEPS
Fields Farm Park Road	Loudoun County project to extend Mayfair Crown Drive to Hillsboro Road and widen school access road	<p>Town staff has met with County and their design engineer to discuss conflicts with Town utilities. Received updated plans with proposed water and sanitary relocations. Town sent final comments to County on 1/28/18 and additional comments to Engineer's response on 3/29/18. Final comment responses and revised plan sheets received from Engineer on 5/7/18. Town notified that all its comments have been satisfactorily addressed 5/8/18. existing water services abandoned to property line; ball valve installed and covered with meter crock.</p> <p>December 17, 2018. Public informational meeting held at Town Hall; Loudoun County staff presented.</p> <p>January 2019. Process for boundary line adjustment approved at TC meeting.</p> <p>No change</p> <p>November 2019. Loudoun County presented at TC meeting for public hearing for boundary line adjustment.</p> <p>December 2019. BLA approved by Town Council.</p>	
TP18-03 Freemont Industrial LLC Mayfair Industrial Lot 2	Site Plan	<p>1st Submission received 10/9/2018. PW review 11/15/18.</p> <p>January 3, 2019 2nd submission received.</p> <p>January 27, 2019 submissions.</p> <p>June 27, 2019. Easement documents and plat reviewed.</p> <p>September 2019. Plan approved. ROW permit approved but not picked up by applicant.</p>	
Village Case Sec 2 parcel & Sec 8	Residential homes development	Under Construction. Sewer and water installation underway.	Inspections as needed.

**MAINTENANCE DEPARTMENT
MONTHLY OPERATIONS REPORT
FOR THE MONTH OF: DECEMBER 2019
PREPARED: JANUARY 2020**

MEASURE	MONTH	UNITS	FY YTD	UNITS
WORK ORDERS (W.O.) PROCESSED	128		745	#
STAFF HOURS REQUIRED FOR W.O.	355.5	HRS.	2093.5	HRS.
NON-CORE DUTIES HOURS	20.25	HRS.	197.25	HRS.
CD. MAN HOURS REQUIRED FOR WO	335.25	HRS.	1545.25	HRS.
PM FIRE HYDRANTS	0		63	
FIRE HYDRANT REPAIR	1		3	
PM VALVE EXERCISED	8		9	
MANHOLE INSPECTIONS	0		11	
CCTV SEWER LINE	382	L. FT.	2,604	L. FT.
SEWER LINE CLEANED	300	L. FT.	2,666	L. FT.
SL RAT INSPECTIONS	300	L. FT.	11,711	L. FT.
VEHICLES SERVICED/REPAIRED	21		77	
# OF WATER BREAKS	0		0	
# OF SEWER BACKUPS	1		2	
# OF CLEANOUTS INSTALLED	1		3	
# OF MISS UTILITY TICKETS	84		584	
# OF METERS READ	14		143	
# OF METERS SHUT OFF	1		14	
# OF METERS TURNED ON	1		13	
# OF REPLACED METERS	0		0	
# OF REPLACED REGISTERS	0		0	
# OF NEW ACC. METER INSTALLS	1		5	
# OF LEAK CHECKS	31		171	
# OF REPLACED MIUs (Radios)	46		196	
CUSTOMER COMPLAINTS	0		0	
WATER COMPLAINTS REC'D	0		0	
WATER COMPLAINTS RESOLVED	100	%	100	%
WASTEWATER COMPLAINTS REC'D	0		0	
WASTEWATER COMPLAINTS RES'D	100	%	100	%
BULK WATER GALLONS AT NEW RATE	0	Gallons	0	Gallons
BULK WATER SALES-(rate \$15.18per)	\$0.00		\$0.00	

ACCOMPLISHMENTS

Installed Christmas decorations on light poles and in business lawns (Main St., 21st and 23rd Streets and Town Hall parking lot.
 Repaired easement to Forbes Well
 Cleaned/swept 21st Street business district
 Cleared drainage ditches of leaves/debris on numerous streets
 Sign repairs
 Pothole repairs
 Leaf removal operations
 Weekly clean/restocking of dog stations
 Assisted Parks and Rec with Holiday Events
 Snow Removal Operations
 Vehicle/Equipment Repairs
 Fixed all broken sewer cleanout caps in Stone Mason
 Repaired sewer lines on 11th Street and 12 Street
 Installed fence at Jeffries property
 Cleaned the Magnolias sewer line and CCTV for quarterly cleaning and SL Rat
 Weekly cleaning of pump stations
 Cleared a sewer line backup at 321 12th Street
 Repaired fire hydrant at Starbuck's
 Replaced two damaged meter crocks
 Turned multiple water valves to determine sizes for engineering.

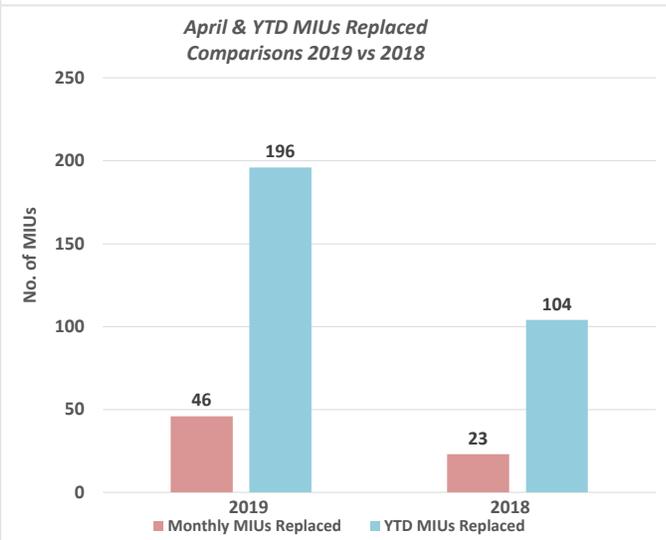
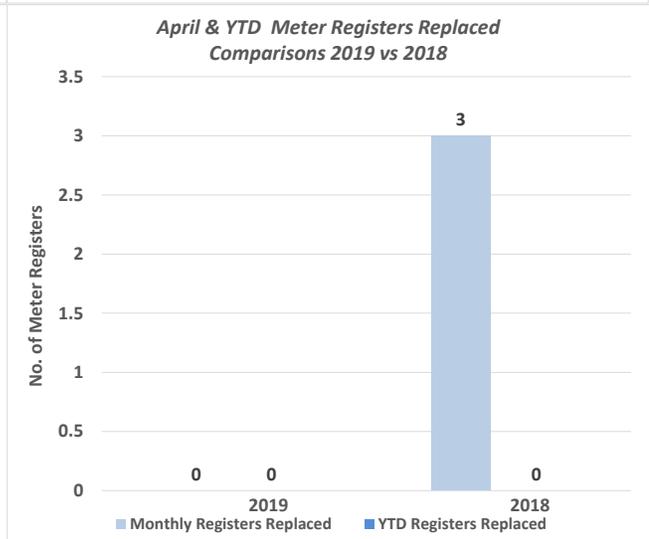
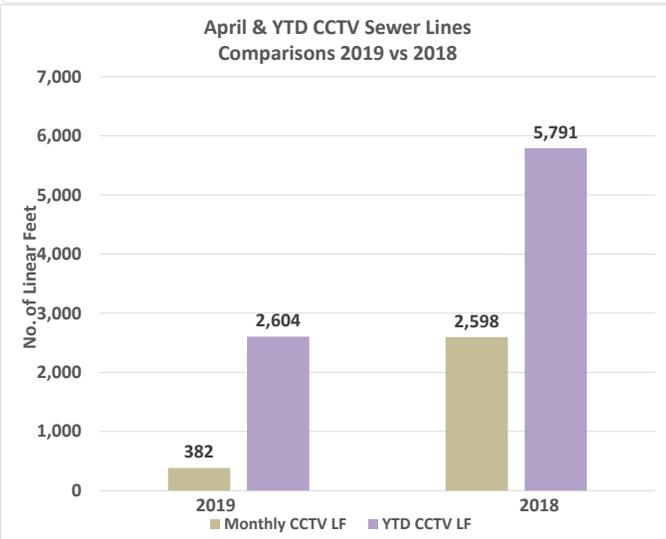
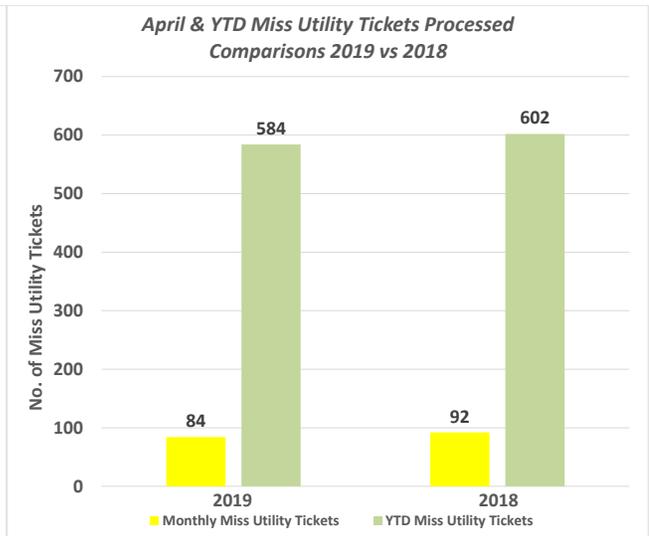
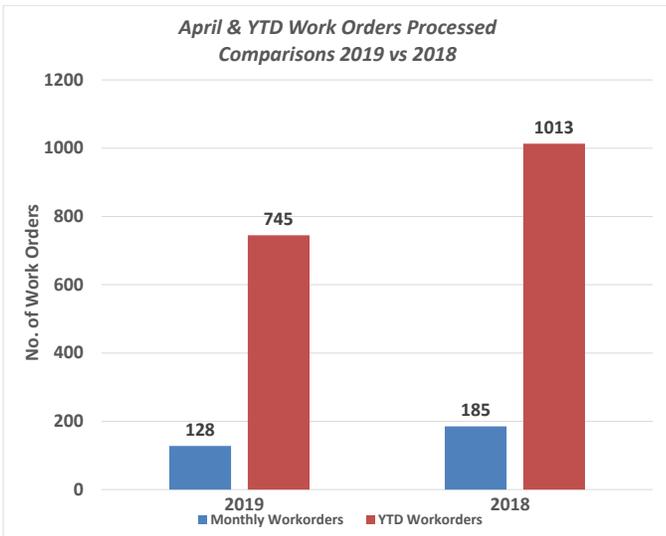
**MAINTENANCE DEPARTMENT
MONTHLY OPERATIONS REPORT
FOR THE MONTH OF: DECEMBER 2018
PREPARED: JANUARY 2019**

MEASURE	MONTH	UNITS	FY YTD	UNITS
WORK ORDERS (W.O.) PROCESSED	185		1013	#
STAFF HOURS REQUIRED FOR W.O.	251.5	HRS.	2038.05	HRS.
NON-CORE DUTIES HOURS	9.5	HRS.	415	HRS.
CD. MAN HOURS REQUIRED FOR WO	242	HRS.	1402.5	HRS.
PM FIRE HYDRANTS	31		100	
FIRE HYDRANT REPAIR	0		0	
PM VALVE EXERCISED	108		299	
MANHOLE INSPECTIONS	0		133	
CCTV SEWER LINE	2,598	L. FT.	5,791	L. FT.
SEWER LINE CLEANED	960	L. FT.	1,189	L. FT.
SL RAT INSPECTIONS	960		30,845	L. FT.
VEHICLES SERVICED/REPAIRED	13		88	
# OF WATER BREAKS	2		2	
# OF SEWER BACKUPS	0		0	
# OF CLEANOUTS INSTALLED	0		0	
# OF MISS UTILITY TICKETS	92		602	
# OF METERS READ	22		134	
# OF METERS SHUT OFF	0		17	
# OF METERS TURNED ON	0		19	
# OF REPLACED METERS	3		3	
# OF REPLACED REGISTERS	0		0	
# OF NEW ACC. METER INSTALLS	0		40	
# OF LEAK CHECKS	65		90	
# OF REPLACED MIUs (Radios)	23		104	
CUSTOMER COMPLAINTS	12		23	
WATER COMPLAINTS REC'D	0		0	
WATER COMPLAINTS RESOLVED	100		100	
WASTEWATER COMPLAINTS REC'D	1		1	
WASTEWATER COMPLAINTS RES'D	100		100	
BULK WATER GALLONS AT NEW RATE	0	Gallons	0	Gallons
BULK WATER SALES-(rate \$15.18per)	\$0.00		\$0.00	

ACCOMPLISHMENTS

Leaf Removal within town ROW including ditches and curbs
 leaf removal at town facilities and parking lots
 Leaf removal at Fireman's Field baseball complex and Tabernacle
 Removed large fallen Oak tree at Fireman's Field baseball complex
 Removed large fallen tree along access easement at Hirst reservoir
 Weekly cleaning and restocking of doggie stations
 Weekly cleaning of bus shelters
 Community event sign work orders
 Assist with Christmas events including Tree lighting, light tours and parade
 Installed Christmas shapes in business lawns along Main Street
 Straightened/replaced several damaged street signs
 Assisted contractor with re-stripping of lane markings on 21st and 23rd Streets
 Assisted contractor with concrete curb, gutter and sidewalk repairs for 26th Street.
 Repaired water break on N. Hall Avenue
 Completed water valve exercising in Zone #5
 Completed Manhole inspections in Zone #5
 Repaired a service leak on West Main Street

**Maintenance Department
2019 vs 2018 Comparisons**



**WATER TREATMENT PLANT
MONTHLY OPERATIONS REPORT
FOR THE MONTH OF: DECEMBER 2019
PREPARED: JANUARY 2020**

**WATER TREATMENT PLANT
MONTHLY OPERATIONS REPORT
FOR THE MONTH OF: DECEMBER 2018
PREPARED: JANUARY 2019**

WATER	MONTH	UNITS	AVG./DAY	UNITS
ALUMINUM SULFATE	1,291.0	lbs.	41.6	lbs.
POLYMER				
METAPHOSPHATE	236.2	lbs.	7.6	lbs.
SODA ASH	1,521.5	lbs.	49.1	lbs.
FLUORIDE (WTP & WELLS)	181.6	lbs.	5.9	lbs.
POTASSIUM PERMANGANATE	26.0	lbs.	0.8	lbs.
CHLORINE (HYPOCHLORITE @ WTP)	244.4	lbs.	7.9	lbs.
CHLORINE RESIDUAL (TANK)			1.9	mg/L
AVERAGE PH (FINISHED)			7.7	SU
BULK WATER SALES	0	gals.	0.0	gals.
INLINE METER, COOPER SPRINGS	4,807,818	gals.	155,090.9	gals.
JEFFERIES WELL	0	gals.	0.0	gals.
WATER PLANT GALLONS	8,106,900	gals.	261,512.9	gals.
MARSH WELL	1,738,000	gals.	56,064.5	gals.
MOUNTAIN VIEW WELL	372,802	gals.	12,025.9	gals.
MAIN STREET VILLAGES WELLS (MS-1 & VC)	3,439,603	gals.	110,954.9	gals.
CORNWELL #2 WELL	1,593,902	gals.	51,416.2	gals.
FORBES WELL	1,288,931	gals.	41,578.4	gals.
HIRST #2 WELL	0	gals.	0.0	gals.
TOTAL WATER FLOW	16,540,138	gals.	533,552.8	gals.

WATER	MONTH	UNITS	AVG./DAY	UNITS
ALUMINUM SULFATE	943.3	lbs.	30.4	lbs.
POLYMER				
METAPHOSPHATE	301.8	lbs.	9.7	lbs.
SODA ASH	1,401.4	lbs.	45.2	lbs.
FLUORIDE (WTP & WELLS)	178.2	lbs.	5.7	lbs.
POTASSIUM PERMANGANATE	23.2	lbs.	0.7	lbs.
CHLORINE (HYPOCHLORITE @ WTP)	220.0	lbs.	7.1	lbs.
CHLORINE RESIDUAL (TANK)			1.9	mg/L
AVERAGE PH (FINISHED)			7.8	SU
BULK WATER SALES		gals.	0	gals.
INLINE METER, COOPER SPRINGS	4,630,273	gals.	149,364	gals.
JEFFERIES WELL	0	gals.	0	gals.
WATER PLANT GALLONS	8,521,100	gals.	274,874	gals.
MARSH WELL	1,814,600	gals.	58,535	gals.
MOUNTAIN VIEW WELL	760,800	gals.	24,542	gals.
MAIN STREET VILLAGES WELLS (MS-1 & VC)	3,106,558	gals.	100,212	gals.
CORNWELL #2 WELL	1,654,254	gals.	53,363	gals.
FORBES WELL	908,978	gals.	29,322	gals.
HIRST #2 WELL	0	gals.	0	gals.
TOTAL WATER FLOW	16,766,290	gals.	540,848	gals.

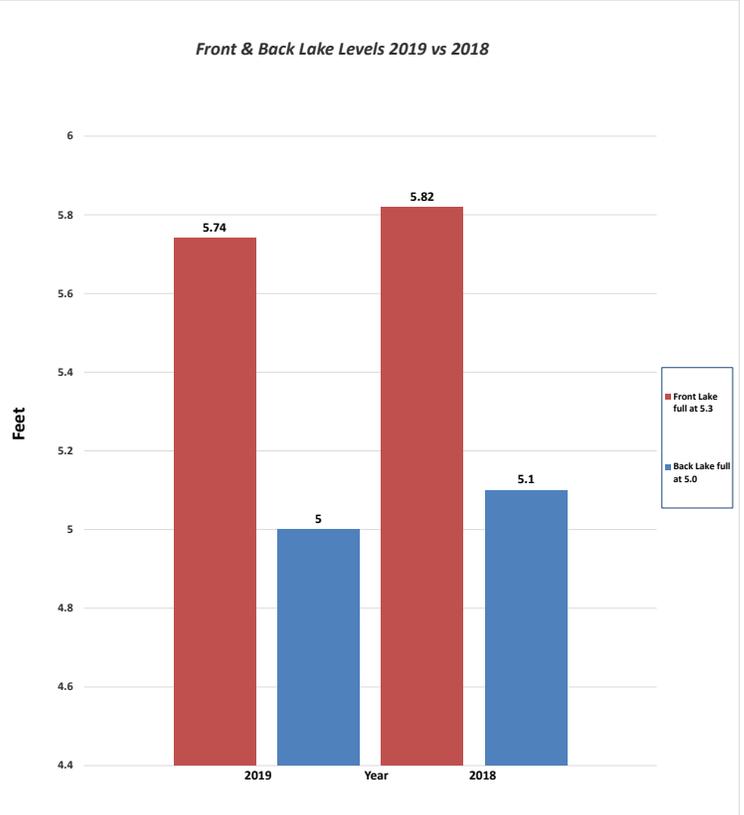
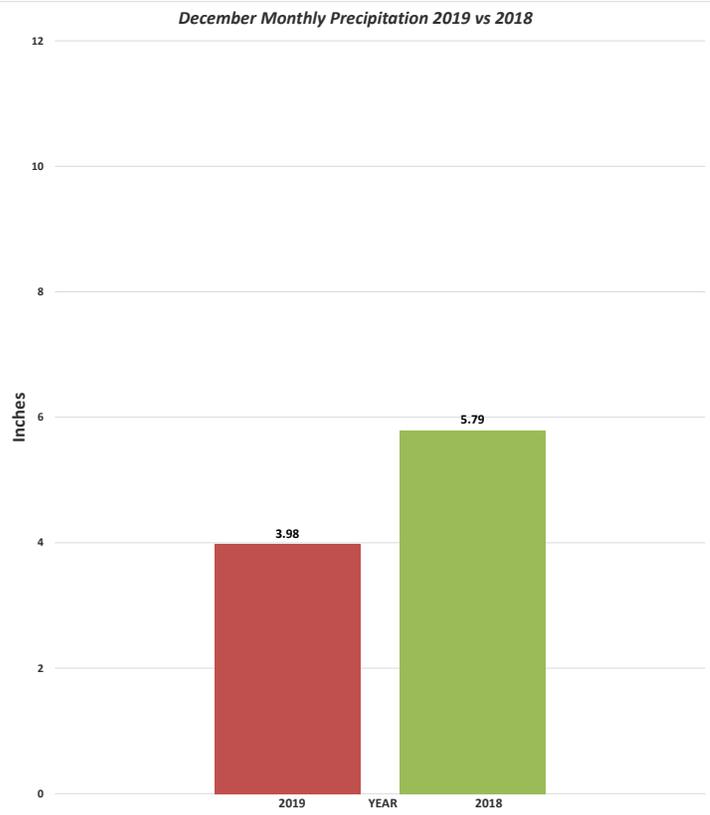
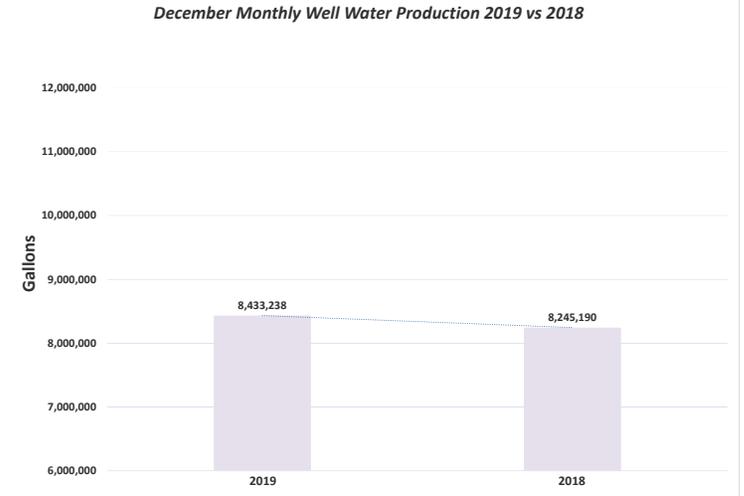
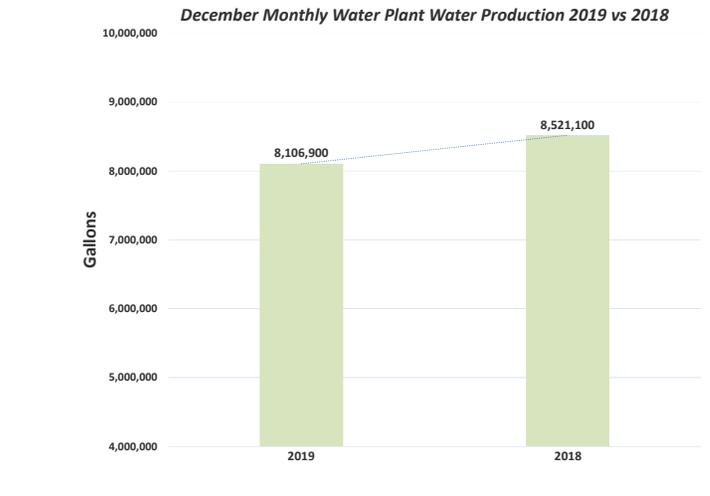
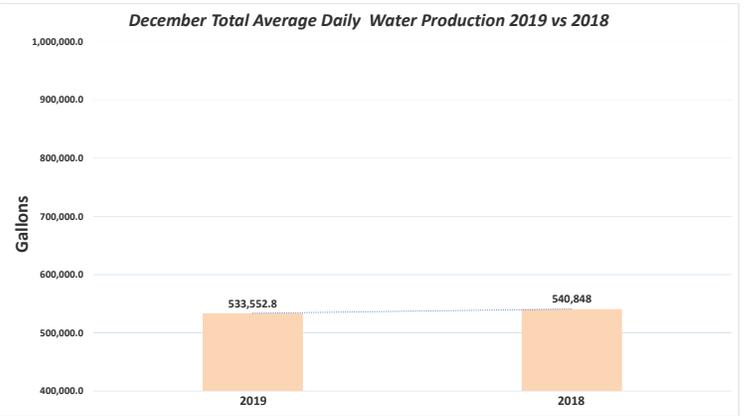
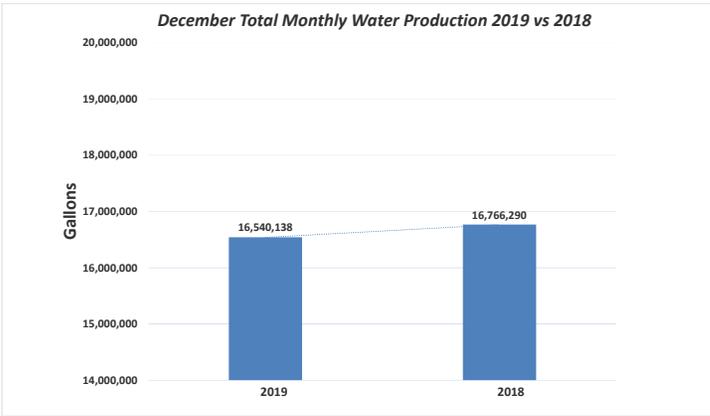
RESERVOIR LEVELS:	1-Dec-2019	31-Dec-2019
FRONT LAKE:	5.10'	5.74'
BACK LAKE	4.34'	5.00'
RAINFALL:	3.98"	

RESERVOIR LEVELS:	1-Dec-2018	31-Dec-2018
FRONT LAKE:	6.07'	5.82'
BACK LAKE	5.18'	5.10'
RAINFALL:	5.79"	

ACCOMPLISHMENTS

NPDES Discharge Monitoring Report due 01/10/2020 was submitted hard copy on 01/02/2020.
 VDH ODW Monthly Operating Report due 01/10/2020 was submitted electronically on 01/10/2020.
 Four Weekly Water Production Reports were completed.
 Water Staff provided facilities and technical support for EPA Groundwater System Inspection Training

**Water Well Production Facilities
December 2019 vs 2018 Comparisons**



**WATER RECLAMATION FACILITY
MONTHLY OPERATIONS REPORT
FOR THE MONTH OF: December 2019
PREPARED: January 2019**

**WATER RECLAMATION FACILITY
MONTHLY OPERATIONS REPORT
FOR THE MONTH OF: December 2018
PREPARED: January 2018**

MEASURE	MONTH	AVG./DAY
INFLUENT FLOW	18,716,600 GAL	603,800 GAL
EFFLUENT FLOW	16,744,500 GAL	540,100 GAL
MAXIMUM DAY INFLUENT	892,100 GAL	
FERRIC CHLORIDE	2,103 GAL	68 GAL
CITRIC ACID	70 GAL	70 GAL
SODIUM HYPOCHLORITE	466 GAL	58 GAL
METHANOL	935 GAL	30 GAL
RAIN	4.00 IN.	0.13 IN.

MONTHLY TOTAL NUTRIENT DISCHARGE

TOTAL NITROGEN	75 LBS.
TOTAL NITROGEN YTD	773 LBS.
AVG. DAILY NITROGEN	0.40 MG/L
VPDES NITROGEN LIMIT	4.0 MG/L
TOTAL PHOSPHORUS	18 LBS.
TOTAL PHOSPHORUS YTD	338 LBS.
AVG. PHOSPHORUS DAILY	0.12 MG/L
VPDES PHOSPHORUS LIMIT	0.3 MG/L

MEASURE	MONTH	AVG./DAY
INFLUENT FLOW	24,773,900 GAL	799,200 GAL
EFFLUENT FLOW	25,464,400 GAL	821,400 GAL
MAXIMUM DAY INFLUENT	2,058,400 GAL	
FERRIC CHLORIDE	1,868 GAL	60 GAL
CITRIC ACID	214 GAL	71 GAL
SODIUM HYPOCHLORITE	272 GAL	54 GAL
METHANOL	1,204 GAL	39 GAL
RAIN	6.40 IN.	0.21 IN.

MONTHLY TOTAL NUTRIENT DISCHARGE

TOTAL NITROGEN	104 LBS.
TOTAL NITROGEN YTD	1,470 LBS.
AVG. DAILY NITROGEN	0.56 MG/L
VPDES NITROGEN LIMIT	4.0 MG/L
TOTAL PHOSPHORUS	24 LBS.
TOTAL PHOSPHORUS YTD	342 LBS.
AVG. PHOSPHORUS DAILY	0.13 MG/L
VPDES PHOSPHORUS LIMIT	0.3 MG/L

ACCOMPLISHMENTS

All Staff received training on (EMS) Hazardous Substance Release Reporting,
 (Plant Process)Updated S.O.P. for the Rotary Drum Thickener, (Safety) storm water Pollution Prevention, (LAB)Dissolved Oxygen Calibration Update
 (LAB) Temperature Correction Factors for Thermometers, Tip On pipetting and measuring and pouring samples.
 Planned WWTF Preventive Maintenance YTD 98 Pieces out of 98 Scheduled per Year
 20 maintenance activities on equipment and buildings, monthly vehicles checks and 6 planned maintenance activities on pump stations.
 Hauled 75 wet tons of bio-solids for land application.
 Submitted VDEQ discharge monitoring report, Virginia's nutrient report .

NIA

No information available at this time.

Basham Simms Water Reclamation Facility 2019 vs 2018 Comparisons

