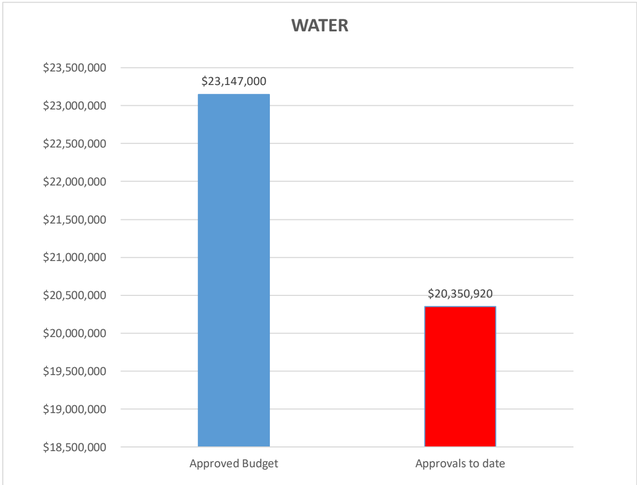
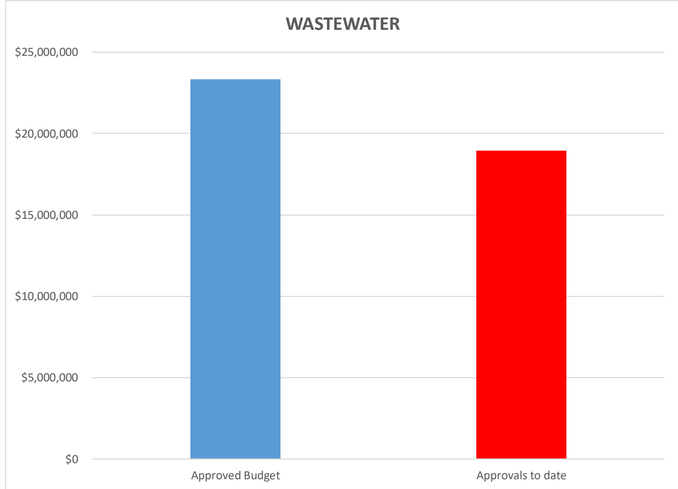
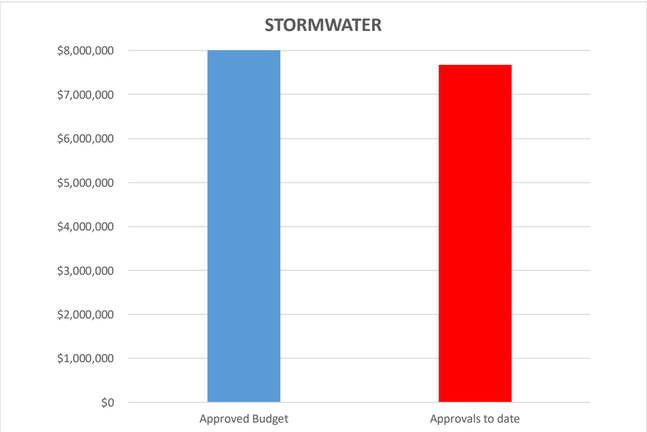
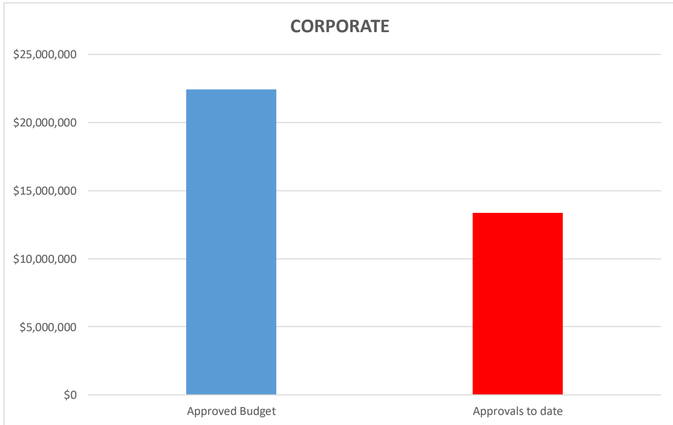
ITEM 2-I
HRWC Board
January, 2020

CAPITAL BUDGET APPROVALS TO DATE - 2019 -2020









WATER

Approved Budget	$23,147,000
Approvals to date	**$20,350,920**

WASTEWATER

Approved Budget	$23,336,000
Approvals to date	**$18,937,826**

STORMWATER

Approved Budget	$8,438,000
Approvals to date	**$7,676,000**

CORPORATE PROJECTS

Approved Budget	$22,427,000
Approvals to date	**$13,374,038**

Total Budget:	$77,348,000
Total To Date:	**$60,338,784**

Total %	**78%**

Jamie Hannam

Digitally signed by Jamie Hannam
Date: 2020.03.20 12:48:36 -03'00'

Report Approved: **Date**
Jamie Hannam

HRWC Board Report #2-1
Capital Projects Funding Approvals 2019-2020

Category	Total Approved	Net Impact on Budget	Approval Date
Water			
Collection System			
Scotia Drive Duffus Drive Watermain Interconnection	$26,000	$0	18-May-19
Culverts/Ditches			
Quarry Road Integrated Project - Additional Funding Component Water	$193,000	$0	3-Sep-19
Distribution			
Automated Flushing Program	$20,000	$20,000	18-Mar-19
Coburg Road Bridge Watermain Replacement	$40,000	$40,000	3-Sep-19
Hydrants	$75,000	$75,000	3-May-19
Lead Service Line Replacement Program	$1,000,000	$1,000,000	3-May-19
Service Lines Renewals	$100,000	$100,000	3-May-19
Valve Renewal	$125,000	$125,000	3-May-19
Water Distribution - Main Renewal Program	$1,839,000	$1,839,000	28-Feb-19
Sewer Separation Program Construction of Romans Federal Avenues	$1,459,000	$1,459,000	
Watermain Renewal Program	$2,435,920	$2,435,920	5-Jun-19
Old Sackville Road - Sackville River Crossing Watermain Replacement	$65,000	$0	
Energy			
Bennery Lake WSP - Tank Insulation Repairs			
Bennery Lake WSP MCC Replacement	$150,000	$150,000	3-Sep-19
Lake Major WSP Process Area HVAC Upgrades	$60,000	$60,000	3-Dec-19
Equipment			
Miscellaneous Equipment Replacement	$50,000	$50,000	3-May-19
Lake Major WSP - Purchase New Microscope	$20,000	$20,000	6-Nov-19
Facility			
Lake Major Dry Polymer Feed System	$120,000	$0	1-Aug-19
Lake Major WSP Butterfly Valve Replacement Program	$120,000	$0	26-Aug-19
JD Kline WSP Raw Water Pump Station HVAC Controls	$75,000	$0	
Land			
Bennery Lake Watershed Land			
Lake Major Watershed - Glasgow Lands			
Watershed Land Acquisition			
Security			
Security Upgrade Program	$50,000	$50,000	6-Aug-19
Structures			
Dam Safety Review	$210,000	$210,000	7-Nov-19
Lake Major Dam Monitoring Program	$40,000	$40,000	11-Sep-19
Robie 2 Emergency Pump Meter Installation	$21,000	$21,000	1-Apr-19
Transmission			
Bedford West CCC - Various Phases			
Cogswell Interchange Water Transmission Main Realignments	$150,000	$150,000	9-Jul-19
Critical Valve Replacements 2019	$225,000	$225,000	18-Mar-19
Halifax Peninsula Transmission Main Project	$398,000	$398,000	27-Sep-19
Lakeside Timberlea CCC			
Lucasville Road Transmission Main - Phase 1	$6,647,000	$6,647,000	15-Apr-19
MacIntosh Estates Phase 1 Oversizing	$100,000	$100,000	15-Apr-19
Port Wallace Transmission Main - Caledonia Section	$120,000	$120,000	27-Mar-19
Treatment Facilities			
Aerotech Booster Station Capital Upgrades			
Bennery Lake Access Road Upgrade	$100,000	$100,000	17-Apr-19
Bennery Lake Filter Influent Valves	$64,000	$64,000	18-Mar-19
Bennery Lake Sludge Valve Replacement Program	$7,000	$7,000	18-Mar-19
Bennery Lake Surge Anticipator Valve Replacement	$20,000	$20,000	18-Mar-19
Chlorine Analyzer Replacement Program	$16,000	$16,000	18-Mar-19
JD Kline Back Up Power Supply Study	$25,000	$25,000	23-Oct-19
JD Kline Building Envelope Upgrades	$100,000	$100,000	17-Sep-19
JD Kline Caustic Tank Liner Replacements	$16,000	$16,000	20-Mar-19
JD Kline Effluent Valve Actuator Replacement Program	$200,000	$200,000	20-Mar-19
JD Kline Low Lift Pump #3			
JD Kline Low Lift Station Crane Renewal	$75,000	$75,000	20-Mar-19
JD Kline Low Lift Station Roof Fan Shroud Replacement	$21,000	$21,000	20-Mar-19
JD Kline New Alum Chemical Supply	$15,000	$15,000	20-Mar-19
JD Kline New Lime Blower System	$35,000	$35,000	27-Mar-19
JD Kline Pilot Plant Upgrades	$200,000	$200,000	26-Mar-18
JD Kline Pre-Mix Area Mixers Upgrade	$90,000	$90,000	8-Apr-19
JD Kline Process Upgrades	$250,000	$250,000	26-Nov-19
JD Kline Purchase New Microscope	$17,000	$17,000	20-Mar-19
JD Kline Raw Water Intake Traveling Screen Replacement Program	$245,000	$245,000	8-Apr-19
JD Kline Raw Water Pump Station Electrical Room Ventilation	$50,000	$50,000	16-Sep-19
JD Kline Raw Water Pump Station Window/Wall/Building Envelope	$50,000	$50,000	23-Oct-19
JD Kline Replace C02 Feeders	$475,000	$475,000	15-Aug-19
JD Kline Replace Floc Tank Valve	$35,000	$35,000	20-Mar-19
JD Kline Replace Westinghouse Electrical Panels	$8,000	$8,000	20-Mar-19
JD Kline Roof Replacement	$270,000	$270,000	1-May-19

Category	Total Approved	Net Impact on Budget	Approval Date
JD Kline Upgrade the PCL			
JD Kline Upgrades to the Process Wastewater Lagoons	$150,000	$150,000	20-Mar-19
Lake Major Butterfly Valve Replacement Program	$200,000	$200,000	20-Mar-19
Lake Major C02 System Replacement Construction	$215,000	$215,000	23-May-19
Lake Major Clarifier Repair			
Lake Major Filtration System Replacement			
Lake Major Lab Relocation	$235,000	$235,000	20-Mar-19
Lake Major Overall Process and Design Study	$230,000	$230,000	18-Jun-19
Lake Major Purchase Spectrophotometers	$15,000	$15,000	20-Mar-19
Lake Major Replace Contactors in the MCC	$34,000	$34,000	20-Mar-19
Lake Major Replace the Lime Feed and Delivery System	$120,000	$120,000	27-Mar-19
Miller Lake Small System Public Main Extension Miller Lake Road	$495,000	$495,000	12-Apr-19
Purchase and Install TOC Analyzers WSP Facilities	$90,000	$90,000	18-Mar-19
Purchase and Install Water Quality Sonde Equipment	$70,000	$70,000	20-Mar-19
Reservoir Mixing and Residual Management Upgrade Program	$150,000	$150,000	10-Apr-19
Silversands WSP - Electrical/Architectural Upgrades	$150,000	$150,000	3-Sep-19
Lake Major Purchase Turbidimeter	$18,000	$18,000	20-Mar-19
Lake Major Dry Polymer Feed System Replacement	$305,000	$305,000	14-Aug-19
Lake Major WSP - New Alum Tank	$155,000	$155,000	3-Dec-19
Peninsula Transmission Main	$211,000	$0	
Burnside to Bedford Connector Transmission Main - Design Service	$90,000	$0	
Water Total	**$21,250,920**	**$20,350,920**	
Wastewater			
Collection System			
Bayers Rd Phase 2 - Sewer Separation			
Bedford West Collection System CCC	$20,000	$20,000	30-May-19
Cogswell Redevelopment Sewer Relocation	$170,000	$170,000	
Fairview, Clayton Park Bridgeview I/I Reduction	$2,500,000	$2,500,000	
Integrated Wastewater Projects Program	$1,315,000	$1,315,000	28-Feb-19
Lateral Replacements WW (non-tree roots)	$1,685,000	$1,685,000	3-May-19
Lateral Replacements WW (tree roots)	$526,000	$526,000	3-May-19
Main Street Sewer Main Replacement	$100,000	$100,000	19-Feb-19
Manhole Renewals WW	$20,000	$20,000	3-May-19
Romans - Federal Avenues Sewer Separation	$2,456,000	$2,456,000	16-Oct-19
Sewer Relocation at South Street CN Bridge	$25,000	$25,000	15-Apr-19
Wanda Lane Sanitary Sewer Replacement	$1,050,000	$1,050,000	5-Jun-19
Wastewater System Trenchless Rehabilitation Program	$2,703,026	$2,503,026	22-May-79
Wet Weather Management Program	$250,000	$250,000	29-May-19
WRWIP Project Bayers Rd Phase 1 - Sewer Separation			
Energy			
HHSP - BAS+ HVAC Recommissioning	$50,000	$50,000	1-May-19
NSPI Meter Relocations	$25,000	$25,000	15-Apr-19
Pump Station HVAC Retro-Commissioning Program	$95,000	$50,000	28-Jan-20
Wastewater Pumping Station Performance Testing	$250,000	$250,000	0-Jan-00
Cogswell District Energy System - Engineering Consulting Services	$150,000	$0	3-Sep-19
Halifax WWTF Flow Splitting Computational Fluid Dynamics (CFD) Analysis	$35,000	$0	11-Sep-19
Dartmouth WWTF - New CSA Approved Raw Water Pumps	$225,000	$0	11-Sep-19
Equipment			
I&I Reduction (SIR) Program Flow Meters and Related Equipment	$25,000	$25,000	3-May-19
Miscellaneous Equipment Replacement	$120,000	$120,000	3-May-19
Mill Cove WWTF New Yard Tractor	$10,000	$0	27-Sep-19
Wastewater CCTV Equipment Replacement	$183,000	$183,000	6-Nov-19
Facility			
Community Wastewater Treatment Facilities: Personal Monitoring Devices	$15,000	$0	20-Jun-19
DWWTF New Air Compressors	$55,000	$0	25-Jun-19
Halifax WWTF South Access Gate Rehabilitation	$16,000	$0	30-Jul-19
Eastern Passage WWTF Plant Optimization Funding Increase	$18,000	$0	17-Oct-19
DWWTF Old Raw Water Pump Rebuild & Storage Container	$0	$0	23-Oct-19
Forcemains			
Beaver Crescent PS - FM Replacement	$500,000	$500,000	23-May-19
Caldwell Road ARV/MH Replacement	$75,000	$75,000	28-Feb-19
Security			
Security Upgrade Program	$200,000	$200,000	6-Aug-19
Structures			
Autoport Pleasant Street PS Replacement			
CSO Upgrade Program			
Duffus PS CSO - Modification	$50,000	$50,000	18-Jun-19
Emergency Pumping Station Pump Replacements	$250,000	$250,000	31-May-19
Fairfield Holding Tank Rehabilitation	$25,000	$25,000	26-Mar-19
Fish Hatchery FM - ARV Chamber Water Proofing	$25,000	$25,000	28-Feb-19
Pump Station Elimination - Concept Design	$25,000	$25,000	12-Mar-19
Russell Lake PS Upgrade			
Upper Water Street PS CSO Replacement			
Wastewater Pumping Station Component Replacement Program - Central	$250,000	$250,000	1-May-19
Wastewater Pumping Station Component Replacement Program - East	$200,000	$200,000	24-Jul-19
Wastewater Pumping Station Component Replacement Program - West	$200,000	$200,000	24-Jul-19
Windmill Road PS Replacement			
Treatment Facilities			

Category	Total Approved	Net Impact on Budget	Approval Date
Aerotech WWTF Asset Renewal Program	$50,000	$50,000	5-Jun-19
Aerotech WWTF Upgrade and Expansion Project Extra Cost	$500,000	$500,000	15-Apr-19
Building Cleaning and Corrosion Protection	$485,000	$245,000	2-Feb-40
Carbon Media Replacement	$21,000	$21,000	5-Feb-20
Dartmouth WW Treatment Facility Coagulant Dosing Pump Replacements	$40,000	$40,000	17-Oct-19
Dartmouth WW Treatment Facility Densadeg Flow Meters	$119,300	$119,300	0-Jan-00
Dartmouth WW Treatment Facility Duct Work Replacement	$25,000	$25,000	8-Apr-19
Easement for Sewer and Access			
Eastern Passage WWTF Atlas Copco Blowers Spare VFD	$20,000	$20,000	8-Apr-19
Eastern Passage WWTF Drum Thickener Overhaul Spare Parts	$15,000	$15,000	8-Apr-19
Eastern Passage WWTF Outfall Inspection and Warning Signage	$15,000	$15,000	26-Apr-19
Eastern Passage WWTF Primary Sludge Pumps Spare Parts	$15,000	$15,000	8-Apr-19
Eastern Passage WWTF Process Upgrade Program	$50,000	$50,000	17-Oct-19
Eastern Passage WWTF RAS Pumps Spare Parts	$40,000	$40,000	8-Apr-19
Eastern Passage WWTF Yard Lighting	$35,000	$35,000	8-Apr-19
Emergency Wastewater Treatment Facility equipment replacements	$335,000	$335,000	16-Sep-19
Grit Pump Replacement	$75,000	$75,000	15-Apr-19
Halifax WWTF AHU Coil Replacement	$45,000	$45,000	18-Jun-19
Halifax WWTF Duct work Replacement	$50,000	$50,000	8-Apr-19
Halifax WWTF New Raw Water Pumps	$56,000	$275,000	10-Jun-19
Herring Cove Wastewater Treatment Facility Duct Work Replacement Program	$25,000	$25,000	8-Apr-19
HHSP - OCS Wet Scrubber Chlorine Analyzers	$125,000	$125,000	29-May-19
HSPs - Outfall Inspection Program	$20,000	$20,000	26-Apr-19
Management Plan	$60,000	$60,000	17-Oct-19
Mill Cove WW Treatment Facility Digester Mixers Failure Analysis	$20,000	$20,000	21-May-19
Mill Cove WW Treatment Facility Lining of Supernatant Pump Croc	$50,000	$50,000	21-May-19
Mill Cove WW Treatment Facility New Lab Cabinets and Countertops	$69,500	$60,000	18-Apr-19
Mill Cove WW Treatment Facility Process Upgrades - Preliminary & Detailed Design	$150,000	$150,000	17-Oct-19
Mill Cove WW Treatment Facility Replace Oxygen Analyzer	$75,000	$75,000	21-May-19
Mill Cove WW Treatment Facility South Secondary Clarifier Recoat/Replace Mechanisms	$100,000	$100,000	17-Oct-19
Mill Cove WW Treatment Facility South Secondary Splitter Box Rehabilitation	$30,000	$30,000	21-May-19
Plant Optimization Audit Program	$125,000	$125,000	23-May-19
Springfield Lake and North Preston - Driveway Replacement	$15,000	$15,000	23-May-19
Timberlea WWTF Asset Renewal Program	$50,000	$50,000	17-Oct-19
Eastern Passage WWTF Rebuild Centrifuge 801	$50,000	$50,000	8-Apr-19
Dartmouth WWTF Grit Pump replacement	$37,500	$0	18-Jun-19
Aerotech BFP LBB Refurbishment	$130,000	$0	8-Jul-19
HHSPs - Neutral Grounding Investigation	$8,500	$8,500	3-Dec-19
Emergency Pumping Station Pump Replacements - Duffus Street	$126,000	$126,000	8-Jan-20
Solar PV Project - Construction and Commissioning	$220,000	$0	
WW Collections - Wastewater Trenchless Rehabilation Program (155K), WWT Mill Cove WWTF - Replace Chlorine Analyzer ($31,500), and WW Eastern Passage WWTF Replace Yard lighting)	$220,000	$0	17-Dec-19
WWTF Dartmouth WWTF Densadeg Flow Diversion Vanes & CFD Analysis	$26,000	$0	
Trunk Sewers			
Fairview Cove Trunk Sewer	$600,000	$600,000	11-Apr-19
Sackville Trunk Sewer - Condition Assessment	$155,000	$155,000	2-Jul-19
Wastewater Total	**$20,370,826**	**$18,937,826**	
Stormwater			
Collection System			
Joe Street Additional Integrated Project	$62,000	$0	18-May-19
Pernix Crt Additional Integrated Project	$17,000	$0	18-May-19
Athorpe Street Additional Integrated Project	$10,000	$0	18-May-19
Forestglen Drive Additional Integrated Project	$44,000	$0	18-May-19
Lakeview Drive Additional Integrated Project	$31,000	$0	18-May-19
Gottingen Street Additional Integrated Project	$43,000	$0	18-May-19
Eastview Drive Additional Integrated Project	$15,000	$0	18-May-19
Quaker Cres Additional Integrated Project	$23,000	$0	18-May-19
Culverts/Ditches			
Bundy Lane near civic 79	$34,000		
Coronet Avenue driveway culvert replacement project	$100,000	$100,000	30-Jul-19
Driveway Culvert Replacements	$812,000	$812,000	8-May-19
Frederick Drive at Dyke Road	$37,000		
Highway 2, near civic 1380	$200,000	$170,000	25-Jun-19
Lucasville Road Sta 0+910 near civic 1155	$38,000	$38,000	15-Apr-19
Lucasville Road Sta 1+595 at Third Street	$38,000	$38,000	15-Apr-19
Lucasville Road Sta 2+695 near civic 758	$38,000	$38,000	15-Apr-19
Lucasville Road Sta 2+850 near civic 749 and 743	$38,000	$38,000	15-Apr-19
Millers Road near civic 1			
Murray Road at Caldwell Road			
Parkway Drive and Atholea Drive	$35,000		
Stormwater Survey and Studies Program			
Kipawa Crescent - Culvert Replacement Design Phase	$31,000	$0	1-Apr-19
Yankeetown Road near civic 16 (project is deferred to next budget year)	$88,000	$88,000	15-Apr-19
Kingswood Drive near civic 10	$34,000	$0	30-Jul-19
Kingswood Drive near civic 60	$34,000	$0	30-Jul-19
Sewer Separation Program - Bayers Road Phase II Project - Detailed Engineering Design	$75,000	$0	31-Jul-19
Seth Aaron Drive near civic 40	$37,000	$0	30-Jul-19
Dartmoor Crescent Integrated Project Culvert Replacements	$134,000	$0	3-Oct-19

Category	Total Approved	Net Impact on Budget	Approval Date
Sunrise Hill SW IP 19/20	$82,000	$0	1-Oct-19
Pipes			
Catchbasin Renewals SW	$60,000	$60,000	3-May-19
Celtic Drive Storm Sewer Renewal	$120,000	$120,000	22-Feb-19
Cogswell Redevelopment SW Sewer Relocation	$300,000	$300,000	12-Jul-19
Drainage Remediation Program Surveys/Studies			
Everette Street at Bonnie Brae Drive Drainage Upgrade			
Integrated Stormwater Projects	$1,200,000	$1,200,000	28-Feb-19
Lakecrest Drive CMP Replacement			
Lateral Replacements SW	$12,000	$12,000	3-May-19
Manhole Renewals SW	$15,000	$15,000	3-May-19
National Disaster Mitigation Program			
Stormwater Pipe Condition Inspections (CSP)	$100,000	$100,000	15-Apr-19
Wanda Lane Deep Storm Sewer	$205,000	$205,000	5-Jun-19
Wanda Lane Storm System Upgrade	$210,000	$210,000	5-Jun-19
Structures			
Clement St. Berm	$82,000	$82,000	1-Oct-19
Ellenvale Run Retaining Wall System Phase 2	$2,220,000	$2,220,000	15-Apr-19
Ellenvale Run Retaining Wall System Phase 3 (Wanda Lane)	$1,830,000	$1,830,000	5-Jun-19
Stormwater Total	**$8,484,000**	**$7,676,000**	
Corporate			
Equipment			
Audio/Video Equipment for Online Meetings	$12,000	$0	
Facility			
Building Capital Improvements	$98,500	$98,500	19-Sep-19
East/Central Regional Operational Facility			
Fleet			
Fleet - Stormwater	$295,000	$295,000	3-May-19
Fleet - Wastewater	$1,180,000	$1,180,000	3-May-19
Fleet - Water	$385,000	$385,000	3-May-19
GIS			
Engineering Drawing Database			
GIS Application Support Program	$85,000	$85,000	23-Oct-19
GIS Data Build			
GIS Data Project			
GIS Hardware/Software Program			
Sewer Service Entry			
Water Data Base Model			
Information Technology			
Analytics Decision Support System	$225,000	$225,000	23-Sep-19
Approval Forms Framework	$415,000	$415,000	9-Apr-39
Computer Maintenance Management System (CMMS) Enhancements	$1,000,000	$1,000,000	24-Jun-19
Customer Portal	$220,000	$220,000	19-Sep-19
Customer Transactional Site			
Data Governance	$150,000	$150,000	29-May-19
Desktop Computer Replacement Program	$290,000	$290,000	3-May-19
Document/Content Management	$100,000	$100,000	12-Dec-19
IT Foundations	$200,000	$200,000	1-Nov-19
IT Server Hosting	$240,000	$240,000	21-Feb-20
Migrate to Office 365	$250,000	$250,000	9-Dec-19
Mobile Devices and Applications	$200,000	$200,000	0-Jan-00
New payroll System	$600,000	$600,000	30-Apr-19
Permit Approvals	$1,360,000	$770,000	12-Dec-19
Regulatory Reporting	$33,000	$33,000	30-Jul-19
SAP S4 Hana Upgrade	$348,000	$348,000	15-May-19
Stormwater Billing Support			
Telephony	$90,000	$90,000	1-Nov-19
Water/Wastewater Data Quality Software Replacement	$582,960	$582,960	11-Mar-20
Asset Registry			
ERP Solution Project Request for proposal Phase	$248,000	$0	24-Jul-19
Regulatory Reporting - Phase 1 Executing	$189,578	$189,578	3-Sep-19
SCADA & Other			
GPS Units - Replacement	$67,000	$67,000	22-Feb-19
Large and New Customer Meters	$460,000	$460,000	3-May-19
Meter Deployment	$2,600,000	$2,600,000	3-May-19
SCADA Control System Enhancements	$100,000	$100,000	21-May-19
Central SCADA System Redesign/Relocation	$90,000	$0	18-Mar-19
Treatment Facilities			
HHSPs and Eastern Passage WWTF - Building Management System User Interface	$100,000	$0	
Asset Management			
Corporate Flow Monitoring Program	$1,760,000	$1,760,000	20-Jun-19