

ALBANY WATER BOARD
MINUTES OF REGULAR MEETING
November 17, 2017

A regular meeting of the Albany Water Board was officially convened at 9:30 AM, local time, in the Conference Room at the Albany Water Board, 10 North Enterprise Drive, Albany, New York Friday, November 17, 2017.

PRESENT: William Clay, Chairman; Charles Houghton, Vice Chairman; Daniel Ranellone, Treasurer; Rachel Johnson, Secretary; Anthony Owens, Member

STAFF PRESENT: Joseph E, Coffey, Jr., P.E., Commissioner; William Simcoe, P.E., Deputy Commissioner; Thomas Dufresne, CFO; Elizabeth Romand, Confidential Assistant

BOARD ADVISORS PRESENT: Marisa Franchini, Assistant Corporation Counsel; William Kahn, UHY Advisors; Kevin Hogan, P.E., ARCADIS

Approval of October 27, 2017 Meeting Minutes

Chairman William Clay introduced the minutes of the October 27, 2017 meeting. With no objection, the reading of minutes was dispensed and Mr. Clay called for a motion to approve the minutes of said meeting. A motion was made by Mr. Houghton seconded by Mr. Owens, and passed unanimously.

Public Comment Period

No public comment.

Committee & Staff Reports

Governance Committee Report: Charles Houghton, Committee Chair, presented a summary of the Governance Committee Meeting, which included notification that all officer and committee assignments will are recommended to remain unchanged in 2018, revised meeting date schedule for 2018 was adopted, and notice of an upcoming training on ABO/PARIS Compliance to be performed by Marisa Franchini.

Financial Report: Thomas Dufresne, Chief Fiscal Officer, submitted a statement of the Albany Water Board's Cash Flows and other combined Financial Information for the one month and year to date period ending October 31, 2017. The detailed report is attached.

Key Performance Indicators and Critical Numbers Dashboard: Commissioner Coffey presented a report detailing the Key Performance Indicators and Critical numbers, noting that department overtime costs and water production continue to trend downward.

Safety GAP Analysis: The Consultant Industrial Hygienist has begun the analysis and has been on tours of facilities, observed employees performing safety sensitive duties, and expects to submit a report of his findings and recommendations in mid-December.

Elberon Place Flood Mitigation Project: Work on the project is nearing completion, with only storm drainage pipe installation at the intersection of Quail St. and Western Ave. remaining.

Hackett Blvd. Water Main Replacement Project: The 16" water main is being installed. However, some minor delays have been encountered due to sewer infrastructure in the path of the work at Holland Ave. Work continues to move forward, with the goal of being largely completed by the end of the year.

Grant and Financing Report: Deputy Commissioner Simcoe presented an update on our Grant and project financing plans (report attached). He highlighted recent EFC grant awards (EFC notices attached), including \$10 million grant for the Big C project.

Consultant Engineer's Report: Kevin Hogan, P.E., ARCADIS, submitted a summary of Upcoming Long Term Control Plan Projects and ARCADIS Projects, including updates (report attached). He also presented the updated draft 5 Year Capital Plan 2018-2022, highlighting Appendix C, which shows all grants and financing awarded to date for Capital Projects (report attached). Board members were asked to review the report for a discussion of the 5 Year Capital Plan at the December Board meeting.

Old Business

RFPs to be Released: In addition to requesting proposals for Master Service Agreements for Engineering Services, an RFP will be released for Auditing services for fiscal years 2017-2019. The Board and AWD Staff had an extended discussion on the form and substance of Professional Services Requests for proposals and the concepts of Qualifications Based Selection and Best Value Procurement.

Executive Session

No Executive Session took place.

Resolutions

Resolution 17-63: Authorizing the transfer of a vehicle to the Albany Fire Department was offered by Mr. Houghton and seconded by Mr. Ranellone. Resolution passed without opposition.

Resolution 17-64: Designating the Albany Water Board as the Lead Agency and determining that the rehabilitation project at the Rensselaer Lake Dam is a Type 2 Action and will not have a Significant Adverse Impact on the Environment, was offered by Mr. Owens and seconded by Mr. Houghton. Resolution passed without opposition.

Resolution 17-65: Authorizing Award of Task Order under the Master Services Agreement with CHA Companies for the SPRTK (Sewage Pollution Right to Know) CSO Monitoring for an amount not to exceed \$88,056 was offered by Mr. Houghton and seconded by Mr. Ranellone. Resolution passed without opposition.

Resolution 17-66: Authorizing Award of Task Order under the Master Services Agreement with OBG Engineers for Albany- Colonie Emergency Water Interconnections Design & Construction Services for an amount not to exceed \$400,000 was offered by Mr. Houghton and seconded by Mr. Ranellone. Resolution passed without opposition.

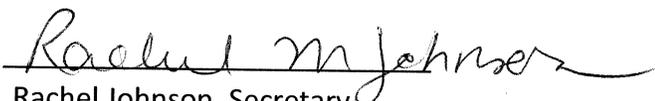
Resolution 17-67: Authorizing Award of Task Order under the Master Services Agreement with Schnabel Engineering for Rensselaer Lake Geotechnical Site Explorations for an amount not to exceed \$138,000 was offered by Mr. Owens and seconded by Mr. Houghton. Resolution passed without opposition.

Resolution 17-68: Authorizing Award of Task Order under the Master Services Agreement with Barton & Loguidice Engineers for Krum Kill Sewer Pump Station Study for an amount not to exceed \$14,800 was offered by Mr. Owens and seconded by Mr. Houghton. Resolution passed without opposition.

Chairman William Clay informed all those in attendance that the next Regular Meeting of the Albany Water Board will be **Friday December 15, 2017 at 9:30 AM** in the AWB Conference Room and will be a joint meeting with the Albany Municipal Finance Authority.

Being no further business, Chairman Clay called for a motion to adjourn the meeting. A motion was made by Mr. Owens, seconded by Mr. Ranellone and passed unanimously. The meeting was adjourned at 10:56 AM.

Recorded by: Elizabeth A. Romand

Approved by: 
Rachel Johnson, Secretary

ALBANY WATER BOARD
ALBANY MUNICIPAL WATER FINANCE AUTHORITY
COMBINED FINANCIAL STATEMENTS
For the period ending October 31, 2017

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ALBANY WATER BOARD
ALBANY MUNICIPAL WATER FINANCE AUTHORITY
STATEMENTS OF CASH FLOWS
October 31, 2017

	One Month Period Ended		Year-To-Date Periods Ended		Percent Variance	Variance	Percent Variance
	2017	2016	2017	2016			
Revenues							
Water/sewer revenue	\$ 2,854,868	\$ 3,104,175	\$ (249,307)	26,621,465	28,956,111	\$ (2,334,647)	-8.1%
Investment income	27,746	21,487	6,259	315,065	257,868	57,197	22.2%
Total revenues	2,882,614	3,125,662	(243,048)	26,936,529	29,213,979	(2,277,450)	-7.8%
Operating expenses							
Operation/maintenance costs	4,158,308	4,596,193	(437,884)	19,506,497	20,123,242	(616,745)	-3.1%
Board/Authority expenses	8,477	3,285	5,192	87,983	70,938	17,046	24.0%
Total expenses	4,166,785	4,599,478	(432,693)	19,594,480	20,194,179	(599,699)	-3.0%
Net operating cash flows before debt service and capital project costs							
	(1,284,171)	(1,473,816)	189,645	7,342,049	9,019,800	(1,677,750)	-18.6%
Debt service costs							
	(497,850)	(561,580)	63,730	(4,978,500)	(5,615,800)	637,300	-11.3%
Capital project costs							
	(407,796)	(427,592)	19,796	(3,911,286)	(3,099,931)	(811,355)	0.0%
Grant income							
	-	-	-	1,069,153	-	1,069,153	0.0%
Net cash flow (deficiency)	\$ (2,189,817)	\$ (2,462,988)	\$ 273,171	\$ (478,584)	\$ 304,069	\$ (782,653)	-257.4%

ALBANY WATER BOARD
ALBANY MUNICIPAL WATER FINANCE AUTHORITY
SCHEDULE OF REVENUES
October 31, 2017

	2017 Budget	2017 Actual	Variance Favorable (Unfavorable)	Variance %	2016 Budget	2016 Actual	Variance Favorable (Unfavorable)	Variance %
Water and sewer revenue								
October	3,767,180	\$ 2,854,888	\$ (912,312)	-24%	\$ 3,567,745	\$ 3,104,175	\$ (463,570)	-13%
Year-to-Date	30,340,170	\$ 26,621,465	\$ (3,718,706)	-12%	\$ 27,927,381	\$ 28,956,111	\$ 1,028,730	4%
Investment income								
October	\$ 15,839	\$ 27,746	\$ 11,907	75%	\$ 16,667	\$ 21,487	\$ 4,820	29%
Year-to-Date	\$ 267,314	\$ 315,065	\$ 47,751	18%	\$ 150,000	\$ 257,868	\$ 107,868	72%

	Additional Cash Receipts	
	Monthly	YTD
Miscellaneous		
Other	\$ 10,000	\$ 27,540
Fishing Permits	\$ -	\$ 1,175
Sales of Scrap	\$ -	\$ 7,490
Insurance Recoveries	\$ -	\$ 7,967
Delmar Mall Easement	\$ -	\$ 500
Delaware Plaza Easement	\$ -	\$ 12,000
Rent		
Huck Finn	\$ 1,250	\$ 12,500
DASNY Rent	\$ 1,250	\$ 12,500
Lamar	\$ -	\$ 20,000
Time Warner Rent	\$ -	\$ 1,500
Sprint	\$ -	\$ 12,462
Totals	\$ 12,500	\$ 115,634

Note: The revenue budgets reflect forecasted revenue collections of \$39,290,000 and \$37,000,000 for 2017 and 2016, respectively.

ALBANY WATER BOARD
ALBANY MUNICIPAL WATER FINANCE AUTHORITY
SCHEDULE OF OPERATING EXPENSES
October 31, 2017

	2017 ANNUAL BUDGET	YEAR-TO-DATE October 2017			2016 YTD ACTUAL
		ADJUSTED BUDGET	ACTUAL	(OVER)/ UNDER	
Administration					
Personnel services	1,478,599	1,150,166	874,623	275,543	796,055
Equipment/Furniture	11,000	9,096	1,449	7,647	400
Contractual and other expenses	212,463	175,691	128,933	46,757	143,844
Benefits	385,745	395,637	251,603	144,034	260,506
	2,087,807	1,730,590	1,256,608	473,982	1,200,805
Supply, Power and Pumping					
Personnel services	988,556	815,806	533,362	282,444	587,315
Equipment	36,000	29,769	29,755	14	43,000
Contractual and other expenses	135,844	112,333	71,032	41,301	30,175
Benefits	203,159	169,651	178,027	(8,376)	187,124
	1,363,559	1,127,558	812,176	315,383	847,614
Purification					
Personnel services	1,347,227	1,109,918	861,038	248,880	796,093
Equipment	207,000	171,173	135,723	35,450	82,131
Contractual and other expenses	1,357,465	1,122,519	560,364	562,155	581,936
Benefits	443,073	370,522	251,372	119,150	238,505
	3,354,765	2,774,133	1,808,497	965,636	1,698,665
Transmission/Distribution					
Personnel services	2,727,920	2,243,376	1,969,645	273,731	2,017,493
Equipment	795,000	591,663	371,386	220,278	481,508
Contractual and other expenses	2,302,941	1,713,920	1,064,068	649,852	1,068,415
Benefits	941,945	791,320	653,618	137,702	623,578
	6,767,806	5,340,279	4,058,717	1,281,562	4,190,994
Sewer Services					
Personnel services	907,425	748,717	681,301	67,416	526,447
Equipment	257,000	191,267	129,401	61,866	448,192
Contractual and other expenses	1,882,312	1,400,875	889,044	511,830	1,039,719
Benefits	202,518	169,121	255,188	(86,067)	152,255
	3,249,255	2,509,979	1,954,935	555,045	2,166,613
Pumping Stations					
Personnel services	150,790	123,865	124,831	(966)	91,176
Equipment	30,000	22,327	9,957	12,370	16,698
Contractual and other expenses	417,765	310,913	196,505	114,408	179,177
Benefits	72,035	60,394	49,817	10,578	25,563
	670,590	517,499	381,110	136,389	312,614
Taxes Paid to Municipalities					
	2,196,853	2,196,853	2,000,954	195,899	1,948,121
County Sewer Contract					
	6,578,505	6,578,505	6,141,738	436,767	6,231,856
Contingencies, Insurance and Other					
	5,093,686	2,440,772	1,091,763	1,349,009	1,525,961
Total Operating Expenses	31,362,826	25,216,169	19,506,497	5,709,672	20,123,242
Capital Expenditures					
	3,000,000	2,480,769	2,764,980	(284,211)	3,099,931
GRAND TOTAL	34,362,826	27,696,938	22,271,477	5,425,461	23,223,173

EXPENSE SUMMARY:	2017	2016	Change
Personnel Services	5,044,801	4,814,579	230,222
Equipment	677,671	1,071,930	(394,259)
Contractual and other expenses	2,909,946	3,043,264	(133,318)
Benefits	1,639,624	1,487,531	152,094
Other	9,234,455	9,705,938	(471,483)
	19,506,497	20,123,242	(616,745)

Percent Increase/Decrease over 2016	-3.1%
Percent under Budget	-22.6%
Personnel Services under Budget	-18.5%
	-22.2%

ALBANY WATER BOARD
ALBANY MUNICIPAL WATER FINANCE AUTHORITY
SCHEDULE OF CAPITAL EXPENDITURES
October 31, 2017

Actual Expenditures to Date

1995	\$	3,459,286
1996		3,148,713
1997		2,977,569
1998		2,059,812
1999		2,696,065
2000		1,771,829
2001		2,437,338
2002		3,384,049
2003		3,845,848
2004		5,673,522
2005		2,389,244
2006		1,575,740
2007		459,599
2008		1,230,331
2009		1,807,010
2010		1,108,164
2011		734,443
2012		2,266,553
2013		2,059,475
2014		1,832,084
2015		2,076,594
2016		8,403,230
2017		3,911,286
	\$	57,396,497

Comparative Expenditures

[----- 2016 -----]		2017	
January	\$ -	January	\$ -
February		February	5,949
March	423,060	March	94,117
April	72,924	April	336,818
May	94,213	May	519,075
June	329,510	June	668,351
July	115,872	July	878,960
August	253,453	August	903,516
September	1,383,307	September	96,704
October	427,592	October	407,796
November	353,823	November	
December	4,949,476	December	
	\$ 8,403,230		\$ 3,911,286

2017	Gross Capital	Grants & Funding	Net Capital	YTD
January	\$ -	\$ -	\$ -	\$ -
February	5,949	-	5,949	5,949
March	94,117	-	94,117	100,066
April	336,818	96,528	240,290	340,356
May	519,075	-	519,075	859,431
June	668,351	405,291	263,059	1,122,491
July	878,960	241,149	637,811	1,760,301
August	903,516	-	903,516	2,663,817
September	96,704	403,338	(306,633)	2,357,184
October	407,796	-	407,796	2,764,980
November	-	-	-	2,764,980
December	-	-	-	2,764,980
	\$ 3,911,286	\$ 1,146,306	\$ 2,764,980	2,764,980

ALBANY WATER BOARD
ALBANY MUNICIPAL WATER FINANCE AUTHORITY
SCHEDULE OF OVERTIME
October 31, 2017

OVERTIME	Budget 10/31/2017 YTD	Actual 10/31/2017 YTD	Budget Difference (over)/under	Actual 10/31/2016 YTD	Actual Difference (over)/under
Supply, Power and Pumping	\$ 78,558	\$ 44,474	\$ 34,084	\$ 93,075	\$ 48,601
Purification	\$ 111,635	\$ 58,684	\$ 52,951	\$ 94,365	\$ 35,681
Transmission/Distribution	\$ 248,077	\$ 266,724	\$ (18,647)	\$ 319,531	\$ 52,806
Sewer Services	\$ 33,077	\$ 62,903	\$ (29,826)	\$ 57,793	\$ (5,110)
Pumping Stations	\$ 8,269	\$ 4,677	\$ 3,592	\$ 3,618	\$ (1,059)
TOTAL	\$ 479,615	\$ 437,462	\$ 42,154	\$ 568,381	\$ 130,920
Percentage			8.79%		23.0%
DUE FROM THE CITY OF ALBANY		<u>10/31/2017</u>			
		\$ 8,628,436			
Rt 7 ACCOUNTS RECIEVABLE		<u>\$ 1,196,729</u>			

ALBANY WATER BOARD
ALBANY MUNICIPAL WATER FINANCE AUTHORITY
EXPENSE DETAIL BY DEPARTMENT
October 31, 2017

Account Description	September		October		2016	
	Balance Forward	MTD Debits	MTD Credits	Ending Balance	MTD Balance	MTD Balance
Department 8120 - Sewer Maintenance						
Supervisory	118,012.60	11,986.16	-	129,998.76	11,387.71	
Professional/Technical	-	-	-	-	-	
Public Safety/Operations	439,652.41	48,747.17	-	488,399.58	34,967.78	
Trades	-	-	-	-	-	
Clerical	-	-	-	-	-	
Line-up Pay/Clothing Allw	6,000.00	-	-	6,000.00	-	
Overtime	57,461.73	5,440.94	-	62,902.67	5,109.08	
Vehicles	21,547.06	-	-	21,547.06	235,780.00	
Other Equipment	86,032.08	21,822.00	-	107,854.08	79,182.00	
Supplies & Materials	37,239.24	12,508.36	-	49,747.60	6,287.93	
Uniforms	-	-	-	-	-	
Gasoline	19,483.00	-	-	19,483.00	3,844.99	
Motor Vehicle Expense	34,952.86	3,193.82	-	38,146.68	17,626.52	
Expense of Litigation	-	-	-	-	-	
Contracted Services	779,995.09	1,672.00	-	781,667.09	61,938.50	
Training/Conferences	-	-	-	-	-	
Social Security	44,713.03	4,730.34	-	49,443.37	3,184.35	
Hospital & Medical Ins.	178,879.88	23,961.74	3,097.00	199,744.62	16,503.09	
Department 8120 - Sewer Maintenance Totals	1,823,968.98	134,062.53	3,097.00	1,954,934.51	475,811.95	

ALBANY WATER BOARD
ALBANY MUNICIPAL WATER FINANCE AUTHORITY
EXPENSE DETAIL BY DEPARTMENT
October 31, 2017

Account Description	September		October		2016	
	Balance Forward	MTD Debits	MTD Credits	Ending Balance	MTD Balance	MTD Balance
Department 8130 - Pumping Stations						
Supervisory	37,403.56	2,565.00	-	39,968.56	3,342.56	
Public Safety/Operations	72,733.60	7,452.24	-	80,185.84	7,527.55	
Line-up Pay/Clothing Allw	800.00	-	-	800.00	-	
Overtime	4,375.88	300.90	-	4,676.78	376.05	
Other Equipment	9,956.59	-	-	9,956.59	952.00	
Supplies & Materials	423.00	95.00	-	518.00	-	
Fuel Oil	-	-	-	-	-	
Uniforms	-	-	-	-	-	
Utilities	77,069.06	19,222.09	-	96,291.15	9,556.35	
Expense of Litigation	-	-	-	-	-	
Contracted Services	94,486.86	5,208.95	-	99,695.81	3,229.00	
Training/Conferences	-	-	-	-	-	
Social Security	8,076.90	721.68	-	8,798.58	1,017.87	
Hospital & Medical Ins.	36,155.58	4,606.88	544.24	40,218.22	3,884.42	
Department 8130 - Pumping Stations Totals	341,481.03	40,172.74	544.24	381,109.53	29,885.80	

ALBANY WATER BOARD
ALBANY MUNICIPAL WATER FINANCE AUTHORITY
EXPENSE DETAIL BY DEPARTMENT
October 31, 2017

Account Description	September		October		2016	
	Balance Forward	MTD Debits	MTD Credits	Ending Balance	MTD Balance	
Department 8310 - Water Administration						
Executive	74,784.84	7,670.24	-	82,455.08	7,525.52	
Supervisory	165,229.38	18,683.52	-	183,912.90	18,060.01	
Professional/Technical	428,817.14	47,006.96	-	475,824.10	33,192.65	
Public Safety/Operations	-	-	-	-	-	
Clerical	116,706.01	15,725.08	-	132,431.09	12,215.00	
Longevity Pay	29,075.00	-	100.00	28,975.00	4,225.00	
Line-up Pay/Clothing Allow	-	-	-	-	-	
Overtime	-	-	-	-	-	
Furniture & Fixtures	259.08	1,190.00	-	1,449.08	-	
Supplies & Materials	19,495.32	35.92	-	19,531.24	2,217.05	
Utilities	42,192.76	1,453.67	-	43,646.43	9,495.88	
Contracted Services	30,907.48	3,739.43	-	34,646.91	579.28	
Printing & Binding	2,451.60	1,143.33	-	3,594.93	777.75	
N.Y.S.P.I.N.	-	-	-	-	-	
Fees & Services	880.27	42.00	-	922.27	-	
Miscellaneous	1,190.48	407.55	-	1,598.03	106.41	
Training/Conferences	1,172.56	388.32	-	1,560.88	149.65	
Postage	23,432.56	-	-	23,432.56	20,000.00	
Social Security	59,087.41	6,551.72	-	65,639.13	4,909.40	
Hospital & Medical Ins.	140,310.70	20,136.58	3,458.60	156,988.68	12,027.16	
Department 8310 - Water Administration Totals	1,135,992.59	124,174.32	3,558.60	1,256,608.31	125,480.76	

ALBANY WATER BOARD
ALBANY MUNICIPAL WATER FINANCE AUTHORITY
EXPENSE DETAIL BY DEPARTMENT
October 31, 2017

Account Description	September			October			2016	
	Balance Forward	MTD Debits	MTD Credits	Ending Balance	MTD Balance	MTD Balance	MTD Balance	
Department 8320 - Source of Supply, Power								
Supervisory	5,502.03	-	-	5,502.03	1,843.29	1,843.29		
Professional/Technical	139,138.47	12,800.00	-	151,938.47	12,989.83	12,989.83		
Public Safety/Operations	273,212.76	32,674.34	-	305,887.10	30,816.80	30,816.80		
Clerical	20,467.73	-	-	20,467.73	1,671.44	1,671.44		
Temporary Help	5,092.50	-	-	5,092.50	555.00	555.00		
Line-up Pay/Clothing Allw	3,240.00	-	-	3,240.00	-	-		
Overtime	39,777.64	4,696.07	-	44,473.71	7,874.66	7,874.66		
Other Equipment	29,095.36	660.00	-	29,755.36	41,059.85	41,059.85		
Supplies & Materials	10,075.77	406.65	-	10,482.42	1,170.00	1,170.00		
Fuel Oil	1,544.56	-	-	1,544.56	-	-		
Uniforms	-	-	-	-	-	-		
Gasoline	5,369.33	819.94	-	6,189.27	631.08	631.08		
Utilities	41,733.51	4,945.63	-	46,679.14	2,138.42	2,138.42		
Contracted Services	4,270.48	-	-	4,270.48	393.00	393.00		
Miscellaneous	172.40	212.32	-	384.72	90.20	90.20		
Training/Conferences	1,266.20	215.00	-	1,481.20	-	-		
Social Security	36,805.79	3,687.52	-	40,493.31	3,513.42	3,513.42		
Hospital & Medical Ins.	121,130.27	15,864.70	2,701.08	134,293.89	13,183.81	13,183.81		
Department 8320 - Source of Supply, Power Totals	737,894.80	76,982.17	2,701.08	812,175.89	117,930.80	117,930.80		

ALBANY WATER BOARD
ALBANY MUNICIPAL WATER FINANCE AUTHORITY
EXPENSE DETAIL BY DEPARTMENT
October 31, 2017

Account Description	September		October		2016	
	Balance Forward	MTD Debits	MTD Credits	Ending Balance	MTD Balance	MTD Balance
Department 8330 - Purification						
Supervisory	-	-	-	-	-	-
Professional/Technical	202,535.00	29,538.40	-	232,073.40	13,898.80	13,898.80
Public Safety/Operations	515,277.65	55,003.22	-	570,280.87	50,505.69	50,505.69
Trades	-	-	-	-	-	-
Line-up Pay/Clothing Allow	4,400.00	-	-	4,400.00	-	-
Overtime	52,051.99	6,632.10	-	58,684.09	4,320.37	4,320.37
Vehicles	-	-	-	-	-	-
Other Equipment	17,674.33	18,283.20	-	35,957.53	433.83	433.83
Laboratory Equipment	30,398.16	482.90	-	30,881.06	-	-
Filtration Plant Equip	61,582.80	7,301.56	-	68,884.36	2,926.18	2,926.18
Supplies & Materials	31,147.24	1,469.60	-	32,616.84	7,025.48	7,025.48
Fuel Oil	40,067.17	-	-	40,067.17	-	-
Uniforms	-	-	-	-	-	-
Chemicals	272,848.96	49,013.57	-	321,862.53	35,308.11	35,308.11
Utilities	80,063.52	5,021.41	-	85,084.93	6,832.71	6,832.71
Contracted Services	69,140.50	4,488.84	-	73,629.34	8,304.31	8,304.31
Miscellaneous	1,677.18	220.90	-	1,898.08	250.00	250.00
Training/Conferences	5,205.00	-	-	5,205.00	-	-
Residuals Management	-	-	-	-	-	-
Social Security	57,890.73	6,733.50	-	64,624.23	6,069.62	6,069.62
Hospital & Medical Ins.	163,853.50	22,391.39	3,897.60	182,347.29	14,665.64	14,665.64
Department 8330 - Purification Totals	1,605,813.73	206,580.59	3,897.60	1,808,496.72	150,540.74	150,540.74

ALBANY WATER BOARD
ALBANY MUNICIPAL WATER FINANCE AUTHORITY
EXPENSE DETAIL BY DEPARTMENT
October 31, 2017

Account Description	September		October		2016	
	Balance Forward	MTD Debits	MTD Credits	Ending Balance	MTD Balance	
Department 8340 - Transmission & Dist.						
Supervisory	308,351.30	32,595.70	-	340,947.00	30,273.66	
Professional/Technical	33,171.52	3,800.00	-	36,971.52	3,385.38	
Public Safety/Operations	1,196,278.50	124,104.12	-	1,320,382.62	116,457.09	
Trades	-	-	-	-	224.64	
Temporary Help	4,619.85	-	-	4,619.85	1,824.00	
Line-up Pay/Clothing Allw	10,800.00	600.00	-	11,400.00	-	
Overtime	249,281.03	17,443.27	-	266,724.30	22,669.38	
Vehicles	155,827.38	-	-	155,827.38	-	
Other Equipment	125,299.63	90,258.63	-	215,558.26	119,275.42	
Equipment Streets & Sidewalks	-	-	-	-	-	
Supplies & Material Sts.	113,040.89	35,533.59	-	148,574.48	37,973.18	
Supplies - Trans. & Dist.	236,556.31	19,980.30	-	256,536.61	20,876.73	
Uniforms	-	-	-	-	-	
Gasoline	77,932.00	-	-	77,932.00	15,379.98	
Supp/Matrl-Meter Repair	242,246.77	17,080.00	-	259,326.77	1,799.50	
Utilities	58,117.85	7,015.96	-	65,133.81	12,907.87	
Motor Vehicle Expense	51,767.34	3,031.08	-	54,798.42	5,929.54	
Expense of Litigation	-	-	-	-	-	
Contracted Services	173,468.95	28,059.16	-	201,528.11	9,229.64	
Miscellaneous	112.50	125.00	-	237.50	464.50	
Training/Conferences	-	-	-	-	-	
Social Security	131,228.30	12,858.59	-	144,086.89	13,324.72	
Hospita & Medical Ins.	452,838.60	59,339.69	14,047.18	498,131.11	45,140.00	
Department 8340 - Transmission & Dist. Totals	3,620,938.72	451,825.09	14,047.18	4,058,716.63	457,135.23	
Grand Total	9,256,089.85	1,033,797.44	27,845.70	10,272,041.59	1,356,785.28	

Route 7 - YTD Billings - as of 10/31			
Customer Group	2016	2017	YoY Change
OGS-BUSINESS SERVICE CENTER	3,519,479.26	2,163,921.34	(1,355,557.92)
SUNY-ALBANY	2,238,407.38	1,856,364.66	(382,042.72)
SUNY-ALBANY NANO	3,911,412.48	3,692,894.76	(218,517.72)
TOWN OF GUILDERLAND	184,675.94	4,702.90	(179,973.04)
TMG-ALBANY 1 LP	50,727.10	204,823.56	154,096.46
ALBANY MEDICAL CENTER	835,687.68	732,713.10	(102,974.58)
CENTRAL TOWERS PRESERVATION LT	133,367.12	99,212.24	(34,154.88)
ALBANY MEMORIAL HOSP. 3226-4017	193,873.20	162,280.30	(31,592.90)
ALBANY HOUSING AUTHORITY	84,546.90	60,630.36	(23,916.54)
DEPT OF HEALTH	99,197.56	120,855.30	21,657.74
NYS OFF OF MENTAL HEALTH 50980	1,038.36	17,253.54	16,215.18
TERESIAN HOUSE	71,798.74	58,123.00	(13,675.74)
BUCKEYE ALBANY TERMINAL, LLC	40,258.38	31,216.45	(9,041.93)
ST PETERS HOSPITAL	587,116.68	595,836.32	8,719.64
VERIZON	54,774.48	47,271.78	(7,502.70)
VETERANS HOSPITAL ADMIN	176,849.88	183,257.94	6,408.06
CSX TRANSPORTATION-48534	10,634.61	15,987.96	5,353.35
99 WASHINGTON LLC	88,848.96	83,670.36	(5,178.60)
TIMES UNION CENTER	29,473.90	32,715.28	3,241.38
AFP107 CORP. D/B/A HILTON ALBANY	167,500.60	164,424.90	(3,075.70)
PSEG POWER NY INC	2,867.78	-	(2,867.78)
ULTRE PET, LLC	328,878.70	326,735.00	(2,143.70)
MARTEL	1,597.76	1,894.66	296.90
COEYMANS HOLLOW FIRE COMPANY	139.64	307.65	168.01
SAYVILLE BROWNING PROPERTIES INC	15,758.00	15,774.02	16.02
THE PEOPLE OF THE STATE OF	698.20	698.20	-
TOWN OF BETHLEHEM	1,417,500.00	1,417,500.00	-
Total	14,247,109.29	12,091,065.58	(2,156,043.71)

	BW.0630	BW.0630.A	BW.0630.TA	BW.0384	Due (to)/from	Change
January	-	(9,399,588.21)	-	16,346,396.69	6,946,808.48	
February	-	(9,471,416.59)	1.00	16,346,396.69	6,874,981.10	(71,827.38)
March	-	(6,066,487.42)	1.00	16,346,396.69	10,279,910.27	3,404,929.17
April	-	(8,778,961.60)	1.00	16,346,396.69	7,567,436.09	(2,712,474.18)
May	-	(8,369,821.61)	(860.20)	16,346,396.69	7,975,714.88	408,278.79
June	-	(8,482,508.89)	(860.20)	16,346,396.69	7,863,027.60	(112,687.28)
July	-	(8,800,217.74)	(2,844.13)	16,346,396.69	7,543,334.82	(319,692.78)
August	-	(9,277,954.02)	(2,844.13)	16,346,396.69	7,065,598.54	(477,736.28)
September	-	(8,363,503.30)	130,548.74	16,346,396.69	8,113,442.13	1,047,843.59
October	-	(7,715,116.75)	(2,844.12)	16,346,396.69	8,628,435.82	514,993.69
November	-				-	
December	-				-	

Department of Water and Water Supply - 2017 Key Performance Indicators and Critical Numbers Dashboard

Parameter	Annual Goal or YTD	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
		well over goal at goal caution unacceptable - corrective action required												
Water/Sewer Revenue														
Budget	\$39,290,000	\$3,313,300	\$2,758,360	\$2,688,090	\$2,500,480	\$3,268,240	\$2,864,880	\$2,452,830	\$3,389,440	\$3,337,370	\$3,767,180	\$755,170	\$8,194,660	\$39,290,000
Actual MTD		\$2,816,864	\$2,764,149	\$3,057,353	\$2,591,687	\$3,506,660	\$2,592,681	\$1,454,782	\$2,963,415	\$3,078,383	\$2,854,868			
Budget YTD/MTD	\$30,340,170	\$3,313,300	\$6,071,647	\$8,759,740	\$11,260,221	\$14,184,134	\$17,049,015	\$19,846,180	\$23,235,620	\$26,572,990	\$30,340,170			\$30,340,170
Actual YTD/MTD	\$26,621,465	\$2,816,864	\$5,576,421	\$8,633,774	\$10,448,625	\$14,726,375	\$17,319,056	\$17,980,988	\$20,942,287	\$23,767,797	\$26,621,465			\$26,621,465
% Actual MTD vs Budget MTD	85.02%	85.02%	100.21%	113.74%	103.65%	107.30%	90.50%	59.31%	87.43%	92.24%	75.78%	0.00%	0.00%	
% Actual YTD vs Budget YTD	87.74%	85.02%	91.84%	98.56%	92.79%	103.82%	101.58%	90.60%	90.13%	89.44%	87.74%	#DIV/0!	#DIV/0!	87.74%
Operating Expenses (non-Capital Exp.)														
Budget	\$31,307,830	\$1,511,330	\$1,107,160	\$1,548,830	\$4,477,800	\$1,306,310	\$2,171,150	\$1,899,700	\$1,703,220	\$6,504,040	\$1,419,620	\$1,736,590	\$5,922,080	\$31,307,830
Actual MTD		\$1,356,329	\$807,206	\$1,453,350	\$4,168,292	\$1,034,095	\$1,247,316	\$1,284,192	\$1,315,078	\$2,518,911	\$4,158,308			
Budget YTD/MTD	\$25,216,169	\$1,511,330	\$2,618,490	\$4,167,320	\$8,645,120	\$9,951,430	\$12,122,580	\$15,122,484	\$16,896,754	\$22,675,446	\$25,216,169			\$25,216,169
Actual YTD/MTD	\$19,506,497	\$1,356,329	\$2,163,535	\$3,616,885	\$7,867,672	\$8,912,333	\$10,170,354	\$11,517,881	\$12,793,399	\$15,312,310	\$19,506,497			\$19,506,497
% Actual vs Budget MTD/MTD	77.36%	89.74%	72.91%	93.84%	93.09%	79.16%	57.45%	67.60%	77.21%	38.75%	292.82%	0.00%	0.00%	
% Actual YTD vs Budget YTD	77.36%	89.74%	82.63%	86.79%	91.01%	89.56%	83.90%	76.16%	75.72%	67.53%	77.36%	#DIV/0!	#DIV/0!	77.36%
Net Operating Cash Flows														
Actual MTD/YTD	\$7,342,049	\$1,469,692	\$1,956,785	\$1,620,192	\$1,474,824	\$2,528,965	\$1,362,473	\$277,059	\$1,647,802	\$572,267	-\$1,284,171			
Net Cash Flow after debt service and capital project costs														
Actual YTD	-\$478,584	\$971,842	\$1,468,633	\$1,028,225	\$593,266	\$1,612,160	\$339,709	-\$709,540	\$246,437	\$231,237	-\$2,189,817			
Grant Income														
Actual	\$1,069,153	\$0	\$15,578	\$307,372	\$0	\$0	\$120,328	\$372,351	\$0	\$253,524	\$0			
Capital Project Expenses (all)														
Actual	\$3,911,286	\$0	\$5,949	\$94,117	\$336,818	\$519,075	\$666,351	\$878,960	\$903,516	\$96,704	\$407,796			
Total Department OT Hrs.	14235	1573	1428	1490	1285	1609	1564	1338	1446	1229	1273			14235
Total Department OT \$														
Budget MTD		\$44,615	\$44,616	\$55,679	\$48,332	\$48,332	\$48,335	\$44,615	\$44,616	\$55,769	\$44,615			
Actual MTD		\$48,186	\$43,461	\$53,235	\$37,687	\$40,948	\$56,805	\$39,293	\$35,467	\$50,211	\$34,514			
Budget YTD	\$479,615	\$44,615	\$89,231	\$145,000	\$193,333	\$241,665	\$290,000	\$334,615	\$379,231	\$435,000	\$479,615			
Actual YTD	\$437,462	\$48,186	\$91,647	\$142,557	\$180,224	\$221,172	\$277,977	\$317,270	\$352,737	\$402,948	\$437,462			
% Budget MTD		108.00%	97.41%	95.61%	77.33%	84.72%	117.52%	88.07%	79.49%	90.03%	77.36%	#DIV/0!	#DIV/0!	
% Budget YTD		108.00%	102.71%	98.32%	93.22%	91.52%	95.85%	94.82%	93.01%	92.63%	91.21%	#DIV/0!	#DIV/0!	

Department of Water and Water Supply - 2017 Key Performance Indicators and Critical Numbers Dashboard

Parameter	Annual Goal	Indicators												YTD
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Injury Reports (New)	48	3	10	2	5	8	5	4	3	3	5	48		
Total Reports Submitted	48	3	10	2	5	8	5	4	3	3	5	48		
Total resulting in Medical Treatment	30	2	8	1	3	3	4	4	1	1	3	30		
Total resulting in Time Loss	18	0	5	1	3	2	3	3	0	1	2	18		
Lost Work Days (injuries)	166	0	43	4	35	23	10	26	0	19	6	166		
Water Main Breaks * 48-inch, ** 36-inch transmission line	39	7	5	9	2	2	0	5	2	2	5	39		
Sewer Repairs includes storm sewer repairs	12	0	4	2	2	1	0	0	2	1	0	12		
Valves Repair/Replaced	24	0	8	2	4	3	4	1	1	1	0	24		
MH Repairs (* = includes vault)	59	3	7	4	2*	8	11	4	8	9	5	59		
Hydrant Replacements/Installs	24	1	0	1	8	3	1	2	3	1	4	24		
Hydrant Repairs	0	0	0	0	0	0	0	0	0	0	0	0		
Service Terminations	17	1	2	0	1	3	0	3	1	2	4	17		
Service Repairs	57	4	5	4	2	10	9	2	5	8	8	57		
Basin Repairs	125	12	5	8	12	13	14	12	22	16	11	125		
Frozen Service	0	0	0	0	0	0	0	0	0	0	0	0		
Curb Box and Rod replaced	2	0	0	0	0	0	1	0	0	1	0	2		
Valve Box replaced	47	5	5	2	2	6	10	3	9	1	4	47		
Install Valve	14	2	0	0	2	1	2	0	4	0	3	14		
Sewer PM	288875	20827	13697	21968	26339	51494	47507	32758	31604	25625	17056	288875		
LF Camera Inspected	14277	1818	1432	859	456	1912	2678	2233	1770	1119	0	14277		
Leak Detection	1143	108	63	72	104	183	123	74	173	110	133	1143		
Blocks Tested	24	5	1	2	2	3	1	4	2	3	1	24		
Leaks Detected														
Orions Installed														
Actual YTD	847	62	78	123	25	25	46	61	224	101	102	847		

well over goal
at goal
caution
unacceptable - corrective action required

Annual Goal

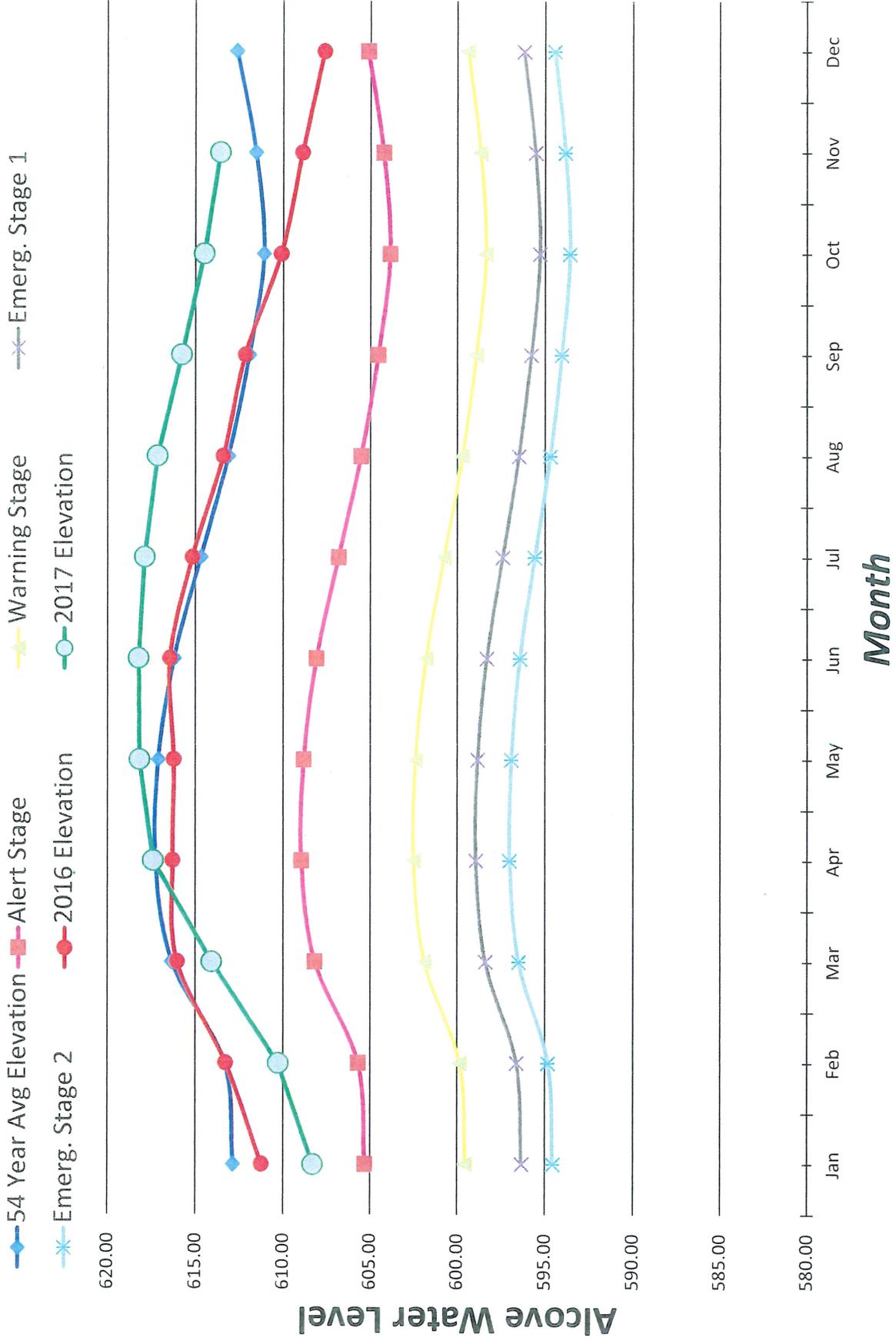
Department of Water and Water Supply - 2017 Key Performance Indicators and Critical Numbers Dashboard														
Parameter	Annual Goal or YTD	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
		well over goal at goal caution unacceptable - corrective action required												
Alcove Elevation (first of month)	MTD/YTD	608.31	610.27	614.06	617.38	618.16	618.21	617.87	617.14	615.76	614.48	613.57		
% capacity	83.5%	65.9%	72.2%	85.2%	97.6%	100.00%	100.00%	99.50%	96.69%	91.47%	86.75%	83.47%		
% average month (period of record)	109.7%	81.4%	87.4%	90.7%	100.00%	104.00%	108.00%	113.75%	119.04%	128.71%	115.85%	109.71%		
Water Produced														
Monthly total (million gallons)	5339.422	591.334	478.598	509.274	520.110	537.626	518.094	553.859	574.759	536.925	518.843			5339.422
Daily average (MGD)	17.559	19.075	17.093	16.428	17.337	17.343	17.270	17.866	18.541	17.897	16.737			17.559
ACSD monthly avg flow (MGD)														
contracted flow	27 MGD	23.09	23.60	23.88	26.94	26.77	23.08	20.28	19.27	17.51				
total		26.84	27.48	27.85	30.84	31.11	26.90	23.99	23.22	21.44				

week budget OT\$ weekly OT\$

week	budget OT\$	weekly OT\$
1-Jan	\$11,154	\$17,041
8-Jan	\$11,154	\$7,762
15-Jan	\$11,154	\$11,149
22-Jan	\$11,154	\$6,758
29-Jan	\$11,154	\$10,953
5-Feb	\$11,154	\$14,565
12-Feb	\$11,154	\$11,908
19-Feb	\$11,154	\$11,251
26-Feb	\$11,154	\$10,962
5-Mar	\$11,154	\$6,550
12-Mar	\$11,154	\$12,964
19-Mar	\$11,154	\$8,816
26-Mar	\$11,154	\$11,096
2-Apr	\$11,154	\$9,935
9-Apr	\$11,154	\$8,807
16-Apr	\$11,154	\$8,993
23-Apr	\$11,154	\$10,726
30-Apr	\$11,154	\$10,376
7-May	\$11,154	\$7,045
14-May	\$11,154	\$10,998
21-May	\$11,154	\$9,427
28-May	\$11,154	\$14,352
4-Jun	\$11,154	\$11,369
11-Jun	\$11,154	\$10,827
18-Jun	\$11,154	\$9,832
25-Jun	\$11,154	\$8,100
2-Jul	\$11,154	\$11,346
9-Jul	\$11,154	\$7,687
16-Jul	\$11,154	\$8,839
23-Jul	\$11,154	\$9,351
30-Jul	\$11,154	\$8,344
6-Aug	\$11,154	\$8,795
13-Aug	\$11,154	\$9,488
20-Aug	\$11,154	\$11,272
27-Aug	\$11,154	\$10,005
3-Sep	\$11,154	\$11,595
10-Sep	\$11,154	\$7,949
17-Sep	\$11,154	\$9,456
24-Sep	\$11,154	\$7,640
1-Oct	\$11,154	\$5,424
8-Oct	\$11,154	\$11,626
15-Oct	\$11,154	\$9,896
22-Oct	\$11,154	\$9,251
29-Oct	\$11,154	\$7,625
5-Nov	\$11,154	\$10,871
12-Nov	\$11,154	
19-Nov	\$11,154	
26-Nov	\$11,154	
3-Dec	\$11,154	
10-Dec	\$11,154	
17-Dec	\$11,154	
24-Dec	\$11,154	



Alcove Critical Water Levels 2016 - 2017



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Water, Bureau of Flood Protection and Dam Safety
625 Broadway, Albany, New York 12233-3504
P: (518) 402-8185 | F: (518) 402-9029
www.dec.ny.gov

Certified Mail – Return Receipt Requested

October 5, 2017

William Simcoe, P.E., Deputy Commissioner
City of Albany – Dept. of Water & Water Supply
10 North Enterprise Drive
Albany, NY 12204

Re: **Notice of Hazard Class Change to: Class C – High Hazard**
Notice of Condition Rating: Unsound, Deficiency Recognized
Rensselaer Lake Dam
DEC Dam ID#: 208-4567
City of Albany, Albany County

Dear Mr. Simcoe:

I have reviewed and accept the Engineering Assessment (EA) report for the above referenced dam, dated June 23, 2017, as developed by Schnabel Engineering of New York, under the supervision of Gregory J. Daviero, NY P.E. license # 076824. The following are more specific comments on the EA:

1. Page 32, Section 10, Item 3, 1st bullet. I suggest that the trees and brush be cut and the tops removed as “ordinary maintenance,” but that the larger stumps be left in place until the remediation of the dam is performed.
2. Page 35, Section 11.1, Item 1. The auxiliary spillway channel should be cleared of trees and woody vegetation and the channel shaped so that flow is directed away from the toe of the dam.
3. Page 38, Section 11. A proposed schedule for the remediation of the dam has not been included. However, the City has provided separately a copy of the Five Year Capital Improvement Program (2017 – 2021), which shows for this dam: tunnel grouting and preliminary design in 2017; detailed design in 2018; and construction in 2019. This schedule is acceptable. I presume that Permit Application will be made late in 2018. I suggest that you allow 3 to 4 months in your schedule between the submission of the initial Application and Permit issuance.
4. Appendix E, DVD with supporting data. I did not find the supporting time of concentration calculations. Please include all supporting calculations with the Permit Application.

ALBANY CITY WATER BOARD
CAPITAL IMPROVEMENTS
11/17/2017 Summary

GL No. 8350	Project	2017 Proposed Budget	2017 Encumbered	Vendor	Asset	Paid to Date	Notes
7511	Supply Reservoir	\$ 170,000	\$ 107,200			\$ 12,382	
			\$ 73,400	Schnabel	Alcove Reservoir Gate	\$ 12,382	
			\$ 13,800	Ryan-Biggs	Alcove Farm House Structural Repairs		
			\$ 20,000	Schnabel	Albany Dams		
7512	Supply Conduit	\$ 15,000	\$ 9,900				
			\$ 9,900	Schnabel	Tivoli Lake Dam Hazard Class Assessment		
7530	Feura Bush Filtration Plant	\$ -	\$ -				
7540	Distribution System	\$ 700,000	\$ 833,932			\$ 9,352	
			\$ 9,620	Schnabel	Alcove Gatehouse - Underwater Investigation		
			\$ 4,452	O'Brien & Gere	Albany-Colonie Interconnection Funding Assistance		
			\$ 90,960	Ross Valve	24" Pressure Reducing Valve	\$ 4,452	
			\$ 4,900	Bethlehem Land Survey	Field Survey- Corridor Survey on Hackett Blvd.		
			\$ 724,000	Peter Luizzi and Brothers	Hackett Blvd. Water Main Replacement	\$ 4,900	
7555	Loudonville Reservoir	\$ 290,000	\$ 29,000			\$ 5,052	
			\$ 29,000	Schnabel	Loudonville Reservoir Dam- Engineering Assessment	\$ 5,052	
7556	Pumping Stations - Water	\$ 100,000	\$ -				
7570	Engineering Fees-Water	\$ 100,000	\$ 61,283			\$ 56,941	
			\$ 11,283	O'Brien & Gere	Engineering Service	\$ 11,283	
			\$ 50,000	Arcadis	Engineering Service	\$ 45,658	
7580	Erie Blvd Facility	\$ 100,000	\$ -				
7590	Contingency - Water	\$ 15,000	\$ -				
7595	Computers/ Meters	\$ 320,000	\$ 77,388			\$ 2,855,222	\$5949 was the original 2016 work authorization
			\$ 324	Hewlett Packard	Workstations	\$ 324	
			\$ 2,531	B & H Photos	Laptops and Monitors	\$ 2,531	
			\$ 8,292	GCS	Smart covers- Park Ave		
			\$ 4,311	Hewlett Packard	Workstations		
			\$ 61,930	GCS	Phase II SCADA System		
7610	Sewer Separation	\$ 100,000	\$ -				
7620	Sewer Rehabilitation	\$ 750,000	\$ 476,040			\$ 339,224	
			\$ 32,500	Kenyon Pipeline	18" CIPP Lining	\$ 32,500	
			\$ 4,510	Davey Tree Expert	Tree Removal	\$ 4,510	
			\$ 52,170	Albany WinWater	Livingston Ave Storm Sewer	\$ 50,354	
			\$ 57,000	Keller	Par Circle	\$ 57,000	
			\$ 194,860	Keller	Marlette Place Sewer Separation	\$ 194,860	
			\$ 91,000	Barton & Logudice	Merline Ave-Green Infrastructure/Storm Sewer Separation		
			\$ 44,000	Arcadis	Brick Chimney and Water System Blow-off Structure		
7630	Pumping Stations	\$ 150,000	\$ 34,825			\$ 11,143	
			\$ 34,825	General Control Systems	Change Order	\$ 11,143	
7640	Engineering Fees-Sewer	\$ 100,000	\$ 31,000			\$ 18,206	
			\$ 31,000	Arcadis	Big C - sewer condition assessment	\$ 18,206	
7650	Contingency - Sewer	\$ 15,000	\$ 0				
			\$ 0	Arcadis	Sewer Condition Assessment - Big C Regulator		
7670	Overflows	\$ 75,000	\$ 72,155			\$ 30,271	
			\$ 30,271	Albany Pool Communities	Watervliet project- Route 32 corridor and green Infrastructure	\$ 30,271	
			\$ 41,884	Albany Pool Communities	LTCP program/admin expenses		
Totals		\$ 3,000,000	\$ 1,732,723			\$ 485,426	

Albany Water Board
Arcadis Engineering Report
Date: November 17, 2017

Upcoming LTCP Projects\Dates

- **Big C Disinfection and Floatables Facility** - A satellite treatment facility that will provide CSO controls for flows up to 75 mgd to reduce floatable and fecal coliform discharges to the Hudson River. Begin SEQR Process 2/1/2018.

Arcadis Projects

- **Five Year Capital Improvement Plan** – Draft complete.
- **Computerized Maintenance Management System** – Arcadis facilitated Requests for Information for CMMS vendors and 11 vendors responded. Arcadis will soon be assisting with submitting Requests for Proposals.
- **Stevens Farm Erosion** – Arcadis has developed a conceptual design and cost estimate to address erosion occurring in the vicinity of a transmission main.
- **Asset Management Plan** – Provided final copy of the Wastewater Asset Management Plan. The plan will soon be submitted to the NYSDEC in accordance with the LTCP. Final updates to the combined Water and Wastewater Asset Management Plan will soon be provided.
- **Brick Sewer Chimney Inspections** – Arcadis will be inspecting large diameter brick sewer chimneys and developing a retrofit design that will take the load from vehicle traffic off the chimneys.

Hazard Class

Based on the findings of the EA, the Department hereby changes the hazard class of the Rensselaer lake Dam from Class B – Intermediate Hazard to **Class C – High Hazard**.

Condition Rating

Based on the findings of the EA, this dam has inadequate spillway capacity and inadequate slope stability. The Department hereby assigns a **Condition Rating of “Unsound, Deficiency Recognized”** to the Rensselaer Lake Dam. This Condition Rating means that the dam has deficiencies for loading conditions that may realistically occur, and dam rehabilitation should move forward as soon as possible. Lowering the reservoir should be implemented as an interim safety measure. Please note that the owners of a dam with a condition rating of Unsound are in violation of 6 NYCRR Part 673 and Environmental Conservation Law (ECL), Section 15-0507.

If you have any questions regarding the above, or the Dam Safety program in general, please contact me by phone at (518) 402-8145, or by email at scott.braymer@dec.ny.gov.

Sincerely,



Scott M. Braymer, P.E.
Professional Engineer 1
Dam Safety Section

cc: Bill Simcoe, City of Albany, wsimcoe@albanyny.gov
Greg Daviero, Schnabel, gdaviero@schnabel-eng.com
Warren Shaw, DEC Dam Safety
Tom Blanchard, DEC Region 4, Dam Safety Representative

L:\DOW\BFPDS\DAM SAFETY\Dam Inventory\Region 4\Albany\AlbanyDams\208-4567RensselaerLake\Letter.Dam.208-4567.2017-10-3.RensselaerLakeDam.EAreview.NO CR.HCchange.docx



November 17, 2017

Joseph E. Coffey, Jr., P.E.
Commissioner
Albany Water Board
10 North Enterprise Drive
Albany, NY 12204

Attn: Mr. William Simcoe, P.E.

**Re: Professional Services in support of the Albany Water Board Sewerage Right to Know Act Grant
CHA Proposal No: X-2017-P1**

Dear Mr. Coffey:

Per your request, CHA Consulting, Inc. (CHA) is pleased to provide this proposal to the Albany Water Board (AWB) to provide professional services in support of the executed Sewerage Right to Know Act (SRTKA) grant, as administered through the New York State Department of Environmental Conservation (DEC). Under the proposed scope of services, CHA will execute agreements with the necessary SubContractor(s) for the procurement, installation and commissioning of the recommended equipment. CHA recognizes that the SRTKA grant requires a 30% MWBE goal for the services performed under this agreement.

The AWB intends to install monitoring equipment at prioritized combined sewer outfalls (CSOs) in order to maximize the available grant funding of \$50,000. In addition to the services prescribed in support of the SRTKA grant, CHA has outlined supplemental services to advance the development of the AWB's monitoring and continuous monitoring and adaptive controls (CMAC). CHA's proposed scope of services, schedule and professional fees are discussed in more detail below for your consideration.

SCOPE OF SERVICES

Task 1 – Procurement, Installation and Commissioning of CSO Monitoring Equipment under the SRTKA Grant Agreement

For the purposes of this proposal, CSOs at Rensselaer (016), Bouck (013), Orange (026) and Quackenbush/Jackson/Livingston (030) have been prioritized based on the annual overflow volumes at these locations. Based on preliminary discussions with vendors, CHA will evaluate the use of LaserFlow or AccuPulse flow meters at the Rensselaer overflow as these meters are intended for use on

larger sewers. ISCO area-velocity and ultrasonic meters will be evaluated for use at the smaller overflows at Bouck, Orange and Quackenbush/Jackson/Livingston.

It is CHA's understanding that the equipment installed will need to be capable of monitoring and supporting CSO reporting requirements in regards to the duration and volumes of CSOs. The monitoring and reporting equipment will allow the AWB to better meet the reporting requirements under the SRTKA; as well as post advisories and better inform the general public in regards to water quality conditions in the Hudson River.

CHA will provide project management services, inclusive of: periodic progress meetings with the AWB; project invoicing; grant and/or financing support documentation; and subcontracting with MWBE firms for the procurement, installation and commissioning of the recommended equipment.

Task 2 – Supplemental Development of the AWB's monitoring and Continuous Monitoring and Adaptive Controls (CMAC)

Under this task, CHA will evaluate options for the installation of additional monitoring equipment at separation manhole #3; as well as the outfall from the Elberon Place separated stormwater system which discharges into Washington Park Lake for future calibration and refinement of the CMAC. Furthermore, the equipment installed at the Rensselaer overflow will need to be capable of communicating with the City's SCADA and/or CMAC systems in order to control the release of flows at storage facilities (e.g., Hansen, Ryckman, Washington Park Lake) as well as the future screening and disinfection facility in Lincoln Park. Under this task, CHA will coordinate the procurement, installation and commissioning of the recommended equipment. Furthermore, CHA will subcontract with OptiRTC for the necessary programming and incorporation of control language for the storage facilities.

SCHEDULE

CHA is prepared to begin this work immediately upon Notice to Proceed from the AWB. The following critical milestone dates have been established for the project:

Milestone Description	Milestone Date
Completion of the evaluation and equipment specification	December 29, 2017
Solicitation of bids from pre-qualified vendors	January 26, 2018
Procurement, installation and commissioning of equipment	April 27, 2018

PROFESSIONAL FEES

CHA proposes the following budgetary amounts in regards to this assignment. CHA will not exceed these amounts without specific written authorization from the AWB.



Task Description	Fee & Expenses
Task 1 – Procurement, Installation and Commissioning of CSO Monitoring Equipment under the SRTKA Grant Agreement	\$55,556
CHA Professional Fees	\$5,000
Budget for procurement, installation and commissioning of the equipment	\$50,556
Task 2 – Supplemental Development of the AWB’s monitoring and Continuous Monitoring and Adaptive Controls (CMAC)	\$32,500
CHA Professional Fees	\$2,500
Subcontract with OptiRTC	\$5,000
Budget for procurement, installation and commissioning of the equipment	\$25,000
Total Budgeted Professional Fee & Expenses	\$88,056

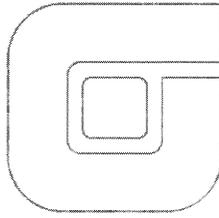
We would like to thank the Albany Water Board for consideration of CHA Consulting, Inc. to support this important and innovative project. If the proposal is acceptable, please provide CHA notification in order for us to expedite this work. Please do not hesitate to contact me at (518) 453-3910 or mmiller@chacompanies.com if you have any questions.

Sincerely,



Michael F. Miller, P.E.
Vice President





OBG | There's a way

November 10, 2017

Mr. Joseph E. Coffey, Jr., PE, Commissioner

City of Albany
Department of Water & Water Supply
10 North Enterprise Drive
Albany, NY 12204

RE: Task Order - Albany/Colonie Interconnections Design and Construction Phase Services

FILE: 11466/44121

Dear Joe:

O'Brien & Gere, Engineers, Inc. (OBG) is pleased to provide the City of Albany Department of Water & Water Supply (Albany Water) with this task order proposal in connection with the Agreement between Albany Water and OBG for Professional Engineering Services, executed February 12, 2015. This proposal has been developed based on our October 23, 2017 meeting with Albany Water and the Town of Colonie; Division of Latham Water (Latham Water) and our Engineering Report Dated December 2016.

To facilitate your review, this proposal is organized as follows:

- Project Understanding
- Scope of Services
- Schedule
- Fee

PROJECT UNDERSTANDING

Albany Water and Latham Water's distribution systems are located adjacent to each other. Both systems are in need of interconnections to provide water during emergencies. The feasibility of the four potential bi-directional interconnections were evaluated as part of a study completed in 2016. The results from that study were presented in an Engineering Report dated December 2016.

Albany Water and Latham Water have mutually agreed to implement the recommended interconnections at Loudonville Reservoirs and New Karner Road. Albany Water and Latham Water each received grant funding through the New York State Infrastructure Improvement Grant program that will be used for implementation. Albany Water has agreed to retain the required engineering services for the design and construction support. Fifty-percent of the cost for these services will be reimbursed by the Latham Water.

In general the project will consist of the following:

- Approximately 4,000 ft. of 24" diameter transmission pipeline at Loudonville
- Approximately 3,500 ft. of 16" diameter transmission pipeline at New Karner Road
- Associated isolation valves
- Preparation of sites for placement of engine-driven rental pumping equipment.



94 New Karner Road, Suite 106
Albany, NY 12203



p 518-724-7272
f 518-869-2945



OBG
www.obg.com

SCOPE OF SERVICES

OBG will provide the following scope of services for the additional project components outlined above:

Task 1 – Kick Off Meeting

Upon receipt of authorization to proceed, O'Brien & Gere's project manager and lead project engineer will meet with City and Town personnel in a project kick-off meeting. During this meeting, project scope issues will be discussed, project schedule and milestones will be reviewed, lines of communication will be established, and existing information needed for design and funding plan will be provided to O'Brien & Gere. O'Brien & Gere will prepare a written summary of this meeting.

Task 2 – Town Approval and Funding Agency Support

OBG will amend its Engineering Report to include the financing plan and estimated impact on user fees. OBG will attend a public hearing at the scheduled Town Board Meeting to support the completion of the Section 202B of Town Law.

OBG will also provide administrative support to fulfill the NYSEFC grant and loan funding requirements including quarterly preparation and updates to the following:

- Attachment 1 -EEO Policy Statement
- Attachment 2 -EEO Workforce Employment Utilization Report
- Attachment 3 -Monthly MWBE Contractor Compliance Report
- Attachment 4 -MWBE Utilization Plan
- Attachment 5 -MWBE Waiver Request
- Attachment 6 -EPA Form 6100-2 - DBE Subcontractor Participation Form
- Attachment 7 -EPA Form 6100-3 - DBE Subcontractor Performance Form
- Attachment 8 -EPA Form 6100-4 - DBE Subcontractor Utilization Form
- Attachment 9 -Lobbying Certification

Task 3 – Survey and Subsurface Investigation

OBG will subcontract Ryan Biggs | Clark Davis Engineering & Surveying P.C. (a WBE firm) to provide survey services. The City will provide surface location of major City utilities on the Loudonville Reservoir Site. All other underground utilities to be located by Dig-Safely or a subcontractor of Ryan Biggs. The survey will include:

- Available property information
- Data on existing utilities
- Base mapping prepared at 40 scale

OBG will subcontract Parratt-Wolff to provide subsurface investigation services to characterize the soil conditions along the proposed pipeline alignments. Borings will be performed at increments of approximately 500 ft. to a depth of ten feet or refusal.

Task 4 – Design and Contract Documents

OBG will perform design and prepare detailed contract drawings and Project Manual for the recommended improvements in such form and detail as to permit public bidding under two separate prime construction



contracts (General and Electrical) in accordance with the requirements of the Infrastructure Improvement Grant and mutually acceptable provisions of the Town and City.

- Two (2) meeting will be conducted with the City and Town to discuss and review progress at approximately the 60% and 90% stage of design completion.
- Preparation of Storm Water Pollution Prevention Plan (SWPPP). Prepare the NOI.
- Preparation of traffic control plans
- Plans and Profiles at 40 scale horizontal and 4 scale vertical
- Detail sheets including details for erosion control
- Project Manual including bidding and contract documents and specifications
- The estimate of construction costs will be updated, based on the final (i.e., as bid) contract documents.
- Submit the plans and technical specifications to Albany County Health Department for review and approval.

Task 5 – Bidding Assistance

OBG will provide assistance to the City and Town during the bid period as follows:

- We anticipate that contract documents will be distributed to prospective bidders and vendors electronically, and that reproduction costs will be paid directly by the requesting contractors and vendors; this proposal includes an allowance of \$1000 to cover website hosting fees and provide reproduction of paper documents for transmittal to the City and Town.
- Prepare and distribute addenda to the contract documents (assume one addendum), if required to address questions received during the bid period. It is assumed that addenda will be distributed to plan holders electronically via email.
- Attend bid opening, analyze bids, and make recommendation to assist the City and Town in evaluating bids and in assembling and awarding contracts for the work.

For purposes of this proposal, we have assumed that no unusual circumstances occur during bidding, such as a bid protest, withdrawal of the low bidder, or similar occurrence. The Bidding phase will be considered complete upon commencement of the Construction phase.

Task 6 – Construction Support Services

OBG will provide support during the construction phase as follows:

- Compile contract documents for signature by the parties.
- *Pre-Construction Conference:* Participate in a Pre-Construction Conference prior to commencement of Work at the Site.
- *Schedules:* Receive, review, and determine the acceptability of schedules that Contractor is required to submit to Engineer, including the Progress Schedule, Schedule of Submittals, and Schedule of Values.
- *Review Contractor's payment requests:* Review monthly payment requests.
- *Coordinate and attend regular job meetings.* Biweekly meetings of two hour duration are anticipated.
- *Clarifications and Interpretations; Field Orders:* Issue necessary clarifications and interpretations of the Contract Documents, as appropriate to the orderly completion of Contractors' work. Such clarifications and



interpretations will be consistent with the intent of and reasonably inferable from the Contract Documents. Subject to any limitations in the Contract Documents, Engineer may issue field orders authorizing minor variations in the Work from the requirements of the Contract Documents.

- *Change Orders and Work Change Directives:* Recommend change orders and work change directives to the Owner, as appropriate, and prepare change orders and work change directives as required. Change orders included in the base scope are limited to those necessary for completing the project in accordance with the design intent.
- *Shop Drawings and Samples:* Review or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such reviews and approvals or other action will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto. Engineer will meet Contractor's submittal schedule that Engineer has accepted. Engineer will provide Owner with electronic (PDF) copies of all reviewed shop drawings and other submissions of the contractors, for its records.
- *Contractor's Completion Documents:* Receive, review, and transmit to Owner maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance required by the Contract Documents, certificates of inspection, tests and approvals, Shop Drawings, Samples and other data, and transmit the annotated record documents which are to be assembled by Contractor in accordance with the Contract Documents to obtain final payment.
- *Substantial Completion:* Promptly after notice from Contractor that Contractor considers the entire Work ready for its intended use, in company with Owner and Contractor, visit the Project to determine if the Work is substantially complete. If after considering any objections of Owner, Engineer considers the Work substantially complete, Engineer shall deliver a certificate of Substantial Completion to Owner and Contractor.
- *Record Drawings:* Prepare Record Drawings showing appropriate record information based on Project annotated record documents received from Contractor, and furnish such Record Drawings to Owner.
- *Duration of Construction Phase:* The Construction Phase will commence with the execution of the first Construction Contract for the Project or any part thereof and will terminate upon written recommendation by Engineer for final payment to Contractors. If the Project involves more than one prime contract, then Construction Phase services may be rendered at different times in respect to the separate contracts. Engineer will be entitled to an equitable increase in compensation if Construction Phase services (including Construction Support Services and Observation services) are required after the original date for completion and readiness for final payment of Contractor as set forth in the Construction Contract.
- *Limitation of Responsibilities:* Engineer will not be responsible for the acts or omissions of any Contractor, Subcontractor or Supplier, or other individuals or entities performing or furnishing any of the Work, for safety or security at the Site, or for safety precautions and programs incident to Contractor's Work, during the Construction Phase or otherwise. Engineer will not be responsible for the failure of any Contractor to perform or furnish the Work in accordance with the Contract Documents.

Task 7 – Construction Observation

OBG will subcontract Ryan Biggs | Clark Davis Engineering & Surveying P.C. (a WBE firm) to provide inspection service to observe the work and progress and compliance with the SWPPP. SWPPP inspections will be completed weekly and after storm events. It is anticipated that inspection will be provided on a part-time basis of approximately 20 hours/week for 6 months, for a total of 480 hours.



Through the Inspector's observations of Contractors' work in progress and field checks of materials and equipment, Engineer will endeavor to provide further protection for Owner against defects and deficiencies in the Work. However, Engineer will not, during field checks or as a result of Inspector observations of Contractor's work in progress, supervise, direct, or have control over Contractor's Work, nor will Engineer have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by any Contractor, for security or safety at the Site, for safety precautions and programs incident to any Contractor's work in progress, or for any failure of a Contractor to comply with Laws and Regulations applicable to such Contractor's performing and furnishing of its work. The Engineer neither guarantees the performances of any Contractor nor assumes responsibility for Contractor's failure to furnish and perform the Work in accordance with the Contract Documents.

CLARIFICATIONS AND ASSUMPTIONS

- OBG assumes that the latest dam safety engineering assessment for the Loudonville reservoirs will be made available for our review.
- The entire project is anticipated to be completed within Town or City owned or controlled property. No easements are anticipated.

SCHEDULE

OBG will commence work upon receipt of written authorization. Based on authorization on November 17, 2017 OBG is committed to complete design by March 2018, to allow for bid in April 2018 with construction in June 2018 thru June 2019.

FEE AND TERMS

OBG will perform the scope of services described in this proposal for a not-to-exceed fee of \$400,000. Invoices will be prepared monthly, on the basis of the scheduled hourly billing rates plus expenses and subcontracted services. A breakdown of this fee by task is as follows:

Task/Description	Budget
Task 1 – Kick Off Meeting	\$5,000
Task 2 – Town Approval and Funding Agency Support	\$25,200
Task 3 – Survey and Subsurface Investigation	\$106,500
Task 4 – Design and Contract Documents	\$117,400
Task 5 – Bidding Assistance	\$10,200
Task 6 – Construction Support Services	\$78,100
Task 7 – Construction Observation	\$57,600
Total	\$400,000

Services will be performed in accordance with the Professional Engineering Services Agreement and Addendum dated February 12, 2015.

If this proposal is acceptable, please countersign and return a copy of the proposal to signify Albany Water's acceptance and serve as authorization for OBG to proceed.



We appreciate the opportunity to provide engineering services to Albany Water and look forward to working with you on this important project. Should you have any questions regarding this proposal, please do not hesitate to contact Brian Edwards at (518) 724-7257 or me at (315) 956-6471.

Very truly yours,
O'BRIEN & GERE ENGINEERS, INC.

Proposal accepted,
CITY OF ALBANY



Richard E. Gell, PE
Sr. Project Manager

Authorized Signature **Date**

Task Order Assignment Number: _____

Cc: Mr. John Frazer, Latham Water
Mr. Brian G. Edwards, OBG
Ms. Jennifer Olivo, OBG
Mr. Stephen D. Delano, OBG



PROFESSIONAL ENGINEERING SERVICES - SUMMARY

Task/Description Task Order No.	Level IV		Level III.2		Level III.1		Level III.2		Level III.1		Level I.3		Subcontract Expenses and Directs	Total Cost
	Officer	Manager 2	Manager 1	Engineer 3	Engineer 2	Engineer 1	Technician 3	Technician 2	Technician 1	Assistant 3	Hours	Labor Cost		
Task 1 Kick Off Meeting														
Kick Off Meeting	1							16			4	29	\$ 4,575	\$ 425
Task 2 Town Approval and Funding Agency Support														
202B														
Funding Agency Support	0.5											8.5	\$ 1,342	\$ 98
												160	\$ 23,760	\$ 23,760
												0	\$ -	\$ -
Task 3 Survey and Subsurface Investigation														
Survey												8	\$ 1,624	\$ 85,000
Subsurface Investigation												16	\$ 2,616	\$ 13,000
Geotechnical and Dam Safety Engineering												28	\$ 4,188	\$ 72
Task 4 Design and Contract Documents														
Process/PM														
Site Civil	4											228	\$ 31,872	\$ 1,000
Structural												456	\$ 55,488	\$ 1,000
Electrical												60	\$ 7,068	\$ -
Geotechnical and Dam Safety Engineering												85	\$ 10,511	\$ -
												60	\$ 10,380	\$ 81
Task 5 Bidding Assistance														
Bidding Assistance														
												68	\$ 9,220	\$ 980
Task 6 Construction Support Services														
Process/CM														
Site Civil	4											264	\$ 36,280	\$ 1,546
Structural												196	\$ 25,584	\$ -
Electrical												42	\$ 5,318	\$ -
												76	\$ 9,372	\$ -
Task 7 Construction Observation														
Inspection												0	\$ -	\$ -
												0	\$ -	\$ -
TOTAL HOURS	25.5	137	62	772	292	152	344	1784.5						
Hourly Billing Rate	\$235	\$203	\$183	\$144	\$112	\$97	\$108							
TOTAL FEE	\$5,993	\$27,811	\$11,346	\$111,168	\$32,704	\$14,744	\$35,432	\$239,198					\$ 160,802	\$ 400,000





Schnabel
ENGINEERING

November 10, 2017

Mr. William Simcoe, PE
Deputy Commissioner
Albany Water Department
10 North Enterprise Drive
Albany, NY 12204

Subject: Albany Dams 2017 Work Order Number 6, Geotechnical Site Explorations in Support of the Rehabilitation Design of Rensselaer Lake Dam, Albany Water Board, City of Albany, New York (Schnabel Reference 17P25018.00)

Dear Mr. Simcoe:

SCHNABEL ENGINEERING OF NEW YORK (Schnabel) is pleased to present this proposal to the Albany Water Board (AWB) to provide geotechnical site exploration and testing services to support the proposed dam safety rehabilitation project at Rensselaer Lake Dam. Upon your request, we are providing this proposal based on the findings of our June 2017 Engineering Assessment (EA) which identified various dam safety deficiencies including inadequate spillway capacity and low factors of safety for embankment stability, and potential for liquefaction of the embankment and foundation soils. The 2017 EA presented a proposed rehabilitation concept for modifications to the dam that are necessary to bring the dam into accordance with New York State Dam Safety regulations. The proposed modifications include construction of an earthen auxiliary spillway section to the northeast of the dam embankment, raising the crest of the dam and flattening the downstream slope, installation of internal seepage collection features, and improvements to the foundation soils downstream of the main embankment. The scope of services proposed herein includes conducting field exploration and testing activities to acquire additional and updated site-specific subsurface data necessary to develop a more detailed characterization of the existing conditions and to further develop the basis for the design of the rehabilitation project. These services will be performed under the professional engineering term contract awarded to Schnabel in December 2014 and executed in February 2015.

OBJECTIVE AND SCOPE OF SERVICES

The objective of the proposed services is to conduct a geotechnical exploration and testing program to obtain subsurface soil and piezometric data of the embankment and the underlying foundation materials to support the proposed rehabilitation of Rensselaer Lake Dam. Key elements and goals of the proposed field activities include:

- Geotechnical borings to characterize the embankment and foundation soils, and piezometric conditions including filling in data gaps from previous site explorations.

**Albany Water Board
Rensselaer Lake Dam – Geotechnical Explorations**

- Installation of temporary and permanent open standpipe piezometers at critical locations in the embankment and foundation to provide monitoring of piezometric and seepage conditions, especially of the known artesian pressures within the foundation soils below the embankment toe.

A previous exploration of the site was conducted circa 2004 by Gifford Engineering that included auger borings, installation of open-standpipe piezometers, and cone penetration test (CPT) soundings. The majority of the borings and soundings were located on the crest of the main dam with several additional borings located in the downstream abutments and at the embankment toe. The encountered subsurface conditions indicated the presence of loose and/or soft, potentially liquefiable materials within and below the embankment, as well as significant seepage with artesian pressures at the downstream toe. Our proposed exploration program will provide additional characterization on the extent of these problematic subsurface conditions that will be necessary for the design of the proposed rehabilitation project. Locations of proposed and historic borings and piezometers are shown on the attached Proposed Boring Layout Plan.

Our services will be performed under the supervision of a licensed Professional Engineer registered in the State of New York.

Our proposed scope of services includes:

Task 1 – Geotechnical Exploration

The scope of services for the subsurface field exploration will include drilling a total of 11 test borings as described in the following table. The boring locations are shown on the attached Proposed Boring Layout Plan.

Boring ID	Anticipated Depth (ft)	Anticipated Completion	Purpose
B-01	70	Open Standpipe with Roadbox	Characterize composition and depth of clay core and underlying foundation materials. Install new piezometer to validate existing instrumentation and seepage conditions.
B-02	65	Open Standpipe	Characterize embankment fill and underlying foundation materials, including soft, permeable alluvial stream channel and/or abutment terrace deposits. Install piezometers to monitor foundation seepage.
B-03	65	Open Standpipe	
B-04	50	Open Standpipe	Characterize foundation materials under the proposed embankment footprint, including the presence of soft or compressible alluvial and terrace deposits within the relict stream channel or abutments. Install piezometers to monitor foundation seepage.
B-05	80	Open Standpipe	
B-06	50	Open Standpipe	
B-07	30	Open Standpipe	Characterize the left abutment including identifying higher-permeability terrace foundation deposits.
B-08	30	Open Standpipe with Roadbox	Characterize embankment soil conditions, composition and depth of clay core, and seepage conditions along eastern edge of the lake.
B-09	30	Grout	
B-10	15	Grout	Characterize soil conditions in area of proposed excavation for the auxiliary spillway control section.
B-11	15	Grout	

**Albany Water Board
Rensselaer Lake Dam – Geotechnical Explorations**

We anticipate drilling a total of approximately 500 linear feet. The geotechnical drilling will be performed by our subcontractor, Parratt-Wolff, Inc., of East Syracuse, New York. Schnabel will provide a qualified representative to observe drilling operations, collect soil samples, perform visual classifications, and log the test borings. Standard Penetration Tests (SPTs) and split-spoon sampling (ASTM D1586) will be performed in the borings from the ground surface at continuous sampling intervals. Five-foot sampling depth intervals may be used in some of the borings depending on the location of the boring and encountered material. We will attempt to retrieve relatively undisturbed soil samples at selected depths in the test borings for laboratory soil strength, compressibility, and permeability testing of the embankment and foundation materials. Previous explorations by others at the site did not include collection of undisturbed samples for attempted soil mechanics testing. Schnabel field staff will provide daily email updates indicating the daily activities and the progress of the drilling program relative to the anticipated schedule.

Groundwater levels will be observed in the borings at the time of drilling. Open standpipe piezometers will be installed after completion of drilling in select borings. The piezometers will be set and sealed in embankment fill or foundation soils to measure pore water pressures at selected depths within the various strata. [Temporary piezometers are those located in areas to be buried with new embankment fill during the future proposed dam rehabilitation project. Prior to earth fill placement, the piezometers should be abandoned by fully sealing with cement-bentonite grout.] Borings that are not completed as piezometers will be sealed with grout via tremie method.

Existing Piezometer PZ-09 located near the toe of the embankment consistently reads between 1 and 2 ft of artesian head for the screened foundation interval at about 20 ft below ground surface. In addition, previous borings have encountered soft, saturated soils to depth within the foundation below and beyond the embankment downstream toe. Further characterization and monitoring of these conditions are important to determining cost-effective foundation mitigation and improvement methods for the dam rehabilitation project. We have attempted to plan for complications associated with drilling in artesian conditions; however, actual conditions encountered may require additional effort, methods, and/or time to safely and properly conduct and complete the proposed drilling activities.

Task 2 – Laboratory Testing

Geotechnical laboratory testing will be performed on selected soil samples obtained during the field exploration to aid in the characterization of the encountered materials and the development of engineering parameters, including soil strength and compressibility. The following maximum number and type of tests are proposed. Some adjustments may be made in the types and quantities of tests based on actual materials encountered and collected.

- 40 moisture content tests (ASTM D2216)
- 10 natural density and moisture content (ASTM D7263)
- 40 Atterberg limits tests (ASTM D4318)
- 36 grain-size distribution tests (ASTM D422)
- 4 grain-size distribution tests with hydrometer (ASTM D422)
- 4 specific gravity tests (ASTM D854)
- 3 to 4 three-stage series of consolidated-undrained triaxial compression tests with pore pressure measurements (ASTM D4767) on relatively undisturbed samples (if sampling is successful), or on remolded samples prepared to represent in situ conditions

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- 4 to 6 falling head hydraulic conductivity flexible wall tests (ASTM D5084) on relatively undisturbed samples (if sampling is successful)
- 2 to 3 one-dimensional consolidation tests (ASTM D2435) on relatively undisturbed samples (if sampling is successful)

We will retain soil samples from the subsurface exploration for 90 days beyond the submission of our report, unless other disposition is requested.

Task 3 – Geotechnical Data Report

Upon completion of Tasks 1 and 2, including collection of sufficient piezometric data from the new open-standpipe piezometers, we will prepare a Geotechnical Data Report (GDR) to summarize the results of the geotechnical exploration and laboratory testing programs. The GDR will generally include the following, subject to variations in the subsurface conditions and using data and information gathered from Tasks 1 and 2:

- Regional and site geology
- Site seismicity based on gridded data from USGS National Seismic Hazard Maps
- Soil boring logs
- SPT blow count data and in situ testing results
- Subsurface stratigraphy as encountered in the test borings and test pits
- Groundwater observations and piezometer readings
- Laboratory index testing results
- Laboratory soil mechanics testing results

The GDR will also incorporate relevant data from previous site explorations including the 2004 exploration by Gifford Engineering.

ASSUMPTIONS

We have assumed that AWB will provide rights of entry and access to the site. Any permits or permission required to drill the borings will be provided by others at no cost to us. We assume no limitations on work hours.

We have assumed that all aspects of the field exploration and testing programs will be able to be performed during one continuous mobilization by our drilling subcontractor.

We have located borings based on our understanding of the site features and access, and assume the boring locations will be accessible with ATV track-mounted drilling equipment. Progress of site work may be dependent upon weather and ground conditions, or other factors beyond our control.

Some damage to the ground surface, trees, and bushes may result from drilling access and operations. We will attempt to reduce any such damage, but no restoration is included other than to complete the borings as open standpipe piezometers with above-grade risers, or surface covers and concrete pads, and seal the remaining borings with grout. Excess drilling spoils will be disposed of on-site at a location designated by AWB.

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We will locate borings in the field with hand-held GPS hardware or by measuring offsets from structures (manholes, wells, outlets) located along the embankment. Ground surface elevations at the boring locations will also be estimated from available LiDAR / DEM survey data of the site.

Our drilling subcontractor, Parratt-Wolff, will contact *Dig Safely New York* prior to mobilizing any drilling equipment to the project site. *Dig Safely* will contact the appropriate public utility companies (or their contract locators) to mark their utilities on the project site. Between 48 and 72 hours are typically required to clear utilities on a site. We will not be responsible for damage or disruption of utilities or other subsurface features not indicated to us in advance.

The public utility companies will not mark private utilities on a site. Private utilities include all utilities between the public utilities' metering devices and any existing facility on site; all storm and sanitary sewers on site; buried electric lines to light poles, signs, or other electrical devices; irrigation lines; etc. Location of private utilities is the responsibility of the Property Owner (i.e., Albany Water Department) according to *Dig Safely New York*. The Property Owner should provide plans showing the locations of all private utilities, mark the private utilities, or arrange for a private utility locator service.

EXCLUSIONS

Services not specifically identified above are not included in the scope of services under this agreement. The following services are not included in our proposed scope, but if these services are deemed necessary, we can submit proposals at your request:

- Working hours other than Monday to Friday, 7 AM to 6 PM
- Multiple site mobilizations
- Long-term monitoring or management of collected piezometric data
- Design of the recommended rehabilitation project
- Preparation of drawings, specifications, and design submittals
- Geotechnical and materials observation and testing during construction
- Consultation during construction

SCHEDULE

We are prepared to initiate this work upon receipt of this executed Work Order and will endeavor to complete it in a timely manner. Please be advised that the overall schedule may be impacted by the availability and outstanding commitments of our subcontractor. We have anticipated a total duration for the on-site field explorations of 13 days (9-hrs/day). If, due to the actual subsurface conditions encountered, any of the assumed items discussed above, or other extenuating factors beyond our control, the field exploration program is anticipated to exceed 13 days, we will immediately contact the AWB to discuss the project progress and seek approval for additional funding to continue the field exploration and testing program beyond the 13-day duration.

ESTIMATED FEES

The estimated fee for the proposed scope of services is \$138,000.00. A task-by-task breakdown of this estimated fee is provided in the following table. All work is proposed on a time and materials basis in

**Albany Water Board
Rensselaer Lake Dam – Geotechnical Explorations**

accordance with the February 2015 term contract. Services will be billed for the actual hours and/or tests. We will not exceed the estimated fee without prior authorization.

Task No.	Task Name	Subtotal	Task Fee
1	Geotechnical Exploration		\$97,000
	Schnabel Labor	\$33,700	
	Drilling Subcontractor	\$63,300	
2	Laboratory Testing of Sampled Materials		\$31,200
3	Geotechnical Data Report		\$9,800
ESTIMATED TOTAL FEE			\$138,000

This fee is for the specific scope of services detailed herein. If the conditions encountered during our subsurface exploration are different from those anticipated, we may recommend that additional borings and/or tests be performed. We will base the fee for any additional services on our current unit prices at the time you authorize the services.

2017 WORK ORDER NUMBER 6 AUTHORIZATION

Thank you for the opportunity to submit this proposal. Your acceptance of 2017 Work Order Number 6 can be facilitated by signing and returning a copy of this letter, which, with our professional engineering term contract executed in February 2015, will form our agreement for these services. Please do not hesitate to contact me at 518-348-8580, or via email at gdaviero@schnabel-eng.com, should you have any questions or need additional information.

Sincerely,

SCHNABEL ENGINEERING OF NEW YORK



Gregory J. Daviero, PhD, PE
Principal

KST:BPT:GJD:hcf

Attachment:

- (1) Proposed Boring Layout Plan

**Albany Water Board
Rensselaer Lake Dam – Geotechnical Explorations**

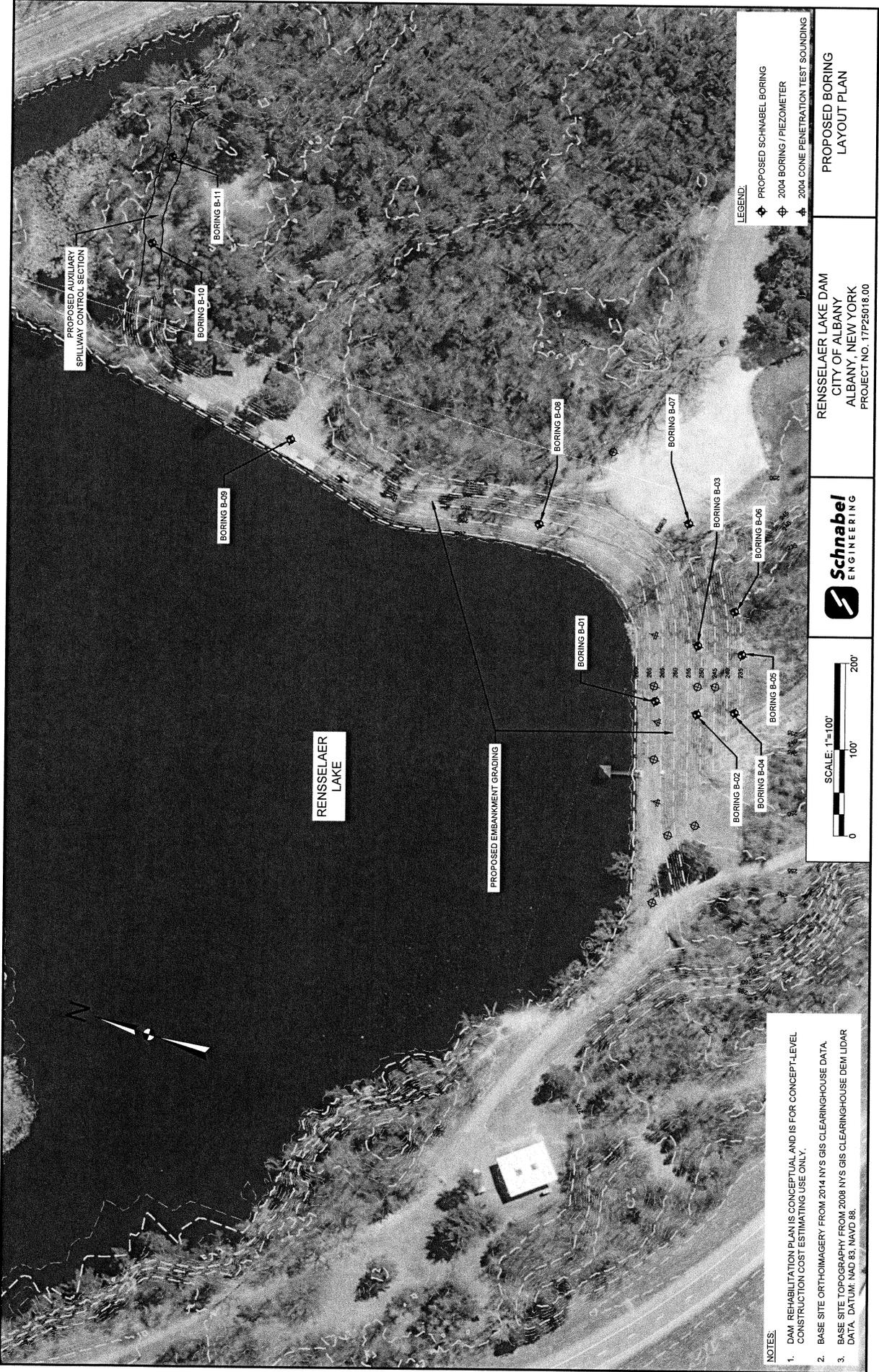
The terms and conditions of 2017 Work Order 6, including the referenced February 2015 contract, are:

ACCEPTED BY: _____ **ALBANY WATER BOARD** _____

SIGNATURE: _____

PRINTED NAME: _____

TITLE: _____ DATE: _____



PROPOSED AUXILIARY
SPILLWAY CONTROL SECTION

BORING B-10

BORING B-09

RENSSELAER
LAKE

PROPOSED EMBANKMENT GRADING

BORING B-01

BORING B-08

BORING B-07

BORING B-03

BORING B-06

BORING B-05

BORING B-02

BORING B-04

LEGEND:

◆ PROPOSED SCHINABEL BORING

⊕ 2004 BORING / PIEZOMETER

⊕ 2004 CONE PENETRATION TEST SOUNDING

RENSSELAER LAKE DAM
CITY OF ALBANY
ALBANY, NEW YORK
PROJECT NO. 17P25016.00



NOTES:

1. DAM REHABILITATION PLAN IS CONCEPTUAL AND IS FOR CONCEPT-LEVEL CONSTRUCTION COST ESTIMATING USE ONLY.
2. BASE SITE ORTHOIMAGERY FROM 2014 NYS GIS CLEARINGHOUSE DATA.
3. BASE SITE TOPOGRAPHY FROM 2008 NYS GIS CLEARINGHOUSE DEM/LIDAR DATA. DATUM: NAD 83, NAVD 83.



November 13, 2017

William D. Simcoe, P.E.
Deputy Commissioner
City of Albany Department of Water and Water Supply
10 North Enterprise Drive
Albany, New York 12204

Re: Sanitary Sewer Evaluation – Krum Kill Sanitary Sewer & Dillenback Pump Station
Proposal for Engineering Services
File: P702.3074

Dear Deputy Commissioner Simcoe:

Barton & Loguidice, D.P.C. (B&L) is pleased to provide this proposal in accordance with B&L's Master Services Agreement with the Albany Water Board for an evaluation of a portion of the sanitary sewer system in the Orchard Avenue area. The intent of the evaluation is to determine feasibility of constructing a new sewer pump station and force main to re-route sanitary sewer from an 18-inch trunk sewer at Orchard Avenue to the Town of Guilderland Dillenback pump station. Sewage would then be conveyed through the Town system to the Town WWTP for treatment. Benefits of this re-route would be to help reduce overloading in the City downstream conveyance system to the existing treatment plant. It is assumed that up to 200,000 gallons per day average dry flow could be conveyed to this pump station.

B&L proposes to provide the following scope of services:

1. Meet with the Albany Water Board and Town of Guilderland to review the project, expected schedule, data and mapping needs.
2. Visit the site to review the siting of the pump station, connection to the existing Town pump station and force main route along existing road right of ways corridors and the two ravine areas.
3. Utilize the following mapping to review the corridor alternative:
 - GIS mapping with Lidar topography;
 - Tax mapping for road and parcel boundaries;
 - City sewer system mapping;
 - Town sewer system mapping; and
 - Town record drawings for the Dillenback pump station
4. Utilize a subconsultant to complete flow monitoring over a 4 week period. It is assumed one flow meter will be used.
5. Review one pumping alternative. It is not expected that a gravity option will be feasible as there are two large ravines in the general area.



William D. Simcoe, P.E.
Deputy Commissioner
November 13, 2017
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6. Review Town provided flow data at the pump station to determine the amount of sewage flow that could be conveyed from the City system to the pump station. It is assumed the Town would also provide any flow information on Town future flows. We would also complete a cursory review of the available capacity of the existing 16-inch force main, although from discussions it appears the station and force main have sufficient capacity.
7. Prepare a draft engineering report that would include existing conditions, future flows, capital project costs, concept sketch of the alternative, funding options and project schedule.
8. Meet with the City Water Board and Town to review the draft report and issue the final report.

Barton & Loguidice proposes a lump sum fee of \$14,800. This includes an allowance of \$3,000 for the flow monitoring.

Thank you for the opportunity to offer this proposal to the Albany Water Board. Please do not hesitate to contact us should you have any questions or comments.

Very truly yours,

BARTON & LOGUIDICE, D.P.C.

A handwritten signature in black ink, appearing to read 'Donald H. Fletcher', is written over the printed name.

Donald H. Fletcher
Vice President

DHF/

Authorization to Proceed

Barton & Loguidice, D.P.C., is hereby authorized by the City of Albany Water Board to proceed with the tasks described above in accordance with our Master Services Agreement.

Signature

Date