BURLINGTON INTERNATIONAL AIRPORT BOARD OF AIRPORT COMMISSIONERS

1200 Airport Drive, South Burlington, Vermont Conference Room #1 Monday March 21, 2016 3:00pm

	RDER

- 2. AGENDA
- 3. PUBLIC FORUM
- FINANCIAL PACKAGE (Documents/Verbal M. Friedman)
- CONSENT AGENDA
 - 5.1 Approval of Minutes: January 25, 2016
- 6. ACTION NEEDED:
 - 6.1 Air Carrier Apron Phase 3 Engineering Contract, AIP Funded Hoyle Tanner
 - 6.2 Storm Water Improvement Project Change Order, AIP Funded Stantec
 - 6.3 Taxiway Alpha Design/Permitting Contract, AIP Funded Stantec
 - 6.4 Taxiway Gulf Design/Permitting Contract, AIP Funded Stantec
 - 6.5 Noise Exposure Map Change Order, AIP Funded Harris, Miller, Miller, Hanson, Inc.
 - 6.6 Passenger Facility Charge Application Assistance Contract Hoyle Tanner
 - 6.7 Underground Injection Control Permit Management Contract Stantec
- 7. COMMUNICATION/DISCUSSION:
 - 7.1 Construction Update Report (Document/Verbal A. Hanaway)
 - 7.2 Marketing Update (Document/Verbal E. Knapp)
 - 7.3 Passenger and Operational Statistics (Document/Verbal N. Longo)
 - 7.4 Fare Comparisons (Document A. Morris)
- 8. DIRECTOR'S REPORT (Verbal)
- 9. COMMISSIONERS' ITEMS
 - 9.1 Policy Issues
- 10. ADJOURNMENT. Tentative: Next Meeting Monday, April 18, 2016 at 3:00pm

City of Burlington

BURLINGTON INTERNATIONAL AIRPORT January 2016

FINANCIAL STATEMENTS







BURLINGTON INTERNATIONAL AIRPORT



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1200 Airport Drive, #1 South Burlington, Vermont 05403

Phone: (802) 863-2874 (TTY)



Budget Performance Report Fiscal Year to Date 01/31/16

Only Show Rollup Account and Rollup to Account

20 30 36 46	6x4 a							
Account	Account Description	Adopted Budget	Budget Amendments	Amended Budget	YTD Encumbrances	FY 2016 YTD Transactions	Remaining Balance	% used Rec'd
und 400 -	Airport		12.				-	1100
	REVENUE							
1247	Fees and Permits	104,850.00	.00	104,850.00	.00	56,710.00	48,140.00	549
1267	Utility Reimbursement	46,967.00	.00	46,967.00	.00	24,706.53	22,260.47	53%
275	Rent & Lease	.00	.00	.00	.00	.00	.00	+++
1295	Parking Fees	5,825,000.00	.00	5,825,000.00	.00	3,010,401.52	2,814,598.48	52%
1297	CFC's	1,180,000.00	.00	1,180,000.00	.00	807,060.00	372,940.00	68%
1345	Advertising Revenues	118,000.00	.00	118,000.00	.00	99,344,25	18,655.75	84%
\$390	Concessions	260,000.00	.00	260,000.00	.00	155,171.37	104,828.63	60%
1440	Taxi Fees	46,900.00	.00	46,900.00	.00	70,477.00	(23,577.00)	150%
1445	Terminal Rent - Exclusive	1,127,147.00	.00	1,127,147.00	.00	670,198.10	456,948.90	59%
1450	Terminal Rent - Commonuse	1,467,928.00	.00	1,467,928.00	.00	856,291.33	611,636.67	58%
1455	Terminal Concessions Airport	525,200.00	.00	525,200.00	.00	380,130.45	145,069.55	72%
1460	Rental Car Concessions	1,777,468.00	.00	1,777,468.00	.00	1,421,447.74	356,020.26	80%
1465	Rent Grounds	380,774.00	.00	380,774.00	.00	200,625.51	180,148.49	53%
1470	Rent Buildings	1,204,998.00	.00	1,204,998.00	.00	759,196.09	445,801.91	63%
1475	Landing Fees	1,825,884.00	00	1,825,884.00	.00	1,002,428.05	823,455.95	55%
1480	PFC Revenue	2,400,000.00	.00	2,400,000.00	.00	1,024,087.71	1,375,912.29	43%
1500	Airport Apron Fees	.00	.00	.00	.00	.00	.00.	+++
1505	Terminal Non Airline	575,061.00	.00	575,061.00	.00	347,414.87	227,646.13	60%
1535	Misc Rev	3,000.00	.00	3,000.00	.00	1,228.09	1,771.91	41%
1600	Fees For Services	.00	.00	.00	.00	4,812.00	(4,812.00)	+++
1700	Interest / Investment Income	33,500.00	.00	33,500.00	.00	1,777.38	31,722.62	5%
702	Interest Income PFC	4,000.00	.00	4,000.00	.00	1,351.93	2,648.07	34%
1703	Restricted Interest Income	.00	.00	.00	.00	16,982.81	(16,982.81)	+++
1705	Unrealzd Gain/Loss-Invest	.00	.00	.00	.00	(7,686.86)	7,686.86	+++
750	Gain/Loss On Asset	.00	.00	.00	.00	17,898.70	(17,898.70)	+++
1825	Interdepartmental	.00	.00	.00	.00	29.59	(29.59)	+++
1850	Cash Over	.00	.00	.00	.00	1,423.91	(1,423.91)	+++
1900	Participant Charges	.00	.00	.00	.00	.00	.00	+++
1961	Property Tax Reimbursement - Airport	208,000.00	.00	208,000.00	.00	143,742.14	64,257.86	69%
	REVENUE TOTALS	\$19,114,677.00	\$0.00	\$19,114,677.00	\$0.00	\$11,067,250.21	\$8,047,426.79	58%
	EXPENSE						, -, ,	
5000	Salaries and Wages	2,356,815.00	.00	2,356,815.00	.00	1,246,475.61	1,110,339.39	53%
100	Overtime	225,000.00	.00	225,000.00	.00	124,988.02	100,011.98	56%
200	Other Personal Service	167,415.00	.00	167,415.00	.00	71,873.68	95,541.32	43%
400	Employee Benefits	1,246,199.00	.00	1,246,199.00	.00	720,711.39	525,487.61	58%
6000	Office Supplies	14,000.00	.00	14,000.00	866.60	3,316.81	9,816.59	24%
5005	Postage	1,500.00	.00	1,500.00	.00	643.77	856.23	43%
007	Shipping and Moving	6,000.00	.00	6,000.00	.00	1,579.91	4,420.09	26%
010	Computer Equipment	45,560.00	.00	45,560.00	590.82	4,191.14	40,778.04	9%
015	Computer Software	62,500.00	.00	62,500.00	.00	1,889.00	60,611.00	3%
017	Computer Licensing and Maint.	17,000.00	18,000.00	35,000.00	.00	19,431.37	15,568.63	56%
020	Office Equipment	5,000.00	.00	5,000.00	.00	650.00	4,350.00	13%
025	Furnishings	5,000.00	.00	5,000.00	.00	.00	5,000.00	0%
200	Medical Fees And Supplies	2,500.00	.00	2,500.00	75.00	839.18	1,585.82	34%
202	Printing/Copying/Paper Mgt	2,500.00	.00	2,500.00	.00	941.34		38%
203	Dues/Subscriptions	86,000.00	.00	86,000.00	7,320.44		1,558.66	
	-,					62,963.91 4,754.20	15,715.65	73%
205	Cash Short	nn	riti					
5205 5206	Cash Short Custodian Supplies	.00 65,000.00	.00 .00	.00 65,000.00	.00	36,455.79	(4,754.20) 28,544.21	+++ 56%

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Budget Performance Report Fiscal Year to Date 01/31/16

Fiscal Year to Date 01/31/16
Only Show Rollup Account and Rollup to Account

		Adopted	Budget	Amended	YTD	FY 2016 YTD	Remaining	% used/
Account	Account Description	Budget	Amendments	Budget	Encumbrances	Transactions	Balance	Rec'd
6210	Small Tools and Equipment	18,000.00	.00	18,000.00	1,803.89	11,693.00	4,503.11	65%
6211	Specialized Equipment	.00	.00	.00	.00	.00	.00	+++
6212	Fuel	174,000.00	.00	174,000.00	73,766.14	26,233.86	74,000.00	15%
6214	Clothing And Uniforms	11,000.00	.00	11,000.00	.00	1,153.88	9,846.12	10%
6215	Uniform Laundering	22,000.00	.00	22,000.00	3,750.50	10,249.50	8,000.00	47%
6216	Oil & Grease & Antifreeze	40,000.00	.00	40,000.00	1,895.13	11,125.62	26,979.25	28%
6222	Runway De-Ice	200,000.00	.00	200,000.00	100,000.00	.00	100,000.00	0%
6300	Repair & Maintenance	826,500.00	49,000.00	875,500.00	118,378.96	385,426.57	371,694.47	44%
6350	Legal Notice & Advertising	3,000.00	.00	3,000.00	.00	.00	3,000.00	0%
6400	Utilities	1,560,000.00	.00	1,560,000.00	808.58	690,975.25	868,216.17	44%
6500	Professional and Consultant Services	1,142,000.00	.00	1,142,000.00	100,174.05	540,658.15	501,167.80	47%
6600	Maintenance Contracts	300,000.00	(18,000.00)	282,000.00	95,009.94	131,042.53	55,947.53	46%
6605	Radio Maintenance	20,000.00	.00	20,000.00	2,170.00	4,891.50	12,938.50	24%
6610	Custodial Contracts	682,000.00	.00	682,000.00	275,625.00	385,875.00	20,500.00	57%
6615	Property Repairs	200,000.00	.00	200,000.00	19,200.00	23,598.50	157,201.50	12%
6620	Contractual Vehicle Repair	22,000.00	.00	22,000.00	.00	5,228.08	16,771.92	24%
6625	Equipment Maintenance Repairs	150,000.00	.00	150,000.00	6,419.57	71,860.43	71,720.00	48%
6700	Travel & Training	98,000.00	.00	98,000.00	.00	14,287.67	83,712.33	15%
6800	Fees for Services	35,000.00	.00	35,000.00	1,026.00	26,349.53	7,624.47	75%
7000	Bad Debt Expense	2,000.00	.00	2,000.00	.00	360.00	1,640.00	18%
7002	Interest Expense	.00	.00	.00	.00	.00	.00	+++
7004	Interest Expense - Restricted	.00	.00	.00	.00	6,929.38	(6,929.38)	+++
7010	Depreciation Expense	.00	.00	.00	.00	.00	.00	+++
7200	Capital Leases	373,000.00	.00	373,000.00	2,025.00	3,980.80	366,994.20	1%
7230	Insurance	243,641.00	.00	243,641.00	.00	171,912.73	71,728.27	71%
7303	Regulatory and Bank Fees	120,000.00	.00	120,000.00	.00	61,639.11	58,360.89	51%
7312	Real Estate Taxes	1,553,000.00	.00	1,553,000.00	6,144.90	905,916.65	640,938.45	58%
8005	Vehicle/Equipment Repairs	.00	.00	.00	.00	.00	.00	+++
8015	Indirect Fees	343,605.00	.00	343,605.00	.00	200,437.16	143,167.84	58%
8016	Risk Management	9,000.00	.00	9,000.00	.00	.00	9,000.00	0%
8017	Indirect Fees - City Attorney	9,923.00	.00	9,923.00	.00	5,789.00	4,134.00	58%
8018	Management Fee - Parking Garge	674,225.00	.00	674,225.00	.00	330,298.46	343,926.54	49%
8035	FAA - Airport Security	.00	.00	.00	.00	.00	.00	+++
8095	Interest On Pooled Cash	34,000.00	.00	34,000.00	.00	3,516.46	30,483.54	10%
8135	Airport Security To Police	1,014,000.00	.00	1,014,000.00	.00	591,500.00	422,500.00	58%
	OPERATING EXPENSE TOTALS	\$14,201,883.00	\$49,000.00	\$14,250,883.00	\$817,108.52	\$6,930,866.90	\$6,502,907.58	54%
							, -,,	

OPERATING PROFIT

\$4,136,383.31

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TREND ANALYSIS
For Fiscal Years 2015 and 2016
Year-To-Date Revenue Comparsions

	PATERDEN AT	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7
FY		Jul	Aug	Sep	Oct	Nov	Dec	Jan
2015	Terminal Concessions	29,062	129,056	180,862	250,243	294,680	340,596	385,468
2016	(4455)	56,798	019,970	176,569	238,695	287,001	335,160	380,129
2015	Car Rental Concessions	244,531	483,906	681,582	923,753	1,002,492	1,149,356	1,305,216
2016	(4460)	240,324	552,535	748,826	977,338	1,124,975	1,273,200	1,421,448
2015	Landing Fees	158,349	316,660	464,374	608,334	732,425	846,526	969,438
2016	(4475)	149,347	300,822	447,804	601,990	735,405	871,127	1,002,428
2015	Parking Fees	424,926	885,487	1,393,271	1,905,737	2,384,795	2,794,781	3,247,996
2016	(4295)	410,392	824,622	1,240,664	1,747,264	2,211,974	2,590,059	3,010,401
2015	Customer Facility Charge	134,124	283,204	414,844	260,600	631,024	697,088	768,264
2016	(4297)	160,052	312,196	444,132	591,724	099'999	736,308	807,060
2015	Total	\$ 990,993	\$ 2,098,313	\$ 3,134,934	\$ 4,248,667 \$	5,045,416	\$ 5,828,347	\$ 6,676,382
2016	Total	\$ 1,016,913	\$ 2,110,146	\$ 3,057,996	\$ 1,016,913 \$ 2,110,146 \$ 3,057,996 \$ 4,157,010 \$	5,026,014	\$ 5,805,853	\$ 6,621,466

Monthly Revenue Comparison

FY		Jul	Aug		Sep	Oct	Nov		Dec		Jan
2015	Terminal Concessions	29,062	99,994	4	51,806	186,69		44,437	45,916		44,872
2016	(4455)	86,798	63,172	2	56,599	62,125		48,306	48,159		44,970
2015	Car Rental Concessions	244,531	239,374	4	197,676	242,171		78,739	146,864		155,860
2016	(4460)	240,324	312,211	_	196,291	228,511		147,637	148,226		148,248
2015	Landing Fees	158,349	158,312	2	147,714	143,960		124,091	114,101		122,912
2016	(4475)	149,347	151,476	9	146,982	154,185		133,415	135,722		131,301
2015	Parking Fees	424,926	460,560	0	507,784	512,466	4	479,058	409,986		453,215
2016	(4295)	410,392	414,230	0	416,042	206,600	4	464,710	378,085		420,342
2015	Customer Facility Charge	134,124	149,080	c	131,640	145,756		70,424	66,064		71,176
2016	(4297)	160,052	152,144	7	131,936	147,592		74,936	69,648		70,752
2015	Total	\$ 990,993	\$ 1,107,320	8	1,036,621	\$ 1,107,320 \$ 1,036,621 \$ 1,113,733	8	796,749 \$	782,931	89	848,035
2016	Total	\$ 1,016,913 \$ 1,093,233	\$ 1,093,23	3	947,850	947,850 \$ 1,099,014	9	869,004 \$	9839	69	815,613



Burlington International Airport Fiscal Year 2016 Debt Coverage Score



DESCRIPTION	July	August	September	October	November	December	January
Total Revenue	1,515,506	3,160,886	4,890,357	6,671,649	8,460,600	9,684,975	11,067,250
Less: PFC Revenue	0	(73,589)	(316,239)	(532,083)	(813,335)	(904,851)	(1,024,088)
Less: PFC Interest Income	(258)	(537)	(818)	(1,082)	(1,352)	(1,352)	(1,352)
Total Net Revenue	1,515,248	3,086,760	4,573,299	6,138,484	7,645,913	8,778,772	10,041,810
Operating Expenses	804,033	1,629,220	2,820,067	3,676,747	4,625,094	5,721,399	6,930,867
Total Net Operating Income	711,215	1,457,540	1,753,232	2,461,737	3,020,819	3,057,373	3,110,943
+ PFC available for Debt Service	90,593	181,186	271,779	362,372	452,964	543,557	634,150
Funds Available for Debt Service	801,808	1,638,726	2,025,011	2,824,109	3,473,783	3,600,930	3,745,093
* + Debt Principal & Interest Payments	282,137	564,274	846,410	1,128,547	1,410,684	1,692,821	1,974,958
Debt Service Coverage Score - Methodology #1	2.84	2.90	2.39	2.50	2.46	2.13	1.90
Apply 125% PFC Revenue towards debt	22,648	45,296	67,945	90,593	113,241	135,889	158,538
Funds Available for Debt Service	824,456	1,684,022	2,092,955	2,914,701	3,587,025	3,736,820	3,903,631
Debt Service Coverage Score - Methodology #2	2.92	2.98	2.47	2.58	2.54	2.21	1.98

Fiscal Year 2015
Debt Coverage Score

Debt Service Coverage Score - Methodology #1	Debt Service Coverage Score - Methodology #2

19.1	1.69
1.80	1.88
2.01	2.09
2.20	2.28
2.01	2.09
2.48	2.56
2.26	2.34



BURLINGTON INTERNATIONAL AIRPORT ACCOUNTS RECEIVABLE AIP PROJECTS AS of Feburary 29, 2016



TOTAL % OF A/R **PROJECT** PROJECT REIMBURSE-A/R BALANCE **EXPENSES GRANT EXPENSES MENTS BALANCE** NW FUND AIP# PROJECT DESCRIPTION 06/30/15 FY 2016 FY 2016 02/29/16 FY 2016 404 LAND ACQ 2011 87 178,151 147,149 98% 144,206 (219,110)103,247 405 84 LAND 2010 PHASE 2 71,017 123,235 120,770 (171,058)20,730 406 89 2012 DEVELOPMENT 96% 407 88 LAND 2011B 105,082.99 224,875 0.98 220,377.50 (268,514)56,947 409 81 LAND 2010 PROPERTIES 155,497 238,657 98% 233,884 (312,870)76,512 421 74 LAND 2009 NOISE 197,262 53,910 98% 52,832 (194, 239)55,854 426 78 LAND 2010 NOISE 86.843 85,471 98% 83,762 (106, 236)64,369 429 ENG DESIGN SVCS 28,796 96% (28,794)430 91 PART 150 NEM UPDATE 77,584 85 96% 81 (56,400)21,266 432 92 LAND 2012 NOISE 179,450 308,609 96% 296,264.64 (362, 357)113,358 433 94 LAND 2012 B NOISE 217,905 746,525 96% 716,664 (690,966)243,603 TAXIWAY B RECONSTRUCTION & WASTEWATER COLLECTION FACILITY 434 95 601,478 12,031 96% 11,550.20 (627,763)(14,734)435 96 CARGO APRON REHAB 75,879 47,144 96% 45,259 (122,746)(1,608)436 97 DESIGN UPDATE SECURITY 63,314 96% 63,314 437 98 LAND ACQUISITION 4 PARCELS 65,381 94,145 96% 90,379 (154, 181)1,579 438 99 CARGO APRON REHAB - PHASE 2 19,717 812 96% 779 (19,735)761 439 100 AIR CARRIER APRON PHASE 1 47,312 86,540 96% 83,079 130,391 440 101 SECURITY SYSTEM UPDATE 42,841 96% 42,841 441 102 TAXIWAY K (SOUTH) 106,992 7,275 96% 6,984 (100,901)13,076 442 105 LAND ACQUISITION FY 15 9,045 706,196 96% 677,949 (429,741)257,253 GLYCOL PROJECT 443 72,096 69,185 96% 66,417 138,513 444 103 AIR CARRIER APRON PHASE II 11,537 2,031,931 96% 1,950,654 (1,751,314)210,877 445 104 TAXIWAY K CONSTRUCTION 12,107 319,183 96% 306,416 (254, 252)64,271 446 LAND ACQUISITION 2016 5,991 96% 5,751 5,751 447 TAXIWAY ALPHA CONSTRUCTION 3,275 96% 3,144 3,144 TAXIWAY GULF CONSTRUCTION 448 3,245 96% 3,115 3,115 449 AIR CARRIER APRON PHASE III 2,425,289 \$ 5,315,469 TOTALS \$ 5,120,317 \$ (5,871,175) \$ 1,674,430

Burlington International Airport

Cash and Investments January 31, 2016

Account	Account Description	Balance
1000_400 1000_415 1000_420	Bank Account Airport Bank Account Airport - Prepaid Cash Acct TD Bank Account CFC	332,780 486,900 3,153,786
1000_474 1000 475	Cash Restricted Burl Arpt 2014 A Debt Serv. Res Cash Restricted Airport 2014 A COI	1,446,773 25
1050_400 1050_420 1050_425 1050_430 1050_487 1050_488 1050_489 1050_490 1050_496	Cash Restricted Air Debt Service Fund Cash Restricted Escrows - Airport PFC TD Bank Cash Restricted Escrows - Airport - Op Maint Res Cash Restricted Esc - Airport Res Acct - TD Bank Cash Restricted Airport Debt Service Res. 2012 A Cash Restricted Airport Debt Service Res. 2012 B Cash Restricted Airport Debt Service Res. 2012 C Cash Restricted Airport 2012 ABC COI Cash Restricted AIP Deposit Keybank	1,073,856 2,755,612 3,289,128 215,864 1,662,356 651,989 7,166 13,633 26,142
Total Cash and Ir	nvestments	15,116,009
1100_999	(Due To) / Due From Pooled Cash	121,287

BURLINGTON INTERNATIONAL AIRPORT BOARD OF AIRPORT COMMISSIONERS MINUTES OF MEETING January 25, 2016

DRAFT

MEMBERS PRESENT: Jeff Munger (Chairman)

Bill Keogh Jeff Schulman Pat Nowak

MEMBERS ABSENT: Alan Newman

BTV STAFF PRESENT: Gene Richards, Director of Aviation

Nic Longo, Director of Planning and Development

Marie Friedman, Financial Advisor Erin Knapp, Director of Marketing Kelly Colling, Director of Operations

Amanda Hanaway-Corrente, Director of Engineering &

Environmental Compliance

Richard Brown, Director of Maintenance

Adrianne Morris, Office Assistant

OTHERS PRESENT: Dave Stiller, Heritage Aviation

Tina Lindberg, Mansfield Heliflight John Dinklage, South Burlington Michael Simoneau, South Burlington Loretta Marriott, South Burlington Paula Lawrence, South Burlington

Meaghan Emery, South Burlington City Council

Sandy Dooley, South Burlington Elizabeth Goldberg, South Burlington Robert Howard, South Burlington Linda Brakel, South Burlington Marc Companion, South Burlington Karen Paul, Burlington City Council

1.0 CALL TO ORDER

Chairman Jeff Munger called the meeting to order at 3 PM.

2.0 AGENDA

MOTION by Bill Keogh, SECOND by Pat Nowak, to approve the agenda with the deletion of Item 9.01 (Policy File). VOTING: unanimous (4-0); motion carried.

3.0 PUBLIC FORUM

Marc Companion, South Burlington resident and member of the Chamberlin Neighborhood Committee, opined the Airport Commission minutes from December 14, 2015 contain certain inaccurate information about the Chamberlin Neighborhood Committee meeting and inappropriate attacks on individuals as well as having information that should not be in minutes. Mr. Companion asked that the minutes be

amended, contending that there was general frustration by the people at the Chamberlin meeting, himself included, over concern that their voice is not being heard and there is lack of transparency by the airport. There were many people for the F35, not against it. Misinformation is leading to distrust. The residents feel they are being kept in the dark about the F35 and that backroom deals are being made. The residents want to know because F35 planes could potentially be a catastrophic event for the neighborhood. Regional planning and a long term management plan needs to be in place.

Linda Brakel, South Burlington resident, asked that the minutes be corrected in terms of the character of the individual referred to at the 11/9/15 neighborhood meeting. The information does not belong in the type of forum the way it was stated.

Meaghan Emery, South Burlington City Council, read a statement to the Airport Commission, dated 1/25/16, regarding the 12/14/15 Airport Commission minutes and reference to her behavior at the neighborhood meeting on 11/9/15 which was inaccurately described (statement on file). Ms. Emery also objected to the description of her behavior relative to finding out a scheduled meeting on 12/11/15 was cancelled without her knowledge, and contended that sound issues are part of the charge of the Chamberlin Neighborhood Committee. Regarding the recommendation to establish a noise/sound committee as noted in the 12/14/15 Airport Commission minutes, Ms. Emery urged including residents in affected neighborhoods on the committee.

Sandy Dooley, South Burlington resident, encouraged staff to include neighbors on the committee to address noise mitigation, stressing it is best to work together.

Tina Lindberg, Mansfield Heliflight, asked if minimum standards will be discussed at the meeting. Staff indicated the matter is not on the agenda.

4.0 FINANCIAL PACKAGE

Marie Friedman reported the following:

- Revenues are at 44% of budget and Expenses are at 37% of budget.
- Parking revenues continue to trend lower than the prior year (November 2015 is down \$173,000 over November 2014). Staff is monitoring the situation and investigating possible solutions.
- Debt coverage score is expected to be 1.5 by the end of the fiscal year.
- BTV as of January 12, 2016 is owed \$1.6 million in AIP receivables. The airport drew down \$400,000 on the grant anticipation note which helps with cash position. The airport has spent \$4.7 million and received \$5.1 million. By the end of the fiscal year the amount will be zero.
- Trend Analysis shows parking revenues continue a downward trend. Other revenues are flat or up slightly.

Gene Richards said the parking garage continues to challenge staff. Canadian traffic is down. Staff is working with Burlington Public Works on different opportunities to manage the garage. A further report is forthcoming in April.

Pat Nowak suggested investigating whether Chamber of Commerce conventions and meetings are fewer than in past years. Gene Richards said staff meets with the state and local chambers and will ask that question.

MOTION by Bill Keogh, SECOND by Jeff Schulman, to accept the finance report and place the information on file. VOTING: unanimous (4-0); motion carried.

5.0 CONSENT AGENDA

5.01 Minutes of December 14, 2015

MOTION by Bill Keogh, SECOND by Pat Nowak, to approve the consent agenda including minutes from December 14, 2015 with the following correction(s)/clarification(s) to the 12/14/15 minutes:

Page 5, Director Report, 2nd paragraph, 1st sentence – insert "12/11/15" after "city council", and in the 3rd sentence – insert "as funded by CCRPC" after "neighborhood committee".

<u>DISCUSSION</u>: Bill Keogh commented minutes of Airport Commission meetings can only be changed by the Airport Commission. Minutes reflect the discussion that transpired at the meeting.

CALL THE QUESTION by Bill Keogh. Discussion ceased.

VOTING: unanimous (4-0); motion carried.

6.0 ACTION NEEDED

6.01 Engineering Contract Rental Car QTA – Stantec Consulting 6.02 Snow Removal Equipment Purchase

MOTION by Bill Keogh, SECOND by Jeff Schulman, to approve Items 6.01 (Engineering Contract Rental Car QTA) and 6.02 (Snow Removal Equipment Purchase) and recommend to City Council for approval.

DISCUSSION: The following was noted:

- Staff explained the engineering contract is for redesign of the rental car wash bays (three bays), maintenance bays (3 bays), fuel bays (12 bays), and office space. Funding is through the Customer Facility Charge (CFC). The contract is for \$300,000. The facility cost is \$5 million. Stantec Consulting is working with an architect who has done the same type of work across the country. Engineering work has begun. Construction is hoped to start in June and be finished by January 2017.
- Pat Nowak suggested posting project information relative to the neighborhood on the airport website. Gene Richards said there have been meetings (and will be more) with South Burlington town staff on projects.
- Staff explained Passenger Facility Charge (PFC) funds will be used to purchase the snow removal equipment. The airport has only one piece of equipment which is over 10 years old. The cost of the equipment is \$665,000. PFCs will fund any portion of a loan that has to be taken out as well.

There were no further comments.

VOTING: unanimous (4-0); motion carried.

7.0 COMMUNICATION/DISCUSSION

7.01 Construction Update Report

7.02 Marketing Update

7.03 Passenger and Operational Statistics

7.04 Fare Comparisons

MOTION by Bill Keogh, SECOND by Jeff Munger, to accept Items 7.01 (Construction Update), 7.02 (Marketing Update), 7.03 (Passenger & Operational Statistics), and 7.04 (Fair Comparisons) and place the information on file.

DISCUSSION: The following was noted:

- Open construction projects include:
 - Taxiway Kilo construction which will resume in spring of 2016;
 - o north glycol system upgrade for more capacity to collect deicing fluid (funded with FAA discretionary funds);
 - o rehab of the terminal apron (phased project);
 - o revitalizing and updating the quick turnaround facility;
 - o relocating Taxiway Alpha (construction 2017);
 - o shifting Taxiway G closer to Runway 1533 creating a full taxiway.
- VTANG has projects planned for 2017 separate from Burlington Airport projects. The airport is working with VTANG to phase the work accordingly.
- Marketing update includes an impromptu dinner from the Food Friday event by the administration for a group of marines from Oklahoma stuck overnight at Burlington Airport. There have been 22,000 views on the Facebook page of the F16 takeoff with positive results and comments on the video. Community partnership events include Chittenden County Humane Society Purses for Paws and the Heritage, FedEx, and American Cancer Society jet pull. The monthly airport newsletter had 19,000 successful deliveries on emails from Purple WiFi. Marketing in Canada via social media is being done. Staff will attend travel and tourism shows in Canada.
- Passenger and Operational statistics show 1.2 million people have been served. Results are slightly below on the fiscal year-to-date. Seat capacity month-to-month and landing rate is up slightly.
- Fare comparison was done between BTV fares and fares from Manchester, Albany, and Montreal for a week in March.

There were no further comments.

VOTING: unanimous (4-0); motion carried.

Staff noted there will be an air show in Burlington on August 13th and 14th at the waterfront independent of the airport.

8.0 DIRECTOR'S REPORT

Gene Richards spoke positively on the work by the administrative team and reported the following:

- The sound/noise map was approved on 12/22/15 by the FAA so the airport can now move forward to receive grants. More information will be forthcoming.
- Heritage closed on ESOP. Thanks are extended to David Stiller and the Stiller family for taking care of their employees.
- Staff continues to work on locating a restaurant in the terminal.
- No additional progress has been made on a hotel since the last meeting.
- College interns are researching automation at the parking garage. Reorganization of duties at the garage is planned.

9.0 COMMISSIONER ITEMS

9.01 Policy File

Removed from the agenda. Bill Keogh will work with Nic Longo and Burlington Public Works on a policy file.

10.0 ADJOURNMENT

Next meeting: February 22, 2016 at 3 PM.

MOTION by Bill Keogh, SECOND by Pat Nowak, to adjourn the meeting. VOTING: unanimous (4-0); motion carried.

The meeting was adjourned at 4:12 PM.

RScty: MERiordan



BURLINGTON INTERNATIONAL AIRPORT

MEMO

TO: Burlington International Airport, Board of Commissioners

FROM: Burlington International Airport Staff

DATE: March 21, 2016

SUBJECT: Engineering Services for Reconstruction of Terminal Apron

The Burlington International Airport (BTV) seeks Airport Board of Commissioners approval of and its recommendation to the Burlington Board of Finance (BofF) and the Burlington City Council (CC) to the awarding of contract to Hoyle, Tanner & Associates (HTA) in the amount of **\$748,950** for the design, permitting, construction administration and resident services related to the re-construction of the Terminal Apron located between Gate 7 and Gate 11.

The project is the third phase of a larger project to reconstruct the entire air carrier apron. This portion of the apron is approximately 25 years old and is in a state of heavy deterioration. The Airport and FAA recognize the need to maintain safe and operational surfaces as well as develop a plan to phase this construction to allow for maximum continued operations, thus a multi-year project. This project and contract with HTA will be funded through the FAA's Airport Improvement Program in a 2017 Grant application and will be reimbursed with 90% Federal funds, 6% State funds, and 4% local funds with Passenger Facility Charges.

HTA was selected to perform this work based on qualifications according to the City's purchasing requirements and FAA requirements. Please find attached a proposed contract for recommendation to Board of Finance and City Council.

Thank you for your continued support.

1200 Airport Drive, #1 South Burlington, Vermont 05403

Phone: (802) 863-2874 (TTY) Fax: (802) 863-7947

www.btv.aero

AGREEMENT FOR PROFESSIONAL SERVICES

Reconstruct Terminal Apron, Phase 3 (Approximately 14,300 SY)

This is an agreement between Burlington International Airport (Client) and Hoyle, Tanner & Associates, Inc. (Consultant) for professional services for the Client's project which is generally described as Reconstruct Terminal Apron, Phase 3 The Consultant's services under this agreement are generally described as follows: the re-packaging of Phase 3 drawings from the overall design set, advertisement, general administration, and construction phase services, such as construction administration and resident engineering for phase 3 of the reconstruction.

The effective date of this Agreement is <u>April 1, 2016</u>. Client and Consultant further agree as follows:

Article 1: Scope of Services

Consultant shall provide the services set forth in Exhibit A.

Article 2: Client's Responsibilities:

The Client shall provide to the Consultant all of Client's criteria and information as to requirements for the Project including objectives, constraints, performance requirements, and budgetary limitations.

The Client shall provide the Consultant with all information available to the Client pertinent to the Consultants work under this Agreement. The Client shall assist the Consultant as necessary to obtain available pertinent information from Federal, State or local offices or from other engineers or others who have previously worked for the Client on matters affecting this Project. Client shall also make available all information Client may have relative to concealed, subsurface, soil, and other conditions that are not apparent from visual, non-invasive, and non-destruction observations of the applicable site.

It may be necessary for the Consultant's personnel and/or subconsultants to enter areas of the Project property. The Client shall arrange for and provide the Consultant with access to such areas on a timely basis.

The Client shall examine all documents prepared for the Project by the Consultant; and at the Client's option, obtain advice from legal counsel, insurance counsel, and other appropriate advisors, and advise the Consultant of any opinion or recommendations resulting from said advice.

The Client shall give prompt notice to the Consultant whenever the Client becomes aware of anything that would have a significant effect on the scope or timing of the Consultant's services.

The Client shall bear all costs related to compliance with this Article of this Agreement.

If the Client engages a construction manager or any other professionals for the Project in addition to the Consultant; the Client must define the duties and responsibilities of each professional services provider.

During the construction of the project the Client or his designated representative, other than the Consultant, shall attend the following meetings: Pre-construction bid meeting, bid opening, pre-construction conference, construction progress meetings, and Project completion meetings.

The Client shall advise the Consultant of any safety or security programs which may be applicable to the Consultant during Project site visits.

Client shall make decisions and perform other Client responsibilities in a timely manner so as not to delay the Consultant's performance of services.

Client's responsibilities may include those included in Exhibit A.

Article 3: Schedule

Consultant is authorized to begin providing services on the effective date of the Agreement. The Consultant shall perform services in conformance with the schedule guided by and subject at all times to sound judgment and practice in accordance with law and professional ethics.

If the schedule changes or orderly progress of services is impaired through no fault of the Consultant; the schedule for services shall be adjusted and compensation may be adjusted by amendment to this Agreement.

Specific schedule requirements for providing services may be provided in Exhibit D.

Services will be performed as expeditiously as is consistent with professional skill and care and the orderly progress of the Project. Notwithstanding anything to the contrary contained herein, Consultant shall not be deemed in default of this Agreement to the extent that any delay or failure in the performance of its obligations results from any cause beyond its reasonable control or without its negligence.

Article 4: Compensation and Payment for Services

The Consultant shall charge for all services requested by the Client and rendered by the Consultant in connection with the Project in strict accordance with the conditions set forth in this Article of the Agreement.

The charges made by the Consultant under this Article and the payment of said charges by the Client shall constitute full compensation for all expenses incurred by the Consultant in connection with the services rendered including F.I.C.A. taxes, Federal and State unemployment taxes, costs in connection with employees' benefits, office expenses, supplies, and equipment, the general costs of doing business, and the Consultant's profit; and Subconsultants engaged by the Consultant for the Project, if any.

The Consultant's compensation for services and the method of compensation shall be as described in Exhibit C.

The Consultant shall prepare and submit monthly applications for payment for services completed under this Agreement.

Invoices shall be the Consultant's standard form or other form approved by Client.

Invoices are due within thirty (30) days of receipt by Client.

If payments are not made on time, Consultant may suspend services under this Agreement, after giving Client seven (7) days' notice, until payment is received by Consultant. Client waives any and all claims against Consultant due to such suspension of services and agrees to appropriate adjustments to the Project schedule and Consultant's schedule.

Client may withhold payment of a disputed invoice, however, Client must advise Consultant promptly of the reason for doing so and Client agrees to process and pay any portion of the invoice which is not in dispute. Client shall not withhold payments based on damages that the Client has incurred or alleges that it has incurred unless Consultant has been adjudged liable for such damages and failed to compensate the Client accordingly within 30 days of such determination.

Article 5: Standard of Care

The standard of care for all professional services performed or furnished by Consultant under this Agreement will be the skill and care used by members of Consultant's profession practicing under similar circumstances at the same time and in the same locality. Consultant makes no warranties, express or implied, under this Agreement or otherwise, in connection with Consultant's services.

Article 6: Opinions of Cost

When included in Consultant's scope of services, opinions or estimates of probable construction costs are prepared on the basis of Consultant's experience and qualifications and represent Consultant's judgment as a professional generally familiar with the industry. However, since Consultant has no control over the cost of labor, materials, equipment or services furnished by others, over Contractor's methods of determining prices, or over competitive bidding or market conditions, Consultant cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from Consultant's opinions or estimates of probable construction cost.

Article 7: Compliance with Laws and Regulations

The Consultant shall review codes, regulations, and laws applicable to Consultant's services and shall exercise professional care to design in compliance with all applicable codes, regulations and laws in effect as of the effective date of this Agreement. Consultant cannot warrant that the applicable interpreting or enforcing authority will similarly interpret such requirements.

If such codes, regulations and laws change during the project and are imposed during the project by government authorities with jurisdiction over the project, such changes may require changes to the Consultant's scope of services, schedule and compensation.

Article 8: Underground Facilities

The location of underground facilities may be required in order to perform subsurface explorations for the project and the location of underground facilities may be shown on the construction Contract drawings. Unless otherwise provided, Client shall provide Consultant with the locations of underground facilities, structures and utilities. If the locations are not known, are inaccurate or cannot be confirmed, Client accepts and retains all risk of damages or losses resulting from the exploration work.

Consultant will take reasonable precautions to avoid damage to underground facilities and shall coordinate the locations of such facilities with known owners of the facilities.

The information shown on the construction Contract drawings with respect to underground facilities shall be based on information furnished by the facility owners to the Client and Consultant and Consultant shall not be responsible for the accuracy or completeness of such information.

If conditions or locations of underground facilities are found to be different during construction appropriate adjustments, if any, shall be made in accordance with the provisions of the construction Contract.

Article 9: Construction Phase Services

If this Agreement provides for any construction phase services by Consultant, it is understood that the Contractor, not Consultant, is responsible for the construction of the project, and that Consultant is not responsible for the acts or omissions of any Contractor, Subcontractor or material supplier; for safety precautions, programs or enforcement; or for construction means, methods, techniques, sequences and procedures employed by the Contractor.

The Consultant, including the resident project representative if provided, does not assume any responsibility for the Contractors failure to perform the construction in accordance with the Contract documents.

Site visits and observations by Consultant are intended to provide the Client greater confidence that the completed work by the Contractor will conform to the Contract documents; and site visits are not detailed inspections and do not extend to every aspect of the Contractor's work.

Article 10: Design without Construction Phase

Consultant and Client agree that if Consultant's services do not include construction phase services, Client or Client's designated agent shall be solely responsible for interpretation of the Contract documents and observing the work of the Contractor to discover, correct and mitigate errors, inconsistencies or omissions and if Client authorizes deviations from the Consultant prepared documents or if conditions are discovered that are not accounted for in the Consultant prepared documents,, Client shall not bring any claim against Consultant and shall indemnify and hold Consultant, its agents and employees harmless from and against claims, losses, damages and expenses, including but not limited to defense costs and time of the Consultant, to the extent such claims, loss, damage or expenses arise out of or results in whole or in part from such deviations, regardless of whether or not such claims, loss damage or expense is caused in part by a party indemnified under this provision.

Article 11: Use of Documents and Ownership of Electronic Documents

All documents prepared or furnished by Consultant pursuant to this Agreement are instruments of Consultant's professional service, and Consultant shall retain an ownership and property interest therein.

Consultant grants Client a license to use instruments of Consultant's professional service for the purpose of constructing, occupying and maintaining the Project. Reuse or modification of any such documents by Client, without Consultant's written permission and professional involvement, shall be at Client's sole risk, and Client agrees to indemnify and hold Consultant harmless from all claims, damages and expenses, including attorneys' fees, arising out of such reuse by Client or by others acting through Client.

Copies of documents that may be relied upon by Client are limited to the printed copies (also known as hard copies) that are signed or sealed by Consultant. Files in electronic media format or text, data, graphic or other types that are furnished by Consultant to Client are only for convenience of Client. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk.

When transferring documents in electronic media format, Consultant makes no representations as to long-term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems or computer hardware differing from those in use by Consultant at the beginning of this assignment.

Article 12: Insurance

Consultant procures and maintains insurance as set forth in Exhibit B. Consultant shall cause Client to be an additional insured on any applicable general liability insurance policy of the Consultant. Consultant shall provide Client reasonable notice of changes to any policy.

Client shall procure and maintain workers compensation insurance, employer's liability insurance, general liability insurance, excess or umbrella liability and automobile liability insurance. Client shall cause the Consultant and its subconsultants to be additional insureds on any general liability policies and as loss payees on any property insurance policies of the Client applicable to the projects.

Client shall require Contractor to carry workers compensation, general liability, property damage, motor vehicle damage and injuries and other insurances to protect Client and Consultant and subconsultant; and Client shall require Contractor's policies to cover Consultant and its subconsultants as additional insureds.

Client may request the Consultant and/or subconsultants provide and maintain additional insurance coverage, however, the expense of such additional coverage shall be the Client's.

Article 13: Suspension and Termination

Client may terminate this Agreement with seven days prior written notice to Consultant for convenience or cause. Consultant may terminate this Agreement for cause with seven days prior written notice to Client. Failure of Client to make payments when due shall be cause for suspension of services or, ultimately, termination, unless and until Consultant has been paid in full all amounts due for services, expenses and other related charges.

Article 14: Indemnification and Limitation of Liability

To the fullest extent permitted by law, Consultant shall indemnify Client, its officers, directors, partners, employees, and representatives, from and against losses, damages, and judgments arising from claims by third parties, including reasonable attorneys' fees and expenses recoverable under applicable law, but only to the extent they are found to be caused by a negligent act, error, or omission of Consultant or

Consultant's officers, directors, members, partners, agents, employees, or subconsultants in the performance of services under this Agreement.

To the fullest extent permitted by law, Client shall indemnify Consultant, its officers, directors, partners, employees, and representatives, from and against losses, damages, and judgments arising from claims by third parties, including reasonable attorneys' fees and expenses recoverable under applicable law, but only to the extent they are found to be caused by a negligent act, error, or omission of Client or Client's officers, directors, members, partners, agents, employees, or subconsultants in the performance of services under this Agreement.

Article 15: Dispute Resolution

Client and Consultant agree that they shall first submit any and all unsettled claims, counterclaims, disputes, and other matters in question between them arising out of or relating to this Agreement to mediation in accordance with the Construction Industry Mediation Rules of the American Arbitration Association, effective as of the date of this agreement.

Article 16: Environmental Conditions

It is acknowledged by both parties that Consultant's scope of services does not include any services related to the presence at the site of asbestos, PCBs, petroleum, hazardous waste or radioactive materials. Client acknowledges that Consultant is performing professional services for Client and Consultant is not and shall not be required to become an "arranger," "operator," "generator" or "transporter" of hazardous substances, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1990 (CERCLA). Further, Consultant has no responsibility for the handling, identification, remediation, or presence of any hazardous materials at the site.

Article 17: Controlling Law

This Agreement shall be governed by the laws of the principal place of business of Consultant/State of New Hampshire.

Article 18: Successors and Assigns

The Client and the Consultant each binds itself, its partners, successors, executors, administrators and assigns, to the other party of the Agreement and to the partners, successors, executors, administrators and assigns, for such other party to all covenants of this Agreement.

Except as above, neither the Client nor the Consultant shall assign, sublet or transfer its interest in this Agreement without the written consent of the other party hereto.

Nothing in this paragraph shall prevent the Consultant from employing such independent subconsultants as Consultant may deem appropriate to assist in the performance of the services of this Agreement.

Article 19: Severability

If any of the terms and conditions of this agreement are deemed unenforceable or invalid, in whole or in part, by judgment or order of a court, that shall not affect the remaining terms and conditions of the

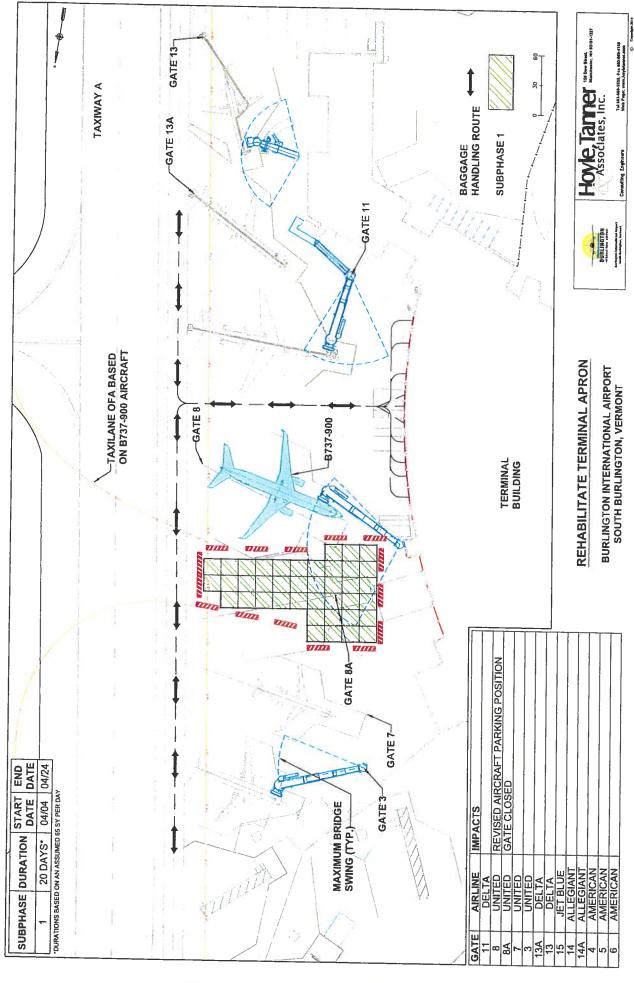
Agreement and they shall remain in full force and effect.

Article 20: Waiver of Provisions

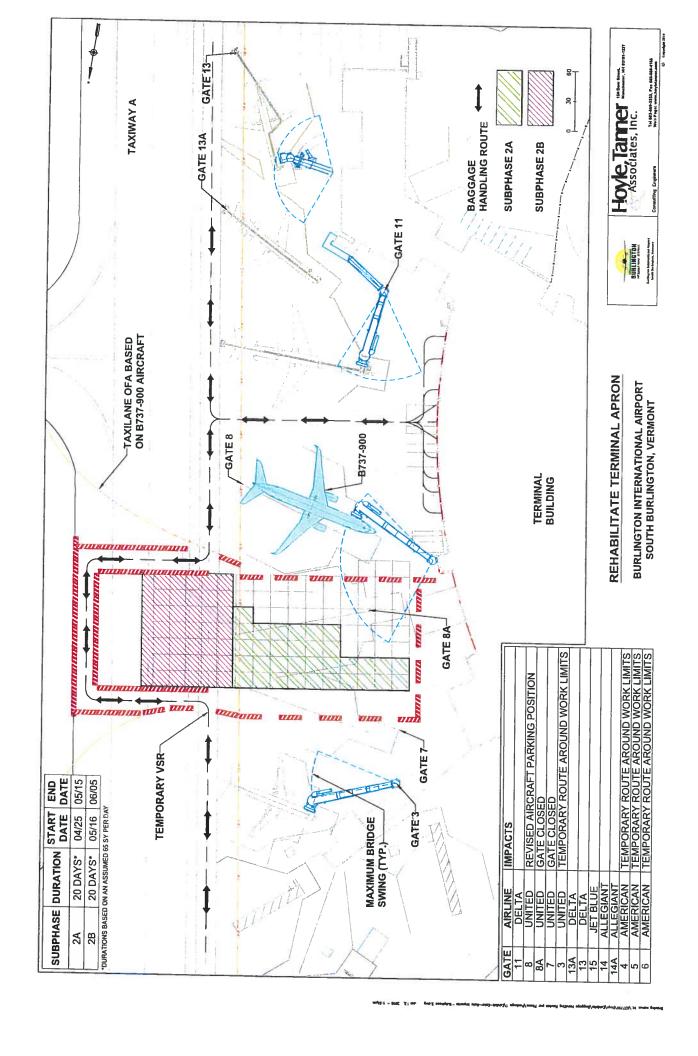
Non-enforcement of any provision of this Agreement by the Client or the Consultant shall not constitute a waiver of that provision; and non-enforcement shall not prohibit subsequent enforcement of the provision or any other provision of the Agreement.

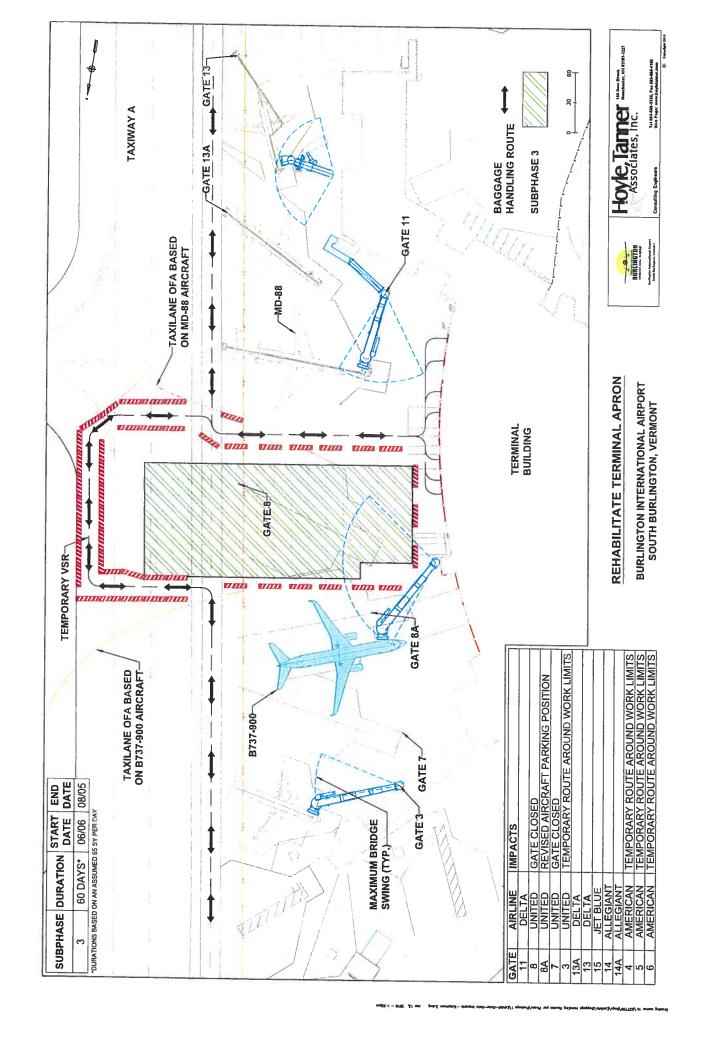
ACCEPTANCE

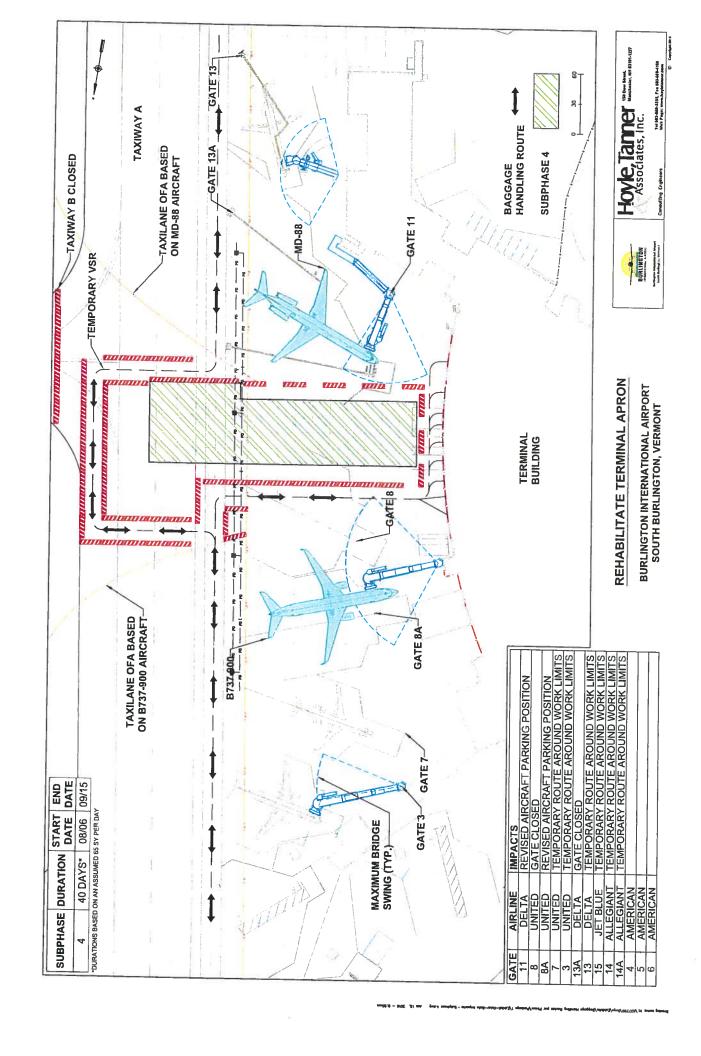
For Hoyle, Tanner & Associates, Inc.:	
Robert M. Furey, PE, Senior Vice President	
(Hoyle, Tanner Officer Name &Title)	(Date)
For [The Burlington International Airport]	
PLEASE PROCEED WITH THE PROJECT AS INDICATED.	
(Name)	(Date)
(Title)	

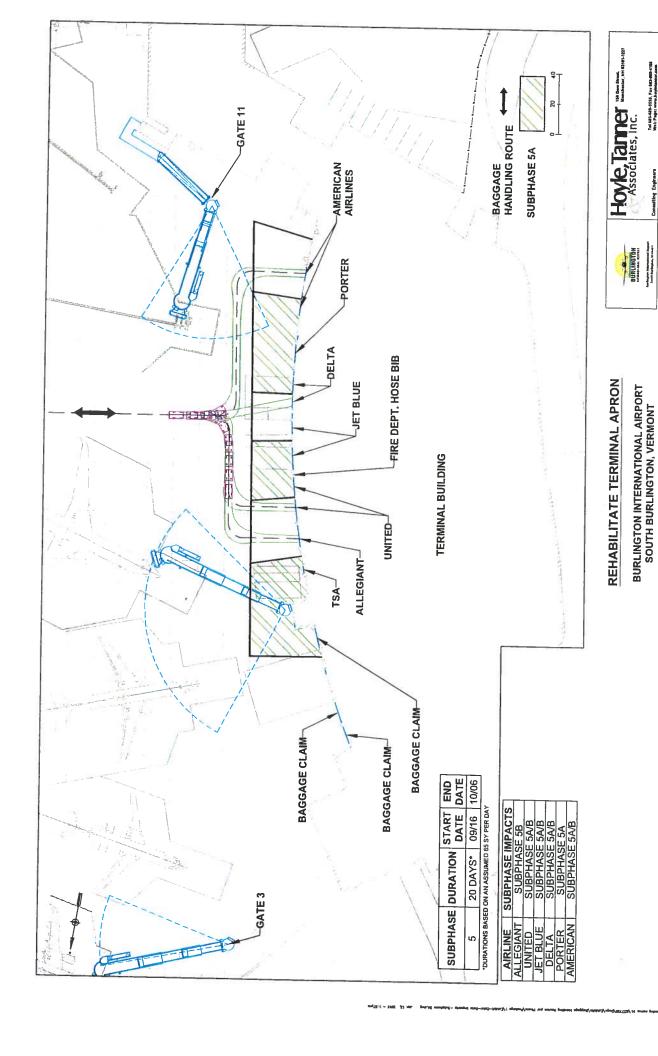


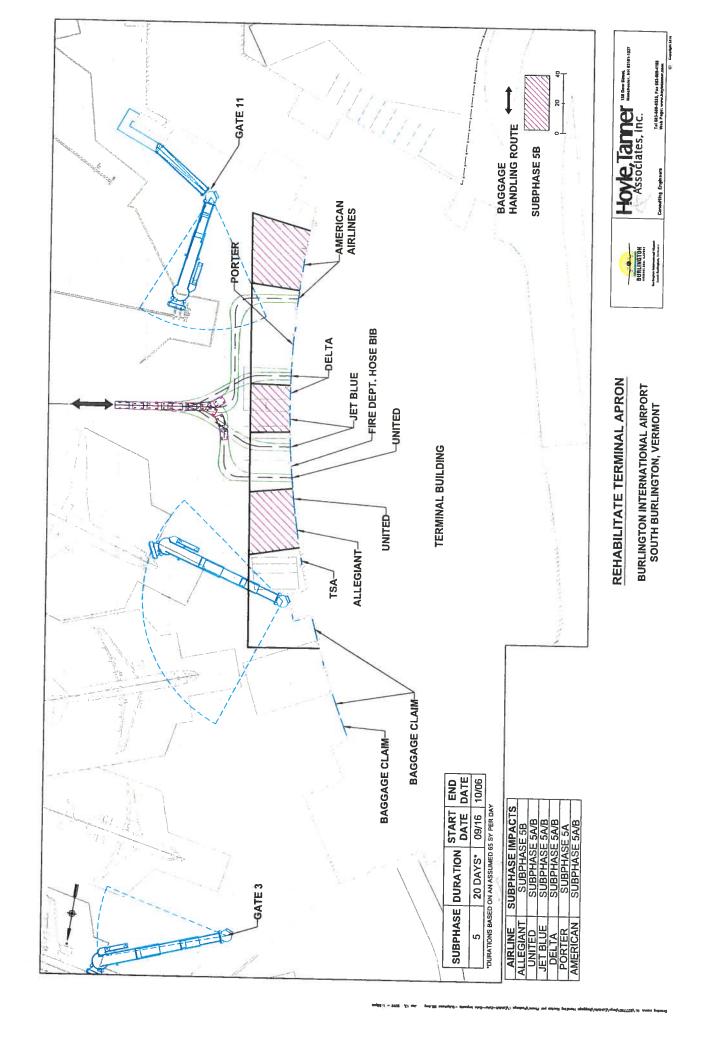
ATTACHMENT A

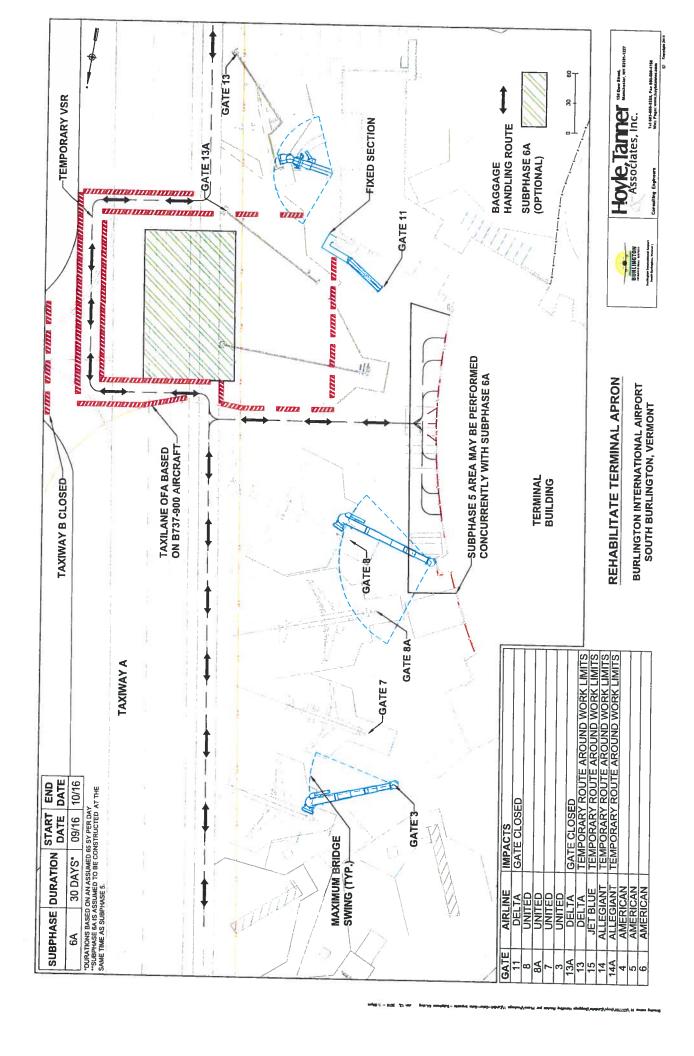












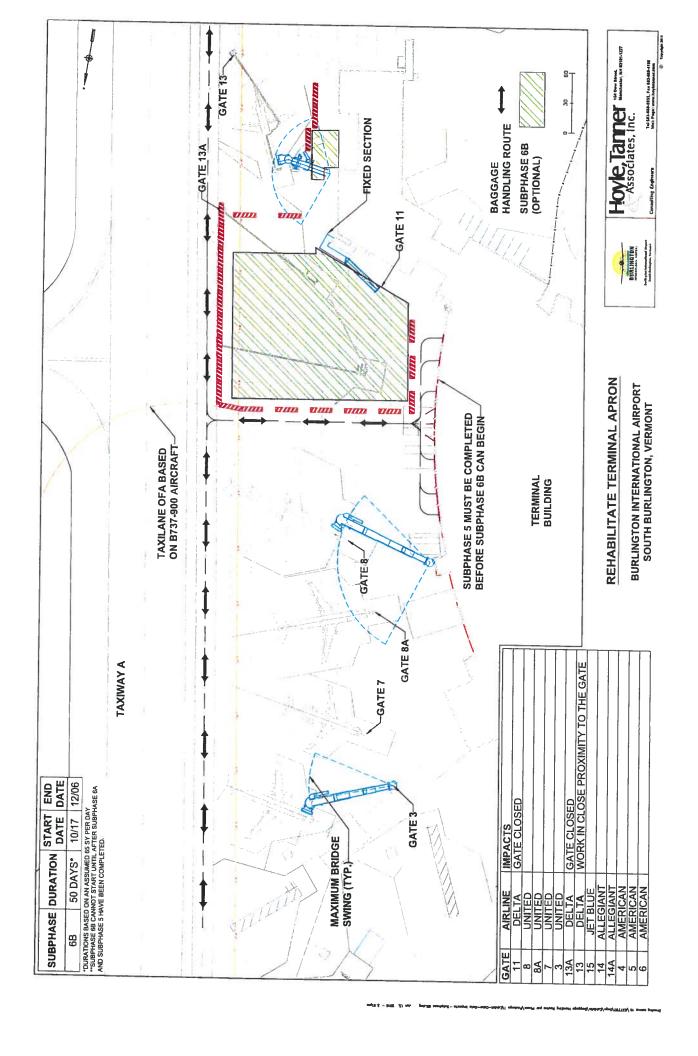


EXHIBIT "A"

SCOPE OF WORK

for PROFESSIONAL ENGINEERING SERVICES

RECONSTRUCT TERMINAL APRON, PHASE 3 (Approx. 8700 SY Base Bid; Approx. 4300 SY Additive Alternate) **BURLINGTON INTERNATIONAL AIRPORT**

This contract will cover the re-packaging of Phase 3 drawings from the overall design set, advertisement, general administration, and construction phase services, such as construction administration and resident engineering for phase 3 of the reconstruction.

ARTICLE I - REPACKAGING FOR PHASE 3 CONSTRUCTION DOCUMENTS

Hoyle, Tanner's work under this paragraph will include:

- 1. Prepare for and attend scoping meeting.
- 2. Develop a detailed construction schedule for use in determining construction phasing and duration. Note, the general phasing was prepared under AIP-100 based on the requirements of the airlines. The work under this contract will be to provide detailed descriptions of what the contractor will be expected to accomplish in each phase.
- 3. Detail temporary pavement markings for various revised aircraft parking positions based on the construction phasing. Temporary markings will be in accordance with guidelines provided by United Airlines and Delta Airlines.
- 4. Review drainage design to ensure that it is compatible with the detailed phasing.
- 5. Review concrete pavement jointing pattern to ensure it is compatible with detailed phasing.
- 6. Prepare and submit the pavement design in accordance with FAA Advisory Circular AC 150/5320-6E. The pavement design will include the completed FAA Form 5100-1. A full report will be completed and submitted to FAA and BTV.
- 7. Develop technical specifications. (i.e. FAA specifications: P-152, P-154, P-209, P-401, P-501, P-602, P-603, P-610, P-620, P-626, D-751, D-701, L-108, L-110, L-125, T-901)
- 8. Develop contract document/front-end specifications. (i.e. Notice to Bidders, Invitation to Bidders, Instruction to Bidders, Bid Proposal, Contract, Contract Articles, General Specifications)
- 9. Develop detailed construction quantities and cost estimate at the 90% and As-Advertised design levels.

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ATTA CHIMENT B

10. Develop the following anticipated plans for construction in 2016:

Cover/Index (1)

General Plan (1)

General Phasing and Safety/Operations Plan including temporary marking (9)

Geometry/Alignment Plans (2)

Erosion Control Plan and Details (1)

Survey Record Plan and Existing Utilities (2)

Typical Sections (1)

Grading Plan (2)

Detailed grading plan including spot elevations

Drainage Plan & Profiles (1)

PCC Jointing Plans (2)

Pavement Details (1)

Pavement Marking Plan (2)

Drainage Details (1)

Boring Logs (2)

Estimated Total: 28 Sheets

11. Coordinate, distribute and print the following copies of the preliminary construction documents (plans, specifications, and construction cost estimate) for review by the FAA and the Owner:

Preliminary Submission (90%)

- FAA-Burlington, MA: 1 copy of plans (1 half size); 1 copy of specifications;1 copy of estimate
- FAA-Burlington, VT: 1 copy of plans (1 full size);
- Owner: 4 copies of plans (3full size; 2 half size); 1 copy of specifications; 1 copy of estimate

As-Advertised Submission

- FAA-Burlington, MA: 1 copy of plans (1 half size); 1 copy of specifications;
 1 copy of estimate
- FAA-Burlington, VT: 1 copy of the plans (1 half size)
- Owner: 1 copy of plans (1 full size); 1 copy of specifications; 1 copy of estimate
- 12. Conduct an in-house QA/QC prior to each submission. The in-house QA/QC check will involve an experienced independent individual, depending on each discipline, to conduct a comprehensive check on all documents to be submitted (e.g. plans, specifications, estimates, reports). Time will be required for engineers and Cadd technicians/designers to correct items listed under the in-house QA/QC checks.
- 13. File FAA Form 7460 for Notice of Construction
- 14. Address final comments from 90% design for as-advertised design plans.

ARTICLE II. ADVERTISING, BIDDING AND ARRANGEMENT FOR CONSTRUCTION

Hoyle, Tanner's work under this paragraph will include bidding phase for the first phase of the project only:

- 1. Provide Public Advertising Assistance
- 2. Prepare for and attend Pre-bid Conference, and prepare minutes of said conference for distribution.
- 3. Prepare revisions or addenda to bid documents, if necessary.
- 4. Respond to Contractor's questions during bidding phase.
- 5. Check references of apparent low bidder.
- 6. Evaluate bids, recommend to the Owner the award or rejection of bids.

ARTICLE III. CONSTRUCTION ADMINISTRATION (230 calendars Base Bid, 105 calendar days for Additive Alternate)

Hoyle, Tanner's work under this paragraph will include:

- Assemble Contractor's Contract
- 2. Prepare Conformed Bid documents into Construction Documents by incorporating all addendums into the contract set.
- 3. Prepare a "Notice to Proceed" to the Contractor
- 4. Prepare for, Schedule, and Attend Pre-Construction Conference. Prepare meeting minutes and distribute.
- 5. Contract with and Coordinate the Work of the Material Testing Firm.
- 6. Establish and maintain a tracking system for all Project construction records (Request for Information (RFI), Change Order (CO), etc)
- 7. Review the Contractor's Project Schedule, Submittal Schedule, Available Equipment, and list of proposed subcontractors
- 8. Request for Information will be responded to through the preparation of written directives and sketches on behalf of the Airport to the Contractor. This scope assumes no more than 30 design inquiries will be submitted by the contractor, and considers contractor resubmittal as another separate submittal.
- 9. Shop Drawing & Submittal Review. This scope assumes no more than 20 shop drawings and materials lists reviews, and considers contractor resubmittal as another separate submittal.
- 10. Prepare for, coordinate, and attend weekly job meetings and site visits (Assume 37 by CM and 15 by project engineer). Prepare meeting minutes and distribute.

- 11. Keep the Owner informed of the progress and quality of the Work
- 12. Periodic review of all schedules with Owner and Contractor
- 13. Notify Owner and Contractor in writing of any work not in conformity with the Construction Documents
- 14. Review construction materials testing
- 15. Provide assistance in the review of the Contractor's requests for change orders. Coordinate the Change Orders with the FAA prior to Owner's execution.
- 16. Prepare Change Orders for the Owner's and FAA's approval and execution. This scope assumes no more than 15 Change Orders items, and considers contractor resubmittal as another separate submittal.
- 17. Prepare revised Contract Drawings to illustrate and document approved Change(s).
- 18. Coordinate with APTech for review of mix designs developed by the selected contractor to ensure that they meet the developed P-501 specification and that all applicable tests have been performed and the results are in conformance with the specification, with a goal of producing a durable pavement that is not susceptible to ASR or other materials-related distress.
- 19. Coordinate with APTech to review the results of tests performed during construction to ensure compliance. APTech will provide guidance for any modifications needed based on these results.
- 20. Review Contractor's application for payment. Determine if it is an appropriate amount (assume 10 payment applications).
- 21. Review Contractor Certified Payroll Submittals
- 22. Prepare and submit a monthly project status update to the FAA, using form 5370-1. This scope assumes no more than 10 submittals will be made to the FAA:
- 23. Attend Final Inspection, prepare, assemble and distribute the official punchlist(s) and meeting notes.
- 24. Review Contractor's record drawings and all other close-out documentation
- 25. Consultation & Advice to Resident Engineer assume 2 hours per week for duration of the project
- 26. Consultation & Advice to Owner assume 0.5 hours per week for duration of the project.

ARTICLE IV. RESIDENT ENGINEERING (230 calendars Base Bid, 105 calendar days for Additive Alternate – 60 hours/week)

Hoyle, Tanner will provide full-time inspection services for 260 calendar days of the PROJECT. Based on previous construction phases of the terminal apron project, this scope includes 10 hours per day for a 6-day work week for the duration of the construction. The inspector shall be fully qualified for the work and shall be approved by the OWNER and the FAA.

The resident engineer will, as appropriate:

- 1. Undertake a pre-field review of the plans and specifications in order to familiarize him with the PROJECT documents and PROJECT work site.
- 2. Review and approve requests for payments to contractors.
- 3. Prepare daily reports covering the work in progress, delays to construction, unusual events, visitors to the work site, and record daily contract quantities.
- 4. Coordinate the construction activity with the OWNER.
- 5. Provide "as built" information for preparation of "as built" drawings of the completed PROJECT.
- 6. Arrange for, conduct, or witness field, laboratory, or shop tests for construction materials as required by the plans and specifications.
- 7. Determine the suitability of materials brought to the site to be used in the construction.
- 8. Interpret the contract plans and specifications and monitor the construction activities to assure compliance with the intent of the design.
- 9. Measure, compute, or monitor quantities of work performed and quantities of materials inplace for partial and final payments to the contractors; and maintain diaries and other project records to document the work.
- 10. Undertake post-field work as necessary in order to close out the PROJECT.

ARTICLE V. CONTROL & TESTING OF MATERIALS

Hoyle, Tanner's work under this Article includes: determination of the materials testing required for construction; contracting with and coordinating the work of a Professional Materials Testing firm to obtain testing for the PROJECT.

Field services:

1. Soil:

Provide a Technician to perform the following field testing of fill materials:

- ASTM D 75: Practice for Sampling Aggregates
- ASTM D 2922: Density of Soil and Soil-Aggregate in Place by Nuclear Methods
- ASTM D 3017: Water Content of Soil and Rock in Place by Nuclear Methods
- ASTM D 6938: In-place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods

2. Concrete:

Provide a Technician to perform the following field tests of freshly mixed concrete:

- ASTM C 31: Making and Curing Concrete Test Specimens in the Field
- ASTM C 143: Slump of Hydraulic Cement Concrete
- ASTM C 172: Sampling Freshly Mixed Concrete
- ASTM C 173: Air Content of Freshly Mixed Concrete by the Volumetric Method
- ASTM C 231: Air Content of Freshly Mixed Concrete by the Pressure Method
- ASTM C 1064: Temperature of Freshly Mixed Portland Cement Concrete
- · Report quantity of fresh concrete tested and test results

3. Hot Mix Asphalt:

Provide a Technician to perform the following field tests:

- ASTM D 979 Sampling Bituminous Paving Mixtures
- ASTM D 2950 Density of Bituminous Concrete in Place by Nuclear Methods
- ASTM D 6926 Preparation of Bituminous Specimens Using MARSHALL Apparatus
- ASTM D 6927 MARSHALL Stability and Flow of Bituminous Mixtures

Laboratory services:

1. Soil:

- ASTM D 422: Particle-Size Analysis of Soils (without Hydrometer analysis)
- ASTM D 698: Laboratory Compaction Characteristics of Soil Using Standard Effort
- ASTM D 854: Specific Gravity
- ASTM D 1557: Laboratory Compaction Characteristics of Soil Using Modified Effort
- ASTM D 2419: Sand Equivalent value of Soils and Fine Aggregate

2. Concrete and Aggregate:

- ASTM C 29: Bulk Density, Unit Weight Voids in Aggregate
- ASTM C 39: Compressive Strength of Cylindrical Concrete Specimens
- ASTM C 78: Flexural Testing (Third Point Loading)
- ASTM C 88: Magnesium/Sodium Sulfate Soundness of Aggregate-Quantitative
- ASTM C 117: Material Finer than 751-1m (#200) Sieve in Mineral Aggregates by Washing
- ASTM C 131: Los Angeles Abrasion of Small Size Coarse Aggregate
- ASTM C 136: Sieve Analysis of Fine and Coarse Aggregates
- ASTM C 4791: Flat Particles, Elongated Particles, and Flat and Elongate Particles in Coarse Aggregate
- ASTM C 5821: Fractured Particles of coarse Aggregate

ARTICLE VI. - PROJECT ADMINISTRATION

The CONSULTANT will provide project administration services as required and as requested by the OWNER during the design and construction periods. The CONSULTANT's services under this paragraph will include:

- Preparation of Contract documents and supporting back-up documentation required in connection with the PROJECT, including Owner Contracting Agreement and Professional Services Agreement.
- 2. As reasonably requested, assistance with any other administrative-type work required by the OWNER in connection with the PROJECT

ARTICLE VII. - PROJECT CLOSE-OUT

- 1. Upon completion of the construction work, the CONSULTANT shall prepare, execute, and furnish a copy of "As-Built" plans to the Federal Aviation Administration and to the Owner. Plans to include 1-full size set, 2-11"x17" sets, 2 CD/DVD's plans in pdf versions, 1 CD/DVD in pdf to the FAA.
- 2. Upon completion of the construction work, the CONSULTANT shall prepare the final quantities and report on overruns or under-runs in quantities to the Federal Aviation Administration and to the Owner.
- 3. Preparation and submission of the final report to the Owner including contractors' payrolls, shop drawings, material certifications, and operations and maintenance manuals.

EXHIBIT "C" - PROJECT FEE ESTIMATE

PROFESSIONAL ENGINEERING SERVICES to

RECONSTRUCT TERMINAL APRON; PHASE 3 (Approx. 14,300 SY)

BURLINGTON INTERNATIONAL AIRPORT South Burlington, Vermont

ARTICLE I - REPACKAGING FOR PHASE 3 CONSTRUCTION DOCUMENTS	\$45,300.00	Lump Sum
ARTICLE II - ADVERTISING, BIDDING AND ARRANGEMENT FOR CONSTRUCTION	\$11,700.00	Actual Cost Not-to-Exceed Plus Fixed Fee
ARTICLE III - CONSTRUCTION PHASE SERVICES	\$176,500.00	Actual Cost Not-to-Exceed Plus Fixed Fee
ARTICLE IV - RESIDENT ENGINEERING	\$439,600.00	Actual Cost Not-to-Exceed Plus Fixed Fee
ARTICLE V - MATERIAL CONTROL AND TESTING	\$58,850.00	Actual Cost Not to Exceed
ARTICLE VI - PROJECT ADMINISTRATION	\$3,800.00	Lump Sum
ARTICLE VII - PROJECT CLOSEOUT	\$13,200.00 \$748,950.00	Lump Sum

1the 2/22/16

CLIENT: Burlington International Airport, South Burlington, Vermont							
PROJECT: Reconstruct Terminal Apron, Phase 3							
Hoyle, Tanner Project # 037750							
		HOURS BY LA	HOURS BY LABOR CLASSIFICATION	CATION			
	PRINCIPAL	MANAGER	ENGINEER	SK. CADD TECH.	SUPPORT	HOURS	TOTAL
TASK DESCRIPTIONS	\$56.00 /HR	\$57.00 /HR	\$26.00 /HR	\$40.00 /HR	\$26.00 /HR		COST
General Project Coordination	4	8	0	0	0	12	\$680.00
Prepare for & attend scoping meeting	0	2	2	0	0	4	\$166.00
Develop detailed construction phasing	0	8	16	0	2	26	\$924.00
	0	8	16	8	2	34	\$1,244.00
Prepare & submit pavement Design per AC 150/5320-6E	0	2	8	0	2	12	\$374.00
Develop Technical Specifications	0	8	24	0	8	40	\$1,288.00
Develop Contract Document/Front-End Specifications	0	4	2	0	2	8	\$332.00
Develop detailed quantities and estimate	0	4	16	2	2	24	\$776.00
File FAA Form 7460 for Notice of Construction	0	2	2	0	0	4	\$166.00
Coordinate permitting efforts with Stantec	0	2	4	0	0	9	\$218.00
	0	00	0	0	0		\$456.00
Covering and Neview the Construction Plans for Phase 3.					c	,	00000
General Plan (1)		-	-			7,	\$123.00
General Phasing and Safety/Operations Plan (1)		- 6	- 6	-	0	? a	\$123.00
Detailed Phasing and Safety/Operations Plan (8)	0	2	8	32	0	42	\$1,602.00
Geometry/Alignment Plans (2)	0	-	2	12	0	15	\$589.00
Erosion Control Plan and Details (1)	0	0	-	2	0	6	\$106.00
Survey Record Plan and Existing Utilities (2)	0	-	0	2	0	6	\$137.00
Typical Sections (1)	0	0	8	1	0	6	\$248.00
Grading Plan (2)	0	2	8	16	0	26	\$962.00
Detailed grading plan including spot elevations	0	2	æ	8	0	18	\$642.00
Drainage Plan & Profiles (1)	0	2	8	4	0	14	\$482.00
PCC Jointing Plans (2)	0	- 0	80	80 0	0	17	\$585.00
Davement Marking Dian (2)				7 0		2 (\$105.00
Drainage Details (2)			-	2		2 6	\$100.00
Misc Details (2)		0	-	200		, "	\$106.00
Boring Logs (2)		0	-	1	0	2	\$66.00
Coordinate, distribute and print plans (@ 90% and as-advertised)	0	2	4	- 80	2	16	\$590.00
	0	0	2	2	2	9	\$184.00
TOTAL HOURS TOTAL DIRECT LABOR	\$224.00	\$4.161.00	156	120	\$22	375	\$13.813.00
		,		2000001			2010/01
REIMBURSABLE EXPENSES: Mileane 4 trin y 60 64 y 324 miles	90 7213		DIRECT LABOR	~	170 459/		\$13,813.00
Postage & Communication	\$129.04		SUBTOTAL LABOR & OVERHEAD	30R & OVERH	EAD EAD	1	\$38,600.43
Printing	\$646.00						
T e e e e e e e e e e e e e e e e e e e	00 0304		PROFIT			15%	\$5,790.00
EXPENSES LOTAR	00.0084		REIMBURSABLE EXPENSES	E EXPENSES			\$950.00
SUBCONSULTANTS:			STIANT III SINO COILS	SEI4			6
			SOBCONSOLIA	2		'	90.00
			ESTIMATED TOTAL COST	TAL COST			\$45,340.43
Subconsultants Total	\$0.00		USE LUMP SUM	-		L_	\$45,300
						l	
Hoyle, Tanner & Associates, Inc.			150 D	ow Street, Man	150 Dow Street, Manchester, New Hampshire 03101-1227	Hampshire	03101-1227

I ABOR ESTIMATE	Article II - Adv	Pertising Bid	Article II - Advertising Bidding & Arrangements for Const	ements for C	onet		
CLIENT: Burlington International Airport, South Burlington, Vermont PROJECT: Reconstruct Terminal Apron, Phase 3	Vermont	i i					
Hoyle, Tanner Project # 037750		HOURS BY	HOURS BY LABOR CLASSIFICATION	SIFICATION			
	PRINCIPAL	PROJECT	STAFF	SR. CADD	ADMIN.	TOTAL	TOTAL
	ı	MANAGER	ENGINEER	TECH.	SUPPORT	HOURS	LABOR
TASK DESCRIPTIONS	\$56.00	\$57.00	\$26.00	\$40.00 /HR	\$26.00		COST
Public advertising assistance	0	-	2	0	2	2	\$161.00
Distribute bid documents, collect document fees	0	-	_	0	2	7	\$213.00
Prepare for and Attend pre-bid conference	0	8	10	4	4	26	\$980.00
Review bidder questions and issue addenda	0	4	12	12	2	30	\$1,072.00
Check References of Apparent Low Bidder	0	1	4	0	4	6	\$265.00
Analyze and tabulate bids, make recommendation of award	0	8	0	0	8	16	\$664.00
TOTAL HOURS	0	23	29	16	25	93	
TOTAL DIRECT LABOR	\$0.00	\$1,311.00	\$754.00	\$640.00	\$650.00		\$3,355.00
REIMBURSABLE EXPENSES:			DIRECT LABOR	J.			\$3,355.00
Mileage 1 trip x \$0.54 x 324 miles	\$174.96		OVERHEAD			179.45%	\$6,020.55
Postage & Communication	\$200.00		SUBTOTAL LABOR & OVERHEAD	ABOR & OVE	RHEAD	•	\$9,375.55
			REIMBURSABLE EXPENSES	SLE EXPENS	ES		\$874.96
Expenses Total	\$874.96		SUBCONSULTANTS	TANTS			\$0.00
SUBCONSULTANTS:						20	
			ESTIMATED TOTAL COST	OTAL COST			\$10,250.51
			FIXED FEE ON LABOR & OVERHEAD	N LABOR & C	OVERHEAD	15%	\$1,400.00
Subconsultants Total	\$0.00		USE: ACTUAL COST NOT TO EXCEED PLUS FIXED	L COST NOT	TO EXCEED PLUS FIXED FEE	E	\$11,700
Hoyle, Tanner & Associates, Inc.			150 Dow	150 Dow Street, Manchester, New Hampshire	hester, New	Hampshire	03101-1227

ILABOR ESTIMATE	Article III. Co	Article III. Construction Administration Services	dministratio	Services			
CLIENT: Burlington International Airport, South Burlington, Vermont	nont						
PROJECT: Reconstruct Terminal Apron, Phase 3 Hoyle, Tanner Project # 037750		230 calenda	ır days Bas	e Bid, 105 c	230 calendar days Base Bid, 105 calendar days Additive Alternate	s Additive	Alternate
		HOURS BY L	ABOR CLAS	LABOR CLASSIFICATION			
	PRINCIPAL	CONSTR.	STAFF	SR. CADD	ADMIN.	TOTAL	TOTAL
TASK DESCRIPTIONS	\$56.00	\$51.00	\$26.00	\$40.00	\$26.00 \$4.00	SADOR	COST
Assemble Contractor's Contracts	-	2		0	2	2	\$210.00
Conform Bid Documents into Construction Documents	0	2	16	20	2	40	\$1,370.00
Prepare Notice to Proceed	0	1	0	0	1	2	\$77.00
Pre-Construction Conference	0	12	8	2	4	26	\$1,004.00
Contract with and Coordinate the Work of the Material Testing Firm	1	4	0	2	4	11	\$444.00
Maintain tracking system for all project construction records	0	80	0	0	24	32	\$1,032.00
Review the Contractor's Project Schedule	0	8	0	0	2	10	\$460.00
Respond to Contractor's inquiries and provide information	0	8	8	8	16	40	\$1,352.00
Shop Drawing & Submittal Review	0	80	24	0	24	26	\$1,656.00
Prepare for and attend Job Meeting (assume 46 weekly job meetings)	0	460	120	0	12	592	\$26,892.00
Deriodic review of all schedules with Owner and Contractor	0	20 00		0	χ .	۽ ۾	\$616.00
Notify Owner and Contractor of any work not in conformity	,	٥			1 o	17	\$312.00
Review construction materials testing	- c	0 4	2 4	0	0 00	28	\$828.00
Assist in the review of regulast for Change Orders		- α	2 0		,	2 6	00.020
Prepare & Negotiate Change Orders	,	12	8	80	4	33	\$1 300 00
Prepare revised Contract Drawings to illustrate and document		! '					
approved Change(s)	0	2	00	ω	2	50	\$682.00
Coordinate with ApTech for review of pavement mix designs	0	4	0	0	0	4	\$204.00
Coordinate with APTech to review the results of tests performed	c	a	c	c	c	ç	00 000
during construction to ensure compliance.	>	o	>	>	7	2	4400.00
Review & Approve Payment Requests	0	20	80	0	œ	36	\$1,436.00
Review Contractor Certified Payroll Submittals	0	0	2	0	20	22	\$572.00
Prepare and submit a monthly project status update to the FAA	0	20	0	0	80	28	\$1,228.00
Attend Final Inspection & Prepare Punch List	0	10	0	0	4	14	\$614.00
Review Contractor's record drawings & close-out documentation	1	8	0	0	2	11	\$516.00
Consultation & Advice to Resident Engineer	0	92	8	0	0	100	\$4,900.00
Consultation & Advice to Owner	0	24	8	0	0	32	\$1,432.00
	2	749	242	48	171	1215	
TOTAL DIRECT LABOR	\$280.00	\$38,199.00	\$6,292.00	\$1,920.00	\$4,446.00		\$51,137.00
REIMBURSABLE EXPENSES:			DIRECT LABOR	OR			\$51,137.00
Mileage 49 trips x \$0.54 x 324 miles	\$9,128.70		OVERHEAD	OVERHEAD SIBTOTAL LABOR & OVERHEAD	(FDHEAD	179.45%	\$91,765.35
Printing G Communication	\$331.30						00,300,31
			REIMBURSA	REIMBURSABLE EXPENSES	SES		\$9,660.00
Expenses Total	\$9,660.00						
STIBCONSTITUTE TANTS:		•	SUBCONSULTANTS	TANIS		1	\$2,500.00
			ESTIMATED	ESTIMATED TOTAL COST	-		\$155,062.35
Aptech	\$2,500.00		FIXED FEE (N LABOR &	FIXED FEE ON LABOR & OVERHEAD	15%	\$21,400.00
						ı	
Subconsultants Total	\$2,500.00	_	JSE: ACTU,	AL COST NOT TO PLUS FIXED FEE	USE: ACTUAL COST NOT TO EXCEED PLUS FIXED FEE	<u>,</u>	\$176,500
Hoyle, Tanner & Associates, Inc.			150 E	low Street, A	fanchester, N	ew Hampsh	150 Dow Street, Manchester, New Hampshire 03101-1227

LABOR ES IIMATE CLIENT: Burlington International Airport, South Burlington, Vermont PROJECT: Reconstruct Terminal Apron, Phase 3 Hoyle, Tanner Project # 037750 230 calendar days Base Bid, 105 calen	it Engineering			
iont 230 calendar days Bas				
230 calendar days Bas				
	se Bid, 105 calendar	230 calendar days Base Bid, 105 calendar days for Additive Alternate – 60 hours/week	– 60 hours/w	eek
47.9				
335	HOL	HOURS BY LABOR CLASSIFICATION	SIFICATION	
	RESIDENT	RES. ENG.		TOTAL
	ENGINEER \$38.00	OVERTIME \$57.00	TOTAL HOURS	LABOR
	/HR	/HR		
	**		!	
eks)	1910	0	1910	\$72,580.00
Weekday - Overtime (2 hours per day, 5 days per week, for 48 weeks)	0	480	480	\$27,360.00
	0	480	480	\$27,360.00
	40	0	40	\$1,520.00
	40	0	40	\$1,520.00
	1990	096	2950	
	\$75,620.00	\$54,720.00	1	\$130,340.00
	DIRECT LABOR OVERHEAD		145.58%	\$130,340.00
	UBTOTAL LABOR	& OVERHEAD		\$320,088.97
_	EIMBURSABLE E	XPENSES		\$71,500.00
\$71,500.00	SUBCONSULTANTS	0		\$0.00
й	STIMATED TOTAL	COST		\$391,588.97
፱	IXED FEE ON LAB	OR & OVERHEAD	15%	\$48,013.00
\$0.00	CTUAL COST NO	TTO EXCEED PLUS IXED FEE	_	\$439,600
	150 Dow S	treet, Manchester, New	/ Hampshir	e 03101-1227
\$12,960.00 \$2,713.50 \$55,584.00 \$242.50 \$71,500.00		\$38.00 1910 0 40 40 40 40 40 40 5,620.00 5,620.00 CT LABOR RHEAD OTAL LABOR BURSABLE E CONSULTANT OTAL LABOR OTAL LABOR	\$38.00 \$57.00 1910	

LABOR E		V - Control & Te	esting		
CLIENT:	Burlington International Airport, South Bu	urlington, Verm	ont		· · · · · · · · · · · · · · · · · · ·
PROJECT	: Reconstruct Terminal Apron, Phase 3	-			
Hoyle, Tar	nner Project # 037750				
	A. Review job mix formula for pavement to	o be furnished to	the project.		
	Acceptance testing of asphalt, cement,	and aggregate.			
	2 Job Mix Review	@	\$500.00	=	\$1,000.00
	4 Gradation Tests	@	\$60.00	=	\$240.00
	2 Wear Tests	@	\$200.00	=	\$400.00
	5 Sodium Soundness	@	\$300.00	=	\$1,500.00
	4 Unit Weight Tests	@	\$125.00	=	\$500.00
	2 Fractured Faces	@	\$85.00	=	\$170.00
	2 Flat and Elongation tests	@	\$90.00	=	\$180.00
	2 Specific Gravity Tests	@	\$150.00	=	\$300.00
	2 Sand Equivalency Tests	@	\$125.00	=	\$250.00
			Subtotal		\$4,540.00
					` .
	B. Sampling and laboratory testing of exca	avation materials	s, aggregate subb	ase,	
	and crushed aggregate base course.				
	15 Proctor Tests	@	\$150.00	=	\$2,250.00
	18 Gradation Tests	@	\$60.00	=	\$1,080.00
	2 Abrasion Resistance	@	\$200.00	=	\$400.00
	2 Aggregate Soundness	@	\$230.00	=	\$460.00
	8 Plasticity Index & Liquid Limit	@	\$100.00	=	\$800.00
	2 Fractured Faces	@	\$85.00	=	\$170.00
	2 Sand Equivalency Tests	@	\$125.00	=	\$250.00
	• -	_	Subtotal		\$5,410.00
					701.10.00
	C. Field density tests on backfills, subgrad	des, and base co	ourses.		
	20 Days Field Density Testing	@	\$500.00	=	\$10,000.00
		_	•		*,=
	D. Experienced asphalt plant inspector for	r control and test	ting.		
	15 Days plant inspection	@	\$500.00 =		\$7,500.00
		•	,		7.,000.00
	E. Determine flexural strength of concrete	pavement by la	boratory testing		
	200 beams	@	\$58.00	=	\$11,600.00
		0	¥==·		WI IJUUUIUU
min	F. Field Tech on site				
	25 days	@	\$400.00	=	\$10,000.00
	•	9	Ψ.00.00		Ψ10,000.00
	G. Determine complression strength of con	ocrete (trench dr.	ain)		
	20 cylinders	@	\$15.00	=	\$300.00
	,	\tag{\tau}	Ψ10.00	_	\$300.00
	H. Attend Meetings (assume 2)				
	16 hours	@	\$125.00	=	\$2,000.00
		\text{\ti}\text{\texi{\text{\texi{\text{\ti}}\\ \tittt{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\text{\text{\text{\texi}\text{\text{\text{\text{\texi}\text{\text{\texi}\tittt{\text{\texi}\tittt{\texitt{\text{\texi}\tittt{\texi}\tittt{\texi}\tittt{\texittt{\texi{\texi{\texi{\texi}	Ψ120.00	_	ΨZ,000.00
	I. Reimbursable Expense				
	Straight Travel: \$125/trip @ 60 tr	ins		=	\$7,500.00
		,po		_	Ψ1,300.00
	TOTAL ACTUAL COST NOT TO EXCE	EED			\$58.850

LABOR ESTIMATE	Article VI. Project Administration	ect Administra	tion				
CLIENT: Burlington International Airport, South Bur PROJECT: Reconstruct Terminal Apron, Phase 3 Hoyle, Tanner Project # 037750	Burlington, Vermont	nt					
		HOURS BY 1	HOURS BY LABOR CLASSIFICATION	-ICATION			
	PRINCIPAL	PROJECT	STAFF	SR CADD	NIMOA	TOTAL	IATOT
		MANAGER	ENGINEER	TECH.	SUPPORT	HOURS	LABOR
TASK DESCRIPTIONS	\$56.00	\$57.00	\$26.00	\$40.00	\$26.00		COST
Generate & Negotiate Contract Documentation	/hr 0	/hr 6	0	0	/hr 2	80	\$394.00
Other Administrative Tasks as Requested	0	9	8	2	4	20	\$734.00
TOTAL MANHOURS	0	12	80	2	9	28	
TOTAL DIRECT LABOR	\$0.00	\$684.00	\$208.00	\$80.00	\$156.00		\$1,128.00
REIMBURSABLE EXPENSES:							
TRAVEL- AUTO, MILES, ETC.	\$		DIRECT LABOR	~			\$1,128.00
POSTAGE & COMMUNICATION	\$150		OVERHEAD		179.45%	•	\$2,024.20
PRINTING	\$50					l	
							\$3,152.20
SUBTOTAL:	\$200		PROFIT		15%	I	\$472.83
SUBCONSULTANTS:							\$3,625.03
			REIMBURSABLE EXPENSES	E EXPENSES	10	'	\$200.00
			ESTIMATED TOTAL COST	TAL COST			\$3,825.03
			LUMP SUM			L	\$3,800
Hoyle, Tanner & Associates, Inc.			150 D	ow Street, Ma	anchester, Ne	w Hampshi	150 Dow Street, Manchester, New Hampshire 03101-1227

LABOR ESTIMATE		Article VII. Project Close-out	out	,;			
CLIENT: Burlington International Airport, South Burlington, PROJECT: Reconstruct Terminal Apron, Phase 3 Hoyle, Tanner Project # 037750	n, Vermont		i.				
	ES	TIMATED HO	URS BY LABOR	ESTIMATED HOURS BY LABOR CLASSIFICATION	NO		
	PRINCIPAL	CONSTR.	STAFF	SR. CADD	ADMIN.	TOTAL	TOTAL
TASK DESCRIPTIONS	\$56.00	MANAGER \$51.00	ENGINEER \$26.00	TECH. \$40.00	SUPPORT \$26.00	HOURS	LABOR
Prepare, Print, & Distribute "As Built" Drawings	0	8	16	40	0	64	\$2,424.00
Prepare Final Testing Report	0	2	9	0	1	6	\$284.00
Prepare project overruns and underruns	0	2	80	0	1	11	\$336.00
Prepare final project report	0	80	16	0	4	28	\$928.00
Prepare final DBE project report							
TOTAL HOURS	0	20	46	40	9	112	
TOTAL DIRECT LABOR	\$0.00	\$1,020.00	\$1,196.00	\$1,600.00	\$156.00		\$3,972.00
REIMBURSABLE EXPENSES: Travel Postage & Communication	\$300.00		DIRECT LABOR OVERHEAD	~	179.45%		\$3,972.00 \$7,127.75
						1	\$1,121.10
Expense Sub-Total SUBCONSULTANTS:	\$400.00		PROFIT		15%		\$11,099.75
			REIMBURSABLE EXPENSES	E EXPENSES		ı	\$400.00
		_	ESTIMATED TOTAL COST	TAL COST			\$13,164.72
		_	USE LUMP SUM	_			\$13,200
Hoyle, Tanner & Associates, Inc.			15	150 Dow Street, Manchester, New Hampshire	anchester, Ne	w Hampshir	e 03101-1227
						•	



BURLINGTON INTERNATIONAL AIRPORT

MEMO

TO: Burlington International Airport, Board of Commissioners

FROM: Burlington International Airport Staff

DATE: March 21, 2016

SUBJECT: Engineering Services Change Order for Stormwater Treatment

Systems Improvement

The Burlington International Airport (BTV) seeks Airport Board of Commissioners approval for the change in contract amount for Stantec Consulting Services, Inc. (Stantec) in the amount of **\$81,400** for the design, environmental permitting, and construction engineering services for a stormwater treatment facility upgrade.

Airport Commission reviewed and approved the original scope of work and fee for this contract on March 19, 2015, with City Council approval on March 23, 2015. Since the original contract was executed, the following major changes occurred:

- On April 15, 2015 the FAA put this project on hold, asking the airport to determine a resolution for the Taxiway "A" hotspot. One of the options to address the Taxiway "A" hotspot was to relocate Taxiway "A" across what would be the location for this project. The change order includes the work associated with accommodating both projects.
- On June 16, 2015, Vermont's Legislative Act No. 64 (Vermont Clean Water Act) was signed into legislation, and it became effective on October 1, 2015. The design implications resulting from this legislative change requires no increase in phosphorus discharge within the Lake Champlain Watersheds. The original concept for this project had to be redesigned to account for more stringent state regulations. The change order includes the work associated with revising the design and coordinating with the State to ensure we follow the new regulations accordingly.

This timing and legislative change justifies the need to increase this contract to a total of \$481,393. This project and contract with Stantec will be funded through the FAA's Airport Improvement Program in a 2016 Grant application and will be reimbursed with 90% Federal funds, 6% State funds, and 4% local funds with Passenger Facility Charges.

Stantec was selected to perform this work based on qualifications according to the City's purchasing requirements and FAA requirements. Please find attached a proposed contract for recommendation to Board of Finance and City Council.

Thank you for your continued support.

1200 Airport Drive, #1 South Burlington, Vermont 05403

Phone: (802) 863-2874 (TTY) Fax: (802) 863-7947 www.btv.aero



PROFESSIONAL SERVICES AGREEMENT CHANGE ORDER

Change Order # 1 Date March 1, 2016

"STANTEC" STANTEC CONSULTING SERVICES INC.

Stantec Project # 195311029

55 Green Mountain Dr. South Burlington, VT 05403

Ph: (802) 864-0223 Fx: (802) 864-0165 email: jon.leinwohl@stantec.com

CLIENT CITY OF BURLINGTON,

BURLINGTON INTERNATIONAL AIRPORT

Client Project # AIP 3-50-0005-XXX-2016

1200 Airport Drive, #1 South Burlington, VT 05403

Ph: (802) 863-2874 Fx: (802) 863-7947

email: rmcewing@btv.aero

Project Name and Location: Air Carrier Apron - Glycol Treatment System Improvements

Design, Environmental Permitting and Construction Engineering Services,

South Burlington, Vermont

In accordance with the original Professional Services Agreement dated 25 February 2015 and Change Orders thereto, the Agreement changes as detailed below are hereby authorized.

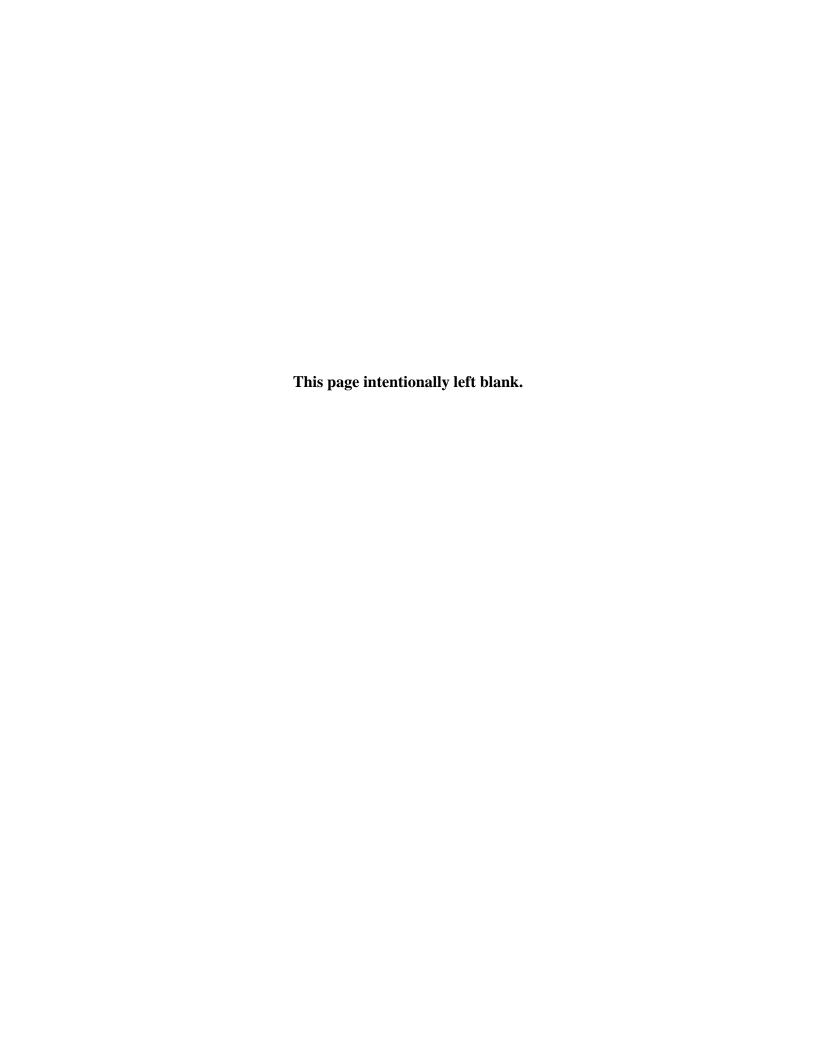
See attachment for Change Order description and justification.

Total fees this Change Order		\$ 81,400.00
Original agreement amount		\$ 399,993.00
Change Order Number		\$ -
Total Agreement	•	\$ 481,393.00

Effect on Schedule:

This Change Order extends Stantec's contract completion date to 31 December 2017.

Payments shall be made in accordance with the original agreement terms. All other items and conditions of the original Agreement shall remain in full force and effect.

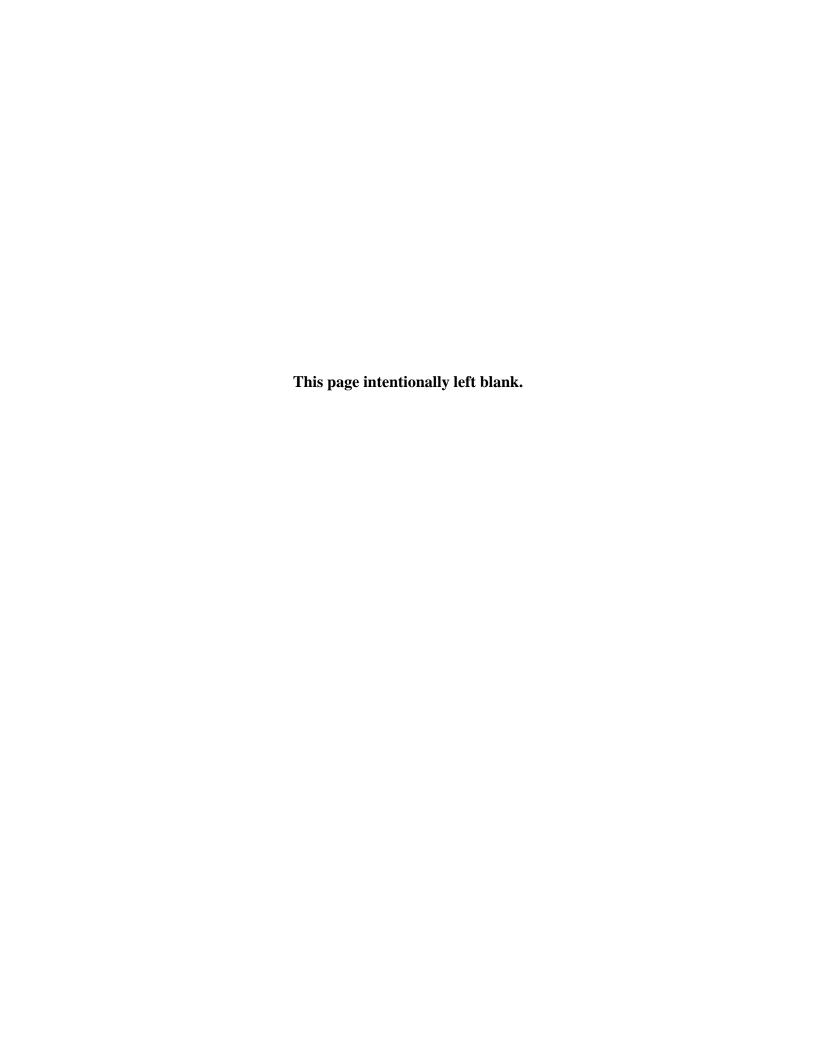




PROFESSIONAL SERVICES AGREEMENT CHANGE ORDER

Page 2

STANTEC CONSULTING SERVICES INC. CITY OF BURLINGTON, BURLINGTON INTERNATIONAL AIRPORT Gregory A. Edwards, P.E. Senior Principal Print Name and Title Signature Date Signed: CITY OF BURLINGTON, BURLINGTON Director of Aviation Print Name and Title Signature Date Signed: Date Signed:



AGREEMENT FOR DESIGN, ENVIRONMENTAL PERMITTING & CONSTRUCTION ENGINEERING SERVICES

for

Air Carrier Apron - Glycol Treatment System Improvements

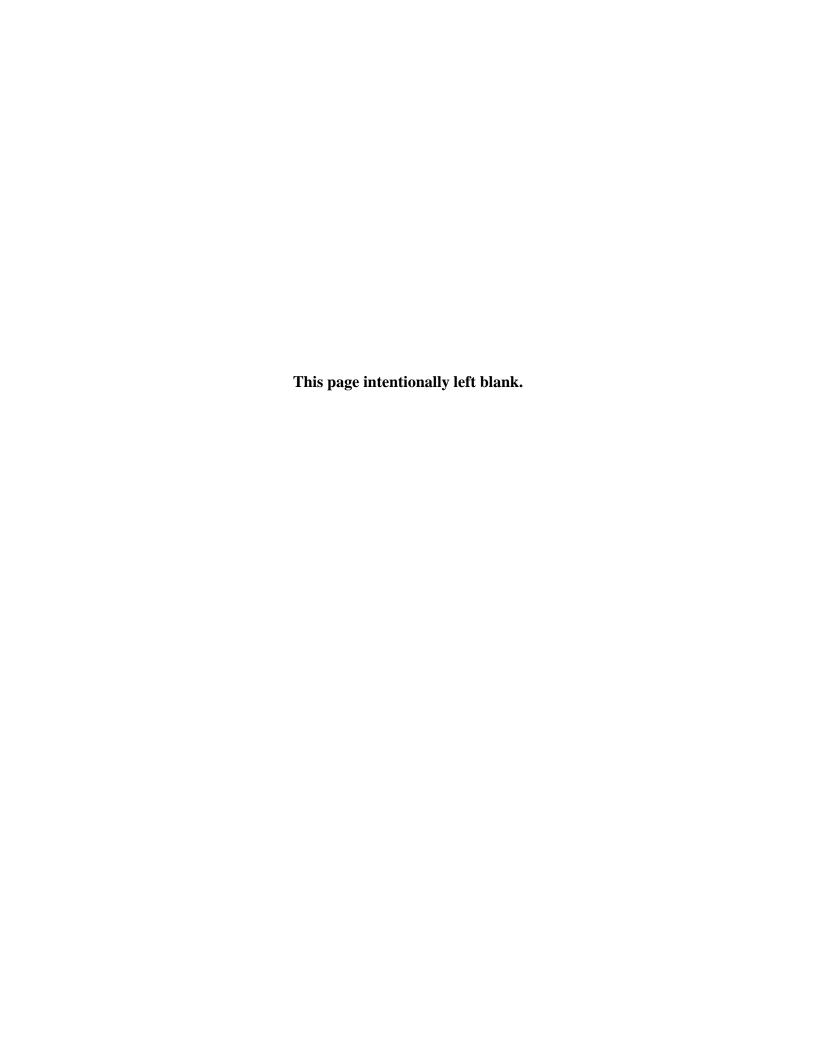
BURLINGTON INTERNATIONAL AIRPORT

South Burlington, Vermont

CHANGE ORDER #1

Attachment "A"

Change Order Narrative



March 1, 2016

Stantec Change Order #1, Attachment A - Narrative
Design, Environmental Permitting & Construction Engineering Services

Background Overview

At a Burlington Airport (BTV) meeting on March 25, 2015, John Merck (FAA New England Region Project Manager) reported that the FAA had been reviewing the Taxiway 'A' geometrics at the Runway 15-33 / 1-19 intersection. This 'Hot Spot' was also the primary subject of the Runway Safety Action Team (RSAT) meeting held at BTV on April 15, 2015. For purposes of improving safety at this location, the FAA proposed to relocate Taxiway 'A' from the Runway 15-33 / 1-19 intersection approximately 700 feet to the north.

The proposed realignment of Taxiway 'A' under consideration at the time passed through the existing Air Carrier Apron glycol treatment infiltration field. It also impacted associated infrastructure improvements which were then under design for this project including proposed stormwater tankage; pump station; valve and electric vaults.

Due to the conflicts between the taxiway relocation and proposed glycol treatment system, BTV management, in agreement with John Merck, directed Stantec to suspend design work on the glycol treatment system pending further conceptual planning to confirm the taxiway relocation. Stantec ceased working on the project on March 25, 2015. At the time work was suspended on designing improvements to the glycol treatment system, Stantec's electrical design was complete; structural design was 80% complete; and the civil design was 70% complete.

Subsequently, a meeting was held on August 27, 2015 with FAA, BTV ATC, VTANG, Stantec, and BTV Management to identify an alternative location for realigning Taxiway 'A'. As a result of the meeting all stakeholders agreed to realign Taxiway 'A' easterly of Taxiway 'B'. This decision removed the conflict with the existing Air Carrier Apron glycol treatment infiltration field and associated structures for this project. In late September 2015, BTV Management authorized Stantec to resume design of the Air Carrier Apron – Glycol Treatment System Improvements project design.

Regulatory Changes

Vermont's Legislative Act No. 64, referred to as the Vermont Clean Water Act, was signed into legislation on June 16, 2015. In part, Act No. 64 contained a requirement that all projects requiring an operational stormwater permit for discharges within the Lake Champlain watershed be required to show no increase in phosphorus. This requirement took effect on October 1, 2015. The requirement applies to all applications for coverage under General Permit 3-9010, General Permit 3-9015, or Individual Stormwater Operational Permits (INDS) submitted after October 1, 2015. The requirement applies to both new projects and to the renewal of existing permits. On October 8, 2015, Stantec, and subconsultant Vanasse Hangen Brustlin, Inc. (VHB), met with representatives of the Vermont DEC, Underground Injection Control (UIC) program to review the

project and the resulting impacts of Act No. 64. On November 5, 2015, Stantec met with representatives of the Vermont DEC, Stormwater program to review the project and the resulting impacts of Act No. 64.

Design implications resulting from the October 1, 2015, requirement for providing a discharge with no increase in phosphorus included the following:

- Changing the design storm for treatment of stormwater runoff from the water quality event WQv (i.e., 0.9" precipitation event) to the Channel Protection event (i.e., Q₁ event with 2.1" of precipitation).
- DEC determined that infiltration was the only acceptable treatment practice (BMP) that met the no increase in phosphorus requirement.

As a result of the new treatment standards, requirements increased substantially from a need to infiltrate the WQv of 32,500 cubic feet up to a need to infiltrate the Q1 volume of 70,600 cubic feet.

To complete the glycol treatment system improvements project, it was necessary to redesign a substantial amount of the system already completed. It was also necessary to perform a substantial amount of new design work primarily due to the need for changing the basis of design for the design storm event.

Project Design Impacts

- 1. Due to stopping work on the project on March 25, 2015, and resuming after October 1, 2015, the following design changes were required:
 - A. Providing solely for modifications to the existing infiltration field would no longer meet the new design criteria. As a result, a new, larger infiltration field needed to be incorporated into the design.
 - B. Previously, the pump station consisted of two, 3.9 HP, single phase pumps operating at 250 gpm with a 6" force main. Pump system curves have been revised and new pumps have been evaluated. The new design includes three, 15 HP, three phase pumps operating at 610 gpm with an 8" force main. The size of the pump station was increased to accommodate the change from a duplex pump system to a triplex pump system.

- C. The original design provided for a new 120/240V, single phase electrical service to be provided by Burlington Electrical Department (BED). A new electrical service, including an alternate power source, was required due to the increased pump sizes noted above. The new electrical service is 480/277V, three phase, provided by Green Mountain Power (GMP).
- D. Stormwater conveyance piping increased from an 18" RCP to a 36" RCP with drainage manholes needing to be increased accordingly from 4' inside diameter to 6' inside diameter.
- E. Significant modifications to the new underground electrical vault were required including electrical, structural, ventilation, and process disciplines.
 - Initially, the new underground electrical vault was conceptualized as being a precast concrete vault with a vertical ladder and small access hatch. During design development Stantec determined that a precast structure would be inadequate and a more robust design was necessary. In working with BTV maintenance and electrical staff, Stantec concluded that a cast-in-place design would provide an improved facility with better functionality. Proposed design enhancements include:
 - Design of a ship's ladder with a larger hatch for providing improved and safer
 - Provisions for a sloped floor and sump with a simplex pump for creating a drier electrical environment.
 - Provisions for ventilation to remove the atmospheric hazard for personnel entry.
- F. Beginning in the late fall of 2015, the UIC Program implemented a new on-line application process. The process is in its infancy requiring additional time to submit documents in support of the UIC application.
- G. Additional geotechnical information was obtained in the form of three soil borings. The original assumption was made that Stantec's structural engineer could use existing geotechnical information in lieu of performing new soil borings for designing the new stormwater storage tank, diversion structure, and electrical vault. However, this information was found to be inadequate and Stantec subcontracted for the required soil borings

See <u>Attachment C</u> for the scope of services and associated fee for Stantec's proposed subcontractor, Mike's Boring and Coring, LLC.

- H. Stantec originally assumed development and preparation of a total of 25 plan drawings for this project. It is anticipated that the final Bid set will include 32 drawings. One original drawing entitled *Infiltration Bed Modifications and Details* has been removed from the original set and replaced with a new drawing entitled *New ADF Infiltration Field Plan and Details*. Therefore, there have been 8 additional new drawings incorporated into the final Bid set. The following is a listing of additional drawings:
 - Demolition Plan
 - Drainage And Grading Plan
 - New ADF Infiltration Field Plan And Details
 (this new sheet replaces Infiltration Bed Modifications and Details)
 - Miscellaneous Site Details
 - Electrical Vault Process Details
 - South End Development Magnetic Flow Meter Replacement
 - Electrical Vault Ventilation Details
 - Electrical Notes
- 2. Additional design effort requested by BTV Management includes the following:
 - A. Replacement of the existing electromagnetic flow meter previously installed under the South End Development (SED or Valley West Apron) ADF Treatment System project (ref. AIP No. 3-05-0005-69-2007). Replacement was requested to satisfy new UIC regulatory requirements anticipated by BTV Management during renewal of UIC Permit #6-0084.
- 3. Additional design related items going forward include:
 - A. Stantec will be developing responses to UIC review comments received on Feb 12, 2016, including a preparing for and attending a meeting with DEC scheduled for March 3, 2016.
 - A contingency cost of \$4,000 has been included for this effort. This is a budgetary value pending review with DEC.
 - B. VHB will be developing responses to UIC review comments received on Feb 12, 2016, including a preparing for and attending a meeting with DEC scheduled for March 3, 2016.

A contingency cost of \$4,000 has been included for this effort. This is a budgetary value pending review with DEC.

- C. UIC application review comments provided by DEC require performing test pits and percolation tests in order to verify previously approved assumed infiltration rates. This effort is needed to gain DEC's approval of the new infiltration field design.
 - A contingency cost of \$12,100 has been included for this effort as a subconsultant has not been identified at this time to install the monitoring wells. Stantec will coordinate with the subconsultant to perform a minimum of two test pits and two percolation tests.
- D. Updating Contract documents including specifications to address the possibility of encountering petroleum based contaminated soils during construction. An underground plume of contaminated soils has been identified as being located in close proximity to the project site. The contaminated soils and resulting plume were first identified in 1992 during removal of a 10,000 gallon underground gasoline storage tank at the Hertz Rent-A-Car facility (formerly National Car Rental). The site is currently an active Vermont Hazardous Waste Site (re. #92-3113).

An estimated cost of \$4,500 has been included for this effort.

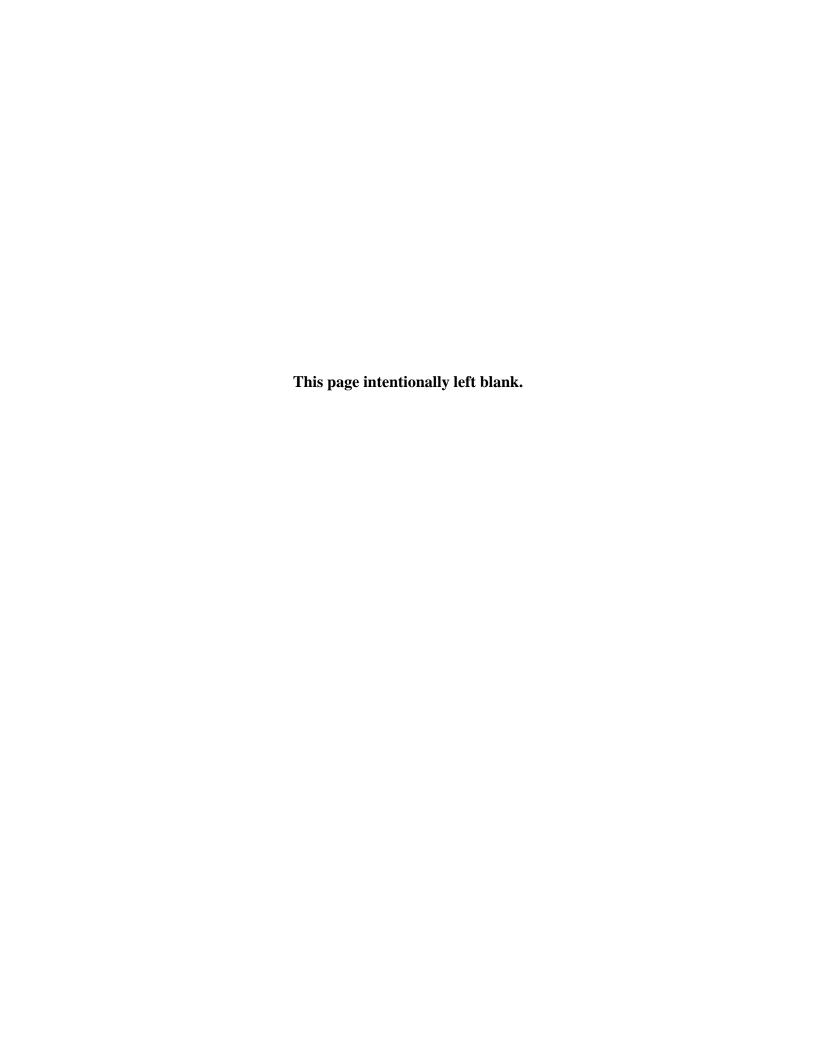
Summary

Stantec's fee derivation for Change Order #1 is as follows:

- Stantec's additional effort expended to date, including additional scope items of work requested by BTV Management, is **\$56,800**.
- We anticipate our additional effort going forward for completion of project design and permitting phases as \$24,600.

See <u>Attachment B</u> for a summary of Stantec's fees incurred to date for this additional effort, and for Stantec's estimated fees going forward for completion of project design and permitting phases.

The total Change Order #1 request includes \$56,800 and \$24,600 for a total amount of \$81,400.



AGREEMENT FOR DESIGN, ENVIRONMENTAL PERMITTING & CONSTRUCTION ENGINEERING SERVICES

for

Air Carrier Apron - Glycol Treatment System Improvements at

BURLINGTON INTERNATIONAL AIRPORT

South Burlington, Vermont

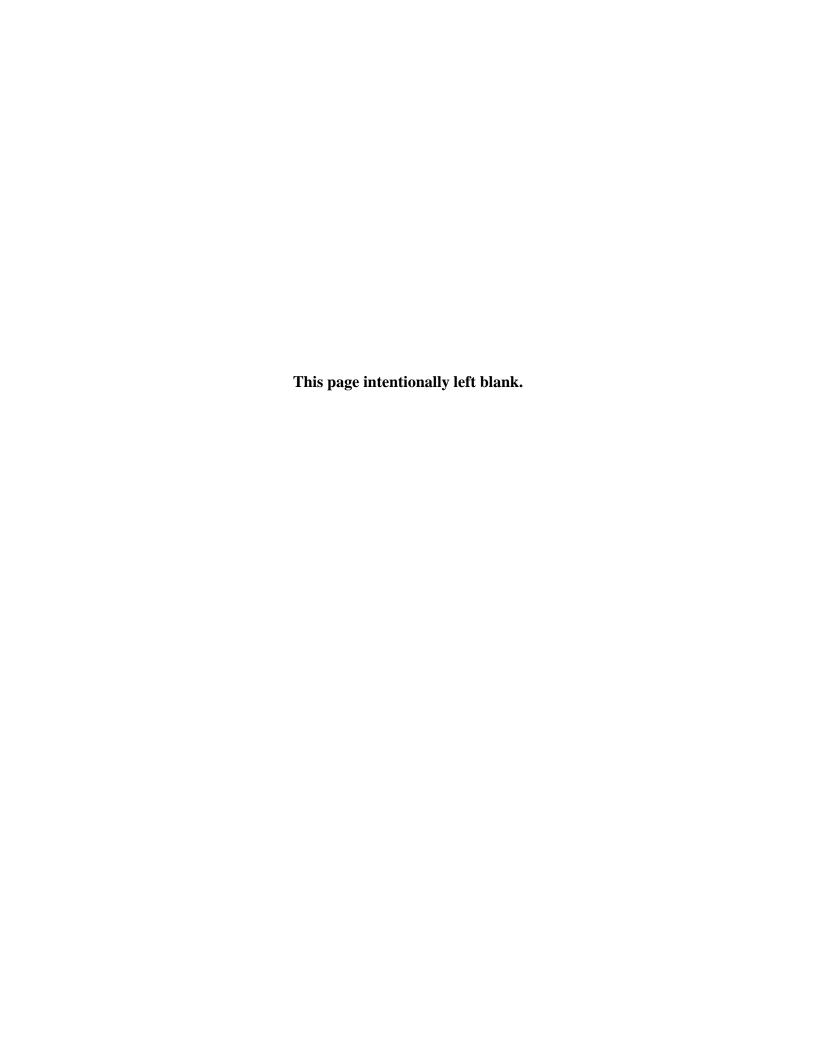
CHANGE ORDER #1

Attachment "B"

Fee Summary for Additional Effort Incurred to Date

and

Fee Summary for Additional Effort Going Forward for Completion of Design/Permitting Phases



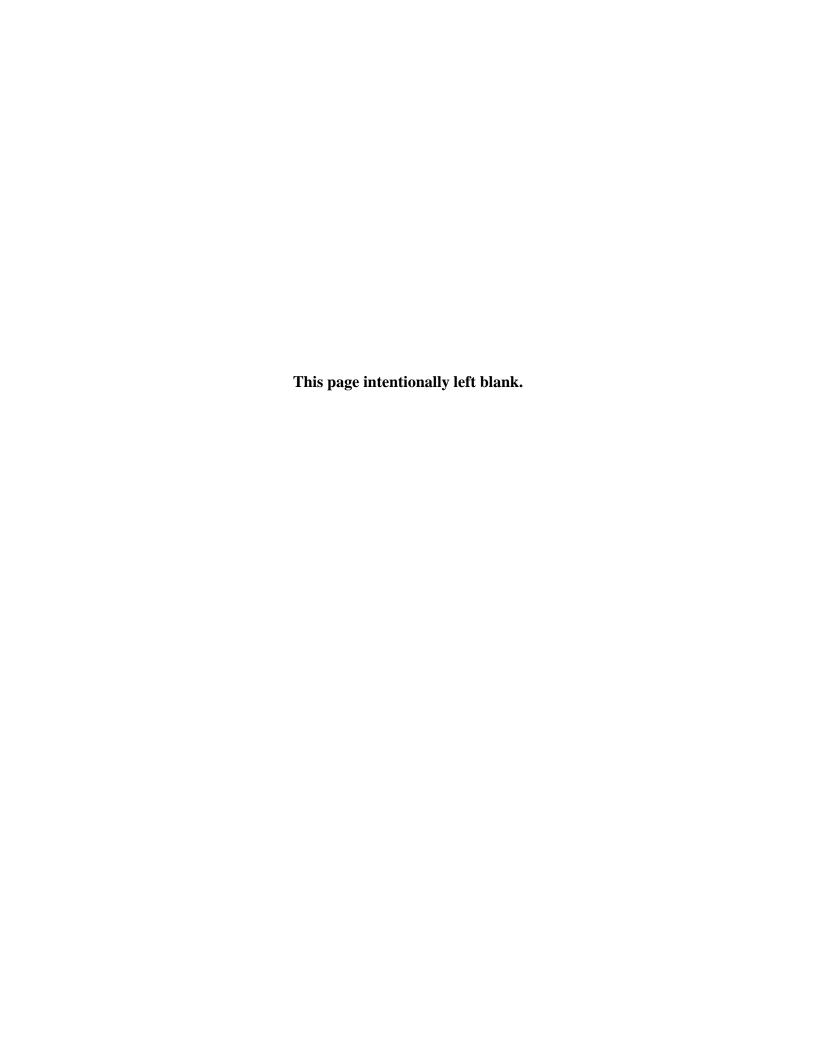
Burlington International Airport Air Carrier Apron - Glycol Treatment System Improvements AIP Project No. 3-50-0005-XXX-2016

Design, Environmental Permitting & Construction Engineering Services AIP Project No. 3-50-0005-XXX-2016

Change Order #1 Attachment 'B' Stantec's Additional Effort Expended to Date

Date: March 1, 2016

Classification	Hours	Amount
Principal	0.0	\$0
Associate/Senior Project Manager	14.5	\$2,273
Senior Structural Engineer	23.0	\$3,842
Structural Engineer	2.0	\$282
Senior Civil Engineer	134.5	\$16,532
Civil Engineer	54.0	\$4,916
Senior Electrical Engineer	16.0	\$3,309
Senior Mechanical Engineer	8.0	\$1,009
Environmental Analyst	2.5	\$250
Technician	117.3	\$11,667
Clerical	0.0	\$0
Subtotal		\$44,079
Current Invoicing not Captured to date		\$10,000
Reimbursable: Mileage Borings: Mike's Boring and Coring, LLC.		\$21 \$2,700
Total Expenditures		\$56,800



Burlington International Airport Air Carrier Apron - Glycol Treatment System Improvements AIP Project No. 3-50-0005-XXX-2016

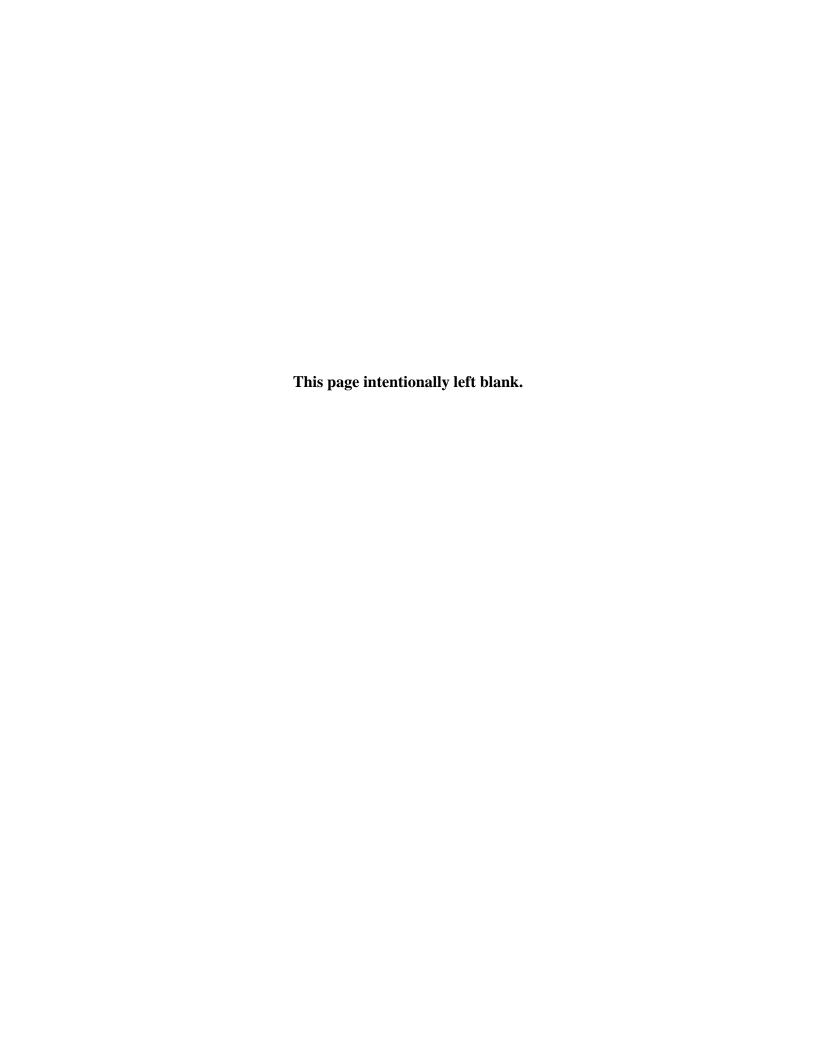
Design, Environmental Permitting & Construction Engineering Services AIP Project No. 3-50-0005-XXX-2016

Change Order #1 Attachment 'B'

Stantec's Additional Effort Going Forward to Completion of Design/Permitting Phases

Date: March 1, 2016

Task	Estimated Hours	Estimated Amount
Develop responses to UIC application review comments (Stantec).	32.0	\$4,000
Develop responses to UIC application review comments (VHB).	32.0	\$4,000
Perform test pits and percolation tests per DEC request.		
- VHB Field Assistance (3 1/2 days x 2 Technicians)	56.0	\$5,600
- VHB Office Assistance (1 day x 1 Hydrogeologist)	8.0	\$1,000
- Stantec Field Assistance (3 1/2 days x 1 Technicians)	28.0	\$3,000
- Stantec Coordination	4.0	\$500
- Subcontractor for Excavation	8.0	\$2,000
	Subtotal =	\$12,100
Update Contract documents to provide for the possibility of encountering Contaminated Soils.	36.0	\$4,500
Total Estimated Amount		\$24,600



AGREEMENT FOR DESIGN, ENVIRONMENTAL PERMITTING & CONSTRUCTION ENGINEERING SERVICES

for

Air Carrier Apron - Glycol Treatment System Improvements

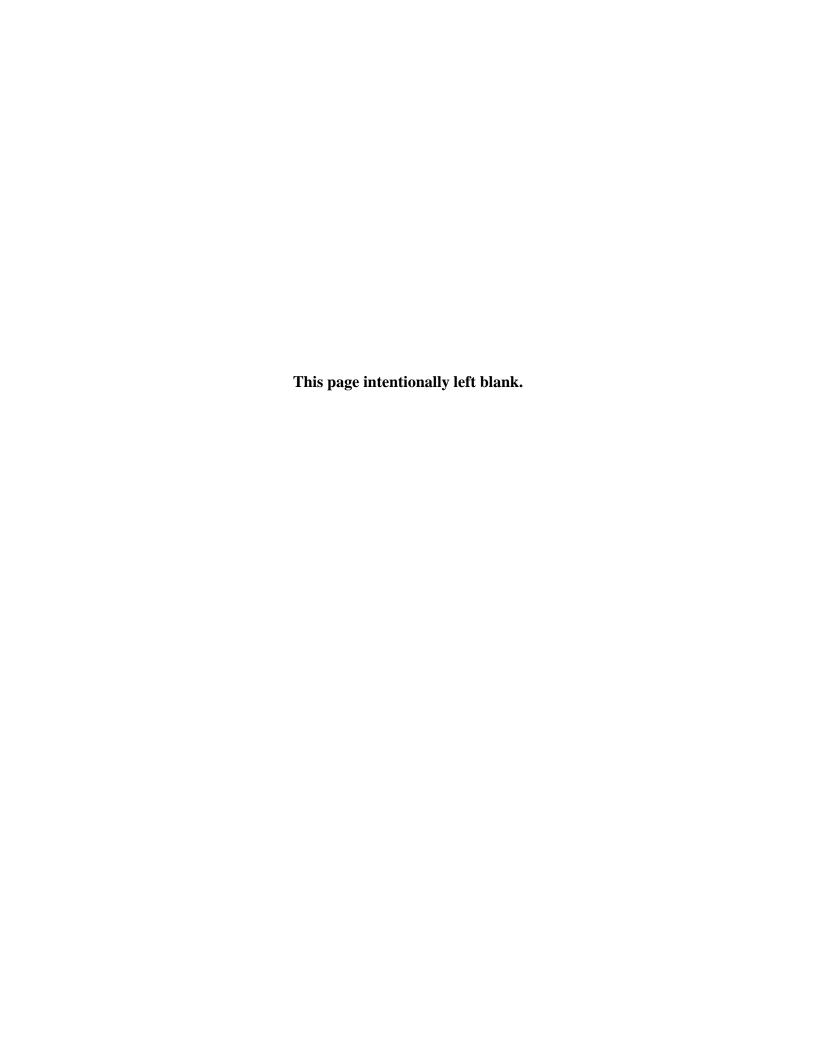
BURLINGTON INTERNATIONAL AIRPORT

South Burlington, Vermont

CHANGE ORDER #1

Attachment "C"

Mike's Boring and Coring, LLC., Proposal



MIKES BORING & CORING LLC.

P.O. Box 75 East Barre, VT 05649

Email- mikesbandc@myfairpoint.net

website- www.mikesboringandcoring.com

January 26, 2016

Trey Dystra Stantec, Inc. 5 Dartmouth Drive Suite 101 Auburn, NH 03032

RE: Burlington Airport, Underground tank

Dear Trey,

This quote is based 2 borings to a depth of 35 feet and with 5 foot sampling and possible an additional boring also to 35' with 5 foot sampling. We will access the site with our wheeled rig and estimate this taking 1 to 1.5 days to complete depending on drilling, access requirements and number of borings.

Stantec with stake out and contact dig safe

ITEM	UNIT PRICE	QUANTITY	TOTAL
Mobilization and demobilization –	\$325.00	1	\$325.00
Drilling price per day	\$1,475.00	1.5	\$2,212.50
Sample jars price per jar	\$1.75	21	\$36.75
Daily mobilization if needed	\$150.00	1	\$150.00
ESTIMATED TOTAL			\$ 2,724.25

This is an estimate only, not the actual cost to do the job.

If you have any questions or need any further information, please feel free to call at anytime. We appreciate the opportunity to work with you.

Thank you and have a nice day.		
Sincerely,		
Amy L. McGinley Owner		
Client hereby agrees to pay all invoice 30 days shall result in the imposition of	orize Mike's Boring & Coring to proceed with this process within 30 days of receipt. Failure to pay invoices with interest on the outstanding balance, at the rate of 1.5 y such interest, together with all cost and expenses the torney fees.	thin
Signature	Date	



BURLINGTON INTERNATIONAL AIRPORT

MEMO

TO: Burlington International Airport, Board of Commissioners

FROM: Burlington International Airport Staff

DATE: March 21, 2016

SUBJECT: Design and Environmental Permitting Services for the Relocation of

Taxiway Alpha

The Burlington International Airport (BTV) seeks Airport Board of Commissioners approval of and its recommendation to the Burlington Board of Finance (BofF) and the Burlington City Council (CC) to the awarding of contract to Stantec Consulting Services, Inc. (Stantec) in the amount of \$311,180 to provide a design of a new taxiway layout and to provide environmental permitting and bidding services.

The FAA has designated the intersection of Taxiway "A", "Runway 15-33", and "Runway 1-19" as a hot spot as shown on the airport diagram (attached). The Runway Safety Action Team (RSAT) identified this hotspot for priority remediation. The removal of a section of taxiway Alpha and the construction of a new taxiway (Currently known as Taxiway Bravo Extension) on the east side of Runway 15-33 to serve the end of Runway 19 has been analyzed and confirmed as the solution to this hotspot. This project and contract with Stantec will be funded through the FAA's Airport Improvement Program and will be reimbursed with 90% Federal funds, 6% State funds, and 4% local funds with Passenger Facility Charges.

Stantec was selected to perform this work based on qualifications according to the City's purchasing requirements and FAA requirements. Please find attached a proposed contract for recommendation to Board of Finance and City Council.

Thank you for your continued support.

1200 Airport Drive, #1 South Burlington, Vermont 05403

Phone: (802) 863-2874 (TTY) Fax: (802) 863-7947

www.btv.aero

AGREEMENT FOR PROFESSIONAL SERVICES

for

RELOCATE TAXIWAY 'A' (HOT SPOT 1) DESIGN ENGINEERING and ENVIRONMENTAL PERMITTING at

BURLINGTON INTERNATIONAL AIRPORT

South Burlington, Vermont

FAA AIP PROJECT NO. 3-50-0005-1___--2016

BASIC AGREEMENT	1-18
EXHIBIT "A" - Contract Provisions for AIP	19-24
EXHIBIT "B" - Fee Schedule	
EXHIBIT "C" – Drawing	

BASIC AGREEMENT

This AGREEMENT is made and entered into at Chittenden County, Vermont effective _______ between the City of Burlington, Vermont (hereinafter called the OWNER) and the firm of Stantec Consulting Services, Inc., 55 Green Mountain Drive, South Burlington, Vermont (hereinafter called the CONSULTANT).

WITNESSETH:

WHEREAS, the OWNER is the owner and operator of the Burlington International Airport located in South Burlington, Vermont; and

WHEREAS, the OWNER wishes to undertake a PROJECT consisting of designing the Relocation of Taxiway 'A', hereinafter called the PROJECT; and

WHEREAS, the OWNER intends to partially finance said PROJECT with financial aid from the U.S. Government acting through the Federal Aviation Administration (hereinafter the FAA) under the Airport Improvement Program (hereinafter AIP); and

WHEREAS, the OWNER has already undertaken certain actions, and will undertake other actions, required to obtain the aforementioned Federal and State financial aid for the PROJECTS; and

WHEREAS, the PROJECT will require approval by the FAA, and local government agencies; and

WHEREAS, the services of a professional engineer or engineering firm will be required by the OWNER to prepare preliminary and final contract plans, specifications and estimates of construction costs; to provide environmental permitting services; and to otherwise assist the OWNER in the conduct of the PROJECT, and

WHEREAS, such services are of a distinct professional and noncompetitive nature; and

WHEREAS, the OWNER has undertaken and completed a consultant selection process in accordance with the requirements of FAA Advisory Circular 150/5100-14E, dated September 30, 2014.

NOW THEREFORE, in consideration of these premises and of the satisfactory performance by the CONSULTANT of the services hereinafter provided and for the payments to be made therefore by the OWNER, the CONSULTANT and the OWNER do hereby agree as follows:

SCOPE OF SERVICES

PROJECT UNDERSTANDING

The FAA has designated the intersection of Taxiway 'A', Runway '15-33' and Runway '01-19' as a hot spot "HS-1" as shown on their airport diagram as depicted below:

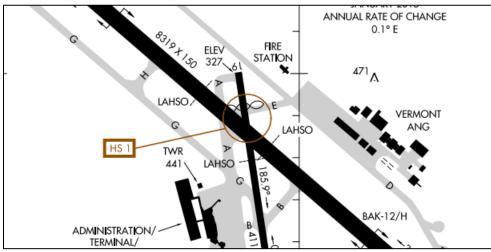


Figure 1- FAA BTV Airport Diagram (Cropped)

The Runway Safety Action Team (RSAT) identified hot spot HS-1 as a priority issue at a meeting held on April 15, 2015 and a report has been prepared regarding HS-1.

A review of FAA AC 150/5300-13A Chapter 4 demonstrates that HS-1 meets a number of the criteria for poor taxiway intersection design. The following paragraphs are relevant when examining HS-1:

1. Chapter 4 401 b (3) Three Node Concept. Good airport design practices keep taxiway intersections simple by reducing the number of taxiways intersection at a single location and allows for proper placement of airfield markings, signage and lighting.

- 2. Chapter 4 401 b (4) Intersection Angles. Design turns to be 90 degrees wherever possible.
- 3. Chapter 4 401 b (5) Runway Incursions. Intersections prone to wrong-runway takeoffs are not recommended for construction. These and other existing nonstandard conditions should be corrected as soon as practicable.
- 4. Chapter 4 401 b (5) (b) Avoid wide expanses of pavement. Taxiway to runway interface encompassing wide expanses of pavement is not recommended. Wide pavements require placement of signs far from a pilot's eye and reduce the conspicuity of other visual cues. Under low visibility conditions or due to pilot focus on the centerline, signs can be missed. This is especially critical at runway entrance points. Where a wide expanse of pavement is unavoidable, such as a crossover providing for a 180 degree turn between parallel taxiways, avoid direct access to a runway.
- 5. Chapter 4 401 b (5) (d) Avoid "high energy" intersections. These are intersections in the middle third of the runways. By limiting runway crossings to the outer thirds of the runway, the portion of the runway where a pilot can least maneuver to avoid a collision is kept clear.
- 6. Chapter 4 401 b (5) (g) Indirect Access. Do not design taxiways to lead directly from an apron to a runway without requiring a turn.

To correct this hot spot (HS-1), Burlington International Airport (BTV) has requested a scope and fee from the CONSULTANT to design a new taxiway layout and to provide environmental permitting and bidding services. The following scope of services encompasses this.

ARTICLE A – REVIEW OF DATA AND SCHEMATIC DESIGN

The CONSULTANT shall provide the following services:

- 1. Review record drawings, and existing data/documentation regarding existing conditions including but not limited to airfield pavement layouts, utility locations (electrical and drainage), geotechnical data and existing ground survey. Existing drawings, data and documentation to be provided by others.
- 2. Coordinate with the OWNER and other stakeholders to confirm Hot Spot 1 issue and to understand the scope of project and future phases of work at the airport.
- 3. **Schematic Design:** Coordinate with BTV, the FAA and other stakeholders (ATCT etc.) to produce four (4) schematic design alternatives for assessment of hot spot HS-1. Prepare an evaluation matrix, sketches and other illustrative materials for each of the alternatives.
- 4. Schematic Design Review Meeting: Prepare for, attend and document a design charrette

with the Airport, the FAA and other stakeholders to analyze the different design solutions. The CONSULTANT will prepare sketches and other illustrative material for each an anticipated 4 alternatives and prepare lists of "Pros and Cons" of each alternative and other matrixes to help identify the best solution. It is anticipated that at the end of this meeting a preferred alternative, scope of project, and future phases of work at the airport will be determined.

- 5. **Schematic Design Submission:** Assuming a preferred alternative is chosen at the design charrette the CONSULTANT will further develop the drawings and produce a cost estimate for this alternative. The CONSULTANT will coordinate with the airport and the FAA for approval to move ahead with the final design documents.
- 6. **Topographical Survey and Mapping Update:** Once the schematic design has been completed and a preferred alternative has been chosen, the OWNER will engage a qualified sub-consultant to conduct a topographical survey of the project area. The CONSULTANT will provide coordination with the surveying firm including developing survey requests; scheduling; and review of the mapping. As the exact size of the project area is yet to be determined we are carrying this sub-consultant as an allowance.
- 7. Verify the location of FAA control and power cables: Communicate with FAA staff to confirm the locations of their underground cables.
- 8. **Geotechnical Coordination:** Once the schematic design has been completed and a preferred alternative has been chosen, the CONSULTANT will engage a qualified subconsultant to conduct a geotechnical investigation of the project area. The CONSULTANT will develop a scope of work for the geotechnical sub-consultant which will include applicable tests (Atterberg limits, sieve analysis, proctors, CBR and United Soils Classification etc.) and the spacing and coverage of the borings/test pits. The CONSULTANT will provide staff to observe the soil boring operation; however, will not provide security escort on the airfield for the geotechnical sub-consultant.
- 9. **Consult with BTV Operations and Electrician** to determine how taxiway edge lighting will function with regard to the existing taxiway circuits.
- 10. **Conduct Electrical/Lighting and Vault Investigation:** Investigate the capacity of the existing electrical vault equipment (regulators, transformers, etc.) to determine if upgrades are needed to handle any additional loads for the new taxiway layout.
- 11. **Airport Layout Plan Update:** This project is not shown on the current airport's current ALP. The CONSULTANT will prepare a "Pen and Ink" change to the ALP and submit it to the BTV and the FAA for approval.

ARTICLE B – PRELIMINARY DESIGN, DRAWINGS AND SPECIFICATIONS

The CONSULTANT shall provide the following services for the project:

- 1. Prepare preliminary (60 percent) construction plans for the new taxiway layout. Plans will be at a scale sufficient to show all pertinent features, existing and design contours at one-half foot intervals, taxiway lights, electrical systems, drainage systems, and approximate locations of existing buried utilities.
- 2. Prepare detail sheets to show typical cross sections for the project area, catch basins, pavement joints, underdrain system, trenching, erosion control, electrical details, and all other features necessary for the proper construction of the project.
- 3. Prepare preliminary contract documents and technical specifications in accordance with applicable FAA design standards necessary for proper construction of the project.
- 4. Prepare the project storm-water design in accordance with FAA Advisory Circular 150/5320-5D (8/15/13) Surface Drainage Design and local standards. A field survey shall be conducted as noted in ARTICLE A to verify locations and conditions of culverts and drainage systems that may be impacted by the proposed design. Design of the stormwater treatment system and environmental permitting is included under ARTICLE D.
- 5. Prepare a preliminary Construction Phasing and Safety Plan (CPSP) and report to address the construction phasing of the project and user impacts. This submission will include but is not limited to addressing facility closures, service interruptions or other user impacts; construction sequencing; and safety issues related to construction activities.
- 6. Prepare preliminary estimates of material quantities and construction costs for the project based on the 60% preliminary plans, specifications and environmental permitting requirements. These estimates will furnish the necessary cost data for the programming of project funds. The preliminary cost estimates will be further developed into a final cost estimate based on the results of the preliminary review comments.

It is noted that the CONSULTANT has no control over the cost of contractor labor and materials or over the competitive bidding and construction market conditions. Therefore the CONSULTANT cannot guarantee the accuracy of the construction cost estimates when compared to the contractor's construction bid or the final project cost.

7. Preliminary Plans, Specifications, and Preliminary Estimates shall be distributed as follows:

	BTV	FAA
Preliminary Plans	2	*7
Preliminary Specifications	2	1
Preliminary Estimates	1	N/A

^{*} One copy of plans to be sent to Flight Procedures for review

8. Perform an in-house quality assurance review of the project plans, specifications, and

estimate prior to the preliminary submission.

- 9. Prepare and submit a pavement design report in accordance with FAA Advisory Circular 150/5320-6E, Airport Pavement Design and Evaluation. The pavement design will be based on the FAARFIELD program. This program utilizes the specific "Aircraft Mix" at BTV as a variable input. It is assumed that the "Aircraft Mix" for BTV has been determined and that this information will be made available for the CONSULTANT's use on this project. The geotechnical data collected under Article A will be utilized in preparing the pavement design report.
- 10. Prepare the project electrical design to include medium intensity taxiway edge lighting and taxiway guidance signs for the new taxiway layout including any modifications and/or relocations of edge lighting along existing taxiways and runway to remain. The electrical design will also include provisions for protecting the FAA control cables.
- 11. Update the Airport's ALP: This project is not shown on the airport's ALP, the FAA have agreed to make a "pen & ink" change to the ALP. The CONSULTANT will make this change and submit it to the airport and the FAA for approval.

ARTICLE C – FINAL DESIGN, DRAWINGS AND SPECIFICATIONS

The CONSULTANT shall provide the following services:

1. Prepare final construction plans and detail drawings suitable for bidding purposes based on the results of the preliminary plan review. Drawings are proposed to be on standard 24" x 36" size sheets. Plans are proposed to include but will not necessarily be limited to the following forty-four (44) sheets:

Title Sheet (1 Drawing)

General Notes (1)

Existing Conditions & Demolition Plan (2)

Construction Phasing and Safety Plans (4)

Alignment Plans (3)

Grading and Drainage Plans (3)

Profiles (3)

Erosion Control Plans (3)

Erosion Control Narrative and Details (4)

Typical Sections (1)

Civil/Miscellaneous Site Details (2)

Lighting and Electrical Layout Plan (3)

Lighting, Electrical Details & Sign Plans (2)

Airfield Lighting Vault Plan (1)

Pavement Marking Plan and Details (3)

Cross Sections (8)

2. Project Specifications and Contract Documents – Prepare specifications and contract

documents for the final design phase based on the plans. The specifications will establish materials and quality standards for the proposed improvement project. Design criteria and specifications will be in accordance with FAA Advisory Circular 150/5300-13A "Airport Design", AC 150/5370-10G "Standards for Specifying Construction of Airport" and any other applicable AC's. The applicable FAA Advisory Circular Checklist will be that in effect as of April 2015. The CONSULTANT will consult with BTV as necessary regarding the format to be utilized in preparation of the bidding documents (i.e. general provisions; contract agreement; City of Burlington requirements; and bid form).

- 3. Finalize the CPSP and report with the submission of the final design, to address the construction phasing of the project. This submission will incorporate the FAA's Safety and Phasing Plan Checklist.
- 4. Prepare final estimates of material quantities and construction costs for the project based on the final plans, specifications and environmental permitting requirements. A copy of these estimates will be included in the submission of the final plans and specifications.

The final cost estimate will provide the basis for judging the merit of the contractor's construction bids. It is noted that the CONSULTANT has no control over the cost of contractor labor and materials or over the competitive bidding and construction market conditions. The CONSULTANT cannot guarantee the accuracy of the final cost estimates when compared to the contractor's construction bids or the final project cost. Therefore, the final cost estimates provided herein will be based on the CONSULTANT'S experience with similar recent construction and industry trends.

5. Final Plans, Specifications, and Estimate Distribution – Plans, specifications, and construction cost estimates shall be distributed as follows:

	BTV	FAA
Final Plans (100%)	2	1
Final Specifications (100%)	2	1

6. Perform an in-house quality assurance review of the final plans, specifications, and estimate prior to the final submission.

ARTICLE D - ENVIRONMENTAL PERMITTING AND STORMWATER TREATMENT DESIGN

It is assumed the following permits will be required:

- NEPA Categorical Exclusion per FAA Order 5050.4b and 1050.1e.
- NPDES Individual Construction Stormwater Discharge Permit (Agency of Natural Resources)

- Stormwater Permit for New Development & Redevelopment (Agency of Natural Resources)
- Act 250 Amendment, due to changes affecting existing permits.
- City of South Burlington Sketch Plan, Preliminary & Final Plat approvals; Zoning Permit; and Certificate of Occupancy.
- FAA Notice of Proposed Construction Permit (Form 7460-1) (Note that two FAA permits are required: One for the permanent construction; the second for temporary use of construction equipment.)

The CONSULTANT's scope of services under Article D includes preparing permit applications; soliciting the Owner's review and signatures; submitting applications; directing permitting agency review comments to the proper individuals and ensuring that timely responses are provided; and monitoring the status of outstanding permit issues. Throughout this process, the CONSULTANT will solicit permit application support information, documentation, plans, and calculations from team members to facilitate the permit approval process. In addition to these tasks, the CONSULTANT will also provide the following with regard to specific permits:

Under Article D, the CONSULTANT will provide permitting services assistance for the following:

1. NEPA Categorical Exclusion.

The CONSULTANT will develop a documented categorical exclusion pursuant to FAA Orders 5050.4b and 1050.1e. Our knowledge of the work area suggests the lack of protected environmental resources that would elevate this project into an environmental assessment. The work is covered under Order 1050.1e (paragraph 310e) that could normally be categorically excluded given the absence of protected resources. The work is located entirely within the airport property and will not bring movement areas closer to sensitive receptors. The information collected as a part of the Act 250 process and some additional federal agency contacts will be completed to adequately document the ability of the project to be categorically excluded under the National Environmental Policy Act.

Specific items under this task include:

- Tribal coordination in conformance with FAA Order 5050.4b, ¶ 303.
- Vermont State Historic Preservation Office project review regarding the project's effect on cultural resources.
- Vermont Nongame & Natural Resource Program project review regarding state-listed rare, threatened, and endangered species and habitats.
- US Fish & Wildlife Service project review regarding federal-listed rare,

threatened, and endangered species and habitats.

- Coordination with the USDA wildlife expert assigned to BTV regarding local wildlife concerns.

2. Individual Construction Stormwater Discharge Permit.

The 2017 construction season at BTV is expected to be active, with as many as 5 construction projects running concurrently. Based on meetings already conducted with Airport Management, ANR, and the CONSULTANT, ANR has provided direction that the large amount of total land disturbance will trigger the need for an Individual Construction Stormwater Discharge Permit to comply with State regulations. This permit application will include a narrative and a completed NOI as well as Erosion Prevention and Sediment Control plans prepared in accordance with the Vermont Standards & Specifications for Erosion Prevention & Sediment Control. Plans and details will be suitable for bidding purposes and be included in the construction documents. The regulations require that an "On-Site Coordinator" be provided during construction. This individual is typically provided by the Contractor and it is assumed this will be the case for the Taxiway A project.

The CONSULTANT's work includes development of erosion prevention and sediment control plans and details conforming to requirements for an Individual Construction Stormwater Discharge Permit in accordance with regulations set forth by the Agency of Natural Resources (ANR). Erosion prevention and sediment control plans and details shall be developed using the *Vermont Standards & Specifications for Erosion Prevention & Sediment Control*. Plans and detail drawings shall be suitable for bidding purposes which will set forth in detail the requirements for the construction of the project. Plans and detail drawings that have been submitted to ANR will become part of the authorized permit. Plans are proposed to include but will not necessarily be limited to:

Erosion Prevention and Sediment Control Plans Erosion Prevention and Sediment Control Details Erosion Prevention and Sediment Control Narrative

The CONSULTANT will prepare documentation required for an Individual Construction Stormwater Discharge Permit application including Notice of Intent Form, EPSC Narrative, EPSC Summary Forms utilizing plans, supporting documentation, calculations, and specifications prepared by the CONSULTANT.

3. Stormwater Discharge Permit for New Development and Redevelopment.

This project involves significant additional impervious area and "redeveloping" impervious areas covered under existing Stormwater Discharge Permits. It is noteworthy that this project will be subject to the "no-net increase in phosphorus" requirements enacted by ANR on October 1, 2015.

It is assumed that a majority of the stormwater can be treated by disconnection of non-rooftop runoff. Given the high infiltration capability of the soils at BTV and the successful performance history of existing infiltration systems to treat stormwater runoff at BTV, it is assumed the remainder of the stormwater treatment can be attained by infiltration. The CONSULTANT will utilize existing infiltration test information for the project to the extent possible. However, in the event that additional infiltration testing is required to satisfy permitting agencies, the CONSULTANT understands that BTV will contract directly with a qualified firm to perform all required testing.

It is our understanding that any stormwater management system for the project must conforms to FAA Advisory Circular 150/5200-33A "Hazardous Wildlife Attractants on or Near Airports" and the Vermont Stormwater Management Manual.

4. Act 250 Permit.

The CONSULTANT's work includes preparing for, attending, and documenting one meeting with the District 4 Environmental Coordinator and the OWNER for a project review prior to completing an Act 250 application. It is anticipated the Coordinator will determine that the project be processed as a minor amendment to the existing permits. This meeting will also help identify criterion that may be of specific concern to the District Commission or require in-depth information that must accompany the application.

5. City of South Burlington Development Review Board approval.

It is anticipated this will be a multi-step process requiring three separate applications and individual public meetings for Sketch Plan, Preliminary Plat, and Final Plat approvals. The CONSULTANT will also provide services for assisting BTV in obtaining a Zoning Permit and Certificate of Occupancy.

6. FAA Notice of proposed Construction Permit.

The FAA requires notification of proposed construction at any public use airport. This must be done at least 30 days before construction begins and is accomplished by completing FAA form 7460-1. This review determines if the project will in result in structures or equipment that penetrate protected airspace surfaces or will interfere with radio communication or aircraft navigation systems. One 7460-1 permit is required for the permanent structures and a second 7460-1 permit is required for temporary construction equipment.

ARTICLE E - BIDDING AND CONSTRUCTION SERVICES

The CONSULTANT shall provide the following services:

1. The CONSULTANT to prepare electronic versions of bid documents for distribution to potential bidders.

- 2. The CONSULTANT will host the bid documents on a dedicated password protected ftp site. The CONSULTANT will include in the bid advertisement, directions for Contractors to contact the CONSULTANT for access to the ftp website. The CONSULTANT will maintain the bidders list for the project and provide BTV with an updated copy of this list daily during the bidding period (unless there have been no changes).
- 3. Bid Advertisement The CONSULTANT will prepare the bid advertisement and deliver it to the OWNER via email for publication in accordance with the OWNER's bidding procedures. The CONSULTANT will deliver the bid advertisement to plan viewing rooms for publication to maximize the project exposure and generate widespread contractor interest in the project. The CONSULTANT will communicate with the plan viewing rooms and similar industry entities to provide technical information for their publications.
- 4. Respond to bidder questions and issue as many addenda if required (assumed total of 2 addenda).
- 5. Attend and conduct Pre-bid conference. Conduct a site walk of the project areas to allow the contractors and subcontractors to observe the existing conditions first-hand and to ask questions regarding their observations. Prepare written responses to questions that require additional information not available at the time of the pre-bid conferences. Distribute the responses to the bid document recipients.
- 6. Conduct a detailed analysis of the contractors' bids for completeness and accuracy and note omissions and discrepancies. Compile a bid summary comprised of the results of the bids for distribution to the bid document recipients. Write a letter to the OWNER recommending the award of the construction contract to the apparent low responsive and responsible bidder based on the bid analyses. With the concurrence of the OWNER and the FAA, the CONSULTANT will issue a written notification to the successful bidder advising the bidder of the bid results. The CONSULTANT will disseminate the bid results to the plan viewing rooms.

ARTICLE F – GENERAL ADMINISTRATION

The CONSULTANT shall provide the following services:

- 1. Coordinate, chair, and document a Pre-design scoping meeting with the OWNER, and FAA.
- 2. Prepare a draft and final project scope and fee for review by the OWNER, and FAA.
- 3. Coordinate with OWNER, other consultants involved with the project and the FAA. Arrange and attend six (6) project coordination/informational meetings with the OWNER throughout the course of the project.

- 4. Perform general coordination throughout the life of the project to ensure the FAA and OWNER are informed as to the status of the project.
- 5. Prepare, analyze, and submit final project completion data and associated documentation for approval and acceptance by FAA, and the OWNER.

ARTICLE G - GIS DATA

The CONSULTANT shall provide the OWNER with metadata for the OWNERS's use in a GIS system.

- 1. Add metadata to design features to allow for functionality in GIS.
- 2. Convert design drawings from AutoCAD/Civil 3D to ArcGIS format (Shape files).

The GIS data created to be delivered by the CONSULTANT shall be limited to the project limits.

ARTICLE H - CONSTRUCTION ADMINISTRATION

Construction Administration services are not included in this contract.

ARTICLE I - TECHNICAL OBSERVATION OF CONSTRUCTION

Technical Observation services are not included in this contract.

ARTICLE J - COMPENSATION

General:

The CONSULTANT shall charge for all services requested by the OWNER and rendered by the CONSULTANT in connection with the PROJECT in strict accordance with the conditions set forth in this Article of the AGREEMENT.

The charges made by the CONSULTANT under this Article and the payment of said charges by the OWNER shall constitute full compensation for all expenses incurred by the CONSULTANT in connection with the services rendered including F.I.C.A. taxes, Federal and State unemployment taxes, costs in connection with employees benefits, office expenses, supplies and equipment, the general costs of doing business, and the CONSULTANT's profit.

Lump Sum Fees

The CONSULTANT shall charge lump sum fees for all work under ARTICLE A, "Review of Data and Schematic Design"; ARTICLE B, "Preliminary Design, Drawings and Specifications"; ARTICLE C, "Final Design, Drawings and Specifications; ARTICLE E, "Bidding and Construction Arrangements"; ARTICLE F, "General Administration"; and ARTICLE G, "GIS Data". The lump sum fee to be charged by the CONSULTANT and paid by the OWNER shall be as follows:

- 1. For all work under ARTICLE A, "Review of Data and Schematic Design", the lump sum fee of \$67,228 (SIXTY-SEVEN THOUSAND TWO HUNDRED TWENTY-EIGHT dollars and no cents).
- 2. For all work under ARTICLE B, "Preliminary Design, Drawings and Specifications", the lump sum fee of \$95,013 (NINEY-FIVE THOUSAND THIRTEEN dollars and no cents).
- 3. For all work under ARTICLE C, "Final Design, Drawings and Specifications", the lump sum fee of \$50,148 (FIFTY THOUSAND ONE HUNDRED FORTY-EIGHT dollars and no cents).
- 4. For all work under ARTICLE E, "Bidding and Construction Arrangements", the lump sum fee of \$15,866 (FIFTEEN THOUSAND EIGHT HUNDRED SIXTY-SIX dollars and no cents).
- 5. For all work under ARTICLE F, "General Administration", the lump sum fee of \$41,043 (FORTY-ONE THOUSAND AND FORTY-THREE dollars and no cents).
- 6. For all work under ARTICLE G, "GIS Data", the lump sum fee of \$6,210 (SIX THOUSAND TWO HUNDRED TEN dollars and no cents).

Actual Cost Plus Fixed Fee

The CONSULTANT shall charge for all services provided under ARTICLE D, "Environmental Permitting and Stormwater Treatment Design" on the basis of the actual cost of providing such services, plus fixed fee payments.

The CONSULTANT's charges for the actual cost of providing services will be computed as the total of (1) Salary Costs, (2) Overhead, and (3) Direct Non-salary Expenses, all as defined in the Federal Aviation Administration's Advisory Circular No. 150/5100-14E, entitled "Architectural Engineering and Planning Consultant Service for Airport Grant Projects"; a copy of which is on file in the offices of each of the parties hereto.

The total of the CONSULTANT's charges for providing these services shall not exceed the following amounts without prior written approval of the OWNER, and the FAA:

1. For providing services under ARTICLE D, "Environmental Permitting", the amount of \$35,672 (THIRTY-FIVE THOUSAND SIX HUNDRED SEVENTY-TWO dollars and no cents), which includes a fixed fee payment in the amount of \$4,620.29 (FOUR THOUSAND SIX HUNDRED TWENTY DOLLARS and TWENTY-NINE cents.

The total of the CONSULTANT's charges for providing all services under this AGREEMENT shall not exceed \$311,180 (THREE HUNDRED ELEVEN THOUSAND ONE HUNDRED EIGHTY dollars and no cents) without written approval of the OWNER and the FAA. Please refer to EXHIBIT B for a detailed breakdown of the staff hours and costs for the individual project tasks.

ARTICLE K – WORK NOT INCLUDED

Services that are not included in this AGREEMENT are as follows:

- 1. Preparation of any permit applications other than those specified in this agreement.
- 2. Attendance at additional project or public meetings beyond those specified in this agreement.
- 3. Preparation of application for federal assistance.
- 4. Preparation of federal reimbursement requests.

ARTICLE L – TIME AND METHOD OF PAYMENT

The CONSULTANT will make periodic applications for payment for the work completed under this AGREEMENT. The applications shall be on forms approved by the OWNER. The CONSULTANT will also submit a progress report and other supporting documentation justifying the request with each application for payment. The OWNER shall promptly review and process the application and shall make payment to the CONSULTANT within 30 days of receipt of the application.

ARTICLE M – ADDITIONAL WORK

If, during the term of this contract, the scope or character of the work is changed substantially, or if the time for completion is increased substantially due to circumstances beyond the control of the CONSULTANT; and if such changes thereby increase the work to be performed by the CONSULTANT, additional fee shall be paid to the CONSULTANT. The additional work and the compensation therefore shall be provided for in a written amendment to this AGREEMENT, said amendment to be negotiated by the OWNER and the CONSULTANT, and approved by the FAA.

ARTICLE N – TIME FOR COMPLETION

Final Design and Bidding Phases

The CONSULTANT shall undertake all work under ARTICLE A; ARTICLE B; ARTICLE C; ARTICLE D; ARTICLE E; and ARTICLE F of this AGREEMENT in order that construction of the PROJECT may commence in the summer of 2017.

ARTICLE O - ASSIGNED PERSONNEL

The CONSULTANT shall assign an experienced Registered Professional Engineer, acceptable to the OWNER, to be in responsible charge of the work performed under the AGREEMENT.

The CONSULTANT shall not replace the person in charge without permission of the OWNER. The CONSULTANT shall assign such other personnel to the work as maybe necessary from time to time to complete the work as required.

All personnel used by CONSULTANT in the performance of the AGREEMENT shall be qualified by training and experience to perform their assigned tasks. At the request of the OWNER, CONSULTANT shall not use in the performance of the AGREEMENT any personnel

deemed by OWNER to be incompetent, careless, unqualified to perform the work assigned to him/her, or otherwise unsatisfactory to OWNER.

ARTICLE P – TO BE PROVIDED BY THE OWNER

Existing Information

The OWNER shall provide the CONSULTANT with all available information, data, plans, etc., pertinent to the CONSULTANT's work under this AGREEMENT. The OWNER shall assist the CONSULTANT as necessary to obtain available pertinent information from Federal, State or local officials or from other engineers or others who have previously worked for the OWNER on matters affecting this PROJECT.

ARTICLE Q – COMPLIANCE WITH REGULATIONS

As the PROJECT is to be partially financed with Federal grant aid, and will be subject to approval by the FAA and various other agencies, it is a specific requirement of this AGREEMENT that all work done by the CONSULTANT be in strict compliance with all rules, regulations, standard specifications, or other requirements of the Federal Aviation Administration and other governmental agencies having jurisdiction. It shall be the CONSULTANT's obligation to assist the OWNER in obtaining all required approvals.

ARTICLE R – TERMINATION

This AGREEMENT may be terminated (in full or in part) by the OWNER upon 5 days written notice to the CONSULTANT. Upon such termination, the OWNER shall pay the CONSULTANT all charges made for work done prior to the termination and the CONSULTANT shall turn over to the OWNER all completed work in whatever form it exists and said work shall then become the property of the OWNER.

In the event of substantial breach of any provision of this AGREEMENT by the CONSULTANT, its officers, agents, employees, and subconsultants, the OWNER shall have the absolute right and option to terminate this AGREEMENT forthwith, and, in addition, may have and maintain any legal remedy against the CONSULTANT for its loss and damages resulting from such breach of this AGREEMENT; provided, however, that as to all plans, drawings, estimates, specifications, proposals, sketches and calculations, together with all material and data theretofore furnished to the OWNER by the CONSULTANT, of a satisfactory nature in accordance with this AGREEMENT, which plans, drawings, etc. are of use to the OWNER, the CONSULTANT shall be entitled to compensation, based on the contract rates, for the work so performed in a satisfactory manner and of use and benefit to the OWNER.

ARTICLE S – LEGAL INTERPRETATION

This AGREEMENT shall be interpreted in accordance with the laws of the State of Vermont.

ARTICLE T – SUBCONTRACTING

CONSULTANT shall not subcontract any portion of the work to be performed under this AGREEMENT without advance written approval by OWNER.

ARTICLE U – INSURANCE

The CONSULTANT will, coincident with the execution of this AGREEMENT, purchase at its own expense and maintain throughout the duration of this AGREEMENT statutory Worker's Compensation Insurance, Comprehensive General Liability Insurance, Automobile Liability Insurance, and Engineer's Professional Liability Insurance. OWNER shall be provided a certificate(s) of such insurance coverage. Such insurance certificate(s) shall indicate that the coverage may not be terminated without a minimum of thirty-day advance notice being provided to OWNER. The coverage shall be applicable for any claims made either during the duration of this AGREEMENT or within the applicable statute of limitation for such claims. The minimum limit of insurance coverage shall be as set forth below:

1. Worker's Compensation Statutory

2. Comprehensive Combined Single Limit

General Liability For Bodily Injury or Property Damage: \$1 Million

3. Comprehensive Combined Single Limit

Automobile Liability for Bodily Injury or Property Damage: \$1 Million

4. Professional liability \$500,000

ARTICLE V – STANDARD OF PERFORMANCE

- 1. The CONSULTANT will provide professional engineering and related services under this agreement with the standard of care and skill ordinarily used by members of the profession practicing under similar circumstances at the same time in the same locality. The CONSULTANT makes **no** warranties, expressed or implied, in connection with services provided under this agreement.
- 2. The CONSULTANT shall be responsible for the accuracy of its services and the technical accuracy of documents which result from the services provided; and shall comply with applicable laws and regulations and standards mandated by this agreement which are effective as of the effective date of this agreement.
- 3. Through the provision of services during construction as provided by this agreement, the CONSULTANT shall endeavor to provide protection for the Owner against defects and deficiencies in the contractor's work; however the CONSULTANT does **not** guarantee the contractor will perform its work in accordance with the contract documents. The purpose of the provision of construction phase services is to provide the Owner a greater degree of confidence that the completed work of the contractor will generally conform to the contract documents and the contractor has implemented the design concept reflected

in the contract documents.

- 4. The CONSULTANT shall **not** supervise, direct, or have control over the contractor's work or workers' and shall **not** have authority or responsibility for construction means and method; nor construction procedures or sequences selected by the contractor.
- 5. The CONSULTANT shall **not** have authority over or responsibility for contractor's safety precautions and programs.
- 6. The CONSULTANT shall **not** have authority over or responsibility for any failure of the contractor to comply with laws and regulations applicable to the contractor's work; and shall **not** be responsible for the contractor's failure to perform work in accordance with the contract documents.

Opinion of Probable Construction Cost

The CONSULTANT's opinions of probably construction costs, otherwise known as cost estimates, engineer's estimates, or construction cost estimates, provided for herein are to be made on the basis of the CONSULTANT's experience and qualifications and represent The CONSULTANT's best judgment as an experienced and qualified professional generally familiar with the industry. However, since the CONSULTANT has no control over the cost of labor, materials, equipment, or services furnished by others, or over the contractor's methods of determining prices, or over competitive bidding, or market conditions, the CONSULTANT cannot and does not guarantee that proposal, bids, or actual construction costs will not vary from opinions of probable construction cost prepared by the CONSULTANT.

ARTICLE W – CONSULTANT RECORDS

The OWNER, the Federal Aviation Administration, the Comptroller General of the United States, or any duly authorized representatives thereof, shall have access to any books, documents, papers, and records of the CONSULTANT which are pertinent to the PROJECT for the purpose of making audits, examinations, excerpts, and transcriptions. The CONSULTANT shall maintain all records for three years after OWNER makes final payment and all other pending matters are closed.

ARTICLE X – LIMIT OF LIABILITY

The total amount of all claims the Owner may have against the Consultant under this Agreement or arising from the performance or non-performance of the services under any theory of law, including but not limited to claims for negligence, negligent misrepresentation and breach of contract, shall be strictly limited to \$500,000. As the Owner's sole and exclusive remedy under this Agreement any claim, demand or suit shall be directed and/or asserted only against the Consultant and not against any of the Consultant's employee's, officers or directors.

The Consultant's liability with respect to any claims arising out of this Agreement shall be

absolutely limited to direct damages arising out of the services and the Consultant shall bear no liability whatsoever for any consequential loss, injury or damage incurred by the Owner, including but not limited to, claims for loss of use, loss of profits and loss of markets.

ARTICLE Y – ATTACHMENTS TO AGREEMENT

EXHIBIT "A"; EXHIBIT "B"; and EXHIBIT "C" which are appended at the end of this AGREEMENT are hereby made a part of this AGREEMENT by reference and shall have the same force and effect as if they were here written out in full. In the event of conflict between the terms of this AGREEMENT and the attachments hereto, the terms of this AGREEMENT shall prevail.

IN WITNESS WHEREOF, the parties hereto have affixed their seals and hands of their duly authorized officers at Chittenden County, Vermont, effective the date first above written.

<u>BURLINGTON INTERNATIONAL AIRPORT, SOUTH BURLINGTON, VERMONT</u> (OWNER)

BY:	Gene Richards, III Director of Aviation	ATTEST:
	· · · · · · · · · · · · · · · · · · ·	TING SERVICES, INC. ULTANT)
BY:	Gregory A. Edwards, P.E. Senior Principal	ATTEST:

EXHIBIT "A"

CONTRACT PROVISIONS FOR AIP PROJECTS

AGREEMENT FOR PROFESSIONAL SERVICES ENGINEERING AND PROJECT ADMINISTRATION

for

RELOCATE TAXIWAY 'A' (HOT SPOT 1) DESIGN AND ENVIRONMENTAL PERMITTING

at

BURLINGTON INTERNATIONAL AIRPORT

South Burlington, Vermont

During the performance of this contract, Stantec Consulting Services, Inc. for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

A. AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, SECTION 520 - GENERAL CIVIL RIGHTS PROVISIONS

The contractor assures that it will comply with pertinent statutes, Executives orders and such rules as are promulgated to assure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or handicap be excluded from participating in any activity conducted with or benefiting from Federal assistance. This provision obligates the tenant/concessionaire/lessee or its transferee for the period during which Federal assistance is extended to the airport a program, except where Federal assistance is to provide, or is in the form of personal property or real property or interest therein or structure or improvements thereon. In these cases the provision obligates the party or any transferee for the longer of the following periods: (a) the period during which the property is used by the airport sponsor or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits or (b) the period during which the airport sponsor or any transferee retains ownership or possession of the property. In the case of contractors, this provision binds the contractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

B. BREACH OF CONTRACT TERMS

Any violation or breach of terms of this contract on the part of the contractor or their subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement. The duties and obligations imposed by the Contract Documents and the rights and remedies available there under shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

C. DISADVANTAGED BUSINESS ENTERPRISES

Contract Assurance (§26.13) - The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material

breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate.

D. LOBBYING AND INFLUENCING FEDERAL EMPLOYEES

No Federal appropriated funds shall be paid, by or on behalf of the contractor, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the making of any Federal grant and the amendment or modification of any Federal grant.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any Federal grant, the contractor shall complete and submit Standard Form-LLL, "Disclosure of Lobby Activities," in accordance with its instructions.

E. CIVIL RIGHTS ACT OF 1964, TITLE VI - CONTRACTOR CONTRACTUAL REQUIREMENTS

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- **1.1 Compliance with Regulations.** The contractor shall comply with the Regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- **1.2 Nondiscrimination.** The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
- **1.3 Solicitations for Subcontracts, Including Procurements of Materials and Equipment.** In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
- **1.4 Information and Reports.** The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto and shall permit access

to its books, records, accounts, other sources of information, and its facilities as may be determined by the Sponsor or the Federal Aviation Administration (FAA) to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the sponsor or the FAA, as appropriate, and shall set forth what efforts it has made to obtain the information.

- **1.5 Sanctions for Noncompliance.** In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the sponsor shall impose such contract sanctions as it or the FAA may determine to be appropriate, including, but not limited to:
 - a. Withholding of payments to the contractor under the contract until the contractor complies, and/or
 - b. Cancellation, termination, or suspension of the contract, in whole or in part.
- 1.6 Incorporation of Provisions. The contractor shall include the provisions of paragraphs 1 through 5 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the sponsor or the FAA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Sponsor to enter into such litigation to protect the interests of the sponsor and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the Untied States.

F. TRADE RESTRICTION CLAUSE

The contractor or subcontractor, by submission of an offer and/or execution of a contract, certifies that it:

- a. is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the Untied States Trade Representatives (USTR);
- b. has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;
- c. has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a contractor or subcontractor who is unable to certify to the above. If the contractor knowingly procures or subcontracts for the supply of any product or service of a foreign country on said list for use on the project, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract at no cost to

the Government.

Further, the contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. The contractor may rely on the certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.

The contractor shall provide immediate written notice to the sponsor if the contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subcontractor agrees to provide written notice to the contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct through the Sponsor cancellation or the contract of subcontract for default at not cost to the Government.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

This certification concerns a matter within the jurisdiction of an agency of the Untied States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, Untied States Code, Section 1001.

G. ACCESS TO RECORDS AND REPORTS

The Contractor shall maintain an acceptable cost accounting system. The Contractor agrees to provide the Sponsor, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers, and records of the contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

H. VETERAN'S PREFERENCE

In the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to Veterans of the Vietnam era and disabled veterans as defined in Section 515(c)(1) and (2) of the Airport and Airway Improvement Act of 1982. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

I. RIGHTS TO INVENTIONS

All rights to inventions and materials generated under this contract are subject to regulations issued by the FAA and the Sponsor of the Federal grant under which this contract is executed.

The following applies to all AIP funded contracts in excess of \$10,000:

TERMINATION OF CONTRACT

- a. The Sponsor may, by written notice, terminate this contract in whole or in part at any time, either for the Sponsor's convenience or because of failure to fulfill the contract obligations. Upon receipt of such notice services shall be immediately discontinued (unless the notice directs otherwise) and all materials as may have been accumulated in performing this contract, whether completed or in progress, delivered to the Sponsor.
- b. If the termination is for the convenience of the Sponsor, an equitable adjustment in the contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed services.
- c. If the termination is due to failure to fulfill the contractor's obligations, the Sponsor may take over the work and prosecute the same to completion by contract or otherwise. In such case, the contractor shall be liable to the Sponsor for any additional costs occasioned to the Sponsor thereby.
- d. If, after notice of termination for failure to fulfill contract obligations, it is determined that the contractor had not so failed, the termination shall be deemed to have been effected for the convenience of the Sponsor. In such event, adjustment in the contract price shall be made as provided in paragraph b. of this clause.
- e. The rights and remedies of the sponsor provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

The following applies to all contracts in excess of \$25,000:

CERTIFICATION REGARDING DEBAREMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

a. The bidder/offeror certifies, by submission of this proposal or acceptance of this contract, that neither it nor it's principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the bidder/offeror/contractor or any lower tier participant is unable to certify to this statement, it shall attach an

explanation to this.

Exhibit "B" - Fee Schedule

Burlington International Airport South Burlington, Vermont

Relocate Taxiway 'A' (Hot Spot 1)

AIP Project No. 3-50-0005-1____-2016

Article A: Review of Data and Schematic Design	\$67,228
Article B: Preliminary Design, Drawings and Specifications	\$95,013
Article C: Final Design, Drawings and Specifications	\$50,148
Article D: Environmental Permitting	\$35,672
Article E: Bidding and Arrangement for Construction	\$15,866
Article F: General Administration	\$41,043
Article G: GIS Data	\$6,210

Total Engineering Services Fee: \$311,180

Article A: Review of Data and Schematic Design

TASK	DISCIPLINE	Principal Aviation	Senior Project Manager	Senior Electrical Engineer	Electrical Engineer	Senior Civil Engineer	Civil Engineer	Senior Engineering Technician	Engineering Technician	Administrative / Clerical
1.0	Compile/Review Existing Drawings/Data		4	8		4	8	8		
2.0	Coordinate with Airport/FAA/Consultants about HS-1		6			8				
3.0	Schematic Design of 4 Alternatives		24	24		24	40	20	24	
4.0	Schematic Design Charrette and Preparation		8			8	12	8		
5.0	Article G: GIS Data		2			4	8			
6.0	Topographical Survey & Mapping (coordination; QC review)		4	2			8	8		
7.0	Verify location of FAA & BTV cables		4	4	6		8	8		
8.0	Geotechnical Investigation - Coordinate, determine applicable tests and number of borings/coverage and have someone onsite during borings		4				4	24		
9.0	Coordinate taxiway lighting requirements with BTV & FAA		2	8	8					
10.0	Conduct Electrical/Lighting and Vault Investigation				To be	completed under	Parallel Taxiway G	Scope		
11.0	Airport ALP Update (Pen & Ink)		4				8			
	TOTAL HOURS	0	62	46	14	48	96	76	24	0
	Hourly Rate	\$73.00	\$55.00	\$58.00	\$39.00	\$50.00	\$37.00	\$38.00	\$28.00	\$22.00
	Direct Labor Cost	\$0.00	\$3,410.00	\$2,668.00	\$546.00	\$2,400.00	\$3,552.00	\$2,888.00	\$672.00	\$0.00

Article A: Expense Worksheet

Misc. Trave	\$250.00		
Task 4.0			
<u>Trips</u>	<u>Miles</u>	<pre>\$ per mile</pre>	<u>Total</u>
1	500	\$0.57	\$282.50
<u>Nights</u>	<u>People</u>	Lodging Per Night	
1	1	\$135.00	\$135.00
Days	<u>People</u>	<u>Meals</u>	
1	1	\$50.00	\$50.00
Task 10.0			
103K 10.0			
Trips	Miles	<u>\$ per mile</u>	<u>Total</u>
	Miles 500	<u>\$ per mile</u> \$0.57	<u>Total</u> \$282.50
		·	
Trips 1	500	\$0.57	
Trips 1 Nights	500 People	\$0.57 Lodging Per Night	\$282.50

Outside Services:	
Task 3.0: Field Survey and Mapping (by OWNER)	\$0.00
Task 6.0: Geotechnical Investigation (Allowance)	\$14,000.00
TOTAL OUTSIDE SERVICES	\$14,000.00

Labor Summary:		
TOTAL DIRECT LABOR COST		\$16,136.00
OVERHEAD @ 177.47%		\$28,636.56
FIXED FEE @ 15%	_	\$6,715.88
	TOTAL LABOR COST	\$51,488.44

Expense Summary:		
	TOTAL EXPENSES	\$1,740.00

USE:	\$67,228
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Article B: Preliminary Design, Drawings and Specifications

TASK	DISCIPLINE	Principal Aviation	Senior Project Manager	Senior Civil Engineer	Senior Electrical Engineer	Electrical Engineer	Civil Engineer	Senior Engineering Technician	Engineering Technician	Administrative / Clerical
1.0	Preliminary Plans (60%)	2	4	16	16	24	55	24	24	
2.0	Preliminary Project Detail Drawings		2	16	16	24	20	24	24	
3.0	Preliminary Specifications		4	16	12	12	8			
4.0	Project Storm-Water Design		4	8			32	16	16	
5.0	Article G: GIS Data		2	8			24	12		
6.0	Preliminary Cost Estimates		4	6	12	12	16	8		
7.0	Reproduce and Distribute Design Submittals		4				4		4	
8.0	Perform In-House Assurance Control Review	4	6	6	6					
9.0	Pavement Design Report		2	8			16			
10.0	Preliminary Electrical Design		4		24	60		32		
	TOTAL HOURS	6	36	84	86	132	175	116	68	0
	Hourly Rate	\$73.00	\$55.00	\$50.00	\$58.00	\$39.00	\$37.00	\$38.00	\$28.00	\$22.00
	Direct Labor Cost	\$438.00	\$1,980.00	\$4,200.00	\$4,988.00	\$5,148.00	\$6,475.00	\$4,408.00	\$1,904.00	\$0.00

Article	B: E>	pense \	Worl	ksheet
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<u>Task 7.0</u>	
	<u>Total</u>
Reproduction of preliminary documents	\$500.00
Misc. Travel to/from South Burlington Office to BT\	/
	\$250.00
avel to/from South Burlir	

 Task X.0:
 \$0.00

 Task X.0:
 \$0.00

 TOTAL OUTSIDE SERVICES
 \$0.00

Outside Services:

Labor Summary:		
TOTAL DIRECT LABOR COST		\$29,541.00
OVERHEAD @ 177.47%		\$52,426.41
FIXED FEE @ 15%		\$12,295.11
	TOTAL LABOR COST	\$94,262.52

Expense Summary:		
	TOTAL EXPENSES	\$750.00

14000

Article C: Final Design, Drawings and Specifications

TASK	DISCIPLINE	Principal Aviation	Senior Project Manager	Senior Electrical Engineer	Electrical Engineer	Senior Civil Engineer	Civil Engineer	Senior Engineering Technician	Engineering Technician	Administrative / Clerical
1.0	Final Plans and Detail Drawings	1	4	16	32	32	60	40	30	
2.0	Final Specifications	1	6	8	8	16	8			
3.0	Finalize Safety and Phasing Plans & Report		2			16	8	2	8	
4.0	Final Cost Estimates		3	2	4	6	8			
5.0	Article G: GIS Data		4			4		16		
6.0	Perform In-House Quality Assurance Review	6	4	4		2				
	TOTAL HOURS	Ω	23	30	44	76	84	58	38	0
	Hourly Rate		\$55.00			\$50.00	\$37.00	\$38.00	\$28.00	\$22.00
	Direct Labor Cost		\$1,265.00			\$3,800.00	\$3,108.00	\$2,204.00	\$1,064.00	\$0.00

Article C: Expense Workshee

<u>Task 1.0</u>	
	<u>Total</u>
Reproduction of preliminary documents	\$500.00
Misc. Travel to/from South Burlington Office to BTV	
	\$250.00

		18000
	TOTAL OUTSIDE SERVICES	\$0.00
Task X.0:		\$0.00
Task X.0:		\$0.00
Outside Services:		

Labor Summary:		
TOTAL DIRECT LABOR COST		\$15,481.00
OVERHEAD @ 177.47%		\$27,474.13
FIXED FEE @ 15%		\$6,443.27
	TOTAL LABOR COST	\$49,398.40

Expense Summary:		
	TOTAL EXPENSES	\$750.00

USE:	\$50,148
	7 7

Article D: Environmental Permitting

TASK	DISCIPLINE	Principal Aviation	Senior Project Manager	Senior Civil Engineer	Civil Engineer	Senior Environmental Analyst	Environmental Analyst	Senior Engineering Technician	Administrative / Clerical
1.0	NEPA Documented Categorical Exclusion (Note: this task previously completed)								
2.0	Individual Construction Stormwater Discharge Permit / EPSC Plans & Details	1	4	8	24			16	
3.0	Stormwater Permit for New Development & Redevelopment / Plans & Details	1	4	12	32	4		32	4
4.0	Act 250 Permit (Assume no Public Hearing is Required) (Note: estimated hours reduced to reflect work previously completed for this task.)	1	12		24				12
5.0	City of South Burlington Approval (3-step process: Sketch Plan; Preliminary Plat; Final Plat); Zoning Permit; Certificate of Occupancy (Note: estimated hours reduced to reflect work previously completed for this task.)	1	25		18			18	6
6.0	FAA Notice of Proposed Construction Permit, Form 7460-1 (2 required)		2	4	6				
	TOTAL HOURS	4	47	24	104	4	0	66	22
	Hourly Rate	\$73.00	\$55.00	\$50.00	\$37.00	\$46.00	\$30.00	\$38.00	\$22.00
	Direct Labor Cost	\$292.00	\$2,585.00	\$1,200.00	\$3,848.00	\$184.00	\$0.00	\$2,508.00	\$484.00

Article D: Expense Worksheet

Task 1.0			
<u>Trips</u>	Miles	<u>\$ per mile</u>	<u>Total</u>
0	500	\$0.57	\$0.00
<u>Nights</u>	<u>People</u>	Lodging Per Night	
0	0	\$135.00	\$0.00
<u>Days</u>	<u>People</u>	<u>Meals</u>	
0	0	\$50.00	\$0.00

Misc. Travel to/from South Burlington Office to BTV	
	\$250.00

Outside Services:	
	\$0.00
Task X.0:	\$0.00
TOTAL OUTSIDE SERVICES	\$0.00

Labor Summary:		
TOTAL DIRECT LABOR COST		\$11,101.00
OVERHEAD @ 177.47%		\$19,700.94
FIXED FEE @ 15%	_	\$4,620.29
	TOTAL LABOR COST	\$35,422.24

Expense Summary:		
	TOTAL EXPENSES	\$250.00

USE:	\$35,672

Article E: Bidding and Arrangement for Construction

TASK	DISCIPLINE	Principal Aviation	Senior Project Manager	Senior Civil Engineer	Senior Electrical Engineer	Electrical Engineer	Civil Engineer	Senior Engineering Technician	Engineering Technician	Administrative / Clerical
1.0	Prepare Electronic Versions of Bid Documents		4				4	4	8	
2.0	Manage Secure FTP Hosting of Bid Documents and Maintenance of Bidders List		2						40	
3.0	Prepare Bid Advertisement		2				2			
4.0	Respond to Questions from Bidders / Addenda		4	8	4	4	4			
5.0	Article G: GIS Data		6	8						
6.0	Review Bids, Bid Analysis and Recommendation for Award	2	2	4	2		6		2	
	TOTAL HOURS	2	20	20	6	4	16	4	50	0
	Hourly Rate	\$73.00	\$55.00	\$50.00	\$58.00	\$39.00	\$37.00	\$38.00	\$28.00	\$22.00
	Direct Labor Cost	\$146.00	\$1,100.00	\$1,000.00	\$348.00	\$156.00	\$592.00	\$152.00	\$1,400.00	\$0.00

Article E: Expense Worksheet

Task 1.0			
<u>Trips</u>	Miles	\$ per mile	<u>Total</u>
0	500	\$0.57	\$0.00
Nights	People	Lodging Per Night	
0	0	\$135.00	\$0.00
Days	<u>People</u>	<u>Meals</u>	
0	0	\$50.00	\$0.00

Misc. Travel to/from South Burlington Office to BTV	
	\$250.00

Outside Services:		
Task X.0:		\$0.00
Task X.0:		\$0.00
	TOTAL OUTSIDE SERVICES	\$0.00

Labor Summary:		
TOTAL DIRECT LABOR COST		\$4,894.00
OVERHEAD @ 177.47%		\$8,685.38
FIXED FEE @ 15%		\$2,036.91
	TOTAL LABOR COST	\$15,616.29

Expense Summary:		
	TOTAL EXPENSES	\$250.00

USE:	\$15,866
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Article F: General Administration

TASK	DISCIPLINE	Principal Aviation	Senior Project Manager	Senior Civil Engineer	Civil Engineer	Senior Electrical Engineer	Environmental Analyst	Engineering Technician	Administrative / Clerical
1.0	Project Scoping Meeting with Airport and Joint Consultants		8	8					
2.0	Work Scope and Fee Preparation	2	32	16		4			
3.0	Coordination with Airport, Other Consultants and FAA	2	40	12					
4.0	General Project Coordination	2	50	8					
5.0	Article G: GIS Data		12	24		4		24	
6.0									
7.0									
8.0									
9.0									
10.0									
	TOTAL HOURS	6	142	68	0	8	0	24	0
	Hourly Rate	\$73.00	\$55.00	\$50.00	\$37.00	\$58.00	\$30.00	\$28.00	\$22.00
	Direct Labor Cost	\$438.00	\$7,810.00	\$3,400.00	\$0.00	\$464.00	\$0.00	\$672.00	\$0.00

Article F: Expense Worksheet

<u>Task 1.0</u>			
<u>Trips</u>	Miles	<u>\$ per mile</u>	<u>Total</u>
0	500	\$0.57	\$0.00
<u>Nights</u>	<u>People</u>	Lodging Per Night	
0	0	\$135.00	\$0.00
<u>Days</u>	<u>People</u>	<u>Meals</u>	
0	0	\$50.00	\$0.00

Misc. Travel to/from South Burlington Office to BTV	
	\$250.00

Outside Services:		
Task X.0:		\$0.00
Task X.0:	_	\$0.00
	TOTAL OUTSIDE SERVICES	\$0.00

Labor Summary:		
TOTAL DIRECT LABOR COST		\$12,784.00
OVERHEAD @ 177.47%		\$22,687.76
FIXED FEE @ 15%	_	\$5,320.76
	TOTAL LABOR COST	\$40,792.53

Expense Summary:		
	TOTAL EXPENSES	\$250.00

USE:	\$41,043
USE.	\$41,U43

Article G: GIS Data

TASK	DISCIPLINE	Principal Aviation	Senior Project Manager	Senior Civil Engineer	Civil Engineer	Senior Electrical Engineer	Senior Engineering Technician	Engineering Technician	Administrative / Clerical
1.0	Add Metadata to design features for use in GIS		4	8			16		
2.0	Convert Design Drawings into ArcGIS compatible format (Shape Files)		2				16		
3.0									
4.0									
5.0									
6.0									
7.0									
8.0									
9.0									
10.0									
	TOTAL HOURS	0	6	8	0	0	32	0	0
	Hourly Rate	\$73.00	\$55.00	\$50.00	\$37.00	\$58.00	\$38.00	\$28.00	\$22.00
	Direct Labor Cost	\$0.00	\$330.00	\$400.00	\$0.00	\$0.00	\$1,216.00	\$0.00	\$0.00

Article F: Expense Worksheet

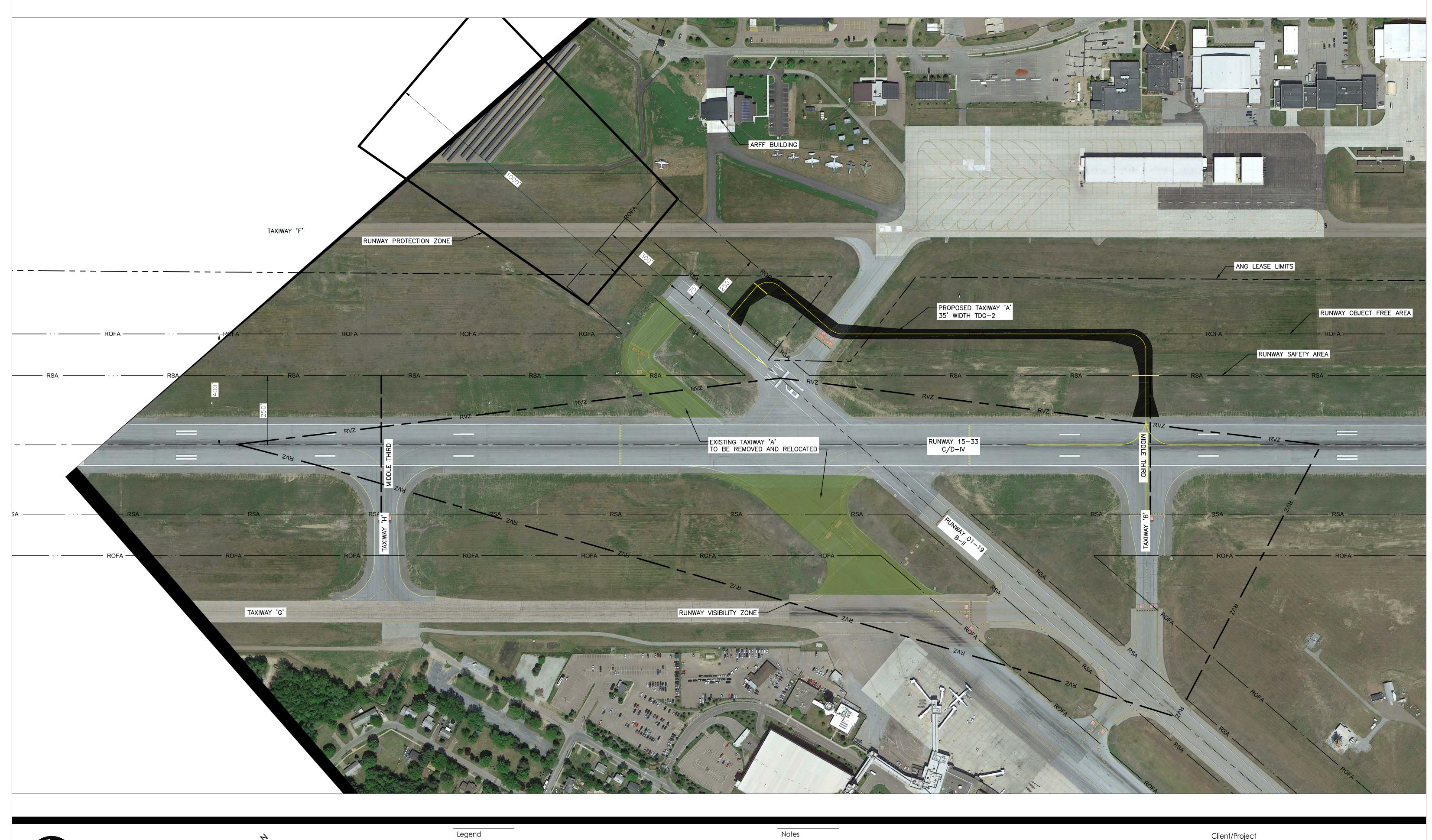
Task 1.0			
Trips	Miles	\$ per mile	<u>Total</u>
0	500	\$0.57	\$0.00
<u>Nights</u>	<u>People</u>	Lodging Per Night	
0	0	\$135.00	\$0.00
<u>Days</u>	<u>People</u>	<u>Meals</u>	
0	0	\$50.00	\$0.00

Misc. Travel to/from South Burlington Office to BTV

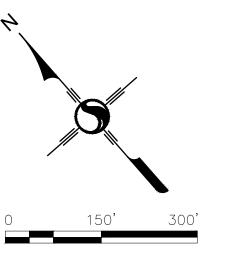
Outside Services:		
Task X.0:		\$0.00
Task X.0:	_	\$0.00
	TOTAL OUTSIDE SERVICES	\$0.00

Labor Summary:		
TOTAL DIRECT LABOR COST		\$1,946.00
OVERHEAD @ 177.47%		\$3,453.57
FIXED FEE @ 15%	_	\$809.93
	TOTAL LABOR COST	\$6,209.50

Expense Summary:		
	TOTAL EXPENSES	\$0.00







REVIEW PRINT NOT FOR CONSTRUCTION 1/11/2016

Client/Project

BURLINGTON INTERNATIONAL AIRPORT HOT SPOT 1

Figure No.

TAXIWAY 'A' TDG II



BURLINGTON INTERNATIONAL AIRPORT

MEMO

TO: Burlington International Airport, Board of Commissioners

FROM: Burlington International Airport Staff

DATE: March 21, 2016

SUBJECT: Design and Environmental Permitting Services for the Relocation

and Construction of Taxiway Gulf

The Burlington International Airport (BTV) seeks Airport Board of Commissioners approval of and its recommendation to the Burlington Board of Finance (BofF) and the Burlington City Council (CC) to the awarding of contract to Stantec Consulting Services, Inc. (Stantec) in the amount of **\$584,869** to provide design engineering for rehabilitating taxiway gulf and to provide environmental permitting and bidding services.

The airport's Master Plan and Airport Layout Plan (ALP) indicate a full parallel Taxiway "G" to be realigned closer to Runway 15-33. Per the ALP, the taxiway will be realigned for a 500 separation between the centerlines of the runway and the new taxiway. We are currently under construction for a new taxiway ("K") between taxiway's "C" and "B", as an initial phase for the complete parallel taxiway. The relocation of the remaining portions from Taxiway "B" to the end of Runway 15 will be completed over two construction seasons (2017 & 2018) and bid as two separate projects. The importance of phasing this for continued maximize efficiency of aircraft operations is of utmost importance, therefore, a multi-year project. This project and contract with Stantec will be funded through the FAA's Airport Improvement Program in a 2017 Grant application and will be reimbursed with 90% Federal funds, 6% State funds, and 4% local funds with Passenger Facility Charges.

Stantec was selected to perform this work based on qualifications according to the City's purchasing requirements and FAA requirements. Please find attached a proposed contract for recommendation to Board of Finance and City Council.

Thank you for your continued support.

1200 Airport Drive, #1 South Burlington, Vermont 05403

Phone: (802) 863-2874 (TTY) Fax: (802) 863-7947

www.btv.aero

AGREEMENT FOR PROFESSIONAL SERVICES

for

REALIGN PARALLEL TAXIWAY 'G' from TAXIWAY 'B' to RUNWAY '15' THRESHOLD Phase 2 Construction, 2017; Phase 3 Construction, 2018

DESIGN ENGINEERING and ENVIRONMENTAL PERMITTING

at

BURLINGTON INTERNATIONAL AIRPORT

South Burlington, Vermont

FAA AIP PROJECT NO. 3-50-0005-1___--2016

BASIC AGREEMENT	1-2 1
EXHIBIT "A" - Contract Provisions for AIP	22-27
EXHIBIT "B" - Fee Schedule	9 pages
EXHIBIT "C" – Sketch 2.0 Taxiway "G" Phasing	1 page

BASIC AGREEMENT

This AGREEMENT is made and entered into at Chittenden County, Vermont effective ________ between the City of Burlington, Vermont (hereinafter called the OWNER) and the firm of Stantec Consulting Services, Inc., 55 Green Mountain Drive, South Burlington, Vermont (hereinafter called the CONSULTANT).

WITNESSETH:

WHEREAS, the OWNER is the owner and operator of the Burlington International Airport located in South Burlington, Vermont; and

WHEREAS, the OWNER wishes to undertake a PROJECT consisting of designing the Realignment of Taxiway 'G', hereinafter called the PROJECT; and

WHEREAS, the OWNER intends to partially finance said PROJECT with financial aid from the U.S. Government acting through the Federal Aviation Administration (hereinafter the FAA) under the Airport Improvement Program (hereinafter AIP); and

WHEREAS, the OWNER has already undertaken certain actions, and will undertake other actions, required to obtain the aforementioned Federal and State financial aid for the PROJECTS; and

WHEREAS, the PROJECT will require approval by the FAA, and local government agencies; and

WHEREAS, the services of a professional engineer or engineering firm will be required by the OWNER to prepare preliminary and final contract plans, specifications and estimates of construction costs; to provide environmental permitting services; and to otherwise assist the OWNER in the conduct of the PROJECT, and

WHEREAS, such services are of a distinct professional and noncompetitive nature; and

WHEREAS, the OWNER has undertaken and completed a consultant selection process in accordance with the requirements of FAA Advisory Circular 150/5100-14E, dated September 30, 2014.

NOW THEREFORE, in consideration of these premises and of the satisfactory performance by the CONSULTANT of the services hereinafter provided and for the payments to be made therefore by the OWNER, the CONSULTANT and the OWNER do hereby agree as follows:

SCOPE OF SERVICES

PROJECT UNDERSTANDING

The airport's Master Plan and Airport Layout Plan (ALP) show parallel Taxiway 'G' to be realigned closer to Runway 15-33. Per the ALP, the taxiway will be realigned to a 500 foot separation between the centerlines of parallel Taxiway 'G' and Runway '15-33'.



Figure 1- BTV ALP showing 500' offset from realigned Taxiway Centerline to Runway Centerline

The airport is presently constructing a new segment of Taxiway 'G' located between Taxiway 'C' and Taxiway 'B'. This on-going project is identified as Taxiway G, Phase 1. The realignment of Taxiway 'G' from Taxiway 'B' to the threshold of Runway '15' to the 500 foot offset will consist of Phases 2 and 3. This project will be completed over two construction seasons (2017 and 2018), and bid as two separate projects (two separate sets of drawings and specifications). It is anticipated that the 2017 project (Phase 2) will be from the south side of Taxiway 'H' to Taxiway 'B' and the 2018 project (Phase 3) will be from the threshold of Runway '15' to Taxiway 'H'. The 3 phases are shown on the attached *Sketch 2.0 Taxiway 'G'*

Phasing.

ARTICLE A – PRELIMINARY WORK & REVIEW OF DATA – 2017 and 2018 PROJECTS

The CONSULTANT shall provide the following services:

- 1. Review record drawings, and existing data/documentation regarding existing conditions including but not limited to airfield pavement layouts, utility locations (electrical and drainage), geotechnical data and existing ground survey. Existing drawings, data and documentation to be provided by others.
- 2. Coordinate with the OWNER and other stakeholders to confirm the scope of project and future phases of work at the airport.
- 3. Topographical Survey and Mapping Update: Once the project scope has been confirmed the OWNER will engage a qualified sub-consultant to conduct a topographical survey of the project area. The CONSULTANT will provide coordination with the surveying firm including developing survey requests; scheduling; and review of the mapping. The CONSULTANT will not provide security escort on the airfield for the survey crew.
- 4. Verify the location of FAA control and power cables: Communicate with FAA staff to confirm the locations of their underground cables. Includes requesting that the FAA field locate their utilities and follow-up coordination to review the utility locations with FAA personnel.
- 5. Geotechnical Coordination: Once the project scope has been confirmed, the CONSULTANT will engage a qualified sub-consultant to conduct a geotechnical investigation of the project area. The CONSULTANT will develop a scope of work for the geotechnical sub-consultant which will include applicable tests (Atterberg limits, sieve analysis, proctors, CBR and United Soils Classification etc.) and the spacing and coverage of the borings/test pits. The CONSULTANT will provide staff to observe the soil boring operation; however, will not provide security escort on the airfield for the geotechnical sub-consultant.
- 6. Consult with BTV Operations and electrician to determine how taxiway edge lighting will function with regard to the existing taxiway circuits.
- 7. Conduct Electrical/Lighting and Vault Investigation: Investigate the capacity of the existing electrical vault equipment (regulators, transformers, etc.) to determine if upgrades are needed to handle any additional loads for the new taxiway layout.

ARTICLE B – PRELIMINARY DESIGN, DRAWINGS AND SPECIFICATIONS - 2017 & 2018 PROJECTS

The CONSULTANT shall provide the following services for the project:

- 1. Prepare preliminary (60 percent) construction plans for the 2017 Taxiway 'G' realignment project. Plans will be at a scale sufficient to show all pertinent features, existing and design contours at one-half foot intervals, taxiway lights, electrical systems, drainage systems, and approximate locations of existing buried utilities.
- 2. Prepare preliminary (60 percent) construction plans for the 2018 Taxiway 'G' realignment project. Plans will be at a scale sufficient to show all pertinent features, existing and design contours at one-half foot intervals, taxiway lights, electrical systems, drainage systems, and approximate locations of existing buried utilities.
- 3. Prepare detail sheets to show typical cross sections for the project area, catch basins, pavement joints, underdrain system, trenching, erosion control, electrical details, and all other features necessary for the proper construction of the 2017 Taxiway 'G' realignment project.
- 4. Prepare detail sheets to show typical cross sections for the project area, catch basins, pavement joints, underdrain system, trenching, erosion control, electrical details, and all other features necessary for the proper construction of the 2018 Taxiway 'G' realignment project.
- 5. Prepare preliminary contract documents and technical specifications in accordance with applicable FAA design standards necessary for proper construction of the 2017 Taxiway 'G' realignment project.
- 6. Prepare preliminary contract documents and technical specifications in accordance with applicable FAA design standards necessary for proper construction of the 2018 Taxiway 'G' realignment project.
- 7. Prepare the project storm-water design in accordance with FAA Advisory Circular 150/5320-5D (8/15/13) Surface Drainage Design and local standards. A field survey shall be conducted as noted in ARTICLE A to verify locations and conditions of culverts and drainage systems that may be impacted by the proposed design. Design of the stormwater treatment system and environmental permitting is included under ARTICLE D.
- 8. Prepare a preliminary Construction Phasing and Safety Plan (CPSP) and report to address the construction phasing of the 2017 Taxiway 'G' realignment project and user impacts. This submission will include but is not limited to addressing facility closures, service interruptions or other user impacts; construction sequencing; and safety issues related to construction activities.
- 9. Prepare a preliminary Construction Phasing and Safety Plan (CPSP) and report to address the construction phasing of the 2018 Taxiway 'G' realignment project and user impacts. This submission will include but is not limited to addressing facility closures, service interruptions or other user impacts; construction sequencing; and safety issues related to construction activities.

- 10. Prepare preliminary estimates of material quantities and construction costs for the 2017 Taxiway 'G' realignment project based on the 60% preliminary plans, specifications and environmental permitting requirements. These estimates will furnish the necessary cost data for the programming of project funds. The preliminary cost estimates will be further developed into a final cost estimate based on the results of the preliminary review comments.
- 11. Prepare preliminary estimates of material quantities and construction costs for the 2018 Taxiway 'G' realignment project based on the 60% preliminary plans, specifications and environmental permitting requirements. These estimates will furnish the necessary cost data for the programming of project funds. The preliminary cost estimates will be further developed into a final cost estimate based on the results of the preliminary review comments.

It is noted that the CONSULTANT has no control over the cost of contractor labor and materials or over the competitive bidding and construction market conditions. Therefore the CONSULTANT cannot guarantee the accuracy of the construction cost estimates when compared to the contractor's construction bid or the final project cost.

12. Preliminary Plans, Specifications, and Preliminary Estimates for the 2017 Taxiway 'G' realignment project shall be distributed as follows:

	BTV	FAA
Preliminary Plans	2	*7
Preliminary Specifications	2	1
Preliminary Estimates	1	N/A

^{*} One copy of plans to be sent to Flight Procedures for review

13. Preliminary Plans, Specifications, and Preliminary Estimates for the 2018 Taxiway 'G' realignment project shall be distributed as follows:

	BTV	FAA
Preliminary Plans	2	*7
Preliminary Specifications	2	1
Preliminary Estimates	1	N/A

^{*} One copy of plans to be sent to Flight Procedures for review

- 14. Perform an in-house quality assurance review of the project plans, specifications, and estimate prior to the preliminary submission. This quality assurance review effort will be performed independently for the 2017 and 2018 contracts.
- 15. Prepare and submit a pavement design report in accordance with FAA Advisory Circular 150/5320-6E, Airport Pavement Design and Evaluation. The pavement design will be

based on the FAARFIELD program. This program utilizes the specific "Aircraft Mix" at BTV as a variable input. It is assumed that the "Aircraft Mix" for BTV has been determined and that this information will be made available for The CONSULTANT's use on this project. The geotechnical data collected under Article A will be utilized in preparing the pavement design report.

16. Prepare the project electrical design to include medium intensity taxiway edge lighting and taxiway guidance signs for the new taxiway layout including any modifications and/or relocations of edge lighting along existing taxiways and runway to remain. The electrical design will also include provisions for protecting the FAA control cables. One combined effort for this task will be conducted to cover both the 2017 and 2018 projects.

ARTICLE C – FINAL DESIGN, DRAWINGS AND SPECIFICATIONS - 2017 & 2018 PROJECTS

The CONSULTANT shall provide the following services:

1. Prepare final construction plans and detail drawings for the 2017 Taxiway 'G' realignment project, suitable for bidding purposes based on the results of the preliminary plan review. Drawings are proposed to be on standard 24" x 36" size sheets. Plans are proposed to include but will not necessarily be limited to:

Title Sheet (1 Drawing)

General Notes (1)

Existing Conditions & Demolition Plan (3)

Construction Phasing and Safety Plans (5)

Alignment Plans (5)

Grading and Drainage Plans (5)

Profiles (3)

Erosion Control Plans (3)

Erosion Control Narrative and Details (4)

Typical Sections (1)

Civil/Miscellaneous Site Details (3)

Lighting and Electrical Layout Plan (5)

Lighting, Electrical Details & Sign Plans (3)

Airfield Lighting Vault Plan (1)

Pavement Marking Plan and Details (5)

Cross Sections (12)

APPROX. TOTAL SHEETS = 60

2. Prepare final construction plans and detail drawings for the 2018 Taxiway 'G' realignment project, suitable for bidding purposes based on the results of the preliminary plan review. Drawings are proposed to be on standard 24" x 36" size sheets. Plans are proposed to include but will not necessarily be limited to:

Title Sheet (1 Drawing)
General Notes (1)

Existing Conditions & Demolition Plan (3)

Construction Phasing and Safety Plans (5)

Alignment Plans (5)

Grading and Drainage Plans (5)

Profiles (3)

Erosion Control Plans (3)

Erosion Control Narrative and Details (4)

Typical Sections (1)

Civil/Miscellaneous Site Details (3)

Lighting and Electrical Layout Plan (5)

Lighting, Electrical Details & Sign Plans (3)

Airfield Lighting Vault Plan (1)

Pavement Marking Plan and Details (5)

Cross Sections (12)

APPROX. TOTAL SHEETS = 60

- 3. Project Specifications and Contract Documents for the 2017 Taxiway 'G' realignment project Prepare specifications and contract documents for the final design phase based on the plans. The specifications will establish materials and quality standards for the proposed improvement project. Design criteria and specifications will be in accordance with FAA Advisory Circular 150/5300-13A "Airport Design", AC 150/5370-10G "Standards for Specifying Construction of Airport" and any other applicable AC's. The applicable FAA Advisory Circular Checklist will be that in effect as of April 2016. The CONSULTANT will consult with BTV as necessary regarding the format to be utilized in preparation of the bidding documents (i.e. general provisions; contract agreement; City of Burlington requirements; and bid form).
- 4. Project Specifications and Contract Documents for the 2018 Taxiway 'G' realignment project Prepare specifications and contract documents for the final design phase based on the plans. The specifications will establish materials and quality standards for the proposed improvement project. Design criteria and specifications will be in accordance with FAA Advisory Circular 150/5300-13A "Airport Design", AC 150/5370-10G "Standards for Specifying Construction of Airport" and any other applicable AC's. The applicable FAA Advisory Circular Checklist will be that in effect as of April 2016. The CONSULTANT will consult with BTV as necessary regarding the format to be utilized in preparation of the bidding documents (i.e. general provisions; contract agreement; City of Burlington requirements; and bid form).
- 5. Finalize the CPSP and report for the 2017 Taxiway 'G' realignment project with the submission of the final design, to address the construction phasing of the project. This submission will incorporate the FAA's Safety and Phasing Plan Checklist.
- 6. Finalize the CPSP and report for the 2018 Taxiway 'G' realignment project with the submission of the final design, to address the construction phasing of the project. This submission will incorporate the FAA's Safety and Phasing Plan Checklist.

- 7. Prepare final estimates of material quantities and construction costs for the 2017 Taxiway 'G' realignment project based on the final plans, specifications and environmental permitting requirements. A copy of these estimates will be included in the submission of the final plans and specifications.
- 8. Prepare final estimates of material quantities and construction costs for the 2018 Taxiway 'G' realignment project based on the final plans, specifications and environmental permitting requirements. A copy of these estimates will be included in the submission of the final plans and specifications.

The final cost estimate will provide the basis for judging the merit of the contractor's construction bids. It is noted that the CONSULTANT has no control over the cost of contractor labor and materials or over the competitive bidding and construction market conditions. The CONSULTANT cannot guarantee the accuracy of the final cost estimates when compared to the contractor's construction bids or the final project cost. Therefore, the final cost estimates provided herein will be based on the CONSULTANT'S experience with similar recent construction and industry trends.

9. Final Plans, Specifications, and Estimate Distribution for the 2017 Taxiway 'G' realignment project – Plans, specifications, and construction cost estimates shall be distributed as follows:

	BTV	FAA
Final Plans (100%)	2	1
Final Specifications (100%)	2	1

10. Final Plans, Specifications, and Estimate Distribution for the 2018 Taxiway 'G' realignment project – Plans, specifications, and construction cost estimates shall be distributed as follows:

	BTV	FAA
Final Plans (100%)	2	1
Final Specifications (100%)	2	1

11. Perform an in-house quality assurance review of the final plans, specifications, and estimate prior to the final submission. This quality assurance review effort will be performed independently for the 2017 and 2018 contracts.

ARTICLE D – DESIGN OF FAA GLIDE SLOPE CABLE RELOCATION – 2017 and 2018 PROJECTS

1. It is anticipated that the existing electrical and communication cabling that feeds the glide slope will be impacted by the realignment of Taxiway 'G' and will therefore need to be relocated. This will require research with the FAA and the Airport into the location and types of the cables. This effort will be conducted at one time only in conjunction with the 2017 project.

- 2. The CONSULTANT will perform a preliminary design and specifications for the relocation of the glide slope cable showing the routing and types of cables.
- 3. The CONSULTANT will create preliminary specifications for the relocation of the glide slope cable to FAA Facilities standards.
- 4. The CONSULTANT will coordinate with the Airport and the FAA to review the preliminary design and make any adjustments as required.
- 5. After confirming the preliminary design, the CONSULTANT will complete a final drawings and specifications of the cable relocation.
- 6. After confirming the preliminary design, the CONSULTANT will create final specifications for the cable relocation.
- 7. Prepare final estimates of material quantities and construction costs for the glide slope cable relocation based on the final plans, specifications. A copy of these estimates will be included in the submission of the final plans and specifications.
- 8. Perform an in-house quality assurance review of the glide slope cable relocation final plans, specifications, and estimate prior to the final submission

ARTICLE E - ENVIRONMENTAL PERMITTING - 2017 and 2018 PROJECTS

It is assumed the following permits will be required:

- NEPA Categorical Exclusion per FAA Order 5050.4b and 1050.1e.
- NPDES Individual Construction Stormwater Discharge Permit (Agency of Natural Resources)
- Stormwater Permit for New Development & Redevelopment (Agency of Natural Resources)
- Act 250 Amendment, due to changes affecting existing permits.
- City of South Burlington Sketch Plan, Preliminary & Final Plat approvals; Zoning Permit; and Certificate of Occupancy.
- FAA Notice of Proposed Construction Permit (Form 7460-1) (Note that two FAA permits are required: One for the permanent construction; the second for temporary use of construction equipment.)

It is assumed that permitting for the 2017 and 2018 projects will be performed concurrently, and that on set of applications will be prepared to cover both projects.

The CONSULTANT's scope of services under Article E includes preparing permit applications; soliciting the Owner's review and signatures; submitting applications; directing permitting agency review comments to the proper individuals and ensuring that timely responses are provided; and monitoring the status of outstanding permit issues. Throughout this process, the CONSULTANT will solicit permit application support information, documentation, plans, and calculations from team members to facilitate the permit approval process. In addition to these tasks, the CONSULTANT will also provide the following with regard to specific permits:

Under Article E, the CONSULTANT will provide permitting services assistance for the following:

1. NEPA Categorical Exclusion. (Assume one NEPA clearance needed for Phases 2 & 3)

The CONSULTANT will develop a documented categorical exclusion pursuant to FAA Orders 5050.4b and 1050.1e. Our knowledge of the work area suggests the lack of protected environmental resources that would elevate this project into an environmental assessment. The work is covered under Order 1050.1e (paragraph 310e) that could normally be categorically excluded given the absence of protected resources. The work is located entirely within the airport property and will not bring movement areas closer to sensitive receptors. The information collected as a part of the Act 250 process and some additional federal agency contacts will be completed to adequately document the ability of the project to be categorically excluded under the National Environmental Policy Act.

Specific items under this task include:

- Tribal coordination in conformance with FAA Order 5050.4b, ¶ 303.
- Vermont State Historic Preservation Office project review regarding the project's effect on cultural resources.
- Vermont Nongame & Natural Resource Program project review regarding state-listed rare, threatened, and endangered species and habitats.
- US Fish & Wildlife Service project review regarding federal-listed rare, threatened, and endangered species and habitats.
- Coordination with the USDA wildlife expert assigned to BTV regarding local wildlife concerns.
- 2. Individual Construction Stormwater Discharge Permit. (Assume two separate INDC Permits needed for Phases 2 & 3)

The 2017 and 2018 construction seasons at BTV are expected to be active, with multiple construction projects running concurrently. Based on meetings already conducted with Airport Management, ANR, and the CONSULTANT, ANR has provided direction that the large amount of total land disturbance will trigger the need for an Individual

Construction Stormwater Discharge Permit to comply with State regulations. This permit application will include a narrative and a completed NOI as well as Erosion Prevention and Sediment Control plans prepared in accordance with the Vermont Standards & Specifications for Erosion Prevention & Sediment Control. Plans and details will be suitable for bidding purposes and be included in the construction documents. The regulations require that an "On-Site Coordinator" be provided during construction. This individual is typically provided by the Contractor and it is assumed this will be the case for the Taxiway G project.

The CONSULTANT's work includes development of erosion prevention and sediment control plans and details conforming to requirements for an Individual Construction Stormwater Discharge Permit in accordance with regulations set forth by the Agency of Natural Resources (ANR). Erosion prevention and sediment control plans and details shall be developed using the *Vermont Standards & Specifications for Erosion Prevention & Sediment Control*. Plans and detail drawings shall be suitable for bidding purposes which will set forth in detail the requirements for the construction of the project. Plans and detail drawings that have been submitted to ANR will become part of the authorized permit. Plans are proposed to include but will not necessarily be limited to:

Erosion Prevention and Sediment Control Plans Erosion Prevention and Sediment Control Details Erosion Prevention and Sediment Control Narrative

The CONSULTANT will prepare documentation required for Individual Construction Stormwater Discharge Permit applications including a Notice of Intent Form; EPSC Narrative; EPSC Summary Forms utilizing plans; supporting documentation; calculations; and specifications prepared by the CONSULTANT.

3. Stormwater Discharge Permit for New Development and Redevelopment. (Assume one Stormwater Discharge Permit needed for Phases 2 & 3)

This project involves significant additional impervious area and "redeveloping" impervious areas covered under existing Stormwater Discharge Permits. It is noteworthy that this project will be subject to the "no-net increase in phosphorus" requirements enacted by ANR on October 1, 2015.

It is assumed that a majority of the stormwater can be treated by disconnection of non-rooftop runoff. Given the high infiltration capability of the soils at BTV and the successful performance history of existing infiltration systems to treat stormwater runoff at BTV, is assumed the remainder of the stormwater treatment can be attained by infiltration. The CONSULTANT will utilize existing infiltration test information for the project to the extent possible. However, in the event that additional infiltration testing is required to satisfy permitting agencies, the CONSULTANT understands that BTV will contract directly with a qualified firm to perform all required testing.

It is our understanding that any stormwater management system for the project must

conforms to FAA Advisory Circular 150/5200-33A "Hazardous Wildlife Attractants on or Near Airports" and the Vermont Stormwater Management Manual.

4. Act 250 Permit. (Assume one Act 250 Permit needed for Phases 2 & 3)

The CONSULTANT's work includes preparing for, attending, and documenting one meeting with the District 4 Environmental Coordinator and the OWNER for a project review prior to completing an Act 250 application. It is anticipated the Coordinator will determine that the project be processed as a minor amendment to the existing permits. This meeting will also help identify criterion that may be of specific concern to the District Commission or require in-depth information that must accompany the application.

5. City of South Burlington Development Review Board approval. (Assume one South Burlington approval process needed for Phases 2 & 3)

It is anticipated this will be a multi-step process requiring three separate applications and individual public meetings for Sketch Plan, Preliminary Plat, and Final Plat approvals. The CONSULTANT will also provide services for assisting BTV in obtaining a Zoning Permit and Certificate of Occupancy.

6. FAA Notice of proposed Construction Permit. (Assume one FAA Permit needed for Phases 2 & 3)

The FAA requires notification of proposed construction at any public use airport. This must be done at least 30 days before construction begins and is accomplished by completing FAA form 7460-1. This review determines if the project will in result in structures or equipment that penetrate protected airspace surfaces or will interfere with radio communication or aircraft navigation systems. One 7460-1 permit is required for the permanent structures and a second 7460-1 permit is required for temporary construction equipment.

Assumptions: It is noted that relocated Taxiway G will cross an existing active ductile iron (DI) sewer line serving the Vermont Air National Guard (VTANG) Base. At this time, it is assumed that this sewer line will not be adversely impacted by the project construction, and consequently the CONSULTANT's proposal does not include design or permitting services related to relocating or altering this sewer line. In addition, relocated Taxiway G will cross an asbestos cement (AC) waterline that formerly served the VTANG Base. It is the CONSULTANT's understanding that this water line has been abandoned and consequently no design or permitting services associated with this water line are included in our proposal.

ARTICLE F - BIDDING AND ARRANGEMENT FOR CONSTRUCTION – 2017 and 2018 PROJECTS

The CONSULTANT shall provide the following services for the 2017 Taxiway 'G' realignment project:

- 1. The CONSULTANT to prepare electronic versions of bid documents for distribution to potential bidders.
- 2. The CONSULTANT will host the bid documents on a dedicated password protected ftp site. The CONSULTANT will include in the bid advertisement, directions for Contractors to contact the CONSULTANT for access to the ftp website. The CONSULTANT will maintain the bidders list for the project and provide BTV with an updated copy of this list daily during the bidding period (unless there have been no changes).
- 3. Bid Advertisement The CONSULTANT will prepare the bid advertisement and deliver it to the OWNER via email for publication in accordance with the OWNER's bidding procedures. The CONSULTANT will deliver the bid advertisement to plan viewing rooms for publication to maximize the project exposure and generate widespread contractor interest in the project. The CONSULTANT will communicate with the plan viewing rooms and similar industry entities to provide technical information for their publications.
- 4. Respond to bidder questions and issue as many addenda if required (assumed total of 2 addenda).
- 5. Attend and conduct Pre-bid conference. Conduct a site walk of the project areas to allow the contractors and subcontractors to observe the existing conditions first-hand and to ask questions regarding their observations. Prepare written responses to questions that require additional information not available at the time of the pre-bid conferences. Distribute the responses to the bid document recipients.
- 6. Conduct a detailed analysis of the contractors' bids for completeness and accuracy and note omissions and discrepancies. Compile a bid summary comprised of the results of the bids for distribution to the bid document recipients. Write a letter to the OWNER recommending the award of the construction contract to the apparent low responsive and responsible bidder based on the bid analyses. With the concurrence of the OWNER and the FAA, the CONSULTANT will issue a written notification to the successful bidder advising the bidder of the bid results. The CONSULTANT will disseminate the bid results to the plan viewing rooms.

The CONSULTANT shall provide the following services for the 2018 Taxiway 'G' realignment project:

- 7. The CONSULTANT to prepare electronic versions of bid documents for distribution to potential bidders.
- 8. The CONSULTANT will host the bid documents on a dedicated password protected ftp site. The CONSULTANT will include in the bid advertisement, directions for Contractors to contact the CONSULTANT for access to the ftp website. The

- CONSULTANT will maintain the bidders list for the project and provide BTV with an updated copy of this list daily during the bidding period (unless there have been no changes).
- 9. Bid Advertisement The CONSULTANT will prepare the bid advertisement and deliver it to the OWNER via email for publication in accordance with the OWNER's bidding procedures. The CONSULTANT will deliver the bid advertisement to plan viewing rooms for publication to maximize the project exposure and generate widespread contractor interest in the project. The CONSULTANT will communicate with the plan viewing rooms and similar industry entities to provide technical information for their publications.
- 10. Respond to bidder questions and issue as many addenda if required (assumed total of 2 addenda).
- 11. Attend and conduct Pre-bid conference. Conduct a site walk of the project areas to allow the contractors and subcontractors to observe the existing conditions first-hand and to ask questions regarding their observations. Prepare written responses to questions that require additional information not available at the time of the pre-bid conferences. Distribute the responses to the bid document recipients.
- 12. Conduct a detailed analysis of the contractors' bids for completeness and accuracy and note omissions and discrepancies. Compile a bid summary comprised of the results of the bids for distribution to the bid document recipients. Write a letter to the OWNER recommending the award of the construction contract to the apparent low responsive and responsible bidder based on the bid analyses. With the concurrence of the OWNER and the FAA, the CONSULTANT will issue a written notification to the successful bidder advising the bidder of the bid results. The CONSULTANT will disseminate the bid results to the plan viewing rooms.

ARTICLE G – GENERAL ADMINISTRATION – 2017 and 2018 PROJECTS

The CONSULTANT shall provide the following services (assume that both the 2017 and 2018 contracts are developed simultaneously):

- 1. Coordinate, chair, and document a Pre-design scoping meeting with the OWNER, and FAA.
- 2. Prepare a draft and final project scope and fee for review by the OWNER, and FAA.
- 3. Coordinate with OWNER, other consultants involved with the project and the FAA. Arrange and attend six (6) project coordination/informational meetings with the OWNER throughout the course of the project.
- 4. Perform general coordination throughout the life of the project to ensure the FAA and OWNER are informed as to the status of the project.

5. Prepare, analyze, and submit final project completion data and associated documentation for approval and acceptance by FAA, and the OWNER.

ARTICLE H - GIS DATA-2017 and 2018 PROJECTS

The CONSULTANT shall provide the OWNER with metadata for the OWNERS's use in a GIS system.

- 1. Add metadata to design features to allow for functionality in GIS.
- 2. Convert design drawings from AutoCAD/Civil 3D to ArcGIS format (Shape files).

The GIS data created to be delivered by the CONSULTANT shall be limited to the project limits.

ARTICLE I - CONSTRUCTION ADMINISTRATION

Construction Administration services are not included in this contract.

ARTICLE J - TECHNICAL OBSERVATION OF CONSTRUCTION

Technical Observation services are not included in this contract.

ARTICLE K - COMPENSATION

General:

The CONSULTANT shall charge for all services requested by the OWNER and rendered by the CONSULTANT in connection with the PROJECT in strict accordance with the conditions set forth in this Article of the AGREEMENT.

The charges made by the CONSULTANT under this Article and the payment of said charges by the OWNER shall constitute full compensation for all expenses incurred by the CONSULTANT in connection with the services rendered including F.I.C.A. taxes, Federal and State unemployment taxes, costs in connection with employees benefits, office expenses, supplies and equipment, the general costs of doing business, and the CONSULTANT's profit.

Lump Sum Fees

The CONSULTANT shall charge lump sum fees for all work under ARTICLE A, "Preliminary Work and Review of Data – 2017 & 2018 Projects"; ARTICLE B, "Preliminary Design, Drawings and Specifications - 2017 & 2018 Projects"; ARTICLE C, "Final Design, Drawings and Specifications – 2017 & 2018 Projects"; ARTICLE D, "Design of FAA Glide Slope Cable Relocation – 2017 & 2018 Projects"; ARTICLE F, "Bidding and Arrangement for Construction – 2017 & 2018 Projects"; ARTICLE G, "General Administration – 2017 & 2018 Projects"; and ARTICLE H, "GIS Data – 2017 & 2018 Projects". The lump sum fee to be charged by the CONSULTANT and paid by the OWNER shall be as follows:

- 1. For all work under ARTICLE A, "Review of Data and Schematic Design 2017 & 2018 Projects", the lump sum fee of \$62,784 (SIXTY-TWO THOUSAND SEVEN HUNDRED EIGHTY-FOUR dollars and no cents).
- 2. For all work under ARTICLE B, "Preliminary Design, Drawings and Specifications 2017 & 2018 Projects", the lump sum fee of \$225,558 (TWO HUNDRED TWENTY-FIVE THOUSAND FIVE HUNDRED FIFTY-EIGHT dollars and no cents).
- 3. For all work under ARTICLE C, "Final Design, Drawings and Specifications 2017 & 2018 Projects", the lump sum fee of \$105,618 (ONE HUNDRED FIVE THOUSAND SIX HUNDRED EIGHTEEN dollars and no cents).
- 4. For all work under ARTICLE D, "Design of FAA Glide Slope Cable Relocation 2017 & 2018 Projects", the lump sum fee of \$22,803 (TWENTY-TWO THOUSAND EIGHT HUNDRED THREE dollars and no cents).
- 5. For all work under ARTICLE F, "Bidding and Arrangement for Construction 2017 & 2018 Projects", the lump sum fee of \$45,353 (FORTY-FIVE THOUSAND THREE HUNDRED FIFTY-THREE dollars and no cents).
- 6. For all work under ARTICLE G, "General Administration 2017 & 2018 Projects", the lump sum fee of \$64,955 (SIXTY-FOUR THOUSAND NINE HUNDRED FIFTY-FIVE dollars and no cents).
- 7. For all work under ARTICLE H, "GIS Data 2017 & 2018 Projects", the lump sum fee of \$9,038 (NINE THOUSAND AND THIRTY-EIGHT dollars and no cents).

Actual Cost Plus Fixed Fee

The CONSULTANT shall charge for all services provided under ARTICLE E, "Environmental Permitting – 2017 & 2018 Projects" on the basis of the actual cost of providing such services, plus fixed fee payments.

The CONSULTANT's charges for the actual cost of providing services will be computed as the total of (1) Salary Costs, (2) Overhead, and (3) Direct Non-salary Expenses, all as defined in the Federal Aviation Administration's Advisory Circular No. 150/5100-14E, entitled "Architectural Engineering and Planning Consultant Service for Airport Grant Projects"; a copy of which is on file in the offices of each of the parties hereto.

The total of the CONSULTANT's charges for providing these services shall not exceed the following amounts without prior written approval of the OWNER, and the FAA:

The total of the CONSULTANT's charges for providing engineering and permitting services shall not exceed the following amounts without prior written approval of the OWNER, the FAA, and the VTrans:

1. For providing services under ARTICLE E "Environmental Permitting – 2017 & 2018 Projects", the amount of \$57,798 (FIFTY-SEVEN THOUSAND SEVEN HUNDRED NINETY-EIGHT dollars and no cents), which includes a fixed fee payment in the amount of \$7,506.26 (SEVEN THOUSAND FIVE HUNDRED AND SIX DOLLARS and TWENTY-SIX cents.

The total of the CONSULTANT's charges for providing all services under this AGREEMENT shall not exceed \$584,869 (FIVE HUNDRED EIGHTY-FOUR THOUSAND EIGHT HUNDRED SIXTY-NINE dollars and no cents) without written approval of the OWNER and the FAA. Please refer to EXHIBIT B for a detailed breakdown of the staff hours and costs for the individual project tasks.

ARTICLE L – WORK NOT INCLUDED

Services that are not included in this AGREEMENT are as follows:

- 1. Preparation of any permit applications other than those specified in this agreement.
- 2. Attendance at additional project or public meetings beyond those specified in this agreement.
- 3. Preparation of application for federal assistance.
- 4. Preparation of federal reimbursement requests.

ARTICLE M – TIME AND METHOD OF PAYMENT

The CONSULTANT will make periodic applications for payment for the work completed under this AGREEMENT. The applications shall be on forms approved by the OWNER. The CONSULTANT will also submit a progress report and other supporting documentation justifying the request with each application for payment. The OWNER shall promptly review and process the application and shall make payment to the CONSULTANT within 30 days of receipt of the application.

ARTICLE N – ADDITIONAL WORK

If, during the term of this contract, the scope or character of the work is changed substantially, or if the time for completion is increased substantially due to circumstances beyond the control of the CONSULTANT; and if such changes thereby increase the work to be performed by the CONSULTANT, and additional fee shall be paid to the CONSULTANT. The additional work and the compensation therefore shall be provided for in a written amendment to this AGREEMENT, said amendment to be negotiated by the OWNER and the CONSULTANT, and approved by the FAA.

ARTICLE O – TIME FOR COMPLETION

Final Design and Bidding Phases

The CONSULTANT shall undertake all work under ARTICLE A; ARTICLE B; ARTICLE C; ARTICLE D; ARTICLE E; and ARTICLE F of this AGREEMENT in order that construction of the PROJECT may commence in the summer of 2017.

ARTICLE P – ASSIGNED PERSONNEL

The CONSULTANT shall assign an experienced Registered Professional Engineer, acceptable to the OWNER, to be in responsible charge of the work performed under the AGREEMENT.

The CONSULTANT shall not replace the person in charge without permission of the OWNER. The CONSULTANT shall assign such other personnel to the work as maybe necessary from time to time to complete the work as required.

All personnel used by CONSULTANT in the performance of the AGREEMENT shall be qualified by training and experience to perform their assigned tasks. At the request of the OWNER, CONSULTANT shall not use in the performance of the AGREEMENT any personnel deemed by OWNER to be incompetent, careless, unqualified to perform the work assigned to him/her, or otherwise unsatisfactory to OWNER.

ARTICLE Q - TO BE PROVIDED BY THE OWNER

Existing Information

The OWNER shall provide the CONSULTANT with all available information, data, plans, etc., pertinent to the CONSULTANT's work under this AGREEMENT. The OWNER shall assist the CONSULTANT as necessary to obtain available pertinent information from Federal, State or local officials or from other engineers or others who have previously worked for the OWNER on matters affecting this PROJECT.

ARTICLE R – COMPLIANCE WITH REGULATIONS

As the PROJECT is to be partially financed with Federal grant aid, and will be subject to approval by the FAA and various other agencies, it is a specific requirement of this AGREEMENT that all work done by the CONSULTANT be in strict compliance with all rules, regulations, standard specifications, or other requirements of the Federal Aviation Administration and other governmental agencies having jurisdiction. It shall be the CONSULTANT's obligation to assist the OWNER in obtaining all required approvals.

ARTICLE S – TERMINATION

This AGREEMENT may be terminated (in full or in part) by the OWNER upon 5 days written notice to the CONSULTANT. Upon such termination, the OWNER shall pay the CONSULTANT all charges made for work done prior to the termination and the CONSULTANT shall turn over to the OWNER all completed work in whatever form it exists and said work shall then become the property of the OWNER.

In the event of substantial breach of any provision of this AGREEMENT by the CONSULTANT, its officers, agents, employees, and subconsultants, the OWNER shall have the absolute right and option to terminate this AGREEMENT forthwith, and, in addition, may have and maintain any legal remedy against the CONSULTANT for its loss and damages resulting

from such breach of this AGREEMENT; provided, however, that as to all plans, drawings, estimates, specifications, proposals, sketches and calculations, together with all material and data theretofore furnished to the OWNER by the CONSULTANT, of a satisfactory nature in accordance with this AGREEMENT, which plans, drawings, etc. are of use to the OWNER, the CONSULTANT shall be entitled to compensation, based on the contract rates, for the work so performed in a satisfactory manner and of use and benefit to the OWNER.

ARTICLE T – LEGAL INTERPRETATION

This AGREEMENT shall be interpreted in accordance with the laws of the State of Vermont.

ARTICLE U - SUBCONTRACTING

CONSULTANT shall not subcontract any portion of the work to be performed under this AGREEMENT without advance written approval by OWNER.

ARTICLE V – INSURANCE

The CONSULTANT will, coincident with the execution of this AGREEMENT, purchase at its own expense and maintain throughout the duration of this AGREEMENT statutory Worker's Compensation Insurance, Comprehensive General Liability Insurance, Automobile Liability Insurance, and Engineer's Professional Liability Insurance. OWNER shall be provided a certificate(s) of such insurance coverage. Such insurance certificate(s) shall indicate that the coverage may not be terminated without a minimum of thirty-day advance notice being provided to OWNER. The coverage shall be applicable for any claims made either during the duration of this AGREEMENT or within the applicable statute of limitation for such claims. The minimum limit of insurance coverage shall be as set forth below:

1. Worker's Compensation Statutory

2. Comprehensive Combined Single Limit

General Liability For Bodily Injury or Property Damage: \$1 Million

3. Comprehensive Combined Single Limit

Automobile Liability for Bodily Injury or Property Damage: \$1 Million

4. Professional liability \$500,000

ARTICLE W - STANDARD OF PERFORMANCE

1. The CONSULTANT will provide professional engineering and related services under this agreement with the standard of care and skill ordinarily used by members of the profession practicing under similar circumstances at the same time in the same locality. The CONSULTANT makes **no** warranties, expressed or implied, in connection with services provided under this agreement.

- 2. The CONSULTANT shall be responsible for the accuracy of its services and the technical accuracy of documents which result from the services provided; and shall comply with applicable laws and regulations and standards mandated by this agreement which are effective as of the effective date of this agreement.
- 3. Through the provision of services during construction as provided by this agreement, the CONSULTANT shall endeavor to provide protection for the Owner against defects and deficiencies in the contractor's work; however the CONSULTANT does **not** guarantee the contractor will perform its work in accordance with the contract documents. The purpose of the provision of construction phase services is to provide the Owner a greater degree of confidence that the completed work of the contractor will generally conform to the contract documents and the contractor has implemented the design concept reflected in the contract documents.
- 4. The CONSULTANT shall **not** supervise, direct, or have control over the contractor's work or workers' and shall **not** have authority or responsibility for construction means and method; nor construction procedures or sequences selected by the contractor.
- 5. The CONSULTANT shall **not** have authority over or responsibility for contractor's safety precautions and programs.
- 6. The CONSULTANT shall **not** have authority over or responsibility for any failure of the contractor to comply with laws and regulations applicable to the contractor's work; and shall **not** be responsible for the contractor's failure to perform work in accordance with the contract documents.

Opinion of Probable Construction Cost

The CONSULTANT's opinions of probably construction costs, otherwise known as cost estimates, engineer's estimates, or construction cost estimates, provided for herein are to be made on the basis of the CONSULTANT's experience and qualifications and represent The CONSULTANT's best judgment as an experienced and qualified professional generally familiar with the industry. However, since the CONSULTANT has no control over the cost of labor, materials, equipment, or services furnished by others, or over the contractor's methods of determining prices, or over competitive bidding, or market conditions, the CONSULTANT cannot and does not guarantee that proposal, bids, or actual construction costs will not vary from opinions of probable construction cost prepared by the CONSULTANT.

ARTICLE X – CONSULTANT RECORDS

The OWNER, the Federal Aviation Administration, the Comptroller General of the United States, or any duly authorized representatives thereof, shall have access to any books, documents, papers, and records of the CONSULTANT which are pertinent to the PROJECT for the purpose of making audits, examinations, excerpts, and transcriptions. The CONSULTANT shall maintain all records for three years after OWNER makes final payment and all other

pending matters are closed.

ARTICLE Y – LIMIT OF LIABILITY

The total amount of all claims the Owner may have against the Consultant under this Agreement or arising from the performance or non-performance of the services under any theory of law, including but not limited to claims for negligence, negligent misrepresentation and breach of contract, shall be strictly limited to \$500,000. As the Owner's sole and exclusive remedy under this Agreement any claim, demand or suit shall be directed and/or asserted only against the Consultant and not against any of the Consultant's employee's, officers or directors.

The Consultant's liability with respect to any claims arising out of this Agreement shall be absolutely limited to direct damages arising out of the services and the Consultant shall bear no liability whatsoever for any consequential loss, injury or damage incurred by the Owner, including but not limited to, claims for loss of use, loss of profits and loss of markets.

ARTICLE Z – ATTACHMENTS TO AGREEMENT

EXHIBIT "A"; EXHIBIT "B"; and EXHIBIT "C" which are appended at the end of this AGREEMENT are hereby made a part of this AGREEMENT by reference and shall have the same force and effect as if they were here written out in full. In the event of conflict between the terms of this AGREEMENT and the attachments hereto, the terms of this AGREEMENT shall prevail.

IN WITNESS WHEREOF, the parties hereto have affixed their seals and hands of their duly authorized officers at Chittenden County, Vermont, effective the date first above written.

BURLINGTON INTERNATIONAL AIRPORT, SOUTH BURLINGTON, VERMONT (OWNER)

BY:	ATTEST:
	Gene Richards, III
	Director of Aviation
	STANTEC CONSULTING SERVICES, INC. (CONSULTANT)
BY:	Sharp Lean ATTEST:
	Gregory A. Edwards, P.E.
	Senior Principal

EXHIBIT "A"

CONTRACT PROVISIONS FOR AIP PROJECTS

AGREEMENT FOR PROFESSIONAL SERVICES ENGINEERING AND PROJECT ADMINISTRATION

for

RELOCATE TAXIWAY 'A' (HOT SPOT 1) DESIGN AND ENVIRONMENTAL PERMITTING

at

BURLINGTON INTERNATIONAL AIRPORT

South Burlington, Vermont

During the performance of this contract, Stantec Consulting Services, Inc. for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

A. AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, SECTION 520 - GENERAL CIVIL RIGHTS PROVISIONS

The contractor assures that it will comply with pertinent statutes, Executives orders and such rules as are promulgated to assure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or handicap be excluded from participating in any activity conducted with or benefiting from Federal assistance. This provision obligates the tenant/concessionaire/lessee or its transferee for the period during which Federal assistance is extended to the airport a program, except where Federal assistance is to provide, or is in the form of personal property or real property or interest therein or structure or improvements thereon. In these cases the provision obligates the party or any transferee for the longer of the following periods: (a) the period during which the property is used by the airport sponsor or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits or (b) the period during which the airport sponsor or any transferee retains ownership or possession of the property. In the case of contractors, this provision binds the contractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

B. BREACH OF CONTRACT TERMS

Any violation or breach of terms of this contract on the part of the contractor or their subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement. The duties and

obligations imposed by the Contract Documents and the rights and remedies available there under shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

C. DISADVANTAGED BUSINESS ENTERPRISES

Contract Assurance (§26.13) - The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate.

D. LOBBYING AND INFLUENCING FEDERAL EMPLOYEES

No Federal appropriated funds shall be paid, by or on behalf of the contractor, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the making of any Federal grant and the amendment or modification of any Federal grant.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any Federal grant, the contractor shall complete and submit Standard Form-LLL, "Disclosure of Lobby Activities," in accordance with its instructions.

E. CIVIL RIGHTS ACT OF 1964, TITLE VI - CONTRACTOR CONTRACTUAL REQUIREMENTS

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- **1.1 Compliance with Regulations.** The contractor shall comply with the Regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- **1.2 Nondiscrimination.** The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

- **1.3 Solicitations for Subcontracts, Including Procurements of Materials and Equipment.** In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
- **1.4 Information and Reports.** The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Sponsor or the Federal Aviation Administration (FAA) to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the sponsor or the FAA, as appropriate, and shall set forth what efforts it has made to obtain the information.
- **1.5 Sanctions for Noncompliance.** In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the sponsor shall impose such contract sanctions as it or the FAA may determine to be appropriate, including, but not limited to:
 - a. Withholding of payments to the contractor under the contract until the contractor complies, and/or
 - b. Cancellation, termination, or suspension of the contract, in whole or in part.
- 1.6 Incorporation of Provisions. The contractor shall include the provisions of paragraphs 1 through 5 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the sponsor or the FAA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Sponsor to enter into such litigation to protect the interests of the sponsor and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

F. TRADE RESTRICTION CLAUSE

The contractor or subcontractor, by submission of an offer and/or execution of a contract, certifies that it:

- a. is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representatives (USTR);
- b. has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or

- controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;
- c. has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a contractor or subcontractor who is unable to certify to the above. If the contractor knowingly procures or subcontracts for the supply of any product or service of a foreign country on said list for use on the project, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract at no cost to the Government.

Further, the contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. The contractor may rely on the certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.

The contractor shall provide immediate written notice to the sponsor if the contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subcontractor agrees to provide written notice to the contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct through the Sponsor cancellation or the contract of subcontract for default at not cost to the Government.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

This certification concerns a matter within the jurisdiction of an agency of the Untied States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, Untied States Code, Section 1001.

G. ACCESS TO RECORDS AND REPORTS

The Contractor shall maintain an acceptable cost accounting system. The Contractor agrees to provide the Sponsor, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers, and records of the contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

H. VETERAN'S PREFERENCE

In the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to Veterans of the Vietnam era and disabled veterans as defined in Section 515(c)(1) and (2) of the Airport and Airway Improvement Act of 1982. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

I. RIGHTS TO INVENTIONS

All rights to inventions and materials generated under this contract are subject to regulations issued by the FAA and the Sponsor of the Federal grant under which this contract is executed.

The following applies to all AIP funded contracts in excess of \$10,000:

TERMINATION OF CONTRACT

- a. The Sponsor may, by written notice, terminate this contract in whole or in part at any time, either for the Sponsor's convenience or because of failure to fulfill the contract obligations. Upon receipt of such notice services shall be immediately discontinued (unless the notice directs otherwise) and all materials as may have been accumulated in performing this contract, whether completed or in progress, delivered to the Sponsor.
- b. If the termination is for the convenience of the Sponsor, an equitable adjustment in the contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed services.
- c. If the termination is due to failure to fulfill the contractor's obligations, the Sponsor may take over the work and prosecute the same to completion by contract or otherwise. In such case, the contractor shall be liable to the Sponsor for any additional costs occasioned to the Sponsor thereby.
- d. If, after notice of termination for failure to fulfill contract obligations, it is determined that the contractor had not so failed, the termination shall be deemed to have been effected for the convenience of the Sponsor. In such event, adjustment in the contract price shall be made as provided in paragraph b. of this clause.
- e. The rights and remedies of the sponsor provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

The following applies to all contracts in excess of \$25,000:

CERTIFICATION REGARDING DEBAREMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

a. The bidder/offeror certifies, by submission of this proposal or acceptance of this contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the bidder/offeror/contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this.

ARTICLE Z – ATTACHMENTS TO AGREEMENT

EXHIBIT "A"; EXHIBIT "B"; and EXHIBIT "C" which are appended at the end of this AGREEMENT are hereby made a part of this AGREEMENT by reference and shall have the same force and effect as if they were here written out in full. In the event of conflict between the terms of this AGREEMENT and the attachments hereto, the terms of this AGREEMENT shall prevail.

Exhibit "B" - Fee Schedule Revised February 19, 2016

Burlington International Airport South Burlington, Vermont

Realign Taxiway 'G' from Taxiway 'B' to Runway '15' Threshold Phase 2 Construction, 2017; Phase 3 Construction, 2018

AIP Project No. 3-50-0005-1___-2016

Article A: Preliminary Work & Review of Data	\$62,784
Article B: Preliminary Design, Drawings and Specifications for the 2017 & 2018 Projects (Separate Bids)	\$225,558
Article C: Final Design for the 2017 & 2018 Projects	\$105,618
Article D: Design of FAA Glide Slope Cable Relocation	\$22,803
Article E: Environmental Permitting	\$57,798
Article F: Bidding and Arrangement for Construction of 2017 & 2018 Projects	\$45,353
Article G: General Administration	\$64,955
Article H: GIS Data (Includes both 2017 & 2018 Contracts)	\$9,038

Total Engineering Services Fee: \$584,869

Article A: Preliminary Work & Review of Data

TASK	DISCIPLINE	Principal Aviation	Senior Project Manager	Senior Electrical Engineer	Electrical Engineer	Senior Civil Engineer	Civil Engineer	Senior Engineering	Engineering Technician	Administrative /
1.0	Compile/Review Existing Drawings/Data	7ttlation	4	8	16	8	16	Technician 16	recrimetari	Olenear
2.0	Coordinate with Airport/FAA/Consultants		6			16	8			
3.0	Topographical Survey & Mapping (coordination; QC review)		4				16			
4.0	Verify location of Utilities with Airport & FAA		16	8	16	24	4			
5.0	Geotechnical Investigation - Coordinate, determine applicable tests and number of borings/coverage and have someone onsite during borings		4			4	16	40		
6.0	Consult with BTV about Taxiway Circuitry		2	12	16					
7.0	Conduct Electrical/Lighting and Vault Investigation		4	16	24					
	TOTAL HOURS	0	40	44	72	52	60	56	0	0
	Hourly Rate	\$73.00	\$55.00	\$58.00	\$39.00	\$50.00	\$37.00	\$38.00	\$28.00	\$22.00
	Direct Labor Cost	\$0.00	\$2,200.00	\$2,552.00	\$2,808.00	\$2,600.00	\$2,220.00	\$2,128.00	\$0.00	\$0.00

Misc. Travel	Misc. Travel from South Burlington Office to BTV \$250.00								
Task 4.0									
<u>Trips</u>	Miles	<pre>\$ per mile</pre>	<u>Total</u>						
1	500	\$0.57	\$282.50						
Nights	<u>People</u>	Lodging Per Night							
1	1	\$135.00	\$135.00						
<u>Days</u>	<u>People</u>	<u>Meals</u>							
1	1	\$50.00	\$50.00						
Task 10.0									
<u>Trips</u>	<u>Miles</u>	\$ per mile	<u>Total</u>						
1	500	\$0.57	\$282.50						
<u>Nights</u>	<u>People</u>	Lodging Per Night							
2	2	\$135.00	\$540.00						
<u>Days</u>	<u>People</u>	<u>Meals</u>							
2									

Outside Services:								
Task 3.0: Field Survey and Mapping (by OWNER))	\$0.00							
Task 6.0: Geotechnical Investigation (Allowance)	\$15,000.00							
TOTAL OUTSIDE SERVICES	\$15,000,00							

Labor Summary:		
TOTAL DIRECT LABOR COST		\$14,508.00
OVERHEAD @ 177.47%		\$25,747.35
FIXED FEE @ 15%	_	\$6,038.30
	TOTAL LABOR COST	\$46,293.65

Expense Summary:		
	TOTAL EXPENSES	\$1,490.00

USE:	\$62,784

Article B: Preliminary Design, Drawings and Specifications for the 2017 & 2018 Projects (Separate Bids)

TASK	DISCIPLINE	Principal Aviation	Senior Project Manager	Senior Civil Engineer	Senior Electrical Engineer	Electrical Engineer	Civil Engineer	Senior Engineering Technician	Engineering Technician	Administrative / Clerical
1.0	Preliminary Plans (60%) for the 2017 Project	2	8	32	24	40	80	40	60	
2.0	Preliminary Plans (60%) for the 2018 Project	2	8	32	24	40	80	40	60	
3.0	Preliminary Project Detail Drawings for the 2017 Project		4	24	12	32	40	40	24	
4.0	Preliminary Project Detail Drawings for the 2018 Project			8	4	12	16		8	
5.0	Preliminary Specifications for the 2017 Project		8	32	8	24	16			
6.0	Preliminary Specifications for the 2018 Project			4	4	8	4			
7.0	Project Storm-Water Design		8	16			80	32	16	
8.0	Preliminary Safety and Phasing Plans & Report for the 2017 Project		4	16			80	24		
9.0	Preliminary Safety and Phasing Plans & Report for the 2018 Project		4	16			80	24		
10.0	Preliminary Cost Estimates for the 2017 Project		6	12	12	24	32	16		
11.0	Preliminary Cost Estimate for the 2018 Project		6	12	12	24	32	16		
12.0	Reproduce and Distribute Design Submittals for the 2017 Project		6				8		4	
13.0	Reproduce and Distribute Design Submittals for the 2018 Project									
14.0	Perform In-House Assurance Control Review	8	16	12	6	6				
15.0	Pavement Design Report		4	12			24			
16.0	Preliminary Electrical Design		8		20	40		32		
	TOTAL HOURS	12	90	228	126	250	572	264	172	0
	Hourly Rate	\$73.00	\$55.00	\$50.00	\$58.00	\$39.00	\$37.00	\$38.00	\$28.00	\$22.00
	Direct Labor Cost	\$876.00	\$4,950.00	\$11,400.00	\$7,308.00	\$9,750.00	\$21,164.00	\$10,032.00	\$4,816.00	\$0.00

Article B: Expense Worksheet

<u>Task 12.0</u>	
	<u>Total</u>
Reproduction of preliminary documents	\$500.00
<u>Task 13.0</u>	
	<u>Total</u>
Reproduction of preliminary documents	\$500.00
Misc. Travel from South Burlington Office to BTV	\$250.00

	TOTAL OUTSIDE SERVICES	\$0.00
Task X.0:	_	\$0.00
Task X.0:		\$0.00
Outside Services:		

Labor Summary:		
TOTAL DIRECT LABOR COST		\$70,296.00
OVERHEAD @ 177.47%		\$124,754.31
FIXED FEE @ 15%		\$29,257.55
	TOTAL LABOR COST	\$224,307.86

Expense Summary:		
	TOTAL EXPENSES	\$1,250.00

USE:	\$225,558
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Article C: Final Design for the 2017 & 2018 Projects

TASK	DISCIPLINE	Principal Aviation	Senior Project Manager	Senior Electrical Engineer	Electrical Engineer	Senior Civil Engineer	Civil Engineer	Senior Engineering Technician	Engineering Technician	Administrative / Clerical
1.0	Final Plans and Detail Drawings for 2017 Project	4	8	16	24	32	60	20	60	
2.0	Final Plans and Detail Drawings for 2018 Project	4	8	16	24	32	60	20	60	
3.0	Final Specifications for 2017 Project	1	12	8	8	8	16			
4.0	Final Specifications for 2018 Project	1	12	8	8	8	16			
5.0	Finalize Safety and Phasing Plans & Report for 2017 Project		8			16	8	2	16	
6.0	Finalize Safety and Phasing Plans & Report for 2018 Project		8			16	8	2	16	
7.0	Final Cost Estimates for 2017 Project		4	2	4	4	8			
8.0	Final Cost Estimates for 2018 Project		4	2	4	4	8			
9.0	Reproduce and Distribute Design Submittals for 2017 Project		8			4		8	8	8
10.0	Reproduce and Distribute Design Submittals for 2018 Project		8			4		8	8	8
11.0	Perform In-House Quality Assurance Review	6	8	4		2				
	TOTAL HOURS	16			72		184		168	
	Hourly Rate	\$73.00	\$55.00	\$58.00	\$39.00	\$50.00	\$37.00	\$38.00	\$28.00	\$22.00
	Direct Labor Cost	\$1,168.00	\$4,840.00	\$3,248.00	\$2,808.00	\$6,500.00	\$6,808.00	\$2,280.00	\$4,704.00	\$352.00

Article C: Expense Worksheet

<u>Task 9.0</u>	
	<u>Total</u>
Reproduction of final documents	\$500.00
<u>Task 9.0</u>	
	<u>Total</u>
Reproduction of final documents	\$500.00
Misc. Travel from South Burlington Office to BTV	\$250.00

Outside Services:		
Task X.0:		\$0.00
Task X.0:	<u>-</u>	\$0.00
	TOTAL OUTSIDE SERVICES	\$0.00
Labor Summary:		
TOTAL DIRECT LABOR COST		\$32,708.00
OVERHEAD @ 177.47%		\$58,046.89
FIXED FEE @ 15%	_	\$13,613.23
	TOTAL LABOR COST	\$104,368.12

Expense Summary:		
	TOTAL EXPENSES	\$1,250.00

Article D: Design of FAA Glide Slope Cable Relocation

TASK	DISCIPLINE	Principal Aviation	Senior Project Manager	Senior Electrical Engineer	Electrical Engineer	Senior Civil Engineer	Civil Engineer	Senior Engineering Technician	Engineering Technician	Administrative / Clerical
1.0	Research into location of FAA Glide Slope Cable		2	4	8					
2.0	Preliminary Design of Relocated Glide Slope Cable		2	16	24			16	8	
3.0	Preliminary Specification of Relocated Glide Slope Cable			4	6					
4.0	Coordination with the Airport & FAA review of the preliminary design of the Glide Slope Cable		8	8	8					
5.0	Final Design of Glide Slope Cable		2	8	16			12		
6.0	Final Specification of Relocated Glide Slope Cable			2	4					
	TOTAL HOURS		14			0	0	28		0
	Hourly Rate	\$73.00	\$55.00	\$58.00	\$39.00	\$50.00	\$37.00	\$38.00	\$28.00	\$22.00
	Direct Labor Cost	\$0.00	\$770.00	\$2,436.00	\$2,574.00	\$0.00	\$0.00	\$1,064.00	\$224.00	\$0.00

Article C: Expense Worksheet

Misc. Travel from South Burlington Office to BTV	\$250.00

Outside Services:		
Task X.0:		\$0.00
Task X.0:	_	\$0.00
	TOTAL OUTSIDE SERVICES	\$0.00
Labor Summary:		
TOTAL DIRECT LABOR COST		\$7,068.00
OVERHEAD @ 177.47%		\$12,543.58
FIXED FEE @ 15%	_	\$2,941.74
	TOTAL LABOR COST	\$22,553.32

Expense Summary:		
	TOTAL EXPENSES	\$250.00

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Article E: Environmental Permitting

TASK	DISCIPLINE	Principal Aviation	Senior Project Manager	Senior Civil Engineer	Civil Engineer	Senior Environmental Analyst	Environmental Analyst	Senior Engineering Technician	Administrative / Clerical
1.0	NEPA Documented Categorical Exclusion (assume 1 NEPA clearance needed for Phases 2 & 3) (Note: This task pervoulsy completed)								
2.0	Individual Construction Stormwater Discharge Permit / EPSC Plans & Details (Assume separate INDC Permits needed for Phases 2 & 3)	2	8	16	48			32	
3.0	Stormwater Permit for New Development & Redevelopment / Plans & Details (Assume Phases 2 & 3 will be permitted under 1 Stormwater Permit)	2	8	24	100	8		60	8
4.0	Act 250 Permit (Assume no Public Hearing is Required; Assume 1 Act 250 permit will cover both Phases 2 & 3) (Note: estimated hours reduced to reflect work previously completed for this task.)	1	12		24				12
5.0	City of South Burlington Approval (3-step process: Sketch Plan; Preliminary Plat; Final Plat); Zoning Permit; Certificate of Occupancy (Assume 1 approval process will cover Phases 2 & 3) (Note: estimated	1	25		18			18	6
6.0	hours reduced to reflect work previously completed for this task.) FAA Notice of Proposed Construction Permit, Form 7460-1 (Assume one 7460 for temporary const. & one 7460 for permanent const. will cover Phases 2 & 3)		2	4	6				
_	TOTAL HOURS	6	55	44	196	8	0	110	26
	Hourly Rate	\$73.00	\$55.00	\$50.00	\$37.00	\$46.00	\$30.00	\$38.00	\$22.00
	Direct Labor Cost	\$438.00	\$3,025.00	\$2,200.00	\$7,252.00	\$368.00	\$0.00	\$4,180.00	\$572.00

Article D: Expense Worksheet

<u>Task 1.0</u>			
<u>Trips</u>	Miles	<pre>\$ per mile</pre>	<u>Total</u>
0	500	\$0.57	\$0.00
<u>Nights</u>	<u>People</u>	Lodging Per Night	
0	0	\$135.00	\$0.00
<u>Days</u>	<u>People</u>	<u>Meals</u>	
0	0	\$50.00	\$0.00
Misc. Trave	\$250.00		

Outside Services:		
		\$0.00
Task X.0:		\$0.00
	TOTAL OUTSIDE SERVICES	\$0.00

Labor Summary:		
TOTAL DIRECT LABOR COST		\$18,035.00
OVERHEAD @ 177.47%		\$32,006.71
FIXED FEE @ 15%		\$7,506.26
	TOTAL LABOR COST	\$57,547.97

Expense Summary:		
	TOTAL EXPENSES	\$250.00

USE:	\$57,798

Article F: Bidding and Arrangement for Construction of 2017 & 2018 Projects

TASK	DISCIPLINE	Principal Aviation	Senior Project Manager	Senior Civil Engineer	Senior Electrical Engineer	Electrical Engineer	Civil Engineer	Senior Engineering Technician	Engineering Technician	Administrative / Clerical
Bidding S	Services for Construction of 2017 Project									
1.0	Prepare Electronic Versions of Bid Documents		6				6	6	8	
2.0	Manage Secure FTP Hosting of Bid Documents and Maintenance of Bidders List		2						40	
3.0	Prepare Bid Advertisement		2				2			
4.0	Respond to Questions from Bidders / Addenda		8	16	8	8	8			
5.0	Prepare and Conduct Pre Bid Conference		6	8						
6.0	Review Bids, Bid Analysis and Recommendation for Award	2	4	8	4		8		4	
Bidding S	Services for Construction of 2018 Project									
7.0	Prepare Electronic Versions of Bid Documents		6				6	6	8	
8.0	ivianage secure FTP nosting or bid bocuments and iviaintenance or Ridders List		2						40	
9.0	Prepare Bid Advertisement		2				2			
10.0	Respond to Questions from Bidders / Addenda		8	16	8	8	8			
11.0	Prepare and Conduct Pre Bid Conference		6	8						
12.0	Review Bids, Bid Analysis and Recommendation for Award	2	4	8	4		8		4	
	TOTAL HOURS	4	56	64	24	16	48	12	104	(
	Hourly Rate	\$73.00	\$55.00	\$50.00	\$58.00	\$39.00	\$37.00	\$38.00	\$28.00	\$22.00
	Direct Labor Cost	\$292.00	\$3,080.00	\$3,200.00	\$1,392.00	\$624.00	\$1,776.00	\$456.00	\$2,912.00	\$0.00

Article E: Expense Worksheet

Task 5.0			
<u>Trips</u>	Miles	<pre>\$ per mile</pre>	<u>Total</u>
2	500	\$0.57	\$565.00
<u>Nights</u>	<u>People</u>	Lodging Per Night	
2	1	\$135.00	\$270.00
<u>Days</u>	<u>People</u>	<u>Meals</u>	
4	1	\$50.00	\$200.00
Misc. Trave	Burlington Office to BTV	\$500.00	

Outside Services:		
Task X.0:		\$0.00
Task X.0:		\$0.00
	TOTAL OUTSIDE SERVICES	\$0.00

Labor Summary:		
TOTAL DIRECT LABOR COST		\$13,732.00
OVERHEAD @ 177.47%		\$24,370.18
FIXED FEE @ 15%	_	\$5,715.33
	TOTAL LABOR COST	\$43,817.51

Expense Summary:		
	TOTAL EXPENSES	\$1,535.00

USE:	\$45,353
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Article G: General Administration

TASK	DISCIPLINE	Principal Aviation	Senior Project Manager	Senior Civil Engineer	Civil Engineer	Senior Electrical Engineer	Environmental Analyst	Engineering Technician	Administrative / Clerical
1.0	Project Scoping Meeting with Airport and Joint Consultants		8	8					
2.0	Work Scope and Fee Preparation	2	32	16		4			
3.0	Coordination with BTV, other Consultants and FAA	2	90	12	12				
4.0	General Project Coordination	2	90	24	12				
5.0	Prepare Project Closeout Data / Report (Assume Separate Reports for 2017 & 2018 Contracts)		12	32		8		32	2
Assumption	ons:								
1	General Administration Tasks 3.0 & 4.0 will take place continuously over an 18 month period								
2	Both 2017 & 2018 contracts are developed simultaneously								
	TOTAL HOURS	6	232	92	24	12	0	32	2 0
	Hourly Rate	\$73.00	\$55.00	\$50.00	\$37.00	\$58.00	\$30.00	\$28.00	\$22.00
	Direct Labor Cost	\$438.00	\$12,760.00	\$4,600.00	\$888.00	\$696.00	\$0.00	\$896.00	\$0.00

Article F: Expense Worksheet

<u>Task 1.0</u>	<u>lask 1.0</u>								
<u>Trips</u>	Miles	\$ per mile	<u>Total</u>						
0	500	\$0.57	\$0.00						
<u>Nights</u>	<u>People</u>	Lodging Per Night							
0	0	\$135.00	\$0.00						
<u>Days</u>									
0	0 0 \$50.00 \$0.00								
Misc. Trave	\$250.00								

Outside Services:		
Task X.0:		\$0.00
Task X.0:		\$0.00
	TOTAL OUTSIDE SERVICES	\$0.00

Labor Summary:		
TOTAL DIRECT LABOR COST		\$20,278.00
OVERHEAD @ 177.47%		\$35,987.37
FIXED FEE @ 15%	_	\$8,439.80
	TOTAL LABOR COST	\$64,705.17

Expense Summary:		
	TOTAL EXPENSES	\$250.00

USE:	\$64,955
USE:	\$64,955

Article H: GIS Data (Includes both 2017 & 2018 Contracts)

TASK	DISCIPLINE	Principal Aviation	Senior Project Manager	Senior Civil Engineer	Civil Engineer	Senior Electrical Engineer	Senior Engineering Technician	Engineering Technician	Administrative / Clerical
1.0	Add Metadata to design features for use in GIS		4	6			24		
2.0	Convert Design Drawings into ArcGIS compatible format (Shape Files)		2	6			24		
3.0									
4.0									
5.0									
6.0									
7.0									
8.0									
9.0									
10.0									
	TOTAL HOURS	0	6	12	0	0	48	0	0
	Hourly Rate	\$73.00	\$55.00	\$50.00	\$37.00	\$58.00	\$38.00	\$28.00	\$22.00
	Direct Labor Cost	\$0.00	\$330.00	\$600.00	\$0.00	\$0.00	\$1,824.00	\$0.00	\$0.00

Article F: Expense Worksheet

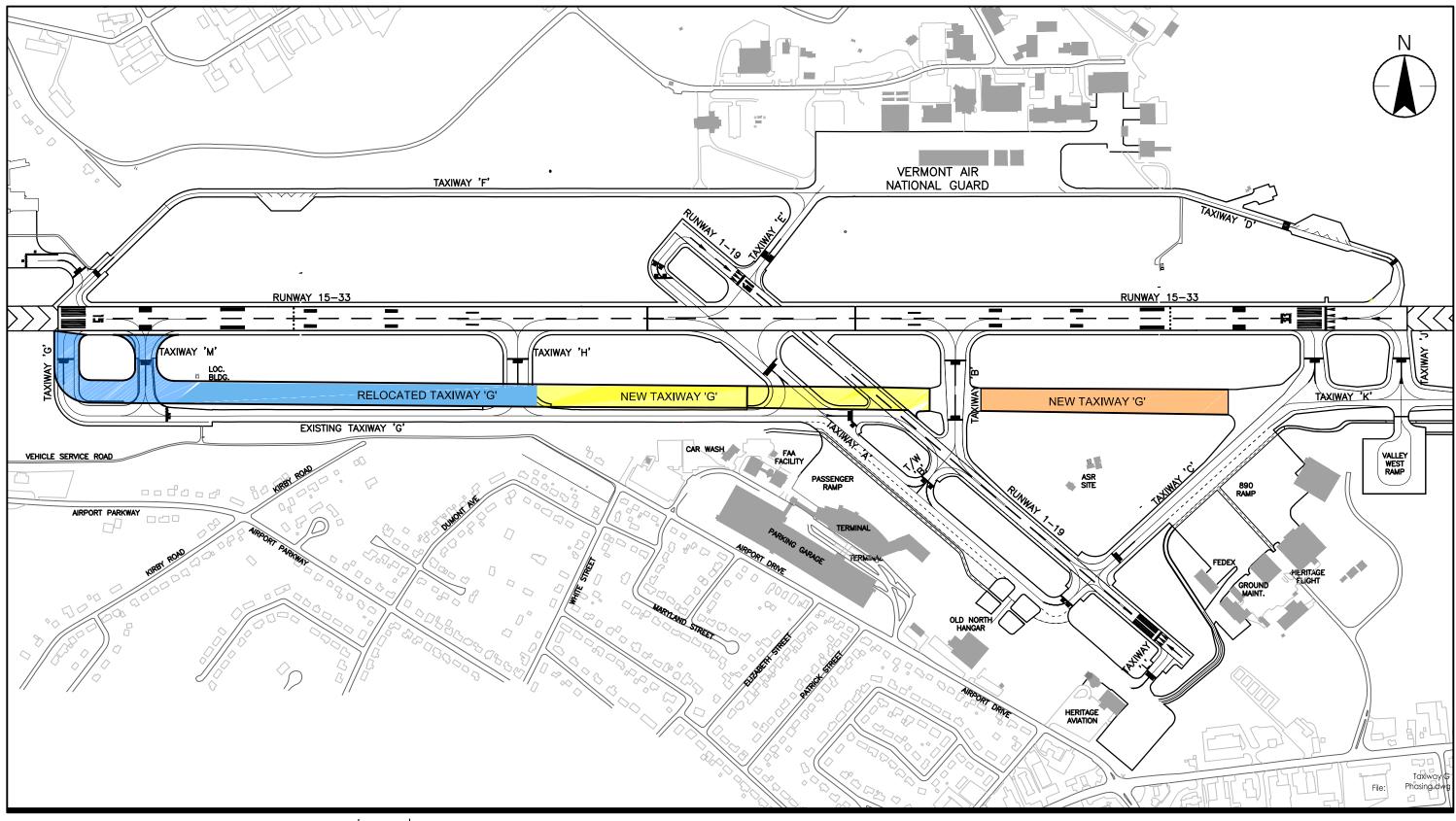
<u>Task 1.0</u>			
<u>Trips</u>	Miles	\$ per mile	<u>Total</u>
0	500	\$0.57	\$0.00
<u>Nights</u>	<u>People</u>	Lodging Per Night	
0	0	\$135.00	\$0.00
<u>Days</u>	<u>People</u>	<u>Meals</u>	
0	0	\$50.00	\$0.00
Misc. Trave	\$250.00		

Outside Services:		
Task X.0:		\$0.00
Task X.0:		\$0.00
	TOTAL OUTSIDE SERVICES	\$0.00

Labor Summary:		
TOTAL DIRECT LABOR COST		\$2,754.00
OVERHEAD @ 177.47%		\$4,887.52
FIXED FEE @ 15%	_	\$1,146.23
	TOTAL LABOR COST	\$8,787.75

Expense Summary:		
	TOTAL EXPENSES	\$250.00

USE:	\$9,038
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55 Green Mountain Drive South Burlington, VT 05403 Legend TAXIWAY G CONSTRUCTION

PHASE 1 (CONSTRUCTION 2015-2016)

PHASE 2 (CONSTRUCTION 2017)

PHASE 3 (CONSTRUCTION 2018)



SKETCH 2.0 - TAXIWAY 'G' PHASING



BURLINGTON INTERNATIONAL AIRPORT

MEMO

TO: Burlington International Airport, Board of Commissioners

FROM: Burlington International Airport Staff

DATE: March 21, 2016

SUBJECT: Change Order for Part 150 Noise Exposure Map Contract with

Harris, Miller, Miller & Hanson, Inc.

The Burlington International Airport (BTV) seeks Airport Board of Commissioners approval for the change in contract amount for Harris Miller Miller Hanson, Inc. (HMMH) in the amount of \$20,760.38 for the technical assistance, engineering, analysis and conclusion of BTV's Part 150 2015/2020 Noise Exposure Maps (NEMs).

Please find attached a letter from Mr. David Crandall, Principal Consultant and project manager for the BTV NEMs, outlining the requested change in contract costs. Because of the extensive work he performed, and the assistance rendered for final documentation and additional mapping requested by the Airport, the staff agrees with HMMH's justification and requests to move forward as outlined. The increase in contract will be funded through the original grant, AIP-94, and will be reimbursed by FAA 90%, State Reimbursement 6%, and 4% locally funded and reimbursed through the Passenger Facility Charge Program.

Thank you for your continued support.

1200 Airport Drive, #1 South Burlington, Vermont 05403

Phone: (802) 863-2874 (TTY) Fax: (802) 863-7947

www.btv.aero

HMMH

77 South Bedford Street Burlington, Massachusetts 01803 781.229.0707 www.hmmh.com

February 18, 2016

Mr. Nicolas Longo, C.M.
Director of Planning and Development
Burlington International Airport
1200 Airport Drive, Suite 1
South Burlington, Vermont

Subject: Burlington International Airport Part 150 Noise Exposure Map Update, Project Close-Out

Reference: HMMH Project Number 305661

Dear Mr. Longo:



As you are aware, Harris Miller & Hanson Inc. (HMMH) successfully assisted the City of Burlington, VT/Burlington International Airport (Airport) prepare and submit the Noise Exposure Map (NEM) to the Federal Aviation Administration (FAA). We have completed our contracted scope of work and I recommend closing the contract.

This letter is also meant to notify you that during the course of preparing the NEM and assisting the City, we exceeded our contracted budget of \$79,393.00. Our invoice, dated December 12, 2016, brought the invoicing up to \$79,390.44 and covered services up to November 30, 2015. HMMH greatly appreciated the City's prompt payment of that invoice.

The enclosed invoice, dated today, documents our expenditures beyond our contracted budget. We appreciate your review, and consideration of payment. In the process of completing the NEM, the City requested the following assistance from HMMH that exceeded the original scope of work and the associated contracted budget:

- Additional enlargement maps that became a part of the final document Figures 14 sheets 1-5;
- Additional land use analysis for historical noise contours that became document Table 5;
- Two additional internal BTV draft document reviews and associated teleconferences;
- Delays in the project, compared to the contract schedule, caused work at the conclusion of the project to be expedited, which increased labor costs; and
- Assisting the City in responding to 125 comments, rather than the budgeted 20.

We would have ideally provided prior notice prior to exceeding our budget. However, the project schedule required completion and submittal of the NEM by the end of December 2015 and necessitated an expedited schedule. We were focused on assisting the City with the regulatory requirements while also attempting to assist the City in addressing the community's concerns, many of which were beyond the scope of this NEM update. We make our best efforts to assist our clients and we appreciate your attention to this matter.

Please let us know if you have any questions. We look forward to working you in the future.

la celle!

Sincerely yours,

Harris Miller Miller & Hanson Inc.

David A. Crandall
Principal Consultant

enclosures: 1



BURLINGTON INTERNATIONAL AIRPORT

MEMO

TO: Burlington International Airport, Board of Commissioners

FROM: Burlington International Airport Staff

DATE: March 21, 2016

SUBJECT: Passenger Facility Charge Application Assistance – Hoyle Tanner

and Associates

The Burlington International Airport (BTV) seeks Airport Board of Commissioners approval and recommendation to the City of Burlington Board of Finance for a contract with Hoyle Tanner & Associates (HTA) in the amount of \$63,700 for the technical assistance, coordination, analysis, preparation, and submittal of BTV's 2016 Passenger Facility Charge (PFC) Program, attached please find a draft contract.

The PFC program is a federally guided program that allows the collection of fees up to \$4.50 for every enplaned passenger at commercial airports. At BTV, airlines collect these fees on behalf of the airport through their ticket purchases, retains \$0.11 and remits \$4.39 to BTV for each enplaned passenger. The collection and the expenditure of these funds must be approved by the Federal Aviation Administration, therefore, an amended application must be submitted at this time.

The items related to this year's PFC Application amendment consists of Snow Removal Equipment which the commission reviewed and approved on the January 25, 2016 agenda, item 6.2. Other items on the application includes long term planning opportunities and development, as well as reimbursement of all local share expenditures from our most recent Airport Improvement Program Grants. The cost of the consultant contract has been included and will be reimbursed 100% through this amended PFC application.

Thank you for your continued support.

1200 Airport Drive, #1 South Burlington, Vermont 05403

Phone: (802) 863-2874 (TTY) Fax: (802) 863-7947

www.btv.aero

AGREEMENT FOR PROFESSIONAL SERVICES

PASSENGER FACILITY CHARGE (PFC) APPLICATION ASSISTANCE

This is an agreement between	<u>Burlington International Ai</u>	rport ((Client) and
Hoyle, Tanner & Associates, Inc. (Cor	nsultant) for professional service	es for the C	lient's project
which is generally described as P	FC Application Assistance	The Consulta	ant's services
under this agreement are generally des	scribed as follows: <u>assist client</u>	with PFC ap	pplication .
The effective date of this Agreement is further agree as follows:	January 14, 2016 .	Client and	d Consultant

Article 1: Scope of Services

Consultant shall provide the services set forth in Exhibit A.

Article 2: Client's Responsibilities:

The Client shall provide to the Consultant all of Client's criteria and information as to requirements for the Project including objectives, constraints, performance requirements, and budgetary limitations.

The Client shall provide the Consultant with all information available to the Client pertinent to the Consultants work under this Agreement. The Client shall assist the Consultant as necessary to obtain available pertinent information from Federal, State or local offices or from other engineers or others who have previously worked for the Client on matters affecting this Project. Client shall also make available all information Client may have relative to concealed, subsurface, soil, and other conditions that are not apparent from visual, non-invasive, and non-destruction observations of the applicable site.

It may be necessary for the Consultant's personnel and/or subconsultants to enter areas of the Project property. The Client shall arrange for and provide the Consultant with access to such areas on a timely basis.

The Client shall examine all documents prepared for the Project by the Consultant; and at the Client's option, obtain advice from legal counsel, insurance counsel, and other appropriate advisors, and advise the Consultant of any opinion or recommendations resulting from said advice.

The Client shall give prompt notice to the Consultant whenever the Client becomes aware of anything that would have a significant effect on the scope or timing of the Consultant's services.

The Client shall bear all costs related to compliance with this Article of this Agreement.

If the Client engages a construction manager or any other professionals for the Project in addition to the Consultant; the Client must define the duties and responsibilities of each professional services provider.

During the construction of the project the Client or his designated representative, other than the Consultant, shall attend the following meetings: Pre-construction bid meeting, bid opening, pre-construction conference, construction progress meetings, and Project completion meetings.

The Client shall advise the Consultant of any safety or security programs which may be applicable to the Consultant during Project site visits.

Client shall make decisions and perform other Client responsibilities in a timely manner so as not to delay the Consultant's performance of services.

Client's responsibilities may include those included in Exhibit A.

Article 3: Schedule

Consultant is authorized to begin providing services on the effective date of the Agreement. The Consultant shall perform services in conformance with the schedule guided by and subject at all times to sound judgment and practice in accordance with law and professional ethics.

If the schedule changes or orderly progress of services is impaired through no fault of the Consultant; the schedule for services shall be adjusted and compensation may be adjusted by amendment to this Agreement.

Specific schedule requirements for providing services may be provided in Exhibit D.

Services will be performed as expeditiously as is consistent with professional skill and care and the orderly progress of the Project. Notwithstanding anything to the contrary contained herein, Consultant shall not be deemed in default of this Agreement to the extent that any delay or failure in the performance of its obligations results from any cause beyond its reasonable control or without its negligence.

Article 4: Compensation and Payment for Services

The Consultant shall charge for all services requested by the Client and rendered by the Consultant in connection with the Project in strict accordance with the conditions set forth in this Article of the Agreement.

The charges made by the Consultant under this Article and the payment of said charges by the Client shall constitute full compensation for all expenses incurred by the Consultant in connection with the services rendered including F.I.C.A. taxes, Federal and State unemployment taxes, costs in connection with employees' benefits, office expenses, supplies, and equipment, the general costs of doing business, and the Consultant's profit; and Subconsultants engaged by the Consultant for the Project, if any.

The Consultant's compensation for services and the method of compensation shall be as described in Exhibit C.

The Consultant shall prepare and submit monthly applications for payment for services completed

under this Agreement.

Invoices shall be the Consultant's standard form or other form approved by Client.

Invoices are due within thirty (30) days of receipt by Client.

If payments are not made on time, Consultant may suspend services under this Agreement, after giving Client seven (7) days' notice, until payment is received by Consultant. Client waives any and all claims against Consultant due to such suspension of services and agrees to appropriate adjustments to the Project schedule and Consultant's schedule.

Client may withhold payment of a disputed invoice, however, Client must advise Consultant promptly of the reason for doing so and Client agrees to process and pay any portion of the invoice which is not in dispute. Client shall not withhold payments based on damages that the Client has incurred or alleges that it has incurred unless Consultant has been adjudged liable for such damages and failed to compensate the Client accordingly within 30 days of such determination.

Article 5: Standard of Care

The standard of care for all professional services performed or furnished by Consultant under this Agreement will be the skill and care used by members of Consultant's profession practicing under similar circumstances at the same time and in the same locality. Consultant makes no warranties, express or implied, under this Agreement or otherwise, in connection with Consultant's services.

Article 6: Opinions of Cost

When included in Consultant's scope of services, opinions or estimates of probable construction costs are prepared on the basis of Consultant's experience and qualifications and represent Consultant's judgment as a professional generally familiar with the industry. However, since Consultant has no control over the cost of labor, materials, equipment or services furnished by others, over Contractor's methods of determining prices, or over competitive bidding or market conditions, Consultant cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from Consultant's opinions or estimates of probable construction cost.

Article 7: Compliance with Laws and Regulations

The Consultant shall review codes, regulations, and laws applicable to Consultant's services and shall exercise professional care to design in compliance with all applicable codes, regulations and laws in effect as of the effective date of this Agreement. Consultant cannot warrant that the applicable interpreting or enforcing authority will similarly interpret such requirements.

If such codes, regulations and laws change during the project and are imposed during the project by government authorities with jurisdiction over the project, such changes may require changes to the Consultant's scope of services, schedule and compensation.

Article 8: Underground Facilities

The location of underground facilities may be required in order to perform subsurface explorations for the project and the location of underground facilities may be shown on the construction Contract drawings.

Unless otherwise provided, Client shall provide Consultant with the locations of underground facilities, structures and utilities. If the locations are not known, are inaccurate or cannot be confirmed, Client accepts and retains all risk of damages or losses resulting from the exploration work.

Consultant will take reasonable precautions to avoid damage to underground facilities and shall coordinate the locations of such facilities with known owners of the facilities.

The information shown on the construction Contract drawings with respect to underground facilities shall be based on information furnished by the facility owners to the Client and Consultant and Consultant shall not be responsible for the accuracy or completeness of such information.

If conditions or locations of underground facilities are found to be different during construction appropriate adjustments, if any, shall be made in accordance with the provisions of the construction Contract.

Article 9: Construction Phase Services

If this Agreement provides for any construction phase services by Consultant, it is understood that the Contractor, not Consultant, is responsible for the construction of the project, and that Consultant is not responsible for the acts or omissions of any Contractor, Subcontractor or material supplier; for safety precautions, programs or enforcement; or for construction means, methods, techniques, sequences and procedures employed by the Contractor.

The Consultant, including the resident project representative if provided, does not assume any responsibility for the Contractors failure to perform the construction in accordance with the Contract documents.

Site visits and observations by Consultant are intended to provide the Client greater confidence that the completed work by the Contractor will conform to the Contract documents; and site visits are not detailed inspections and do not extend to every aspect of the Contractor's work.

Article 10: Design without Construction Phase

Consultant and Client agree that if Consultant's services do not include construction phase services, Client or Client's designated agent shall be solely responsible for interpretation of the Contract documents and observing the work of the Contractor to discover, correct and mitigate errors, inconsistencies or omissions and if Client authorizes deviations from the Consultant prepared documents or if conditions are discovered that are not accounted for in the Consultant prepared documents,, Client shall not bring any claim against Consultant and shall indemnify and hold Consultant, its agents and employees harmless from and against claims, losses, damages and expenses, including but not limited to defense costs and time of the Consultant, to the extent

such claims, loss, damage or expenses arise out of or results in whole or in part from such deviations, regardless of whether or not such claims, loss damage or expense is caused in part by a party indemnified under this provision.

Article 11: Use of Documents and Ownership of Electronic Documents

All documents prepared or furnished by Consultant pursuant to this Agreement are instruments of Consultant's professional service, and Consultant shall retain an ownership and property interest therein. Consultant grants Client a license to use instruments of Consultant's professional service for the purpose of constructing, occupying and maintaining the Project. Reuse or modification of any such documents by Client, without Consultant's written permission and professional involvement, shall be at Client's sole risk, and Client agrees to indemnify and hold Consultant harmless from all claims, damages and expenses, including attorneys' fees, arising out of such reuse by Client or by others acting through Client.

Copies of documents that may be relied upon by Client are limited to the printed copies (also known as hard copies) that are signed or sealed by Consultant. Files in electronic media format or text, data, graphic or other types that are furnished by Consultant to Client are only for convenience of Client. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk.

When transferring documents in electronic media format, Consultant makes no representations as to long-term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems or computer hardware differing from those in use by Consultant at the beginning of this assignment.

Article 12: Insurance

Consultant procures and maintains insurance as set forth in Exhibit B. Consultant shall cause Client to be an additional insured on any applicable general liability insurance policy of the Consultant. Consultant shall provide Client reasonable notice of changes to any policy.

Client shall procure and maintain workers compensation insurance, employer's liability insurance, general liability insurance, excess or umbrella liability and automobile liability insurance. Client shall cause the Consultant and its subconsultants to be additional insureds on any general liability policies and as loss payees on any property insurance policies of the Client applicable to the projects.

Client shall require Contractor to carry workers compensation, general liability, property damage, motor vehicle damage and injuries and other insurances to protect Client and Consultant and subconsultant; and Client shall require Contractor's policies to cover Consultant and its subconsultants as additional insureds.

Client may request the Consultant and/or subconsultants provide and maintain additional insurance coverage, however, the expense of such additional coverage shall be the Client's.

Article 13: Suspension and Termination

Client may terminate this Agreement with seven days prior written notice to Consultant for convenience or cause. Consultant may terminate this Agreement for cause with seven days prior written notice to Client. Failure of Client to make payments when due shall be cause for suspension of services or, ultimately, termination, unless and until Consultant has been paid in full all amounts due for services, expenses and other related charges.

Article 14: Indemnification and Limitation of Liability

To the fullest extent permitted by law, Consultant shall indemnify Client, its officers, directors, partners, employees, and representatives, from and against losses, damages, and judgments arising from claims by third parties, including reasonable attorneys' fees and expenses recoverable under applicable law, but only to the extent they are found to be caused by a negligent act, error, or omission of Consultant or Consultant's officers, directors, members, partners, agents, employees, or subconsultants in the performance of services under this Agreement.

To the fullest extent permitted by law, Client shall indemnify Consultant, its officers, directors, partners, employees, and representatives, from and against losses, damages, and judgments arising from claims by third parties, including reasonable attorneys' fees and expenses recoverable under applicable law, but only to the extent they are found to be caused by a negligent act, error, or omission of Client or Client's officers, directors, members, partners, agents, employees, or subconsultants in the performance of services under this Agreement.

Article 15: Dispute Resolution

Client and Consultant agree that they shall first submit any and all unsettled claims, counterclaims, disputes, and other matters in question between them arising out of or relating to this Agreement to mediation in accordance with the Construction Industry Mediation Rules of the American Arbitration Association, effective as of the date of this agreement.

Article 16: Environmental Conditions

It is acknowledged by both parties that Consultant's scope of services does not include any services related to the presence at the site of asbestos, PCBs, petroleum, hazardous waste or radioactive materials. Client acknowledges that Consultant is performing professional services for Client and Consultant is not and shall not be required to become an "arranger," "operator," "generator" or "transporter" of hazardous substances, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1990 (CERCLA). Further, Consultant has no responsibility for the handling, identification, remediation, or presence of any hazardous materials at the site.

Article 17: Controlling Law

This Agreement shall be governed by the laws of the principal place of business of Consultant/State of New Hampshire.

Article 18: Successors and Assigns

The Client and the Consultant each binds itself, its partners, successors, executors, administrators and assigns, to the other party of the Agreement and to the partners, successors, executors, administrators and assigns, for such other party to all covenants of this Agreement.

Except as above, neither the Client nor the Consultant shall assign, sublet or transfer its interest in this Agreement without the written consent of the other party hereto.

Nothing in this paragraph shall prevent the Consultant from employing such independent subconsultants as Consultant may deem appropriate to assist in the performance of the services of this Agreement.

Article 19: Severability

If any of the terms and conditions of this agreement are deemed unenforceable or invalid, in whole or in part, by judgment or order of a court, that shall not affect the remaining terms and conditions of the Agreement and they shall remain in full force and effect.

Article 20: Waiver of Provisions

Non-enforcement of any provision of this Agreement by the Client or the Consultant shall not constitute a waiver of that provision; and non-enforcement shall not prohibit subsequent enforcement of the provision or any other provision of the Agreement.

ACCEPTANCE:	
For Hoyle, Tanner & Associates, Inc.:	
Robert M. Furey, PE, Senior Vice President	Date
For [The Burlington International Airport]	
PLEASE PROCEED WITH THE PROJECT AS INDICATED.	
Signature	Date
Printed Name/Title	

EXHIBIT A Scope of Services

I. Anticipated project list:

- 1. Snow Removal Equipment
 - a. High speed multipurpose plows
 - b. High Velocity Snow Blower
- 2. Terminal Building Projects:
 - a. New Boarding Bridge (Gate 14)
- 3. Security Upgrades (local share of AIP 97 & AIP-101)
- 4. Land Acquisition (local share of AIP-98 & 2015 & 2016)
- Air Carrier Apron Reconstruction (local share AIP-100, AIP-103, & 2016 construction)
- 6. Taxiway K (local share of AIP-102 & construction phase)
- 7. North-end Stormwater improvements (local share)
- 8. NCP update (local share)
- 9. Taxiway G design (local share)
- 10. PFC Application Costs

II. Scope of Work:

Hoyle, Tanner's work for this project will include:

- 1. Review existing data regarding enplanement forecast and update as necessary.
- 2. Determine which class of carriers to exclude from the collection of PFC's (if any).
- 3. Prepare justification for SRE purchases.
- 4. Prepare cash flow analysis in MS Excel format to determine anticipated expiration date of the PFC's.
- 5. Coordinate any sketches that might be needed to determine and justify eligibility of a project. Hoyle Tanner assumes that all sketches will be available in some digital format and can be directly incorporated into the application with only minor alterations.
- 6. Prepare a hard copy packet to send to the airlines (assume 12 copies) for their review prior (at least 30 days) to the consultation meeting. This will include:
 - a. Description of project(s) being considered for funding by PFC's;
 - b. The PFC charge level, the proposed charge effective date, the estimated charge expiration date, and the estimated total PFC revenue.
 - c. A request that any class or classes of carriers not be required to collect the PFC including:

- (1) The designation of each class,
- (2) The names of the carriers belonging to each class (to the extent the names are known),
- (3) The estimated number of passengers enplaned annually by each class,
- (4) The reasons for requesting that carriers in each class not be required to collect the PFC;
- d. The date and location of a meeting to present the projects to air carriers operating at the airport.
- 7. FAA also requires that the public have an opportunity to comment on the proposed application. This can be accomplished by posting the required information on the airport's website. Hoyle Tanner will provide a packet in pdf format for posting on the airport's website for the general public. This will be the same packet that is sent to the airlines.
- 8. Attend one consultation meeting with the airlines and provide agenda and notes of the meeting.
 - a. Hoyle Tanner recommends that a designee from Burlington International Airport present the material and explain the Airport's intent to the attendees of the meeting, and Hoyle Tanner will be available to answer questions of a technical nature.
 - b. Hoyle Tanner will provide an overall graphic for this meeting as appropriate, in coordination with a member of the Airport.
- 9. Prepare responses to comments from the airlines and the general public, if any.
- 10. Prepare application (FAA form 5500-1) plus all required attachments:
 - a. Attachment A Airport Capital Improvement Program including the airport's CIP for AIP funded projects, a financial plan for the implementation of the PFC collection, PFC level of collection, amount of PFC revenue requested, anticipated expiration date for collections.
 - b. Attachment B Project Narratives for each of the ten (10) projects including project description, project objective, project justification, financing plan for the project, anticipated construction start and completion dates, and a list of carriers certifying agreement or disagreement including any comments from the carriers and responses to the comments with reasons for continuing with the project.
 - c. Attachment C Air Carrier Consultation Information including a copy of the information given to the airlines prior to the meeting, a copy of the letter sent to the airlines, a copy of the meeting notes and agenda, any comments received from the airlines, and any responses to the comments.
 - d. Attachment D Excluded class of Carriers including justification and a listing of the carriers excluded from collections.

- e. Attachment G ALP, Airspace, and Environmental Findings including the date of any environmental findings, date of airspace findings and case number, and date of approved ALP for each project.
- 11. Prepare and send three hard (3) copies of the application to the airport for signature.
- 12. Prepare six (6) additional hard copies of the application for airport files.

Client responsibilities:

- 1. Descriptions and justifications for projects.
- 2. Current list of enplanements
- 3. Provide a list of property managers for each airline to be contacted and their addresses.
- 4. Provide a meeting room for the airline consultation meeting.
- 5. Provide grant applications, environmental findings, and airspace findings for projects that will collect for the local share of past projects.
- 6. The date of the latest signed Airport Layout Plan (ALP) that is on file at the FAA.
- 7. Sign copies of the application and deliver/mail two to New England Region office and one to FAA in Washington, DC.

Exhibits

Exhibit B INSURANCE

Consultant has the following Insurance coverages:

a.	Workers' Compensation and Employers' Liability	\$ \$	500,000 500,000	
		\$	500,000	Disease-Policy Limit
b.	General Liability	\$	1,000,000	Per claim
	Commercial Package	\$	2,000,000	Annual Aggregate
C.	Umbrella	\$	10,000,000	Each Occurrence
		\$	10,000,000	Aggregate
e.	Business Auto	\$	1,000,000	Each Occurrence
	(Hired and Non-Owned)	\$	2,000,000	00 0
		\$	2,000,000	1 1 00
		\$	1,000,000	3 3
		\$	10,000	Med Exp (any one person)
f.	Professional Liability	\$	3,000,000	Per claim
		\$	3,000,000	Annual Aggregate

EXHIBIT C Compensation for Services

A lump sum amount of sixty-three thousand seven hundred and 00/100 dollars, as detailed on the attached Exhibit C.

LABOR ESTIMATE Article 1. 2015 PFC Application **CLIENT: Burlington International Airport** PROJECT: PFC Application Assistance **EXHIBIT C** PROJECT #: 037749 **ESTIMATED HOURS BY LABOR CLASSIFICATION Project** Aviation CADD Admin. **TOTAL LABOR TOTAL HOURS** Tech. Manager **Planner** Support COST TASK DESCRIPTIONS \$56.00 \$48.00 \$40.00 \$25.00 /hr /hr /hr /hr Project Meetings & General Coordination 40 16 0 8 64 \$3,208.00 Review existing data regarding enplanement forecast 0 2 0 0 2 \$96.00 Determine which carriers are to be excluded, if any 4 2 0 0 6 \$320.00 Δ 0 0 0 4 \$224.00 Justification for SRE purchase Financial Plan including cash flow 40 0 0 0 40 \$2,240.00 0 Coordinate Project Sketches 4 8 0 12 \$544.00 Prepare Airline Consultation Booklet 40 24 0 0 64 \$3,392.00 Meeting with Airlines 8 0 0 0 8 \$448.00 0 \$112.00 Attachment A - Airport Capital Improvement Program 2 0 0 2 0 0 140 \$7,584.00 Attachment B - Project Narratives (Est. 10 projects) 108 32 Attachment C - Air Carrier Consultation Information Prepare Responses to Comments by Airlines 4 4 0 0 8 \$416.00 4 2 0 0 \$320.00 Prepare Summary of Airline Consultation 6

REIMBURSABLE EXPENSES:

Attachment D - Excluded Class of Carriers

Attachment G - ALP, Airspace, and Environmental Findings

TOTAL HOURS

TOTAL DIRECT LABOR

Travel - est. 3 trips	\$590.00	DIRECT LABOR		\$19,224.00
Postage & Communication	\$160.00	OVERHEAD	179.45%	\$34,497.47
Printing	\$1,200.00			\$53,721.47
Expenses Sub-Total	\$1,950.00			
		PROFIT	15%	\$8,058.22

2

2

84

\$4,032.00

0

0

8

USE LUMP SUM

\$320.00

0

0

8

\$200.00

6

6

362

\$320.00

\$320.00

\$19,224.00

\$63,700

4

4

262

\$14,672.00

 PROFIT
 15%
 \$8,058.22

 REIMBURSABLE EXPENSES
 \$1,950.00

 SUB-CONSULTANTS
 \$0.00

ESTIMATED TOTAL COST \$63,729.69

Hoyle, Tanner & Associates, Inc.

2015 Application Projects:

- 1. Snow Removal Equipment
- a. High speed multipurpose plow
- b. High Velocity Snow Blower
- 2. Terminal Building Projects:
- a. New Boarding Bridge (Gate 14)
- 3. Security Upgrades (local share of AIP 97 & AIP-101)
- 4. Land Acquisition (local share of AIP-98 & 2015 & 2016)
- 5. Air Carrier Apron Reconstruction (local share AIP-100 & 2015 & 2016)
- 6. Taxiway K (local share of AIP-102 & construction phase)
- 7. North-end Stormwater improvements (local share)
- 8. Noise Compatibility Program update (local share 2016)
- 9. Runway 15-33 parallel Taxiway G design (local share)
- 10. PFC Application Costs



BURLINGTON INTERNATIONAL AIRPORT

MEMO

TO: Burlington International Airport, Board of Commissioners

FROM: Burlington International Airport Staff

DATE: March 21, 2016

SUBJECT: Underground Injection Control Permit Management Contract -

Stantec Consulting Services, Inc.

The Burlington International Airport (BTV) seeks Airport Board of Commissioners approval and recommendation to the City of Burlington Board of Finance for a contract with Stantec Consulting Services, Inc. (Stantec) in the amount of \$81,934 for the management of the Underground Injection Control (UIC) Permits during Calendar Year 2016, attached please find a draft contract.

Historically, Aircraft Deicing Fluid ("ADF") has been applied to aircraft on the airport aprons, as a necessary safety practice for cold-weather flights. Runoff from the apron areas are diverted to existing infiltration systems in accordance with UIC regulations. These UIC permits are required for the discharge of this runoff.

BTV is subject to three UIC permits, which include four areas on the airfield. The requirements for each permit varies according to the date of issuance from the State and permitting rules at that time. The contract with Stantec, while varied, will generally follow three basic categories:

- 1) Perform annual system field inspections and semi-annual groundwater quality and wastewater monitoring
- 2) Develop annual system field inspection reports and semi-annual groundwater quality and wastewater monitoring reports
- 3) Provide permit assistance and subconsultant management

The expenditure of this contract will be from the Airports annual operating budget, as approved.

Thank you for your continued support.

1200 Airport Drive, #1 South Burlington, Vermont 05403

Phone: (802) 863-2874 (TTY) Fax: (802) 863-7947

www.btv.aero



Stantec Consulting Services Inc. 55 Green Mountain Drive, South Burlington VT 05403-7824

December 11, 2015

Attention: Amanda Hanaway-Corrente, P.E., MBA

Director of Engineering and Environmental Compliance

Burlington International Airport 1200 Airport Drive, #1 South Burlington, VT 05403

Dear Amanda,

Reference: Proposal for UIC Permit Management Services
Calendar Year 2016

The Burlington International Airport (BTV) is subject to three Underground Injection Control (UIC) permits identified as follows:

- UIC Permit #6-0075 (Aircraft Deicing Fluid Treatment Facility, Main Apron and NOTE2)
- UIC Permit #6-0084 (Aircraft Deicing Fluid Runoff, South End Development, Phase 2).
- UIC Permit #6-0117 (Aircraft Deicing Fluid Treatment System, 890 Ramp)

Permit compliance conditions vary for each permit according to the date of issuance and permitting rules at the time of issuance. Inspection, ground water monitoring, and reporting requirements are extensive and varied. Management of these permits requires significant effort and responsibility on the part of BTV in order to maintain compliance. As requested, we are pleased to provide this proposal for assisting BTV with management of your UIC Permit Program during calendar year 2016.

Scope of Services

Stantec's scope of services covers the following three basic categories to assist the Airport in complying with BTV's UIC permits:

- A. Performing annual system field inspections and semi-annual groundwater quality and wastewater monitoring.
 - Stantec will perform the annual system field inspections, while Stantec's subconsultant, Vanasse Hangen Brustlin (VHB) will perform the semi-annual groundwater quality and wastewater monitoring.



December 11, 2015 Amanda Hanaway-Corrente, P.E., MBA Director of Engineering and Environmental Compliance Page 2 of 10

Reference: Proposal for UIC Permit Management Services

Calendar Year 2016

- B. Developing annual system field inspection reports and semi-annual groundwater quality and wastewater monitoring reports.
 - Stantec will develop the annual system field inspection reports, while VHB will develop the semi-annual groundwater quality and wastewater monitoring reports.
- C. Providing permit assistance and subconsultant management.
 - Stantec and VHB will each provide permitting assistance to BTV.
 - Stantec will be responsible for providing subconsultant management and overall UIC Permit Program quality assurance.

A detailed list of tasks for each of these categories is provided in the attached spreadsheet. We have included estimated staff hours for the tasks and summarized the costs for each of the three basic categories. A scope of services and associated fees for our subconsultant, VHB, is also attached for reference.

The narrative below explains the requirements for the existing UIC permit and provides information about the work Stantec and subconsultant VHB will perform under this proposal.

Task A - Annual System Field Inspection and Semi-Annual Groundwater Quality and Wastewater Monitoring

Annual System Field Inspection (By Stantec)

System Field inspections shall be performed annually per the permit requirements for all four UIC systems including the Main Apron (Permit #6-0075), NOTE2 (Permit #6-0075), South End Development (Permit #6-0084), and the 890 Ramp (Permit #6-0117) aircraft deicing fluid (ADF) treatment systems.

For each of the four ADF systems, the stormwater collection, treatment, and disposal systems, including the pump station and associated components (pumps, level sensors, magnetic meters, and controls), manholes, and infiltration areas, shall be inspected on an annual basis. All inspections must be performed by a Professional Engineer licensed in Civil or Environmental Engineering in the State of Vermont. Operational, maintenance, and infrastructure condition issues shall be addressed for the twelve-month inspection term defined as June 1st of one year to May 31st of the following year.



December 11, 2015 Amanda Hanaway-Corrente, P.E., MBA Director of Engineering and Environmental Compliance Page 3 of 10

Reference: Proposal for UIC Permit Management Services

Calendar Year 2016

Specific system components requiring inspection for each system includes the following:

UIC Permit #6-0075 (Aircraft Deicing Fluid Treatment Facility, Main Apron)

Approximately 1,500' of trench drain, 26 catch basins and drainage manholes, 1 simplex pump station with diversion weir including controls, 1 distribution manhole, and 1 - 50' wide x 100' long infiltration field.

• UIC Permit #6-0075 (Aircraft Deicing Fluid Treatment Facility, NOTE2)

Approximately 450' of trench drain, 1 drainage manhole, 1 Vortechnics swirl separator, 1 diversion manhole with weir, and 1 - 32' wide x 172' long Stormtech infiltration field.

UIC Permit #6-0084 (Aircraft Deicing Fluid Runoff, South End Development, Phase 2).

Approximately 400' of trench drain, 8 drainage manholes, 1 bypass manhole, 1 overflow manhole, 1 Vortech swirl separator, 1 - stormwater detention tank, 1 duplex pump station including controls, telemetry and SCADA reporting system, 1 valve vault, 9 cleanout manholes, and 1 – 15' wide x 300' long infiltration field with 8 flushing valves.

UIC Permit #6-0117 (Aircraft Deicing Fluid Treatment System, 890 Ramp)

Approximately 7 drainage manholes, 1 diversion structure with weir, 1 stormwater storage tank, 1 duplex pump station including controls, telemetry and SCADA reporting system, 1 valve vault, 2 cleanout manholes, and 1 – 40' wide x 500' long infiltration field with 32 flushing valves.

Inspection of collection system components noted above including trench drains, catch basins, and drainage manholes will be performed under Stantec's Stormwater Permit Management Services, FY 2016 Contract, thereby eliminating the need for duplicate effort under this proposal.

In order to adequately inspect many of the system components, Stantec will rely on BTV Maintenance staff to operate pumps, valves, floats, and associated electrical control equipment during the system field inspections. In several cases, these activities will require confined space entry by BTV staff as well as Stantec employees. More specifically, thirteen underground structures will require entry including eleven cleanout manholes and two force main valve vaults. The two underground concrete stormwater storage/detention tanks are also confined space environments, however, there will be no need to enter these for inspection purposes. We propose utilizing a remote camera to inspect the interior of each tank



December 11, 2015 Amanda Hanaway-Corrente, P.E., MBA Director of Engineering and Environmental Compliance Page 4 of 10

Reference: Proposal for UIC Permit Management Services

Calendar Year 2016

instead of entering the tanks. For the two force main valve vaults, we propose that a Stantec inspector and BTV Maintenance staff both enter the confined space to perform the respective inspection and equipment operation. Confined space entry shall be performed under the respective employer's established confined space program.

Semi-Annual Groundwater Quality Monitoring (By VHB)

Groundwater quality monitoring shall be performed semi-annually per the permit requirements for all four UIC systems including the Main Apron, NOTE2, South End Development, and the 890 Ramp aircraft deicing fluid (ADF) treatment systems.

Groundwater quality monitoring will be performed for each system at the following on-site monitoring well locations:

• UIC Permit #6-0075 (Aircraft Deicing Fluid Treatment Facility, Main Apron)

Upgradient: MW12P

Downgradient: MW1, MW2, MW4, MW9P, MW10P Total No. of Monitoring Wells to be sampled = 6

UIC Permit #6-0075 (Aircraft Deicing Fluid Treatment Facility, NOTE2)

Upgradient: MW11P

Downgradient: MW13P, MW14P

Total No. of Monitoring Wells to be sampled = 3

UIC Permit #6-0084 (Aircraft Deicing Fluid Runoff, South End Development, Phase 2).

Upgradient: MW-16

Infiltration System: MW-18R, MW-19, MW-26
Downgradient: MW-21, MW-22, MW-23, MW-24
Total No. of Monitoring Wells to be sampled = 8

UIC Permit #6-0117 (Aircraft Deicing Fluid Treatment System, 890 Ramp)

Upgradient: MW-25



December 11, 2015 Amanda Hanaway-Corrente, P.E., MBA Director of Engineering and Environmental Compliance Page 5 of 10

Reference: Proposal for UIC Permit Management Services

Calendar Year 2016

Infiltration System: MW-18R, MW-19, MW-26 Downgradient: MW-23, MW-24, MW-27

Total No. of Monitoring Wells to be sampled = 7

Water quality sampling will be performed at each of the 24 on-site monitoring wells, and the water samples will be analyzed for the constituents listed in Table 1 below.

 Table 1: Required Monitoring Constituents

Parameter	EPA Method
BOD₅	401.5
COD	410.2
Propylene Glycol (PG)	SW 8015B
Ethylene Glycol	SW 8015B
Chloride	325.1
Nitrate as N	300.0
Total Dissolved Solids	160.1
Alkalinity as CaCO₃	310.1
рН	150.1
Conductivity	120.1 (field measurement)
Temperature	170.1 (field measurement)

Note: Monitoring of Ethylene Glycol is not required for UIC Permit #6-0075

The primary groundwater quality standard that must be maintained at the compliance point is a BOD₅ concentration increase above background of no more than 25 mg/L.

If groundwater quality monitoring results indicate BOD₅ levels exceed the Maximum Acceptable Change of 25 mg/l, monitoring of Muddy Brook shall be required to commence. Dissolved oxygen (DO) levels and temperature will be required to be measured in Muddy Brook at locations upstream and downstream from the groundwater plume.

Groundwater sampling will be conducted at specified monitoring wells twice annually: once during the spring (April / May) and again in the fall (October / November). The required schedule coincides with late fall and spring base streamflow periods as indicated by the Winooski River USGS gage. Sampling in April / May is intended to capture spring runoff and the cumulative



December 11, 2015 Amanda Hanaway-Corrente, P.E., MBA Director of Engineering and Environmental Compliance Page 6 of 10

Reference: Proposal for UIC Permit Management Services

Calendar Year 2016

effect of winter de-icing operations. BTV originally initiated this groundwater quality monitoring program in 2007.

Semi-Annual Wastewater Monitoring (By VHB)

Additional semi-annual wastewater monitoring is required for the 890 Ramp Aircraft Deicing Fluid Treatment System (UIC Permit #6-0117).

Flows from the pump station wet well discharging to the infiltration treatment system are measured with an in-line magnetic flowmeter. During the first twelve months of operation, weekly flow measurements were originally required to be obtained and submitted to DEC for review. Subsequently, cumulative flows are required to be measured and recorded monthly. The physical and chemical characteristics of the wastewater, as specified in Table 1 above will be analyzed with samples collected from the sump area of the pump station. Wastewater quality will be sampled twice annually, in the Spring (April / May) and again in the Fall (October/November), concurrent with the groundwater quality sampling noted above.

At this time, semi-annual wastewater monitoring is not required for the three other UIC systems. In the event that this becomes a requirement after permit renewal, Stantec would provide these additional services by amendment to this proposal.

Task B - Annual System Field Inspection Reports and Semi-Annual Groundwater Quality and Wastewater Monitoring Reports

<u>Annual System Field Inspection Reports</u> (By Stantec)

As a requirement for each of the three UIC permits, an Annual System Field Inspection Report is required to be prepared and submitted to DEC for review. Stantec will prepare an annual report for each of the three UIC permits detailing the findings made during inspection of the stormwater collection, treatment, and discharge systems as discussed above. The report for UIC Permit #6-0075 will include both the Main Apron and the NOTE2 ADF treatment systems. The reports will include:

- The condition of the physical infrastructure of each system
- A description and date of any maintenance and repairs performed on the systems during the previous year
- A description of the repair outcomes



December 11, 2015 Amanda Hanaway-Corrente, P.E., MBA Director of Engineering and Environmental Compliance Page 7 of 10

Reference: Proposal for UIC Permit Management Services

Calendar Year 2016

A description of any necessary maintenance to be performed

- A description of any operational and performance issues associated with the systems
- Recommended changes to physical infrastructure/operational regimes/maintenance practices to address any performance issues and the associated implementation schedule and approach to measure outcomes.

The three annual inspection reports will be submitted to DEC, Drinking Water & Groundwater Protection Division (DWGWPD), Underground Injection Control (UIC) Program by June 30th for the previous year. Under this proposal, the three reports will be submitted by June 30, 2016. Each report will be reviewed and signed by the Professional Engineer licensed in Civil or Environmental Engineering in the State of Vermont, who performed the inspection.

Semi-Annual Groundwater Quality and Wastewater Monitoring Reports (By VHB)

UIC Permit #6-0075 (Main Apron and NOTE2) and UIC Permit #6-0084 (South End Development) each require that a Semi-Annual Groundwater Quality Monitoring Report be prepared and submitted to DEC for review.

UIC Permit #6-0117 (890 Ramp) requires that a Semi-Annual Groundwater Quality and Wastewater Monitoring Report be prepared and submitted to DEC for review.

Stantec will prepare two semi-annual monitoring reports for each of the three UIC permits detailing the results of the sampling efforts discussed above.

Groundwater Quality and Wastewater Monitoring Reports shall be submitted semi-annually within 45 days of each sampling event. The monitoring reports shall include the following information:

- Sampling results
- Groundwater contour map
- Discussion of the stormwater collection, treatment, and discharge system operation
- Assessment of regulatory compliance



December 11, 2015 Amanda Hanaway-Corrente, P.E., MBA Director of Engineering and Environmental Compliance Page 8 of 10

Reference: Proposal for UIC Permit Management Services

Calendar Year 2016

 In addition to the items noted above, cumulative historical flow data and wastewater sampling results will also be reported in the UIC Permit #6-0117 (890 Ramp) semi-annual report

A summary report describing the results of the monitoring will be prepared semi-annually for each year of monitoring for each of the three UIC permits. The reports will provide a basis for establishing whether future changes in groundwater quality are attributable to the operation of the BTV ADF infiltration systems. These semi-annual reports will be submitted to the DEC, DWGWPD, Underground Injection Control Program within 45 days of each sampling event.

Task C - Permit Assistance and Subconsultant Management

Stantec will also provide the following:

- 1. Report Submittal Follow-up
 - Respond to DEC / Public questions and comments related to submission of Annual Inspection Reports and Semi-Annual Groundwater Quality and Wastewater Monitoring Reports.
- 2. On-call Consultation & Advice to BTV Management
 - Provide BTV management with UIC Permit Compliance Assistance. (This effort will be provided by VHB. See VHB Task 1.0 for further detail.)
 - Provide on-call consultation and advice to BTV as needed to address compliance
 issues as they arise throughout the contract period. Effort associated with this task is
 limited to 30 hours and can be increased by amendment if requested by BTV.
 - Address general compliance issues as they develop.
- 3. Permit Renewal Application
 - Develop Permit Renewal Application for Permit #6-0117 (Aircraft Deicing Fluid Treatment System, 890 Ramp) by September 30, 2016. (See VHB Task 4.0 for further detail.)
- 4. Subconsultant Management and UIC Permit Program Quality Assurance



December 11, 2015 Amanda Hanaway-Corrente, P.E., MBA Director of Engineering and Environmental Compliance Page 9 of 10

Reference: Proposal for UIC Permit Management Services

Calendar Year 2016

- Provide Subconsultant Management and Overall UIC Permit Program Quality Assurance.
- 5. Additional Monitoring of Muddy Brook
 - As noted above, if groundwater quality monitoring results indicate BOD₅ levels exceed the Maximum Acceptable Change of 25 mg/l, monitoring of Muddy Brook will be required to commence. Dissolved oxygen (DO) levels and temperature will be required to be measured in Muddy Brook at locations upstream and downstream from the groundwater plume.

At this time, monitoring of Muddy Brook is not required. In the event that this effort becomes a requirement under the conditions noted above, Stantec would provide these additional services by amendment to this proposal.

Fee Summary

We estimate that the total fees for this assignment will be **\$81,934** as summarized below. Billings will not exceed this amount without BTV's authorization. Stantec proposes providing the services presented in this proposal on a Time and Expenses basis.

Task A

Perform annual field inspections and semi-annual groundwater quality and wastewater monitoring	\$10,952
Task B	
Develop annual inspection reports and semi-annual groundwater quality and wastewater monitoring reports	\$19,538
Task C	
Provide permit assistance and subconsultant management	\$15,744
Direct reimbursable expenses including VHB; Lab Analysis; Reproduction Costs; and	
Travel	. \$35,700



December 11, 2015 Amanda Hanaway-Corrente, P.E., MBA Director of Engineering and Environmental Compliance Page 10 of 10

Reference: Proposal for UIC Permit Management Services

Calendar Year 2016

Project direct expenses (e.g. travel using personal vehicles; laboratory testing; incidental printing; and other external charges) will be invoiced in addition to labor at our cost. Travel in personal vehicles will be invoiced at \$0.575 per mile.

Schedule

Stantec is committed to ensuring that the efforts and the submittal dates mentioned in this proposal are met. Toward this end, we are prepared to begin work on this assignment in January 2016.

If you find our proposal to be acceptable, we are requesting that you please sign the attached Professional Services Agreement and return one copy to us along with a copy of the Purchase Order authorizing this work.

Thank you for providing Stantec with this opportunity to assist the Airport with BTV's underground injection control permitting program. We look forward to working with you on this project.

Gray Elean

Senior Principal

Gregory A. Edwards, PE

Sincerely,

STANTEC CONSULTING SERVICES INC.

Jon Leinwohl, P.E.

Associate, Transportation Phone: (802) 497-6410

Fax: (802) 864-0165

jon.leinwohl@stantec.com

Attachment: Staff hour and fee spreadsheets

c. Gene Richards, Nic Longo and Rick Brown (BTV Management)

 $v:\ 1953 \rightarrow 0 - proposal \ 2015 \ proposal \ burlington int'l airport \ permitting \ 0 - proposal \ 12-11-2015. docx$

Stantec Stantec

TASK-LABOR HOUR SCHEDULE
Burlington International Airport

UIC Permit Management Services (Calendar Year 2016)	Project Senior Project Hydrogeologist Technical / Clerical				1 2 6		c	5 6	1 bypass als, 3 flushing 2 4 24			2 4				Task performed by Subconsultant (VHB) . See Reimburables below. Task performed by Subconsultant (VHB) . See Reimburables below	2		Task performed by Subconsultant (VHB) . See Reimburables below. Task performed by Subconsultant (VHB) . See Reimburables below.	2 2 1	Tack performed by Subconcultant (VIIII) See Deimburghles helow	performed by Subconsultant (VHB) . See Reimburables below.		Task performed by Subconsultant (VHB) . See Reimburables below.	. See Reimburables below.	2 2 1		performed by Subconsultant (VHR) See	Task performed by Subconsultant (VHB) . See Reimburables below.	0 14 20 0 0 64 \$239 \$160 \$122 \$116 \$130 \$98
UIC Person Mountain Drive South Burlington, VT 05403 December 11, 2015	TASK	ask - Perform Annual System Field Inspections and Semi-Annual Groundwater Quality And Wastewater Monitoring	Annual System Field Inspection	 a. Permit #6-0075 (Aircraft Deicing Fluid Treatment Facility, Main Apron) - Perform Annual Field Inspection of System Componants including approximately 1,500' of trench drain, 26 catch basins and drainage manholes, 1 simplex pump station with diversion weir including controls, 1 distribution manhole, and 1 - 50' wide x 100' long infiltration field 	Note: Inspection of collection system including trench drain, catch basins, and drainage manholes will be performed under Stantec's Stormwater Permit Management Services, FY 2016 Contract.	b. Permit #6-0075 (Aircraft Deicing Fluid Treatment Facility, NOTE2)		Note: Inspection of collection system including trench drain and drainage manholes will be performed under Stantec's Stormwater Permit Management Services, FY 2016 Contract.	- Perform Annual Field Inspection of System Componants including approximately 400' of trench drain, 8 drainage manholes, 1 bypass manhole, 1 overflow manhole, 1 Vortech swirl separator, 1 - stormwater detention tank, 1 duplex pump station including controls, telemetry and SCADA reporting system, 1 valve vault, 9 cleanout manholes, and 1 – 15' wide x 300' long infiltration field with 8 flushing valves.	Note: Inspection of collection system including trench drain and drainage manholes will be performed under Stantec's Stormwater Permit Management Services, FY 2016 Contract.	d. Permit #6-0117 (Aircraft Deicing Fluid Treatment System, 890 Ramp)		Services, FY 2016 Contract.	Semi-Annual Groundwater Quality Monitoring	Fluid Treatment Facility, Main Apron)	- Obtain Semi-annual groundwater samples from six monitoring wells (Spring, April / May) for lab analysis.		b. Permit #6-0075 (Aircraft Deicing Fluid Treatment Facility, NOTE2)	- Obtain Semi-annual groundwater samples from three monitoring wells (Spring, April / May) for lab analysis Obtain Semi-annual groundwater samples from three monitoring wells (Fall, October / November) for lab analysis.	- Coordination with Subconsultant.	c. Permit #6-0084 (Aircraft Deicing Fluid Runoff, South End Development, Phase 2).	- Obtain Semi-annual groundwater samples from eight monitoring wells (Fall, October / November) for lab analysis.	- Coordination with Subconsultant.	d. Permit #6-0117 (Aircraft Deicing Fluid Treatment System, 890 Ramp) - Obtain Semi-annual groundwater samples from seven monitoring wells (Spring. April / Mav) for lab analysis.		- Coordination with Subconsultant.	Semi-Annual Wastewater Monitoring	7 (Aircraft Deicing Fluid Tra	- Obtain Semi-annual groundwater samples from pump station wet well (Fall, October/November) for lab analysis.	Task A. Labor Hours Hourly Rates

30

30

Stantec Stantec

55 Green Mountain Drive South Burlington, VT 05403 December 11, 2015

TASK-LABOR HOUR SCHEDULE Burlington International Airport

UIC Permit Management Services (Calendar Year 2016)

TASK		Principal	Project Manager	Senior Engineer	Project Engineer	Hydrogeologist	Technical / Clerical	TOTAL
B. Task -	Develop Annual System Field Inspection Reports and Semi-Annual Groundwater Quality and Wastewater Monitoring Reports							
1. Develop	elop Annual Inspection Reports							
	Descrit 46 007F (Alicentit Deleting Fluid Tenetiment Facility Main Americand MOTFO)							
	- Prepare and Submit Annual Inspection Report to DEC for review and approval by June 30, 2016.		2	16			9	24
þ.	Permit #6-0084 (Aircraft Deicing Fluid Runoff, South End Development, Phase 2).		·				d	
	- Prepare and Submit Annual Inspection Report to DEC for review and approval by June 30, 2016.			.50			0.	28
ပ	Permit #6-0117 (Aircraft Deicing Fluid Treatment System, 890 Ramp)							
	- Prepare and Submit Annual Inspection Report to DEC for review and approval by June 30, 2016.	2	2	20			9	30
	Jose Comi American Maniforina Donosta							
z. Deve	Develop Semi-Annual Groundwater and wastewater Monitoring Reports							
a.	Permit #6-0075 (Aircraft Deicing Fluid Treatment Facility, Main Apron and NOTE2)							
	i. Spring, April / May							
	- Review and Interpret laboratory analysis of groundwater samples, develop historical trending data, and preparation of groundwater contour map.		Task performed by	ed by Subconsultant	(XHR)	See Reimburables below		C
	- Prepare and Submit Semi-Annual Groundwater Monitoring Report to DEC for review and approval		Task perform	ed by Subconsul	Itant (VHB) . See	Task performed by Subconsultant (VHB) . See Reimburables below.		0
	- Coordination and Report QA/QC		4	4		2	2	12
	ii. Fall, October / November							
	- Coordination and Report QA/QC							0
	- Review and Interpret laboratory analysis of groundwater samples, develop historical trending data, and preparation of groundwater		Tack perform	li Subcoperi		See Beimhurshles helow		C
	- Prepare and Submit Semi-Annual Groundwater Monitoring Report to DEC for review and approval		Task perform	Task performed by Subconsultant (VHB)		See Reimburables below		0 0
	- Coordination and Report QA/QC		4	4	•	2	. 2	12
p.	Permit #6-0084 (Aircraft Deicing Fluid Runoff, South End Development, Phase 2).							
	i. Spring, April / May							
	- Review and Interpret laboratory analysis of groundwater samples, develop historical trending data, and preparation of groundwater contour map.		Task performed by		Subconsultant (VHB) . See	See Reimburables below.		C
	- Prepare and Submit Semi-Annual Groundwater Monitoring Report to DEC for review and approval		Task perform	ed by Subconsul	Itant (VHB) . See	Task performed by Subconsultant (VHB) . See Reimburables below		0
	- Coordination and Report QA/QC		4	4	,	2	2	12
	 Review and Interpret laboratory analysis of groundwater samples, develop historical trending data, and preparation of groundwater contour map. 		Task performed by		Subconsultant (VHB) . See	See Reimburables below		0
	- Prepare and Submit Semi-Annual Groundwater Monitoring Report to DEC for review and approval		Task perform			See Reimburables below		0
	- Coordination and Report QA/QC		4	7		2	2	12
٥	Permit #6-0117 (Aircraft Deicing Fluid Treatment System 890 Ramp)							
5								
	i. Spring, April / May							
	- Review and Interpret laboratory analysis of groundwater and wastewater samples, develop historical trending data, preparation of							•
<u> </u>	groundwater contour map, and obtain monthly now measurements.		Task performed by	ed by Subconsul		See Reimburables below.		0
<u></u>	- Prepare and Submit Semi-Annual Groundwater and Wastewater Monitoring Report to DEC for review and approval - Coordination and Report OA/OC		lask periorii	Task performed by Subconsultant (VHB)		See Keimburabies below		12
<u> </u>	- Coordination and Report לאיטכ		1	1		7	7	71
	ii. Fall, October / November							
	- Review and Interpret laboratory analysis of groundwater and wastewater samples, develop historical trending data, preparation of		Took Jook					C
	- Prepare and Submit Semi-Annual Groundwater and Wastewater Monitoring Report to DEC for review and approval		Task performed by			See Reimburables below.		0
	- Coordination and Report QA/QC		4	4		2	. 2	12
Tas	k B. Labor Hours	2	30	80	0	12	30	154
HOI	Hourly Rates	\$239	\$160	\$122	\$116	\$130	\$98	ALO FOO
	k R Lahor Chete	\$4/X	X4.XIIU	04/.6%	7	1.361	57 940	XY C 5 C



TASK-LABOR HOUR SCHEDULE
Burlington International Airport

55 Green Mountain Drive South Burlington, VT 05403 December 11, 2015	(Calendar Year 2016)	016)					
TASK	Principal	Project Manager	Senior Engineer	Project Engineer	Hydrogeologist	Technical / Clerical	
C. Permit Assistance and Subconsultant Management							
1. Report Submittal Follow-up							
a. Respond to DEC / Public questions and comments.		8	8			4	
2. On-call Consultation & Advice to BTV Management							
a. UIC Permit Compliance Assistance by VHB. See VHB Task 1.0 for further detail.		Task perform	Task performed by Subconsultant (VHB)		See Reimburables below.		
h Provide consultation & advise to RTV Management as-requested	6	45	4			α	
	7	2	t				
c. Address compliance issues as they develop.	2	16	4		4	12	
3. Permit Renewal Application							
Develop Permit Renewal Application for Permit #6-0117 (Aircraft Deicing Fluid Treatment System, 890 Ramp) by September 30, 2016. a. See VHB Task 4.0 for further detail.		Task perform	Task performed by Subconsultant (VHB)		See Reimburables below.		
b. Coordination and Permit Renewal Application QA/QC.		2	4			2	Ш
a. Provide Subconsultant Management and Overall UIC Permit Program Quality Assurance.		16					
5. Additional Monitoring of Muddy Brook							
In the event that groundwater monitoring results indicate BOD levels exceed the Maximum Allowable Change of 25 mg/L, monitoring of Muddy Brook shall be required for Dissolved Oxygen (DO) and Temperature. Monitoring shall be measured at locations upstream and downstream from the groundwater plume.							
Hourly Rates	\$230	58	\$122	0	¢130	56	
Task C. Labor Costs	\$956	\$9.280	\$2.440	0\$	\$520	\$2.548	49
\vdash							
Direct Reimbursable Expenses							Ш
Vanasse Hangen Brustlin (VHB) - Subconsultant for Groundwater and Wastewater Monitoring including Semi-Annual Report Development							\$
Endyne, Inc - Subconsultant for additional lab analysis as needed Reproduction (Annual Reports, etc.)							
Travel							
Subtotal Direct Reimbursable Expenses							↔
Total Project Hours	9	102	120	0	16	120	
							Щ

0 8



Client Authorization

Transportation
Land Development
Environmental
Energy

Fax 802.495.5130 www.vhb.com

New Contract ■ Contract	Date	November 19, 2015
Amendment#	Project No.	57165.08 (pending)

Client: Stantec

Project NameBTV: 2016 Aircraft Deicing Fluid UIC System Monitoring and Reporting

To:	Stantec	Cost Estimate Summary	Contract Total
	c/o Jon Leinwohl, PE	Task 1.0 – UIC Permit Compliance Assistance	\$4,500
	55 Green Mountain Drive	Task 2.0 – Spring 2016 UIC Monitoring/Reporting	\$13,100
	South Burlington VT 05403	Task 3.0 – Fall 2016 UIC Monitoring/Reporting	\$13,100
		Task 4.0 – Permit Renewal Application - #6-0117	\$1,200
		Task 5.0 – Coordinate Monitoring Well Replacement	\$2,500
		Total Estimated Cost	\$34,400
As Requested By:	Jon Leinwohl	☐ Fixed Fee ☐ Time & Expenses	
		Cost + Fixed Fee Other	
Date of request:	November 19, 2015	Estimated Date of Completion: Decem	ber 15, 2016

Project Description:

Vanasse Hangen Brustlin, Inc. ("VHB") understands that the Burlington International Airport ("BTV") is seeking consulting services in order to comply with the requirements of its three Underground Injection Control ("UIC") Permits that were previously issued by the Vermont Department of Environmental Conservation ("VT DEC") to the airport (Permit #6-0075, #6-0084, and #6-0117 for the Main Apron/NOTE2, South End, and Air Cargo Ramp sites, respectively), and that BTV wishes to contract with Stantec ("Client") for these services. VHB also understands that Stantec is seeking VHB to perform some of these environmental consulting services related to groundwater monitoring and permit renewal. In order to provide the Client with necessary technical assistance for the Project, VHB proposes the following scope of services:

Proposed Scope of Services:

Task 1.0 UIC Permit Compliance Assistance

This task is for general consulting and coordination services on a time-and-materials basis, and is budgeted for up to 20 hours by a VHB senior hydrogeologist and 30 hours by technical staff. VHB will participate in bi-weekly conference calls as convened by BTV and/or the Client, and will respond to general client inquiries about groundwater and UIC issues as may be requested.

If needed, additional effort or services such as supplemental groundwater monitoring, well installation, or site testing would be outside of this scope of work and a separate cost estimate would be provided for Client approval.

VHB's Total Estimate for Task 1.0 is \$4,500

Task 2.0 Spring 2016 UIC System Monitoring and Reporting

VHB will perform permit compliance monitoring and reporting in the spring of 2016 in accordance with the UIC Permits #6-0075, #6-0084, and #6-0117 for the Main Apron/NOTE2, South End, and Air Cargo Ramp sites, following the same protocol as in prior years. The sampling will occur during the months of April or May, pending contract approval prior to April 1, 2016. In the case of permits #6-0075 and #6-0084, which have expired but have been extended indefinitely by the VT DEC because VHB had filed

timely renewal applications on behalf of BTV, the monitoring/reporting requirements of the prior permits have been used as the basis for this scope of work. In the event that the VT DEC acts on the previously filed applications for renewal, and imposes monitoring conditions that differ from those contained in prior permits, a scope amendment would be required.

VHB's monitoring work will consist of in-situ measurement of static groundwater levels, temperature, and conductivity, as well as collection of groundwater samples in the network of wells specified by the permits. VHB also will collect wastewater effluent samples from the sump area of the Air Cargo Ramp pump station, as specified by the permit. VHB will submit the groundwater and wastewater samples for laboratory analysis for the parameters required by the UIC permits (BOD, COD, Glycol by method 8015B, Chloride, Nitrate, TDS, Alkalinity, and pH). VHB will coordinate with airport operations staff regarding access and escorts to the monitoring locations.

In accordance with the UIC Permits, VHB will prepare a spring 2016 monitoring report to be submitted to the VT DEC. The report will assess groundwater flow direction and velocity, groundwater quality trends, compliance with regulatory standards, and stormwater volumes. VHB's report will evaluate effluent flow rates at the Air Cargo Ramp system (flow recordings from the control system computer to be provided to VHB by BTV or the Client). VHB will provide an initial draft of the report to the Client and BTV for review before submitting a final version to the VT DEC.

VHB's Total Estimate for Task 2.0 is \$13,100

Task 3.0 Fall 2016 UIC System Monitoring and Reporting

As in the spring, VHB will perform permit compliance monitoring and reporting in the fall of 2016 in accordance with the UIC Permits #6-0075, #6-0084, and #6-0117, following the same protocol as in prior years. The sampling will occur during the months of October or November, pending contract approval prior to October 1, 2016. In the case of the expired permits, the monitoring/reporting requirements of the prior permits have been used as the basis for this scope of work.

As in the spring, VHB's monitoring work will consist of in-situ measurement of static groundwater levels, temperature, and conductivity; as well as collection of groundwater samples in the network of wells specified by the permits. VHB also will collect wastewater effluent samples from the sump area of the Air Cargo Ramp pump station, as specified by the permit. VHB will submit the groundwater and wastewater samples for laboratory analysis for the parameters required by the UIC permits (BOD, COD, Glycol by method 8015B, Chloride, Nitrate, TDS, Alkalinity, and pH). VHB will coordinate with airport operations staff regarding access and escorts to the monitoring locations.

As in the spring, VHB will prepare a fall 2016 monitoring report to be submitted to the VT DEC. The report will assess groundwater flow direction and velocity, groundwater quality trends, compliance with regulatory standards, and stormwater volumes. VHB's report will evaluate effluent flow rates at the Air Cargo Ramp system (flow recordings from the control system computer to be provided to VHB by BTV or the Client). VHB will provide an initial draft of the report to the Client and BTV for review before submitting a final version to the VT DEC.

VHB's Total Estimate for Task 3.0 is \$ 13,100

Task 4.0 Permit Renewal Application - #6-0117

Condition III(3)(ii) of the UIC Permit #6-0117 for the Air Cargo Ramp requires the submittal of a Permit renewal application by September 30, 2016 if the permittee wishes to continue the regulated activity (disposal of aircraft deicing fluid via the subsurface system).

VHB will prepare a permit renewal application and will provide a draft to the Client and BTV for review, a minimum of three weeks prior to the due date. In order for VHB to submit the final application to VT DEC on a timely basis, we assume that Client approval will be provided to VHB within one week of the due date.

VHB's Total Estimate for Task 4.0 is \$1,200

Task 5.0 Coordinate Monitoring Well Replacement and Repairs

Various monitoring wells at BTV, which are required by the UIC Permits to be tested routinely, will need repair or replacement.

Former well MW-19 was previously destroyed, and repairs are needed to wells MW-5 and MW-1. Also, monitoring wells MW-8, MW-15, MW-16, MW-18R, and MW-26 are in the vicinity of an active construction project to install a new taxiway, and some or all of these wells will likely be destroyed by the construction and would need replacement. VHB will coordinate the proper closure of wells that will be destroyed, and will design replacement wells in new locations that do not conflict with the taxiway, with the goal of minimizing cost by replacing only the monitoring wells that are needed for UIC Permit compliance, therefore other (water-level-only) wells would not be proposed for replacement.

VHB will perform the following services to coordinate the repair and replacement of the monitoring wells:

- prepare a monitor well replacement proposal for ANR approval and coordinate with the ANR UIC program administrator;
- provide specifications and plans for formal closure of the existing monitoring wells that will be discontinued
- provide specifications and plans for the installation of replacement wells and the repair of existing wells
- coordinate with the contractor who will be responsible for the well closure, replacement, and repair work
- report the well closure and replacement activities to the ANR, when completed

The following work is not included in VHB's scope of work:

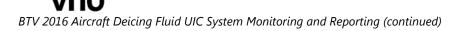
- well closure and replacement well installation (by licensed driller as subcontractor to SD Ireland)
- certification of well closure (by licensed driller as subcontractor to SD Ireland)
- staking of replacement well installation locations (by Client, VHB will provide location information)
- dig-safe / underground utility location (by others: note that BTV is responsible for identifying and marking out their utilities in the vicinity of the drilling area. If BTV is uncertain of the location of the utilities, then BTV or the Client must contract with underground utility locator to verify that the proposed drilling site is clear.)
- observation of well closure and well replacement activities (assumed by Stantec)

VHB's Total Estimate for Task 5.0 is \$2,500

Client Furnished Information

It is understood that VHB will perform services under the sole direction of the Client. In the performance of these services, VHB will coordinate its efforts with the Client and other consultants as required. VHB will rely upon the accuracy and completeness of Client- and/or other consultant-furnished information in connection with the performance of services. The Client and/or others shall provide VHB will project-related technical data, including, but not limited to, the following:

- Safe and allowed access to the site.
- Copies of relevant correspondence to and from the VT DEC, regarding water quality monitoring and permit compliance.
- Location and dimensions of the new taxiway under construction, in a CADD shapefile or other electronic format.



Assumptions and Limitations

- As outlined in the letter from Gene Richards, BTV Director of Aviation, dated July 31, 2015, VHB will notify the City by a formal letter at least 90 days prior to the estimated contract date of completion that a new contract is needed for permit compliance monitoring and reporting in the coming year, unless a new contract is already in place by then.
- This scope of work does not include engineering inspection and reporting services which are required for UIC Permit compliance (by Client).
- This scope of work does not include permitting or engineering services for any upgrades to the existing UIC systems.
- Permit renewal application fees and operating fees are not included in this budget, to be paid directly by the Client to the VT DEC.

AUTHORIZATION

Pr	repared By: Meddie Perry	Department Approval: Jeffrey A. Nelson
	ease execute this Client Authorization for Vanasse Hangen B timated costs. No services will be provided until it is signed	rustlin, Inc. to proceed with the above scope of services at the stated and returned to VHB.
∑ Te	Subject to attached terms & conditions (standard Stanted rms and Conditions).	Subject to terms & conditions in our original agreement dated
	Vanasse Hangen Brustlin, Inc. Authorization	Client Authorization (Please sign and return)
Ву	Jeffrey A. Nelson	Ву
	Print Name	Print Name
	Signature	Signature
Title	Director, Energy & Environmental Services	Title
Date		_ Date

PROFESSIONAL SERVICES AGREEMENT



THIS AGREEMENT is made and entered into effective December 14, 2015 (the "Agreement Date") by and between:

"CLIENT"

Name: CITY OF BURLINGTON, BURLINGTON INTERNATIONAL AIRPORT

Address: 1200 Airport Drive, #1

South Burlington, Vermont 05403

Phone: 802-863-2874 ext. 200 Fax: 802-863-7947

Representative: Gene Richards, III, Director of Aviation

"Stantec"

Name: STANTEC CONSULTING SERVICES INC.

Address: 55 Green Mountain Drive, South Burlington, VT 05403

Phone: 802-497-6410 Fax: 802-864-0165

Representative: Jon B Leinwohl, PE, Associate, Transportation

PROJECT NAME (the "PROJECT"): UIC Permit Management Services

DEFINITIONS: Unless the context otherwise requires, the following terms shall have the meaning herein specified:

"Work" means the buildings, structures, mechanical systems, electrical systems, equipment, roadways, sitework, or any other thing of any nature or kind whatsoever to be designed, constructed, procured or commissioned by third parties as part of the Project.

"Consultant" means any person, partnership, firm or corporation who has a contract to act in matters pertaining to the Project other than that undertaken in this AGREEMENT.

"Contractor or Supplier" means any person, partnership, firm or corporation who has a contract for the supply of materials, labor, plant, equipment and temporary construction for, or the performance of, any part of the Work other than that undertaken in this AGREEMENT by Stantec or by a Consultant. "OH&S Appointee" means the party as defined under applicable Occupational Health and Safety ("OH&S") legislation, responsible for construction health and safety for the Work and shall generally be the CLIENT, except in circumstances as the construction of the Work, and the associated OH&S requirements, are assigned, by agreement, to a contractor in which case the contractor shall be deemed to be the OH&S Appointee.

"Services" means the services provided by Stantec as set out in Attachment "A" to this AGREEMENT.

SCOPE OF Stantec'S WORK: The CLIENT hereby retains Stantec to perform professional Services as described in Attachment "A" on behalf of the CLIENT for the management of all aspects of the Project as hereinafter set forth and for the consideration and fee hereinafter determined.

Stantec's RESPONSIBILITIES: Stantec shall perform or cause to be performed, the Services. Stantec shall appoint one or more individuals who shall be authorized to act on behalf of Stantec, with whom the CLIENT may consult at all reasonable times, and whose actions will be binding on Stantec as to all matters pertaining to this AGREEMENT.

Stantec shall assign all necessary professional and other staff required from time to time to perform the Services. The names and classifications of key staff shall at all times be subject to the approval of the CLIENT and shall not be changed without the CLIENT's prior approval, such approval not to be unreasonably withheld.

CLIENT'S RESPONSIBILITIES: The CLIENT shall give prompt attention to all designs, drawings, specifications, reports, tenders, proposals, recommendations and other information submitted by Stantec. The CLIENT shall make all decisions that it is required to make in connection therewith for the



expeditious and economical execution of the Project within a reasonable time so as not to delay the Services of Stantec.

The CLIENT shall be responsible for costs, delays or damages arising from errors or delays in the provision of any of the information or decisions to be given by it to Stantec.

The CLIENT shall provide free, clear and maintained access to the Project site and all documents, reports and other information relating to the Project at all times.

The CLIENT shall take all necessary steps to determine whether any toxic or hazardous substances or materials are present at the place of the Work and shall provide to the Stantec a written list of any such substances or materials.

The CLIENT shall promptly make payments as required in the administration of all contracts and purchase commitments entered into by or on behalf of the CLIENT.

The CLIENT shall appoint a designated representative who shall have the authority to act for the CLIENT under this AGREEMENT, and whose actions will be binding on the CLIENT as to all matters pertaining to this AGREEMENT.

COMPENSATION: The CLIENT shall pay Stantec fees in accordance with Attachment "A".

The CLIENT shall reimburse Stantec for, or pay directly, the actual amount of all disbursements incurred on behalf of the Project in accordance with Attachment "A".

The CLIENT shall reimburse Stantec for extra Services, costs or expenses chargeable to the CLIENT under the provisions of this AGREEMENT, including but not limited to costs arising from strikes, lock-outs or labor disputes.

EXTRA SERVICES: If the CLIENT changes the scope of the Project as described in Attachment "A" or if it shall become necessary for Stantec to make changes to the scope of the Project as described in Attachment "A" for reasons over which it has no control or if the CLIENT makes changes to the scope of Services as described in Attachment "A" and such changes involve Stantec in extra Services, costs or expenses, or if Stantec is required to perform extra Services or pay costs or expenses at the request of the CLIENT or because of delays caused by the CLIENT or because the duration of the Project is extended for causes outside of the control of Stantec, or because of delinquency, insolvency or death of any of the parties involved with the Project, or by litigation or arbitration proceedings, or as the result of damage to the Work in progress by fire, lightning or tempest, Stantec shall be equitably paid for such extra Services, reasonable costs and expenses, in accordance with Attachment "A" or, if not covered by Attachment "A", on the basis of the hours actually expended by Stantec's personnel on such extra Services, charged at its published billing rates applicable at the time of performing the extra Services.

PAYMENT: Stantec shall submit invoices for its fees and disbursements on a monthly basis. The fees and disbursements owing shall be calculated as outlined in Attachment "A" and as otherwise stated herein. Upon receipt of an invoice in satisfactory form in respect of any month, the CLIENT shall make payment in full (without holdback or set-off) for the amount indicated on the invoice.

Payment is due to Stantec upon receipt of invoice. Failure to make any payment when due is a material breach of this Agreement and will entitle Stantec, at its option, to suspend or terminate this Agreement and the provision of the SERVICES. Interest will accrue on accounts overdue by 30 days at the lesser of 1.5 percent per month (18 percent per annum) or the maximum legal rate of interest.

No deductions shall be made from monies payable to Stantec for statutory holdback or because of other sums (including but not limited to penalties and liquidated damages) withheld from payment to any Consultants, Contractors, Suppliers or other persons engaged on the Project.

SUSPENSION OR TERMINATION: The CLIENT may at any time upon thirty (30) days written notice to Stantec suspend the AGREEMENT or any portion thereof at any stage of the Project and upon the effective date of such notice, Stantec shall perform no further Services other than those reasonably necessary to implement the suspension. Those Services reasonably necessary shall be performed only



with the prior written approval of the CLIENT, which approval shall not be unreasonably withheld. Stantec shall be paid during the period of suspension for all outlays and reasonable costs and expenses incurred by it as a result of the suspension. Strikes or lockouts involving a recognized construction trade union or the union of the CLIENT's work force shall not constitute suspension of the AGREEMENT. If after a period of suspension, the Services are reactivated, then Stantec shall be entitled to compensation in the form of additional payment defined under Extra Services above.

In the event that the AGREEMENT is suspended and the period of suspension exceeds sixty (60) days then unless both the CLIENT and Stantec mutually agree as to the terms under which the Services will be resumed, the CLIENT shall be deemed to have terminated the AGREEMENT.

The CLIENT may terminate the AGREEMENT or any part thereof upon sixty (60) days written notice to Stantec. Upon such termination, Stantec shall be paid either that part of the total fee which is commensurate with the amount of Services actually performed by it to the date of termination, or for the actual number of hours its personnel have expended on Project activities to the date of termination charged at Stantec's applicable published hourly rates, whichever is greater. In addition, the CLIENT shall reimburse Stantec for all reasonable losses as are necessarily incurred by Stantec as a result of such termination.

Such reasonable losses shall include, but not be limited to, all costs and expenses necessarily incurred by Stantec during the period of suspension or as a result of termination, including:

- For the full duration of the notice period or, for the period of suspension to a maximum of sixty (60) days, whichever is greater, an amount equal to Stantec's applicable published hourly rates multiplied by the number of hours normally expended on Project activities by all of Stantec's personnel assigned to the Project prior to the effective date of notice.
- In the event that the actual number of hours Stantec's personnel expend on Project activities exceeds the number of hours normally expended on Project activities, or in the event that additional personnel of Stantec are required to be assigned to the Project during the notice period or period of suspension, an amount equal to Stantec's applicable published hourly rates multiplied by the number of hours actually expended on Project activities by all of Stantec's personnel assigned to the Project during the notice period or period of suspension.
- In the event of termination only, all direct expenses that have not otherwise been reimbursed by the CLIENT including but not limited to:
 - Project stationery costs
 - Project equipment and computer software purchase costs
 - Termination costs for all project and/or site office lease/rental and equipment lease/rental agreements
 - All costs of disassembling the project and/or site office
 - Staff termination costs
 - Staff relocation costs
 - Staff reassignment costs

Stantec may suspend its Services or terminate the AGREEMENT if the CLIENT becomes insolvent or fails to fulfill its responsibilities or fails to make payment to Stantec in the time specified or if the Work be stopped under the order of any court or other public authority through no act or fault of Stantec. Stantec shall be entitled to be paid for Services rendered and for reimbursement for all reasonable losses incurred as a result of the termination.

CONSTRUCTION EMERGENCIES: In the case of construction emergencies occurring during the progress of the Work, Stantec may, on behalf of the CLIENT, give orders and cause to be performed such



emergency Work as in its judgment is deemed to be necessary or expedient in the CLIENT's interest. Costs incurred by Stantec as a result of such actions shall be to the CLIENT's account.

LIMIT OF LIABILITY: Stantec's liability in relation to the performance of the Services shall be limited to claims arising out of the failure of Stantec to exercise that degree of diligence, skill or care in the performance of the Services and in the selection, appointment and supervision of its employees and agents which would normally be exercised by duly qualified persons in performing similar functions, it being understood that Stantec shall be responsible for the selection and appointment of all personnel engaged by it for the performance of the Services.

Stantec's liability to the CLIENT in respect of performance of the Services shall not extend to damage for loss of use, loss of revenue, or any consequential damages arising therefrom. Stantec's liability with respect to any claims arising out of this AGREEMENT shall be absolutely limited to direct damages arising out of the Services and Stantec shall bear no liability whatsoever for any consequential loss, injury or damage incurred by the CLIENT, including but not limited to claims for loss of profits and loss of markets. Without limiting the generality of the foregoing, Stantec shall not be liable for damages of any kind caused directly or indirectly by the inability of the products or Services Stantec supplies or specifies for use in the Project to read, recognize, interpret or process any encoded, abbreviated or encrypted date, time or combined date/time data or data field.

In the event of a claim, Stantec's liability, including all costs and expenses, shall be limited to the lesser of the fee for the Services giving rise to the claim, or the amount of the coverage stated in Attachment "A".

Stantec shall be allowed to include a disclaimer within the tender documents for the Work that limits Stantec's liabilities to Consultants, Contractors and Suppliers in respect of errors, omissions and other such misrepresentations, which may be included in the tender documents.

INDEMNIFICATION: By Stantec:

Subject to the provisions of the Limit of Liability above, Stantec shall indemnify and hold the CLIENT harmless from and against damages, losses, costs, charges and expenses (including legal costs on a solicitor and CLIENT basis) arising from any negligent act, error or omission of Stantec in the performance of this AGREEMENT, it being expressly agreed, however, that should the CLIENT be unsuccessful in its pursuit of any claim against Stantec, the CLIENT shall indemnify Stantec for its legal costs on a solicitor and CLIENT basis

By CLIENT:

The CLIENT shall indemnify, defend and hold Stantec harmless from and against any and all claims, demands and causes of action resulting from any action or omission of the CLIENT or for any breach of the CLIENT's obligations under this AGREEMENT and from and against all damages, losses, costs, charges and expenses (including legal costs on a solicitor and CLIENT basis) which Stantec may sustain or incur or be liable for in consequence of such claims, demands or causes of action.

Except as provided for under Limit of Liability above, the CLIENT shall indemnify, defend and hold Stantec harmless from and against any and all claims and demands which may be made against Stantec as a result of the execution by the CLIENT, or by Stantec on behalf of the CLIENT, of contracts, agreements and purchase orders or otherwise arising from Stantec acting within the scope of its duties under this AGREEMENT, and from and against any and all damages, losses, costs, charges and expenses (including legal costs on a solicitor and CLIENT basis) which Stantec may sustain or incur or be liable for in consequence of such claims or demands including claims made by Contractors, Consultants, Suppliers or any other such third party for errors, omissions and other such misrepresentations which may be included in the in tender documents for the Work.

The CLIENT shall indemnify, defend and hold Stantec and the Stantec's agents and employees harmless from and against any and all claims and demands which may be made against the CLIENT and/or the



OH&S Appointee and/or Stantec in respect of violations of the applicable Occupational Health and Safety legislation and/or other applicable health, safety and environmental legislation governing the place of the Work, including but not limited to any and all claims and demands which may be made in respect of any matter in any way arising out of involvement with pollutants and hazardous wastes associated with the Work.

In the event that Stantec is requested or required to provide assistance to the CLIENT in connection with any claim or potential claim by or against the CLIENT arising from or related to the Work or the Project, the CLIENT shall indemnify and hold Stantec harmless from and against all costs, charges and expenses (including Stantec's own legal costs on a solicitor and CLIENT basis) which Stantec may sustain or incur and shall further compensate Stantec for all of its time expenditures relating to the provision of such assistance to the CLIENT.

INDEMNITY FOR MOLD CLAIMS: It is understood by the parties that existing or constructed buildings may contain mold substances that can present health hazards and result in bodily injury, property damage and/or necessary remedial measures. If, during performance of the SERVICES, Stantec knowingly encounters any such substances, Stantec shall notify the CLIENT and, without liability for consequential or any other damages, suspend performance of services until the CLIENT retains a qualified specialist to abate and/or remove the mold substances. The CLIENT agrees to release and waive all claims, including consequential damages, against Stantec, its subconsultants and their officers, directors and employees arising from or in any way connected with the existence of mold on or about the project site whether during or after completion of the SERVICES. The CLIENT further agrees to indemnify and hold Stantec harmless from and against all claims, costs, liabilities and damages, including reasonable attorneys' fees and costs, arising in any way from the existence of mold on the project site whether during or after completion of the SERVICES, except for those claims, liabilities, costs or damages caused by the sole gross negligence and/or knowing or willful misconduct of Stantec. Stantec and the CLIENT waive all rights against each other for mold damages to the extent that such damages sustained by either party are covered by insurance.

FORCE MAJEURE: Any delays in or failure of performance by the CLIENT or Stantec, other than payment of money, shall not constitute default hereunder if and to the extent that such delays or failures of performance are caused by occurrences beyond the control of the CLIENT or Stantec as the case may be, including but not limited to: acts of God or the public enemy; expropriation or confiscation of facilities; compliance with any order or request of any governmental authority; act of war; rebellion or sabotage or damage resulting therefrom; fires, floods, explosions, accidents; riot or strikes or other concerted acts of Workers, whether direct or indirect; or any causes, whether or not of the same class or kind as those specifically above named, which are not within the control of the CLIENT or Stantec respectively, and which by the exercise of reasonable diligence the CLIENT or Stantec are unable to prevent.

INDEPENDENT ENTITY: Stantec shall be an independent entity with respect to the Services and neither Stantec nor its agents or employees shall be deemed to be the servants, employees or agents of the CLIENT. Except as may be expressly authorized in writing by the CLIENT or in accordance with its responsibilities, Stantec acknowledges that it has no authority whatsoever to contract on behalf of or bind the CLIENT in respect of any contract or purchase order or otherwise.

HEALTH, SAFETY AND ENVIRONMENT LEGISLATION: Stantec shall assist the CLIENT and/or the OH&S Appointee in complying at all times with the requirements of the applicable OH&S legislation and/or other applicable health, safety and environmental legislation governing the place of the Work. **OWNERSHIP OF DOCUMENTS:** All construction data, reports and other documents prepared by Stantec shall be and remain the property of Stantec. The CLIENT shall be entitled to copies of such documents for record purposes and for the operation of the completed Project. The CLIENT shall pay



for all reproduction costs to produce such documents. The CLIENT shall not use or permit the use thereof of such documents for any other purpose or any other project, or for any Work other than that contemplated under this AGREEMENT, without the prior written consent of Stantec. Stantec shall retain copyright on the use of all forms, procedures, systems, terms and conditions and report format developed for use on the Project. In the event that such documentation is used by the CLIENT for purposes other than in connection with the Project or if the said documentation has been amended, altered or revised in any manner whatsoever without notice to Stantec and without receiving Stantec's prior written consent, Stantec does not warrant the fitness of same for the CLIENT's use, and the CLIENT agrees to indemnify, hold harmless and defend Stantec from and against all claims, demand, losses, damages, liability and costs associated with such use by the CLIENT. The CLIENT and Stantec agree that payment of Stantec's fee by the CLIENT pursuant to this AGREEMENT shall be a condition precedent to the CLIENT's right to use documentation prepared by Stantec for all purposes in connection with the Project or under this AGREEMENT.

Stantec cannot guarantee the authenticity, integrity or completeness of data files supplied in electronic format ("Electronic Files"). CLIENT shall release, indemnify and hold Stantec, its officers, employees, consultants and agents harmless from any claims or damages arising from the use of Electronic Files. Electronic files will not contain stamps or seals, remain the property of Stantec, are not to be used for any purpose other than that for which they were transmitted, and are not to be retransmitted to a third party without Stantec's written consent.

NON-SOLICITATION OF EMPLOYEES: The CLIENT shall not, during the term of this AGREEMENT and for a period of three (3) years after the expiry or termination of this AGREEMENT, solicit for employment any of the technical, professional or administrative employees of Stantec.

ADDRESS FOR NOTICES: All communications in writing between the parties shall be deemed to have been received by the addressee if delivered to the attention of the named representative, or if sent by post, or by facsimile addressed as noted above in this agreement.

ASSIGNMENT: Neither the CLIENT nor Stantec shall assign this AGREEMENT without the consent in writing of the other.

SUCCESSION: This AGREEMENT shall inure to the benefit of and be binding upon the parties hereto, their respective heirs, legal representatives, successors and permitted assigns.

APPLICABLE LAW: This AGREEMENT shall be governed by the laws of the jurisdiction in which the majority of the services are performed.

Stantec shall observe and comply with all applicable laws, continue to provide equal employment opportunity to all qualified persons, and to recruit, hire, train, promote and compensate persons in all jobs without regard to race, color, religion, sex, age, disability or national origin or any other basis prohibited by applicable laws.

PROTECTION OF PRIVACY LAWS: Stantec will comply with its statutory obligations respecting the collection, use, disclosure, access to, correction, protection, accuracy, retention and disposition of personal information that may be collected or created under this AGREEMENT. Stantec will refer any request for access to or correction of personal information that is made under statute to the CLIENT and will comply with any directions from the CLIENT respecting the access request, or respecting correction and annotation of personal information. Stantec will, at reasonable times and on reasonable notice, allow the CLIENT to enter its premises and inspect any personal information of the CLIENT's that is in the custody of Stantec or any of Stantec's policies or practices relevant to the management of personal information subject to this AGREEMENT.



PROFESSIONAL SERVICES AGREEMENT

Page 7

THE PARTIES EXPRESSLY ACKNOWLEDGE THAT THIS AGREEMENT CONTAINS LIMITATION OF LIABILITY PROVISIONS RESTRICTING RIGHTS FOR THE RECOVERY OF DAMAGES.

The Parties, intending to be legally bound, have made, accepted and executed this AGREEMENT as of the AGREEMENT Date noted above:

CITY OF BURLINGTON, BURLINGTON INTERNATIONAL AIRPORT

STANTEC CONSULTING SERVICES INC.

	Gene Richards, III, Director of Aviation		Gregory A Edwards, PE, Senior Principal
Signature	Print Name and Title	Signature	Print Name and Title
			0 1
	Print Name and Title		Print Name and Title
Signature		Signature	



PROFESSIONAL SERVICES AGREEMENT ATTACHMENT "A"

Attached to and forming part of the AGREEMENT

BETWEEN:

CITY OF BURLINGTON, BURLINGTON INTERNATIONAL

AIRPORT

(hereinafter called the "CLIENT")

- and -

STANTEC CONSULTING SERVICES INC.

(hereinafter called "Stantec")

EFFECTIVE: December 14, 2015

This Attachment details the SERVICES, CONTRACT TIME, CONTRACT PRICE, ADDITIONAL CONDITIONS and ADDITIONAL ATTACHMENTS forming part of the above described AGREEMENT.

SERVICES: Stantec shall perform the following SERVICES:

Assist the Burlington International Airport with UIC Permit management

responsibilities to include performing field inspections; monitoring groundwater; developing and submitting annual reports to the Agency of Natural Resources (ANR); providing on-call UIC permit assistance and subconsultant management. See attached proposal for detailed scope of work and staff hours/fee estimate.

(hereinafter called the "SERVICES")

CONTRACT TIME: Commencement Date: January 1, 2016

Estimated Completion Date: December 31, 2016

CONTRACT PRICE: Subject to the terms below, CLIENT will compensate Stantec as follows:

\$81,934 including direct expenses.

A zero percent (0%) flat rate disbursement (FRD) recovery charge will be applied to the Stantec fees to cover miscellaneous project expenses, internal incidental printing, copying and plots, film, CDs and report materials; communications expenses (e.g., faxes, office and mobile phones, blackberries, pagers, and other devices); office expenses (e.g., postage, couriers, equipment, common software and other supplies); staff local mileage/kilometrage; and archive maintenance. As this is a FRD, no supporting document will be provided with invoices.

Project specific charges, such as subconsultants; travel, accommodations and meals; project-specific printing of deliverables; consumables; usage charges for specialized field equipment and company-owned, leased or rented project vehicles; external testing lab charges and other external services charges; specialized computer software costs; and other significant project-specific expenses will be invoiced in addition to labor fees and to the FRD.

Where not stated as being included in the fees, project specific subconsultant, contractor, lab and other similar third party charges will be charged as invoiced to Stantec with a zero percent (0%) markup.

StantecUnless otherwise noted, the fees in this agreement do not include any value added, sales, or other taxes that may be applied by Government on fees for services. Such taxes will be added to all invoices as required.

Revised 2004-01-27



PROFESSIONAL SERVICES AGREEMENT ATTACHMENT "A"

Where the SERVICES or services conditions change, Stantec shall submit to the CLIENT in a timely manner, documentation of the revisions to Attachment "A" adjusting the Contract Services Time and Price as required.

Unless otherwise specified, charges for SERVICES are based on Stantec's hourly billing rate table ("Rate Table"), attached hereto, if applicable. The Rate Table is subject to escalation from time to time.

ADDITIONAL CONDITIONS:

The following additional conditions shall be read in conjunction with and constitute part of this AGREEMENT:

No additional conditions

ADDITIONAL ATTACHMENTS:

The following additional attachments shall be read in conjunction with and constitute part of this AGREEMENT:

See attached Stantec scope of work and staff hour estimate September 4, 2015.

INSURANCE REQUIREMENTS:

Before any SERVICES are provided under this AGREEMENT, Stantec shall procure, and maintain in effect during the term of this AGREEMENT, insurance coverage in amounts and on terms not less than set forth below.

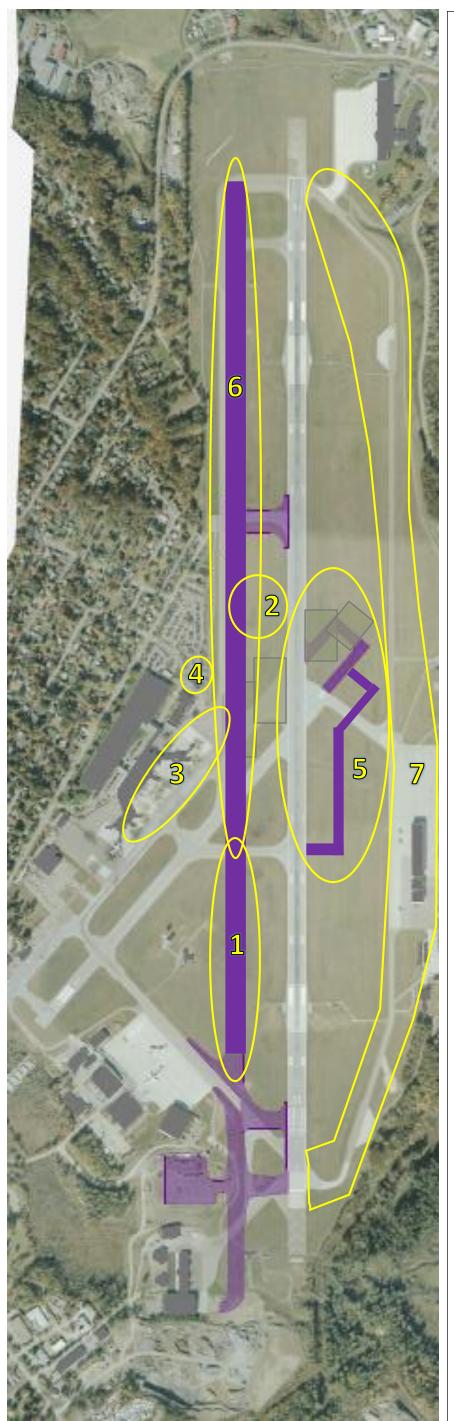
General Liability: Commercial general liability insurance for personal and bodily injury, including death, and property damage in the amount of \$1,000,000 each occurrence and not less than \$2,000,000 in the aggregate.

Automobile Liability: Automobile liability insurance for bodily injury, including death, and property damage in the amount of \$1,000,000 each occurrence. **Professional Liability**: Professional liability insurance for damages incurred by reason of any negligent act, error or omission committed or alleged to have been committed by Stantec in the amount of \$1,000,000 per claim and in the aggregate.

Workers' Compensation: As prescribed by applicable law.

Certificates of insurance shall be made available to the CLIENT upon request All other insurance required in addition to the above shall be provided by the CLIENT at the CLIENT's expense. Stantec shall be an additional insured under all insurances provided by the CLIENT applicable to the Project. The CLIENT shall provide Stantec with a certified copy of the insurance policy upon request. Insurance policies shall provide that the coverage therein afforded shall not be cancelled except with thirty (30) days prior written notice to the CLIENT. Stantec shall comply and assist the CLIENT with the administration of all insurance programs provided by the CLIENT in respect of the Project.

Construction Update Report



Open Projects

1. Taxiway K Construction. Taxiway K is the first phase in a multiphase project to construct a parallel taxiway to Runway 15-33. The construction consists of extended the existing Taxiway K to connect with the new Taxiway B, and will be completed in 2016. The contractor will install all the base materials this year, and will complete the paving next summer. This project has been completely shut down for the winter. Work to presume as soon as the ground thaws (April/May 2016).

Future Projects

- 2. North Glycol System Upgrades. Our stormwater system at BTV is inspected on a regular basis. One of the recommendations that came out of those inspections was to upgrade our North Glycol System, which is currently not operating as intended. The upgrades include a new concrete holding tank and larger pipes and pumps to accommodate more treatment capacity for stormwater runoff. This work is planned for the 2016 Construction Season.
- **3. Air Carrier Apron Rehabilitation, Phases 3 9.** Rehabilitating the Air Carrier Apron adjacent to the Terminal Building is planned in 9 phases, with phase 2 occurring last summer. Phase 3 and 4 are planned for construction next summer. The work is projected to start right after July 4th, and will continue into 2017.
- 4. Quick Turn-Around Facility. Car Rental Companies at BTV currently utilize a car wash facility just north of the Air Traffic Control Tower to wash, fuel, and maintain their fleet of vehicles. Included in the Car Rental Company Agreement that was updated and executed in 2015 was a breakdown of how a portion of the Customer Facility Charges will be used to build a new Quick Turn-around Facility (QTA) to replace the existing outdated car wash facility. This construction is planned for 2016.
- 5. Taxiway A Relocation. The "sea of pavement" is a colloquial term that has been tossed around to label the intersection of Taxiway A and Runway 15-33, which has vast amounts of pavement. This intersection is dangerous for smaller aircrafts that essentially get lost in the "sea of pavement". FAA has asked BTV to expedite a project that will mitigate this safety concern. On August 27th, about 20 airport stakeholders, including BTV, Air Guard, FAA, Army Guard, Air Traffic Control, and the State Airports Director, attended an intensive planning session hosted by BTV to discuss design alternatives for relocating Taxiway A. Based on the discussion, we selected one alternative and made comments on the design. The planning process will continue over the next few months, and we are working very diligently to have this project ready for construction in 2017.
- 6. Taxiway G Realignment. Realigning Taxiway G will be the final phases of the overall project to create a parallel taxiway for Runway 15-33. The first phase is Taxiway K, which is listed above in the open projects section. Taxiway G will be constructed in segments, and will likely take 2 years to complete. Construction is scheduled for 2017-2018 and we are currently working on the design and permits. The construction schedule will overlap with Taxiway A Realignment, so coordination between the projects is essential.
- **7. Vermont Air National Guard**. VTANG is planning to widen and reconstruct their apron, as well as Taxiways Delta and Foxtrot in 2017.

INTERNATIONAL AIRPORT

COMMISSION REPORT

Marketing Updates

This Month Highlights:

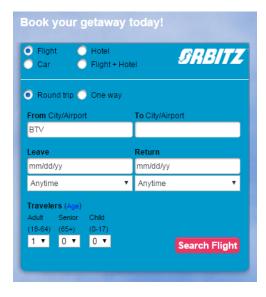
- Marketing Covered Parking garage heavily for winter months
- Continuing to partnered with Lake Champlain Chamber to sell advertising
- Airport becoming popular event location

Purrses for Paws -Success!

With over 230 guests bidding on purses, The Humane Society raised nearly \$24,000 which doubled their fund raising goal!

Orbitz Widget Update:

We've had 703 orders, worth \$177,619.71 in sales as of 2/17 and \$2,144.59 in commission (116,588 impressions, 33,055 Clicks, 28.35 CTR)





Upcoming Events

- March 16—Gravity Press Conference
- March 22—SBBA Monthly Meeting
- April 7—Destination BTV—Refugee Resettlement Program
- April 28th—The Stern Center Readers and Writers Rock! A day of literary adventures
- Pulling for Hope—Tentatively Postponed

Purple Wifi top 5 Locations:

Last Month

- 1. Burlington, VT
- 2. Essex Junction, VT
- 3. South Burlington, VT
- 4. Montreal, Quebec
- 5. Montpelier, VT

Between Dec 8 2015 – Jan 19th 2016 Between Jan 20 2015 – Feb 17 2016

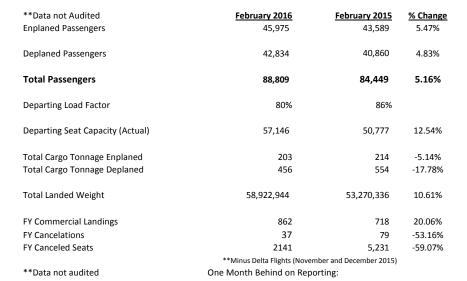
This Month

- 1. Burlington, VT
- 2. Essex Junction, VT
- 3. South Burlington, VT
- 4. Colchester, VT
- 5. Barre, VT

Burlington International Airport

Passenger and Operational Statistics

February 2016



	January 2016	January 2015	
Air Carriers	937	1067	-12.2%
Air Taxi	1134	824	37.6%
General Aviation	1210	1020	18.6%
Military	389	287	35.5%
Total BTV Operations	3670	3198	14.8%

^{***} Data from FAA Air Traffic Activity Data System

Air Carrier: Seating Capacity of more than 60 seats or a max payload capacity of more than 18,000 pounds
Air Taxi: Maximum seating capacity of 60 seats or a max payload capacity of less than 18,000 pounds
General Aviation: Takeoffs and Landings of all civil aircraft, except those classified as air carrier or air taxi
Military: All classes of military takeoffs and landings



FY2015 YTD 403,209	FY2014 YTD 407,803	% Change -1.13%
395,318	397,135	-0.46%
798,527	804,938	-0.80%
82%	87%	
492,367	467,209	5.38%
1,810 4,873	1,437 4,072	25.95% 19.66%
504,553,058	495,558,201	1.82%
7,230	6,999	3.30%
171	243	-29.63%
11,008	16,866	-34.73%

FY:	<u>2015 YTD</u>	FY2014 YTD	% Change
7	525	7977	-5.7%
79	919	7299	8.5%
12	519	12090	3.5%
20	015	2359	-14.6%
29	978	29725	0.9%

February 2016 Draft

Burlington International Airport

Passenger and Operational Statistics

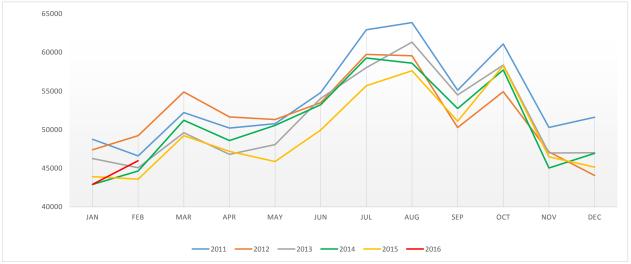
February 2016



BTV Enplaned Passengers

C Year	JAN	FEB	MAR	APR	MAY	JUN	JUL AUG		SEP	ОСТ	NOV	DEC	Total
2011	48,746	46,600	52,206	50,211	50,774	54,792	62,931	63,860	55,103	61,092	50,279	51,601	648,195
2012	47,388	49,226	54,871	51,642	51,309	53,491	59,740	59,557	50,273	54,916	47,126	44,065	623,604
2013	46,256	45,066	49,605	46,804	48,058	54,039	58,027	61,325	54,487	58,359	46,967	47,013	616,006
2014	42,901	44,650	51,210	48,583	50,555	53,224	59,273	58,601	52,737	57,727	45,032	46,928	611,421
2015	43,916	43,589	49,215	47,184	45,872	49,944	55,684	57,629	51,089	58,296	46,470	45,153	594,041
2016	42,913	45,975											

2011 YTD	48,746	95,346	147,552	197,763	248,537	303,329	366,260	430,120	485,223	546,315	596,594	648,195
2012 YTD	47,388	96,614	151,485	203,127	254,436	307,927	367,667	427,224	477,497	532,413	579,539	623,604
2013 YTD	46,256	91,322	140,927	187,731	235,789	289,828	347,855	409,180	463,667	522,026	568,993	616,006
2014 YTD	42,901	87,551	138,761	187,344	237,899	291,123	350,396	408,997	461,734	519,461	564,493	611,421
2015 YTD	43,916	87,505	136,720	183,904	229,776	279,720	335,404	393,033	444,122	502,418	548,888	594,041
2016 YTD	42,913	88,888										1



Airline	February 2016	February 2015	% Change	2016 Share	FY2015 YTD	FY2014 YTD	% Change	15 YTD Share
United	14,652	12,557	17%	31.9%	129,457	122,608	6%	32.1%
American	12,597	13,324	-5%	27.4%	106,900	108,181	-1%	26.5%
Delta	8,546	8,626	-1%	18.6%	87,739	96,181	-9%	21.8%
Jetblue	8,063	7,187	12%	17.5%	68,446	69,311	-1%	17.0%
Porter	332	430	0%	0.7%	857	748	15%	0.2%
Allegiant	1,785	1,465	22%	3.9%	9,810	10,774	-9%	2.4%
Subtotal	45,975	43,589	5.47%	100%	403,209	407,803	-1.13%	100%

February 2016 Draft 2 of 3

Burlington International Airport

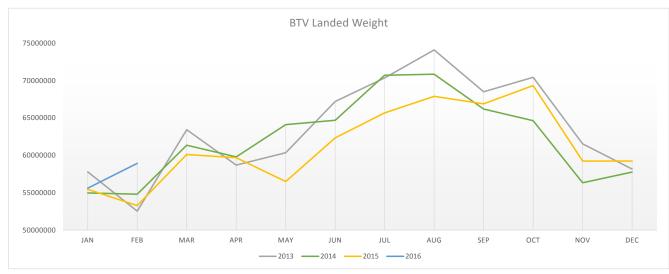
Passenger and Operational Statistics

February 2016



BTV Landed Weight

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	Total
2013	57,778,031	52,523,030	63,421,699	58,688,306	60,341,100	67,198,278	70,353,853	74,095,109	68,495,860	70,425,455	61,521,452	58,160,119	763,002,292
2014	54,953,876	54,793,326	61,338,283	59,783,921	64,096,128	64,682,726	70,702,546	70,844,351	66,186,099	64,626,169	56,324,271	57,747,440	746,079,136
2015	55,444,310	53,270,336	60,105,714	59,673,095	56,481,915	62,334,588	65,677,274	67,889,959	66,876,985	69,329,074	59,229,784	59,229,784	735,542,818
2016	55,595,302	58,922,944											



<u>Airline</u>	February 2016	February 2015	% Change	2016 Share	2015 YTD	2014YTD	% Change	15 YTD Share
American	16,439,700	14,602,700	13%	27.9%	137,909,367	126,685,593	9%	27.3%
United	16,471,766	13,268,289	24%	28.0%	138,812,343	122,309,921	13%	27.5%
Delta	10,463,448	10,953,593	-4%	17.8%	105,382,745	112,720,473	-7%	20.9%
JetBlue	9,163,198	7,902,198	16%	15.6%	78,110,386	77,192,188	1%	15.5%
Allegiant	1,676,698	1,271,688	32%	2.8%	10,122,242	10,532,648	-4%	2.0%
Porter	494,008	786,500	0%	0.8%	1,358,522	1,589,263	-15%	0.3%
Federal Expr	3,762,000	3,960,000	-5%	6.4%	28,710,415	33,660,000	-15%	5.7%
Wiggins	452,126	525,368	-14%	0.8%	4,147,038	9,786,328	-58%	0.8%
Total	58,922,944	53,270,336	11%	100%	504,553,058	494,476,414	2%	100%

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Date Completed			12	12/8/2015 02/08-02/15		1/	15/2016	03,	/14-03/21	2/	11/2016					05/16-05/23		
	TO Destination:	Code		\$	D	fference		\$	Di	fference		\$	Di	fference		\$	Dif	ference
BTV			\$	206.00			\$	213.00			\$	283.00				289.00		
MHT	Washington, D.C. National	DCA	\$	168.00	\$	38.00	\$	197.00	\$	16.00	\$	193.00	\$	90.00	\$	197.00	\$	92.00
ALB	3		\$	213.00	\$	(7.00)	\$	231.00	\$	(18.00)	\$	231.00	\$	52.00	\$	247.00	\$	42.00
YUL			\$	235.00	\$	(29.00)		220.00	\$	(7.00)	\$	254.00	\$	29.00	\$	282.00	\$	7.00
BTV			\$	401.00	•	040.00	\$	409.00		470.00	\$	396.00	_	70.00	\$	411.00	_	0.47.00
MHT	Baltimore, MD	BWI	\$	182.00	\$	219.00	\$	230.00	\$	179.00	\$	326.00	\$	70.00	\$	164.00	\$	247.00
ALB YUL			\$	252.00 313.00	\$ \$	149.00 88.00	\$	329.00 287.00	\$ \$	80.00 122.00	\$	325.00 297.00	\$ \$	71.00 99.00	\$	240.00 306.00	\$ \$	171.00 105.00
BTV			_		φ	00.00	_	213.00	Φ	122.00	\$	218.00	φ	99.00	\$	253.00	φ	105.00
MHT			\$	201.00 194.00	\$	7.00	\$	238.00	\$	(25.00)	\$ \$	206.00	\$	12.00	\$	239.00	\$	14.00
ALB	Washington Dulles, VA	IAD	\$	232.00	\$	(31.00)	\$	247.00	\$	(34.00)	\$	239.00	\$	(21.00)		231.00	\$	22.00
YUL			\$	185.00	\$	16.00	\$	185.00	\$	28.00	\$	215.00	\$	3.00	\$	248.00	\$	5.00
BTV			\$	355.00	Ψ	10.00	\$	406.00	Ψ	20.00	\$	372.00	Ψ	0.00	\$	413.00	Ψ	0.00
MHT			\$	359.00	\$	(4.00)		428.00	\$	(22.00)	\$	354.00	\$	18.00	\$	339.00	\$	74.00
ALB	Las Vegas, NV	LAS	\$	360.00	\$	(5.00)		386.00	\$	20.00	\$	352.00	\$	20.00	\$	438.00	\$	(25.00)
YUL			\$	335.00	\$	20.00	\$	329.00	\$	77.00	\$	306.00	\$	66.00	\$	349.00	\$	64.00
BTV			\$	260.00	-		\$	274.00	Ť		\$	377.00	Ė		\$	283.00		
MHT	01: "	000	\$	204.00	\$	56.00	\$	204.00	\$	70.00	\$	200.00	\$	177.00	\$	238.00	\$	45.00
ALB	Chicago, IL	ORD	\$	214.00	\$	46.00	\$	207.00	\$	67.00	\$	349.00	\$	28.00	\$	349.00	\$	(66.00)
YUL			\$	227.00	\$	33.00	\$	240.00	\$	34.00	\$	350.00	\$	27.00	\$	237.00	\$	46.00
BTV			\$	137.00			\$	170.00			\$	127.00			\$	158.00		
MHT	IEIZ NIV	JFK	\$	330.00	\$	(193.00)	\$	334.00	\$	(164.00)	\$	340.00	\$	(213.00)	\$	360.00	\$	(202.00)
ALB	JFK, NY	JFK	\$	369.00	\$	(232.00)	\$	361.00	\$	(191.00)	\$	372.00	\$	(245.00)	\$	352.00	\$	(194.00)
YUL			\$	234.00	\$	(97.00)	\$	232.00	\$	(62.00)	\$	231.00	\$	(104.00)	\$	290.00	\$	(132.00)
BTV			\$	131.00			\$	137.00			\$	137.00			\$	127.00		
MHT	LaGuardia, NY	LGA	\$	284.00	\$	(153.00)	\$	310.00	\$	(173.00)	\$	255.00	\$	(118.00)	\$	233.00	\$	(106.00)
ALB	LaGuardia, IVI	LGA	\$	406.00	\$	(275.00)	\$	392.00	\$	(255.00)	\$	334.00	\$	(197.00)	\$	352.00	\$	(225.00)
YUL			\$	234.00	\$	(103.00)	\$	232.00	\$	(95.00)	\$	231.00	\$	(94.00)	\$	250.00	\$	(123.00)
BTV			\$	315.00			\$	354.00			\$	312.00			\$	272.00		
MHT	Detroit, MI	DTW	\$	255.00	\$	60.00	\$	269.00	\$	85.00	\$	233.00	\$	79.00	\$	192.00	\$	80.00
ALB	_ = = = = = = = = = = = = = = = = = = =		\$	182.00	\$	133.00	\$	283.00	\$	71.00	\$	357.00	\$	(45.00)		312.00	\$	(40.00)
YUL			\$	309.00	\$	6.00	\$	288.00	\$	66.00	\$	345.00	\$	(33.00)	\$	377.00	\$	(105.00)
BTV			\$	157.00		(400.00)	\$	137.00		(470.00)	\$	137.00	_	(440.00)		127.00	_	(400.00)
MHT	Newark, NJ	EWR	\$	289.00	\$	(132.00)		315.00		(178.00)		255.00		(118.00)		233.00		(106.00)
ALB YUL			\$	355.00	\$	(198.00) (110.00)		378.00	\$ \$	(241.00) (87.00)		341.00		(204.00) (105.00)		341.00		(214.00) (147.00)
BTV			\$	267.00	\$	(110.00)		224.00 251.00	Φ	(67.00)		242.00 301.00	φ	(105.00)		274.00 357.00	φ	(147.00)
MHT			\$	338.00 267.00	\$	71.00	\$	310.00	\$	(59.00)	\$ \$	301.00	\$	_	\$	205.00	\$	152.00
ALB	Atlanta, GA	ATL	\$	222.00	\$	116.00	\$	313.00	\$	(62.00)	\$	361.00	\$	(60.00)		327.00	\$	30.00
YUL			\$	318.00	\$	20.00	\$	273.00	\$	(22.00)	\$	310.00	\$	(9.00)		360.00	\$	(3.00)
BTV			_	0.0.00	Ψ		*		_	(==:00)	<u> </u>	0.0.00	Ť	(0.00)	Ť	000.00	_	(0.00)
MHT	0 1 10 1				\$	-			\$	-			\$	-			\$	-
ALB	Orlando/Sanford, FL ***	SFB			\$	-			\$	-			\$	-			\$	-
YUL					\$	-			\$	-			\$	-			\$	-
BTV			\$	321.00		_	\$	332.00			\$	276.00		_	\$	292.00		
MHT	Fort Loudordela Fl	FLL	\$	282.00	\$	39.00	\$	277.00	\$	55.00	\$	267.00	\$	9.00	\$	184.00	\$	108.00
ALB	Fort Lauderdale, FL	FLL	\$	188.00	\$	133.00	\$	237.00	\$	95.00	\$	230.00	\$	46.00	\$	177.00	\$	115.00
YUL			\$	272.00	\$	49.00	\$	246.00	\$	86.00	\$	246.00	\$	30.00	\$	290.00	\$	2.00
BTV			\$	378.00			\$	378.00			\$	360.00			\$	336.00		
MHT	Denver, CO	DEN	\$	380.00	\$	(2.00)		345.00	\$	33.00	\$	350.00	\$	10.00	\$	350.00	\$	(14.00)
ALB	23/1701, 30		\$	436.00	\$	(58.00)		406.00	\$	(28.00)	\$	415.00	\$	(55.00)		407.00	\$	(71.00)
YUL			\$	384.00	\$	(6.00)	_	322.00	\$	56.00	\$	324.00	\$	36.00	\$	334.00	\$	2.00
BTV				406.00	_		\$	417.00	_		\$	410.00	_		\$	426.00		
MHT	Los Angelas, CA	LAX	\$	384.00	\$	22.00	\$	418.00	\$	(1.00)	\$	350.00	\$	60.00	\$	424.00	\$	2.00
ALB	y , -		\$	415.00	\$	(9.00)	\$	372.00	\$	45.00	\$	384.00	\$	26.00	\$	384.00		42.00
YUL	A		\$	335.00	\$	71.00	\$	331.00	\$	86.00	\$	321.00	\$	89.00	\$	369.00	\$	57.00
	Average Difference			NAI 1-	\$	(6.00)	_		\$	(8.40)			\$	(11.29)			\$	(5.93)
	ge Difference			MHT	\$	2.00	_	MHT	\$	(13.14)		MHT	\$	5.43	_	MHT	\$	27.57
	ge Difference		ALB	\$	(17.00)		ALB	\$	(32.21)		ALB	\$	(41.71)		ALB	\$	(29.50)	
YUL Averag	e Difference			YUL	\$	(3.00)		YUL	\$	20.14		YUL	\$	2.43		YUL	\$	(15.86)