APPENDIX D - MISCELLANEOUS QUOTES, INVOICES & CONTRACTS

Street Lights: Total Cost of Operation – Current vs LED Retrofit

Proposal for Knollwood Circle Pump Station Upgrades

Contract for Grafton Street Pump Station Upgrades

Superior Oil, Inc. Invoice for Peerless Boiler & AFUE Rating Information Sheet

W.J. Budzyna Quote & Invoice for Repeater System at Butler Farm

Board of Fire Engineers Policy Letter

Future Solar Systems, LLC Letter Of Intent









DISTRIBUTORS

INPUTS:		
Cost per kWh:	\$0.1700	
Operating Hours per Year:	4,200	4,200
Number of Fixtures/Retrofits:	1000	
	Current	LED Solution
Model:	50W HPS	Cobralux C-40
Lamps per Fixture:	1	1
Lamp Wattage:	50	43
System Wattage:	91	43
Lamp Life:	24,000	50,000
Cost per Lamp:	\$20.00	\$349.00
Ballast Life:	50,000	N/A
Cost per Ballast:	\$90.00	N/A
Relamp Service Cost:	\$150.00	

RESULTS: (cost of LED system not factored in)			
Average Years Between Relamps:	5.7	11.9	
Annual Energy Used kWh:	382,200	180,600	
Annual Energy Savings:		\$34,272.00	
Annual Service Cost Savings:		\$26,250.00	
Average Annual Material Savings:		\$23,660.00	
Annual Energy, Labor & Material Savings:		\$84,182.00	
Total Savings over LED System Life:		\$1,002,166.67	

RESULTS - (with LED system cost factored in):			
Total Energy Cost:	\$773,500.00	\$365,500.00	
Total Lamp and Ballast Cost:	\$131,666.67	\$349,000.00	
Total Service Cost:	\$312,500.00	\$0.00	
Total Cost of Operation	\$1,217,666.67	\$714,500.00	
Payback in Years (w/ Labor & Material Savings);	4.1	
Return on Investment (ROI):		187.2%	
Annual Cost of Operation Per Unit After Payback:		\$30.70	

Environmental Savings:		
Over Life of Product, assuming coal electrical genera	tion	
Total kWh Saved	2,400,000	
Total pounds of CO2		3,684,000
Total pounds of NOX		5,047
Total pounds of SO2		13,046
Total pounds of PM10		302
Total pounds of PM2.5		173
Total pounds of VOC		74
Total pounds of CO		595
Total pounds of Mercury		0.133
Total number of Equivalent Cars Taken Off the Ro	ad for 10 Years:	20.8









INPUTS:		
Cost per kWh:	\$0.1700	
Operating Hours per Year:	4,200	4,200
Number of Fixtures/Retrofits:	10	
	Current	LED Solution
Model:	100W HPS	Cobralux C-60
Lamps per Fixture:	1	1
Lamp Wattage:	100	65
System Wattage:	128	65
Lamp Life:	24,000	50,000
Cost per Lamp:	\$20.00	\$424.00
Ballast Life:	50,000	N/A
Cost per Ballast:	\$90.00	N/A
Relamp Service Cost:	\$150.00	

RESULTS: (cost of LED system not factored in)			
Average Years Between Relamps:	5.7	11.9	
Annual Energy Used kWh:	5,376	2,730	
Annual Energy Savings:		\$449.82	
Annual Service Cost Savings:		\$262.50	
Average Annual Material Savings:		\$236.60	
Annual Energy, Labor & Material Savings:		\$948.92	
Total Savings over LED System Life:		\$11,296.67	

RESULTS - (with LED system cost factored in):			
Total Energy Cost:	\$10,880.00	\$5,525.00	
Total Lamp and Ballast Cost:	\$1,316.67	\$4,240.00	
Total Service Cost:	\$3,125.00	\$0.00	
Total Cost of Operation	\$15,321.67	\$9,765.00	
Payback in Years (w/ Labor & Material Savings):		4.5	
Return on Investment (ROI):		166.4%	
Annual Cost of Operation Per Unit After Payback:		\$46.41	

Environmental Savings:		
Over Life of Product, assuming coal electrical g	eneration	
Total kWh Saved	31,500	
Total pounds of CO2	,	48,353
Total pounds of NOX		66
Total pounds of SO2		171
Total pounds of PM10		4
Total pounds of PM2.5		2
Total pounds of VOC		1
Total pounds of CO		8
Total pounds of Mercury		0.002
Total number of Equivalent Cars Taken Off the Road for 10 Years:		0.3









INPUTS:		
Cost per kWh:	\$0.1700	<u> </u>
Operating Hours per Year:	4,200	4,200
Number of Fixtures/Retrofits:	10	
	Current	LED Solution
Model:	150 W HPS	Cobralux C-80
Lamps per Fixture:	1	1
Lamp Wattage:	150	85
System Wattage:	188	85
Lamp Life:	24,000	50,000
Cost per Lamp:	\$20.00	\$551.00
Ballast Life:	50,000	N/A
Cost per Ballast:	\$90.00	N/A
Relamp Service Cost:	\$150.00	

RESULTS: (cost of LED system not factored in)			
Average Years Between Relamps:	5.7	11.9	
Annual Energy Used kWh:	7,896	3,570	
Annual Energy Savings:		\$735.42	
Annual Service Cost Savings:		\$262.50	
Average Annual Material Savings:		\$236.60	
Annual Energy, Labor & Material Savings:	\$1,234.52		
Total Savings over LED System Life:		\$14,696.67	

RESULTS - (with LED system cost factored in):				
Total Energy Cost:	\$15,980.00	\$7,225.00		
Total Lamp and Ballast Cost:	\$1,316.67	\$5,510.00		
Total Service Cost:	\$3,125.00	\$0.00		
Total Cost of Operation	\$20,421.67	\$12,735.00		
Payback in Years (w/ Labor & Material Savings):		4.5		
Return on Investment (ROI):		166.7%		
Annual Cost of Operation Per Unit After Payback:		\$60.69		

Environmental Savings:		
Over Life of Product, assuming coal electrical g	generation	
Total kWh Saved	51,500	
Total pounds of CO2	·	79,053
Total pounds of NOX		108
Total pounds of SO2		280
Total pounds of PM10		6
Total pounds of PM2.5		4
Total pounds of VOC		2
Total pounds of CO		13
Total pounds of Mercury		0.002
Total number of Equivalent Cars Taken Off t	he Road for 10 Years:	0.4









INPUTS:		
Cost per kWh:	\$0.1700	
Operating Hours per Year:	4,200	4,200
Number of Fixtures/Retrofits:	10	
	Current	LED Solution
Model:	250W HPS	Cobralux C-150
Lamps per Fixture:	1	1
Lamp Wattage:	250	149
System Wattage:	295	149
Lamp Life:	24,000	50,000
Cost per Lamp:	\$20.00	\$827.00
Ballast Life:	50,000	N/A
Cost per Ballast:	\$90.00	N/A
Relamp Service Cost:	\$150.00	

RESULTS: (cost of LED system not factor	red in)	
Average Years Between Relamps:	5.7	11.9
Annual Energy Used kWh:	12,390	6,258
Annual Energy Savings:		\$1,042.44
Annual Service Cost Savings:		\$262.50
Average Annual Material Savings:		\$236.60
Annual Energy, Labor & Material Savings:		\$1,541.54
Total Savings over LED System Life:		\$18,351.67

RESULTS - (with LED system cost factor	ed in):	
Total Energy Cost:	\$25,075.00	\$12,665.00
Total Lamp and Ballast Cost:	\$1,316.67	\$8,270.00
Total Service Cost:	\$3,125.00	\$0.00
Total Cost of Operation	\$29,516.67	\$20,935.00
Payback in Years (w/ Labor & Material Savings)	:	5.4
Return on Investment (ROI):		121.9%
Annual Cost of Operation Per Unit After Payback:		\$106.39

Environmental Savings:		
Over Life of Product, assuming coal electrical g	generation	
Total kWh Saved	73,000	
Total pounds of CO2		112,055
Total pounds of NOX		154
Total pounds of SO2		397
Total pounds of PM10		9
Total pounds of PM2.5		5
Total pounds of VOC		2
Total pounds of CO		18
Total pounds of Mercury		0.003
Total number of Equivalent Cars Taken Off t	he Road for 10 Years:	0.6









INPUTS:		
Cost per kWh:	\$0.1700	
Operating Hours per Year:	4,200	4,200
Number of Fixtures/Retrofits:	5	
	Current	LED Solution
Model:	400W HPS	Cobralux C-200
Lamps per Fixture:	1	1
Lamp Wattage:	400	192
System Wattage:	464	192
Lamp Life:	24,000	50,000
Cost per Lamp:	\$20.00	\$1,115.00
Ballast Life:	50,000	N/A
Cost per Ballast:	\$90.00	N/A
Relamp Service Cost:	\$150.00	

RESULTS: (cost of LED system not factor	ed in)	
Average Years Between Relamps:	5.7	11.9
Annual Energy Used kWh:	9,744	4,032
Annual Energy Savings:		\$971.04
Annual Service Cost Savings:		\$131.25
Average Annual Material Savings:		\$118.30
Annual Energy, Labor & Material Savings:		\$1,220.59
Total Savings over LED System Life:		\$14,530.83

RESULTS - (with LED system cost factor	ed in):	
Total Energy Cost:	\$19,720.00	\$8,160.00
Total Lamp and Ballast Cost:	\$658.33	\$5,575.00
Total Service Cost:	\$1,562.50	\$0.00
Total Cost of Operation	\$21,940.83	\$13,735.00
Payback in Years (w/ Labor & Material Savings):	:	4.6
Return on Investment (ROI):		160.6%
Annual Cost of Operation Per Unit After Payback:		\$137.09

Environmental Savings:		
Over Life of Product, assuming coal electrical gener	ration	
Total kWh Saved	68,000	
Total pounds of CO2	·	104,380
Total pounds of NOX		143
Total pounds of SO2		370
Total pounds of PM10		9
Total pounds of PM2.5		5
Total pounds of VOC		2
Total pounds of CO		17
Total pounds of Mercury		0.002
Total number of Equivalent Cars Taken Off the R	oad for 10 Years:	0.6

C.O. 5 a

FED. CORP.

GENERAL CONTRACTORS (781) 329-1044 FAX (781) 329-1039

January 27, 2009

Ms. Marie Cannon, P.E. Earth Tech, Inc. 300 Baker Ave. Concord, Massachusetts 01742

Re: Millbury Sewers
Contract No. 32 & 33
Replacement of Knollwood Cir, Pump Station

Dear Ms. Cannon;

At your request we have reviewed the documents supplied to us for the replacement of the Knollwood Circle Pump Station and have prepared a proposal to include a breakdown of costs per category of construction as follows:

1.	Excavation & Backfill including shoring	\$107,123,00
	Furnish & Install Precast Structures	\$ 54,809.00
3,	Furnish & Install Submersible Pump package	\$100,901.00
4.	Complete Electrical System including Generator	\$123,855,00
5,	Furnish & Install all Piping	\$ 30,740.00
6.	Demo Existing Equipment & Structures	\$ 12,650.00
	Erosion Controls & Site Restoration	\$ 32,660.00
8.	Bypass Existing Sewage Flow	\$ 37,555.00
Total as do	escribed above	\$500,293.00

Exclusions:

- 1. Rock excavation & refill
- 2. Police details
- 3. Electrical allowance over \$5000
- 4. Unsuitable material & refill
- 5. Hazardous material handling & disposal

Page 2 Earth Tech, Inc. January 27, 2009

6. Insertion valves

Ester P. Valente

- 7. Piping modifications to existing force main
- 8. Erosion controls beyond haybales & siltfence
- 9. Bypass pumping beyond 2 months

In addition to the above, we propose as requested to remove the existing generator at the Knollwood site and reinstall it at the Elmwood School to include removing the old generator and disposing of it and installing the automatic transfer switch within the existing pump station for the total price of \$ 8,855.00. This addition can only be performed in conjunction with the replacement of the Knollwood Pump Station.

If you have any questions please feel free to contact us.

Sincerely yours,

Lester P. Valente Project Engineer

APPLICATION AND CERTIFICATE FOR PAYMENT

OWNER: TOWN OF MILLBURY

127 ELM STREET

MILLBURY, MA 01527

FED. CORP.

CONTRACTOR:

PAGE 1 OF 4

PROJECT: EAST MILLBURY (AREAS 6LT) AND PARK HILL AVENUE AND MARTIN STREET (AREA 11) SEWER PROJECT

CWSRF 2773/CONTRACT NO. 32 AND 33.

ORIGINAL CONTRACT COMPLETION DATE: CURRENT CONTRACT COMPLETION DATE:

PERIOD: FROM 11/8/2009 TO

APPLICATION NO.19 7/1/2010

12/18/2009

12/1/2009

GROSS AMOUNT DUE
LESS RETAINAGE 2.50%
AMOUNT DUE TO DATE
LESS PREVIOUS PAYMENTS
AMOUNT DUE THIS APPLICATION CONTRACT PAYMENT

> \$ 5,584,586,30 975,900.30 6,580,485.80

NET REVISIONS TO CONTRACT PRICE(1)
NET APPROVED CHANGE ORDERS (2)
CURRENT CONTRACT PRICE:

ORIGINAL CONTRACT PRICE:

CONTRACT STATUS DEDHAM, MA 02026 1039 EAST STREET

CONTRACTOR'S CERTIFICATION:

DATE: 12/22/09

6,408,747,22 5,824,473,51 486,273,71 164,352.49

6,574,099.71

The undersigned CONTRACTOR certifies that (1) all provious progness payments received from OWNER on account of work done under the Contract referred to above have been applied to discharge in full all obligations of the CONTRACTOR incurred in connection with work covered by prior Applications for Payment, and (2) title to all materials and equipment incorporated in said Work or otherwise listed in or covered by this application and Certificate for Payment will pass to Owner at time of payment free and clear of all liens, dailin, security interests and encumbrances (except such as covered by Bond

1038 East Street Dedham, MA 92028 FED, CORP.

Lindro Morteo, Vice-Preside

9

ENGINEER'S RECommendation:

In accordance with the Contract Documents, based on on-site observation and the data comprising the above application, the Engineer certifies to the Contract of the Engineer's knowledge, Information and belief the Work has progressed as indicated, the quality of Work is in accordance with the Contract Documents, and the Contractor is entitled to Payment of the amount certified.

22 AMOUNT CERTIFIED DATE: [2]

485,273,71

300 Baker Avenus Concord, MA 01742 EARTH TECH, INC.

OWNER'S Approval:

In accordance with the Contract Documents, General Conditions, Article 14-Payments to Contractor and Completion, the Owner heraby approves this application for Payment. The amount of this payment is the amount certified by the Engineer unless signified in writing differently by Owner.

AMOUNT CERTIFIED

DATE:

485,273,71

Milibury Sewer Commission Town of Milibury 127 Elm Street Millbury, NA 01627

Ä

Nelson, Chair

B.

<u>~</u>

FED. CORP. 1039 EAST STREET DEDHAM, MA 02028

TOWN OF MILLBURY, MA FAST MILLBURY (KRESA 62.7) AND PARK HILL AVENUE AND MARTIN STREET (AREA 11) SEWER PROJECT. OWSHE 2773 CONTRACT NO. 328.35

ESTIMATE NO. 19 BILLING PERIOD: 11/09/09-12/18/09

LEW	DESCRIPTION	QUANTITYMEASUR	MEASUR	PRICE	TOTAL	PERIOD	COST THIS	PREVIOUS	TOTAL	COST TO	
-	Moblization/demobilization	•	SI	250,000,00	250.000.00	0.05	50 600 00	1	111111000	2816	
22	8" PVC sewer less than 8' deep	4,000	51	68.00	272,000,00		200000	2 2026	00.1		250,000,00
8	8" PVC sewer 8-12" deep	13,500	'n	68.00	918.000.00			4 4769			220,582.00
22	8" PVC sewer 12-16" deep	3,700	9	22 00	266 400 00			007**	1		969,408.00
R	8* PVC sewer 16-20' deep	850	1	105.00	89.250.00			33/5	6		243,000.00
8	8" DI sewer more than 20' deep	110	ı	125.00	13 750 00			891.5			93,607.50
7	2" PVC tow pressure main line sewer all depths	3,100	5	22.00	68,200.00		,	36	38.00		4,750.00
29 1	1-1/2" PVC low pressure service conn,	8	4	22.00	19,800,00	,		2047.4			00.508,65
ارة الم	6" PVC gravity sewer service conn.	4,500	Ψ,	40.00	180,000.00			2 8902			44,382.80
R	6" Di gravity sewer service conn.	2,000	تا	48.00	96,000,00			727			202,740.00
12	4" Di force main & fittings all depths	1,650	5	29.00	47 850 00			121	Ì		34,896.00
8	6" Di force main & fittings all depths	4,600	15	34.00	156 400 00			Oco.			47,270.00
73	for LPS PVC wyes and tees	40	a	550.00	22 000 00			4555.4	6		156,168.80
다.	for Gravily PVC wyes and tees	190	5	280 00	49 400 00			47			23,100.00
2n fe	for DI wyes and tees	×	1	305	27,025.00			738	7		61,880.00
8 4	4' manholes w/o frame & cover less than a' door	2 2	† i	00.000	24,3/5.UU		•	88	39.00		12,675,00
f f	dan o non company	Q	\$	1,750.00	43,750.00	•	,	23	23.00		40,250.00
-	4 mannoles wio frame & cover 8-12' deep	48	A	2,500.00	120,000.00	•	Ì	54	64.00		160,000,00
8	4' manholes w/o frame & cover 12-18' deep	5	ā	3,200.00	48,000,00	,		Ŧ	11.00		35 200 00
33	4' manholes w/o frame & cover 16-20' deep	2	Ð	5,000.00	10,000.00	•	•	3	300		45,000,00
36	4' manholes w/o frame & cover 20' deep	-	ð	5,500.00	5,500.00	•		1	8		5 500 00
34	Stype 1 drain manholes w/o frame & cover all dept	6	ā	3,000.00	27,000.00	•	,	6	00.6		27 000 00
8	5 type 2 cleanout manholes all depths w/o frame &	4	ង	5,000.00	20,000.00			4	4.00		00 000 00
동	5 type 3 connection manholes all depths w/o frame	8	ā	2,750.00	16,500.00			80	8		48 500 00
3.	5' air vacuum release manholes ail depths w/o fram	-	ā	5,500.00	5,500.00	,		1	5		2000
3	5 drop-type manholes all depths w/o frame & cover	6	EA	3,250.00	9.750.00	•		-	5		20000
<u>و</u> ج	6 special manholes all depths w/o frame & cover	-	a	4.000.00	00000			,	3		On once

ITEM	DESCRIPTION	OUANTITYMEASUR	UNIT OF	UNIT	TOTAL	QTY THIS	COST THIS	PREVIOUS	TOTAL	COST TO	
4	25* standard maphole frames \$				10101	PERIOD	PERIOD	QUANTITY	QUANTITY	DATE	
1	STREET THE PROPERTY OF COMBINE	81	ð	200:00	43,500.00	,	,	96	98.00		49,000.00
8	25" watertight manhole frames & covers	3	EA	775.00	2,325.00	•	,		8		
9	32" standard manhole frames & covers	21	ភ	660.00	13,860,00			5	ľ		3,100,00
8	32" watertight manhole frames & covers	Υ	Æ	900.00	00 008						14,520.00
5a	a" PVC sewer (drop conn)	40		100.00	W 000 W						900:00
ß	2" PVC low pressure sewer (drop conn)	α		00 99	2000			43.7	43.70		4,370.00
ø	Chimneys	2	Ι.	00.00	220.00				8 8.00		520.00
Г		35	*	0.01	4.00			214.1	214.10		2.14
-	Miscellaneous cement concrete	8	ઠે	0.01	0.30		•		,		
80	Rock and boulder excavation (min. unit price 50.00)	000'6	ò	50.00	450,000.00		•	8017.08	8 017 08		
8	Replace unsultable material above trench grade	5,000	ઇ	0.01	50.00						442,854.00
B	Replace unsuitable material below trench grade	5,000	ઠે	0.01	00.03						
2	Exploratory excavation	200	ઠ	0.0	200			֓֟֜֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֡֓֓֡֓֡֓֓֓֡֓֓	j ,		
-	Not Used	o	ş								
22	Sheeting and/or shoring	o	λ				•		,		
5	Soll compaction testing	ş	ឥ	80.00	00000						
148	State road gravel base course material	1,800	ઠ	10.00	18 000 00			50			2,480.00
4	Local road gravel base course malerial	6200	2	5	00.000.00			1.171			17,111.00
15a	2" temp. bituminous concrete trench resurfacion St	Ş	,		05,000,00		•	4731.99	4,731.99		47,319.90
4	To himpingo i paro i pa	3	\dagger	2002	55,000.00	1	•	672.56	672.58		73,981.60
-	temp. bituminous concrete trench resurfacing Loca	2,000	۲	0.01	50.00		,	2787.34	2,797.34		27.97
	Permenant pavement in State Highway	2,000	+	100.00	200,000.00	•		3087.05	3 087 05		205 205
32	Not Used	ō	NA	1	•		,	•			200,703,00
158	Cold planing in State highway	3,000	λS	3.75	11,250.00			10036 36	L		
15f	Cold planing in Local Roadway	6,000	λ	3.75	22.500.00			4700 47	L		57,638.35
159	1 3/4" bituminous concrete overlay, State Highway	2,200	-	65.00	143.000.00			4707 EE	1,205.43		4,756.61
환	1 1/2" bituminous concrete overlay, Local Roadway	6,400	-	85.00	416,000.00			5803 64			16,840.75
15:	Miscellaneous bituminous concrete	400	۱-	90.00	36.000.00	15.32	4 37B BD	246.00			365,530,10
15)	Control density fill (min. price 70,00/CY)	2,000	ઠ	. 70.00	140,000.00			1486	'		32,544.00
15k	Gravel material	230	λS	4.00	800.00						00,020,00
16a	Removing and relaying existing water main piping	30,000	Z	0.01	300.00			107	20.00		
166	Removing and relaying existing storm drain & sewe	30,000	Z	0.01	300.00		,	32.72	ľ		20.55
18c	Replacing existing drain manholes / catchbasins die	8	\$	175.00	8,750.00	,	,	40			8
											1,750.00

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COST THIS PREVIOUS		,	٠	•	2.000.00	,	•	27,000.00	30,000.00	33,000,00	,	8,431.50	•	,			127.287.00	,					45,214,50 337,844 RG	Agricol inc.		,			-					•	
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TOTA		,	15,000.00	13,000.00	26,000.00	50,000.00	10,000.00	270,000.00	300,000,00	330,000.00	50,000.00	100,000,00	9,644.54	8,650.89	33,561,99	24.338.01	509,148.00	192,424.67	52.102.62	31,880.40	67 834 88	24.45	\$ 6,560,486,60												
PRICE	1		7,500.00	250.00	250.00	50,000,00	1.00	270,000.00	300,000.00	330,000.00	50,000.00	100,000,001	9,644.54	8,650.89	33,661.99	24,338.01	509,148.00	192,424.67	52,102.62	31,880.40	67.834.65	46 244 50										\dagger		1	
UNIT OF		A/A	E	WEEK	104 WEEK	SJ	4	S.	SI	SI	SI	ST	SI	LS.	S	S	S	rs.	SJ	รา	รา	2								T	+	1	\dagger	†	1
QUANTITYMEASUR			2	52	\$	٢	10,000	+	1		-	_	1	1	-	1	1	-	1	1	-	-											1	1	
DESCRIPTION	Uniformed police officers		installing and removing engineer's field offices	Maintaining engineer's field office for area 11		Sedimentation control barrier	Dewatering	Constuction of Barbara Avenue Pump Station	21b Constuction of Ward Avenue Pump Station	21c Constuction of Hastings Avenue Pump Station	Handling and disposal of hazardous solis & ground	Ward St. drainage improvements	0.0#1	CO#2	C.O. #3	CO.#4	co. #5 Knollwood PS	C.O. #6	C.O. #7	C.O.#8	C.O. #9	C.O. #10	TOTAL BASE BID												
E	4	{	25	ğ	8	13	R	21a	21b	210	22	23				Ī	Ī										_	1					T	T	1

Page 3 of

Change Order Summary

(origin Contract Price	\$	5,584,586.30
(hange Orders		10000
			t water main replacement Chai
			t water main replacement Char Ave service replacement Char
	d 2,270.	40 Hiltop D	Prive service replacement Char
	um 1 \$ 9,644.5 evised Contract Value	54 S	5,694,230.84 Char
٠	OTNOG GOTATION TENES	•	5,034,230,04 Char
2			Rd repair water service Char
2			Ave repair water leak ck Ave move sewer service Char
- 2			repair water service leak Chair
2		Grafton	& Ackerman Rd delays Char
F	um 2 \$8,650.6 evised Contract Value	** \$	5,602,881.72 Char
			Char
3			i repair water line I repair water line Net 0
3			Rd Inadequate police details
3			lg lire service repair
3	********		Rd inadequate police details Rd inadequate police details
3	\$3,986,0	4 Grafton	Rd 2 hour delay
	um 3 \$33,661.95	7	
n	evised Contract Value	\$	5,636,543.71
4:		7 Undergro DSMHCo	ound electrical service connection repair
40			ve water main repair
40	\$1,100.3	B Ackerma	in Road water service repair
46	\$1,508,43	2 Haymon 9 Grafton i	d Street water main repair Road road markings
45	\$4,953.4	3 Park Hill	Ave underdrain repairs
41			Ave underdrain asphalt
4)	\$3,013,62	2 Relocate	Gordon service repair drain at Barbara Ave
S	ım 4 \$ 24,338.01	_	
R	vised Contract Value	\$	5,660,881.72
5a	\$500,293.00	Upgrade	Replace Knollwood PS
5h			generator from Knollwood PS to Elmwood School
	m 5 \$509,148.00 vised Contract Value	,	6,170,029.72
6a 6b			on #3 sewer connection water main and ledge
60	\$4,608.45	Replace	CMP pipe with ADS Pipe
6d	\$3,456.88	Martin St	reat sewer connection
6e			reet sewer connection ve sewer connection
6g	\$150,000.00	John, Hei	nry, and Marion St. Drainage Improvements
6h	\$15,000,00	Raymond	Street Drainage Improvements
	m 6 \$192,424,67 vised Contract Value	s	B,362,454.39
7a 7b	\$31,274.43 \$2,540.30		justment for Item 15G .ve LPS Connections & Adaptors
7c	\$5,324.40	Hastings	Ave Drain Replacement
7d 7e	\$7,083,19		reel Berm and related work
	\$5,880,30 m 7 \$52,102.62	_ riolay vv	ater Main on Ward Ave
	rised Contract Value	\$	6,414,557.01
8a	\$13,190,40	Price Adia	ustment for Items 15E &15F
8b	\$18,690.00	Add1 Fen	ce and Guard Rail @ PSs
	n 8 \$31,880.40 rised Contract Value	s	6,446,437.41
110	Day Connact Table	•	
9a	\$8,190.00		
9b 9c	\$1,109.44 \$5,313.80		TWT MH Cover
9c	\$1,689.42	Raymond	i St Drainage final v estimate in CO 6H
9a 91	\$20,016.26 \$14,121.70		d Insert Valve d Odor Control
9g	\$9,398,37	Water Ma	ain & Service conflict on John St.
9h	\$4,680.00	Addi Pav	ement @ PSs
91 9j	\$3,315,69 \$0,00		harge over \$5,000 Allowance ension to 7/1/10 for final overlay pavement
Śи	n 9 \$67,834.68	•	
Rev	ised Contract Value	\$	6,514,272.09
10a	\$723,87	Low Leve	l Floats
101	\$4,567.50		d Circle Fencing Mods
10a Su	\$40,923,13	. W. Main i	Orain Repair
	ised Contract Value	\$	6,560,486.59
11.	\$81,620,24	IID Date-	eina. Bandina Sunamadad by CO 10-
11a Rev	ised Contract Value		cing Pending Superceded by CO 13a -6,642,116,83
12a 12b	6,327.14 \$ 6,892.53		Conduit rel to NGRID pole placement ass pumping at Knoftwood due to NGRID delays
120	\$ 7,854.97	Widening	of Marion Ave
12d	\$ (91,737,99)		cing - Final Adjustment to UP from Superceded by CO 13a
	1 12 \$21,074.64 sed Contract Value		-6,662 ,19 0.47
	Corniaci Falla		
13a 13b	\$44,572.15		BALANCING/CORRECTION
130 13c	\$765.80 \$1,031.81		igh temp alarm T-stats per WAJA ods at Pumping Stations by WAJA
	13 \$45,369,76		· · · · · · · · · · · · · · · · · · ·

Original Contr	act Price	\$	6,584,586.30			
TO SECURE A	Carried Services	A CONTRACTOR OF THE PARTY OF TH	20.00			
	Eligible	Not Eligible	Total			
Change Order 1	\$9,644.54	\$0,00	\$9,644,54			
Change Order 2	\$8,650.88	\$0.00	\$8,650,88			
Change Order 3	\$14,310.49	\$19,351.50	\$33,661,99			
Change Order 4	\$24,338.01	\$0.00	\$24,338,01			
Change Order 5	\$509,148.00	\$0.00	\$509,148.00			
Change Order 6	\$192,424.67	\$0.00	\$192,424.67			
Change Order 7	\$52,102.62	\$0.00	\$52,102.62			
Change Order 8	\$31,880,40	\$0.00	\$31,880,40			
Change Order 9	\$67,834,68	\$0.00	\$67,834,68			
Change Order 10	\$48,214,50	\$0,00	\$48,214,50			
Change Order 11 up	\$0.00	\$0.00	\$0.00			
Change Order 12a-c	\$21,074,64	\$0.00	\$21,074,64			
Change Order 12d up	\$0.00	\$0.00	\$0.00			
Change Order 13a-up	\$44,572,15	\$0.00	\$44,572,15			
Change Order 13b,c	\$1,797.61	\$0.00	\$1,797.61			
Net Change Orders	\$1,023,993,19	\$19,351,50	\$1,043,344.69			
不完新性数数数数数数	e sum e de contra	THE PERSON	202121-202			
Revised Contra	ict Value	\$6,627,	930,99			
Eligible Value for	SAF Reimb.	\$6,608,579,49				

Final Contract Value \$ 6,627,930.99

AECOM

AECOM 978 371 4000 tel 300 Baker Avenue, Suite 290 978 371 2468 fax Concord, MA 01742 www.aecom.com

February 1, 2011

Board of Sewer Commissioners 127 Elm Street Millbury, MA 01527

Attn: Mr. Gary C. Nelson, Chairman

Subject:

AGREEMENT for General Consulting Services

Grafton Street Pump Station Upgrade

Dear Mr. Nelson:

AECOM Technical Services, Inc. (AECOM) (ENGINEER) proposes to render professional engineering services in connection with the Grafton Street Pump Station upgrade (PROJECT). The Town of Millbury, Massachusetts acting through its Board of Sewer Commissioners (OWNER) is expected to furnish AECOM with full information as to your requirements including any special or extraordinary considerations for the PROJECT or Special Services needed, and also, to make available pertinent existing data.

ENGINEER's services will consist of designing the replacement of the existing pneumatic-type pumping station with submersible pump-type station arrangement in accordance with the Sewer Department requirements as executed for the East Millbury pumping stations and Knollwood Circle replacement station completed under Sewer Construction Contract 32/33. The scope of the upgrade services includes; establishing design flow conditions, preparing recommendations for upgraded equipment including electrical service as necessary, limited permitting (Request for Determination of Applicability, only) and preparation of plans and specifications to solicit bids for the recommended improvements. The ENGINEER will also provide services related to advertising and soliciting general bids and filed sub-bids (electrical only) for the project including; distributing plans and specifications (up to 50 sets), responding to questions during the bid period(s), issuing addenda, attending the bid openings (electrical sub-bid and general bid), preparing a Bid Tabulation and recommendations related to filed sub-bid and general bid Contract Award. Construction services, including shop drawing review and limited field observation are outlined in the attached table for budgeting purposes, but will be verified when these services are amended to this Contract at a future date.

Compensation for ENGINEER's services shall be on a time and materials basis as outlined in the attached Schedule of Fees and Conditions. The project involves an investigating phase from which the recommendations and thus specific scope of improvements will be determined. The estimated fee includes separate budgets for these phases which may require adjustment depending on the result of the prior phase. Compensation on this PROJECT will not exceed Fifty-Five Thousand Three Hundred Fifty-Five Dollars (\$55,355) without prior written authorization from the OWNER.

ENGINEER expects to complete the services contained in this LETTER AGREEMENT within 150 calendar days of the ENGINEER's receipt of the executed LETTER AGREEMENT from the OWNER.

AECOM

Letter Agreement Town of Millbury, MA Board of Sewer Commissioners Professional Services – Grafton Street Pump Station Upgrade

This LETTER AGREEMENT, including all attachments, represents the entire understanding between the OWNER and ENGINEER in respect of the PROJECT and may only be modified in writing, if signed by both parties. If it satisfactorily sets forth OWNER's understanding of the arrangement between us, we would appreciate your signing the enclosed originals of this LETTER AGREEMENT in the space provided below. Please return two (2) executed copies to us for our accounting and PROJECT records.

Very truly yours,	ACCEPTED BY:
AECOM	Town of Millbury, Massachusetts By its Board of Sewer Commissioners
Dall & Road.	Tang Julsa
Joseph M. Boccadoro, P.E.	Gary C. Nelson, Chairman
Senior Project Director	
APPROVED BY:	Happy Erickson, Clerk
TOMUNIA III	
Richard Jubinville, P.E.	Frank Gagliardi, Member
Vice President	4
Date: $2-8-11$	Date: 5/15/11
Date:	

Attachments:

- 1. Schedule of Fees and Conditions, consisting of two (2) pages
- 2. Estimated Fees Table

CERTIFICATION OF APPROPRIATION

The undersigned hereby certifies that an appropriation in the amount of this LETTER AGREEMENT is available therefore.

Finance Director

AECOM TECHNICAL SERVICES, INC.

Schedule of Fees and Conditions

Scope of Services

AECOM Technical Services, Inc. (AECOM), shall perform, as agent for the OWNER; the professional services designated and described in the LETTER AGREEMENT between the parties dated February 1, 2011, which constitutes a part of this Schedule.

Compensation for Services

Compensation for services will be based on the time required to provide services.

Compensation for services will be based on the time required to provide services computed as the sum of the following:

- Labor 2.14 times Salary Costs. Salary costs are defined as the cost of salaries (including sick leave, vacation and holiday pay applicable thereto) of those staff personnel directly chargeable to the Project; plus unemployment, excise and payroll taxes; and contributions for 1. social security, employment compensation insurance, retirement benefits, and medical and insurance benefits.
- Other Direct Costs The following costs of direct expenses will be billed at AECOM cost and/or at the nominal rates plus the identified 2. percentage mark-up.

Identifiable living and traveling expenses of employees when away from home office plus 5%.

Communication expenses including long distance telephone, facsimile, telegraph, cable and mailing charges plus 5%.

Printing and reproduction costs plus 5%. c)

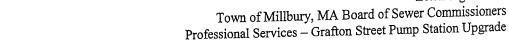
Laboratory costs plus 5%.

- Purchase or rental of specialized equipment from outside vendors plus 5%. e)
- Rental charges for specialized equipment owned or leased by AECOM.
- Services of Consultants AECOM may engage contractors and/or other professionals to perform specific services. These services will be billed at cost plus 5%. It is understood and agreed that all consultants who or which may be engaged by AECOM are independent 3. contractors of AECOM and not employees of AECOM; and, AECOM shall have no right, duty or obligation to direct or control the contractor's employees or the safety procedures, means, and methods or techniques of contractors.

Invoices for services performed will be submitted to OWNER on a monthly basis. Payments by OWNER to AECOM shall be made within thirty (30) days of receipt of Invoice. Payments shall be mailed to the AECOM's lock box location at Bank of America, AECOM Technical Services, Inc., 1178 Paysphere Circle, Chicago IL 60674.. If payment is not made within thirty (30) days after receipt of bill, the amounts due shall include a charge at the rate of one and one-half percent (1-1/2%) per month from the thirtieth day, and in addition AECOM may, after giving seven (7) days' written notice, suspend services under this LETTER AGREEMENT until AECOM has been paid in full all amounts due it for services invoiced without liability for delays or damages which result therefrom.

All documents, including Drawings, Specifications, estimates, field notes, and other data, prepared or furnished under this LETTER AGREEMENT are instruments of service in respect to the Project and shall remain the property of AECOM whether or not the Project is completed. AECOM shall retain ownership of all Documents, Drawings, Specifications, Estimates, Field Notes, and other data, and any copyright thereto. OWNER may make and retain copies thereof as is necessary to occupy and operate the Project by OWNER or others, however, such documents are not intended or represented to be suitable for additions, extensions, or completion of the Project by another engineer, or use on any other project. Any reuse without written verification or adaptation by AECOM for the specific purpose intended is at OWNER's sole risk and without liability or legal exposure to AECOM or their independent contractors or consultants. The OWNER shall indemnify, defend, and hold harmless AECOM and their independent contractors, and consultants from all claims, damages, loses, and expenses, including attorney's fees arising out of or resulting therefrom. Any such verification or adaptation will entitle AECOM to further compensation at rates to be agreed upon by OWNER and AECOM.

AECOM opinions of probable Total Project Costs and Construction Cost are estimates provided on the basis of experience and qualifications and represent its best judgment as experienced and qualified professionals familiar with the construction industry. Since AECOM has no control over the means, methods or techniques of construction, or the cost of labor, materials, equipment or services furnished by others or over competitive bidding



The OWNER agrees to provide access to and to furnish right of entry on all public and private land necessary for AECOM to perform services required under this LETTER AGREEMENT. Where OWNER is not the owner of any site upon which AECOM is required to perform services, AECOM shall have the right to require written permission from the owner of said site to perform the service required thereon. AECOM will take reasonable precautions to minimize damage to the property from use of equipment, but has not included in the fee the cost of restoration or damage that may result from our operations. If AECOM is required to restore the property to its former condition, the costs will be added to its fee.

AECOM

AECOM and its independent contractors and consultants shall have no responsibility for the presence, generation, discovery, handling, transportation, removal, or disposal of, or exposure of persons to, hazardous materials in any form located at the Project Site. In the event unanticipated hazardous materials are discovered on the Project Site, OWNER agrees that any such discovery constitutes a changed condition necessitating a renegotiation of the Scope of Services, additional compensation, or a termination of services. In addition, OWNER agrees to defend, indemnify, and hold AECOM harmless for any claims arising out of or related to the discovery of unanticipated hazardous materials.

OWNER recognizes that special risks occur whenever engineering or related disciplines are applied to identify subsurface conditions. Even a comprehensive sampling and testing program, implemented with appropriate equipment and experience by personnel under the direction of a trained professional who functions in accordance with the prevailing standard to care may fail to detect certain hidden conditions. For similar reasons, actual environmental, geological, and technical conditions that AECOM properly inferred to exist between sampling points may differ significantly from those that actually exist. The passage of time also must be considered, and the OWNER recognizes that due to natural occurrences or direct or indirect human intervention at the Site or distance from it, actual conditions may quickly change.

AECOM shall be responsible for, and its employees shall follow, health and safety precautions, which meet federal, state and local standards, statues, and regulations. AECOM shall not specify construction procedures, manage or supervise construction, or implement or be responsible for health and safety procedures for other than its own employees or subconsultants. AECOM shall not share any responsibility for the acts, errors, or omissions of its subconsultants or other parties on the Project nor have control or change of, or be responsible for, construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs. Unless otherwise agreed in the LETTER AGREEMENT, AECOM observation and testing of portions of the work of other parties on the Project shall not relieve such other parties from their responsibilities for performing their work in accordance with applicable plans, specifications and health and safety requirements. Accordingly, OWNER agrees to defend, indemnify, and hold AECOM harmless from any and all claims, liabilities, fines, administrative penalties, or other costs, including court costs and attorney's fees, by any third parties arising out of or relating to health and safety procedures for other than its own employees or subconsultants, or arising out of or related to the acts, errors, or omissions of contractors, subcontractors, independent consultants, subconsultants, or other parties on the Project.

AECOM is protected by Workmen's Compensation Insurance, Standard Public Liability Insurance, and Professional Liability Insurance. AECOM will furnish information and certificates at your request. AECOM will not be responsible for any loss, damage or liability beyond the amounts, limits and conditions of such insurance. AECOM will not be responsible for any loss, damage or liability arising from the OWNER's negligent acts, errors and omissions and those by OWNER's staff, consultants, contractors and agents or from those of any person for whose conduct AECOM is not legally responsible.

The OWNER hereby agrees to limit AECOM's total liability for any claims or damages of any nature whatsoever to a maximum amount equal to the total compensation received by AECOM under this LETTER AGREEMENT.

It is understood that AECOM makes no warranty, either expressed or implied, as to the findings, designs, accommodations, specifications, or professional advice or opinion that AECOM represents except that it shall perform its Services in accordance with the standards of care and diligence normally practiced by professional consulting firms performing Services of a similar nature in the same locale.

The obligations of either party may be terminated by either party upon twenty days' written notice.

If the Project is suspended or abandoned in whole or in part for more than three months, AECOM will be compensated for all services performed prior to receipt of written notice from the OWNER of such suspension or abandonment, together with payment of reimbursable expenses then due. If the Project is resumed after being suspended for more than three months, AECOM's compensation shall be equitably adjusted.

Town of Millbury, Massachusetts **Grafton Street Pump Station Engineering Fee Estimate**

Submitted by: AECOM Technical Services, Inc February 2011

Task	Description	Estimated Hours	Estimated Labor	Subcontractors	Expenses	Total
Current Contract 1A Establ	rent Contract 1A Establish Design Criteria	52	\$6,720.00	\$1,465.00	\$50.00	\$8,235.00
18	Prepare Plans and Specifications	198	\$24,530.00	\$9,035.00	\$630.00	\$34,195.00
10	1C Bidding Task 1 Subtotal:	30 e	\$7,465.00 \$38,715.00	\$10,500.00	\$5,460.00 \$6,140.00	\$5,460.00 \$12,925.00 \$6,140.00 \$55,355.00
Future AI 2	Future Amendment 2 Construction Services	009	\$68,000.00		\$12,000.00	\$12,000.00 \$80,000.00

Notes:

- 1) Estimate does not include soil borings
- 2) Estimate includes one day of survey to obtain key elevations and general site features. Services to secure Easements and/or prepare easement plans are not included.
 - 3) Permitting: estimate includes preparation of a Request for Determination of Applicability If Millbury Conservation Commission determines that a Notice of Intent is required, AECOM will furnish a cost estimate for such services.
- 4) Chapter 149 bid is assumed; requires a separate filed sub bid in addition to general bid Only electrical filed sub bid is assumed to be required.
- 5) Construction Services amendment inlcudes office engineering and part-time on-site inspection

W. J. BUDZYNA 49 GILL COURT WHITINSVILLE, MA 01588 Buller with ferr

6186

PLEASE INDICATE THE ABOVE NUMBER WHEN ORDERING

(508) 234-6021

то °

Millbury Fire Department

Attn: Chief David Rudge

QUOTATION DATE		SALESPERSON	
Mar. 14,	2007		
INOUIRY DATE		INQUIRY NUMBER	-
	-		J

	SHIPPED WA	FO.B.		TERMS			
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	345 with enclo	ARO Freight De Kyocera TP34512600FGAA 345 watts, 12 VDC, 6 with top-of-pole mou enclosure, 30 ampere harness. Freight charge	ARO Freight DESCRIPTION Kyocera TP34512600FGAA113 Solar Po 345 watts, 12 VDC, 600 Ampere-ho with top-of-pole mounting struct enclosure, 30 ampere power panel harness. Freight charge	ARO Freight DESCRIPTION Kyocera TP34512600FGAA113 Solar Power System, 345 watts, 12 VDC, 600 Ampere-hours, with top-of-pole mounting structure, steel batter enclosure, 30 ampere power panel, and wiring harness. Freight charge	ARO Freight DESCRIPTION Kyocera TP34512600FGAA113 Solar Power System, 345 watts, 12 VDC, 600 Ampere-hours, with top-of-pole mounting structure, steel battery enclosure, 30 ampere power panel, and wiring harness. Freight charge	ARO Freight DESCRIPTION Kyocera TP34512600FGAA113 Solar Power System, 345 watts, 12 VDC, 600 Ampere-hours, with top-of-pole mounting structure, steel battery enclosure, 30 ampere power panel, and wiring harness. Freight charge	ARO Freight DESCRIPTION Net 30 PRICE AMOUNT AMOUNT AMOUNT AND AMOUNT AMO

WE A	RE PLEASED TO SUBMIT THE ABOVE QUOTATION FOR '	YOUR CONSIDERATION, SHOULD YOU PLACE A	N ORDER, BE ASSUPED IT WILL RECEIVE OUR PROJECT ATTENTION, THISDAYS THEREAFTER IT IS SUBJECT TO CHANGE WITHOUT NOTICE.
	$\Delta \Omega = \Delta$		
BY	of Janglester)	ACCEPTED	DATE

Thank You!

W. J. BUDZYNA 49 GILL COURT MITINSVILLE, MA 01588-1307 (508) 234-5021

Invoice

4970//-

Millbury:	Fire!	Depart	ment	

DATE			ORDER NO.
Apr (1	10,	2008	
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	Vije repeater system for Butler Parm site; includes setup, programming, and installation in shed; includes installation and wiring of solar power eystem:			
	per attached bill of materials.		l I	
	Material Johan			1945 89 2460 00
	TOTAL			\$2945.58



INVOICE

TE OF SERVICE	INV.#	ACCT.# START TIME STOP TIME	TECHNICIAN
04/03/07	048590	013242	SH / JS]

TOWN OF MILLBURY GRAFTON RD FIRE DEPT 127 ELM ST MILLBURY MA 01527

FIRE STATION E MILLBURY RT 122 (GRAFTON RD) MILLBURY, MA 01527

6 600KM

		REMITTANCI	E \$ 0,970 ==
TO ASSUI	RE PROPER CREDIT, PLEASE HETURN THIS PORTION AND I	INCLUDE YOUR ACCOUNT NUMBER ON YOUR O	CHECK
	WORK REQUESTED / I	PROBLEM	
INSTALLATION	OTLER		
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Brand Name	Model Name	Model Number	Boiler Type	Fuel Type	AFUE Rating (Must meet or exceed 85% AFUE (CAafue) energy-efficiency rating)
NTI	Triton	VS100	Water	Oil	85
NTI	Triton	VS90	Water	Oil	85
NTI	Triton	V\$80	Water	Oil	86.7
OMEGA COMFORT	JLG	JLG-28	Water	Gas	86
OMEGA COMFORT	OME	OME620D	Water	Gas	87
OMEGA COMFORT	TEK	TEK 3	Water	Gas	87
PB Heat, LLC	Combi 160	PC-160C	Water	Gas	90.7
Peerless	Cast 92	Cast 92-2	Water	Gas	92.7
Peerless	Cast 92	Cast 92-4	Water	Gas	92.7
Peerless (P.B. Heat)	EC/ECT	EC/ECT-04- 1.25 gph	Steam	Oil	85.1
Peerless (P.B. Heat)	EC/ECT	EC/ECT-0375 gph	Steam	Oil	85.4
Peerless (P.B. Heat)	EC/ECT	EC/ECT-05- 1.75 gph	Steam	Oil	85.6
Peerless (P.B. Heat)	EC/ECT	EC/ECT-04- 1.50 gph	Water	Oil	85.2
Peerless (P.B. Heat)	EC/ECT	EC/ECT-05- 2.00 gph	Water	Oil	85.2
Peerless (P.B. Heat)	EC/ECT	EC/ECT-03- 1.00 gph	Water	Oil	85.3
Peerless (P.B. Heat)	EC/ECT	EC/ECT-04- 1.25 gph	Water	Oil	86.1
Peerless (P.B. Heat)	EC/ECT	EC/ECT-05- 1.75 gph	Water	Oil	86.2
Peerless (P.B. Heat)	EC/ECT	EC/ECT-0375 gph	Water	Oil	86.6
Andreas		PDE-03, PDE-04,			
Peerless (P.B. Heat)	PDE	PDE-05	Water	Gas	85
Peerless (P.B. Heat)	Peerless Pinnacle Oil	PO-84	Water	Oil	91.3
Peerless (P.B. Heat)	Peerless Pinnacle Oil	PO-70	Water	Oil	91.7
Peerless (P.B. Heat)	Peerless Pinnacle Oil	PO-84A	Water	Oil	91.8
Peerless (P.B. Heat)	Peerless Pinnacle Oil	PO-70A	Water	Oil	92
Peerless (P.B. Heat)	Peerless Series PSC II	PSCII-04-WPC	Water	Gas	geographics and choice in relative desiles that the test policy policy and a result relative being
Peerless (P.B. Heat)	Peerless Series PSC II	PSCII-05-WPC	Water	Gas	85
Peerless (P.B. Heat)	Peerless Series PSC II	PSCII-06-WPC	Water	Gas	85.1
Peerless (P.B. Heat)	Peerless Series PSC II	PSCII-03-WPC	Water	Gas	86
Peerless (P.B. Heat)	Pinnacle	PI-80, PI-140, PI-199	Water	Gas	§95.1
Peerless (P.B. Heat)	Pinnacle	PI-T50, PI-T80	Water	Gas	95.1
Peerless (P.B. Heat)	PRO Series	PRO-04-100	Water	Oil	85.2
Peerless (P.B. Heat)	PRO Series	PRO-05-125	Water	Oil	85.2
Peerless (P.B. Heat)	PRO Series	PRO-03-060	Water	Oil	85.4
Peerless (P.B. Heat)	PRO Series	PRO-04-080	Water	Oil	86.4
Peerless (P.B. Heat)	PRO Series	PRO-05-100	Water	Oil	86.5
Peerless (P.B. Heat)	PureFire	PF-50	Water	Gas	95.0
Peerless (P.B. Heat)	PureFire	PF-80	Water	Gas	95.2
Peerless (P.B. Heat)	PureFire	PF-140	Water	Gas	95.3

To: Laurie Connors



Commonwealth of Massachusetts & C

TOWN OF MILLBURY

FIRE DEPARTMENT



December 15,1980

TO: ALL STATIONS FROM: FIRE ENGINEERS

RE:1.TEMPERTURE SETTINGS

2. OUTSILE LIGHTS

3. PLECTRONS

1. The heard of Engineers have decided that due to the high cost of heating the stations the following directive shall be put into effect immediately.

ALL APPARATUS AREAS SHALL BE SET BETWEEN 40 - 50 F.
ALL MEETING ROOMS SHALL BE SET BETWEEN 45 - 55 F.

The engineers request that when members of the Department are at the stations, that the temperture be raised to a comfortable level AND RETURNED TO THE ABOVE MENTIONED SETTINGS WHEN THEY LEAVE THE STATIONS.

- 2. ALL OUTSIDE LIGHTS, EXCEPT A LIGHT OVER THE FIRE ALARM BOX, SHALL BE PUT OUT WHEN THE LAST MEMBER LEAVES THE STATION AT NIGHT.
- 3. Effective immediately, all plectrons in need of repair shall be brought to Paul Najemy, 1 Brenda Dr. 865-9242.

FUTURE SOLAR SYSTEMS, LLC

Letter of Intent

CONFIDENTIAL

June 6, 2011

Millbury Town Hall Laurrie Connors Town Planner

Re: Power Purchase Agreement and Construction of Solar Facility

Future Solar Systems, LLC or its assignee or designee ("FSS") is pleased to provide you with this Letter of Intent as an expression of interest to construct and install a commercial photovoltaic ("PV") system (the "System") for

The Millbury Town Hall (HOST) to purchase all of the energy produced by the System (together, the "Project"). Based upon our site survey and numerous discussions with you, we believe that the Project will provide you with a long-term source of low cost electricity, with no initial capital outlay by the Town.

- 1. <u>Description of System, and power purchase terms</u>. The System and power purchase details will be as described in the terms and conditions set forth in Exhibit A hereto
- 2. <u>Term Sheet</u>. The main electric purchase and termination terms and conditions respecting the Project are set forth in Exhibit B hereto, including purchase conversion costs in Exhibit C.
- 3. <u>Conditions to Closing.</u> The obligations of the parties to execute the definitive documents to proceed with the Project (the "Closing") shall be subject to the following conditions:
- 3.1. <u>Due Diligence</u>. Each party and its attorneys, accountants, lenders and other representatives and agents shall have satisfactorily completed their due diligence investigation of the other party and the Project.
- 3.2. <u>Power Purchase Agreement</u>. The parties shall have entered into a mutually satisfactory definitive power purchase agreement (the "PPA"), as contemplated by the Terms and Conditions set forth in Exhibit A hereto, as well as a site access agreement and other ancillary agreement as may be mutually agreed.
- 3.3. <u>Corporate Approvals</u>. The Project shall have been duly approved by HOST and FSS, before final execution of the PPA.

- 3.4. <u>Closing Date</u>. The Closing shall take place no later than Sept 15, 2011, or such other date as the parties shall agree.
- 4. HOST agrees that until the termination of this letter of intent pursuant to Paragraph 8 below, it will allow FSS and its lenders, auditors, investors and their respective representatives reasonable access to HOST's premises, assets, records, personnel, customers, suppliers and such other similar third parties for the purpose of completing all due diligence investigations deemed necessary or advisable by FSS, provided that the timing, scope and form of any on-site work will be coordinated with HOST.
- 5. <u>Confidentiality</u>. Each party shall keep confidential any business information of the other that is in written form and labeled confidential, and shall return any such material to the other in the event that the Closing shall not occur. The terms of this letter of intent, including Exhibit A and the terms of the PPA and any other agreement prepared and presented by FSS are deemed confidential information of FSS.
- 6. Non-Disclosure. FSS and HOST agree that no disclosure of the Project or the proposal contained in this letter of intent shall be made to any third party without the consent of the other, except to each party's legal counsel and accountants, to each party's directors and shareholders for the purpose of obtaining the approvals referred to herein, or to FSS' investors, lender(s) or lease financing sources, or as may be required by law (in which event the non-disclosing party or parties shall be given an opportunity to review in advance the proposed disclosure). Following the Closing, FSS may publicize the Project in connection with its business and marketing activities.
- 7. <u>Expenses</u>. Except as otherwise expressly provided herein, each party will be responsible for its own costs and expenses, including counsel fees, incurred in connection with the transactions contemplated by this letter of intent.
- 8. <u>Expiration</u>. The proposal set forth in this letter of intent, shall terminate upon notice given by FSS at or after 5:00 p.m. EST, on October 30, 2010 unless prior to such time and date FSS shall have received from HOST a copy of this letter countersigned in the place indicated below. This letter of intent supersedes in all respects any prior agreements between or among the parties or their affiliates relating to the Project.
- 9. <u>Exclusivity</u>. This letter constitutes the agreement of HOST to work exclusively with FSS with respect to the Project. During the period commencing on the date of this letter and ending on the earlier of the Closing date or the date that is 90 days after the date hereof, HOST shall not: (i) directly or indirectly through any other party engage in any negotiations with or provide any information to any other person, firm or corporation with respect to a transaction similar to the Project and will notify FSS promptly of the receipt of any unsolicited offer

therefore. In the event of any breach of the provisions of this Section 9 or any termination of the definitive purchase and sale agreement due to a material breach on the part of HOST, HOST will pay to FSS all reasonable out-of-pocket expenses which FSS incurred in connection with the Project, including without limitation attorneys' fees and other expenses.

10. Letter of Intent. It is not the intention of the parties that this letter or any actions of the parties with respect hereto be, or be deemed to constitute, a legally binding obligation of the parties hereto, except that the provisions of Sections 4 through 8 shall be binding and enforceable obligations of HOST and FSS and, in consideration of FSS' submission of this letter of intent, the provisions of Section 9 shall be binding and enforceable obligations of HOST. Any other legally binding obligation with respect to the Project shall arise or exist only upon the execution and delivery of a definitive agreement, and all rights and obligations of the parties shall be governed by such agreement. Accordingly, subject to the provisions of Section 8, any party is free to abandon negotiations regarding the Project at any time, for any reason or for no reason, by notice to the other in writing, and the decision of any party so to abandon discussions shall not be subject to legal challenge by the other.

Please acknowledge your intent to proceed with the Project on the basis described in this letter by signing where indicated below and returning one signed original to me.

Very truly yours,

FUTURE SOLAR SYSTEMS, LLC

	By: James Dunn James Dunn President	
Agreed to and accepted this, 2011		
Town of Millbury		-
Laurie Connors		
Town Planner		

Exhibit A – Terms and Conditions

Parties	Future Solar Systems, Inc., its assignee or its designee ("FSS") and ("Customer").	
	FSS is a developer of solar photovoltaic generating systems on third-party facilities. Customer is the party that will receive all of the energy produced by the System. Each party may be referred to individually as a "Party" and jointly as the "Parties."	
Power Purchase Agreement	The PPA shall be a firm contract pursuant to which FSS shall install, maintain, own and operate the System as a means for producing electricity.	
	The parties shall also enter into a property access agreement that will provide among other things access to Customer's property and rooftop for all purposes necessary to the PPA, as well as other ancillary agreement to be agreed upon.	
System	The System, which shall be owned by FSS, is a PV system of approximately 85 kW DC which uses solar radiation as the energy source for the production of electricity. The System shall include approximately 500 PV panels providing approximately 230W DC power each, with a Solectria 82 KW inverter, to be installed and maintained on Customer's property located at (the "Project Site").	
Term	Twenty (20) years, beginning on the date of the Commissioning of the System, as defined in the PPA. FSS shall retain all rights to the Renewable Energy Credits hereunder for the full Term, unless Customer executes its option to purchase the System from FSS. Terms and conditions for such purchase shall be set forth in more detail in the PPA.	
Commissioning of the System	Commissioning of the System will be demonstrated by FSS presenting a certificate, signed by an independent engineer, reasonably acceptable to both Parties, verifying that all conditions precedent for Commissioning have been satisfied for the System.	
Rate	The rate for electricity consumed by, and to be sold to the Customer is set forth in Exhibit B, attached hereto. The procedure for rate change determination is also outlined in Exhibit B.	
Metering	FSS shall provide and install an electronic, utility-grade electrical meter on the System that will measure the output from the System in terms of kWh ("Customer Meter"). FSS or its agent, shall read the Customer Meter on a monthly basis and shall submit to Customer quarterly meter reading summaries, together with payment requests, for the following periods: Jan 1 to Mar 31; Apr 1 to Jun 31; Jul 1 to Sep 31; and Oct 1 to Dec 31.	

Payments Renewable Energy	Customer shall make payment to FSS within ten (10) days of receiving a written payment request. Payment requests shall be sent following the third month of each calendar quarter as set forth above. Payment shall be calculated by FSS based on the Rate Schedule attached as Exhibit B. The Renewable Energy Credit or environmental attributes associated
Credits	with energy produced by the System shall be known as the Renewable Energy Certificates. Each Renewable Energy Certificate represents the non-power attributes of one Megawatt-hour of solar generation, along with any reporting rights arising there-from or connected therewith. FSS shall retain ownership of all Renewable Energy Credits (REC's) associated with the System for the entire term of the PPA.
Force Majeure	Force Majeure events are those events outside the reasonable control of a Party that prevent that Party's performance under the PPA. The events that qualify as Force Majeure events, which excuse the Party's non-performance for some period of time, shall be agreed upon by the Parties and detailed in the PPA. The prerequisites for making a valid claim of Force Majeure shall also be detailed in the PPA, but shall generally include the requirement that the claiming Party notify the other Party of the existence of a Force Majeure event as well as make reasonable efforts to continue performance of its obligations under the PPA.
	Neither Party shall be considered in default under the PPA if it is unable to perform its obligations under the PPA if such delay or failure is due to an event of Force Majeure. A Party may rely on a claim of Force Majeure to excuse its performance only to the extent that such Party: (i) provides prompt notice of such Force Majeure event to the other Party, giving an estimate of its expected duration and the probable impact on the performance of its obligations under this Agreement; (ii) exercises all reasonable efforts to continue to perform its obligations under the PPA; (iii) expeditiously takes action to correct or cure the event or condition excusing performance so that the suspension of performance is no greater in scope and no longer in duration than is dictated by the problem; provided, however, that settlement of strikes or other labor disputes will be completely within the sole discretion of the Party affected by such strike or labor dispute; (iv) exercises all reasonable efforts to mitigate or limit damages to the other Party; and (v) provides prompt notice to the other Party of the cessation of the event or condition giving rise to its excuse from performance.
Events of Default	Certain events shall qualify as Events of Default under the PPA. Such Events of Default shall trigger remedies that will be detailed in the PPA, and which shall specifically include, among other remedies, the right of the non-defaulting party to declare an early termination of the PPA. The

following events, among others that may be reasonably negotiated by the Parties, shall be deemed events of default under the PPA (each event, an "Event of Default"): (a) the failure of either Party to make when due, any payment required hereunder if such failure is not remedied within five (5) Business Days after notice of such failure is given to the defaulting Party by the other Party; (b) the failure of either Party to comply with any or all of its other respective obligations in good faith as herein set forth and such noncompliance is not cured within ten (10) Business Days after notice thereof to the defaulting Party.

The non-defaulting Party shall have the right, among other rights that may be reasonably negotiated by the Parties, for so long as such Event of Default is continuing, to establish by notice to the defaulting Party a date on which the PPA shall terminate early (the "Early Termination Date"), and the non-defaulting Party shall calculate, in a commercially reasonable manner, the Party's Gains, Losses and Costs and will net such amounts to determine the single net liquidated termination payment owed to or from the non-defaulting Party , resulting from the early termination of the PPA ("Termination Payment").

Obligation to Operate and Maintain the Project

FSS shall operate and maintain the System in accordance with applicable law, equipment manufacturers' recommendations and Good Utility Practices, and shall maintain such documents and records necessary to confirm FSS's operation and maintenance of the System in accordance with such standards.

Indemnification

- (a) Indemnity by FSS. The PPA shall provide that FSS releases and will defend, indemnify, and hold harmless Customer, its officers, directors, agents, affiliates, employees and permitted assigns (collectively, "Customer Indemnified Parties") from and against any and all losses, costs, damages, injuries, liabilities, claims, demands, penalties, judgments, awards, and fines, including reasonable and necessary attorneys' and experts' fees and expenses, costs of investigation, court costs and other dispute resolution costs, and interest on any of these items (collectively, "Damages") sustained or incurred by the Customer Indemnified Parties and only to the extent (i) caused by the negligence or willful misconduct of FSS, its officers, directors, agents, affiliates or employees; (ii) caused by FSS's construction, ownership, operation, or decommissioning of its System(s): (iii) caused by any violation of applicable law, regulation or order by FSS; or (iv) caused by any claims by a third party arising out of any act or omission by FSS.
- (b) Indemnity by Customer. The PPA shall provide that Customer releases and will defend, indemnify, and hold harmless FSS, its officers, directors, agents, affiliates, employees and permitted assigns (collectively, "FSS Indemnified Parties") from and against any and all Damages sustained or incurred by the FSS Indemnified Parties to the extent (i) caused by the negligence or willful misconduct of Customer,

its officers, directors, agents, affiliates or employees; (ii) caused by any violation of applicable law, regulation or order by Customer; or (iii) caused by any claims by a third party arising out of any act or omission by Customer. (c) Indemnity Procedure. The person entitled to indemnification under this Section (the "Indemnified Person") will promptly notify the indemnifying Party of any claim, and the indemnifying Party will have the right to assume the investigation and defense of the claim, including employing legal counsel. If the indemnifying Party does not promptly assume the investigation and defense of the claim, the Indemnified Person may do so, including employing legal counsel of its choice, at the indemnifying Party's expense. In any case, the indemnifying Party will pay or reimburse the Indemnified Person for all court costs, reasonable and necessary attorneys' fees and experts' fees relating to the claim and post any appeals bonds. (d) Limitation of Liability. Except for the acts of gross negligence or willful misconduct, the Parties (for themselves and their respective third party licensors, suppliers or contributors) exclude, to the fullest extent allowed by law, any liability, whether based in contract, tort (including negligence), or any other legal theory, for indirect, consequential (including lost profits and data), incidental, special or punitive damages of any kind, even if it has been advised of the possibility of such damages. Except for the acts of gross negligence or willful misconduct, FSS's maximum liability to Customer for damages arising out of or relating to the PPA, whether based in contract, tort (including negligence), or any other legal theory, will not exceed the amounts payable by Customer for the previous twelve (12) month period for the particular services giving rise to the cause of action. FSS shall obtain customary insurance for systems of similar size and Insurance technology as the System. Customer shall continue to maintain insurance for the location as is customary for its business. All disputes will be referred in the first instance to senior officers of **Disputes** FSS and Customer for resolution. If such persons cannot resolve the dispute, it shall be referred to arbitration. Arbitration shall be conducted by the Commercial Arbitration Rules of the American Arbitration Association standards in Delaware. The PPA will set forth the timetables for selecting the arbitrators and the conduct of all such proceedings. Arbitral awards shall be final and binding on the Parties. and, to the maximum extent permitted by applicable law, the Parties waive any right to appeal such award. For the purposes of injunctive relief, the Parties will submit to jurisdiction in the federal and state

courts located in Delaware.

Assignment	Neither Party shall have the right to assign the PPA or its respective rights and obligations there-under without the prior written consent of the other Party except that FSS may, without such consent, transfer, sell, pledge, encumber or assign title to the System, the PPA, or the accounts, revenues or proceeds thereof in connection with any financing or other financial arrangements; provided, further, that any such assignee shall be bound by the terms and conditions of the PPA and any other agreements by and between FSS and HOST.	
Governing Law	Delaware.	
Confidentiality	Any information deemed confidential and relating to this letter of intent or the PPA shall not be disclosed to any person not employed or retained by the Parties or their affiliates, except as required of FSS in relation to its financing or other financial arrangements. Any other exceptions to this confidentiality requirement shall be determined by the Parties and included in the PPA. The PPA shall also detail the rights and obligations of the Parties in the event of compelled disclosure. The Parties specifically agree that any press release or other public statement that addresses this letter of intent, the PPA, or the transactions contemplated herein shall be mutually agreed upon by the Parties.	

Town of Millbury		Future Solar Systems, Inc.
By:		By:
Name:		Name: James Dunn
Title:	9	Title: President
Date:		Date: