DOWNERS GROVE SANITARY DISTRICT GENERAL MANAGER'S REPORT December 7, 2018

December 10 Special Board Meeting

Copies of the following items are enclosed for the September 10, 2018 special meeting:

- 1) Proposed Agenda
- 2) Confidential briefing on potential litigation *under separate cover*
- 3) Memo and proposal for emergency repair of CHP No. 1
- 4) Agreement for repair of CHP No. 2

Also attached please find an extension from the Illinois Clean Energy Community Foundation of our \$500,000 net-zero energy grant agreement.

cc: WDVB, ASK, PWC, BOLI, TTC, WCC, MGP

DOWNERS GROVE SANITARY DISTRICT BOARD OF TRUSTEES SPECIAL MEETING DECEMBER 10, 2018 – 5:30 PM

PROPOSED AGENDA

- I. PUBLIC COMMENT
- II. EXECUTIVE SESSION POTENTIAL LITIGATION
- III. NEW BUSINESS
 - A. APPROVE EMERGENCY REPAIR CHP NO 1
 - B. APPROVE CHP NO 2 AGREEMENT

This attachment has been removed for its contents are currently confidential.

Board of Trustees Wallace D. Van Buren President

Amy S. Kovacevic Vice President

Paul W. Coultrap Clerk



2710 Curtiss Street P.O. Box 1412 Downers Grove, IL 60515-0703 Phone: 630-969-0664 Fax: 630-969-0827 www.dgsd.org General Manager Nicholas J. Menninga

Legal Counsel Michael G. Philipp

Providing a Better Environment for South Central DuPage County

Memo

To: Board of Trustees

From: Nick Menninga, General Manager

Date: December 7, 2018

Subject: Repair of CHP No. 1

The Liebherr engine on CHP No. 1 experienced a significant failure on November 9. A piston head melted, causing the unit to seize, and dispersing aluminum throughout the engine. Staff has been working to identify the cause of the failure, and options for repairing the unit and returning it to service. The unit was started up in 2014, and is no longer under warranty.

The failure appears to be associated with contaminants in the fuel, causing accumulation of deposits in the engine. We are further investigating the nature of the deposits, and the operation of the gas cleaning system, to identify measures needed to avoid a similar failure in the future.

We have evaluated two repair options, and one replacement option. The equipment was supplied by Tech-3 Solutions, who has secured trade agreements with their suppliers for exclusive sales of related repair parts and services. The first option is to conduct an engine overhaul in-house, with assistance from our local engine repair contractor. The cost of this option will exceed \$30,000 for parts alone, plus the cost of in-house and contract labor, with a total estimated cost around \$40,000. The expected schedule for this work would be to finish and restore operation in early January. While the parts are warranted, the engine itself would not have any sort of warranty going forward from this repair.

The second option considered is to have the engine re-manufactured at Liebherr's closest facility, located in Canada. The quote from Tech 3 for this work is attached, along with correspondence clarifying issues associated with the quote. The cost of this option is expected to be roughly \$62,000. The expected schedule of this option would be to restore operation in early to mid-January. The remanufactured engine comes with a one-year original factory warranty.

Replacement of the entire CHP unit has also been considered. This option includes replacement of the engine, generator, and cooling system with a more efficient unit similar to CHP No. 2, from a different manufacturer. This unit would generate an additional 115 kw using a similar amount of fuel, which would improve our ongoing operational costs by \$40,000 to \$60,000 per year. In addition, this improvement would be eligible for a ComEd energy efficiency grant of around \$170,000. However, the

purchase and installation cost would be at least \$650,000, and would take a year to 18 months to accomplish.

At this time, staff is recommending the re-manufacture option, as a robust option that keeps outstanding grant agreements in view. I will be seeking acceptance of the estimate proposed by Tech-3 Solutions Inc. for remanufacture of the CHP No. 1 engine in the amount of \$61,895.92, and for the general manager to issue a purchase order for the same.

C: JPB, MRM, WCC, MGP

Tech 3 Solutions Inc.

7301 SW 57 Court, Ste 400 South Miami, FL 33143 305-666-1910

Estimate

Date	Estimate No.
11/28/2018	18-166

Name/Address

DGSD 2710 Curtiss Street Downers Grove, IL 60515

		Proj	ject
Description	Qty	Rate	Total
Engine Remanufacture G 9408 w/ warranty Alternator coupling element replacement Sealing Kit G 9408 Installation including labor, travel, expenses (2 men 3	1 1 1 1	45,000.00 799.99 2,999.99 11,632.00	45,000.00 799.99 2,999.99 11,632.00
days on site) Sparkplug GK3-5 Thermalcouple Freight prepay and add Out-of-state sale, exempt from sales tax	8 8 1	72.99 109.99 0.00 0.00%	583.92 879.92 0.00 0.00
Customer to remove and send engine to rebuild center		Total	USD 61,895.82

Nick Menninga

From:	Preston Dickerson <pdickerson@tech3solutions.net></pdickerson@tech3solutions.net>
Sent:	Thursday, November 29, 2018 9:06 AM
То:	Nick Whitefleet
Cc:	Nick Menninga; Jeff Barta; Marc Majewski; Bill Smith; 'Marco Mattheis Tech 3 Solutions.
Cultin at	Inc.'
Subject:	RE: Quote
Attachments:	SKM_4750001120005600.pdf; 20181129_094047.jpg; 20181129_094023.jpg; 20181129_ 093828.jpg

Hi Nick – below I have tried to answer all of your questions from yesterday below. I have attached a quote that reflects the Reman of the engine and the re-install by Tech 3. The reinstall would also include all new seals for the engine connections as well as replacement of the thermal couples and alternator coupling rubber element, the remaining sensors can be reused when you remove the engine simply coil the wires up and label them.

If you choose to remove the engine and ship it out I would suggest to try and remove the thermal couples if you can, after several hours and heat they can be difficult to remove, if they are left in LEIBHERR may have to machine them out which they can do but they generally charge an additional fee for each head to do that.

The flat fee to do the reman is a typical rate for this model to do the reman. If the engine is severely damaged these fees can be higher but I think for now this should suffice, if this changes I would let you know.

Let me know any other questions that you may have.

Preston

From: Nick Whitefleet <nwhitefleet@dgsd.org>
Sent: Wednesday, November 28, 2018 3:26 PM
To: Preston Dickerson <pdickerson@tech3solutions.net>
Cc: Nick Menninga <nmenninga@dgsd.org>; Jeff Barta <jbarta@dgsd.org>; Marc Majewski <mmajewski@dgsd.org>; Bill
Smith <bsmith@dgsd.org>
Subject: RE: Quote

Preston,

Thank you for getting back to me and I appreciate the suggestion of the alternative option for getting our CHP back on line.

We would be interested in the possibility of going the route of a general overhaul performed by Liebherr in Canada. With that said, we would like it if you could provide us with a more detailed description of the scope of work provided by Liebherr.

-Complete disassembly teardown with cleaning -inspection and measurement of all components, any components out of spec are discarded and replaced - reassembled to original specifications with painting -original as new warranty

https://www.liebherr.com/en/usa/about-liebherr/service-services/reman-program/reman-programme.html#lightbox

(video attached of an engine rebuild process)

- Also attached are some pictures of what the engine looks like when it comes back

For example, does this rebuild include any work with the turbo/ intercooler, or is it limited to what is typically described as a "long block" or a "short block"? Greater clarification in this department would be greatly appreciated.

- The turbo and intercooler are separate since these are not LIEBHERR components, at this time neither your turbo nor intercooler should need any work, they were serviced when the heads were changed. Your new turbo can also be utilized if you prefer.

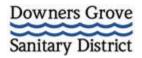
We would also like a detailed description of the warranty in regards to the length of it as well as the coverage. The engine comes with a full 1 year warranty as new

Finally regarding the removal and installation of the engine, could you provide a more detailed breakdown of the charges for labor as well as the availability of Tech 3 to perform the work? In the past this is generally 2 men 2-2.5 days to complete a reinstall and startup. We would obviously want Tech 3 Solutions to handle the installation of the rebuilt engine, but would likely be interested in handling the removal and shipping of the current engine in house as the engine is already mostly disassembled and close to being ready to remove. As I stated yesterday this is not a problem, I can send you a stand for this if you like for easy transport. If that is ok with you could you show the pricing for the labor to reflect that?

Please let me know if you have any questions or concerns that you need me to take care of to better help you put this proposal together. Otherwise I thank you again and look forward to hearing back from you.

Regards,

Nick Whitefleet Downers Grove Sanitary District 2710 Curtiss st Downers Grove, IL 60515 Ph# (630) 675-5563



From: Preston Dickerson [mailto:pdickerson@tech3solutions.net]
Sent: Wednesday, November 28, 2018 10:22 AM
To: Nick Whitefleet <<u>nwhitefleet@dgsd.org</u>>
Cc: Nick Menninga <<u>nmenninga@dgsd.org</u>>; Jeff Barta <<u>jbarta@dgsd.org</u>>; Marc Majewski <<u>mmajewski@dgsd.org</u>>; Bill
Smith <<u>bsmith@dgsd.org</u>>; 'Marco Mattheis Tech 3 Solutions. Inc.' <<u>mmattheis@tech3solutions.net</u>>
Subject: RE: Quote

Hi Nick – I am working on the pricing now, with the top end including the pistons and the heads. At this point we would recommend doing a general overhaul by pulling the engine and sending it to the LIEBHERR factory in Canada for service.

We have done this with several other G 9408 engines and the turnaround time from shipment to the facility back to the customer is generally 30 days. There are several reasons for this but most importantly I would like to highlight the following for you to consider with your colleagues:

1. Several parts have not been investigated thus far and a failure from them could cause damage to the engine even if it is rebuilt, some examples of these parts are: camshaft, pushrods, big end bearings, crankshaft.

- 2. The parts sold and the install is covered by warranty but a failure of these other parts listed in # 1 are not which is a situation we should avoid.
- 3. A general reman engine is covered by a full warranty
- 4. We can pull the engine in approx. 1 day- 1.5 days and send it out. Reinstall of the engine is about 2 days
- 5. Cost of the reman is generally less than the price of all of the parts added up individually
- 6. Work is performed in Canada, not Germany so freight and freight time is not very expensive

I have attached a vide of the reman process if you are interested. For this model engine the price of the reman is approx. \$45 k plus the removal and reinstall which is about \$ 10k along with some replacement of some gaskets and other small items.

https://www.liebherr.com/en/usa/about-liebherr/service-services/reman-program/reman-programme.html

If this is of interest to you please let me know and I can give a more exact estimate.

Preston

From: Nick Whitefleet <<u>nwhitefleet@dgsd.org</u>>
Sent: Monday, November 26, 2018 12:31 PM
To: Preston Dickerson <<u>pdickerson@tech3solutions.net</u>>
Cc: Nick Menninga <<u>nmenninga@dgsd.org</u>>; Jeff Barta <<u>jbarta@dgsd.org</u>>; Marc Majewski <<u>mmajewski@dgsd.org</u>>; Bill
Smith <<u>bsmith@dgsd.org</u>>
Subject: RE: Quote

Preston,

Greetings, thank you for getting this quote in to us.

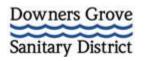
Could you please update the quote's quantity and pricing for 8 cylinder heads instead of just one? I will also need an oil pan gasket as well as a full set of "upper end" coolant gaskets.

We are also interested in pricing and availability for Tech 3 Solutions to provide the labor for the install of the quoted parts as well as additional parts already on site that are needed to reinstall for startup. We are also interested if Tech 3 offers any type of warranty if they supply the labor, and if so to what extent?

Please let me know at your earliest convenience as we are trying to get the engine back on line as soon as possible.

Regards,

Nick Whitefleet Downers Grove Sanitary District 2710 Curtiss st Downers Grove, IL 60515 Ph# (630) 675-5563



From: Preston Dickerson [mailto:pdickerson@tech3solutions.net]
Sent: Friday, November 23, 2018 8:35 AM
To: Nick Whitefleet <<u>nwhitefleet@dgsd.org</u>>
Cc: mmattheis@tech3solutions.net
Subject: RE: Quote

Hi Nick – attached is draft of the pricing for the set of 8 complete pistons with connecting rods and liners.

We have included 1 head but assume the others should be fine. We have included the hardware to remove the other heads and reinstall them as this will be needed to install the pistons. There is 1 seal I have to confirm with our factory which is the exhaust manifold gasket to re-attach these after the heads are back on the unit.

LIEBHERR did not indicate any lead time, in our experience these parts are typically available off the shelf pretty quickly. I would estimate 1-2 weeks from an order to final delivery to your facility unless LEIBHERR comes back with a lead time issue.

Preston

From: Preston Dickerson <<u>pdickerson@tech3solutions.net</u>>
Sent: Wednesday, November 21, 2018 3:58 PM
To: 'Nick Whitefleet' <<u>nwhitefleet@dgsd.org</u>>
Cc: 'mmattheis@tech3solutions.net' <<u>mmattheis@tech3solutions.net</u>>
Subject: Quote

Nick – as soon as I get the final scope back from Marco I will forward it, Marco can you send this to me Thursday morning?

Preston Dickerson Tech 3 Solutions, Inc. (305) 666-1910 7301 SW 57th CT Ste. 400 South Miami, FL 33143 USA Board of Trustees Wallace D. Van Buren President

Amy S. Kovacevic Vice President

Paul W. Coultrap Clerk



2710 Curtiss Street P.O. Box 1412 Downers Grove, IL 60515-0703 Phone: 630-969-0664 Fax: 630-969-0827 www.dgsd.org General Manager Nicholas J. Menninga

Legal Counsel Michael G. Philipp

Providing a Better Environment for South Central DuPage County

Memo

To: Board of Trustees

From: Nick Menninga, General Manager

Date: December 7, 2018

Subject: Settlement agreement for the repair of CHP No. 2

Attached find a settlement agreement staff has negotiated with Joseph J. Henderson & Son, Inc (JJH) and Nissen Energi Teknik (Nissen) to cover repair costs for the August failure of the engine on the subject equipment.

This agreement has been reviewed by our counsel at Seyfarth Shaw, LLP, who has indicated that this adequately captures the terms agreed to among the parties.

I will be seeking approval of this agreement at the December 10, 2018 special meeting, and for permission for the general manager and assistant clerk to sign the same.

C: BOLI, WCC, MGP

RELEASE AND SETTLEMENT AGREEMENT

This release and settlement agreement ("Agreement") is made and entered into by the Downers Grove Sanitary District ("DGSD"), Joseph J. Henderson & Son, Inc. ("JJH"), and Nissen Energy Teknik ("Nissen"), collectively the "Parties".

<u>RECITALS</u>

Whereas, DGSD and JJH entered into a contract ("Contract") for certain construction work on a project known as the Wastewater Treatment Center Phase 2 CHP Improvements (the "Project");

Whereas, the Project included the installation of a combined heat and power (CHP) system including a Nissen CHP engine (the "Engine");

Whereas, on August 13, 2018, the Nissen Engine purportedly experienced a failure, requiring the installation of a replacement engine (the "Replacement Engine"); and

Whereas, the Parties desire to terminate, settle, and compromise all claims between them relating to the performance of the Engine and the installation of the Replacement Engine.

The Parties hereby agree as follows:

TERMS AND CONDITIONS

1. <u>Release By DGSD</u>

Except for the obligations of the parties set forth in this Agreement, DGSD, together with its predecessors, successors, past and present affiliates, parents, subsidiaries, employees, attorneys, representatives, officers, directors, insurers, agents and assigns, do mutually hereby fully release, forever discharge, and covenant not to sue JJH and each of its past, present and future parents, predecessors, successors, subsidiaries, affiliates, joint venturers, partners (general or limited), shareholders, officers, directors, employees, agents, attorneys, insurers, representatives, members, and assigns, of and from all claims, demands, debts, liabilities, actions and causes of action, of every kind and nature, accrued and unaccrued, now known or hereafter discovered, at law or in equity, including but not limited to claims based upon breach of contract, warranty, tort, or any other claims resulting from, arising out of, or to arise out of, or connected with, directly or indirectly:

a. The alleged failure of the Engine on August 13, 2018 and any alleged damages arising therefrom, including damages that are certain or uncertain in amount; and

b. The replacement of the Engine and/or the installation of the Replacement Engine. Any previous warranties made or that could be construed to have been made against JJH, including those in the Contract, are deemed satisfied and now void solely with regard to the Engine and Replacement and each and every part of the total device or its replacement. Nothing hereunder shall otherwise be construed to waive any claims or limit any other warranty or guarantee under the Contract other than as such relates solely to the Engine and the Replacement Engine.

2. <u>Release By J.IH</u>

Except for the obligations of the parties set forth in this Agreement, JJH, together with its predecessors, successors, past and present affiliates, parents, subsidiaries, employees, attorneys, representatives, officers, directors, insurers, agents and assigns, do mutually hereby fully release, forever discharge, and covenant not to sue DGSD and Nissen and each of their past, present and future parents, predecessors, successors, subsidiaries, affiliates, joint venturers, partners (general or limited), shareholders, officers, directors, employees, agents, attorneys, insurers, representatives, members, and assigns, of and from all claims, demands, debts, liabilities, actions and causes of action, of every kind and nature, accrued and unaccrued, now known or hereafter discovered, at law or in equity, including but not limited to claims based upon breach of contract, warranty, tort, or any other claims resulting from, arising out of, or to arise out of, or connected with, directly or indirectly:

- a. The alleged failure of the Engine on August 13, 2018 and any alleged damages arising therefrom, including damages that are certain or uncertain in amount; and
- b. The replacement of the Engine and/or the installation of the Replacement Engine. Any previous warranties made or that could be construed to have been made against Nissen, including those in the Contract, are deemed satisfied and now void solely with regard to the Engine and Replacement and each and every part of the total device or its replacement.

3. <u>Release By Nissen</u>

Except for the obligations of the parties set forth in this Agreement, Nissen together with its predecessors, successors, past and present affiliates, parents, subsidiaries, employees, attorneys, representatives, officers, directors, insurers, agents and assigns, do mutually hereby fully release, forever discharge, and covenant not to sue DGSD and JJH and each of their past, present and future parents, predecessors, successors, subsidiaries, affiliates, joint venturers, partners (general or limited), shareholders, officers, directors, employees, agents, attorneys, insurers, representatives, members, and assigns, of and from all claims, demands, debts, liabilities, actions and causes of action, of every kind and nature, accrued and unaccrued, now known or hereafter discovered, at law or in equity, including but not limited to claims based upon breach of contract, warranty, tort, or any other claims resulting from, arising out of, or to arise out of, or connected with, directly or indirectly:

- a. The alleged failure of the Engine on August 13, 2018 and any alleged damages arising therefrom, including damages that are certain or uncertain in amount; and
- b. The replacement of the Engine and/or the installation of the Replacement Engine.

4. <u>Settlement Amount.</u>

In consideration of the releases set forth above, the Parties agree as follows:

- a. DGSD shall directly pay to Nissen \$40,000 for the Replacement Engine; and
- b. JJH shall pay directly to Nissen \$83,000 for the Replacement Engine.

The above payments represent a total payment to Nissen of \$123,000, equivalent to the cost of the Replacement Engine (\$189,000) less a credit of \$66,000 provided by Nissen (the "Credit").

5. <u>Manufacturer Written Warranty for the Replacement Engine.</u>

Upon receipt of payment by DGSD, Nissen shall execute and deliver to DGSD a manufacturer's written warranty and/or guarantee for the replacement or repair of the Replacement Engine, including any parts thereof, that may become defective or do not function properly, in the form of the warranty attached hereto as Exhibit A.

6. <u>Settlement Not an Admission of Liability.</u>

The Parties agree that the releases and covenants contained herein, and the payments and Credits required by this Agreement are not to be construed or deemed as an admission of liability, negligence, and/or fault or legal responsibility of any kind whatsoever by any Party, but are to be construed as a compromise and settlement of all disputes between the Parties hereto for the purpose of avoiding further controversy, litigation, and expense. The Parties specifically agree that each Party denies fault for the alleged failure of the Engine and any damages or warranties resulting therefrom, and that each Party agrees that they waive fault for any alleged failure of the engine caused by any other Party.

7. <u>Acknowledgement.</u>

The Parties acknowledge that facts may hereinafter be discovered in addition to or different from those which are now known or believed to be true with respect to all or any part of the subject matter of the releases contained in this Agreement, but that it is the Parties' clear and unequivocal intention to hereby effectuate fully, finally, and forever the settlement, release, and discharge of each and every claim specifically or generally covered by this release and that, in furtherance of said intention, any and all releases given by the Parties shall be and will remain, in full force and effect notwithstanding the discovery or existence of any additional or different facts.

8. <u>Entire Agreement.</u>

The Parties acknowledge that this Agreement sets forth the entire understanding of the Parties with respect to the subject matter of this Agreement. Further, this Agreement supersedes any and all agreements, either oral or in writing, between the parties with respect to the subject matter of this Agreement. In addition, any modification of the release shall be effective only if in writing, and signed by the party to be charged, or otherwise adversely affected thereby.

9. <u>Contractual Nature of Release.</u>

The Parties acknowledge and agree that the terms and conditions of this release are contractual and not mere recitals.

10. <u>Covenant Not to Sue</u>

The Parties agree that they will not bring or commence any action against each other any of the other Parties for any claim, action, cause of action, right or obligation released in this Agreement. This Agreement may be pled as a full and complete defense to any action, suit or other proceeding that may be instituted, prosecuted, or attempted in breach of the Releases in this Agreement.

11. <u>Enforcement of this Agreement</u>

The Parties hereto recognize that this instrument contains certain duties, promises and obligations. The Circuit Court of DuPage County, Illinois shall have the sole and exclusive jurisdiction, power and authority to resolve all issues and disputes arising from this Agreement. This Agreement shall be interpreted, construed and governed in accordance with, and under the laws of the State of Illinois.

12. <u>Severability</u>

In the event any of the provisions of this Agreement are deemed to be invalid and unenforceable, those provisions shall be severed from the remainder of this Agreement only if and to the extent agreed upon by the Parties in writing.

13. <u>Signature in Counterparts</u>

This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same Agreement. Copies of all or part of this Agreement, including signatures thereto, that are transmitted by facsimile or electronic mail shall be presumed valid. Facsimile, electronic or PDF transmitted signatures shall be deemed to have the full force and effect of original ink signatures.

14. <u>Authorship</u>

The Parties and their counsel each have contributed to this Agreement. No provision of this Agreement shall be construed against any Party by reason of authorship.

15. <u>Representations</u>

The Parties declare, warrant and represent that they have agreed to the terms of this Agreement. Each signatory of this Agreement declares, warrants and represents that he or she has the general and specific authority to enter into and execute this Agreement.

THIS IS A COMPLETE AND FINAL RELEASE OF ALL CLAIMS. BY SIGNING THIS DOCUMENT, YOU ARE FOREVER GIVING UP SUBSTANTIAL RIGHTS. FULLY READ AND UNDERSTAND THIS AGREEMENT BEFORE SIGNING.

Witness his hand and seal this _____ day of _____, 2018.

DOWNERS GROVE SANITARY DISTRICT JOSEPH J. HENDERSON & SON, INC.

Print / Title

Print / Title

Date: _

Date:

NISSEN ENERGY TEKNIK

Print / Title

Date: _

Nick Menninga

From:	ICECF Energy <mail@grantapplication.com></mail@grantapplication.com>
Sent:	Wednesday, December 5, 2018 10:37 AM
То:	Nick Menninga
Subject:	ICECF Grant Extension Approval - Request ID 7639

Mr. Nick Menninga General Manager Downers Grove Sanitary District 2710 Curtiss St Downers Grove, IL 60515

Re: Request ID: 7639 Combined Heat And Power Facilities Phase 2

Dear Mr. Menninga:

We received your request for an extension of the grant period for the above referenced project.

The Illinois Clean Energy Community Foundation accepts the proposed change to the terms of the grant for that project. The grant period is now November 1, 2016 through September 30, 2019.

All other terms and conditions of the grant, as defined in the grant agreement.

If you have any further questions about this grant, please contact Gabriela Martin at (312) 372-5191.

Sincerely,

Dennis F. O'Brien Executive Director