City of Duluth
Maintenance Operations
Fleet Services
4825 Mike Colalillo Drive, Duluth, MN 55807
218-730-4450
Inter-Department Correspondence

FROM: THOMAS ANDERSON

SUBJECT: REPLACEMENT OF UNIT #

DATE:

This purchase is part of a plan involving [1] exsisting vehicle(s).

New unit [3356] that will result in [0] net change in the number of vehdicles in our fleet.

Unit # [3356R2017*] will be sold at auction,traded in, or repurposed.

Unit # [ ] will be repurposed to replace unit # [ ]

Unit # [3356R2017*] will be replaced with the new vehicle purchase authorized here.

Unit # [3356R2017*] is [14] years old.

The 2014-2015 Fleet Study found that, in order to minimize total City vehicle costs for purchase and maintenance, vehicles of this kind should be replaced when they reach [12] years old.

This vehicle is [2] years beyond the recommended replacement ag
Attached is a vehicle lifecycle report outlining total cost of maintenance for review.

This vehicle was originally pruchased by the [ ] It was transferred to [ ] for continued City use.

* UNIT NUMBERS FOLLOWED BY "R" AND THEN A NUMBER ARE RETIRED. (Example 3356R2017)
THE NEW SYSTEM ALLOWS THE REUSE OF UNIT NUMBERS. R=RETIRED FOLLOWED BY THE YEAR.



UNIT	MAKE	MODEL	DESCRIPTION	YEAR	PURCHASE PRICE
3356	FREIGHTLINER	FL80	RDS DUMP BODY	2003	$119,199.00

PLACEMENT	MILES	AGE	MAIN FRAME TOTALS	EXPENSED TO DATE	% OF VALUE
STREET MAINTENANCE	67,656	14	$16,838.00	247,289.60	207%

Asset Life Cycle - Percent of Maintenance

Asset	Purchase Cost	Upfitting Cost	Total Cost	Maintenance Expense	Percent
Vehicle: 3356: 2003 Freightliner FL80	$119,199.00	$0.00	$119,199.00	$230,451.60	193%
Grand Total:	**$119,199.00**	**$0.00**	**$119,199.00**	**$230,451.60**	**193%**

MAINFRAME TOTAL $16,838.00

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www.crysteeltruck.com

AN EQUAL OPPORTUNITY EMPLOYER

May 12, 2017

Tom Anderson
City of Duluth
4825 Mike Colalillo Drive
Duluth, MN 55807-2731

Reference: Quote to install plow equipment and refurbished RDS Chassis Mounted Body on customer supplied cab chassis 2017 with 96"CA for Replacement Of unit Number 3356

Dear Tom:

Per your request we are pleased to quote the following equipment manufactured to current standards to include the following:

One (1) Install Crysteel refurbished Stainless Steel 10' RDS Dump Body
To include the following:
Refurbish 10' RDS body and cross conveyer
As needed to bring body to like new condition
Stainless Steel Cab Shield
½" Rubber belting on front and sides to cover pre wet
Hoist frame and front hitch blasted and painted
Add stainless Steel Extension to front top of
Hopper sloped to back of cab shield
Installed on suitable cab chassis $26590.95

Convert Monroe Hydraulic Pre Wet system to Hydraulic Closed Loop
to include All plumbing, enclosure, nozzles, Motor
and Feedback Turbine for hydraulic operation system to
be plumber for separate operation of driver side front
and rear spinner $ 3411.27

Falls 46B Style Front hitch w/ 4" Single Acting lift cylinder
Pressure relief Valve installed
Fall Front Plow TER1143
11' long Trip Edge
Snow Flap
Installed $15839.03

For Falls 9' Double function Wing with Monroe Para-Glide
Lift and hydraulic pusher cylinder. Includes Painting, Installation
Cutting edge and lock valves (work done at time of original Installation
Components as follows:
Falls TDL-9ATE Wing
Whelen Light on wing model WPLOW1A w/ switch
Mounted on dash

Wing hydraulic hose connections on Passenger Side located on top of plow frame	$15695.43
Plow Light (customer Specified) on Stainless Steel Mirror brackets Installed	$ 1163.57
Whelen Strobe System (customer Specified) Installed with Stainless Steel Boxes Mounted at rear of RDS box per Customer specification	$ 4798.89
LED Sander Light installed per customer spec's	$ 214.46
Mud Flaps installed front and rear of tire	$ 250.81
Federal Standard Camera System 56-NTCS-2 Installed per customer location	$ 1591.61
Force America Ultra Joy Stick Hydraulic control system Hot Shift PTO LS Pump 9 valve operations as follows: Hoist D/A, Plow lift D/A, Plow reverse D/A, Main conveyor w/reverse, Cross Conveyor w/reverse, Driver side spinner, and main rear Spinner Stainless Steel Valve enclosure vertical style Reservoir Stainless Steel with all filters, ball valve, Mounted in cab shield up rights Special hydraulic hose specified by customer Weather Head Frost 2B series 6100 Force Controller Installed	$40840.36
Loadshare Air bag installed on passenger side front For wing application	$ 1116.98
Equipment and installation	$111513.36

Note: For removal of RDS body from old cab chassis Add $ 1050.25

Note: Crysteel to offer a Trade-in value of $8500.00 for old City of Duluth Plow truck unit number 3356

Please look over this quote and if you have any questions, please give me a call at any time.

Sincerely,

Bob Brandenburg
Crysteel Truck Equipment

- **All prices are subject to applicable taxes**
- **Quotes are good for 30 days**

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Inter-Department Correspondence

FROM: THOMAS ANDERSON

SUBJECT: REPLACEMENT OF UNIT #

DATE:

This purchase is part of a plan involving [1] exsisting vehicle(s).

New unit [3357] that will result in [0] net change in the number of vehdicles in our fleet.

Unit # [3357R2017*] will be sold at auction,traded in, or repurposed.

Unit # [ ] will be repurposed to replace unit # [ ]

Unit # [3357R2017*] will be replaced with the new vehicle purchase authorized here.

Unit # [3357R2017*] is [12] years old.

The 2014-2015 Fleet Study found that, in order to minimize total City vehicle costs for purchase and maintenance, vehicles of this kind should be replaced when they reach [12] years old.

This vehicle is [0] years beyond the recommended replacement ag
Attached is a vehicle lifecycle report outlining total cost of maintenance for review.

This vehicle was originally pruchased by the [ ] It was transferred to [ ] for continued City use.

* UNIT NUMBERS FOLLOWED BY "R" AND THEN A NUMBER ARE RETIRED. (Example 3356R2017)
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UNIT	MAKE	MODEL	DESCRIPTION	YEAR	PURCHASE PRICE
3357	MACK	CV712	RDS DUMP BODY	2005	$149,262.00

PLACEMENT	MILES	AGE	MAIN FRAME TOTALS	EXPENSED TO DATE	% OF VALUE
STREET MAINTENANCE	62,136	12	$0.00	$192,437.23	129%

Asset Life Cycle - Percent of Maintenance

Asset	Purchase Cost	Upfitting Cost	Total Cost	Maintenance Expense	Percent
Vehicle: 3357: 2005 MACK CV712	$149,262.00	$0.00	$149,262.00	$192,437.23	129%
Grand Total:	**$149,262.00**	**$0.00**	**$149,262.00**	**$192,437.23**	**129%**

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May 12, 2017

Tom Anderson
City of Duluth
4825 Mike Colalillo Drive
Duluth, MN 55807-2731

Reference: Quote to install plow equipment and refurbished RDS Chassis Mounted Body on customer supplied cab chassis 2017 with 96"CA for Replacement Of unit Number 3357

Dear Tom:

Per your request we are pleased to quote the following equipment manufactured to current standards to include the following:

One (1) Install Crysteel refurbished Stainless Steel 10' RDS Dump Body
To include the following:
Refurbish 10' RDS body and cross conveyer
As needed to bring body to like new condition
Stainless Steel Cab Shield
½" Rubber belting on front and sides to cover pre wet
Hoist frame and front hitch blasted and painted
Add stainless Steel Extension to front top of
Hopper sloped to back of cab shield
Installed on suitable cab chassis $26590.95

Convert Monroe Hydraulic Pre Wet system to Hydraulic Closed Loop
to include All plumbing, enclosure, nozzles, Motor
and Feedback Turbine for hydraulic operation system to
be plumber for separate operation of driver side front
and rear spinner $ 3411.27

Falls 46B Style Front hitch w/ 4" Single Acting lift cylinder
Pressure relief Valve installed
Fall Front Plow TER1143
11' long Trip Edge
Snow Flap
Installed $15839.03

For Falls 9' Double function Wing with Monroe Para-Glide
Lift and hydraulic pusher cylinder. Includes Painting, Installation
Cutting edge and lock valves (work done at time of original Installation
Components as follows:
Falls TDL-9ATE Wing
Whelen Light on wing model WPLOW1A w/ switch
Mounted on dash

Wing hydraulic hose connections on Passenger Side located on top of plow frame	$15695.43
Plow Light (customer Specified) on Stainless Steel Mirror brackets Installed	$ 1163.57
Whelen Strobe System (customer Specified) Installed with Stainless Steel Boxes Mounted at rear of RDS box per Customer specification	$ 4798.89
LED Sander Light installed per customer spec's	$ 214.46
Mud Flaps installed front and rear of tire	$ 250.81
Federal Standard Camera System 56-NTCS-2 Installed per customer location	$ 1591.61
Force America Ultra Joy Stick Hydraulic control system Hot Shift PTO LS Pump 9 valve operations as follows: Hoist D/A, Plow lift D/A, Plow reverse D/A, Main conveyor w/reverse, Cross Conveyor w/reverse, Driver side spinner, and main rear Spinner Stainless Steel Valve enclosure vertical style Reservoir Stainless Steel with all filters, ball valve, Mounted in cab shield up rights Special hydraulic hose specified by customer Weather Head Frost 2B series 6100 Force Controller Installed	$40840.36
Loadshare Air bag installed on passenger side front For wing application	$ 1116.98
Equipment and installation	$111513.36

Note: For removal of RDS body from old cab chassis Add $ 1050.25

Note: Crysteel to offer a Trade-in value of $12,500.00 for old City of Duluth Plow truck unit number 3357

Please look over this quote and if you have any questions, please give me a call at any time.

Sincerely,

Bob Brandenburg
Crysteel Truck Equipment

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FROM: THOMAS ANDERSON

SUBJECT: REPLACEMENT OF UNIT #

DATE:

This purchase is part of a plan involving [1] exsisting vehicle(s).

New unit [3358] that will result in [0] net change in the number of vehdicles in our fleet.

Unit # [3358R2017*] will be sold at auction,traded in, or repurposed.

Unit # [ ] will be repurposed to replace unit # [ ]

Unit # [3358R2017*] will be replaced with the new vehicle purchase authorized here.

Unit # [3358R2017*] is [12] years old.

The 2014-2015 Fleet Study found that, in order to minimize total City vehicle costs for purchase and maintenance, vehicles of this kind should be replaced when they reach [12] years old.

This vehicle is [0] years beyond the recommended replacement ag
Attached is a vehicle lifecycle report outlining total cost of maintenance for review.

This vehicle was originally pruchased by the [ ] It was transferred to [ ] for continued City use.

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UNIT	MAKE	MODEL	DESCRIPTION	YEAR	PURCHASE PRICE
3358	MACK	CV712	RDS DUMP BODY	2005	$147,811.00

PLACEMENT	MILES	AGE	MAIN FRAME TOTALS	EXPENSED TO DATE	% OF VALUE
STREET MAINTENANCE	52,766	12	$0.00	$220,285.99	149%

Asset Life Cycle - Percent of Maintenance

Asset	Purchase Cost	Upfitting Cost	Total Cost	Maintenance Expense	Percent
Vehicle: 3358: 2005 MACK CV712	$147,811.00	$0.00	$147,811.00	$220,285.99	149%
Grand Total:	**$147,811.00**	**$0.00**	**$147,811.00**	**$220,285.99**	**149%**

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May 12, 2017

Tom Anderson
City of Duluth
4825 Mike Colalillo Drive
Duluth, MN 55807-2731

Reference: Quote to install plow equipment and refurbished RDS Chassis Mounted Body on customer supplied cab chassis 2017 with 96"CA for Replacement Of unit Number 3358

Dear Tom:

Per your request we are pleased to quote the following equipment manufactured to current standards to include the following:

One (1) Install Crysteel refurbished Stainless Steel 10' RDS Dump Body
To include the following:
Refurbish 10' RDS body and cross conveyer
As needed to bring body to like new condition
Stainless Steel Cab Shield
½" Rubber belting on front and sides to cover pre wet
Hoist frame and front hitch blasted and painted
Add stainless Steel Extension to front top of
Hopper sloped to back of cab shield
Installed on suitable cab chassis $26590.95

Convert Monroe Hydraulic Pre Wet system to Hydraulic Closed Loop
to include All plumbing, enclosure, nozzles, Motor
and Feedback Turbine for hydraulic operation system to
be plumber for separate operation of driver side front
and rear spinner $ 3411.27

Falls 46B Style Front hitch w/ 4" Single Acting lift cylinder
Pressure relief Valve installed
Fall Front Plow TER1143
11' long Trip Edge
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Installed $15839.03

For Falls 9' Double function Wing with Monroe Para-Glide
Lift and hydraulic pusher cylinder. Includes Painting, Installation
Cutting edge and lock valves (work done at time of original Installation
Components as follows:
Falls TDL-9ATE Wing
Whelen Light on wing model WPLOW1A w/ switch
Mounted on dash

Wing hydraulic hose connections on Passenger Side located on top of plow frame		$15695.43
Plow Light (customer Specified) on Stainless Steel Mirror brackets Installed		$ 1163.57
Whelen Strobe System (customer Specified) Installed with Stainless Steel Boxes Mounted at rear of RDS box per Customer specification		$ 4798.89
LED Sander Light installed per customer spec's		$ 214.46
Mud Flaps installed front and rear of tire		$ 250.81
Federal Standard Camera System 56-NTCS-2 Installed per customer location		$ 1591.61
Force America Ultra Joy Stick Hydraulic control system Hot Shift PTO LS Pump 9 valve operations as follows: Hoist D/A, Plow lift D/A, Plow reverse D/A, Main conveyor w/reverse, Cross Conveyor w/reverse, Driver side spinner, and main rear Spinner Stainless Steel Valve enclosure vertical style Reservoir Stainless Steel with all filters, ball valve, Mounted in cab shield up rights Special hydraulic hose specified by customer Weather Head Frost 2B series 6100 Force Controller Installed		$40840.36
Loadshare Air bag installed on passenger side front For wing application		$ 1116.98
	Equipment and installation	$111513.36
Note: For removal of RDS body from old cab chassis	Add	$ 1050.25

Note: Crysteel to offer a Trade-in value of $12,500.00 for old City of Duluth Plow truck unit number 3358

Please look over this quote and if you have any questions, please give me a call at any time.

Sincerely,

Bob Brandenburg
Crysteel Truck Equipment

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