

**COUNTY OF ERIE  
SETTLEMENT WITH TOWNS  
REAL PROPERTY TAX SERVICES**

2015

**SETTLEMENT WITH JOHANNA COLEMAN, TOWN CLERK  
TOWN OF LANCASTER, 2015**

TOWN SHARE COUNTY SHARE  TOTAL WARRANT EXCESS (ADD) DEFICIENCY(SUBTRACT)  TOTAL SPREAD  TAXPAYERS' PENALTY TAXPAYERS' INTEREST SERVICE CHARGE-PAID SERVICE CHARGE UNPAID	20,367,489.20 21,188,943.17  41,556,432.37 59.04  41,556,491.41  42,579.92 3,872.62 192.00 516.00	PD SUPERVISOR: TAX COLLECTIONS TAXPAYERS' PENALTY PD S/CHARGE-PD & UNPAID  TOT PD SUPERVISOR  PD COMMISSIONER: CORPORATIONS SERVICE FEE UNPAID SCHOOL ESCROW COLLECTOR OTHER  TOT PD COMMISSIONER  RETURNED UNCOLLECTED  SUBTOTAL  (DUE TO COUNTY) DUE TO COLLECTOR	20,367,489.20 \$ 42,579.92 192.00  20,410,261.12  928,306.75 516.00 41,090.58 18,932,959.63 3,182.54  19,906,055.50  1,287,335.33  41,603,651.95  0.00
	41,603,651.95 =====		41,603,651.95 =====

7/14/15 *Nancy C Grant*  
 DATE SUPERVISING ACCOUNTANT  
 REAL PROPERTY

7/24/15 *Johanna Coleman*  
 DATE RECEIVER OF TAXES  
 Johanna Coleman

527



Cori Greenawalt

Lancaster, NY 14086

July 27, 2015

Lancaster Town Board  
21 Central Avenue  
Lancaster, NY 14086

Dear Lancaster Town Board Members and To Whom it May Concern,

Thank you for taking the time to read my request. I am writing as a concerned resident in the Pleasant Meadows Subdivision and on behalf of my neighbors. We would like to begin the process of having a stop sign installed on the corner of Juniper Blvd. and Sterling Place for cars traveling north and south on Juniper Blvd. While we enjoy the convenience of having Juniper Blvd. open from Pleasantview to Walden Ave., we are concerned about the high speed at which some cars travel. My backyard backs up to Juniper Blvd. so I have watched several cars traveling at a high rate of speed and I also witness several people and children cross the street multiple times daily. The Lancaster Police Department does a wonderful job of keeping our community safe and driving through daily as well, but can't be here all day.

Please consider looking in to my request and advise me on what next steps can be taken to ensure the safety of our community. Thank you again for your time! I can be reached at [redacted] or emailed at [redacted]. I also invite you to stop by at your convenience if you would like to take a closer look at the area.

Sincerely,

*Cori Greenawalt*  
*(Newhouse)*

Cori Greenawalt

528

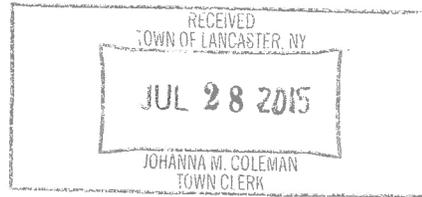
**Donna Martin**

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**From:** Jeffrey Smith <JSmith  
**Sent:** Tuesday, July 28, 2015 12:01 PM  
**To:** dmartin  
**Subject:** RE: Firework permit

Donna,

After reviewing the fireworks permit for the Fox Valley Country Club for 8/1/2015 and inspecting the proposed site, the Lancaster Police Department has no objection to granting the permit pursuant to Chapter 3 of the Lancaster Town Code.



JOHANNA M. COLEMAN, TOWN CLERK  
TOWN OF LANCASTER  
21 CENTRAL AVE  
LANCASTER, N.Y. 14086  
AREA CODE 1-716 683-9028

COPY

July 28, 2015

Laura Jedlikowski  
The Fox Valley Country Club  
6161 Genesee Street  
Lancaster, New York 14086

Dear Ms. Jedlikowski:

Your application for the Public Display of Fireworks permit to be conducted at The Fox Valley Country Club on August 1, 2015 was approved. Enclosed is your permit for a fireworks display on August 1, 2015 between the hours of 9:00 P.M. and 11:00 P.M.

By copy of this letter I hereby direct the Millgrove Fire Chief to inspect the premises wherein said display will take place to see that the execution of the work so authorized by said permit shall be done in conformity with approved plans and specifications and the existing standards, rules and regulations applicable thereto.

Sincerely yours,

OFFICE OF THE TOWN CLERK

  
Johanna M. Coleman  
Town Clerk

JMC/dm  
Encl.

- cc: G. Gill, Police Chief
- Millgrove Fire Chief
- J. Dudziak, Town Attorney
- Town Board
- M. Shaw, Skylighters of New York, LLC

File: Permit/Fireworks Permit Letter.doc

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JOHANNA M. COLEMAN, TOWN CLERK  
TOWN OF LANCASTER  
21 CENTRAL AVE  
LANCASTER, N.Y. 14086  
AREA CODE 1-716 683-9028

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**FIREWORKS PERMIT**  
**TOWN OF LANCASTER**

Pursuant to Local Law No. 1 of the Year 2012 of the Town of Lancaster, and Penal Law Section 405 of the State of New York,

**Skylighters of New York LLC, P.O. Box 1357, Orchard Park, New York, 14127** is hereby granted permission for a public display of fireworks at 6161 Genesee Street, Lancaster, New York, on August 1, 2015 in accordance with all the terms, conditions, and diagrams, contained in the "Request for Fireworks Display Permit" on file in the Office of the Town Clerk of the Town of Lancaster.

This permit expires at 11:00 P.M. on the date specified herein. Any display after 11:00 P.M. is not authorized by this permit.

TOWN OF LANCASTER



Johanna M. Coleman  
Town Clerk

Seal

Dated: July 28, 2015

cc: Gerald J. Gill, Jr., Police Chief, Town of Lancaster  
Robert Poeller, Millgrove Fire Chief  
John Dudziak, Town Attorney  
Town Board  
M. Shaw, Skylighters of New York, LLC  
File: fire wks prmt

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# Town of Lancaster

OFFICE OF THE TOWN ATTORNEY

21 Central Avenue  
Lancaster, New York 14086  
PHONE: (716) 684-3342  
FAX: (716) 681-7475

**JOHN M. DUDZIAK**

*Town Attorney*  
jdudziak@lancasterny.com

**Kevin E. Loftus**  
*Deputy Town Attorney*

**Leza E. Braun**  
*Clerk Typist*  
lezabraun@lancasterny.com

## MEMO

**To:** Supervisor, Town Board Members, Planning Board Members, Building Inspector, Town Engineer, and Town Clerk

**From:** John M. Dudziak, Town Attorney

**Date:** July 28, 2015

**Subject:** **SEQR Review – Rezone: 6525 & 6529 Broadway; NB to GB**  
**AND**  
**Rezone & Sketch Plan: 0 Walden Ave, NB to MFR-3;**  
**Walden Ave Patio Homes #5022**

### PLEASE NOTE:

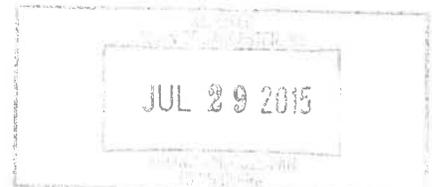
There will be a SEQR Review Meeting regarding the above-referenced projects on **Monday, August 3, 2015 at 6:00 P.M.** in the Town Hall located at 21 Central Avenue, Lancaster, New York.

Please note there are two (2) EAFs for the Walden Avenue project; the long form is for the rezone part and the short form is for the subdivision part. The two aspects should be reviewed simultaneously under SEQR.

If you have any questions please feel free to this office.

Encs.

CC: David Pawlik, (w/o enc.)  
Kenneth Zollitsch, P.E (w/o enc.)



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**SUPERVISOR**

Dino J. Fudoli

**COUNCIL MEMBERS**

John M. Abraham Jr.  
Ronald Ruffino Sr  
Donna G. Stempniak

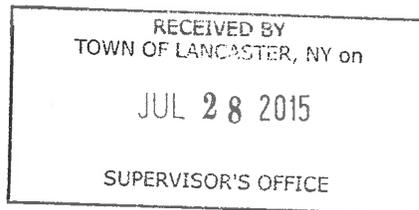


Department of Parks,  
Recreation & Forestry

**Park Crew Chief**  
Mark D. Lubera

525 Pavement Road  
Lancaster, NY 14086  
716-684-3320 phone  
716-685-3497 fax

July 28, 2015



Supervisor Dino J. Fudoli  
And Honorable Council Members  
Town of Lancaster  
21 Central Avenue  
Lancaster, NY 14086

Dear Supervisor Fudoli and Honorable Council Members:

I respectfully submit the following individuals for your consideration to be appointed to the position of part-time temporary seasonal employee for the summer of 2015 in the Parks, Recreation & Forestry Department, without benefits.

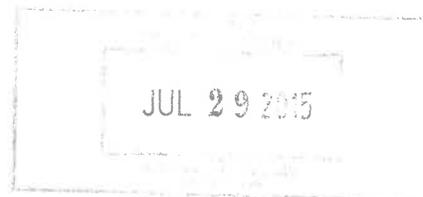
<u>NAME</u>	<u>POSITION</u>	<u>PAY RATE/HR.</u>
Miranda Hardy (new hire) Lancaster, NY 14086	Recreation Attendant (Girls Basketball Worker)	\$10.00
Joshua Pijacki (new hire) Bowmansville, NY 14026	Recreation Attendant (Boys Basketball Worker)	\$10.00

These appointments are to be retro-active to July 20, 2015. Should you approve, I would like to request that a resolution be placed on the agenda for Monday, August 3, 2015 Town Board meeting.

Sincerely,

Mark D. Lubera  
Park Crew Chief

MDL:sg



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JOHANNA M COLEMAN TOWN CLERK  
TOWN OF LANCASTER  
21 CENTRAL AVE  
LANCASTER NY 14086  
AREA CODE 1-716 683-9028

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July 29, 2015

Buffalo News  
Lancaster Correspondent  
1 News Plaza  
Buffalo, New York 14240

Lancaster Bee  
5564 Main St  
Williamsville, New York 14221

Lancaster Source  
75 Boxwood Lane  
Cheektowaga, New York 14227

COPY

**NOTICE OF SPECIAL MEETING OF THE TOWN BOARD AND PLANNING BOARD OF THE TOWN OF LANCASTER**

Notice is hereby given that the Municipal Review Committee, comprised of the Town Board and the Planning Board of the Town of Lancaster, will hold a meeting on Monday, August 3, 2015 at 6:00 P.M. at the Town Hall, 21 Central Avenue, Lancaster, New York for the SEQRA Review: Rezone – 6525 & 6529 Broadway and the SEQRA Review: Rezone & Sketch Plan - 0 Walden Avenue.

Thank you for your cooperation in disseminating this information to the public. Please call me at 683-9028 if you have any questions.

Sincerely yours,

OFFICE OF THE TOWN CLERK

  
Johanna M. Coleman, Town Clerk

DMT/dt  
cc: Town Board

**NOTE:** Post on Town Clerk's Bulletin Board

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**TOWN OF LANCASTER  
HIGHWAY DEPARTMENT  
525 PAVEMENT ROAD  
LANCASTER, NY 14086**

**Daniel Amatura  
Highway Superintendent  
Tel (716)683-3426  
Fax (716)685-0271**

**COMMUNICATIONS**

July 27, 2015

Honorable Town Board  
21 Central Avenue  
Lancaster, NY 14086

Re: 2015 Caterpillar 938M Loader

Dear Honorable Town Board Members:

I would appreciate your support in sponsoring a resolution to purchase one new and unused 2015 Caterpillar 938M Loader. This loader will be purchased off of New York State Contract PC65318, Group # 40603. The State vendor is Milton Cat, 4610 East Saile Drive, Batavia, New York. The price of this loader is \$167,058.00 and we will be trading in our 2007 John Deere 624J Loader, Serial #DW6247Z604963 in the amount of 58,000.00 making the total amount due of 109,058.00. This 2015 Caterpillar will be paid for out of the bond authorized May 18, 2015 for Highway Equipment.

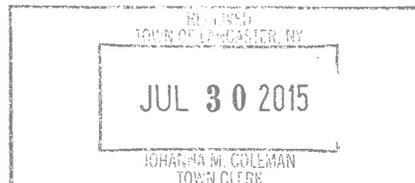
Should you need any further information regarding this subject, please do not hesitate to contact me.

Respectfully yours,

Daniel Amatura  
Highway Superintendent  
Town of Lancaster

RLR/mb

Cc: John Dudziak, Town Attorney  
Dino Fudoli, Supervisor  
Johanna Coleman, Town Clerk





4610 East Saile Drive Batavia, NY 585-815-6200	294 Ainsley Drive Syracuse, NY 315-476-9981	500 Commerce Dr. Clifton Park, NY 518-877-8000	55 Industrial Park Dr. Binghamton, NY 607-772-6500
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New York State Contract-- Group # 40603 – Wheel Loaders

Award Number – 22063

Contract Number - PC 65318

Contract Period: December 1, 2010 to October 31, 2015

# Town of Lancaster Hwy Dept

## 2015 CATERPILLAR 938M

182 SAE max. net horsepower, performance mode per SAE J1349, Tier 4 Final emissions, hydrostatic drive, Bridgestone VJT\*radial 20.5Rx25 L-3 tread tires, deluxe cab, tilt and telescoping steering wheel, air suspension seat with 3” seat belt, automatic temperature heat and air conditioning, electronic parking brake, front and rear windshield wipers and washers, 3 valves with a joystick control lever and remote FNR switch, front axle hydraulic differential lock, *dual interior and dual heated power exterior mirrors*, back up alarm, 115 amp alternator, 4 front cab mounted work lights and 4 rear grill mounted work lights, roading lights, front fenders, *JRB quick coupler*, *GEM 3.0 C.Y. multi-purpose loader bucket with bolt on cutting edges*, heavy counterweight, *extended cover fenders*, side power train guard, Bluetooth, am/fm, aux, mic radio, ride control, beacon strobe, parts-operator’s-maintenance manuals, all manufacturers standard equipment. Warranty – 3 year Premier Coverage EPP.

Net sell price-	- - - - -	\$167,058.00
Less trade – Deere 624J	- - - - -	<u>\$58,000.00</u>
Total delivered price	- - - - -	\$109,058.00



# Cat<sup>®</sup> 938M

## WHEEL LOADER

### M SERIES – MAKING YOUR CHOICE EASY:

- Enjoy All Day Comfort** – Have a seat in the new M Series Small Wheel Loader and enjoy automatic temperature control, class leading sound levels, excellent all around visibility and low-effort joystick controls that move with you on a fully adjustable seat suspension. A large spacious operator environment combined with Caterpillar's exclusive hydraulic cylinder damping and smooth predictable controls make this the most comfortable seat on your job site.
- Work Made Easy** – Move more with Caterpillar's patented quick loading Performance Series buckets and optimized Z-bar linkage that combines the digging efficiency of a traditional Z-bar with tool carrier capabilities. The parallel lift and high tilt forces throughout the working range allow you to safely and confidently handle loads with precise control.

Multi-function work has never been easier with dedicated pumps for each system and a flow sharing implement valve governed by an intelligent power management system. Simultaneously lift, steer and drive without compromise. The M Series Small Wheel Loader simply does what you ask it to do.

- Efficiently Powerful** – Experience hybrid like fuel efficiency with an intelligent hydrostatic power train and industry leading fuel savings through a lower maximum engine speed of just 1,600 rpm in Standard Mode. Power when you need it with Caterpillar's exclusive Power-by-Range technology that increases power in Range 4 for improved speed on grade. For your toughest and most demanding applications a new Performance Mode will allow you to boost the power and hydraulic speed in all Ranges to get the job done even quicker. Meets U.S. EPA Tier 4 Final/EU Stage IV emission standards with a Cat<sup>®</sup> C7.1 ACERT<sup>™</sup> engine that is designed to manage itself so you can concentrate on your work.
- Customize Your Experience** – Meet your application requirements and individual preferences with Caterpillar's industry first Hystat<sup>™</sup> Operator Modes featuring four unique power train settings. Select classic Torque Converter for smooth rollout, conventional Hystat for aggressive engine braking, an Ice Mode that maximizes your control on slippery underfoot, or default mode which blends the best of Hystat and Torque Converter characteristics. Fine tune machine performance with adjustments at your fingertips through the soft touch buttons and optional secondary display. Quickly set hydraulic response along with linkage kick-out positions, maximum wheel torque, and peak ground speed to efficiently perform a multitude of tasks.

## Specifications

### Engine

Engine Model	Cat C7.1 ACERT			
Power Mode	Standard Mode	Performance Mode		
Speed Range	Range 1-3*		Range 1-4	
Maximum Gross Power				
Maximum Engine Speed	1,600 rpm		1,800 rpm	
ISO 14396	129 kW	173 hp	140 kW	188 hp
ISO 14396 (DIN)	129 kW	175 hp	140 kW	190 hp
Rated Net Power	1,600 rpm		1,800 rpm	
SAE J1349	125 kW	168 hp	136 kW	182 hp
SAE J1349 at				
Maximum Fan Speed	114 kW	153 hp	125 kW	168 hp
ISO 9249 (DIN)	126 kW	171 hp	137 kW	186 hp

### Engine (continued)

	Standard Mode		Performance Mode	
Maximum Gross Torque				
ISO 14396	879 N-m	648 lbf-ft	879 N-m	648 lbf-ft
Maximum Net Torque				
SAE J1349	843 N-m	621 lbf-ft	843 N-m	621 lbf-ft
ISO 9249 (1977)/EEC 80/1269	852 N-m	628 lbf-ft	852 N-m	628 lbf-ft
Displacement	7.01 L	427 in <sup>3</sup>	7.01 L	427 in <sup>3</sup>

- Engine meets Tier 4 Final/Stage IV emission standards.
  - Net power shown is the power available at the flywheel when the engine is equipped with alternator, air cleaner and diesel exhaust filter.
- \*Range 4 power is boosted to be the same as Performance Mode.



# 938M Wheel Loader

## Buckets

Bucket Capacities – General Purpose	2.5-3.2 m <sup>3</sup>	3.2-4.2 yd <sup>3</sup>
Bucket Capacities – Light Material	3.1-5.0 m <sup>3</sup>	4.0-6.5 yd <sup>3</sup>

## Steering

Steering Articulation Angle (each direction)	40°	
Maximum Flow – Steering Pump	130 L/min	34 gal/min
Maximum Working Pressure – Steering Pump	24 130 kPa	3,500 psi
Maximum Steering Torque:		
0 degrees (straight machine)	57 630 N·m	42,506 lbf·ft
40 degrees (full turn)	42 570 N·m	31,398 lbf·ft
Steering Cycle Times (full left to full right):		
At 1,800 rpm: 90 rpm steering wheel speed	2.3 seconds	
Number of Steering Wheel Turns – full left to full right or full right to full left	3.3 turns	

## Loader Hydraulic System

Maximum Flow – Implement Pump	190 L/min	50 gal/min
3rd Function Maximum Flow*	190 L/min	50 gal/min
4th Function Maximum Flow*	160 L/min	42 gal/min
Maximum Working Pressure – Implement Pump	28 000 kPa	4,061 psi
Relief Pressure – Tilt Cylinder	30 000 kPa	4,351 psi
3rd Function Maximum Working Pressure	28 000 kPa	4,061 psi
4th Function Maximum Working Pressure	28 000 kPa	4,061 psi
Hydraulic Cycle Times:	Standard Mode	Performance Mode
	At 1,600 rpm	At 1,800 rpm
Raise (ground level to maximum lift)	6.2 seconds	5.5 seconds
Dump (at maximum lift height)	1.7 seconds	1.5 seconds
Float Down (maximum lift to ground level)	2.7 seconds	2.7 seconds
Total Cycle Time	10.6 seconds	9.7 seconds

\*Adjustable from 20% to 100% of maximum flow through the secondary display, when equipped.

## Service Refill Capacities

Fuel Tank	195 L	51.5 gal
Cooling System	32 L	7.9 gal
Engine Crankcase	20 L	5.3 gal
Transmission (gearbox)	11 L	2.9 gal
Axles:		
Front	35 L	9.2 gal
Rear	35 L	9.2 gal
Hydraulic System (including tank)	170 L	44.9 gal
Hydraulic Tank	90 L	23.8 gal
Diesel Exhaust Fluid (DEF) Tank	19 L	5 gal

- DEF used in Cat SCR systems must meet the requirements outlined in the International Organization for Standardization (ISO) standard 22241-1.

## Transmission

Forward and Reverse:		
Range 1*	1-13 km/h	0.6-8 mph
Range 2	13 km/h	8 mph
Range 3	27 km/h	17 mph
Range 4	40 km/h	25 mph

\*Creeper control allows maximum speed range adjustability from 1 km/h (0.6 mph) to 13 km/h (8 mph) in Range 1 through the secondary display, when equipped. Factory default is 7 km/h (4.4 mph).

## Tires

Standard Size	20.5 R25, radial (L-3)	
Other Choices Include:	20.5 R25, radial (L-2)	23.5 R25, radial (L-3)
	20.5 R25, radial (L-5)	650/65 R25 radial (L-3)
	20.5-25 12PR (L-2)	Skidder/Agriculture
	20.5-25 12PR (L-3)	Flexports Gen II
	20.5-25 16PR (L-5)	

- Other tire choices are available. Contact your Cat dealer for details.
- In certain applications, the loader's productive capabilities may exceed the tire's tonnes-km/h (ton-mph) capabilities.
- Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model.

## Cab

ROPS	SAE J1040 MAY94, ISO 3471-1994
FOPS	SAE J/ISO 3449 APR98, Level II, ISO 3449 1992 Level II

- Cab and Rollover Protective Structures (ROPS) are standard in North America and Europe.
- The declared dynamic operator sound pressure levels per ISO 6396:2008\*, when properly installed and maintained, are:
  - Standard cab: 68 ±3 dB(A)
  - Deluxe cab: 66 ±2 dB(A)

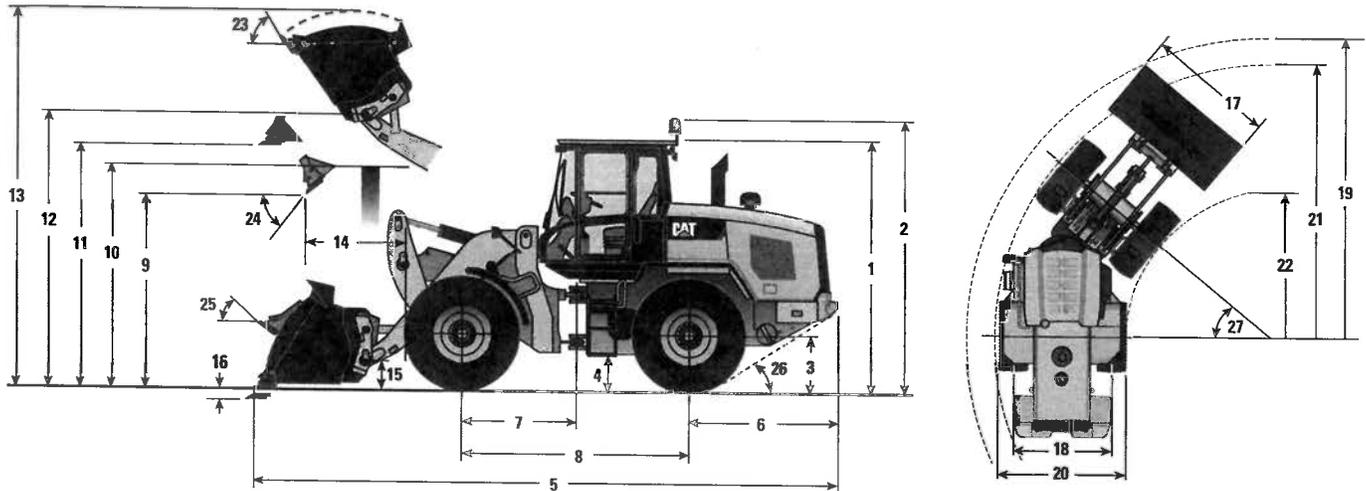
\*The measurements were conducted with the cab doors and windows closed and at 70% of the maximum engine cooling fan speed. The sound level may vary at different engine cooling fan speeds.

## Axles

Front	Fixed
	Locking differential (standard)
Rear	Oscillating ±11 degrees
	Open differential (standard)
	Limited slip differential (optional)

# 938M Wheel Loader

## Dimensions and Operating Specifications (All dimensions are approximate. Dimensions vary with bucket and tire choice.)



	Standard Lift		High Lift	
** 1 Height: Ground to Cab	3340 mm	(10'11")	3340 mm	(10'11")
** 2 Height: Ground to Beacon	3669 mm	(12'0")	3669 mm	(12'0")
** 3 Height: Ground Axle Center	685 mm	(2'2")	685 mm	(2'2")
** 4 Height: Ground Clearance	386 mm	(1'3")	386 mm	(1'3")
* 5 Length: Overall	7656 mm	(25'1")	8397 mm	(27'6")
6 Length: Rear Axle to Bumper	1963 mm	(6'5")	1968 mm	(6'5")
7 Length: Hitch to Front Axle	1525 mm	(5'0")	1525 mm	(5'0")
8 Length: Wheel Base	3050 mm	(10'0")	3050 mm	(10'0")
* 9 Clearance: Bucket at 45 degrees	2834 mm	(9'3")	3415 mm	(11'2")
** 10 Clearance: Loadover Height	3354 mm	(11'0")	3561 mm	(11'8")
** 11 Clearance: Level Bucket	3641 mm	(11'11")	4222 mm	(13'10")
** 12 Height: Bucket Pin	3969 mm	(13'0")	4550 mm	(14'11")
** 13 Height: Overall	5273 mm	(17'3")	5853 mm	(19'2")
* 14 Reach: Bucket at 45 degrees	1146 mm	(3'9")	1413 mm	(4'7")
15 Carry Height: Bucket Pin	467 mm	(1'6")	686 mm	(2'2")
** 16 Dig Depth	101 mm	(3.9")	135 mm	(5.3")
17 Width: Bucket	2750 mm	(9'0")	2750 mm	(9'0")
18 Width: Tread Center	2065 mm	(6'9")	2065 mm	(6'9")
19 Turning Radius: Over Bucket	6133 mm	(20'1")	6490 mm	(21'3")
20 Width: Over Tires	2675 mm	(8'9")	2675 mm	(8'9")
21 Turning Radius: Outside of Tires	5537 mm	(18'1")	5537 mm	(18'1")
22 Turning Radius: Inside of Tires	2852 mm	(9'4")	2852 mm	(9'4")
23 Rack Angle at Full Lift	54 degrees		53 degrees	
24 Dump Angle at Full Lift	49 degrees		47 degrees	
25 Rack Angle at Carry	45 degrees		50 degrees	
26 Departure Angle	33 degrees		33 degrees	
27 Articulation Angle	40 degrees		40 degrees	
* Tipping Load – Straight (ISO 14397-1)	11 837 kg	26,097 lb	8362 kg	18,435 lb
* Tipping Load – Full Turn (ISO 14397-1)	10 045 kg	22,146 lb	7021 kg	15,480 lb
* Breakout	13 170 kg	29,035 lb	12 663 kg	27,917 lb
* Operating Weight	16 400 kg	36,156 lb	16 326 kg	35,993 lb

\*Vary with bucket.

\*\*Vary with tire.

Dimensions listed are for a machine configured with 2.5 m<sup>3</sup> (3.2 yd<sup>3</sup>) general purpose Fusion™ bucket, bolt-on cutting edge, heavy counterweights, additional guarding, 80 kg (176 lb) operator and Michelin 20.5 R25 (L-3) XHA2 tires.

# 938M Wheel Loader

## STANDARD EQUIPMENT

### POWER TRAIN

- Auto idle shut down feature
- Cat C7.1 ACERT engine
  - Power modes (Standard and Performance)
  - Power by range (High Power in Range 4)
  - Turbocharged and aftercooled
  - Filtered crankcase breather
  - Diesel particulate filter
  - Selective Catalyst Reduction
- Coded start (requires secondary display)
- Coolant protection to -34° C (-29° F)
- Enclosed wet disc full hydraulic brakes
- Fuel priming pump, automatic
- Hydraulically driven demand cooling fan
- Hydrostatic transmission with electronic control
  - Operator modes (Default, TC, Hystat, and Ice)
  - Directional Shift Aggressiveness (fast, medium, slow)
  - Rimpull control, adjust wheel torque
  - Creeper control, adjust ground speed
- Parking brake, electric
- Single plane cooling package wide six fins per inch density
- Throttle lock and max speed limiter

### HYDRAULICS

- Automatic lift and bucket kickouts, adjustable in-cab
- Bucket and fork modes, adjustable in-cab
- Cylinder damping at kickout and mechanical end stops
- Fine mode control (fast, medium, slow) in fork mode
- Hydraulic response setting (fast, medium, slow)
- Hydraulic diagnostic connectors and S-O-S<sup>SM</sup> ports
- Load sensing hydraulics and steering

### ELECTRICAL

- Alternator, 115 amp, heavy duty
- 12V power supply in cab (2)
- Batteries, 1,000 CCA (2) 24V system, disconnect switch
- Back-up alarm
- Emergency shutdown switch
- Halogen work and roading lights, LED rear tail lights
- Product Link™ PRO with three year subscription
- Remote jump start post
- Resettable main and critical function breakers

### OPERATOR ENVIRONMENT

- 75 mm (3 in) retractable seat belt, with audible alarm and indicator
- Automatic temperature control
- External heated mirrors with lower parabolic
- Hydraulic control lockout
- Interior cab lighting, door and dome
- Interior rearview mirrors (2)
- Lunch box storage
- Radio ready speakers
- Rear window defrost, electric
- Seat-mounted electronic implement controls, adjustable
- Column mounted multi function control – lights, wipers, turn signal
- Tilt and telescopic steering wheel
- Tinted front glass
- Wet arm wiper/washer, 2-speed and intermittent, front

### OTHER STANDARD EQUIPMENT

- Large-access enclosure doors with adjustable close/open force
- Parallel lift loader linkage

### EU STANDARD EQUIPMENT

- Deluxe cab
- Secondary display
- Rearview camera

## OPTIONAL EQUIPMENT

- Auto lube, integrated in secondary display
- Auxiliary flow, third and fourth function, adjustable through secondary display
- Beacon light, strobe
- Cab, deluxe (standard in Europe, optional in North America)
  - Electrically adjustable external heated mirrors (2)
  - Secondary display to enable features and adjust parameters
  - Sunscreen, front and rear
- Camera, rearview (standard in Europe)
- Cold start package
- Counterweight, (heavy and logger)
- Coupler, (Fusion and ISO 23727)
- Debris packages (low, medium, high)
- Fenders (extended cover and full coverage)
- Guarding (machine and operator)
- Linkage, high lift
- Lights, auxiliary, halogen or LED with engine compartment lights
- Object Detection
- Product Link ELITE with capabilities for software push, data logging, histogram and trend mapping
- Radio packages
- Ride Control System, adjustable through secondary display
- Seats
  - Deluxe seat – fully adjustable fabric air suspension seat with mid backrest and mechanical lumbar support
  - Premium seat – fully adjustable leather and fabric air suspension with high backrest and air lumbar support. Seat is heated and ventilated on bottom cushion and backrest.
- Steering
  - Dual mode and secondary
- NOTE: Not all features are available in all regions.

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com)

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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AEHQ7363 (11-14)



# EQUIPMENT PROTECTION PLAN (EPP) - AMERICAS NORTH: COMPETITIVE COVERAGE COMPARISONS FOR HEAVY EQUIPMENT EXCAVATORS, ARTICULATED TRUCKS, TRACK TYPE TRACTORS, WHEEL LOADERS

ENGINE & ACCESSORIES	POWERTRAIN			POWERTRAIN + HYDRAULICS			PREMIER		
	Volvo CAP D	Komatsu Advantedge	Cat EPP	Volvo CAP D	Komatsu Advantedge	Cat EPP	Volvo CAP F	Komatsu Advantedge	Cat EPP
Engine - Internal Components	*	*	*	*	*	*	*	*	*
Valve Cover	*	*	*	*	*	*	*	*	*
Oil Cooler	*	*	*	*	*	*	*	*	*
Radiator	*	*	*	*	*	*	*	*	*
Exhaust/Walker	*	*	*	*	*	*	*	*	*
Manifolds	*	*	*	*	*	*	*	*	*
Fan Motor	*	*	*	*	*	*	*	*	*
Water Pump	*	*	*	*	*	*	*	*	*
Fuel Injection Pumps	*	*	*	*	*	*	*	*	*
Injectors	*	*	*	*	*	*	*	*	*
Lift Transfer Pump	*	*	*	*	*	*	*	*	*
Sensors/Solenoids/Sensors	*	*	*	*	*	*	*	*	*
Thermostat	*	*	*	*	*	*	*	*	*
Hywheel & Torque Converter	*	*	*	*	*	*	*	*	*
Oil Pan Group	*	*	*	*	*	*	*	*	*
Engine Oil Filter Mount	*	*	*	*	*	*	*	*	*
Turbocharger	*	*	*	*	*	*	*	*	*
Pulleys	*	*	*	*	*	*	*	*	*
Starter	*	*	*	*	*	*	*	*	*
Alternator	*	*	*	*	*	*	*	*	*
AC Compressor/Condenser	*	*	*	*	*	*	*	*	*
Electronic Control Modules	*	*	*	*	*	*	*	*	*
Fuel Lines	*	*	*	*	*	*	*	*	*
Fuel Tank & Assoc. Parts	*	*	*	*	*	*	*	*	*
Water Piping	*	*	*	*	*	*	*	*	*
Oil Hoses/Lines (Non Hydraulic)	*	*	*	*	*	*	*	*	*
<b>TRANSMISSION/HYDROSTATIC/DRIVE LINE</b>									
Transmission	*	*	*	*	*	*	*	*	*
Final Drive/Planetary	*	*	*	*	*	*	*	*	*
Drive Shafts	*	*	*	*	*	*	*	*	*
Transfer Case	*	*	*	*	*	*	*	*	*
Wet Brake Assemblies	*	*	*	*	*	*	*	*	*
Hydrostatic Pumps & Drive Motors	*	*	*	*	*	*	*	*	*
Linkage/Lines Connected to Hystat Pump	*	*	*	*	*	*	*	*	*
Drive (Pilot/Ch) Control Valves	*	*	*	*	*	*	*	*	*
Sensors/Sensors	*	*	*	*	*	*	*	*	*
<b>AXLES (EXCLUDING HEX)</b>									
Axles	*	*	*	*	*	*	*	*	*
Axle Seals	*	*	*	*	*	*	*	*	*
Lug Nuts & Bolts	*	*	*	*	*	*	*	*	*
<b>DIFFERENTIALS**</b>									
Differentials	*	*	*	*	*	*	*	*	*
<b>HYDRAULIC SYSTEMS</b>									
Hydraulic Pumps & Motors	*	*	*	*	*	*	*	*	*
Hydraulic Cylinders	*	*	*	*	*	*	*	*	*
Hydraulic Valves & Controls	*	*	*	*	*	*	*	*	*
Hydraulic Accumulators	*	*	*	*	*	*	*	*	*
Hydraulic Oil Coolers	*	*	*	*	*	*	*	*	*
Hoses and Lines	*	*	*	*	*	*	*	*	*
Hydraulic Oil Filter Mount	*	*	*	*	*	*	*	*	*
<b>ELECTRICAL &amp; INTERIOR**</b>									
Gauges/Indicators/Instruments	*	*	*	*	*	*	*	*	*
Wiring Harness	*	*	*	*	*	*	*	*	*
Switches	*	*	*	*	*	*	*	*	*
Joysticks	*	*	*	*	*	*	*	*	*
Relays/Circuit Breakers	*	*	*	*	*	*	*	*	*
<b>FRAMES &amp; LINKAGES</b>									
Chassis/Implement Frames	*	*	*	*	*	*	*	*	*
Weldment	*	*	*	*	*	*	*	*	*

\*Engine Electronic Controls covered in Powertrain Only. Other Electronics, including other electronic control modules covered with optional Electronics coverage.  
 Note: Maintenance and Wear items generally not covered, unless defective.  
 \*\*Note: List is not exhaustive. If component is not listed or specifically excluded above, please inquire at local dealer for more information.  
 INTERNAL DOCUMENT - NOT TO BE GIVEN TO CUSTOMERS. The information contained in this comparison is provided solely for general informational purposes only. For complete descriptions of the terms, conditions and exclusions of the coverage please contact a representative of the program.  
 Effective Date: July 2013, Caterpillar Confidential: YELLOW

## Equipment Protection Plans (EPP)

# 3 EASY STEPS TO PROTECT YOUR NEW CAT® EQUIPMENT

You count on your Cat® machines to get the job done, day in and day out. Choose a protection plan that's just as dependable and long-lasting. Cat Financial Insurance Services offers the only coverage designed specifically for new Cat equipment—giving you the highest level of repair cost protection available. Our comprehensive EPP options protect your investment and your peace of mind.

## 1 SELECT YOUR PROTECTION OPTION

Choose from our **Powertrain**, **Powertrain + Hydraulics** and **Premier** plans to get the exact age and hours for the protection you need.

### **PREMIER** (includes all Powertrain + Hydraulics and Powertrain components listed below)

#### **ENGINE RELATED**

Radiator  
Exhaust Muffler  
AC Compressor/Condenser  
Governor/Speed Controls & Linkages  
Fuel Lines  
Fuel Tank & Associated Parts  
Coolant & Water Lines  
Oil Hoses & Lines  
Air Compressor

#### **STEERING & SUSPENSION**

Power Steering Logic Module  
Steering Linkage  
Tie Rod

Axle Spring  
Bogie Suspension  
Cross Slope Control  
Equalizer Bar & Support  
Equalizer Bar Center Pin Support  
Stabilizer  
Suspension Control & Control Valve  
Suspension Cylinder

#### **ELECTRONICS**

Cat Grade Control  
Product Link™  
Traction Control System  
Protection Devices & Alarms  
Speed Sensors

#### **BRAKING**

Brake Master Cylinder  
Vacuum Pump & Wheel Cylinder  
Brake Caliper, Head Assembly  
Control Valves & Brake Lines  
Accumulator  
Wet Brake Assemblies  
Parking Brake

#### **CAB**

Steering Column & Console  
Seat  
Gauges/Indicators/Instruments  
Circuit Board  
Wiring Harnesses/Switches  
Relays/Circuit Breakers

Fuse/Circuit Breaker Panel

#### **STRUCTURES & MAINFRAME**

Chassis/Implement Frames  
Weldment/Carbody/Main Frame  
Track Roller Frame/Track Adjuster  
Recoil Spring

#### **STARTING/CHARGING**

Starter Motor  
Starter Solenoid  
Alternator/Generator  
Battery Cables  
Start Switch  
Main Power Relay  
Regulator

### **POWERTRAIN + HYDRAULICS** (includes all Powertrain components listed below)

#### **STEERING & IMPLEMENT CONTROLS**

Hydraulic Pumps  
Hydraulic Motors  
Hydraulic Cylinders

Hydraulic Valves  
Hydraulic Accumulators  
Hydraulic Lines  
Hydraulic Hoses  
Electronic Controls - Implement & Steering

Joysticks - Implement & Directional Control  
Pilot Valve  
Hydraulic Tank  
Hydraulic Oil Filter Base  
Hydraulic Swivel

Hydraulic Oil Temp Sensor  
Hydraulic Oil Cooler  
Transmission Oil Lines  
Drive Train Oil Lines  
Steering Gear & Valve

### **POWERTRAIN**

#### **ENGINE**

Fan & Fan Drive  
Fan Motor  
Water Pump  
Thermostat  
Timing/Accessory Gears  
Timing Chain/Belt  
Oil Cooler  
Oil Pump & Pan Group  
Engine Oil Filter Base  
Cylinder Block & Cylinder Head  
Crankshaft, Main & Rod Bearings  
Piston & Connecting Rod  
Piston Pins & Rings  
Camshaft & Camshaft Bearings

Inlet/Exhaust Valves  
Push Rod & Balancer  
Rocker Arm & Shaft Assembly  
Valve Cover & Base/Valve Spring & Guide  
Flywheel  
Air Lines & Pipes  
Aftercooler  
Turbocharger  
Manifolds, Intake & Exhaust  
Fuel Pump/Governor Drive  
Fuel Injection Pumps & Injectors  
Lift/Transfer Pump  
Senders/Solenoids/Sensors  
Electronic Control Modules (ECM)

Caterpillar Clean Emissions Module (CEM)  
Emissions Control Components

#### **TRANSMISSION, TORQUE CONVERTER & TRANSFER CASE**

Transmission Case/Housing  
Transmission Gears  
Transmission Shafts & Bearings  
Transmission Hydraulic & Electronic Controls  
Transmission Oil Cooler  
Transmission Oil Filter Base  
Torque Converter Group  
Transfer Case Group  
Hydrostatic Drive Pumps & Drive Motors  
Joysticks - Directional Control

#### **DRIVE TRAIN**

Differential Case/Housing  
Differential Gears  
Differential Shafts & Bearings  
Differential Steering  
Axle Housing  
Axles, Axle Shaft & Axle Seals  
Differential & Final Drive Oil Coolers  
Final Drive Case/Bore  
Final Drive Chain/Gears  
Final Drives/Planetary Gears  
Steering Clutch  
Steering Clutch & Brake Control Valve  
Universal Joint  
Electric Final Drive Motors  
Swing Gear

## 2 KNOW YOUR RESPONSIBILITIES

To qualify for coverage under an Equipment Protection Plan, you need to:

- > Operate your equipment according to the Cat Operation & Maintenance Manual (OMM) (e.g., no improper fuel use)
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- > Promptly provide your equipment for repair in the event of a covered failure

You can count on us to perform necessary inspections to confirm eligibility, install parts approved by Caterpillar on covered repairs and validate your enrollment in the program.

## 3 PURCHASE AND REGISTER YOUR EPP

Work with your local Cat dealer to complete the process—and get the protection and peace of mind you deserve.

### EXCLUSIONS\*

If a component isn't listed, it may not be included in your plan. Other exclusions include:

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- > Freight charges for parts shipments
- > Travel time and mileage involved in getting to a jobsite
- > Hauling, retrieval, equipment rental or overtime labor costs
- > Repair costs resulting from the failure of any non-covered components
- > Downtime loss
- > Any incidental or consequential damages or costs incurred as a result of a covered component failure
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#### **ENGINE RELATED**

Radiator  
Exhaust Muffler  
AC Compressor/Condenser  
Governor/Speed Controls & Linkages  
Fuel Lines  
Fuel Tank & Associated Parts  
Coolant & Water Lines  
Oil Hoses & Lines  
Air Compressor

#### **STEERING & SUSPENSION**

Power Steering Logic Module  
Steering Linkage  
Tie Rod

Axle Spring  
Bogie Suspension  
Cross Slope Control  
Equalizer Bar & Support  
Equalizer Bar Center Pin Support  
Stabilizer  
Suspension Control & Control Valve  
Suspension Cylinder

#### **ELECTRONICS**

Cat Grade Control  
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Traction Control System  
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Speed Sensors

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Brake Master Cylinder  
Vacuum Pump & Wheel Cylinder  
Brake Caliper, Head Assembly  
Control Valves & Brake Lines  
Accumulator  
Wet Brake Assemblies  
Parking Brake

#### **CAB**

Steering Column & Console  
Seat  
Gauges/Indicators/Instruments  
Circuit Board  
Wiring Harnesses/Switches  
Relays/Circuit Breakers

Fuse/Circuit Breaker Panel

#### **STRUCTURES & MAINFRAME**

Chassis/Implement Frames  
Weldment/Carbody/Main Frame  
Track Roller Frame/Track Adjuster  
Recoil Spring

#### **STARTING/CHARGING**

Starter Motor  
Starter Solenoid  
Alternator/Generator  
Battery Cables  
Start Switch  
Main Power Relay  
Regulator

### **POWERTRAIN + HYDRAULICS** (includes all Powertrain components listed below)

#### **STEERING & IMPLEMENT CONTROLS**

Hydraulic Pumps  
Hydraulic Motors  
Hydraulic Cylinders

Hydraulic Valves  
Hydraulic Accumulators  
Hydraulic Lines  
Hydraulic Hoses  
Electronic Controls - Implement & Steering

Joysticks - Implement & Directional Control  
Pilot Valve  
Hydraulic Tank  
Hydraulic Oil Filter Base  
Hydraulic Swivel

Hydraulic Oil Temp Sensor  
Hydraulic Oil Cooler  
Transmission Oil Lines  
Drive Train Oil Lines  
Steering Gear & Valve

### **POWERTRAIN**

#### **ENGINE**

Fan & Fan Drive  
Fan Motor  
Water Pump  
Thermostat  
Timing/Accessory Gears  
Timing Chain/Belt  
Oil Cooler  
Oil Pump & Pan Group  
Engine Oil Filter Base  
Cylinder Block & Cylinder Head  
Crankshaft, Main & Rod Bearings  
Piston & Connecting Rod  
Piston Pins & Rings  
Camshaft & Camshaft Bearings

Inlet/Exhaust Valves  
Push Rod & Balancer  
Rocker Arm & Shaft Assembly  
Valve Cover & Base/Valve Spring & Guide  
Flywheel  
Air Lines & Pipes  
Aftercooler  
Turbocharger  
Manifolds, Intake & Exhaust  
Fuel Pump/Governor Drive  
Fuel Injection Pumps & Injectors  
Lift/Transfer Pump  
Senders/Solenoids/Sensors  
Electronic Control Modules (ECM)

Caterpillar Clean Emissions Module (CEM)  
Emissions Control Components

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Transmission Gears  
Transmission Shafts & Bearings  
Transmission Hydraulic & Electronic Controls  
Transmission Oil Cooler  
Transmission Oil Filter Base  
Torque Converter Group  
Transfer Case Group  
Hydrostatic Drive Pumps & Drive Motors  
Joysticks - Directional Control

#### **DRIVE TRAIN**

Differential Case/Housing  
Differential Gears  
Differential Shafts & Bearings  
Differential Steering  
Axle Housing  
Axles, Axle Shaft & Axle Seals  
Differential & Final Drive Oil Coolers  
Final Drive Case/Bore  
Final Drive Chain/Gears  
Final Drives/Planetary Gears  
Steering Clutch  
Steering Clutch & Brake Control Valve  
Universal Joint  
Electric Final Drive Motors  
Swing Gear

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# Cat<sup>®</sup> 938M

## WHEEL LOADER

### M SERIES – MAKING YOUR CHOICE EASY:

■ **Enjoy All Day Comfort** – Have a seat in the new M Series Small Wheel Loader and enjoy automatic temperature control, class leading sound levels, excellent all around visibility and low-effort joystick controls that move with you on a fully adjustable seat suspension. A large spacious operator environment combined with Caterpillar's exclusive hydraulic cylinder damping and smooth predictable controls make this the most comfortable seat on your job site.

■ **Work Made Easy** – Move more with Caterpillar's patented quick loading Performance Series buckets and optimized Z-bar linkage that combines the digging efficiency of a traditional Z-bar with tool carrier capabilities. The parallel lift and high tilt forces throughout the working range allow you to safely and confidently handle loads with precise control.

Multi-function work has never been easier with dedicated pumps for each system and a flow sharing implement valve governed by an intelligent power management system. Simultaneously lift, steer and drive without compromise. The M Series Small Wheel Loader simply does what you ask it to do.

■ **Efficiently Powerful** – Experience hybrid like fuel efficiency with an intelligent hydrostatic power train and industry leading fuel savings through a lower maximum engine speed of just 1,600 rpm in Standard Mode. Power when you need it with Caterpillar's exclusive Power-by-Range technology that increases power in Range 4 for improved speed on grade. For your toughest and most demanding applications a new Performance Mode will allow you to boost the power and hydraulic speed in all Ranges to get the job done even quicker. Meets U.S. EPA Tier 4 Final/EU Stage IV emission standards with a Cat<sup>®</sup> C7.1 ACERT<sup>™</sup> engine that is designed to manage itself so you can concentrate on your work.

■ **Customize Your Experience** – Meet your application requirements and individual preferences with Caterpillar's industry first Hystat<sup>™</sup> Operator Modes featuring four unique power train settings. Select classic Torque Converter for smooth rollout, conventional Hystat for aggressive engine braking, an Ice Mode that maximizes your control on slippery underfoot, or default mode which blends the best of Hystat and Torque Converter characteristics. Fine tune machine performance with adjustments at your fingertips through the soft touch buttons and optional secondary display. Quickly set hydraulic response along with linkage kick-out positions, maximum wheel torque, and peak ground speed to efficiently perform a multitude of tasks.

## Specifications

### Engine

Engine Model	Cat C7.1 ACERT			
Power Mode	Standard Mode		Performance Mode	
Speed Range	Range 1-3*		Range 1-4	
Maximum Gross Power				
Maximum Engine Speed	1,600 rpm		1,800 rpm	
ISO 14396	129 kW	173 hp	140 kW	188 hp
ISO 14396 (DIN)	129 kW	175 hp	140 kW	190 hp
Rated Net Power	1,600 rpm			
SAE J1349	125 kW	168 hp	136 kW	182 hp
SAE J1349 at				
Maximum Fan Speed	114 kW	153 hp	125 kW	168 hp
ISO 9249 (DIN)	126 kW	171 hp	137 kW	186 hp

### Engine (continued)

	Standard Mode		Performance Mode	
Maximum Gross Torque				
ISO 14396	879 N·m	648 lbf-ft	879 N·m	648 lbf-ft
Maximum Net Torque				
SAE J1349	843 N·m	621 lbf-ft	843 N·m	621 lbf-ft
ISO 9249 (1977)/EEC 80/1269	852 N·m	628 lbf-ft	852 N·m	628 lbf-ft
Displacement	7.01 L	427 in <sup>3</sup>	7.01 L	427 in <sup>3</sup>

- Engine meets Tier 4 Final/Stage IV emission standards.
- Net power shown is the power available at the flywheel when the engine is equipped with alternator, air cleaner and diesel exhaust filter.

\*Range 4 power is boosted to be the same as Performance Mode.



# 938M Wheel Loader

## Buckets

Bucket Capacities – General Purpose	2.5-3.2 m <sup>3</sup>	3.2-4.2 yd <sup>3</sup>
Bucket Capacities – Light Material	3.1-5.0 m <sup>3</sup>	4.0-6.5 yd <sup>3</sup>

## Steering

Steering Articulation Angle (each direction)	40°	
Maximum Flow – Steering Pump	130 L/min	34 gal/min
Maximum Working Pressure – Steering Pump	24 130 kPa	3,500 psi
Maximum Steering Torque:		
0 degrees (straight machine)	57 630 N-m	42,506 lbf-ft
40 degrees (full turn)	42 570 N-m	31,398 lbf-ft
Steering Cycle Times (full left to full right):		
At 1,800 rpm: 90 rpm steering wheel speed	2.3 seconds	
Number of Steering Wheel Turns – full left to full right or full right to full left	3.3 turns	

## Loader Hydraulic System

Maximum Flow – Implement Pump	190 L/min	50 gal/min
3rd Function Maximum Flow*	190 L/min	50 gal/min
4th Function Maximum Flow*	160 L/min	42 gal/min
Maximum Working Pressure – Implement Pump	28 000 kPa	4,061 psi
Relief Pressure – Tilt Cylinder	30 000 kPa	4,351 psi
3rd Function Maximum Working Pressure	28 000 kPa	4,061 psi
4th Function Maximum Working Pressure	28 000 kPa	4,061 psi
Hydraulic Cycle Times:	Standard Mode	Performance Mode
	At 1,600 rpm	At 1,800 rpm
Raise (ground level to maximum lift)	6.2 seconds	5.5 seconds
Dump (at maximum lift height)	1.7 seconds	1.5 seconds
Float Down (maximum lift to ground level)	2.7 seconds	2.7 seconds
Total Cycle Time	10.6 seconds	9.7 seconds

\*Adjustable from 20% to 100% of maximum flow through the secondary display, when equipped.

## Service Refill Capacities

Fuel Tank	195 L	51.5 gal
Cooling System	32 L	7.9 gal
Engine Crankcase	20 L	5.3 gal
Transmission (gearbox)	11 L	2.9 gal
Axles:		
Front	35 L	9.2 gal
Rear	35 L	9.2 gal
Hydraulic System (including tank)	170 L	44.9 gal
Hydraulic Tank	90 L	23.8 gal
Diesel Exhaust Fluid (DEF) Tank	19 L	5 gal

• DEF used in Cat SCR systems must meet the requirements outlined in the International Organization for Standardization (ISO) standard 22241-1.

## Transmission

Forward and Reverse:

Range 1*	1-13 km/h	0.6-8 mph
Range 2	13 km/h	8 mph
Range 3	27 km/h	17 mph
Range 4	40 km/h	25 mph

\*Creeper control allows maximum speed range adjustability from 1 km/h (0.6 mph) to 13 km/h (8 mph) in Range 1 through the secondary display, when equipped. Factory default is 7 km/h (4.4 mph).

## Tires

Standard Size	20.5 R25, radial (L-3)	
Other Choices Include:	20.5 R25, radial (L-2)	23.5 R25, radial (L-3)
	20.5 R25, radial (L-5)	650/65 R25 radial (L-3)
	20.5-25 12PR (L-2)	Skidder/Agriculture
	20.5-25 12PR (L-3)	Flexports Gen II
	20.5-25 16PR (L-5)	

- Other tire choices are available. Contact your Cat dealer for details.
- In certain applications, the loader's productive capabilities may exceed the tire's tonnes-km/h (ton-mph) capabilities.
- Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model.

## Cab

ROPS	SAE J1040 MAY94, ISO 3471-1994
FOPS	SAE J/ISO 3449 APR98, Level II, ISO 3449 1992 Level II

- Cab and Rollover Protective Structures (ROPS) are standard in North America and Europe.
- The declared dynamic operator sound pressure levels per ISO 6396:2008\*, when properly installed and maintained, are:
  - Standard cab: 68 ±3 dB(A)
  - Deluxe cab: 66 ±2 dB(A)

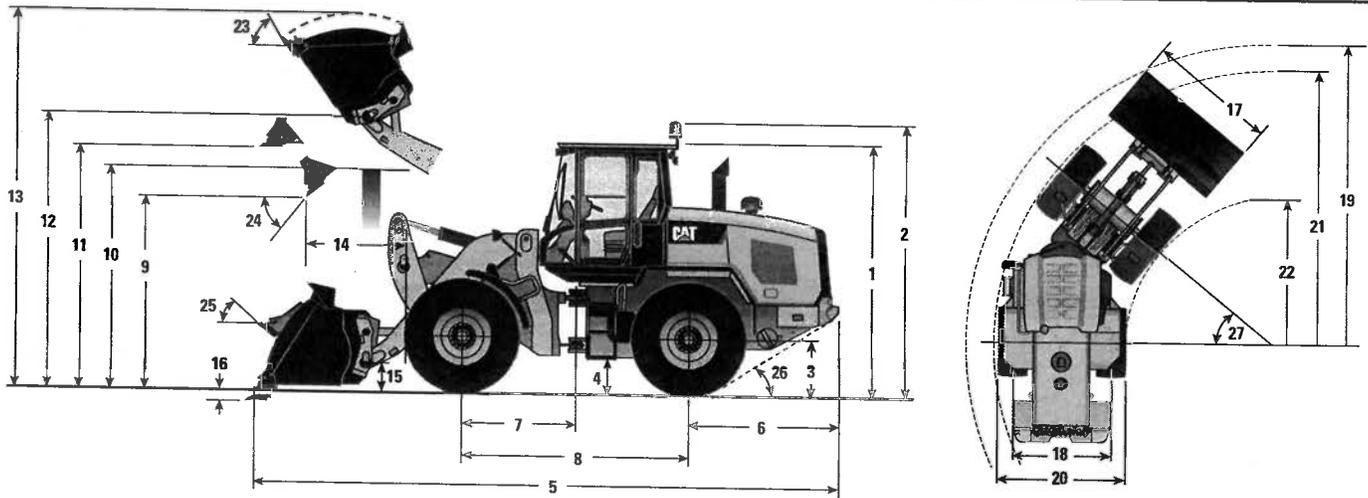
\*The measurements were conducted with the cab doors and windows closed and at 70% of the maximum engine cooling fan speed. The sound level may vary at different engine cooling fan speeds.

## Axles

Front	Fixed
	Locking differential (standard)
Rear	Oscillating ±11 degrees
	Open differential (standard)
	Limited slip differential (optional)

# 938M Wheel Loader

## Dimensions and Operating Specifications (All dimensions are approximate. Dimensions vary with bucket and tire choice.)



	Standard Lift		High Lift	
** 1 Height: Ground to Cab	3340 mm	(10'11")	3340 mm	(10'11")
** 2 Height: Ground to Beacon	3669 mm	(12'0")	3669 mm	(12'0")
** 3 Height: Ground Axle Center	685 mm	(2'2")	685 mm	(2'2")
** 4 Height: Ground Clearance	386 mm	(1'3")	386 mm	(1'3")
* 5 Length: Overall	7656 mm	(25'1")	8397 mm	(27'6")
6 Length: Rear Axle to Bumper	1963 mm	(6'5")	1968 mm	(6'5")
7 Length: Hitch to Front Axle	1525 mm	(5'0")	1525 mm	(5'0")
8 Length: Wheel Base	3050 mm	(10'0")	3050 mm	(10'0")
* 9 Clearance: Bucket at 45 degrees	2834 mm	(9'3")	3415 mm	(11'2")
** 10 Clearance: Loadover Height	3354 mm	(11'0")	3561 mm	(11'8")
** 11 Clearance: Level Bucket	3641 mm	(11'11")	4222 mm	(13'10")
** 12 Height: Bucket Pin	3969 mm	(13'0")	4550 mm	(14'11")
** 13 Height: Overall	5273 mm	(17'3")	5853 mm	(19'2")
* 14 Reach: Bucket at 45 degrees	1146 mm	(3'9")	1413 mm	(4'7")
15 Carry Height: Bucket Pin	467 mm	(1'6")	686 mm	(2'2")
** 16 Dig Depth	101 mm	(3.9")	135 mm	(5.3")
17 Width: Bucket	2750 mm	(9'0")	2750 mm	(9'0")
18 Width: Tread Center	2065 mm	(6'9")	2065 mm	(6'9")
19 Turning Radius: Over Bucket	6133 mm	(20'1")	6490 mm	(21'3")
20 Width: Over Tires	2675 mm	(8'9")	2675 mm	(8'9")
21 Turning Radius: Outside of Tires	5537 mm	(18'1")	5537 mm	(18'1")
22 Turning Radius: Inside of Tires	2852 mm	(9'4")	2852 mm	(9'4")
23 Rack Angle at Full Lift	54 degrees		53 degrees	
24 Dump Angle at Full Lift	49 degrees		47 degrees	
25 Rack Angle at Carry	45 degrees		50 degrees	
26 Departure Angle	33 degrees		33 degrees	
27 Articulation Angle	40 degrees		40 degrees	
* Tipping Load – Straight (ISO 14397-1)	11 837 kg	26,097 lb	8362 kg	18,435 lb
* Tipping Load – Full Turn (ISO 14397-1)	10 045 kg	22,146 lb	7021 kg	15,480 lb
* Breakout	13 170 kg	29,035 lb	12 663 kg	27,917 lb
* Operating Weight	16 400 kg	36,156 lb	16 326 kg	35,993 lb

\*Vary with bucket.

\*\*Vary with tire.

Dimensions listed are for a machine configured with 2.5 m<sup>3</sup> (3.2 yd<sup>3</sup>) general purpose Fusion™ bucket, bolt-on cutting edge, heavy counterweights, additional guarding, 80 kg (176 lb) operator and Michelin 20.5 R25 (L-3) XHA2 tires.

# 938M Wheel Loader

## STANDARD EQUIPMENT

### POWER TRAIN

- Auto idle shut down feature
- Cat C7.1 ACERT engine
  - Power modes (Standard and Performance)
  - Power by range (High Power in Range 4)
  - Turbocharged and aftercooled
  - Filtered crankcase breather
  - Diesel particulate filter
  - Selective Catalyst Reduction
- Coded start (requires secondary display)
- Coolant protection to -34° C (-29° F)
- Enclosed wet disc full hydraulic brakes
- Fuel priming pump, automatic
- Hydraulically driven demand cooling fan
- Hydrostatic transmission with electronic control
  - Operator modes (Default, TC, Hystat, and Ice)
  - Directional Shift Aggressiveness (fast, medium, slow)
  - Rimpull control, adjust wheel torque
  - Creeper control, adjust ground speed
- Parking brake, electric
- Single plane cooling package wide six fins per inch density
- Throttle lock and max speed limiter

### HYDRAULICS

- Automatic lift and bucket kickouts, adjustable in-cab
- Bucket and fork modes, adjustable in-cab
- Cylinder damping at kickout and mechanical end stops
- Fine mode control (fast, medium, slow) in fork mode
- Hydraulic response setting (fast, medium, slow)
- Hydraulic diagnostic connectors and S.O.S<sup>SM</sup> ports
- Load sensing hydraulics and steering

### ELECTRICAL

- Alternator, 115 amp, heavy duty
- 12V power supply in cab (2)
- Batteries, 1,000 CCA (2) 24V system, disconnect switch
- Back-up alarm
- Emergency shutdown switch
- Halogen work and roading lights, LED rear tail lights
- Product Link™ PRO with three year subscription
- Remote jump start post
- Resettable main and critical function breakers

### OPERATOR ENVIRONMENT

- 75 mm (3 in) retractable seat belt, with audible alarm and indicator
- Automatic temperature control
- External heated mirrors with lower parabolic
- Hydraulic control lockout
- Interior cab lighting, door and dome
- Interior rearview mirrors (2)
- Lunch box storage
- Radio ready speakers
- Rear window defrost, electric
- Seat-mounted electronic implement controls, adjustable
- Column mounted multi function control – lights, wipers, turn signal
- Tilt and telescopic steering wheel
- Tinted front glass
- Wet arm wiper/washer, 2-speed and intermittent, front

### OTHER STANDARD EQUIPMENT

- Large-access enclosure doors with adjustable close/open force
- Parallel lift loader linkage

### EU STANDARD EQUIPMENT

- Deluxe cab
- Secondary display
- Rearview camera

## OPTIONAL EQUIPMENT

- Auto lube, integrated in secondary display
- Auxiliary flow, third and fourth function, adjustable through secondary display
- Beacon light, strobe
- Cab, deluxe (standard in Europe, optional in North America)
  - Electrically adjustable external heated mirrors (2)
  - Secondary display to enable features and adjust parameters
  - Sunscreen, front and rear
- Camera, rearview (standard in Europe)
- Cold start package
- Counterweight, (heavy and logger)
- Coupler, (Fusion and ISO 23727)
- Debris packages (low, medium, high)
- Fenders (extended cover and full coverage)
- Guarding (machine and operator)
- Linkage, high lift
- Lights, auxiliary, halogen or LED with engine compartment lights
- Object Detection
- Product Link ELITE with capabilities for software push, data logging, histogram and trend mapping
- Radio packages
- Ride Control System, adjustable through secondary display
- Seats
  - Deluxe seat – fully adjustable fabric air suspension seat with mid backrest and mechanical lumbar support
  - Premium seat – fully adjustable leather and fabric air suspension with high backrest and air lumbar support. Seat is heated and ventilated on bottom cushion and backrest.
- Steering
  - Dual mode and secondary
- NOTE: Not all features are available in all regions.

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com)

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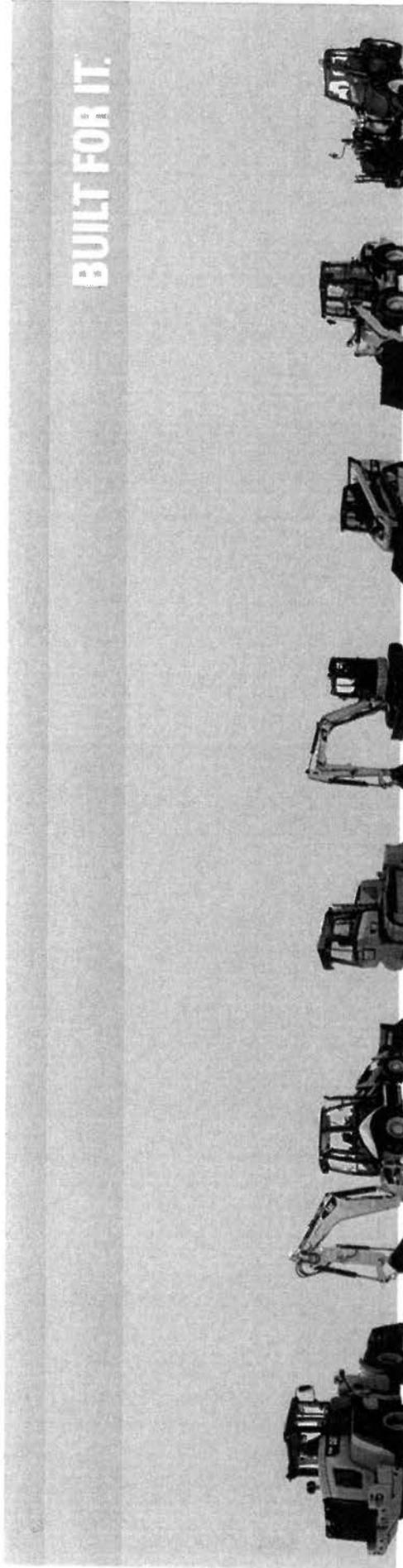
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AEHQ7363 (11-14)



# Deere 624K Wheel Loader OMM details on the Aftertreatment System

Updated on 31<sup>st</sup> October 2014



**B U I L D I N G   C O N S T R U C T I O N   P R O D U C T S**

Chris Thomas, Engine System Team, 7-251-1315

# Quotes from Deere 624K Operator's Manual

## Deere 624K

## Cat M-Series

Safety	"During DPF cleaning... exhaust gases and DPF components reach temperatures hot enough to ignite or melt common materials."	Exhaust temperatures on M-series are less than what they were on H-series. Operators can continue to work where they work today.
	"(During DPF cleaning) Keep machine away from people, animals, or structures which may be susceptible to harm or damage from hot exhaust gases."	
	"Closely monitor machine and surrounding area for smoldering debris during and after DPF cleaning." Parked cleaning occurs in two stages... The second stage is when the cleaning process begins and can result in DPF temperatures exceeding 1022 degF.	
Display	"DPF Restriction Level Indicator shows soot level restriction in the exhaust filter."	The aftertreatment system manages itself so that the operator does not have to.
	"If auto cleaning is enabled and the indicator is 100%, a pop-up will appear on the monitor stating further action is needed to clean the filter."	
Maintenance	"It is expected that the service interval for DPF ash removal will be at least 4500 hours; however, actual service should take place when indicated by the display."	The DPF is fit for the life of the engine.
	"Every 1000 hours, change DEF tank breather filter."	The DEF tank does not require a breather filter.
	"Every 2000 hours, adjust engine valve lash (clearance). See your authorized John Deere dealer." "Every 4000 hours, change DEF dosing unit filter."	The valve lash is managed automatically. "Every 5000 hours, change DEF dosing unit filter."

# Quotes from Deere 624K Operator's Manual

## Deere 624K

## Cat M-Series

Operation	<p>"There are 3 types of DPF cleaning available to the operator:          PASSIVE          AUTO          PARKED"</p>	<p>The aftertreatment system manages itself so that the operator does not have to.</p>
	<p>"There are 5 levels to describe the amount of restriction in the DPF:          LOW          MODERATE          HIGH          VERY HIGH          SERVICE"</p>	
Operation	<p>"Auto cleaning is no longer available if DPF restriction reaches VERY HIGH or SERVICE soot levels. Parked cleaning can only be initiated when DPF restriction reaches HIGH or VERY HIGH soot levels."</p>	<p>The operator can operate the machine the way he does today.</p>
	<p>"NOTE: Shut off engine whenever possible. Unnecessary idling can cause DPF soot to accumulate. For best possible DPF operation, which requires the least amount of operator interaction, idling should be kept to a minimum."</p>	
	<p>"(During AUTO cleaning and HIGH soot level) a pop-up will appear on the monitor stating two options. First option is to increase engine speed above 1200rpm to assist auto cleaning. The second option is to initiate a parked cleaning."</p>	
Operation	<p>"During parked cleaning, the engine speed will be controlled automatically and the machine must remain parked. Complete cleaning time takes less than 45 minutes, but will vary on several criteria including fuel type, ..., and the number of previously aborted DPF cleaning requests."</p>	<p>There is no need to park the machine in order to manage soot.</p>
	<p>The engine may continue to run after the engine stop switched has been pressed.</p>	<p>There is no need for a delay to engine shutdown.</p>

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# Town of Lancaster

BUILDING DEPARTMENT  
21 CENTRAL AVENUE  
LANCASTER, NEW YORK 14086  
716-684-4171  
FAX 685-5317

TOWN BOARD  
*Supervisor*  
Dino J. Fudoli

*Councilmembers*  
John M. Abraham, Jr.  
Ronald Ruffino, Sr.  
Donna G. Stempniak

JEFFREY H. SIMME, CCI  
*Building & Zoning Inspector*

July 29, 2015

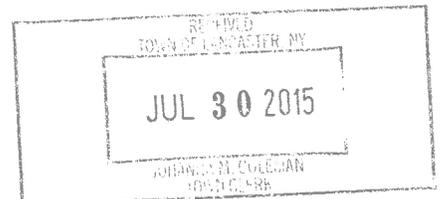
Honorable Town Board  
Town of Lancaster  
Lancaster, NY 14086

Re: Application for a Dumping Permit  
Kevin McFall  
6513 Broadway  
Lancaster, New York 14086

Dear Board Members:

Upon review of the above noted site, we recommend the issuance of an extension to the dumping permit for the above owner and location with the following conditions:

1. Fill shall consist of dirt. No building demolition material such as wood, asphalt shingles, asbestos tiles, etc. are permitted.
2. Access to the site shall be controlled to prevent unauthorized dumping of non-permitted material.
3. Dirt tracked on the road must be cleaned on a daily basis and more often if necessary. The Town of Lancaster Police shall stop operation immediately upon complaint of dirty road.
4. Fill area shall be graded and seeded upon completion of filling.
5. Dumping will be allowed between the hours of 7am and 8pm Monday thru Saturday. No dumping shall be allowed on Sunday.
6. Dust from the site shall also be prevented from migrating off site.
7. Fill shall only be placed in the areas which are indicated on the plot plan
8. No signage for dumping allowed

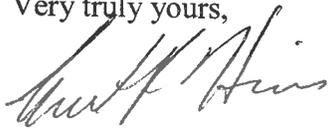


Page 2  
July 29, 2015  
6513 Broadway

9. The source of the fill is various construction sites

If you have any questions or comments, please feel free to call.

Very truly yours,



Robert R. Harris, P.E.  
Town Engineer



Jeffrey H. Simme, CCI  
Supervising Code Enforcement Officer

cc: Johanna Coleman, Town Clerk  
John Dudziak, Town Attorney

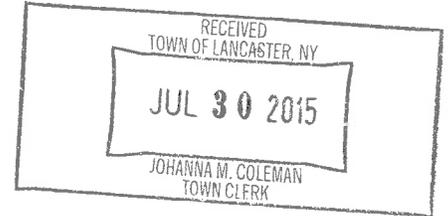
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# Youth Bureau

July 30, 2015

Mr. Dino Fudoli  
 Supervisor  
 Town of Lancaster  
 21 Central Ave.  
 Lancaster, NY 14086



Dear Mr. Fudoli and Town Board Members:

I am recommending the following individual for a position in the Youth Bureau's Safe Summer Program effective July 1, 2015 through August 31, 2015.

<u>Name:</u>	<u>Position:</u>	<u>Rate:</u>	
Beth Cumbo Lancaster, NY 14086	Tutor	\$15.00 hr.	(new hire)
Jennifer Schwertfeger Cheektowaga, NY 14206	Tutor	\$15.00 hr.	(new hire)
Christopher DeVries Depew, NY 14043	Accompanist Summer Performing Arts Academy	\$10.00 hr.	(new hire)
Lise Harty Williamsville, NY 14221	Costume Coordinator Summer Performing Arts Academy	\$10.00 hr.	(new hire)

Sincerely,  
  
 John Trojanowsky  
 Executive Director