



CITY OF WILLMAR, MINNESOTA  
REQUEST FOR COMMITTEE ACTION

Agenda Item Number: \_\_\_\_\_

Meeting Date: October 29, 2013

Attachments: Yes  No

CITY COUNCIL ACTION

Date: November 4, 2013

- |                                   |                                 |
|-----------------------------------|---------------------------------|
| <input type="checkbox"/> Approved | <input type="checkbox"/> Denied |
| <input type="checkbox"/> Amended  | <input type="checkbox"/> Tabled |
| <input type="checkbox"/> Other    |                                 |

Originating Department: Engineering

Agenda Item: Proposal to Modify Scope of Services/Consulting Fees for the MinnWest Lift Station/Lakeland Drive Project

Recommended Action: Approve a modified fee proposal.

Background/Summary: Brian Bollig will present a proposal to modify the consultant fees for the MinnWest/Lakeland Drive Project due to a revised scope of services.

Alternatives: Do not modify project scope, thereby eliminating the need to modify fees.

Financial Considerations: Costs to be presented.

Preparer: Bruce D. Peterson, AICP, Acting Public Works Director

Signature:

Comments:



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Approved  Denied  
 Amended  Tabled  
 Other

**Originating Department:** Public Works

**Agenda Item:** Request to Purchase/Replace an Aerial Bucket Truck

**Recommended Action:** Approve the purchase/replacement for an aerial bucket truck.

**Background/Summary:** The current truck is 17 years old with over 4,000 hours on it. The boom manufacturer is no longer in business. Replacement parts are scarce.

**Alternatives:** Keep the current truck with its safety risks.

**Financial Considerations:** The cost of the truck is \$179,424.00, with a trade value of approximately \$2,000.00.

**Preparer:** Bruce D. Peterson, AICP, Acting Public Works Director

**Signature:**

**Comments:** Metal and fiberglass fatigue in the boom unit are a safety concern. Replacement was budgeted in the 2013 CIP.



**WILLMAR**



**PUBLIC WORKS**

**DIRECTOR/CITY ENGINEER**  
City Office Building  
Box 755 320-235-4202  
**STREET/PARK SUPERINTENDENT**  
801 W. Hwy. 40 320-235-3827  
**WASTEWATER TREATMENT**  
3000 75th St. SW 320-235-4760  
Willmar, Minnesota 56201  
Fax 320-235-4917  
[www.ci.willmar.mn.us](http://www.ci.willmar.mn.us)

## Memorandum

**TO:** Charlene Stevens, City Administrator  
**FROM:** Bruce Peterson, Planning and Development Services Director  
**DATE:** October 16, 2013  
**RE:** Purchase and Replacement of an Aerial Bucket Truck

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Staff is in the process of proceeding with the purchase and replacement of an Aerial Bucket Truck in accordance with the 2013 Capital Outlay Program.

I am requesting approval to replace Unit # 961104 an Aerial Bucket Truck from Altec Industries Inc. The Aerial Bucket Truck would be purchased through the National Joint Powers Alliance (NJPA) for \$179,424.00. Please be advised that the 2013 Capital Outlay Program has included \$192,937.50 for replacement of stated equipment.

Please be advised taxes and licensing would be added at a later period. Staff is recommending Unit # 961104 be sold at the City of Willmar auction, or explore other governmental equipment selling option. Also be advised delivery of the new unit would be about eight months from ordering date.

Please let me know if you concur with this submittal.

sl

Approval: \_\_\_\_\_



## 2013 Vehicle/Equipment Replacement Schedule

Year/Make/Model	Department	Amount
2002 Spartan Chassis	Fire	\$ 610,000.00
2010 Chevrolet Impala	Police	\$ 34,129.20
2010 Chevrolet Impala	Police	\$ 34,129.20
2010 Chevrolet Impala	Police	\$ 34,129.20
2001 Chevrolet Silverado	Police	\$ 25,684.00
2008 Chevrolet Silverado	Police	\$ 40,007.00
2000 Ford F-150	Public Works	\$ 35,000.00
1999 Ford F-450	Public Works	\$ 41,107.50
1996 GMC Bucket	Public Works	\$ 192,937.50
1998 Case Wheel Loader	Public Works	\$ 200,000.00
2005 Elgin Sweeper	Public Works	\$ 206,636.00
2006 John Deere Gator	Public Works	\$ 20,000.00
1997 Sweeper	Public Works	\$ 8,000.00
<b>Total</b>		<b>\$ 1,481,759.60</b>



### NJPA VENDOR CONTRACT SUMMARY – ALTEC INDUSTRIES

<b>DATE</b> July 19, 2011	<b>RFP #</b> 060311
<b>AWARDED CONTRACT NUMBER</b>  <b>060311-AII</b>	<b>NJPA RFP TITLE &amp; CATEGORY</b> Heavy Construction Equipment Together With Related Accessories, Supplies, And Services Public Utility Equipment
<b>CONTRACT PERIOD</b> July 19, 2011 through July 18, 2015	<b>PRICING MODEL</b> Line Item + Per Mile Delivery Charge
<b>DESCRIPTION</b> Comprehensive line of tractor mounted mowing, brush cutting, and land clearing attachments, including options for tractor/attachment packaged units	
<b>VENDOR NAME AND ADDRESS</b> Altec Industries, Inc. 33 Inverness Center Pkwy. Birmingham, AL 35232	<b>VENDOR CONTACT</b> Cullen Bull 205-222-0137 <a href="mailto:cullen.bull@altec.com">cullen.bull@altec.com</a> Elana Martinez 205-995-4862 <a href="mailto:elana.martinez@altec.com">elana.martinez@altec.com</a>

<b>NJPA CONTRACTS CONSIST OF THE FOLLOWING DOCUMENTS</b> Section 2.6 "Contract" as used herein shall mean cumulative documentation consisting of the RFP, and entire Bidder's Response, and fully executed "Acceptance and Award". <ul style="list-style-type: none"><li>• <a href="#">Request for Proposal (RFP)</a></li><li>• <a href="#">Bid Acceptance &amp; Award</a></li><li>• Bidder's Response and Pricing - Available upon request from the NJPA Contract Manager</li></ul>	<b>RELATED CONTRACT DOCUMENTATION</b> <a href="#">Board Minutes 7-19-11</a> <a href="#">Bid Evaluation</a> <a href="#">Bid Opening Witness Page</a> <a href="#">Affidavit of Advertisement</a> <a href="#">Bid Comment &amp; Review</a>
<b>DOCUMENTATION OF CONTRACT MAINTENANCE</b> <a href="#">Contract Renewal 2013</a> <a href="#">Contract Renewal 2012</a>	<b>ADDITIONAL INFORMATION:</b>

### NJPA INFORMATION

<b>NJPA CONTACT</b> Jeremy Schwartz	<b>TITLE</b> NJPA Contract Manager
<b>PHONE</b> 218-894-5488	<b>EMAIL</b> <a href="mailto:jeremy.schwartz@njpacoop.org">jeremy.schwartz@njpacoop.org</a>
<b>ADDRESS</b> 202 12th Street NE, P.O. Box 219, Staples, MN 56479	<b>WEBSITE</b> <a href="http://www.njpacoop.org">www.njpacoop.org</a>

National Joint Powers Alliance\*

Contract Purchasing Department

**ANNUAL RENEWAL OF AGREEMENT**

Made by and Between

**Altec Industries (Vendor)  
210 Inerness Center Drive  
Birmingham, AL 35242**

and

**National Joint Powers Alliance® (NJPA)  
20212<sup>th</sup> Street NE  
Staples, MN 56479  
Phone: (218) 894-1930**

Whereas:

"Vendor" and "NJPA" have entered into an "Acceptance and Award #060311-A11" for the procurement of Heavy Construction Equipment Together with Related Accessories, Supplies, and Services, and having a maturity date of July 9, 2015, and which are subject to annual renewals at the option of both parties.

Now therefore:

"Vendor" and "NJPA" hereby desire and agree to extend and renew the above defined contract for the period of July 9, 2013 to July 9, 2014.

National Joint Powers Alliance®(NJPA)

By: Susan Narvik, Its: Executive Director

Name printed or typed: Susan Narvik

Date 6/13/13

Altec Industries

By: Cullen Bull, Its: Technical Sales, Strategic accounts, Altec Industries

Name printed or typed: Cullen Bull

Date 6/12/13

If you do not desire to extend contract, please sign below and return this agreement.  
Discontinue: We desire to discontinue the contract.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Proposal Offering  
And Acceptance and Award  
RFP #060311

FORM D

HEAVY CONSTRUCTION EQUIPMENT TOGETHER WITH RELATED ACCESSORIES, SUPPLIES, AND SERVICES,

Proposal Offering (To be completed Only by Proposer)

In compliance with the Request for proposal (RFP) for HEAVY CONSTRUCTION EQUIPMENT TOGETHER WITH RELATED ACCESSORIES, SUPPLIES, AND SERVICES, the undersigned warrants that I/we have examined this RFP and, being familiar with all of the instructions, terms and conditions, general specifications, expectations, technical specifications, service expectations and any special terms, do hereby offer and agree to furnish the defined products/services and services in compliance with all terms, conditions of this RFP, any applicable amendments of this RFP, and all Proposer's Response documentation. Proposer further understands they are the sole offeror herein and that the performance of any sub-contractors employed by the Proposer in fulfillment of this offer is the sole responsibility of the Proposer.

Company Name: Altec Industries, Inc. Date: 6/1/2011

Company Address: 210 Inverness Center Drive

City: Birmingham State: AL Zip: 35242

Contact Person: Courtney Meredith Title: Inside Sales Representative

Authorized Signature (Ink only): *Courtney Meredith* Courtney Meredith  
(Name printed or typed)

Contract Acceptance and Award (To be completed only by NJPA)

Your proposal offering is hereby accepted and awarded. As an awarded Proposer, you are now bound to provide the defined goods and services contained in your proposal offering according to all terms, conditions, and pricing set forth in this RFP, any amendments to this RFP, and the Proposer's Response. The effective date of the Contract be 19 July, 2011 and continue for four years thereafter AND which is subject to annual renewal at the option of both parties.

**National Joint Powers Alliance® (NJPA)**

NJPA Authorized signature: *Lane D. Waldahl* Lane D. Waldahl  
(Name printed or typed)  
Title: Board Clerk

Awarded this 19th day of July, 2011 Contract Number # 060311-AII

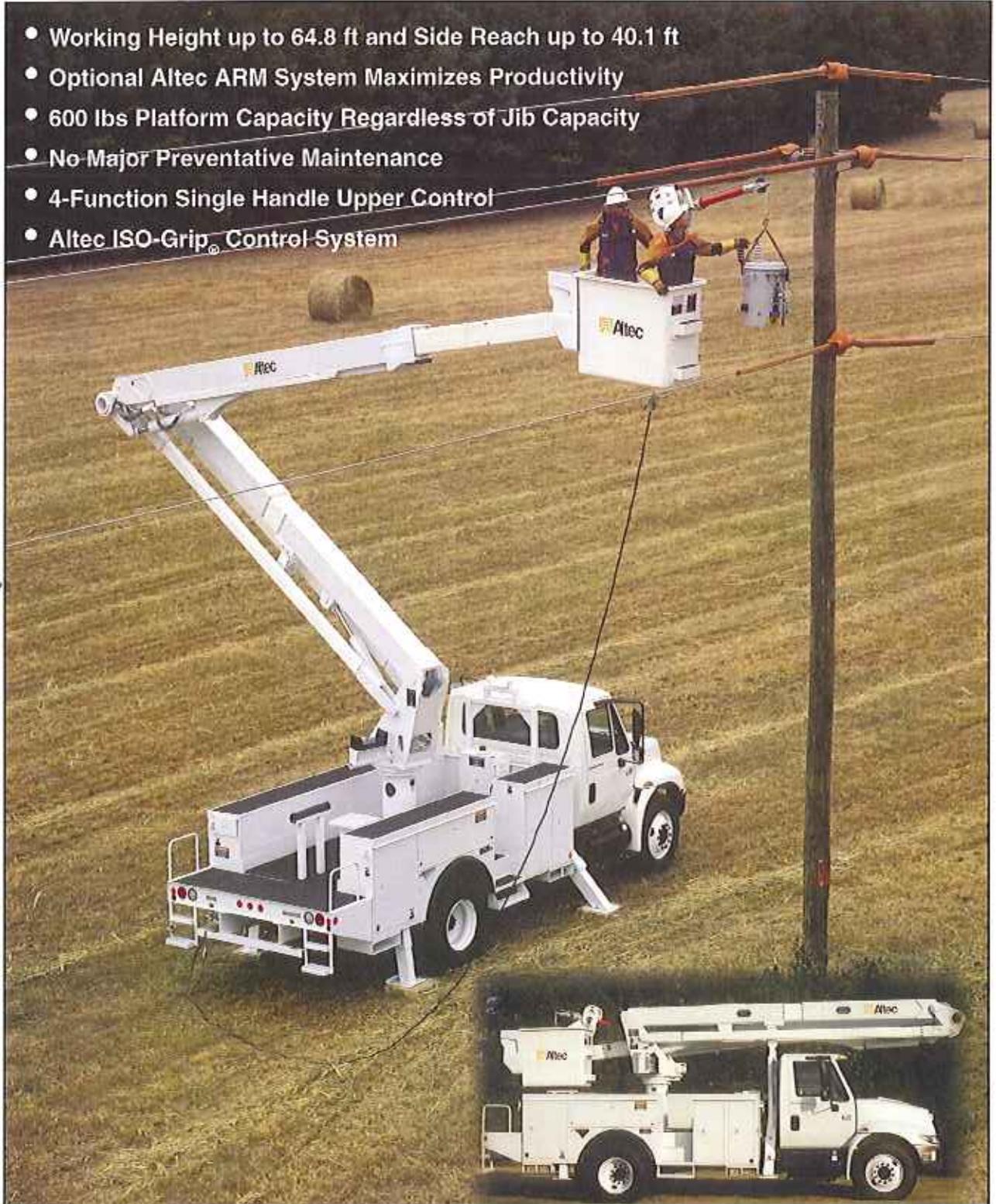
NJPA Authorized signature: *Todd Lyser* Todd Lyser  
(Name printed or typed)  
Title: Executive Director

Executed this 20th day of July Contract Number # 060311-AII



# Altec TA50/55/60 Aerial Device

- Working Height up to 64.8 ft and Side Reach up to 40.1 ft
- Optional Altec ARM System Maximizes Productivity
- 600 lbs Platform Capacity Regardless of Jib Capacity
- No-Major Preventative Maintenance
- 4-Function Single Handle Upper Control
- Altec ISO-Grip® Control-System



2 men  
top jib  
180° rotation  
or  
single man  
side jib  
90° rotation

## STANDARD FEATURES

- Fiberglass Upper Boom & Lower Boom Insulator
- Insulated Aerial Device
- Continuous Rotation
- Articulating Arm Provides Upper Boom Compensation
- Hydraulic Platform Rotation and Tilt
- Full Pressure, Open Center Hydraulic System
- A-Frame Primary Outriggers
- Altec ISO-Grip<sup>®</sup> Control System
- 4-Function Single Handle Upper Control
- Outrigger Motion Alarm and Outrigger Interlocks
- Back-Up Alarm
- Powder Coat Painted Prior to Assembly
- Two Sets of Hydraulic Tool Circuits at Platform
- Diagnostic Pressure Test Quick Disconnect Couplings
- Emergency Stop Valves at All Upper and Lower Control Stations
- Lower Boom Lifting Eye

## OPTIONS

- Rear or Behind Cab Mount
- Altec ARM System
- 1 Hydraulic Extend Jib
- 2-Man Platform with 180° Rotation
- Engine Start/Stop
- Remote Secondary Stowage
- Jib Adapter
- Phase Lifting Jib Attachment
- Auxiliary Outriggers
- Manual Throttle
- Platform Covers
- Intensifier at Boom Tip
- Tool Circuit Below Rotation

## RECOMMENDED FEATURES

- Fall Protection System
- Platform Liner
- Wheel Chocks
- Outrigger Pads

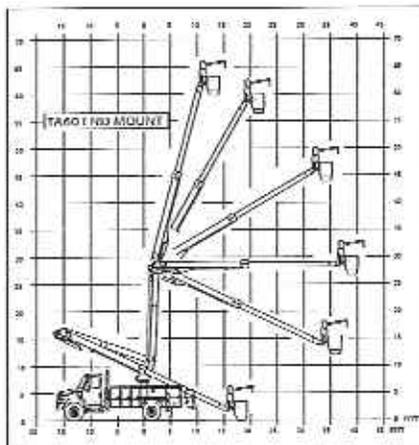
## GENERAL SPECIFICATIONS

	TA50		TA55		TA60	
Ground to Bottom of Platform*	49.5 ft	15.1 m	54.4 ft	16.6 m	59.8 ft	18.2 m
Working Height*	54.5 ft	16.6 m	59.4 ft	18.1 m	64.8 ft	19.8 m
Maximum Side Reach (@ Platform Height)	36.2 ft	11.0 m	38.3 ft	11.7 m	40.1 ft	12.2 m
	19.9 ft	6.1 m	22.7 ft	6.9 m	26.6 ft	8.1 m
Slowed Travel Height, approx.*	11.9 ft	3.6 m	11.4 ft	3.5 m		
Platform Capacity, Single 2-man	600 lbs.		272.2 kg			
Upper Boom Isolation Gap, min.	38 in	965 mm	16 in	406 mm	36 in	914 mm
Articulating Arm Isolation Gap	12 in	305 mm	8.5 in	216 mm	12 in	305 mm
Upper Boom Articulation	-25° to 75°					
Articulating Arm Articulation	5.25° to 92.5°		0° to 92.5°			
Rotation	Continuous					

\* Based on chassis frame height of 40 inches (1016 mm).

Altec Aerial Devices meet or exceed all applicable ANSI Standards as of the date of manufacture. Altec reserves the right to improve models and change specifications without notice or obligation.

## REACH DIAGRAM



The optional Altec ARM System provides the unique ability to handle material on either side of the boom tip.



The Altec ARM Jib makes removing and installing transformers Safer and Smarter.

sales@altec.com  
Sales - 800-958-2555  
Service - 877-GOALTEC

**Prepared For:**  
 Altec Industries \*  
 Jennifer Pellersels  
 31 Inverness Center Pkwy. Ste. 360  
 Birmingham, AL 35242-4875  
 (205)323 - 8751  
 Reference ID: Willmar

**Presented By:**  
 Southland International Trucks, Inc.  
 Philip Noles  
 200 Ormoor Blvd.  
 Homewood AL 35209 -  
 (205)942-6226

Thank you for the opportunity to provide you with the following quotation on a new International truck. I am sure the following detailed specification will meet your operational requirements, and I look forward to serving your business needs.

**Model Profile**  
**2014 4400 SBA 4X2 (MA035)**

<b>APPLICATION:</b>	Utility/Service (Other)
<b>MISSION:</b>	Requested GVWR: 33000. Calc. GVWR: 33000 Calc. Start / Grade Ability: 42.42% / 3.31% @ 55 MPH Calc. Geared Speed: 66.1 MPH
<b>FUEL ECONOMY:</b>	6.93 MPG @ 55 MPH
<b>DIMENSION:</b>	Wheelbase: 175.00, CA: 107.90, Axle to Frame: 114.00
<b>ENGINE, DIESEL:</b>	{MaxxForce DT} EPA 10, 300 HP @ 2200 RPM, 860 lb-ft Torque @ 1300 RPM, 2400 RPM Governed Speed
<b>TRANSMISSION, AUTOMATIC:</b>	{Allison 3500_RDS_P} 5th Generation Controls; Wide Ratio, 6-Speed, With Double Overdrive; On/Off Hwy; Includes Oil Level Sensor, With PTO Provision, Less Retarder, With 80,000-lb GVW & GCW Max.
<b>CLUTCH:</b>	Omit Item (Clutch & Control)
<b>AXLE, FRONT NON-DRIVING:</b>	{Meritor MFS-13-143A} Wide Track, I-Beam Type, 13,000-lb Capacity
<b>AXLE, REAR, SINGLE:</b>	{Meritor RS-21-160} Single Reduction, 20,000-lb Capacity, 200 Wheel Ends, Driver Control Locking Differential Gear Ratio: 6.83
<b>CAB:</b>	Conventional
<b>TIRE, FRONT:</b>	(2) 11R22.5 HSL2 ECO PLUS (CONTINENTAL) 500 rev/mile, load range H, 16 ply
<b>TIRE, REAR:</b>	(4) 11R22.5 HDR2 (CONTINENTAL) 491 rev/mile, load range G, 14 ply
<b>SUSPENSION, RR, SPRING, SINGLE:</b>	Vari-Rate; 20,000-lb Capacity, With 4500 lb Auxiliary Rubber Spring
<b>PAINT:</b>	Cab schematic 100GA Location 1: 6H39, Brt Med Blu (Custom) Chassis schematic N/A

<u>Code</u>	<u>Description</u>
MA03500	Base Chassis, Model 4400 SBA 4X2 with 175.00 Wheelbase, 107.90 CA, and 114.00 Axle to Frame.
1570	TOW HOOK, FRONT (2) Frame Mounted
1CAE	FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 10.125" x 3.580" x 0.312" (257.2mm x 90.9mm x 8.0mm); 420.0" (10668mm) Maximum OAL
1LLD	BUMPER, FRONT Full Width, Aerodynamic, Steel; 0.142" Material Thickness  <u>Includes</u> : BUMPER, FRONT Powder Coated Gray (Argent) Color
1SAL	CROSSMEMBER, REAR, AF (01)
1WEH	WHEELBASE RANGE 134" (340cm) Through and Including 197" (500cm)
2ATG	AXLE, FRONT NON-DRIVING (Meritor MFS-13-143A) Wide Track, I-Beam Type, 13,000-lb Capacity  <u>Notes</u> : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.
3770	SPRINGS, FRONT AUXILIARY Rubber
3AGS	SUSPENSION, FRONT, SPRING Parabolic, Taper Leaf; 13,000-lb Capacity; With Shock Absorbers  <u>Includes</u> : SPRING PINS Rubber Bushings, Maintenance-Free  <u>Notes</u> : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.
4091	BRAKE SYSTEM, AIR Dual System for Straight Truck Applications  <u>Includes</u> : BRAKE LINES Color and Size Coded Nylon : DRAIN VALVE Twist-Type : GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster : PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel : PARKING BRAKE VALVE For Truck : QUICK RELEASE VALVE Bendix On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4 : SLACK ADJUSTERS, FRONT Automatic : SLACK ADJUSTERS, REAR Automatic : SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4  <u>Notes</u> : Front and Rear Dust Shields not Included : Rear Axle is Limited to 19,000-lb GAWR with Code 04091 BRAKE SYSTEM, AIR and Code 04NCL BRAKES, REAR, AIR CAM Regardless of Axle/Suspension Ordered. : Rear Axle is Limited to 20,000-lb GAWR with Code 04091 BRAKE SYSTEM, AIR and Code 04NCG BRAKES, REAR, AIR CAM Regardless of Axle/Suspension Ordered. : Rear Axle is Limited to 23,000-lb GAWR with Code 04091 BRAKE SYSTEM, AIR and Standard Rear Air Cam Brakes Regardless of Axle/Suspension Ordered.
4AZA	AIR BRAKE ABS (Bendix AntiLock Brake System) Full Vehicle Wheel Control System (4-Channel)
4EBD	AIR DRYER (Meritor Wabco System Saver 1200) with Heater  <u>Includes</u> : AIR DRYER LOCATION Inside Left Rail, Back of Cab
4ESX	BRAKE CHAMBERS, FRONT AXLE (Haldex) 20 SqIn
4EVL	BRAKE CHAMBERS, REAR AXLE (Haldex GC3030LHDHO) 30/30 Spring Brake

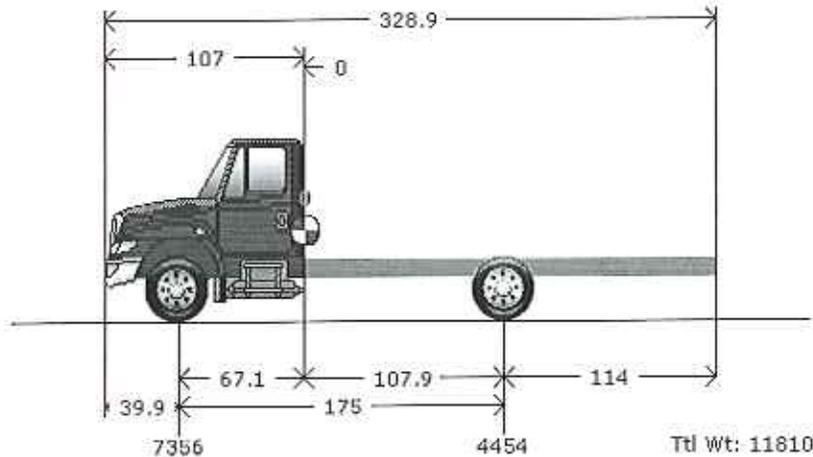
<u>Code</u>	<u>Description</u>
	<u>Includes</u> : BRAKE CHAMBERS, SPRING (2) Rear Parking; WITH TRUCK BRAKES: All 4x2, 4x4; WITH TRACTOR BRAKES: All 4x2, 4x4; 6x4 & 6x6 with Rear Tandem Axles Less Than 46,000-lb. or GVWR Less Than 54,000-lb.
4JCJ	BRAKES, FRONT, AIR CAM S-Cam; 16.5" x 5.0"; Includes 20 Sq. In. Long Stroke Brake Chambers  <u>Notes</u> : Front Axle with 14,000-lb GAWR is Limited to 13,200-lb GAWR when used in Conjunction with 15" BRAKES, FRONT, AIR CAM. : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.
4NDB	BRAKES, REAR, AIR CAM S-Cam; 16.5" x 7.0"; Includes 30/30 Sq. In. Long Stroke Brake Chamber and Spring Actuated Parking Brake  <u>Notes</u> : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.
4SBC	AIR COMPRESSOR (Bendix Tu-Flo 550) 13.2 CFM Capacity
5708	STEERING COLUMN Tilting
5CAL	STEERING WHEEL 2-Spoke, 18" Diam., Black
5PSM	STEERING GEAR (Sheppard HD94) Power
7BDA	EXHAUST SYSTEM Single, Horizontal, Aftertreatment Device Frame Mounted Right Side Back of Cab, Includes Horizontal Tail Pipe  <u>Includes</u> : NOTE: The Horizontal Tailpipe Includes a Temperature Control Device
7WZY	SWITCH, FOR EXHAUST 2 Position, Lighted & Latching, ON/OFF Type, Mounted in IP, Inhibits Diesel Particulate Filter Regeneration as Long as Switch is in ON Position
8000	ELECTRICAL SYSTEM 12-Volt, Standard Equipment  <u>Includes</u> : BATTERY BOX Steel : DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab : FUSES, ELECTRICAL SAE Blade-Type : HAZARD SWITCH Push On/Push Off, Located on Top of Steering Column Cover : HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever : HORN, ELECTRIC Single : JUMP START STUD Located on Positive Terminal of Outmost Battery : PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light : STARTER SWITCH Electric, Key Operated : STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector : TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change Feature : TURN SIGNALS, FRONT Includes Reflectors and Auxiliary Side Turn Signals, Solid State Flashers; Flush Mounted : WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Turn Signal Lever : WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted : WIRING, CHASSIS Color Coded and Continuously Numbered
8GXD	ALTERNATOR (Leece-Neville AVI160P2013) Brush Type; 12 Volt 160 Amp. Capacity, Pad Mount, With Remote Sense

<u>Code</u>	<u>Description</u>
8HAB	BODY BUILDER WIRING Back of Standard Cab at Left Frame or Under Extended or Crow Cab at Left Frame; Includes Sealed Connectors for Tail/Amber Turn/Marker/ Backup/Accessory Power/Ground and Sealed Connector for Stop/Turn
8MEP	BATTERY SYSTEM (International) Maintenance-Free (2) 12-Volt 1300CCA Total
8RMD	RADIO AM/FM/WB/Clock/3MM Auxiliary Input, with Multiple Speakers
8WPB	HEADLIGHTS Halogen; Composite Aero Design for Two Light System; Includes Daytime Running Lights
8WTK	STARTING MOTOR (Delco Remy 38MT Type 300) 12 Volt; less Thermal Over-Crank Protection
8WWJ	INDICATOR, LOW COOLANT LEVEL With Audible Alarm
9HAD	GRILLE Chrome
9WAY	FRONT END Tilting, Fiberglass, With Three Piece Construction
10060	PAINT SCHEMATIC, PT-1 Single Color, Design 100  <u>Includes</u> : PAINT SCHEMATIC ID LETTERS "GA"
10761	PAINT TYPE Base Coat/Clear Coat, 1-2 Tone
10771	PAINT CLASS Single Custom Color
11001	CLUTCH Omit Item (Clutch & Control)
12NUT	ENGINE, DIESEL (MaxxForce DT) EPA 10, 300 HP @ 2200 RPM, 860 lb-ft Torque @ 1300 RPM, 2400 RPM Governed Speed  <u>Includes</u> : AIR COMPRESSOR AIR SUPPLY LINE Naturally-Aspirated (Air Brake Chassis Only) : ANTI-FREEZE Red Shell Rotella Extended Life Coolant; -40 Degrees F/ -40 Degrees C; for MaxxForce Engines : COLD STARTING EQUIPMENT Intake Manifold Electric Grid Heater with Engine ECM Control : CRUISE CONTROL Electronic; Controls Integral to Steering Wheel : ENGINE OIL DRAIN PLUG Magnetic : ENGINE SHUTDOWN Electric, Key Operated : FUEL FILTER Included with Fuel/Water Separator : FUEL/WATER SEPARATOR Fuel/Water Separator and Fuel Filter in a Single Assembly; With Water-in-Fuel Sensor; Engine Mounted : GOVERNOR Electronic : OIL FILTER, ENGINE Spin-On Type : WET TYPE CYLINDER SLEEVES  <u>Notes</u> : Recommend Code 12THT when using front mount obstructions (winches, cones, reels, etc.) that restrict air flow through the radiator.
12THT	FAN DRIVE (Horton Drivemaster) Direct Drive Type, Two Speed With Residual Torque Device for Disengaged Fan Speed  <u>Includes</u> : FAN Nylon  <u>Notes</u> : Recommend Code 12THT when using front mount obstructions (winches, cones, reels, etc.) that restrict air flow through the radiator.
12UAU	RADIATOR Aluminum; 2-Row, Cross Flow, Over Under System, 1045 SqIn Louvered, with 373 SqIn CAC, with 369 SqIn LTR, with In-Tank Transmission Oil Cooler  <u>Includes</u>

<u>Code</u>	<u>Description</u>
	: DEAERATION SYSTEM with Surge Tank : HOSE CLAMPS, RADIATOR HOSES Gates Shrink Band Type; Thermoplastic Coolant Hose Clamps : RADIATOR HOSES Premium, Rubber
12UXG	FEDERAL EMISSIONS for 2010; MaxxForce DT Engines
12VBR	AIR CLEANER With Service Protection Element  <u>Includes</u> : GAUGE, AIR CLEANER RESTRICTION Air Cleaner Mounted
12VXT	THROTTLE, HAND CONTROL Engine Speed Control; Electronic, Stationary, Variable Speed; Mounted on Steering Wheel
12VZA	ENGINE CONTROL, REMOTE MOUNTED Provision for; Includes Wiring for Body Builder Installation of PTO Controls; With Ignition Switch Control for MaxxForce post 2007 Emissions Electronic Engines
12WTA	FAN DRIVE SPECIAL EFFECTS Fan Cooling Ring with Fan Shroud Effects, Engine Mounted
12WZE	EMISSION COMPLIANCE Federal, Does Not Comply With California Clean Air Idle Regulations
12XAN	OBD COMPLIANCE for 2013 OBD (On Board Diagnostics)
13AVL	TRANSMISSION, AUTOMATIC (Allison 3500_RDS_P) 5th Generation Controls; Wide Ratio, 6-Speed, With Double Overdrive; On/Off Hwy; Includes Oil Level Sensor, With PTO Provision, Loss Retarder, With 80,000-lb GVW & GCW Max.
13WBL	TRANSMISSION SHIFT CONTROL (Allison) Push-Button Type; for Allison 3000 & 4000 Series Transmission
13WGH	TRANSMISSION DIPSTICK Relocated to Right Side of Transmission
13WLP	TRANSMISSION OIL Synthetic; 29 thru 42 Pints
13WUC	ALLISON SPARE INPUT/OUTPUT for Rugged Duty Series (RDS); General Purpose Trucks, Construction
13WYL	SHIFT CONTROL PARAMETERS Allison Performance Programming in Primary and Allison Economy Programming in Secondary
14ATZ	AXLE, REAR, SINGLE (Meritor RS-21-160) Single Reduction, 20,000-lb Capacity, 200 Wheel Ends, Driver Control Locking Differential . Gear Ratio: 6.83  <u>Includes</u> : REAR AXLE DRAIN PLUG (1) Magnetic, For Single Rear Axle
14VAG	SUSPENSION, RR, SPRING, SINGLE Vari-Rate; 20,000-lb Capacity, With 4500 lb Auxiliary Rubber Spring  <u>Notes</u> : The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam; Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires.
15SGJ	FUEL TANK Top Draw; D Style, Non Polished Aluminum, 50 U.S. Gal., 189 L Capacity, 16" Tank Depth, with Quick Connect Outlet, Mounted Left Side, Under Cab
16030	CAB Conventional  <u>Includes</u> : ARM REST (2) Molded Plastic; One Each Door : CLEARANCE/MARKER LIGHTS (5) Flush Mounted : COAT HOOK, CAB Located on Rear Wall, Centered Above Rear Window : CUP HOLDERS Two Cup Holders, Located in Lower Center of Instrument Panel : DOME LIGHT, CAB Rectangular, Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Console, Center Mounted : GLASS, ALL WINDOWS Tinted : GRAB HANDLE, CAB INTERIOR (1) "A" Pillar Mounted, Passenger Side : GRAB HANDLE, CAB INTERIOR (2) Front of "B" Pillar Mounted, One Each Side

<u>Code</u>	<u>Description</u>
	: INTERIOR SHEET METAL Upper Door (Above Window Ledge) Painted Exterior Color : STEP (4) Two Steps Per Door
16400	SEAT, PASSENGER Omit Item
16975	HEATER HOSES Silicone
16HBA	GAUGE CLUSTER English With English Electronic Speedometer  <u>Includes</u> : GAUGE CLUSTER (5) Engine Oil Pressure (Electronic), Water Temperature (Electronic), Fuel (Electronic), Tachometer (Electronic), Voltmeter : ODOMETER DISPLAY, Miles, Trip Miles, Engine Hours, Trip Hours, Fault Code Readout : WARNING SYSTEM Low Fuel, Low Oil Pressure, High Engine Coolant Temp, and Low Battery Voltage (Visual and Audible)
16HGH	GAUGE, OIL TEMP, ALLISON TRAN
16HKT	IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster
16JPU	SEAT, FRONT BENCH (Gra-Mag) Full Width; Vinyl, With Fixed Mid Back  <u>Includes</u> : SEAT BELT (3) Two 3-Point Shoulder Belts for Driver and Outer Passenger and One 2-Point Lap Belt for Center Passenger
16SDJ	MIRRORS (2) (Lang Mekra) Rectangular, 7.44" x 14.84" & 7.44" sq. Convex Both Sides, 102" Inside Spacing, Breakaway Type, Black Heads, Brackets & Arms
16VBW	CAB MOUNTING HEIGHT EFFECTS Mid Cab in Lieu of Low Cab Mounting Height (Approx. 4") for Increased Cooling System Requirements
16WCT	AIR CONDITIONER (Blond-Air) With Integral Heater & Defroster  <u>Includes</u> : HEATER HOSES Premium : HOSE CLAMPS, HEATER HOSE Mubea Constant Tension Clamps : REFRIGERANT Hydrofluorocarbon HFC-134A
16WJS	INSTRUMENT PANEL Center Section, Flat Panel
16WRX	CAB INTERIOR TRIM Deluxe  <u>Includes</u> : "A" PILLAR COVER Molded Plastic : CAB INTERIOR TRIM PANELS Cloth Covered Molded Plastic, Full Height; All Exposed Interior Sheet Metal is Covered Except for the Following: with a Two-Man Passenger Seat or with a Full Bench Seat the Back Panel is Completely Void of Covering : CONSOLE, OVERHEAD Molded Plastic; With Dual Storage Pockets with Retainer Nets and CB Radio Pocket : DOOR TRIM PANELS Molded Plastic; Driver and Passenger Doors : FLOOR COVERING Rubber, Black : HEADLINER Soft Padded Cloth : INSTRUMENT PANEL TRIM Molded Plastic with Black Center Section : STORAGE POCKET, DOOR (1) Molded Plastic, Full-Length; Driver Door : SUN VISOR (2) Padded Vinyl with Driver Side Toll Ticket Strap, Integral to Console
16WSK	CAB REAR SUSPENSION Air Bag Type
27DMA	WHEELS, FRONT DISC; 22.5" Painted Steel, 2 Hand Hole, 10 Stud (285.75MM BC) Hub Piloted, Flanged Nut, Metric Mount, 8.25 DC Rims; With Steel Hubs  <u>Includes</u> : PAINT IDENTITY, FRONT WHEELS White  <u>Notes</u>

<u>Code</u>	<u>Description</u>
	: Compatible Tire Sizes: 11R22.5, 12R22.5, 255/70R22.5, 255/80R22.5, 265/75R22.5, 275/70R22.5, 275/80R22.5, 295/75R22.5, 295/80R22.5
28DMA	WHEELS, REAR DUAL DISC; 22.5" Painted Steel, 2 Hand Hole, 10-Stud (285.75MM BC) Hub Piloted, Flanged Nut, Metric Mount, 8.25 DC Rims; With Steel Hubs
	<u>Includes</u> : PAINT IDENTITY, REAR WHEELS White
	<u>Notes</u> : Compatible Tire Sizes: 11R22.5, 12R22.5, 255/70R22.5, 255/80R22.5, 265/75R22.5, 275/70R22.5, 275/80R22.5, 295/75R22.5, 295/80R22.5
29PBA	PAINT IDENTITY, FRONT WHEELS (Accuride) Disc Wheels; With Vendor Applied (PKBLK21) Black Powder Coat Paint
29PBB	PAINT IDENTITY, REAR WHEELS (Accuride) Disc Wheels; With Vendor Applied (PKBLK21) Black Powder Coat Paint
7372135423	(4) TIRE, REAR 11R22.5 HDR2 (CONTINENTAL) 491 rev/mile, load range G, 14 ply
7382135414	(2) TIRE, FRONT 11R22.5 HSL2 ECO PLUS (CONTINENTAL) 500 rev/mile, load range H, 16 ply



Graphics are provided as visual aids only and are not intended to represent the actual scale, shape, or color of the truck or its components. All weights are represented in lbs.

Truck			Body/Trailer			Chassis/Empty Weights		
Bumper to Axle	(BA)	39.9	Body Length	(BL)	N/A	Tractor Front Axle:		7,356
Wheelbase	(WB)	175.00				Tractor Rear Axle:		4,454
Axle to Frame	(AF)	114.00						
Axle to Back Cab	(ABC)	67.1						
Cab to Axle	(CA)	107.9						
Usable CA		107.9						
CA Reduction Adjustment		0						
Fuel-Diesel(Gals)		0						
DEF(Gals)		0						

Before the Cab			Cab			Payloads Chassis			Body			After the Body		
#	Weight	CG	#	Weight	CG	#	Weight	CG	#	Weight	CG	#	Weight	CG
						1	0	1						

Loads	
Payload Weight:	0
Driver:	0
Fuel-Diesel(Lbs):	0
DEF(Lbs):	0

Weight Distribution	
Total Front Axle:	7,356
Total Rear Axle:	4,454
Total Weight:	11,810

Weights and clearances in this proposal are estimates only. Navistar, Inc. is not liable for any consequences resulting from any differences between the estimated weights and clearances and the actual manufactured weights and clearances.

Weight Distribution

All weights are represented in lbs.

	Truck		
	Front	Rear	Total
<u>Chassis Weight</u>			
Chassis Weight:	7,356	4,454	11,810
Fuel:	0	0	0
DEF:	0	0	0
(Curb Weight):	7,356	4,454	11,810

Loads

Payloads:	0	0	0
Driver:	0	0	0
Axle Totals (Gross Weight):	7,356	4,454	11,810

Weight Ratings

	Truck	
	Front	Rear
Axle(axle capacity)	13,000	20,000
Tire(tire capacity)	13,220	24,700
Suspension(suspension capacity)	13,000	20,000
Spring:	0	
Fed Bridge Law (axle spread):	20,000	20,000
<u>Wheel Combination</u>	<u>Load</u>	<u>Limit</u>
1 - 2:	11,810	44,000

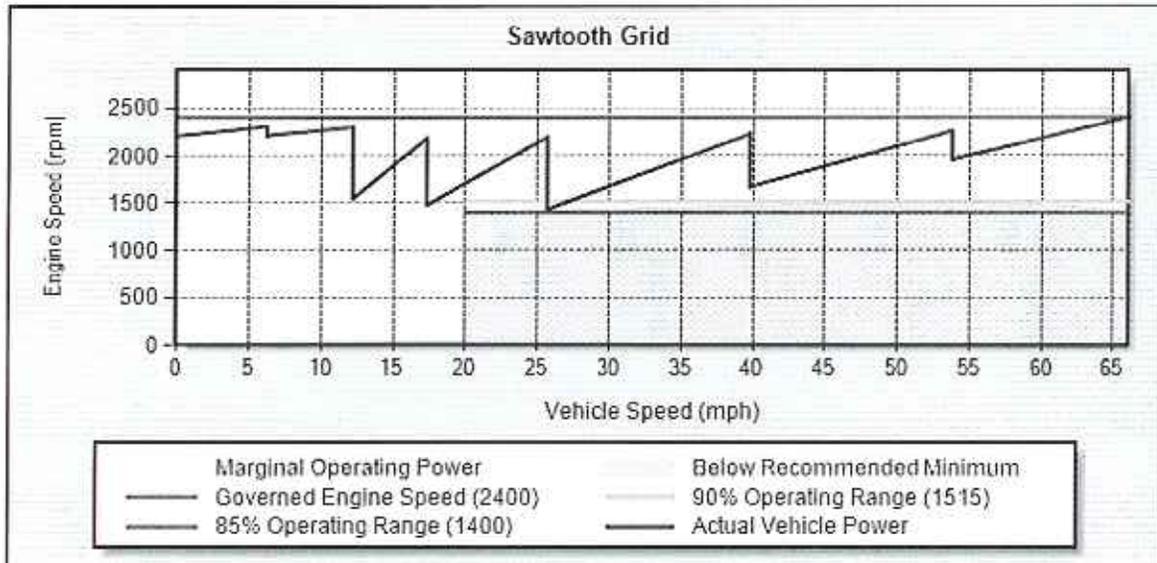
Federal Total Vehicle Weight Limit: 80,000

Maximum Gross Vehicle Weight Rating (GVWR) 33,000 - Gross Vehicle Weight(GVW) 11,810 = 21,190 Reserves

Weight Summary

\* Distributed weights are within capacity limits

ENGINE/TRANSMISSION MATCHING



Sawtooth Details

Gear	Trans Ratio	Upshift Power Avail		Govern Power Avail		Peak Power Comparison			Warn Msg
		Veh Spd (MPH)	Eng Spd (RPM)	Veh Spd (MPH)	Eng Spd (RPM)	Gear Step (%)	85% Range (%)	90% Range (%)	
1C	4.59	0.0	2213	6.2	2311	N/A	71	58	@
2C	2.26	6.2	2216	12.2	2301	N/A	71	58	
2L	2.26	12.2	1546	17.3	2181	N/A	71	58	
3L	1.53	17.3	1476	25.7	2194	N/A	71	58	
4L	1.00	25.7	1434	39.8	2225	N/A	71	58	
5L	0.75	39.8	1669	53.8	2254	N/A	71	58	
6L	0.65	53.8	1953	66.1	2400	N/A	71	58	

@ - WHEELSLIP CAN OCCUR AT THE GRADE SHOWN. THE VEHICLE IS CAPABLE OF INCREASED GRADEABILITY IF MORE WEIGHT IS PLACED ON THE DRIVE AXLES.

## STEADY STATE PERFORMANCE

Performance Results	Gear	Veh Spd (mph)	Eng Spd (rpm)	Fuel Econ (mpg)	Grade (%)	Notes
LEVEL ROAD MAXIMUM SPEED	6L	67.6	2456	5.18	0.00	
HI GEAR SPEED @ RATED RPM	6L	66.1	2400	5.28	1.29	
55.0 MPH STEADY-STATE	6L	55.0	1998	6.93	3.31	- Calculated Grade Ability/Fuel Economy

VEHICLE ORDER CODING ERRORS MAY RESULT IF THE "LEVEL ROAD MAX SPEED" VALUE EXCEEDS THE "HI GEAR SPEED @ RATED RPM" AND IS USED AS THE ENGINE PROGRAMMABLE VEHICLE SPEED LIMIT.

IF THE RESULTS CONTAIN "-----", VEHICLE CANNOT ATTAIN THAT SPEED.

IF THE RESULTS CONTAIN "\*\*\*\*\*", THE ENGINE USED DOES NOT HAVE A FUEL MAP. FUEL ECONOMY CANNOT BE PREDICTED.

## Recommendations / General Information

IDLE FUEL RATE : 1.01 GALS/HR @ 800.0 RPM

TORQUE CONVERTER : TC-413 STALL RATIO: 2.44

## Fuel Economy Route: Normal Route - City, Suburban, and Highway

Key Fuel Economy Information	City	Suburban	Highway	Notes
MILES PER GALLON	5.86	7.66	6.54	
AVERAGE MPH	19.0	39.9	54.6	
MISSION MINUTES	29.79	51.91	173.33	

IF THE RESULTS CONTAIN "\*\*\*\*\*", THE ENGINE USED DOES NOT HAVE A FUEL MAP. FUEL ECONOMY CANNOT BE PREDICTED.

## GRADEABILITY PERFORMANCE

## Enroute - Full Throttle Upshift Performance

Gear	Trans Ratio	Veh Spd (mph)	Eng Spd (rpm)	Whl Pwr (hp)	Grade (%)	Warn Notes
1C	4.59	0.0	2213	0.00	42.42	@ STALL
		3.6	2221	125.30	42.42	@ 70% EFF
		4.8	2251	166.61	42.42	@ 80% EFF
		6.2	2311	216.39	42.42	@
2C	2.26	6.2	2216	169.63	31.99	
		12.2	2301	219.20	20.03	
2L	2.26	12.2	1546	226.94	20.79	
		17.3	2181	264.85	16.89	
3L	1.53	17.3	1476	216.84	13.62	
		25.7	2194	264.48	10.84	
4L	1.00	25.7	1434	209.94	8.39	
		39.8	2225	259.08	6.08	
5L	0.75	39.8	1669	240.29	5.54	
		53.8	2254	249.85	3.39	
6L	0.65	53.8	1953	254.87	3.50	
		66.1	2400	221.51	1.29	RATED RPM
		66.4	2413	206.75	1.00	
		67.0	2435	181.00	0.50	
		67.6	2456	155.80	0.00	LEVEL ROAD

## STARTING / TOP GEAR PERFORMANCE

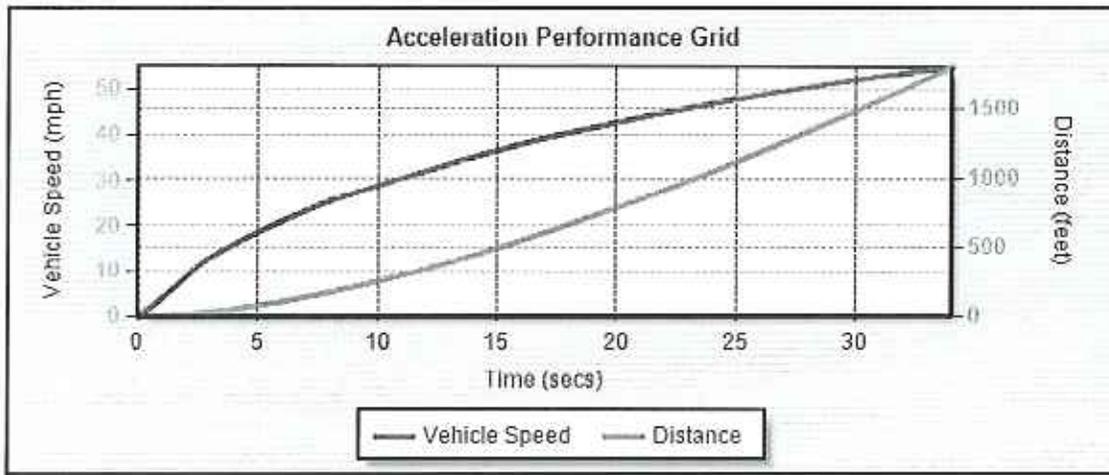
Gear	Trans Ratio	Veh Spd (mph)	Eng Spd (rpm)	Whl Pwr (hp)	Grade (%)	Warn Notes
1C	4.59	0.0		0.00	42.42	@ STALL
		4.8		166.61	42.42	@ 80% EFF - Calculated Start Ability

@ - WHEELSLIP CAN OCCUR AT THE GRADE SHOWN. THE VEHICLE IS CAPABLE OF INCREASED GRADEABILITY IF MORE WEIGHT IS PLACED ON THE DRIVE AXLES.

THE TRANSMISSION WAS SIMULATED IN PERFORMANCE OPERATING MODE.

ACCELERATION PERFORMANCE RESULTS

Acceleration Performance Grid



Acceleration Performance: TIME TO ACCELERATE ON A GRADE TO 55.0 (MPH) IS 34.05 (SECS)

Acceleration Performance Details

Gear	Time (secs)	Distance (feet)	Speed (mph)	Notes
1C	0.29	0.2	1.0	
	0.58	0.9	2.0	
	0.82	1.7	3.0	
	1.02	2.8	4.0	
	1.24	4.2	5.0	
2C	1.47	6.1	6.0	
	1.51	6.5	6.2	
	1.73	8.6	7.2	
	1.93	10.9	8.2	
	2.13	13.3	9.2	
	2.34	16.3	10.2	
	2.56	19.9	11.2	
2L	2.81	24.1	12.2	
	2.82	24.3	12.2	
	3.14	30.2	13.2	
	3.46	36.6	14.2	
	3.78	43.6	15.2	
	4.13	51.7	16.2	
	4.50	60.8	17.2	
3L	4.51	61.0	17.3	
	4.92	71.6	18.3	
	5.32	82.8	19.3	
	5.73	94.6	20.3	
	6.14	107.1	21.3	
	6.56	120.5	22.3	
	7.00	135.2	23.3	
	7.46	151.3	24.3	
4L	7.95	168.9	25.3	
	8.14	176.2	25.7	
	8.74	199.3	26.7	
	9.34	223.2	27.7	
	9.95	248.2	28.7	

Gear	Time (secs)	Distance (feet)	Speed (mph)	Notes
	10.55	274.1	29.7	
	11.16	301.0	30.7	
	11.77	328.8	31.7	
	12.39	357.9	32.7	
	13.02	388.6	33.7	
	13.67	421.4	34.7	
	14.35	456.4	35.7	
	15.06	493.7	36.7	
	15.79	533.6	37.7	
	16.55	576.3	38.7	
	17.35	622.1	39.7	
5L	17.47	629.4	39.8	
	18.36	681.6	40.8	
	19.25	735.5	41.8	
	20.14	791.0	42.8	
	21.05	848.9	43.8	
	21.99	910.0	44.8	
	22.97	974.7	45.8	
	23.98	1043.3	46.8	
	25.02	1116.0	47.8	
	26.11	1193.2	48.8	
	27.25	1275.3	49.8	
	28.43	1362.7	50.8	
	29.67	1455.8	51.8	
	30.97	1555.7	52.8	
6L	32.30	1659.2	53.8	
	33.71	1771.3	54.8	
	34.05	1798.7	55.0	

## REQUIRED TCAPE INFORMATION

TCAPE Factors For Vehicle

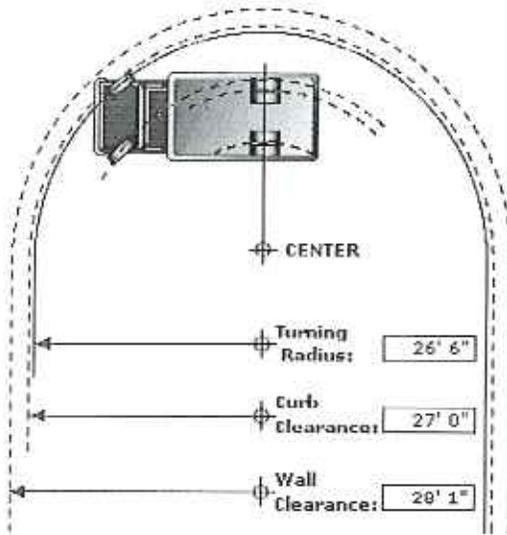
Selected Rear Axle Gear Ratio(s):	6.83
Vehicle Vocation:	GENERAL ON HIGHWAY
Road Surface Type:	TYPICAL
Enroute PTO:	NO
Transmission Mode:	Performance
Fuel Economy Route:	Normal Route - City, Suburban, and Highway
ID Wheel Slip Conditions:	Yes
Engine Fan Type:	VISCOUS
Parked PTO:	NO
Road Governor/Cruise Ctrl:	No
Acceleration Grade (%):	0.0
Weight on Drive Axle (LBF):	20000
Alternator (A):	40
Frontal Area (FT <sup>2</sup> ):	96
Air Compressor (HP):	2.20
Vehicle Width (IN):	96
Vehicle Height (IN):	144
Steering Gear (HP):	2.60
Air Conditioner (HP):	3.20
Acceleration Vehicle Spd (MPH):	55.0
Speed Limit on Route (MPH):	61.0
Relative Drag Coefficient:	85
TIRE, FRONT	2 - RADIAL NORMAL
TIRE, REAR	4 - RADIAL NORMAL

Components

0002ATG	AXLE, FRONT NON-DRIVING {Meritor MFS-13-143A} Wide Track, I-Beam Type, 13,000-lb Capacity
0004SBC	AIR COMPRESSOR {Bendix Tu-Flo 550} 13.2 CFM Capacity
0005PSM	STEERING GEAR {Sheppard HD94} Power
0008GXD	ALTERNATOR {Leece-Neville AVI160P2013} Brush Type; 12 Volt 160 Amp. Capacity, Pad Mount, With Remote Sense
0012NUT	ENGINE, DIESEL {MaxxForte DT} EPA 10, 300 HP @ 2200 RPM, 860 lb-ft Torque @ 1300 RPM, 2400 RPM Governed Speed
0012THT	FAN DRIVE {Horton Drivemaster} Direct Drive Type, Two Speed With Residual Torque Device for Disengaged Fan Speed
0013AVL	TRANSMISSION, AUTOMATIC {Allison 3500_RDS_P} 5th Generation Controls; Wide Ratio, 6-Speed, With Double Overdrive; On/Off Hwy; Includes Oil Level Sensor, With PTO Provision, Less Retarder, With 80,000-lb GVW & GCW Max.
0014ATZ	AXLE, REAR, SINGLE {Meritor RS-21-160} Single Reduction, 20,000-lb Capacity, 200 Wheel Ends, Driver Control Locking Differential
0016030	CAB Conventional
0016WCT	AIR CONDITIONER {Blend-Air} With Integral Heater & Defroster
07372135423	TIRE, REAR 11R22.5 HDR2 (CONTINENTAL) 491 rev/mile, load range G, 14 ply 11R22.5 HDR2 (CONTINENTAL) 491 rev/mile, load range G, 14 ply
07382135414	TIRE, FRONT 11R22.5 HSL2 ECO PLUS (CONTINENTAL) 500 rev/mile, load range H, 16 ply 11R22.5 HSL2 ECO PLUS (CONTINENTAL) 500 rev/mile, load range H, 16 ply

TCAPE HAS BEEN DESIGNED TO GIVE ECONOMY AND PERFORMANCE PREDICTIONS WHICH HAVE BEEN SHOWN TO BE TYPICAL FOR MOST OPERATIONS. HOWEVER, DUE TO OPERATING CONDITIONS, DRIVER INFLUENCES, AND OTHER FACTORS, YOUR RESULTS MAY VARY FROM THOSE PREDICTED. ALSO, BECAUSE OF FUEL MAPPING PROCEDURES USED BY VARIOUS ENGINE MANUFACTURERS, COMPARISONS OF FUEL ECONOMY RESULTS FOR DIFFERENT BRANDS OF ENGINES MAY VARY FROM THOSE SHOWN.

NAVISTAR, INC. SHALL NOT BE LIABLE FOR ANY LOSS OF PROFITS, LOSS OF USE, INTERRUPTION OF BUSINESS OR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND THAT ARE INCURRED BY DEALER OR BY DEALER'S CUSTOMERS AS A RESULT OF RELIANCE ON TCAPE, WHETHER THE CLAIM IS IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE.



Series: 4000  
 Model: MA035  
 Description: 4400 SBA 4X2  
 Model Year: 2014

**Calculation Factors**

Wheelbase: 175  
 Front Axle: 0002ATG  
 Description: AXLE, FRONT NON-DRIVING, (Meritor MFS-13-143A) Wide Track, I-Beam Type, 13,000-lb Capacity  
 Front Wheel: 0027DMA  
 Description: WHEELS, FRONT, DISC; 22.5" Painted Steel, 2 Hand Hole, 10 Stud (285.75MM BC) Hub Piloted, Flanged Nut, Metric Mount, 8.25 DC Rims; With Steel Hubs  
 Front Tire: 07382135414  
 Description: TIRES, 11R22.5 HSL2 ECO PLUS (CONTINENTAL) 500 rev/mile, load range H, 16 ply  
 Steering Gear: 0005PSM  
 Description: STEERING GEAR, (Sheppard HD94) Power

**Turning Radius Statistics**

**General Information**

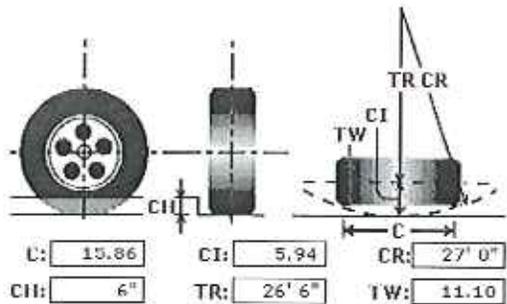
Inside Turn Angle: 45 Degrees  
 Radial Overhang: 19

**Axle Information**

KingPin Inclination: 6.25 Degrees  
 KingPin Center: 71.5

**Turning Radius - Curb View**

C - Curb Contact Length: 15.86  
 CI - Curb Clearance Increment: 5.94  
 CR - Curb Clearance Radius: 27'0"  
 CH - Curb Height: 6"  
 TR - Turning Radius: 26'6"  
 TW - Tire Width: 11.10



\* All Measurements are in inches, unless otherwise specified.

This information is based on engineering information available at this time. Actual figures may vary. Navistar, Inc. cannot accept liability for consequences due to this variance.

October 11, 2013  
Our 84th Year

320-235-3827

CITY OF WILLMAR PUBLIC WORKS  
801 W HWY 40

**Bill To:**

CITY OF WILLMAR PUBLIC WORKS  
801 W HWY 40

Willmar, MN 56201  
US

**Altec Quotation Number** 233590 - 4  
**Account Manager:** Clint Bitting  
**Inside Sales Rep:** Kevin J Chesterfield

Willmar, MN 56201  
United States  
**Altec Sales Order(s):**

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
	<u>Unit</u>		
1.	206 ALTEC Model TA60 telescopic articulating aerial with an insulating lower arm, insulating telescopic upper boom and the Altec ISO-Grip (U.S. Patent No. 7,416,053) system, an upper control system incorporating high resistance components at the boom tip, for rear mount installation	1	
A.	Ground to Bottom of Platform Height: 59.8 feet at 14.3 feet from centerline of rotation (18.2 m at 4.4 m)		
B.	Working Height 64.8 feet (19.8 m)		
C.	Maximum Reach to Edge of Platform: 40.1 feet at 26.6 foot platform height (12.2 m at 8.1 m)		
D.	Lower Boom Insulator: Provides 12.0 inches (305 mm) of isolation		
E.	Side by Side Boom Configuration: Travel height approximately 11'6" on a chassis with approximately 40" frame height. This may have to be increased depending on cab configuration.		
F.	Articulating Arm: Tubular steel structure. The articulating arm is designed so that the articulating arm and lower boom are compensating. By raising the articulating arm only, the lower and upper boom maintain the same relative angle with the ground. By raising the articulating arm in conjunction with the lower boom, the operator is able to position himself more quickly and easily into the work area.		
G.	Lift Cylinders: The rod eye is welded to the rod while the blind end of the cylinder is of cast steel, one piece design, which utilizes cartridge-type, bi-directional counter-balance holding valves. The lower boom has a spherical-type bearings on both rod and base end. The arm cylinder has a spherical-type bearing on the rod end and self-lubricating bearings on the base end.		
H.	Lower Boom: Fabricated, reinforced steel box structure. Ultra high molecular weight polyurethane slide pads are installed at the boom tip to guide the telescopic upper boom. These pads have a large contact area in order to reduce wear. The pads are shimmed and attached for ease of adjustment or replacement without disassembly of the booms.		
I.	Lower Boom Pivot Pin: high strength chrome plated steel with self-lubricating, replaceable, non-metallic bearings.		
J.	Telescopic Upper Boom: filament wound, rectangular fiberglass, providing a minimum of 38.0 inches (965 mm) of isolation for the TA50, 16.0 inches (406 mm) for the TA55, and 36 inches (914 mm) for the TA60. The inner surface of the fiberglass boom is coated with polyurethane to provide a dry, smooth inner surface,		

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
	which will cause moisture to bead. The outer surface has a smooth gelcoat finish.		
K.	Upper Boom Extension: The upper boom is extended and retracted by a double acting hydraulic cylinder installed within the booms. The boom extends and retracts over slide bearings located in the end of the lower boom.		
L.	Hydraulic System: The open-center hydraulic system operates at a system pressure of 3,000 psi (20.7 MPa, 207 bar) and a free flow rate of 7.8 to 8.2 gpm (29.5 to 30.8 lpm).		
M.	Pedestal: Post-type structure design with 16 inch (407 mm) diameter vertical pedestal tube with a heavy-duty welded flange at the base end and openings that provide easy access to the hydraulic hoses. The round structure facilitates personnel movement between the pedestal and body sides. Includes pedestal base plate for attachment to subbase.		
N.	Rotation: Continuous rotation is provided by worm gear drive, equipped with extended shaft for manual rotation, driving a shear ball bearing rotation gear. The fully adjustable rotation drive assembly includes an external eccentric ring adjustment of the gearbox pinion gear to the main rotation bearing, permitting the ability to easily adjust backlash, reduce boom side play and ensure proper tooth contact over the life of the unit. This reduces life cycle cost. All bearing attachment bolts are easily accessed from outside the pedestal and inside the turntable.		
O.	Turntable: Steel fixture-welded structure with a 1.25 inch (32 mm) steel bottom plate. The bottom plate of the turntable is machined after welding to ensure a flat mounting surface for the rotation bearing. The hydraulic rotary joint and hydraulic hoses are located on the turntable for ease of access. The main control valve is located outside the turntable for convenience and ease of access and is covered for protection.		
P.	Platform Leveling System: The platform is leveled by hydraulic leveling means, contained within the upper boom and designed to maintain the dielectric integrity of the aerial device. Controls for leveling and tilting the platform are located at the platform. Leveling for the platform includes two double acting cylinders incorporating counterbalance load holding valves to lock the platform in the event of hydraulic line failure. Cylinders are located at the platform and at the end of the lower boom. The master-slave action of the cylinders maintains a level platform throughout the full range of boom articulation.		
Q.	Fiberglass non-insulated platform for use with or without insulated liner (per ANSI A92.2).		
R.	Lower Boom Lifting Eye: provides for 1,000 pounds (454 kg) of lifting capacity.		
S.	ISO-Grip System: The Altec ISO-Grip (U.S. Patent No. 7,416,053) System includes the following boom tip components that can provide an additional layer of secondary electrical contact protection. This is not a primary protection system. 1) Control Handle: An insulating single handle controller incorporating high electrical resistance components that is dielectrically tested to 40 kV AC with no more than 400 microampers of leakage. The control handle is green in color to differentiate it from other non-tested controllers. The handle also includes an interlock guard that reduces the potential for inadvertent boom operation. 2) Auxiliary Control Covers: Non-tested blue silicon covers for auxiliary controls. 3) Control Console: Non-tested non-metallic control console plate. 4) Boom Tip Covers: Non-tested non-metallic boom tip covers. The covers are not dielectrically tested, but they may provide some protection against electrical hazards.		
T.	Controls: Boom and articulating arm functions are controlled with a four-function single handle control. The control provides good metering capability at all boom speeds. The control handle activates; Articulating Arm --Raise and Lower, Lower Boom--Raise and Lower, Rotation--Clockwise/Counter-clockwise, and Upper Boom--Extend and Retract. The single handle control incorporates an interlock trigger and safety interlock at the platform. Activation of the interlock is required when operating a boom function. The controls are located within easy reach of the operator.		
U.	Hydraulic Tool Circuit at Platform: Control easily accessible to the operator activates the tool circuit which provides a maximum of 8.0 gpm (30.3 lpm). Tool		

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
	system relief pressure set at 2,000 psi (13.8 MPa). Two sets of hydraulic tool outlets are standard at the boom tip; they consist of two sets of quick disconnect couplings at the platform, a valve assembly inside the control cover, and detented control handle. Operates open center tools.		
V.	Hydraulic Tool Circuit Below Rotation: One set of quick disconnect couplings and control valve to supply maximum of 8.0 gpm (30.3 lpm). Tool system relief pressure set at 2,000 psi (13.8 MPa). Operates open center tools.		
W.	Outrigger/Boom Interlock System: Prevents boom from being unstowed until outriggers have been at least partially deployed		
X.	Outrigger/Unit Selector Control: Located near the outrigger controls, allows operator to divert hydraulic oil from machine circuit for outrigger operation. This reduces the potential for inadvertent outrigger movement during machine operation if outrigger controls are bumped.		
Y.	Outrigger Motion Alarm: Provides audible alarm when any of the outriggers controls are operated.		
Z.	Back-up Alarm, installed		
AA.	Diagnostic Pressure Test Quick Disconnect Couplings: are located at the turntable to allow a mobile service technician to quickly and easily attach a test gauge to verify system and tool circuit pressure. This reduces life cycle cost.		
AB.	ANSI Category C, 46 kV and below dielectric rating. Upper boom must be extended approximately 48 inches.		
AC.	Manuals: Two (2) Operator's and two (2) Maintenance/Parts manuals containing instructional markings indicating hazards inherent in the operation of an aerial device.		
AD.	Paint: Painted white with the Altec Powder Coat Paint Process which provides a finish-painted surface that is highly resistant to chipping, scratching, abrasion and corrosion. Paint is electro-statically applied to the inside as well as outside of fabricated parts then high temperature cured prior to assembly ensuring maximum coverage and protection		
2.	Automatic Upper Boom Stow Securing System with support cradle.	1	
3.	Pedestal/Mounting Location Pedestal to be 44" H / Mount Behind Cab	1	
4.	220 Single Two-Man Platform - Platform end mounted, rotates 180 degrees around boom tip. Platform has a capacity of 600lbs without liner. This option does not include material handling.	1	
5.	Soft Platform Cover For Two Man Platform (24x48)	1	
6.	No Platform liner required	1	
7.	Engine Start/Stop & Secondary Stowage System: 12 VDC powered motor and pump assembly for temporary operation of the unit in a situation wherein the primary hydraulic source fails. Electric motor is powered by the chassis battery. This feature allows the operator to completely stow the booms, platform, and outriggers. Secondary Stowage & Start/Stop is activated with an air plunger at the platform or momentary switch at the lower control station and outriggers.	1	
8.	Throttle Control - Manually increase/decrease chassis engine speed to preset values. Control is captive air operated from the platform and momentary switch operated from the lower controls and curbside at tailshelf.	1	
9.	248 (750) - A Frame Outrigger with pivot shoe installed behind the cab, provides 139.5" maximum spread. Includes motion alarm and outrigger interlocks which will not allow the unit to be operated until the outriggers have been deployed.	1	

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
10.	240 Modified flat-shoe, A-frame, Fixed Shoe, Outrigger installed at rear of body, with 101 inches (2565 mm) of spread at maximum penetration.	1	
11.	Electric Over Hydraulic Outrigger Control Valve	1	
12.	Altec Aerial Device Powder Painted White	1	
13.	Custom Option - PLATFORM STEPS: Install two (2) platform steps on the side of the platform nearest the elbow in the stowed position.	1	
<b><u>Unit &amp; Hydraulic Acc.</u></b>			
14.	TA Series Subbase	1	
15.	Subbase Storage With Drop Down Door (Paddle Latch) At Rear	1	
16.	Insert Subbase Stop At 10'	1	
17.	Standard 1" Space between Subbase and frame for hose routing and ease of maintenance.	1	
18.	Reservoir, 30 Gallon, Triangular, Mounted in Cargo Area	1	
	A. Internal return filter, 10 micron absolute, fiberglass media		
	B. Ball valves in suction and return lines.		
	C. Magnetic suction strainer.		
	D. Filler/breather cap with dipstick.		
19.	HVI-22 Hydraulic Oil (Standard).	35	
20.	Standard Pump For PTO	1	
21.	Hot shift PTO for automatic transmission	1	
22.	Muncie PTO (Altec Standard)	1	
23.	Standard PTO/Transmission Functionality for Automatic Transmissions - If chassis is in gear, and PTO switch is activated, PTO will not engage. Chassis will remain in gear. If chassis is already in neutral with PTO engaged and operator tries to shift into gear, PTO will disengage and transmission will shift into gear.	1	
<b><u>Body</u></b>			
24.	Altec Body	1	
25.	Steel Body	1	
26.	Aerial Service Line With Step (ASLS) - Streetside to have 1st vertical (34 inches wide), 1st	1	

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
	horizontal, and 2nd horizontal. Curbside to have 1st vertical, 2nd vertical, access step, 1st horizontal, and rear vertical.		
27.	Approximate Body Length (Engineering to Determine Final Length) 156	1	
28.	94 Inch Body Width	1	
29.	46 Inch Body Compartment Height	1	
30.	18 Inch Body Compartment Depth	1	
31.	Undercoat Body	1	
32.	Finish Paint Body Custom Color (Provide Color And Code) - Dark Blue to match chassis	1	
33.	5.5 Drop-In Wood Cargo Retaining Board At Rear Of Body	1	
34.	5.5 Drop-In Wood Cargo Retaining Board At Top Of Side Access Step	1	
35.	Gripstrut On Streetside Compartment Tops	1	
36.	Gripstrut On Curbside Compartment Tops	1	
37.	Stainless Steel Rotary Paddle Latches With Keyed Locks	1	
38.	Gas Shock (Gas Spring) Rigid Door Holders On All Vertical Doors	1	
39.	Chains On All Horizontal Doors	1	
40.	Standard Master Body Locking System (Standard Placement Is At Rear. Sidepacks With A Throughshelf/Hotstick Door At Rear, Standard Placement Is At The Front)	1	
41.	One Chock Holder On Each Side of Body With Retaining Lip In Fender Panel (Rear Of Wheel Or Opposite Fuel Fill)	1	
42.	Custom 1st Vertical (SS) Compartmentation - WIDTH: 34 inches - ADJUSTABLE SHELVES: Install two (2) adjustable shelves with no dividers.	1	
43.	1st Horizontal (SS) - Vacant - 58 inch width	1	
44.	2nd Horizontal (SS) - Vacant - 58 inch width	1	
45.	1st Vertical (CS) - Adjustable Shelf With No Dividers	3	
46.	2nd Vertical (CS) - Locking Swivel Hooks On An Adjustable Rail - Left Wall	1	
47.	2nd Vertical (CS) - Locking Swivel Hooks On An Adjustable Rail - Rear Wall	2	
48.	2nd Vertical (CS) - Locking Swivel Hooks On An Adjustable Rail - Right Wall	1	
49.	3rd Vertical (CS) - Gripstrut Access Steps With Two (2) Sloped Grab Handles	1	
50.	1st Horizontal (CS) - Vacant	1	

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
51.	Custom Rear Vertical (CS) Compartmentation - VENT: Install vent for fuel storage. - LOCKING SWIVEL HOOKS: Install locking swivel hooks on an adjustable rail (1-3-1)	1	
<b><u>Body and Chassis Accessories</u></b>			
52.	29" L Steel Tailshelf, Width To Match Body	1	
53.	3" Fixed Retaining Rail On Sides And Rear With Corner Wash-Out	1	
54.	Cabguard Required, Mounted on Front Bumper	1	
55.	Rigid Step Mounted Beneath Side Access Steps (Installed To Extend Approx. 2" Outward)	1	
56.	ICC (Underride Protection) Bumper Installed At Rear	1	
57.	T-125 Style Pintle Hitch (30,000 LB MGTW with 6,000 LB MVL)	1	
58.	Set Of Eye Bolts for Trailer Safety Chain, installed one each side of towing device mount.	1	
59.	Platform Rest, Rigid with Rubber Tube - Platform Stored as low as possible on body floor	1	
60.	Lower Boom Rest Weldment	1	
61.	Mounting Brackets for Lights, Located on Lower Boom Rest	1	
62.	Outrigger Pad Holder, 25" L x 25" W x 5" H, Fits 24.5" x 24.5" x 4" And Smaller Pads, Bolt-On, Bottom Washout Holes, 3/4" Lip Retainer	4	
63.	Pendulum Retainers For Outrigger Pad Holders	4	
64.	Wheel Chocks, Rubber with Metal Hairpin Style Handle, 9.75" L X 7.75" W X 5.00" H (Pair)	1	
65.	Mud Flaps With Altec Logo (Pair)	1	
66.	Safety Harness And 4.5' Lanyard (Fits Medium To Xlarge) Includes Pouch and Placards Installed under passengers seat.	2	
67.	5 LB Fire Extinguisher With Heavy Duty Bracket, Installed	1	
68.	Triangular Reflector Kit, Installed	1	
69.	Slope Indicator Assembly For Machine With Outriggers	1	
70.	Vinyl manual pouch for storage of all operator and parts manuals	1	
71.	Additional Body/Chassis Accessory - HYDRAULIC RESERVOIR GUARD: Install hydraulic reservoir guard to protect from falling limbs.	1	

**Electrical Accessories**

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
72.	Altec Standard Multi-Point Grounding System	5	
73.	Lights and reflectors in accordance with FMVSS #108 lighting package. (Complete LED, including LED reverse lights)	1	
74.	Altec Standard Amber LED Strobe Light With Brush Guard Install on boom stow. One(1) each side.	2	
75.	Dual Tone Back-Up With Outrigger Motion Alarm	1	
76.	PTO Hour Meter, Rectangular With 10,000 Hour Display	1	
77.	Altec Modular Panel System (AMPS) - Includes Mounting Panel and Accessory Switches	1	
78.	Power Distribution Module Is A Compact Self-Contained Electronic System That Provides A Standardized Interface With The Chassis Electrical System. (Includes Operator's Manual)	1	

#### Finishing Details

79.	Delivery Of Completed Unit	1	
80.	Non-Focus Factory Build	1	
81.	Custom paint. - Body Accessories to be painted Dark Blue to match chassis	1	
82.	Altec Standard; Components mounted below frame rail shall be coated black by Altec. i.e. step bumpers, steps, frame extension, pintle hook mount, dock bumper mounts, D-rings, receiver tubes, accessory mounts, light brackets, under-ride protection, etc. Components mounted to under side of body shall be coated black by Altec. i.e. Wheel chock holders, mud flap brackets, pad carriers, boxes, lighting brackets, steps, and ladders.	1	
83.	Apply Non-Skid Paint to all walking surfaces	1	
84.	English Safety And Instructional Decals	1	
85.	Vehicle Height Placard - Installed In Cab	1	
86.	Dielectric test unit according to ANSI requirements.	1	
87.	Stability test unit according to ANSI requirements.	1	
88.	Prepaint Inspection Required By Customer	1	
39.	Placard, HVI-22 Hydraulic Oil	1	
90.	Inbound Freight	1	
91.	TA60 FA Installation	1	

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
	<u>Chassis</u>		
92.	Chassis	1	
93.	Altec Supplied Chassis	1	
94.	2014 Model Year	1	
95.	International 4400 SBA	1	
96.	4x2 Drivetrain	1	
97.	Chassis Cab To Axle Length - 108 inch	1	
98.	Conventional Cab	1	
99.	Other Chassis Color - Brt Med Blu (Custom), 6H39	1	
100.	Other Chassis Wheelbase Length - 175 inches	1	
101.	Maxxforce DT	1	
102.	300 HP Engine Rating	1	
103.	Allison RDS-3500 Automatic Transmission	1	
104.	GVWR 33,000 LBS	1	
105.	13,000 LBS Front Axle Rating	1	
106.	20,000 LBS Rear Axle Rating	1	
107.	11R22.5 Front Tire	1	
108.	11R22.5 Rear Tire	1	
109.	Air Brakes	1	
110.	Single Horizontal Exhaust Right Hand	1	
111.	International Transmission Dipstick Relocated to RH Side Of Transmission (13WGH)	1	
112.	No Prewire Chassis	1	
113.	No Idle Engine Shut-Down Required	1	
114.	Vinyl Full Bench Seat	1	
	<u>Miscellaneous</u>		
115.	Standard Altec Warranty One (1) year parts warranty One (1) year labor warranty Ninety	1	

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
	(90) days warranty for travel charges Limited Lifetime Structural Warranty		
<hr/>			
		<b>Total</b>	<b>179,424.00</b>

Altec Industries, Inc.

BY \_\_\_\_\_

Kevin J Chesterfield

Notes:

October 11, 2013  
Our 84th Year

320-235-3827

CITY OF WILLMAR PUBLIC WORKS  
801 W HWY 40

**Bill To:**

CITY OF WILLMAR PUBLIC WORKS  
801 W HWY 40

Willmar, MN 56201  
US

Willmar, MN 56201  
United States

**Altec Quotation Number** 233590 - 4  
**Account Manager:** Clint Bitting  
**inside Sales Rep:** Kevin J Chesterfield

**Altec Sales Order(s):**

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
	<u>Unit</u>		
1.	206 ALTEC Model TA60 telescopic articulating aerial with an insulating lower arm, insulating telescopic upper boom and the Altec ISO-Grip (U.S. Patent No. 7,416,053) system, an upper control system incorporating high resistance components at the boom tip, for rear mount installation	1	
	A. Ground to Bottom of Platform Height: 59.8 feet at 14.3 feet from centerline of rotation (18.2 m at 4.4 m)		
	B. Working Height 64.8 feet (19.8 m)		
	C. Maximum Reach to Edge of Platform: 40.1 feet at 26.6 foot platform height (12.2 m at 8.1 m)		
	D. Lower Boom Insulator: Provides 12.0 inches (305 mm) of isolation		
	E. Side by Side Boom Configuration: Travel height approximately 11'6" on a chassis with approximately 40" frame height. This may have to be increased depending on cab configuration.		
	F. Articulating Arm: Tubular steel structure. The articulating arm is designed so that the articulating arm and lower boom are compensating. By raising the articulating arm only, the lower and upper boom maintain the same relative angle with the ground. By raising the articulating arm in conjunction with the lower boom, the operator is able to position himself more quickly and easily into the work area.		
	G. Lift Cylinders: The rod eye is welded to the rod while the blind end of the cylinder is of cast steel, one piece design, which utilizes cartridge-type, bi-directional counter-balance holding valves. The lower boom has a spherical-type bearings on both rod and base end. The arm cylinder has a spherical-type bearing on the rod end and self-lubricating bearings on the base end.		
	H. Lower Boom: Fabricated, reinforced steel box structure. Ultra high molecular weight polyurethane slide pads are installed at the boom tip to guide the telescopic upper boom. These pads have a large contact area in order to reduce wear. The pads are shimmed and attached for ease of adjustment or replacement without disassembly of the booms.		
	I. Lower Boom Pivot Pin: high strength chrome plated steel with self-lubricating, replaceable, non-metallic bearings.		
	J. Telescopic Upper Boom: filament wound, rectangular fiberglass, providing a minimum of 38.0 inches (965 mm) of isolation for the TA50, 16.0 inches (406 mm) for the TA55, and 36 inches (914 mm) for the TA60. The inner surface of the fiberglass boom is coated with polyurethane to provide a dry, smooth inner surface,		

Item	Description	Qty	Price
K.	which will cause moisture to bead. The outer surface has a smooth gelcoat finish. Upper Boom Extension: The upper boom is extended and retracted by a double acting hydraulic cylinder installed within the booms. The boom extends and retracts over slide bearings located in the end of the lower boom.		
L.	Hydraulic System: The open-center hydraulic system operates at a system pressure of 3,000 psi (20.7 MPa, 207 bar) and a free flow rate of 7.8 to 8.2 gpm (29.5 to 30.8 lpm).		
M.	Pedestal: Post-type structure design with 16 inch (407 mm) diameter vertical pedestal tube with a heavy-duty welded flange at the base end and openings that provide easy access to the hydraulic hoses. The round structure facilitates personnel movement between the pedestal and body sides. Includes pedestal base plate for attachment to subbase.		
N.	Rotation: Continuous rotation is provided by worm gear drive, equipped with extended shaft for manual rotation, driving a shear ball bearing rotation gear. The fully adjustable rotation drive assembly includes an external eccentric ring adjustment of the gearbox pinion gear to the main rotation bearing, permitting the ability to easily adjust backlash, reduce boom side play and ensure proper tooth contact over the life of the unit. This reduces life cycle cost. All bearing attachment bolts are easily accessed from outside the pedestal and inside the turntable.		
O.	Turntable: Steel fixture-welded structure with a 1.25 inch (32 mm) steel bottom plate. The bottom plate of the turntable is machined after welding to ensure a flat mounting surface for the rotation bearing. The hydraulic rotary joint and hydraulic hoses are located on the turntable for ease of access. The main control valve is located outside the turntable for convenience and ease of access and is covered for protection.		
P.	Platform Leveling System: The platform is leveled by hydraulic leveling means, contained within the upper boom and designed to maintain the dielectric integrity of the aerial device. Controls for leveling and tilting the platform are located at the platform. Leveling for the platform includes two double acting cylinders incorporating counterbalance load holding valves to lock the platform in the event of hydraulic line failure. Cylinders are located at the platform and at the end of the lower boom. The master-slave action of the cylinders maintains a level platform throughout the full range of boom articulation.		
Q.	Fiberglass non-insulated platform for use with or without insulated liner (per ANSI A92.2).		
R.	Lower Boom Lifting Eye: provides for 1,000 pounds (454 kg) of lifting capacity.		
S.	ISO-Grip System: The Altec ISO-Grip (U.S. Patent No. 7,416,053) System includes the following boom tip components that can provide an additional layer of secondary electrical contact protection. This is not a primary protection system. 1) Control Handle: An insulating single handle controller incorporating high electrical resistance components that is dielectrically tested to 40 kV AC with no more than 400 microampers of leakage. The control handle is green in color to differentiate it from other non-tested controllers. The handle also includes an interlock guard that reduces the potential for inadvertent boom operation. 2) Auxiliary Control Covers: Non-tested blue silicon covers for auxiliary controls. 3) Control Console: Non-tested non-metallic control console plate. 4) Boom Tip Covers: Non-tested non-metallic boom tip covers. The covers are not dielectrically tested, but they may provide some protection against electrical hazards.		
T.	Controls: Boom and articulating arm functions are controlled with a four-function single handle control. The control provides good metering capability at all boom speeds. The control handle activates; Articulating Arm --Raise and Lower, Lower Boom--Raise and Lower, Rotation--Clockwise/Counter-clockwise, and Upper Boom--Extend and Retract. The single handle control incorporates an interlock trigger and safety interlock at the platform. Activation of the interlock is required when operating a boom function. The controls are located within easy reach of the operator.		
U.	Hydraulic Tool Circuit at Platform: Control easily accessible to the operator activates the tool circuit which provides a maximum of 8.0 gpm (30.3 lpm). Tool		

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
	system relief pressure set at 2,000 psi (13.8 MPa). Two sets of hydraulic tool outlets are standard at the boom tip; they consist of two sets of quick disconnect couplings at the platform, a valve assembly inside the control cover, and detented control handle. Operates open center tools.		
V.	Hydraulic Tool Circuit Below Rotation: One set of quick disconnect couplings and control valve to supply maximum of 8.0 gpm (30.3 lpm). Tool system relief pressure set at 2,000 psi (13.8 MPa). Operates open center tools.		
W.	Outrigger/Boom Interlock System: Prevents boom from being unstowed until outriggers have been at least partially deployed		
X.	Outrigger/Unit Selector Control: Located near the outrigger controls, allows operator to divert hydraulic oil from machine circuit for outrigger operation. This reduces the potential for inadvertent outrigger movement during machine operation if outrigger controls are bumped.		
Y.	Outrigger Motion Alarm: Provides audible alarm when any of the outriggers controls are operated.		
Z.	Back-up Alarm, installed		
AA.	Diagnostic Pressure Test Quick Disconnect Couplings: are located at the turntable to allow a mobile service technician to quickly and easily attach a test gauge to verify system and tool circuit pressure. This reduces life cycle cost.		
AB.	ANSI Category C, 46 kV and below dielectric rating. Upper boom must be extended approximately 48 inches.		
AC.	Manuals: Two (2) Operator's and two (2) Maintenance/Parts manuals containing instructional markings indicating hazards inherent in the operation of an aerial device.		
AD.	Paint: Painted white with the Altec Powder Coat Paint Process which provides a finish-painted surface that is highly resistant to chipping, scratching, abrasion and corrosion. Paint is electro-statically applied to the inside as well as outside of fabricated parts then high temperature cured prior to assembly ensuring maximum coverage and protection		
2.	Automatic Upper Boom Stow Securing System with support cradle.	1	
3.	Pedestal/Mounting Location Pedestal to be 44" H / Mount Behind Cab	1	
4.	220 Single Two-Man Platform - Platform end mounted, rotates 180 degrees around boom tip. Platform has a capacity of 600lbs without liner. This option does not include material handling.	1	
5.	Soft Platform Cover For Two Man Platform (24x48)	1	
6.	No Platform liner required	1	
7.	Engine Start/Stop & Secondary Stowage System: 12 VDC powered motor and pump assembly for temporary operation of the unit in a situation wherein the primary hydraulic source fails. Electric motor is powered by the chassis battery. This feature allows the operator to completely stow the booms, platform, and outriggers. Secondary Stowage & Start/Stop is activated with an air plunger at the platform or momentary switch at the lower control station and outriggers.	1	
8.	Throttle Control - Manually increase/decrease chassis engine speed to preset values. Control is captive air operated from the platform and momentary switch operated from the lower controls and curbside at tailshelf.	1	
9.	248 (750) - A Frame Outrigger with pivot shoe installed behind the cab, provides 139.5" maximum spread. Includes motion alarm and outrigger interlocks which will not allow the unit to be operated until the outriggers have been deployed.	1	

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
10.	240 Modified flat-shoe, A-frame, Fixed Shoe, Outrigger installed at rear of body, with 101 inches (2565 mm) of spread at maximum penetration.	1	
11.	Electric Over Hydraulic Outrigger Control Valve	1	
12.	Altec Aerial Device Powder Painted White	1	
13.	Custom Option - PLATFORM STEPS: Install two (2) platform steps on the side of the platform nearest the elbow in the stowed position.	1	
<b><u>Unit &amp; Hydraulic Acc.</u></b>			
14.	TA Series Subbase	1	
15.	Subbase Storage With Drop Down Door (Paddle Latch) At Rear	1	
16.	Insert Subbase Stop At 10'	1	
17.	Standard 1" Space between Subbase and frame for hose routing and ease of maintenance.	1	
18.	Reservoir, 30 Gallon, Triangular, Mounted in Cargo Area	1	
	A. Internal return filter, 10 micron absolute, fiberglass media		
	B. Ball valves in suction and return lines.		
	C. Magnetic suction strainer.		
	D. Filler/breather cap with dipstick.		
19.	HVI-22 Hydraulic Oil (Standard).	35	
20.	Standard Pump For PTO	1	
21.	Hot shift PTO for automatic transmission	1	
22.	Muncie PTO (Altec Standard)	1	
23.	Standard PTO/Transmission Functionality for Automatic Transmissions - If chassis is in gear, and PTO switch is activated, PTO will not engage. Chassis will remain in gear. If chassis is already in neutral with PTO engaged and operator tries to shift into gear, PTO will disengage and transmission will shift into gear.	1	
<b><u>Body</u></b>			
24.	Altec Body	1	
25.	Steel Body	1	
26.	Aerial Service Line With Step (ASLS) - Streetside to have 1st vertical (34 inches wide), 1st	1	

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
	horizontal, and 2nd horizontal. Curbside to have 1st vertical, 2nd vertical, access step, 1st horizontal, and rear vertical.		
27.	Approximate Body Length (Engineering to Determine Final Length) 156	1	
28.	94 Inch Body Width	1	
29.	46 Inch Body Compartment Height	1	
30.	18 Inch Body Compartment Depth	1	
31.	Undercoat Body	1	
32.	Finish Paint Body Custom Color (Provide Color And Code) - Dark Blue to match chassis	1	
33.	5.5 Drop-In Wood Cargo Retaining Board At Rear Of Body	1	
34.	5.5 Drop-In Wood Cargo Retaining Board At Top Of Side Access Step	1	
35.	Gripstrut On Streetside Compartment Tops	1	
36.	Gripstrut On Curbside Compartment Tops	1	
37.	Stainless Steel Rotary Paddle Latches With Keyed Locks	1	
38.	Gas Shock (Gas Spring) Rigid Door Holders On All Vertical Doors	1	
39.	Chains On All Horizontal Doors	1	
40.	Standard Master Body Locking System (Standard Placement Is At Rear. Sidepacks With A Throughshelf/Hotstick Door At Rear, Standard Placement Is At The Front)	1	
41.	One Chock Holder On Each Side of Body With Retaining Lip In Fender Panel (Rear Of Wheel Or Opposite Fuel Fill)	1	
42.	Custom 1st Vertical (SS) Compartmentation - WIDTH: 34 inches - ADJUSTABLE SHELVES: Install two (2) adjustable shelves with no dividers.	1	
43.	1st Horizontal (SS) - Vacant - 58 inch width	1	
44.	2nd Horizontal (SS) - Vacant - 58 inch width	1	
45.	1st Vertical (CS) - Adjustable Shelf With No Dividers	3	
46.	2nd Vertical (CS) - Locking Swivel Hooks On An Adjustable Rail - Left Wall	1	
47.	2nd Vertical (CS) - Locking Swivel Hooks On An Adjustable Rail - Rear Wall	2	
48.	2nd Vertical (CS) - Locking Swivel Hooks On An Adjustable Rail - Right Wall	1	
49.	3rd Vertical (CS) - Gripstrut Access Steps With Two (2) Sloped Grab Handles	1	
50.	1st Horizontal (CS) - Vacant	1	

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
51.	Custom Rear Vertical (CS) Compartmentation - VENT: Install vent for fuel storage. - LOCKING SWIVEL HOOKS: Install locking swivel hooks on an adjustable rail (1-3-1)	1	
<b><u>Body and Chassis Accessories</u></b>			
52.	29" L Steel Tailshelf, Width To Match Body	1	
53.	3" Fixed Retaining Rail On Sides And Rear With Corner Wash-Out	1	
54.	Cabguard Required, Mounted on Front Bumper	1	
55.	Rigid Step Mounted Beneath Side Access Steps (Installed To Extend Approx. 2" Outward)	1	
56.	ICC (Underride Protection) Bumper Installed At Rear	1	
57.	T-125 Style Pintle Hitch (30,000 LB MGTW with 6,000 LB MVL)	1	
58.	Set Of Eye Bolts for Trailer Safety Chain, installed one each side of towing device mount.	1	
59.	Platform Rest, Rigid with Rubber Tube - Platform Stored as low as possible on body floor	1	
60.	Lower Boom Rest Weldment	1	
61.	Mounting Brackets for Lights, Located on Lower Boom Rest	1	
62.	Outrigger Pad Holder, 25" L x 25" W x 5" H, Fits 24.5" x 24.5" x 4" And Smaller Pads, Bolt-On, Bottom Washout Holes, 3/4" Lip Retainer	4	
63.	Pendulum Retainers For Outrigger Pad Holders	4	
64.	Wheel Chocks, Rubber with Metal Hairpin Style Handle, 9.75" L X 7.75" W X 5.00" H (Pair)	1	
65.	Mud Flaps With Altec Logo (Pair)	1	
66.	Safety Harness And 4.5' Lanyard (Fits Medium To Xlarge) Includes Pouch and Placards Installed under passengers seat.	2	
67.	5 LB Fire Extinguisher With Heavy Duty Bracket, Installed	1	
68.	Triangular Reflector Kit, Installed	1	
69.	Slope Indicator Assembly For Machine With Outriggers	1	
70.	Vinyl manual pouch for storage of all operator and parts manuals	1	
71.	Additional Body/Chassis Accessory - HYDRAULIC RESERVOIR GUARD: Install hydraulic reservoir guard to protect from falling limbs.	1	

**Electrical Accessories**

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
72.	Altec Standard Multi-Point Grounding System	5	
73.	Lights and reflectors in accordance with FMVSS #108 lighting package. (Complete LED, including LED reverse lights)	1	
74.	Altec Standard Amber LED Strobe Light With Brush Guard Install on boom stow. One(1) each side.	2	
75.	Dual Tone Back-Up With Outrigger Motion Alarm	1	
76.	PTO Hour Meter, Rectangular With 10,000 Hour Display	1	
77.	Altec Modular Panel System (AMPS) - Includes Mounting Panel and Accessory Switches	1	
78.	Power Distribution Module Is A Compact Self-Contained Electronic System That Provides A Standardized Interface With The Chassis Electrical System. (Includes Operator's Manual)	1	
<b><u>Finishing Details</u></b>			
79.	Delivery Of Completed Unit	1	
80.	Non-Focus Factory Build	1	
81.	Custom paint. - Body Accessories to be painted Dark Blue to match chassis	1	
82.	Altec Standard; Components mounted below frame rail shall be coated black by Altec. i.e. step bumpers, steps, frame extension, pintle hook mount, dock bumper mounts, D-rings, receiver tubes, accessory mounts, light brackets, under-ride protection, etc. Components mounted to under side of body shall be coated black by Altec. i.e. Wheel chock holders, mud flap brackets, pad carriers, boxes, lighting brackets, steps, and ladders.	1	
83.	Apply Non-Skid Paint to all walking surfaces	1	
84.	English Safety And Instructional Decals	1	
85.	Vehicle Height Placard - Installed In Cab	1	
86.	Dielectric test unit according to ANSI requirements.	1	
87.	Stability test unit according to ANSI requirements.	1	
88.	Prepaint Inspection Required By Customer	1	
89.	Placard, HVI-22 Hydraulic Oil	1	
90.	Inbound Freight	1	
91.	TA60 FA Installation	1	

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
<u>Chassis</u>			
92.	Chassis	1	
93.	Altec Supplied Chassis	1	
94.	2014 Model Year	1	
95.	International 4400 SBA	1	
96.	4x2 Drivetrain	1	
97.	Chassis Cab To Axle Length - 108 inch	1	
98.	Conventional Cab	1	
99.	Other Chassis Color - Brt Med Blu (Custom), 6H39	1	
100.	Other Chassis Wheelbase Length - 175 inches	1	
101.	Maxxforce DT	1	
102.	300 HP Engine Rating	1	
103.	Allison RDS-3500 Automatic Transmission	1	
104.	GVWR 33,000 LBS	1	
105.	13,000 LBs Front Axle Rating	1	
106.	20,000 LBs Rear Axle Rating	1	
107.	11R22.5 Front Tire	1	
108.	11R22.5 Rear Tire	1	
109.	Air Brakes	1	
110.	Single Horizontal Exhaust Right Hand	1	
111.	International Transmission Dipstick Relocated to RH Side Of Transmission (13WGH)	1	
112.	No Prewire Chassis	1	
113.	No Idle Engine Shut-Down Required	1	
114.	Vinyl Full Bench Seat	1	
<u>Miscellaneous</u>			
115.	Standard Altec Warranty One (1) year parts warranty One (1) year labor warranty Ninety	1	

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
	(90) days warranty for travel charges Limited Lifetime Structural Warranty		
<b>Total</b>			<b>179,424.00</b>

Altec Industries, Inc.

BY \_\_\_\_\_

Kevin J Chesterfield

Notes:



CITY OF WILLMAR, MINNESOTA  
REQUEST FOR COMMITTEE ACTION

Agenda Item Number: \_\_\_\_\_

Meeting Date: October 29, 2013

Attachments:  Yes  No

CITY COUNCIL ACTION

Date:

- |                                   |                                 |
|-----------------------------------|---------------------------------|
| <input type="checkbox"/> Approved | <input type="checkbox"/> Denied |
| <input type="checkbox"/> Amended  | <input type="checkbox"/> Tabled |
| <input type="checkbox"/> Other    |                                 |

Originating Department: **Willmar Police**

Agenda Item: Dangerous Weapons Ordinance, Article III – Proposed Ordinance Changes

**Recommended Action:** Introduce the ordinance for a hearing and amend Chapter 10, Offenses and Miscellaneous Provisions, Article III, Dangerous Weapons, Section 10-54, Discharge of Firearms and adopting a new section 10-55, Shooting a Bow and Arrow Within City Limits.

**Background/Summary:** Past consideration has been given by PW/PS committee members regarding proposed ordinance changes to the "Dangerous Weapons" ordinance. The proposal was first introduced at the May 14, 2013, Public Works/Public Safety meeting. The current version would add an exemption for the purpose of taking fish.

**Alternatives:** Return to staff.

**Financial Considerations:** None.

Preparer: Chief of Police David Wyffels

Signature:

*David / Wyffels*

Comments:

ORDINANCE NO. \_\_\_\_\_

AN ORDINANCE AMENDING CHAPTER 10, OFFENSES AND MISCELLANEOUS PROVISIONS, ARTICLE III, DANGEROUS WEAPONS, SECTION 10-54, DISCHARGE OF FIREARMS AND ADOPTING NEW SECTION 10-55, SHOOTING A BOW AND ARROW WITHIN CITY LIMITS

The City Council of the City of Willmar hereby ordains as follows:

Section 1. AMENDMENT OF MUNICIPAL CODE SECTION 10-54. Chapter 10, Article III, Section 10-54 of the Willmar Municipal Code is hereby amended as follows (deleted material is crossed out; new material is underlined; sections and subsections not being amended are omitted):

**Sec. 10-54. – Discharge of firearms.**

- (c) *Lawful defense, law enforcement.* Nothing in this article shall be construed to ~~embraee~~ prohibit the firing of a gun, pistol, revolver or other kind of firearm when done in the lawful defense of person or family or in the necessary enforcement of the laws.
- (d) *Permit.* Nothing in this article shall be construed to ~~embraee~~ prohibit the firing of a gun, pistol, revolver or other kind of firearm when permission therefor has first been given by the chief of police of the city, which permission shall designate the place where and the time when such firearms may be used. When the applicant for a permit is an individual requesting a permit for purposes of shooting pests on private property, the permit shall only be granted for the use of a pellet gun or twenty-two-caliber rifle using birdshot. No permit shall be granted for more than ~~sixty (60)~~ one hundred eighty (180) days. Every applicant for a permit shall execute a hold harmless agreement, indemnifying the city from all claims that result from the discharge of the firearm. When the applicant for the permit is not the property owner, a hold harmless agreement shall also be executed by the property owner.

Section 2. ENACTMENT OF NEW MUNICIPAL CODE SECTION 10-55. Chapter 10, Article III of the Willmar Municipal Code is hereby amended to include a new Section 10-55 to read as follows:

**Sec. 10-55.—Bows and Arrows**

- (a) *Definitions.* The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in

this section, unless the context clearly indicates a different meaning.

*Arrow* - shall mean any shaft, rod or bolt constructed out of any substance.

*Bow* - shall mean any device designed as or commonly known as a bow, long-bow, compound-bow, or cross-bow and fashioned to propel, thrust or project an arrow, shaft, bolt, or rod beyond one foot of the device itself.

(b) *Shooting of Bows and Arrows Prohibited.* It is unlawful to shoot, discharge or otherwise propel an arrow from a bow in the city except under the conditions listed under Paragraph (c) of this section.

(c) *Exemptions.* Use of bows and arrows in the following circumstances shall be exempted from the general prohibition thereof contained in Paragraph (a) of this section:

- (1) Bows and arrows may be used as authorized in a physical education program in a school when supervised by a member of its faculty;
- (2) Bows and arrows may be used in a community-wide supervised class or event as specifically authorized in advance by the Chief of Police; or
- (3) Bows and arrows may be used in any archery range specifically designated and approved by the city council.
- (4) Bows and arrows may be used at the edge of or upon any water for the purpose of taking fish.

Section 3. EFFECTIVE DATE. This ordinance shall be effective from and after its adoption and second publication.

Passed by the City Council of the City of Willmar this \_\_\_ day of \_\_\_\_\_, 2013.

ATTEST:

\_\_\_\_\_  
Kevin Halliday, City Clerk

\_\_\_\_\_  
Frank Yanish, Mayor

VOTE: \_\_\_\_\_ AIIMANN \_\_\_\_\_ ANDERSON \_\_\_\_\_ CHRISTIANSON  
\_\_\_\_\_ DEBLIECK \_\_\_\_\_ DOKKEN \_\_\_\_\_ FAGERLIE \_\_\_\_\_ JOINSON \_\_\_\_\_ NELSEN

This Ordinance introduced by Council Member: \_\_\_\_\_

This Ordinance introduced on: \_\_\_\_\_

This Ordinance published on: \_\_\_\_\_

This Ordinance given a hearing on: \_\_\_\_\_

This Ordinance adopted on: \_\_\_\_\_

This Ordinance published on: \_\_\_\_\_



**CITY OF WILLMAR, MINNESOTA  
REQUEST FOR COMMITTEE ACTION**

**Agenda Item Number:** \_\_\_\_\_

**Meeting Date:** October 29, 2013

**Attachments:**  Yes  No

**CITY COUNCIL ACTION**

**Date:** November 4, 2013

- |                                   |                                 |
|-----------------------------------|---------------------------------|
| <input type="checkbox"/> Approved | <input type="checkbox"/> Denied |
| <input type="checkbox"/> Amended  | <input type="checkbox"/> Tabled |
| <input type="checkbox"/> Other    |                                 |

**Originating Department:** Engineering

**Agenda Item:** Accept Project and Authorize Final Payment

**Recommended Action:** Accept Project No. 1201-A and authorize final payment to Duinick Inc. in the amount of \$2,074.46.

**Background/Summary:** The City Council entered into an agreement with Duinick Inc. on June 7, 2012 for the reconstruction of 5<sup>th</sup> and 9<sup>th</sup> Street SW. The final pay request with quantities is hereby submitted for consideration. The contract came in below the original bid amount and was constructed prior to the completion date. Staff is recommending final payment be made.

**Alternatives:** N/A

**Financial Considerations:** Payment of the final amount of \$2,074.46 from within the project budget.

**Preparer:** Bruce D. Peterson, AICP, Acting Public Works Director

**Signature:**

**Comments:**

**CONTRACTOR'S ESTIMATE NO. 4 (FINAL)****PROJECT NO. 1201-A****CONTRACTOR: DUININCK INC.****P.O. BOX 208****PRINSBURG, MN 56281****CONSTRUCTION OF: STORM SEWER, CURB & GUTTER, SIDEWALK, BITUMINOUS MILLING & PAVING****LOCATION: 5TH ST SW & 9TH ST SW****DATE: JUNE 25, 2013****HONORABLE MAYOR AND CITY COUNCIL****CITY OF WILLMAR, MINNESOTA****IN ACCORDANCE WITH THE CONTRACT WITH DUNINCK INC.****I HEREWITH PRESENT THE FOLLOWING ESTIMATE****1201-A**

<b>ITEM NO.</b>	<b>ITEM</b>	<b>UNIT</b>	<b>QUANTITY</b>	<b>BID</b>	<b>TOTAL</b>
2104.501	Remove Concrete Curb/Curb and Gutter	LF	1,081.9	\$2.00	\$2,163.80
2104.503	Remove 4" Sidewalk	SF	3,620.4	\$0.55	\$1,991.22
2104.505	Remove Concrete Driveway Pavement	SY	93.7	\$6.25	\$585.63
2104.509	Remove Bituminous Pavement	SY	35.7	\$4.00	\$142.80
2104.505	Remove Concrete Cross Gutter	SY	28	\$6.25	\$175.00
2104.511	Saw Concrete Pavement	LF	46.3	\$5.00	\$231.50
2105.525	Topsoil Borrow (CV)	CY	72.27	\$17.35	\$1,253.88
2105.501	Common Excavation	CY	80	\$20.00	\$1,600.00
2211.501	Aggregate Base (Class 5)	TON	49.1	\$13.00	\$638.30
2232.501	Mill Bituminous Pavement 1-1/2"	SY	10,053.3	\$0.99	\$9,952.77
2357.502	Bituminous Material For Tack	GAL	1,770	\$2.41	\$4,265.70
2360.502	Type SP 12.5 Non Wear Course Mix (3,B)	TON	45.89	\$70.90	\$3,253.60
2360.501	Type SP 12.5 Wearing Course Mix (3,B)	TON	1,674.36	\$70.90	\$118,712.12
2503.511	12" RC Pipe Cl. 2	LF	10	\$47.50	\$475.00
2504.602	Adjust Valve Casting	EA	6	\$75.00	\$450.00
2506.501	Const. Drainage Structure Design H	LF	2.6	\$445.00	\$1,157.00
2506.516	Casting Assembly (Catchbasin) B624 Curb	EA	1	\$450.00	\$450.00
2506.522	Adjust Frame & Ring Casting	EA	19	\$170.00	\$3,230.00
2521.501	4" Concrete Walk	SF	3,765.8	\$4.29	\$16,155.28
2531.603	Concrete Cross Gutter	SY	24.2	\$57.00	\$1,379.40
2531.618	Truncated Domes	SF	312	\$40.00	\$12,480.00
2531.501	Concrete Curb and Gutter, Design B624	LF	1,081.9	\$16.95	\$18,338.21
2531.507	6" Concrete Driveway Pavement	SY	86.7	\$47.00	\$4,074.90
2575.501	Seeding	AC	0.25	\$900.00	\$225.00
2575.502	Seed Mixture 270	LB	30	\$2.50	\$75.00
2575.523	Erosion Control Blanket Category 1	SY	1,222.7	\$1.18	\$1,442.79
2575.532	Fertilizer Analysis 20-10-20 Type 3	LB	87.5	\$0.95	\$83.13
2582.502	4" Broken Line Yellow - Epoxy	LF	800	\$3.08	\$2,464.00

TOTAL PROJECT 1201-A				\$207,446.03
(Price includes all applicable sales and use taxes)				
INCENTIVE FOR BITUMINOUS DENSITY:				\$1,813.55
SUBTOTAL:				\$209,259.58
DISINCENTIVE FOR FAA BITUMINOUS FAILURE:				\$6,607.88
LESS CREDIT FOR BITUMINOUS SALVAGE:				\$8,000.00
LESS PREVIOUS ESTIMATE #1				\$62,984.87
LESS PREVIOUS ESTIMATE #2				\$118,414.49
LESS PREVIOUS ESTIMATE #3				\$11,177.88
LESS PREVIOUS ESTIMATE #4				
AMOUNT DUE CONTRACTOR THIS ESTIMATE:				\$2,074.46

APPROVED: *Paul E. Meyer*  
CONTRACTOR **DUINICK, INC.**

APPROVED: *AMK*  
CITY ENGINEER

CONTRACT AMOUNT: \$216,795.50  
BUDGET NO.: 412.48451.0336



**CITY OF WILLMAR, MINNESOTA  
REQUEST FOR COMMITTEE ACTION**

**Agenda Item Number:** \_\_\_\_\_

**Meeting Date:** October 29, 2013

**Attachments:**  Yes  No

**CITY COUNCIL ACTION**

**Date:** November 4, 2013

- |                                   |                                 |
|-----------------------------------|---------------------------------|
| <input type="checkbox"/> Approved | <input type="checkbox"/> Denied |
| <input type="checkbox"/> Amended  | <input type="checkbox"/> Tabled |
| <input type="checkbox"/> Other    |                                 |

**Originating Department:** Engineering

**Agenda Item:** Accept Project and Authorize Final Payment

**Recommended Action:** Accept Project No. 1101 and authorize final payment to Duinick Inc. in the amount of \$21,768.10.

**Background/Summary:** The City Council entered into an agreement with Duinick Inc. on May 18, 2011 for the reconstruction of numerous segments of streets. The final pay request with quantities is hereby submitted for consideration. The contract came in below the original bid amount and was constructed prior to the completion date. Staff is recommending final payment be made.

**Alternatives:** N/A

**Financial Considerations:** Payment of the final amount of \$21,768.10 from within the project budget.

**Preparer:** Bruce D. Peterson, AICP, Acting Public Works Director

**Signature:**

**Comments:**

CONTRACTOR'S ESTIMATE NO. 8 (FINAL)  
PROJECT NO. 1101

CONTRACTOR: DUININCK INC.  
P.O. BOX 208  
PRINSBURG, MN 56281

CONSTRUCTION OF: SANITARY SEWER, STORM SEWER, WATERMAIN, COMMON EXCAVATION,  
CLASS 5 AGGREGATE, CURB & GUTTER, 5" PE TUBING, BITUMINOUS PAVING

LOCATION: GORTON AVE. NW, VOS PARK ADDITION, 6TH AVE. NW, 15TH AVE. SW, 11 1/2 AVE. SE  
BECKER AVE. SE, 25TH ST. SW, 20TH AVE. SW, 11TH AVE. SE AND 4TH AVE. SE

DATE: June 11, 2013

HONORABLE MAYOR AND CITY COUNCIL  
CITY OF WILLMAR, MINNESOTA

IN ACCORDANCE WITH THE CONTRACT WITH DUNINCK INC.  
I HEREWITH PRESENT THE FOLLOWING ESTIMATE

1101-A SECTION PARTICIPATING

STREET ITEMS:

ITEM NO.	ITEM	UNIT	QUANTITY	BID	TOTAL
2104.501	Remove Sewer Pipe (Storm)	LF	366	\$8.00	\$2,928.00
2104.501	Remove Concrete Curb/Curb and Gutter	LF	4,497.5	\$2.00	\$8,995.00
2104.503	Remove 4" Walk	SF	7,017.2	\$0.60	\$4,210.32
2104.503	Remove Concrete Pavement	SY	5,640	\$4.60	\$25,944.00
2104.505	Remove Concrete Driveway Pavement	SY	457.8	\$5.00	\$2,289.00
2104.505	Remove Bituminous Pavement	SY	8,854	\$1.75	\$15,494.50
2104.509	Remove Manhole or Catchbasin	EA	13	\$250.00	\$3,250.00
2104.511	Saw Concrete Pavement	LF	13	\$10.00	\$130.00
2104.521	Salvage Concrete Pipe Storm Sewer	LF	160	\$13.00	\$2,080.00
2105.501	Common Excavation	CY	3,060	\$8.00	\$18,360.00
2105.523	Common Borrow (CV) (From Stockpile)	CY	1,820	\$6.30	\$11,466.00
2105.525	Topsoil Borrow (CV)	CY	200	\$20.00	\$4,000.00
2105.533	Salvaged Aggregate (CV)	CY	500	\$5.50	\$2,750.00
2105.604	Geotextile Fabric	SY	7,680	\$1.00	\$7,680.00
2211.501	Aggregate Base (Class 5)	TON	6,725.56	\$10.00	\$67,255.60
2357.502	Bituminous Material For Tack	GAL	970	\$0.01	\$9.70
2360.501	Type SP12.5 Wearing Course Mixture	TON	871.17	\$58.93	\$51,338.05
2360.502	Type SP12.5 Non Wearing Course Mixture	TON	2,109.81	\$53.34	\$112,537.27
2503.511	36" RC Pipe Cl. 2	LF		\$60.00	\$0.00
2503.511	15" RC Pipe Cl. 2	LF	330	\$24.25	\$8,002.50
2503.511	12" RC Pipe Cl. 2	LF	398	\$23.00	\$9,154.00
2503.571	Install Concrete Pipe Storm Sewer	LF	160	\$17.00	\$2,720.00
2504.602	Adjust Valve Casting	EA	1	\$250.00	\$250.00
2506.501	Const. Drainage Structure Design F	LF	39.3	\$315.00	\$12,379.50
2506.501	Const. Drainage Structure Design H	LF	17.3	\$269.00	\$4,653.70
2506.516	Casting Assembly Manhole	EA	4	\$600.00	\$2,400.00
2506.516	Casting Assembly Catchbasin	EA	14	\$735.00	\$10,290.00

2506.516	Casting Assembly Surface Drain	EA	1	\$410.00	\$410.00
2506.522	Adjust Frame & Ring Casting	EA	7	\$350.00	\$2,450.00
2521.501	4" Concrete Walk	SF	9,719.3	\$3.24	\$31,490.53
2531.501	Concrete Curb and Gutter, Design B824	LF	4,534.2	\$10.60	\$48,062.52
2531.507	6" Concrete Driveway Pavement	SY	663.7	\$37.21	\$24,696.28
2531.618	Truncated Domes	SF	152	\$38.00	\$5,776.00
2573.502	Silt Fence, Type Machine Sliced Maintained	LF	1,255	\$1.70	\$2,133.50
2573.530	Storm Drain Inlet Protection	EA	8	\$75.00	\$600.00
2575.501	Seeding	AC	1.54	\$900.00	\$1,386.00
2575.502	Seed Mixture 270	LB	185	\$2.50	\$462.50
2575.523	Erosion Control Blanket Category 1	SY	7,480.4	\$1.20	\$8,976.48
2575.532	Fertilizer Type 3	LB	539	\$0.95	\$512.05
2582.502	4" Broken Line Yellow - Paint	LF	430	\$6.84	\$2,941.20
2582.502	4" Broken Line Yellow - Epoxy	LF	410	\$4.80	\$1,968.00
<b>TOTAL STREET ITEMS:</b>					<b>\$522,432.20</b>

**SANITARY ITEMS:**

ITEM NO.	ITEM	UNIT	QUANTITY	BID	TOTAL
2104.509	Remove Manhole	EA	5	\$350.00	\$1,750.00
2451.609	Granular Foundation and/or Bedding	TON		\$10.00	\$0.00
2451.609	Rock Stabilization	TON		\$20.00	\$0.00
2503.511	4" PVC Pipe Sewer	LF	596.1	\$16.00	\$9,537.60
2503.601	8" Neoprene Sleeve	EA	8	\$45.00	\$360.00
2503.601	4 x6" Neoprene Sleeve (Eccentric)	EA	17	\$35.00	\$595.00
2503.601	4" Neoprene Sleeve	EA	11	\$30.00	\$330.00
2503.602	10" X 4" P.V.C. Wye	EA	36	\$120.00	\$4,320.00
2503.602	10" X 8" P.V.C. Reducer (Eccentric)	EA	1	\$230.00	\$230.00
2503.603	10" PVC	LF	1,531	\$19.25	\$29,471.75
2503.603	8" PVC	LF	242	\$17.90	\$4,331.80
2504.602	4" PVC Bend	EA	48	\$20.00	\$960.00
2506.502	Construct Drainage Structure Des. 4007 ( 0-8' )	EA	4	\$2,150.00	\$8,600.00
2506.502	Construct Drainage Structure Des. 4007 ( 8'-10' )	EA	1	\$2,350.00	\$2,350.00
<b>TOTAL SANITARY ITEMS:</b>					<b>\$62,836.15</b>

**WATER MAIN ITEMS:**

2504.602	1" Curb Stop & Box	EA	18	\$220.00	\$3,960.00
2504.603	1" Copper Type K	LF	636.8	\$20.50	\$13,054.40
2504.602	1"x3/4" Coupling	EA	24	\$60.00	\$1,440.00
2504.602	Reconnect Water Service	EA	27	\$275.00	\$7,425.00
2504.602	8" Gate Valve And Box	EA	9	\$1,650.00	\$14,850.00
2504.602	5" Hydrant	EA	2	\$2,800.00	\$5,600.00
2504.603	8" Water Main	LF	1,617.1	\$26.00	\$42,044.60
2504.603	6" Water Main	LF	20	\$20.00	\$400.00
2504.608	Water Main Fittings	LB	2,160	\$3.25	\$7,020.00
<b>TOTAL WATER MAIN ITEMS:</b>					<b>\$95,794.00</b>

**TOTAL PROJECT 1101-A PARTICIPATING**

**\$681,062.35**

**1101-B SECTION NON-PARTICIPATING**

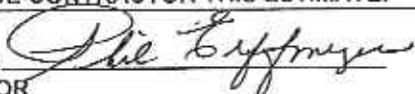
**STREET ITEMS:**

ITEM NO.	ITEM	UNIT	QUANTITY	BID	TOTAL
2104.501	Remove Sewer Pipe (Storm)	LF	140	\$8.00	\$1,120.00
2104.501	Remove Concrete Curb/Curb and Gutter	LF	2,350.2	\$2.00	\$4,700.40
2104.505	Remove Concrete Driveway Pavement	SY	63.4	\$6.00	\$380.40
2104.509	Remove Bituminous Pavement	SY	27,615.1	\$1.75	\$48,326.43
2104.509	Remove Light Base	EA	2	\$500.00	\$1,000.00
2104.503	Remove 4" Sidewalk	SF	3,379	\$0.75	\$2,534.25
2104.503	Remove Manhole or Catchbasin	EA	2	\$250.00	\$500.00
2104.511	Saw Concrete Pavement	LF		\$10.00	\$0.00
2105.501	Common Excavation	CY	8,350	\$6.00	\$50,100.00
2105.525	Topsoil Borrow (CV)	CY	32.56	\$20.00	\$651.20
2105.533	Salvaged Aggregate (CV)	CY	90	\$5.50	\$495.00
2105.604	Geotextile Fabric Type V	SY	13,257	\$1.00	\$13,257.00
2211.501	Aggregate Base (Class 5)	TON	15,510.61	\$10.00	\$155,106.10
2232.501	Mill Bituminous Surface (2")	SY	18,646.4	\$1.12	\$20,883.97
2357.502	Bituminous Material For Tack	GAL	3,250	\$0.01	\$32.50
2360.501	Type SP 12.5 Wearing Course Mix (3,B)	TON	4,836.45	\$58.93	\$285,012.00
2360.502	Type SP 12.5 Non Wear Course Mix (3,B)	TON	4,206.91	\$53.34	\$224,398.58
2501.515	F&I 15" Pipe Apron w/Trash Guard (choose one) <input type="checkbox"/> RC <input type="checkbox"/> PE	EA	1	\$350.00	\$350.00
2503.511	F&I 15" Pipe Sewer (choose one) <input type="checkbox"/> RC <input type="checkbox"/> PE	LF	297	\$18.50	\$5,494.50
2503.511	F&I 12" Pipe Sewer (choose one) <input type="checkbox"/> RC <input type="checkbox"/> PE	LF	92	\$19.00	\$1,748.00
2504.602	Adjust Valve Casting	EA	10	\$250.00	\$2,500.00
2506.501	Const. Drainage Structure Design F	LF	7.3	\$267.00	\$1,949.10
2506.501	Const. Drainage Structure Design H	LF	14.2	\$190.00	\$2,698.00
2506.516	Casting Assembly Manhole	EA	2	\$600.00	\$1,200.00
2506.516	Casting Assembly (Catchbasin) D412 Curb	EA	2	\$635.00	\$1,270.00
2506.516	Casting Assembly (Catchbasin) B624 Curb	EA	4	\$735.00	\$2,940.00
2506.522	Adjust Frame & Ring Casting	EA	30	\$350.00	\$10,500.00
2511.504	Quarry Run Riprap (Class 2)	TON	4	\$70.00	\$280.00
2521.501	4" Concrete Walk	SF	3,459.0	\$3.40	\$11,760.60
2531.507	6" Concrete Driveway Pavement	SY	63.4	\$37.21	\$2,359.11
2531.501	Concrete Curb and Gutter, Design B624	LF	1,246.5	\$10.60	\$13,212.90
2531.501	Concrete Curb and Gutter, Design D412	LF	1,170	\$10.00	\$11,700.00
2531.618	Truncated Domes	SF	64	\$38.00	\$2,432.00
2502.541	5" Perf PE Pipe Drain	LF	4,668.5	\$8.00	\$37,348.00
2502.541	5" Perf PE Service	EA	68	\$200.00	\$13,600.00
2573.502	Silt Fence, Type Machine Sliced Maintained	LF	470	\$1.70	\$799.00
2573.530	Storm Drain Inlet Protection	EA		\$75.00	\$0.00
2575.501	Seeding	AC	0.494	\$900.00	\$444.60
2575.502	Seed Mixture 270	LB	59.3	\$2.50	\$148.25
2575.523	Erosion Control Blanket Category 1	SY	2,398.6	\$1.20	\$2,878.32
2575.532	Fertilizer Analysis 20-10-20	LB	172.9	\$0.95	\$164.26
<b>TOTAL STREET ITEMS:</b>					<b>\$936,272.47</b>

<b>WATER MAIN ITEMS:</b>					
ITEM NO.	ITEM	UNIT	QUANTITY	BID	TOTAL
2504.602	1" Curb Stop & Box	EA	16	\$220.00	\$3,520.00
2504.602	1"x3/4" Coupling	EA	33	\$60.00	\$1,980.00
2504.802	Reconnect Water Service to New Main	EA	45	\$275.00	\$12,375.00
2504.802	Hydrant	EA	4	\$2,800.00	\$11,200.00
2504.602	8" Gate Valve And Box	EA	12	\$1,650.00	\$19,800.00
2504.603	8" Water Main	LF	2,619.5	\$26.00	\$68,107.00
2504.603	6" Water Main	LF	39.5	\$25.50	\$1,007.25
2504.603	1" Copper Type K Pipe	LF	261	\$20.50	\$5,350.50
2504.608	Water Main Fittings	LB	2,700	\$3.25	\$8,775.00
<b>TOTAL WATER MAIN ITEMS:</b>					<b>\$132,114.75</b>
<b>TOTAL PROJECT 1101B</b>					<b>\$1,068,387.22</b>
<b>CHANGE ORDER FOR PROJECT NO. 1101 FUNDED AS 1101-12 (NON-PARTICIPATING)</b>					
ITEM NO.	ITEM	UNIT	QUANTITY	BID	TOTAL
<b>STREET ITEMS:</b>					
2104.501	Remove Sewer Pipe (Storm)	LF	60	\$8.00	\$480.00
2104.501	Remove Concrete Curb/Curb and Gutter	LF	1,507.4	\$2.00	\$3,014.80
2104.505	Remove Concrete Driveway Pavement	SY	17.1	\$6.00	\$102.60
2104.509	Remove Bituminous Pavement	SY	13,592	\$1.75	\$23,786.00
2104.503	Remove 4" Sidewalk	SF	632.0	\$0.75	\$474.00
2104.509	Remove Manhole or Catchbasin	EA	3	\$250.00	\$750.00
2104.511	Saw Concrete Pavement	LF		\$10.00	\$0.00
2105.501	Common Excavation	CY	3,984	\$6.00	\$23,904.00
2105.525	Topsoil Borrow (CV)	CY	20.37	\$20.00	\$407.40
2105.604	Geotextile Fabric Type V	SY	13,033	\$1.00	\$13,033.00
2211.501	Aggregate Base (Class 5)	TON	5,865.33	\$10.00	\$58,653.30
2357.502	Bituminous Material For Tack	GAL	1,080.0	\$0.01	\$10.80
2360.501	Type SP 12.5 Wearing Course Mix (3,B)*	TON	1,318.89	\$59.67	\$78,698.17
2360.502	Type SP 12.5 Non Wear Course Mix (3,B)*	TON	1,908.82	\$57.66	\$110,062.56
2503.511	12" RC Pipe Cl. 2	LF	837.5	\$23.00	\$19,262.50
2504.602	Adjust Valve Casting	EA	3	\$250.00	\$750.00
2506.501	Const. Drainage Structure Design 4020-72*	LF	4.6	\$900.00	\$4,140.00
2506.501	Const. Drainage Structure Design F	LF	14.4	\$315.00	\$4,536.00
2506.501	Const. Drainage Structure Design H	LF	19.3	\$269.00	\$5,191.70
2506.516	Casting Assembly Manhole	EA	3	\$600.00	\$1,800.00
2506.516	Casting Assembly (Catchbasin) D412 Curb	EA	6	\$635.00	\$3,810.00
2506.522	Adjust Frame & Ring Casting	EA	13	\$350.00	\$4,550.00
2521.501	4" Concrete Walk	SF	632.0	\$3.40	\$2,148.80
2531.507	6" Concrete Driveway Pavement	SY	21.1	\$37.21	\$785.13
2531.501	Concrete Curb and Gutter, Design B624	LF	142.8	\$10.60	\$1,513.68

2531.501	Concrete Curb and Gutter, Design D412	LF	1,364.6	\$10.00	\$13,646.00
2502.541	5" Perf PE Pipe Drain	LF	3,944.3	\$8.00	\$31,554.40
2502.541	5" Perf PE Service	EA	50.0	\$200.00	\$10,000.00
2575.501	Seeding	AC	0.07	\$900.00	\$63.00
2575.502	Seed Mixture 270	LB	8.4	\$2.50	\$21.00
2575.523	Erosion Control Blanket Category 1	SY	312.1	\$1.20	\$374.52
2575.532	Fertilizer Analysis 20-10-20	LB	24.5	\$0.95	\$23.28
	<b>TOTAL STREET ITEMS:</b>				<b>\$417,546.64</b>
	<b>WATER MAIN ITEMS:</b>				
2504.602	8" Gate Valve And Box	EA	1	\$1,650.00	\$1,650.00
2504.603	8" Water Main	LF	261.0	\$26.00	\$6,786.00
2504.603	6" Water Main	LF	20.0	\$25.00	\$500.00
2504.608	Water Main Fittings	LB	270.0	\$3.25	\$877.50
	<b>TOTAL WATER MAIN ITEMS:</b>				<b>\$9,813.50</b>
	<b>TOTAL PROJECT 1101-12</b>				<b>\$427,360.14</b>
	<b>GRAND TOTAL PROJECT NO. 1101-A AND 1101-B AND 1101-12:</b>				<b>\$2,176,809.71</b>
	(Price includes all applicable sales and use taxes)				
	<b>LESS BITUMINOUS DISINCENTIVE (SEE ATTACHMENT)</b>				<b>\$1,330.60</b>
	<b>LESS CREDIT FOR BITUMINOUS SALVAGE:</b>				<b>\$51,000.00</b>
	<b>SUBTOTAL:</b>				<b>\$2,124,479.11</b>
	<b>LESS PREVIOUS ESTIMATE #1</b>				<b>\$299,271.57</b>
	<b>LESS PREVIOUS ESTIMATE #2</b>				<b>\$384,187.69</b>
	<b>LESS PREVIOUS ESTIMATE #3</b>				<b>\$261,917.74</b>
	<b>LESS PREVIOUS ESTIMATE #4</b>				<b>\$615,269.49</b>
	<b>LESS PREVIOUS ESTIMATE #5</b>				<b>\$39,440.27</b>
	<b>LESS PREVIOUS ESTIMATE #6</b>				<b>\$467,826.76</b>
	<b>LESS PREVIOUS ESTIMATE #7</b>				<b>\$34,797.49</b>
	<b>AMOUNT DUE CONTRACTOR THIS ESTIMATE:</b>				<b>\$21,768.10</b>

APPROVED: \_\_\_\_\_  
CONTRACTOR



APPROVED: \_\_\_\_\_  
CITY ENGINEER

CONTRACT AMOUNT: \$1,796,223.84  
CHANGE ORDER: \$446,836.45  
TOTAL PROJECT NO. 1101: \$2,243,060.29

BUDGET NO.: 411.48451.0336 \$21,738.26  
BUDGET NO.: 412.48451.0336 \$29.84

Project 1101 and 1101-12 Incentive /Disincentive Summary						
Incentive/Disincentive (2011 Work)	Incentive	Disincentive	Location	Core #'s	Date	
			Gorton Ave NW	1	7/13/2011	
			Vos Park Add'n	2,3,4,5,6	7/21-22/2011	
			Gorton Ave NW	7	7/22/2011	
			Gorton Ave NW	8	7/29/2011	
			Gorton Ave NW	9	8/5/2011	
		\$769.96	Gorton Ave NW	10	8/20/2011	
		\$262.65	6th Ave NW	11	8/20/2011	
			15th Ave SW	14	9/16/2011	
			11 1/2 Ave SE	15	9/16/2011	
\$ 503.39			Gorton Ave NW	16	9/29/2011	
\$ 475.38			15th Ave SW	17	9/29/2011	
			Becker Ave SE	18	9/29/2011	
			Becker Ave SE	21	10/17/2011	
<b>1101-12 Incentive/Disincentive (2011 Work)</b>						
		\$444.33	20th Ave /25th St SW	12,13	9/19/2011	
			11th Ave SE	19,20	10/10/2011	
			4th Ave SE	22	10/21/2011	
<b>Total</b>	\$ 978.77	\$ 1,476.94				
<b>Total Disincentive (2011)</b>		(\$498.17)				
<b>1101 Incentive/Disincentive (2012 Work)</b>						
	Incentive	Disincentive	Location			
		\$588.34	Vos Park Addition	23,24,25	4/30/2012	
		\$2,178.76	6th Ave NW	26	4/30/2012	
\$ 1,989.97			Gorton Ave NW	27	5/1/2012	
			15th Ave SW	28	5/1/2012	
			11 1/2 Ave SE	30	5/2/2012	
		\$575.98	Becker Ave SE	32,33,34	5/2/2012	
\$ 1,443.08			Becker Ave SE	35,36	5/3/2012	
<b>1101-12 Incentive/Disincentive (2012 Work)</b>						
			20th Ave /25th St SW	29	5/1/2012	
		\$542.40	11th Ave SE	31	5/2/2012	
			4th Ave SE	37	5/3/2012	
<b>Total</b>	\$ 3,433.05	\$4,265.48				
<b>Total Disincentive (2012)</b>		\$ (832.43)				
<b>Total Project Incentive /Disincentive</b>		(\$1,330.60)				