



Agenda
City Council Regular Meeting
Tuesday, April 17, 2018
City Hall Council Chamber | 505 Swift Boulevard

City Council Pre-Meeting Workshop - 7:00 p.m. (Discussion Only – Annex Building)

Agenda Item:

1. Executive Session Per RCW 42.30.110 (1) (ii): Discuss Current or Potential Litigation With Legal Counsel (10 minutes)
 - Heather Kintzley, City Attorney
2. BPA Spill Surcharge (5 minutes)
 - Clint Whitney, Energy Services Director
3. Discuss Meeting Agenda Items (15 minutes)
 - City Council Members

City Council Regular Meeting - 7:30 p.m. (City Hall Council Chamber)

Welcome and Roll Call

Pledge of Allegiance

Approval of Agenda: (Approved by Motion)

Presentations:

4. Expressing Appreciation to Gerald Frey for Service on the Code Enforcement Board - Resolution No. 43-18 (5 minutes)
 - Mayor Thompson
5. Richland EMS/Fire Cardiac Survival (7 minutes)
 - Tom Huntington, Fire and Emergency Services Director

Public Hearing: (Please Limit Public Hearing Comments to 3 Minutes) Note: Records intended for Council consideration must be given to the City Clerk.

6. Proposed Amendments to the 2018 Budget to Include the 2017 Budget Carryovers - Ordinance No. 17-18
 - Brandon Allen, Finance Director
7. Proposed Increase in the 2018 Budget Appropriation in the Water Fund, Equipment Replacement Fund and Stormwater Utility Fund - Ordinance No. 20-18
 - Pete Rogalsky, Public Works Director
8. Proposed Surplus of .44 Acres Along Keene Road Trail - Resolution No. 73-18
 - Kerwin Jensen, Community Development Director

Public Comments: (Please Limit Public Comments to 2 Minutes) Note: Records intended for Council consideration must be given to the City Clerk.

Consent Calendar: (Approved by single vote or Council may pull items and transfer to Items of Business)

Minutes:

9. Approve the Minutes of the Council Meetings Held April 3 and 5, 2018
 - Heather Kintzley, City Attorney

Ordinances - First Reading:

10. Ordinance No. 17-18, Approving Amendments to the 2018 Budget to Include the 2017 Budget Carryovers
 - Cathleen Koch, Administrative Services Director
11. Ordinance No. 18-18, Amending Ordinance No. 07-17 to Correct a Scrivener's Error in the Legal Description
 - Kerwin Jensen, Community Development Director
12. Ordinance No. 19-18, Amending Richland Municipal Code Section 2.28.054 Related to Probationary Periods
 - Heather Kintzley, City Attorney
13. Ordinance No. 20-18, Increasing 2018 Budget Appropriations in the Water Fund, Equipment Replacement Fund and Stormwater Fund
 - Pete Rogalsky, Public Works Director

Ordinances - Second Reading/Passage:

Resolutions – Adoption:

14. Resolution No. 43-18, Expressing Appreciation to Gerald Frey for Service on the Code Enforcement Board
 - Heather Kintzley, City Attorney
15. Resolution No. 66-18, Authorizing the Purchase of a Fire Services Ladder Truck from Hughes Fire Equipment
 - Tom Huntington, Fire and Emergency Services Director
16. Resolution No. 68-18, Authorizing Submission of a Grant Application to the Washington State Recreation and Conservation Office
 - Joe Schiessl, Parks and Public Facilities Director
17. Resolution No. 69-18, Awarding Bid to Sturgeon Electric Company, Inc. for Construction of the Stevens L-32 and L-41 Electrical Distribution Lines
 - Clint Whitney, Energy Services Director
18. Resolution No. 70-18, Approving the Second Round of Business License Reserve Fund Awards
 - Kerwin Jensen, Community Development Director
19. Resolution No. 73-18, Approving the Surplus of .44 Acres of Property Along Keene Road
 - Kerwin Jensen, Community Development Director
20. Resolution No. 77-18, Authorizing the Award of Bid to All Star, Inc. for the 2018 ADA Ramp Project
 - Pete Rogalsky, Public Works Director
21. Resolution No. 79-18, Approving a Purchase Order to Acquire Ambulance Billing and Collection Services with Systems Design EMS, LLC
 - Tom Huntington, Fire and Emergency Services Director

Items for Approval:

22. Appointments to the Planning Commission: Francesca Maier and Douglas Eadie
 - Heather Kintzley, City Attorney

Expenditures - Approval:

23. Expenditures from March 26, 2018 - April 6, 2018 for \$11,593,326.14 including Check Nos. 255930-256217, Wire Nos. 6809-6836, Payroll Check Nos. 132062-132586, and Payroll Wire/ACH Nos. 10396-10418
 - Cathleen Koch, Administrative Services Director

Items of Business:

Reports and Comments:

1. City Manager
2. City Council
3. Mayor

Adjournment

City Council Meetings are broadcast live on CityView Channel 192 and online at CI.RICHLAND.WA.US/CITYVIEWTV

Richland City Hall is ADA accessible. Council Chamber parking and access is available at the entrance facing George Washington Way. Requests for sign interpreters, audio equipment, and/or other special services must be received 48 hours prior to the City Council Meeting by calling the City Clerk's Office at 942-7388.



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Agenda Item

Key Element: Key I - Financial Stability & Operational Effectiveness

Subject:

Executive Session Per RCW 42.30.110 (1) (ii): Discuss Current or Potential Litigation With Legal Counsel (10 minutes)

Department:

City Attorney

Ordinance/Resolution Number:

Document Type:

Executive Session Item

Recommended Motion:

None.

Summary:

None.

Fiscal Impact:

None.

Attachments:



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Agenda Item

Key Element:

Subject:

BPA Spill Surcharge (5 minutes)

Department:

Energy Services

Ordinance/Resolution Number:

Document Type:

Presentation

Recommended Motion:

Summary:

Staff will provide a update on the BPA Spill Surcharge and its implications.

Fiscal Impact:

Attachments:



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Presentations

Key Element:

Subject:

Expressing Appreciation to Gerald Frey for Service on the Code Enforcement Board - Resolution No. 43-18 (5 minutes)

Department:
City Council

Ordinance/Resolution Number:

Document Type:
Presentation

Recommended Motion:

Summary:

Fiscal Impact:

Attachments:



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Presentations

Key Element:

Subject:

Richland EMS/Fire Cardiac Survival (7 minutes)

Department:

Assistant City Manager

Ordinance/Resolution Number:

Document Type:

Presentation

Recommended Motion:

Summary:

Fiscal Impact:

Attachments:



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Public Hearing

Key Element: Key I - Financial Stability & Operational Effectiveness

Subject:

Proposed Amendments to the 2018 Budget to Include the 2017 Budget Carryovers - Ordinance No. 17-18

Department:

Administrative Services

Ordinance/Resolution Number:

17-18

Document Type:

Ordinance

Recommended Motion:

Public hearing only, item is also included on the agenda as first reading of Ordinance No. 17-18.

Summary:

A public hearing is necessary for Ordinance No. 17-18, amending the 2018 Budget to include the 2017 budget carryovers.

The public hearing notice was posted on April 17, 2018. First reading of the ordinance amending the 2018 Budget will occur April 17, 2018, with the second reading and passage scheduled for the Council meeting, May 1, 2018.

Fiscal Impact:

No

Attachments:



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Public Hearing

Key Element: Key I - Financial Stability & Operational Effectiveness

Subject:

Proposed Increase in the 2018 Budget Appropriation in the Water Fund, Equipment Replacement Fund and Stormwater Utility Fund - Ordinance No. 20-18

Department:
Public Works

Ordinance/Resolution Number:
20-18

Document Type:
Public Hearing Item

Recommended Motion:

None.

Summary:

Washington State law requires that a public hearing be held prior to consideration of an ordinance to increase the appropriation of existing fund balance. Ordinance No. 20-18 is on this evening's consent calendar and proposes to appropriate existing fund balance in the Water, Equipment Replacement and Stormwater funds restricted reserve fund and to make changes to the 2018 Water Fund, Equipment Replacement Fund and Stormwater Utility Fund.

Fiscal Impact:

None.

Attachments:



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Public Hearing

Key Element: Key 1 - Financial Stability & Operational Effectiveness
Key 3 - Economic Vitality

Subject:

Proposed Surplus of .44 Acres Along Keene Road Trail - Resolution No. 73-18

Department:

Community Development Services

Ordinance/Resolution Number:

73-18

Document Type:

Public Hearing Item

Recommended Motion:

Summary:

As required by RMC Title 3.06.030 a public hearing for the proposed surplus of .44 acres along Keene Road Trail must be held prior to Council's determination. The purpose of this public hearing is to gather input from the public for Council consideration.

Resolution 73-18 is included later in the agenda along with a more detailed staff report relative to this item.

Fiscal Impact:

None

Attachments:



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Minutes

Key Element: Key I - Financial Stability & Operational Effectiveness

Subject:

Approve the Minutes of the Council Meetings Held April 3 and 5, 2018

Department:

City Attorney

Ordinance/Resolution Number:

Document Type:

Minutes

Recommended Motion:

Approve the Minutes of the Council Meetings Held April 3 and 5, 2018

Summary:

None.

Fiscal Impact:

None.

Attachments:

1. 040318 Reg Mtg
2. 040518 Special Workshop (Strategic Plan)



MINUTES

RICHLAND CITY COUNCIL REGULAR MEETING

Richland City Hall ~ 505 Swift Boulevard

Tuesday, April 3, 2018

City Council Pre-Meeting - 7:00 p.m.

Mayor Thompson called the pre-meeting to order at 7:00 p.m. in the City Manager's Conference Room in the City Hall Annex building.

Attendance

Mayor Thompson, Mayor Pro Tem Christensen, Councilmembers Lemley, Anderson, Alvarez and Lukson were present.

Also present were City Manager Reents, Assistant City Manager Amundson, City Attorney Kintzley, Administrative Services Director Koch, Community Development Director Jensen, Parks and Public Facilities Director Schiessl and City Clerk Hopkins.

1. Smoking in Portions of Public Parks (15 minutes)

Mr. Schiessl explained several options to prohibit smoking in portions of public parks. He said a proposal will be placed on a future Council agenda for action, based on this discussion.

Mr. Jensen said there has been a price reduction on the property for sale on Jadwin and George Washington Way. He said this should stimulate potential buyer for the property.

2. Discuss Meeting Agenda Items (15 minutes)

Council and staff briefly reviewed the proposed agenda scheduled for the regular meeting.

City Council Regular Meeting - 7:30 p.m.

Mayor Thompson called the Council meeting to order at 7:30 p.m. in the Council Chamber at City Hall.

Welcome and Roll Call

Mayor Thompson welcomed those in the audience and expressed appreciation for their attendance.

Attendance:

Mayor Thompson, Mayor Pro Tem Christensen, Councilmembers Lemley, Anderson, Alvarez and Lukson were present.

Also present were City Manager Reents, Assistant City Manager Amundson, City Attorney Kintzley, Administrative Services Director Koch, Public Works Capital Projects Manager Marlow, Fire and Emergency Services Director Huntington, Community Development Director Jensen, Parks and Public Facilities Director Schiessl, Energy Services Director Hammond, Police Captain Taylor and City Clerk Hopkins.

COUNCILMEMBER LUKSON MOVED AND MAYOR THOMPSON SECONDED THE MOTION TO EXCUSE COUNCILMEMBER KENT. THE MOTION CARRIED 6-0.

Pledge of Allegiance

Mayor Thompson led the Council and audience in the recitation of the Pledge of Allegiance.

Approval of Agenda

MAYOR PRO TEM CHRISTENSEN MOVED AND COUNCILMEMBER ANDERSON SECONDED A MOTION TO APPROVE THE AGENDA AS PUBLISHED. THE MOTION CARRIED 6-0.

3. Expressing Appreciation to James Wise for his Service on the Planning Commission: Resolution No. 35-18 (5 minutes)

Councilmember Lemley, formerly the Council Liaison for the Planning Commission, read the Resolution of Appreciation to Mr. Wise. Mr. Wise said his time on the Planning Commission was a very rewarding experience. Mayor Thompson gave his personal thanks to Mr. Wise.

4. New Hire/Retirements (5 minutes)

Ms. Jubb announced the new hires: Rachel Wyant, Emergency Communications Dispatcher; Elena Yatsuk, Engineering Tech. III; Roxanne Branton, ITApplications Dev; Robert Ramsey, Electronics & Instrumentation Tech I; Lori Briere, Parks & Recreation Coordinator; and Jeffrey Albin, Plant Operator-in-Training.

Public Comments

City Clerk Hopkins read the public comments procedure. There were no public comments.

Minutes

5. Approve the Minutes of the Meeting Held on March 20 and 27, 2018

Ordinances - Second Reading/Passage

Ordinances - First Reading

Resolutions – Adoption

6. Resolution No. 35-18, Expressing Appreciation to James Wise for Service on the Planning Commission
7. Resolution No. 44-18, Authorizing an Interlocal Agreement with Benton County for Aerial Photography
8. Resolution No. 46-18, Authorizing an Agreement with SeamlessGov for Installation and Integration of a Web Form Building Software Solution
9. Resolution No. 57-18, Expressing Appreciation to Sai Kukkadapu for Service on the Parks and Recreation Commission
10. Resolution No. 58-18, Expressing Appreciation to Jessica Scritchfield for Service on the Parks and Recreation Commission
11. Resolution No. 59-18, Expressing Appreciation to Laila Krowiak for Service on the Parks and Recreation Commission
12. Resolution No. 60-18, Expressing Appreciation to Thomas Rado for Service on the Arts Commission
13. Resolution No. 61-18, Expressing Appreciation to Michael Wutzke for Service on the Arts Commission
14. Resolution No. 62-18, Expressing Appreciation to Rachel Bauman for Service on the Arts Commission
15. Resolution No. 63-18, Authorizing an Agreement with Parametrix, Inc. for 2018 Landfill Environmental Monitoring
16. Resolution No. 64-18, Authorizing a Cost Sharing Agreement with Falcon Video Communications L.P. for Fiber Optic Infrastructure Construction on the Duportail Bridge Project
17. Resolution No. 65-18, Awarding a Consultant Agreement to Rhiza A&D, Inc. for Queensgate Roundabout Artwork
18. Resolution No. 67-18, Authorizing Submittal of Transportation Safety Grant Applications

Items for Approval

19. Appointments to the Arts Commission: Tom Nirider, Melinda Garza and Sabastian Marichalar

20. Appointments to the Parks and Recreation Commission: Maria Gutierrez, Nancy Doran, Katie Mair, Colin Berry and Tyler Andersen

Expenditures - Approval

21. Expenditures from March 12, 2018 - March 23, 2018 for \$5,334,498.20 including Check Nos. 255483-255929, Wire Nos. 6777-6808, Payroll Check Nos. 131533-132061, and Payroll Wire/ACH Nos. 10380-10395

Items of Business

No Items of Business.

Reports and Comments

City Manager

Ms. Reents announced that Police Captain Taylor will be the Interim Police Chief during the hiring process to replace Police Chief Skinner. She expressed her appreciation to Mr. Hammond for his service to the City and wished him well in his retirement.

Ms. Kintzley also thanked Mr. Hammond for his service.

City Council

Councilmembers expressed their appreciation to Mr. Hammond for his excellent service to the City and wished him well in his retirement.

Councilmember Christensen said he recently attended a ribbon cutting for a grand reopening celebration for Wendy's Restaurant located on George Washington Way. He said the remodel and updates were very pleasing.

Mayor

Mayor Thompson expressed his thanks for Mr. Hammond's excellent service.

Adjournment

Mayor Thompson adjourned the meeting at 7:57 p.m.

Respectfully Submitted,

Marcia Hopkins, City Clerk

FORM APPROVED:

Robert J. Thompson, Mayor

DATE APPROVED:

DATE PUBLISHED:



MINUTES
CITY COUNCIL WORKSHOP
City Shops Room 110 – 2700 Duportail St.
Thursday, April 5, 2018

Draft

City Council Workshop – 4:00 p.m.

Attendance:

Mayor Pro Tem Christensen, Councilmembers Anderson, Kent, Lemley, Lukson, and Alvarez were present.

Also present were City Manager Reents, Assistant City Manager Amundson, City Attorney Kintzley, (Retiring) Energy Services Director Hammond, Energy Services Director Whitney, Fire and Emergency Services Director Huntington, Community Development Director Jensen, Administrative Services Director Koch, Public Works Director Rogalsky, Parks and Public Facilities Director Schiessl, and Police Captain Jeff Taylor.

Agenda Items:

1. Discuss Future Strategic Plan
Council and staff discussed potential goals and objectives as it related to the Keys for Richland's future.

Adjournment:

Mayor Pro Tem Christensen adjourned the workshop at 7:30 p.m.

Respectfully Submitted,

Marcia Hopkins, City Clerk

FORM APPROVED:

Robert J. Thompson, Mayor

DATE APPROVED:

DATE PUBLISHED:



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Ordinances - First Reading

Key Element: Key I - Financial Stability & Operational Effectiveness

Subject:

Ordinance No. 17-18, Approving Amendments to the 2018 Budget to Include the 2017 Budget Carryovers

Department:

Administrative Services

Ordinance/Resolution Number:

17-18

Document Type:

Ordinance

Recommended Motion:

Give first reading, by title only, to Ordinance No. 17-18, approving the identified carryovers and new revenues, and authorizing staff to make the necessary budget adjustments to appropriate \$40,075,274 into the 2018 budget as indicated therein.

Summary:

All appropriations in any current operating fund lapse at the end of each fiscal year.

At this time, it is necessary to carry over unexpended appropriations from the prior fiscal year to the current fiscal year for goods and services which had not yet been received by the end of the year, but were encumbered and committed in the prior year; and for uncompleted improvements in progress, including capital improvement and business license reserve projects, and grant-related expenditures at the end of the year. RCW 35.33.151 expressly allows for this action.

Ordinance No. 17-18 amends the 2018 budget to increase appropriations in the funds listed in the ordinance for the proposed carryovers. The proposed 2017 budget carryover total of \$40,075,274 includes previously approved capital improvement projects (CIP), grant-funded programs, and encumbered goods and services not yet received at year end. The carryover ordinance also authorizes the appropriation of certain earned revenues not previously budgeted.

The sources of funds for the 2017 carryovers include unrealized grants, loans, contributions of \$7,204,652 and fund balance of \$32,870,622.

Staff recommends approval of Ordinance No. 17-18 for first reading by title only. A public hearing was held on April 17, 2018, and second reading is currently scheduled for May 1, 2018.

Fiscal Impact:

Yes

The total increase in appropriations to the 2018 operating budget is \$40,075,274. This includes the carryover of \$37,368,975 in approved CIP projects, \$1,083,708 in other grant-funded programs and \$1,622,591 in encumbered goods and services.

Attachments:

1. Ordinance No. 17-18
2. 2017 Appropriation Carryovers

ORDINANCE NO. 17-18

AN ORDINANCE of the City of Richland amending the 2018 Budget to provide for additional appropriations from the carryover of prior year budget to complete certain uncompleted capital projects and encumbered purchases of goods and services and certain revenues not previously appropriated.

WHEREAS, on November 21, 2017, Richland City Council passed Ordinance No. 49-17 approving the 2018 Annual Budget, including the 2018-2023 Capital Improvement Plan (CIP); and

WHEREAS, it is necessary to carry over unexpended appropriations from the prior fiscal year to the current fiscal year for goods and services which had not yet been received by the end of the year, but were encumbered and committed in the prior year; and for uncompleted improvements in progress, including capital improvement and business license reserve projects, and grant related expenditures at the end of the year; and

WHEREAS, RCW 35.33.151 provides for the carryover of appropriations to the following year for payment of uncompleted programs or improvements in progress or on orders subsequently filled or claims subsequently billed for goods or services not completed by the end of the fiscal year; and

WHEREAS, this funding appropriation enables the completion of unfinished capital improvement projects and encumbered goods and services not received by year end; and

WHEREAS, on April 17, 2018, a public hearing was held pursuant to RCW 35.33.091 regarding the increase in appropriations from beginning fund balance and new revenue as listed in the table of Section 3 of this ordinance.

NOW, THEREFORE, BE IT ORDAINED by the City of Richland as follows:

Section 1. Facts Constituting Emergency. The expenses contained within this ordinance were not anticipated when the 2018 budget was approved. The increased appropriations contained within this ordinance total \$40,075,274 of which \$40,075,274 was previously appropriated in the prior fiscal year's final budget. These appropriations are necessary for completion of approved projects and purchases and are identified by fund in Section 3 of this ordinance.

Section 2. Declaration of Public Emergency. Due to circumstances described above, the City Council declares that a public emergency exists in the City's Funds described in Section 3 of this ordinance.

Section 3. Amendment of the 2018 Budget. The 2018 Budget is hereby amended to provide for additional appropriations. The sources of funds contained in this ordinance include unrealized grants, loans and contributions in the amount \$7,204,652, and fund balance in the amount of \$32,870,622. These balances are identified for each fund in the following table:

CHANGES IN APPROPRIATION FROM 2017 CARRYOVERS							
FUND #	FUND NAME	SOURCES OF FUNDS			USES OF FUNDS		
		CARRYOVER REVENUE	CARRYOVER APPROPRIATED FUND BALANCE	TOTAL INCREASE IN SOURCES OF FUNDS	CURRENT APPROVED APPROPRIATIONS	CHANGE IN APPROPRIATIONS	TOTAL AMENDED APPROPRIATIONS
001	General	\$ 33,000	\$ 3,690,085	\$ 3,723,085	\$ 59,541,097	\$ 3,723,085	\$ 63,264,182
101	City Streets	-	62,470	62,470	3,389,995	62,470	3,452,465
111	Park Reserve	-	25,155	25,155	554,495	25,155	579,650
112	Industrial Development	-	572,677	572,677	2,719,298	572,677	3,291,975
117	Criminal Justice Sales Tax	-	34,835	34,835	2,295,880	34,835	2,330,715
150	Hotel/Motel	-	172,787	172,787	1,337,500	172,787	1,510,287
153	Community Dev. Block Grant	257,614	105,898	363,512	364,290	363,512	727,802
154	HOME	495,213	196,983	692,196	773,900	692,196	1,466,096
301	Streets Capital Construction	4,819,298	566,266	5,385,564	27,003,131	5,385,564	32,388,695
380	Park Project Construction	417,812	1,444,652	1,862,464	2,668,969	1,862,464	4,531,433
385	General Government Const.	-	15,789,040	15,789,040	1,991,820	15,789,040	17,780,860
401	Electric Utility	-	1,285,000	1,285,000	88,579,760	1,285,000	89,864,760
402	Water Utility	743,759	2,362,046	3,105,805	20,551,652	3,105,805	23,657,457
403	Wastewater Utility	-	5,168,396	5,168,396	11,573,891	5,168,396	16,742,287
404	Solid Waste Utility	-	250,652	250,652	10,450,523	250,652	10,701,175
405	Storm Water Utility	115,500	152,642	268,142	3,429,541	268,142	3,697,683
406	Golf Course	-	245,945	245,945	1,855,009	245,945	2,100,954
407	Medical Services	-	9,448	9,448	4,424,330	9,448	4,433,778
408	Broadband Utility	322,456	230,250	552,706	338,457	552,706	891,163
503	Equipment Replacement	-	505,394	505,394	4,636,520	505,394	5,141,914
	Total	\$ 7,204,652	\$ 32,870,622	\$ 40,075,274	\$ 248,480,058	\$ 40,075,274	\$ 288,555,332

Section 4. This ordinance shall take effect the day following its publication in the official newspaper of the City of Richland.

PASSED by the City Council of the City of Richland, Washington, at a regular meeting on the _____ day of _____, 2018.

ROBERT J. THOMPSON
Mayor

ATTEST:

APPROVED AS TO FORM:

MARCIA HOPKINS, City Clerk

HEATHER KINTZLEY, City Attorney

Date Published: _____

2017 Carryovers - Encumbered, Expanded And Special Programs

Expenditure Account	Date	Vendor	Description	P.O. #	Amount
001-100-0014-513100-4107	6/8/2017	Springsted Incorporated	Class & Compensation Study	P057871	\$ 22,750
001-100-0014-513100-4117	5/10/2017	Springsted Incorporated	Class & Compensation Study - Onsite Meeting	P057871	5,000
001-113-0074-559308-4976	7/20/2017	Tri Media	Produce Video On Hanford Tunnel Collapse	S017512	5,000
001-120-0032-522200-2201	11/3/2017	Sea Western Inc	Carbon Cylinder w/Valve	P058487	12,055
001-120-0034-522100-4902	12/21/2017	Imagetrend Inc	Software License - Fire RMS	P058554	3,441
001-213-0014-518880-4912	11/30/2017	Global Knowledge Training LLC	SASAC Implementing Core Cisco ASA Security	P058545	2,495
001-213-0014-518885-4107	4/19/2017	Smash, Inc.	Message Archiving	S017380	2,260
001-213-0014-518885-4117			Security Review/PCI Vulnerabilities		37,000
001-213-0014-518890-4107			Contract Negotiations (contract 57-16 amend #1)		8,280
001-301-0074-558600-4117			GMA Comprehensive Plan Review (contract 176-16)		6,170
001-900-0074-559310-4924			Commercial Improvement Program		50,251
001-900-0074-559310-4925			Business License Reserve Program		52,803
Total General Fund					207,504
101-401-0059-542600-9813	12/19/2017	Last Mile Gear	Radios	P058623	62,470
Total Streets Fund					62,470
112-306-0074-559300-4149	4/18/2017	Big D'S Construction Of Tri	Schaeffer St Construction	P057793	11,809
Total Industrial Development Fund					11,809
401-504-0004-181569-4117	2/21/2017	Electric Power Systems Inc	Leslie Rd Substation Design & Inspection Work	P057572	300,000
401-504-0004-181563-4117	4/17/2017	Energy Northwest	Staff Augmentation	P057784	75,000
401-502-0004-172501-4117	8/9/2017	Commonwealth Associates Inc	Engineering Design Specs	P058238	225,000
401-505-0004-533115-4117	10/6/2017	Efficiency Solutions LLC	Load Forecast & Integrated Resource Plan Develop	P058402	30,000
401-504-0006-181569-6214	12/7/2017	S & C Electric Company	Circuit Switchers	P058578	100,000
401-504-0004-181569-4117	12/14/2017	Potelco Inc	Leslie Rd Substation Construction	P058607	275,000
401-502-0004-518887-4117	12/5/2017	Geodigital International COR	Update FEM Workbenches	S057295	80,000
Total Electric Fund					1,085,000
403-420-0004-535100-4117	8/21/2015	Wildlands Inc	Amon Basin Revegetation Project	P055619	19,456
403-420-0004-535100-4117	10/24/2017	Gray & Osborne Inc	WWTF Local Limits Reassessment & Reevaluation	P058441	14,110
403-423-0004-535500-4802	12/1/2017	True North Environmental Equ	Drive Motor, Shop Supplies, Crawler Repair, Motor	P058547	4,540
403-423-0004-535500-4911	12/8/2017	NW Linings & Geotextile Prod	Compost Pad Pond Liner	P058583	478
Total Wastewater Fund					38,584
404-433-0004-537820-4117	4/7/2017	Parametrix Inc	Landfill Monitoring, Sampling, Report & Gas Support	P057762	8,840
Total Solid Waste Fund					8,840
407-121-0004-526200-4902	12/21/2017	Imagetrend Inc	Software License - Fire RMS	P058554	2,989
Total Medical Services Fund					2,989
503-215-0006-594480-6405	6/8/2017	Titan Truck Equipment	2017 Replace Flatbed Truck #3266	P057977	167,367
503-215-0006-594480-6405	12/18/2017	Corwin Of Pasco LLC	2017 Replace Interceptor #2428	P058598	38,027
Total Equipment Replacement Fund					205,394
Total Encumbered And Miscellaneous Carryover					\$ 1,622,591
001-120-0033-518887-3182			Exp Prog - Mobile Data Terminals		\$ 22,268
001-120-0034-518887-4117			ITGC - Records Mgt Conversion		18,031
001-120-0036-518887-6401			Exp Prog - Mobile Data Terminals		6,803
001-120-0036-522200-6414			Exp Prog - Replace SCBA Equipment		35,966
001-213-0014-518890-3583			CIP - ERP System		277,654
001-213-0014-518890-4107			CIP - ERP System		238,660
001-213-0014-518890-4116			CIP - ERP System		31,788
001-213-0014-518890-4117			CIP - ERP System		1,225,925
001-213-0014-518890-4301			CIP - ERP System		118,360
001-213-0014-518890-6480			CIP - ERP System		10,126
001-335-0063-518887-3582			ITGC - Treeworks Tablet		2,000
001-900-0016-510000-6209			CIP - Animal Control Facility		1,500,000
Total General Fund					3,487,581

2017 Carryovers - Encumbered, Expanded And Special Programs

Expenditure Account	Date	Vendor	Description	P.O. #	Amount
111-304-0004-576100-4940			Park Partnership Program		25,155
			Total Park Reserve Fund		25,155
112-305-0075-597000-5502			Transfer Out - Street Const (SR240/Kingsgate Signal)		133,763
112-305-0075-597000-5543			Transfer Out - Broadband Util (RAISE Funding For Sys		13,500
112-306-0076-559300-6209			Horn Rapids/Land Sale Development Costs		413,605
			Total Industrial Development Fund		560,868
117-131-0033-518887-3583			Exp Prog - Mobile Data Terminals For Police		2,900
117-131-0063-518887-6401			Exp Prog - Mobile Data Terminals For Police		31,935
			Total Criminal Justice Sales Tax Fund		34,835
150-307-0005-597000-5528			Transfer To Park Const - Columbia Playfield		27,787
150-307-0005-597000-5528			Transfer To Park Const - Columbia Playfield		145,000
			Total Hotel/Motel Fund		172,787
301-402-0046-595300-6302			CIP - Duportail Bridge		(222,762)
301-402-0046-595300-6318			Traffic Impact Agreement		82,645
301-402-0046-595300-6325			CIP - Marcus Whitman Sidewalks		35,000
301-402-0046-595300-6328			CIP - I-82/Queensgate Ramp		2,789,240
301-402-0046-595300-6330			CIP - Queensgate/Col Prk Trail Improvement		(320,325)
301-402-0046-595300-6369			CIP - Center Parkway		1,949,848
301-402-0046-595300-6392			CIP - Duportail St Extension (Fiber Installation)		75,000
301-402-0046-595300-6397			CIP - Raise Area Infrastructure		133,763
301-402-0046-595600-6399			CIP - Audible Pedestrian Signs		19,930
301-402-0046-595610-6363			CIP - Annual Sidewalk Repairs		15,315
301-402-0046-595610-6391			CIP - Curbs And Wheelchair Ramps		2,410
301-402-0046-595640-6327			CIP - SR240/Kingsgate Traffic Signal		825,500
			Total Streets Construction Fund		5,385,564
380-337-0066-594501-6403			CIP - Urban Greenbelt		20,134
380-337-0066-594515-6403			CIP - Keene Rd Improvements		108,180
380-337-0066-594524-6335			CIP - City-Wide Safety/Security		75,000
380-337-0066-594524-6359			Playground Equipment		1,689
380-337-0066-594566-6403			CIP - Goethals Park		3,804
380-337-0066-594571-6403			CIP - Shoreline Enhancement		55,279
380-337-0066-594590-6403			CIP - Gateway Improvements		170,174
380-337-0066-594599-6403			CIP - John Dam Plaza		15,175
380-337-0066-594777-6403			CIP - Howard Amon Sturgeon Cove		2,569
380-337-0066-594783-6403			CIP - Columbia Playfield Improvements		466,183
380-337-0066-594784-6403			CIP - ORV Improvements		38,316
380-337-0066-594785-6403			CIP - Gala Park Improvements		31,029
380-337-0066-594786-6403			CIP - Drollinger Park Improvements		31,644
380-337-0066-596791-6403			CIP - Columbia Park West		1,665
380-337-0066-596793-6209			CIP - Howard Amon Park Improvements		281,679
380-337-0066-596793-6403			CIP - Howard Amon Park Improvements		22,556
380-337-0066-596794-6209			CIP - Badger Mt Park Improvements		91,654
380-337-0066-596795-6403			CIP - Trailhead Park Improvements		3,640
380-337-0066-596797-6403			CIP - Columbia Point Marina Park Improvements		348,643
380-337-0066-596797-6444			CIP - Columbia Pt Mar Pk Conversion Of State Land		60,000
380-337-0066-596799-6403			CIP - Horn Rapids Athletic Comp Imp		33,451
			Total Parks Project Construction Fund		1,862,464
385-900-0006-594191-6403			CIP - Swift Corridor Improvements - City Hall		15,789,040
			Total General Govt Construction Fund		15,789,040
401-501-0004-533110-4117			Exp Prog - Energy Services Financial Program		200,000
			Total Electric Fund		200,000

2017 Carryovers - Encumbered, Expanded And Special Programs

Expenditure Account	Date	Vendor	Description	P.O. #	Amount
402-410-0003-594505-3403			CIP - Pump And Storage Renewals		237,887
402-410-0003-594507-3403			CIP - Irrigation Utility Improvements		30,000
402-410-0003-594536-3403			CIP - Distribution System Repair/Replacement		18,876
402-410-0003-594551-3403			CIP - Water System Security Improvements		6,730
402-410-0004-594551-4403			CIP - Water System Security Improvements		15,362
402-410-0006-594503-6403			CIP - Duportail St Transm Main		171,795
402-410-0006-594505-6403			CIP - Pump And Storage Renewals		74,971
402-410-0006-594507-6403			CIP - Irrigation Utility Improvements		709,662
402-410-0006-594508-6403			CIP - Jason Lee Elementary Irrigation Well		233
402-410-0006-594535-6403			CIP - Completed Project Contingency		336,106
402-410-0006-594548-6403			CIP - Automatic Meter Read System		235,000
402-410-0006-594550-6403			CIP - Harrison Well Improvement		75,000
402-410-0006-594554-6403			CIP - Water Transmission Line-2nd Yakima		1,182,750
402-410-0006-594563-6403			CIP - Sky Meadow Transmission Line		11,433
Total Water Fund					3,105,805
403-421-0004-594558-4403			CIP - Collection System Renew/Replacement		594,365
403-421-0006-594514-6403			CIP - Influent Upgrades		3,157,274
403-421-0006-594517-6403			CIP - Solids Upgrade		470
403-421-0006-594522-6403			CIP - Treatment Facility Renew/Replacement		110,082
403-421-0006-594558-6403			CIP - Collection System Renew/Replacement		1,267,621
Total Wastewater Fund					5,129,812
404-430-0004-594528-4403			CIP - Groundwater Assessment		33,303
404-430-0004-594592-4403			CIP - Landfill Cell		307
404-430-0006-594559-6403			CIP - Landfill Closure		62,532
404-431-0004-537100-4117			Exp Prog - Assessment Monitoring & Legal Council		145,670
Total Solid Waste Fund					241,812
405-440-0006-594530-4403			CIP - Stormwater Rehab/Replacement		45,653
405-440-0006-594530-6403			CIP - Stormwater Rehab/Replacement		67,257
405-440-0006-594545-6403			CIP - Stormwater Quality Retrofit		155,232
Total Stormwater Fund					268,142
406-336-0006-576680-6417			CIP - CPGC Clubhouse Improvements		245,945
Total Golf Course Fund					245,945
407-121-0004-526200-4902			ITGC - RMS Ongoing Maintenance		6,459
Total Medical Services Fund					6,459
408-460-0006-538920-6397			CIP - RAISE Area Infrastructure		13,500
408-460-0006-538920-6421			CIP - Leased Fiber Ext & City Hall		539,206
Total Broadband Fund					552,706
503-215-0006-594480-6405			CIP - Replace Garbage Truck #3283		300,000
Total Equipment Replacement Fund					300,000
Total CIP And Capital Project Carryover					\$ 37,368,975
001-130-0033-518887-3583			DOJ Grant - ICAC Software		\$ 28,000
Total General Fund Grant Carryover					28,000
153-308-0074-559321-4943			Owner Occupied Rehab Program		107,989
153-308-0074-559321-4945			Owner Occupied Rehab Revolving		105,898
153-308-0075-597000-5502			CIP-Audible Signal Installation		19,930
153-308-0075-597000-5528			CIP-Columbia Playfield & Wye Park Improve		129,695
Total CDBG Fund Grant Carryover					363,512
154-309-0074-559321-4982			CHDO - Richland		198,992
154-309-0074-559321-4983			Nueva Vista Project		52,742

2017 Carryovers - Encumbered, Expanded And Special Programs

Expenditure Account	Date	Vendor	Description	P.O. #	Amount
154-309-0074-559321-4988			Entitlement - Richland		162,784
154-309-0074-559321-4989			Entitlement - Kennewick		191,954
154-309-0074-559321-4991			Entitlement - Pasco		27,873
154-309-0075-558101-5201			Richland Program Income Admin		31,049
154-309-0075-558101-5202			Pasco Program Income Admin		41
154-309-0075-558101-5203			Kennewick Program Income Admin		26,761
Total HOME Fund Grant Carryover					<u>692,196</u>
Total Grant Carryover					<u>\$ 1,083,708</u>
2017 Encumbered/Miscellaneous Carryover					\$ 1,622,591
2017 CIP And Construction Carryover					\$ 37,368,975
2017 Grant Carryover					\$ 1,083,708
Total 2017 Carryover					<u>\$ 40,075,274</u>



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Ordinances - First Reading

Key Element: Key 3 - Economic Vitality

Subject:

Ordinance No. 18-18, Amending Ordinance No. 07-17 to Correct a Scrivener's Error in the Legal Description

Department:

Community Development Services

Ordinance/Resolution Number:

18-18

Document Type:

Ordinance

Recommended Motion:

Give first reading, by title only, to Ordinance No. 18-18, amending Ordinance No. 07-17 to correct a scrivener's error in the legal description.

Summary:

Ordinance No. 07-17, passed by City Council on March 6, 2018, effected a zone change for the plat of Wild Canyon in Horn Rapids. The legal description found in Ordinance No. 07-17 contained a scrivener's error that requires correction.

Following adoption of Ordinance No. 07-17, the developer's surveyor identified errors in the legal description pertaining to an easterly boundary of the plat site where the intended boundary did not connect with the existing boundary of the Village Parkway extension to the north. The City's surveyor worked with the developer's surveyor to prepare the revised legal description contained in Ordinance No. 18-18.

Staff recommends approval of Ordinance No. 18-18 for first reading by title only.

Fiscal Impact:

None.

Attachments:

- I. Ordinance No. 18-18

WHEN RECORDED RETURN TO:

Richland City Clerk's Office
505 Swift Boulevard, MS-05
Richland, WA 99352

ORDINANCE NO. 18-18

AN ORDINANCE of the City of Richland amending Ordinance No. 07-17 to correct a scrivener's error in the legal description.

WHEREAS, on March 6, 2018, Richland City Council adopted Ordinance No. 07-17, which became effective on March 12, 2018; and

WHEREAS, Ordinance No. 07-17, contingent upon recording a properly executed, delivered and accepted Property Use and Development Agreement, rezoned an identified 33.31 acre parcel of property located in Benton County, Washington (the "Property") from Multi-Family Residential (R-3) and Commercial Limited Business (C-LB) to Medium Density Residential Small Lot (R2-S); and

WHEREAS, an incorrect legal description was used in the rezone ordinance; and

WHEREAS, Council wishes to correct the error in the legal description.

NOW, THEREFORE, BE IT ORDAINED by the City of Richland as follows:

Section 1. The legal description in Ordinance No. 07-17 for the 33.31 acre property set forth therein and referenced in the Property Use and Development Agreement attached thereto as Exhibit A is deleted and replaced with the legal description set forth in **Exhibit A-1** hereto, which is incorporated by reference.

Section 2. Except to the extent amended by this ordinance, Ordinance No. 07-17 remains in full force and effect.

Section 3. The City Clerk is directed to file with the Auditor of Benton County, Washington a copy of this ordinance, duly certified by the Clerk as a true copy.

Section 4. This ordinance shall take effect the day following its publication in the official newspaper of the City of Richland.

PASSED by the City Council of the City of Richland, Washington, at a regular meeting on the _____ day of _____, 2018.

ROBERT J. THOMPSON
Mayor

ATTEST:

APPROVED AS TO FORM:

MARCIA HOPKINS, City Clerk

HEATHER KINTZLEY, City Attorney

Date Published: _____

Exhibit A-1

The land in the County of Benton, State of Washington, described as follows:

A parcel of land lying in a portion of the South $\frac{1}{2}$ of the Southeast $\frac{1}{4}$ and a portion of the East $\frac{1}{2}$ of the Southwest $\frac{1}{4}$ of Section 20, Township 10 North, Range 28 East. W.M., Benton County, Washington, described as follows:

Beginning at the Southwest corner of the Southeast $\frac{1}{4}$ of said Section 20 as shown in Horn Rapids Division No. 1, according to the Plat thereof, recorded in Volume 14 of Plats, Page 171, records of Benton County, Washington; Thence North $00^{\circ}36'46''$ East along the West line of the Southeast $\frac{1}{4}$ of said Section 20 for a distance of 283.29 feet to the TRUE POINT of BEGINNING of the parcel to be described; Thence leaving the West line of the Southeast $\frac{1}{4}$ of said Section 20, North $87^{\circ}48'16''$ East, a distance of 169.13 feet; Thence North $75^{\circ}42'59''$ East, a distance of 608.25 feet; Thence South $78^{\circ}01'13''$ East, a distance of 833.29 feet to the most Westerly Southwest corner of Lot 20, Eaglewatch, according to the Plat thereof, recorded in Volume 15 of Plats, Page 306, records of Benton County, Washington; Thence North $44^{\circ}42'08''$ East along the Westerly boundary of said Lot 20 (15-306) for a distance of 83.24 feet; Thence leaving the Westerly boundary of said Lot 20 (15-306), Northwesterly along the arc of a 535.47 foot radius, non-tangent curve to the left (the radius of which bears South $24^{\circ}10'28''$ West) through a central angle of $08^{\circ}28'33''$ for an arc distance of 79.21 feet; Thence North $74^{\circ}18'04''$ West a distance of 8.79 feet; Thence Northwesterly along the arc of a 422.00 foot radius, tangent curve to the right (the radius of which bears North $15^{\circ}41'56''$ East) through a central angle of $63^{\circ}25'28''$ for an arc distance of 467.14 feet; Thence North $10^{\circ}52'37''$ West a distance of 46.08 feet to the Southwest corner of the Village Parkway Extension Easement as described under Benton County Auditors File No. 2002-028630, records of Benton County, Washington; Thence leaving the Westerly line of said Village Parkway Extension Easement, North $85^{\circ}53'49''$ West, a distance of 192.64 feet; Thence North $61^{\circ}58'50''$ West a distance of 358.65 feet; Thence North $77^{\circ}12'20''$ West a distance of 445.05 feet; Thence North $70^{\circ}47'09''$ West, a distance of 969.22 feet; Thence South $43^{\circ}46'00''$ West a distance of 274.33 feet; Thence South $04^{\circ}19'35''$ West, a distance of 308.96 feet; Thence South $23^{\circ}28'27''$ East, a distance of 571.21 feet; Thence South $80^{\circ}22'52''$ East, a distance of 179.53 feet; Thence North $87^{\circ}48'16''$ East, a distance of 426.47 feet back to the true point of beginning.



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Ordinances - First Reading

Key Element: Key I - Financial Stability & Operational Effectiveness

Subject:

Ordinance No. 19-18, Amending Richland Municipal Code Section 2.28.054 Related to Probationary Periods

Department:
City Attorney

Ordinance/Resolution Number:
19-18

Document Type:
Ordinance

Recommended Motion:

Give first reading, by title only, to Ordinance No. 19-18, amending Richland Municipal Code section 2.28.054 related to the definition of "probationary period."

Summary:

The City has a need, from time to time, to update the Richland Municipal Code (RMC) to eliminate conflicts and ambiguities, and to bring local ordinances into alignment with updated practices.

Ordinance No. 19-18 has been drafted to remedy an issue identified in RMC 2.28.054 relating to probationary periods.

The proposed edits to RMC 2.28.054 allow for a probationary period greater than six (6) months to ensure consistency with the City's existing employment practices.

Staff recommends approval of Ordinance No. 19-18 for first reading, by title only.

Fiscal Impact:

None.

Attachments:

I. Ordinance No. 19-18

ORDINANCE NO. 19-18

AN ORDINANCE of the City of Richland amending Richland Municipal Code Section 2.28.054 related to probationary periods.

WHEREAS, the City of Richland has need, from time to time, to amend the Richland Municipal Code (RMC) to eliminate conflicts and ambiguities, and to bring local ordinances into alignment with updated practices; and

WHEREAS, Chapter 2.28 RMC addresses the City's Personnel Plan; and

WHEREAS, an amendment to Chapter 2.28.054 is warranted to allow for a probationary period greater than six (6) months to ensure consistency with the City's existing employment practices.

NOW, THEREFORE, BE IT ORDAINED by the City of Richland as follows:

Section 1. Richland Municipal Code Section 2.28.054, entitled Probationary period, as enacted by Ordinance No. 50-77 and last amended by Ordinance No. 3-97, is hereby amended to read as follows:

2.28.054 Probationary period.

"Probationary period" means a working test period of no less than six (6) months during which an employee is required to demonstrate the ability and capacity to perform the duties of the position to which the employee has been appointed.

Section 2. This ordinance shall take effect the day following its publication in the official newspaper of the City of Richland.

PASSED by the City Council of the City of Richland, Washington, at a regular meeting on the ____ day of _____, 2018.

ROBERT J. THOMPSON
Mayor

ATTEST:

APPROVED AS TO FORM:

MARCIA HOPKINS, City Clerk

HEATHER KINTZLEY, City Attorney

Date Published: _____



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Ordinances - First Reading

Key Element: Key I - Financial Stability & Operational Effectiveness

Subject:

Ordinance No. 20-18, Increasing 2018 Budget Appropriations in the Water Fund, Equipment Replacement Fund and Stormwater Fund

Department:
Public Works

Ordinance/Resolution Number:
20-18

Document Type:
Ordinance

Recommended Motion:

Give first reading, by title only, to Ordinance No. 20-18, increasing the 2018 budget appropriation in the Water Fund, Equipment Replacement Fund and Stormwater Fund.

Summary:

Three unanticipated circumstances have resulted in higher-than-planned expenses for three different funds. Ordinance No. 20-18 would address these circumstances by adding to the authorized appropriations in the Water Fund, Stormwater Fund, and Equipment Replacement Fund.

The 2018 Equipment Replacement Fund budget included funds to purchase a vactor truck for the Water Utility. The budget for this purchase was \$509,334 based on staff's best estimate of the vehicle's cost. Using the most advantageous purchasing process available, the vehicle's cost will be \$536,150. Staff is experiencing price escalation due to general market forces. Staff is proposing to provide the additional funding from the Water Fund beginning fund balance.

The developer of the Westcliffe Heights subdivision proposes installation of water pipeline extensions that are eligible for reimbursement under Chapter 18.34 RMC. These expenses were not included in the 2018 Water Fund budget because privately funded land development projects are not programmed in the City's Capital Improvement Plan. Staff recommends increasing appropriations in the Water Fund for these costs, with funding coming from beginning fund balance.

The Washington State Department of Ecology advises that a grant to offset Stormwater Fund operations is being prepared for the City. Staff prepared the 2018 budget at a baseline service level without assuming this grant revenue. With the grant becoming available, staff is proposing to enhance the public outreach element of the Stormwater operation with a portion of this grant revenue.

Staff recommends approval of Ordinance No. 20-18 for first reading, by title only, to meet the needs of the Water and Equipment Replacement Funds and to leverage an Ecology grant to expand service in the Stormwater Fund.

Fiscal Impact:

Water Fund appropriations will increase by \$211,816. The funds will come from the Water Fund beginning fund balance of \$5,048,582. Equipment Replacement Fund appropriation will increase by \$26,816 for the vactor truck purchase, with the funding source being the Water Fund balance referenced above. The water administration expert service budget line will increase by \$185,000 to fund the developer-constructed infrastructure reimbursements. The Stormwater Fund will increase appropriation by \$5,000, with funding coming from stormwater undesignated reserve, which has a balance of \$1,192,385.

Attachments:

- I. Ordinance No. 20-18

ORDINANCE NO. 20-18

AN ORDINANCE of the City of Richland amending the 2018 Budget to provide for additional appropriations and declaring that a public emergency exists in the City's Water Fund, Equipment Replacement Fund and City Streets Fund.

WHEREAS, on November 21, 2017, the Richland City Council approved Ordinance No. 49-17 approving the 2018 Budget; and

WHEREAS, three distinct issues require consideration for budget adjustment as provided herein, to include purchase of a vactor truck, developer-installed infrastructure eligible for reimbursement, and public outreach and education efforts related to stormwater; and

WHEREAS, the 2018 Equipment Replacement Fund includes budgeted funds in the amount of \$509,334 for the purchase of a vactor truck for the Water Division; and

WHEREAS, pursuant to RCW 39.34.030 and RMC 3.04.100, the solicitation process has been satisfied through use of a cooperative contract purchase, which offers the best possible price under the circumstances; and

WHEREAS, the best price available to the City for this equipment is \$536,150, resulting in a budget shortfall of \$26,816; and

WHEREAS, the Westcliffe Heights subdivision has proposed to construct water system infrastructure eligible for cost reimbursement from the City, estimated at \$185,000; and

WHEREAS, RMC 18.34.020 establishes the authority for cost reimbursement by the City for certain developer-installed pipeline extensions; and

WHEREAS, staff recommends City reimbursement of these developer costs as the most efficient way to acquire necessary infrastructure; and

WHEREAS, the 2018 budget did not include budget capacity for this unanticipated expense; and

WHEREAS, the Washington State Department of Ecology has offered the City a \$50,000 grant to offset costs of its stormwater program; and

WHEREAS, staff recommends using \$5,000 of these grant funds to increase public outreach and education efforts related to stormwater; and

WHEREAS, the 2018 budget must be increased to support these expanded public outreach and education efforts; and

WHEREAS, the above-mentioned circumstances have created budget constraints that, if not corrected, will prevent completion of certain activities identified as necessary or desirable in the current year; and

WHEREAS, sufficient unappropriated funds are available in the Water Fund and Stormwater Fund to support the required budget adjustment; and

WHEREAS, on April 17, 2018, a public hearing was held pursuant to RCW 35.33.091 regarding the increase in appropriations from beginning fund balance in the Water Fund and Stormwater Fund.

NOW, THEREFORE, BE IT ORDAINED by the City of Richland as follows:

Section 1. Facts Constituting Emergency. The expenses contained within this ordinance were not anticipated when the 2018 budget was approved.

Section 2. Declaration of Public Emergency. Due to circumstances described above, the City Council declares that a public emergency exists in the Water Fund and Stormwater Fund.

Section 3. Amendment of the 2018 Budget. The 2018 Budget is hereby amended to provide additional appropriations in the Water and Stormwater funds from unappropriated fund balance, and in the Equipment Replacement Fund from interfund transfers as follows:

Water Fund

Current Appropriation:	\$20,339,836
Increase in Appropriation:	<u>\$ 211,816</u>
Amended Appropriation:	<u>\$20,551,652</u>

Equipment Replacement Fund

Current Appropriation:	\$ 4,609,704
Increase in Appropriation:	<u>\$ 26,816</u>
Amended Appropriation:	<u>\$ 4,636,520</u>

Stormwater Fund

Current Appropriation:	\$ 3,424,541
Increase in Appropriation:	<u>\$ 5,000</u>
Amended Appropriation:	<u>\$ 3,429,541</u>

Section 4. This ordinance shall take effect the day following its publication in the official newspaper of the City of Richland.

PASSED by the City Council of the City of Richland, Washington, at a regular meeting on the _____ day of _____, 2018.

ROBERT J. THOMPSON
Mayor

ATTEST:

APPROVED AS TO FORM:

MARCIA HOPKINS, City Clerk

HEATHER KINTZLEY, City Attorney

Date Published: _____



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Resolutions – Adoption

Key Element: Key I - Financial Stability & Operational Effectiveness

Subject:

Resolution No. 43-18, Expressing Appreciation to Gerald Frey for Service on the Code Enforcement Board

Department:
City Attorney

Ordinance/Resolution Number:
43-18

Document Type:
Resolution

Recommended Motion:

Adopt Resolution No. 43-18, expressing appreciation to Gerald Frey for his service on the Code Enforcement Board.

Summary:

Dr. Frey was appointed to the Code Enforcement Board on June 1, 2010 and served until March 14, 2018.

Fiscal Impact:

None.

Attachments:

I. Resolution No. 43-18

RESOLUTION NO. 43-18

A RESOLUTION expressing the appreciation of the City of Richland and its citizens to Dr. Gerald Frey for service rendered to the City as a member of the Code Enforcement Board.

WHEREAS, Dr. Gerald Frey was first appointed to the Richland Code Enforcement Board in June of 2010 and served seven (7) years and nine (9) months until March of 2018; and

WHEREAS, Dr. Frey served as the Code Enforcement Board Chair from March of 2016 to the present, and prior to assuming the role of Chair, served as Vice Chair from May of 2014 to March of 2016; and

WHEREAS, during his tenure, Dr. Frey worked diligently to promote professionalism and proper procedural due process on the Board, and to emphasize the need to regard the Board's quasi-judicial capacity with gravity and respect; and

WHEREAS, Dr. Frey also devoted his time and energy to thoroughly vetting proposed candidates for placement on the Richland Code Enforcement Board.

NOW THEREFORE, BE IT RESOLVED by the City Council of the City of Richland that the City and its citizens express publicly and formally to Dr. Gerald Frey their appreciation for the service he rendered to the City during his tenure as a member of the Code Enforcement Board.

BE IT FURTHER RESOLVED that this resolution shall take effect immediately.

ADOPTED by the City Council of the City of Richland, Washington, at a regular meeting on the 17th day of April, 2018.

ROBERT J. THOMPSON
Mayor

ATTEST:

APPROVED AS TO FORM:

MARCIA HOPKINS, City Clerk

HEATHER KINTZLEY, City Attorney



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Resolutions – Adoption

Key Element: Key 1 - Financial Stability & Operational Effectiveness
Key 7 - Neighborhoods & Community Safety

Subject:

Resolution No. 66-18, Authorizing the Purchase of a Fire Services Ladder Truck from Hughes Fire Equipment

Department:

Fire & Emergency Services

Ordinance/Resolution Number:

66-18

Document Type:

Resolution

Recommended Motion:

Adopt Resolution No. 66-18, authorizing the City Manager to sign and execute a purchase order with Hughes Fire Equipment for a new 2018 Pierce Platform Ladder Truck, Model DW481.

Summary:

Resolution No. 66-18 authorizes the City Manager to execute the purchase of a Fire & Emergency Services ladder truck to replace Vehicle No. 5029, which has reached the end of its life cycle. This purchase is part of the approved 2018 budget.

The City is availing itself of a cooperative purchasing agreement to acquire the ladder truck.

Vehicle No. 5029 is slated for a surplus action once the replacement ladder truck is delivered and in service.

Staff recommends approval of Resolution No. 66-18.

Fiscal Impact:

Funding for the ladder truck purchase order will come from the City's General Fund. This is an approved 2018 budget item, and the total purchase price is \$1,299,766.06.

Attachments:

1. Resolution No. 66-18
2. Purchase Order Documents - Fire Aerial Ladder Truck

RESOLUTION NO. 66-18

A RESOLUTION of the City of Richland authorizing the purchase of a ladder truck from Hughes Fire Equipment for use by the Richland Fire Department.

WHEREAS, RCW 39.34.030 and RMC 3.04.100 allow for waiver of the City's formal solicitation process when a suitable cooperative purchasing agreement is available; and

WHEREAS, the acquisition of goods or services under an established cooperative purchasing agreement (also known as "Piggybacking") allows the City to use the terms and conditions of an established contract in lieu of a formal bid process; and

WHEREAS, a cooperative agreement exists that allows Hughes Fire Equipment to build and deliver a ladder truck to City of Richland specifications; and

WHEREAS, the City of Richland's current ladder truck has reached the end of its service life; and

WHEREAS, repair expenses and parts availability have caused extensive out-of-service time; and

WHEREAS, City Council approved the purchase of a new ladder truck as part of the 2018 budget. The new ladder truck is priced at \$1,299,766,06.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Richland that the City Manager is hereby authorized to execute an agreement and other related documents necessary to purchase a 2018 ladder truck from Hughes Fire Equipment priced at \$1,299,766,06.

BE IT FURTHER RESOLVED that this resolution shall take effect immediately.

ADOPTED by the City Council of the City of Richland, Washington, at a regular meeting on the 17th day of April, 2018.

ROBERT J. THOMPSON
Mayor

ATTEST:

APPROVED AS TO FORM:

MARCIA HOPKINS, City Clerk

HEATHER KINTZLEY, City Attorney

INSERT CITY OF RICHLAND PURCHASE ORDER HERE

Qty. 1	EA	Velocity 100' Aerial Platform Pierce Pulse DW481	\$1,299,766,06
Freight FOB Richland - included			

Terms: Cooperative Contract No. NPPGOV #VH11574 / Public Procurement Authority

Exhibit A: Purchase Detail

Exhibit B: Specifications

Exhibit C: Warranty

Exhibit D: Contract and Master Price Agreement



CITY OF RICHLAND PURCHASE ORDER TERMS AND CONDITIONS

The following terms and conditions are agreed to by the Seller (Supplier) whose name appears on the face of this Purchase Order and the City of Richland (City). Seller hereby acknowledges and agrees that these terms and conditions shall apply and are hereby incorporated into this Purchase Order, or other agreement, between Seller and the City under which Seller agrees to provide goods and services.

INDEPENDENT CONTRACTOR: The Seller, and any and all employees of the Seller or other persons engaged in the performance of any work or services required of the Seller under this Purchase Order, are independent contractors and shall not be considered employees of the City. Seller shall be solely responsible for the operation of its business and the supervision of its employees. Any and all claims that arise at any time under any Workers' Compensation Act on behalf of said employees or other persons while so engaged, and any and all claims made by a third party as a consequence of any act or omission on the part of the Seller's employees or other persons engaged in any of the work or services required to be provided under this Purchase Order, shall be the sole obligation and responsibility of the Seller.

COMPLIANCE WITH ALL LAWS, LICENSES AND PERMITS: In the performance of their duties, Seller shall comply with all applicable federal, state, local laws and regulations. This Purchase Order shall be governed and construed according to the laws of the State of Washington.

INDEMNIFICATION/HOLD HARMLESS: Seller shall defend, indemnify and hold the City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or in connection with the performance of this Purchase Order/Contract, except for injuries and damages caused by the sole negligence of the City. Seller expressly waives its immunity under industrial insurance, Title 51 RCW, to the limited extent necessary to effectuate its indemnification obligation to the City and for no other purpose.

INSURANCE: If requested by the City, Seller shall furnish to the City a certificate of insurance showing the Seller carries adequate public liability and property damage insurance with insurers suitable to the City, in amounts acceptable to the City and adequate workers' compensation insurance (or evidence of authority to self-insure). The failure by Seller to furnish such certificate of insurance to the City will not constitute a waiver of the requirement for such certificate or of any other provision on this Purchase Order.

ACCEPTANCE: Commencement of performance pursuant to this Purchase Order constitutes acceptance hereof by Seller.

PAYMENT TERMS: Unless otherwise negotiated, the terms of payment shall be net 30 days from receipt of proper invoice. PO numbers must be noted on all invoices.

SHIPPING/TITLE: Unless otherwise specified, all goods are to be shipped prepaid, FOB Destination. Regardless of FOB Point, Seller agrees to bear all risks of loss, injury, destruction of goods and materials ordered herein which occur prior to delivery. Except as otherwise expressly provided herein, title to and risk of loss on all items shipped by Seller to City shall pass to the City upon City's inspection and acceptance of such items at the specified City location. Such loss, injury, or destruction shall not release Seller from any obligation hereunder.

REJECTION: All goods or materials purchased herein are subject to approval by the City. Any rejection of goods or materials resulting because of nonconformity to the terms and specifications of this order, whether held by the City or returned will be at Seller's risk and expense.

TAXES: Unless otherwise definitely specified, the City agrees to pay all State of Washington sales or use tax. The City is exempted from payment of Federal Excise Tax. No federal tax shall be included in price.

CHANGES WITHOUT NOTICE PROHIBITED: This Purchase Order, together with any written instructions issued herein, contains the complete and final agreement between the City and the Seller and no agreement or other understating in any way purporting to alteration in any of the terms, conditions, delivery, price, quality, quantities, or specifications of this order will be effective without written consent of the City prior to shipment.

ASSIGNMENT: This Purchase Order is not assignable by Seller either in whole or in part, without the prior written approval of the City.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
03/28/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Hays Companies 1200 North Mayfair Road, Suite 100 Milwaukee, WI 53226	1-414-443-0000	CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL ADDRESS: FAX (A/C, No): INSURER(S) AFFORDING COVERAGE INSURER A: NATIONAL FIRE & MARINE INS CO INSURER B: BERKLEY NATL INS CO INSURER C: INSURER D: INSURER E: INSURER F:	NAIC # 20079 38911
INSURED Pierce Manufacturing Inc. P.O. Box 2017 Appleton, WI 54912-2017			

COVERAGES**CERTIFICATE NUMBER: 52409462****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PRO-JECT ☐ LOC ☐ OTHER:	X		42-GLO-100190-04	04/01/18	04/01/19	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ 1,000,000 \$
	AUTOMOBILE LIABILITY ☐ ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☐ HIRED AUTOS ONLY ☐ NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	☒ UMBRELLA LIAB ☒ EXCESS LIAB ☐ DED ☐ RETENTION \$			42-UMO-100191-04	04/01/18	04/01/19	EACH OCCURRENCE \$ 15,000,000 AGGREGATE \$ 15,000,000 \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N ☐	N/A				PER STATUTE E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
B	Excess Liability			CEX0960017405	04/01/18	04/01/19	Ea Occ/Agg \$ 10,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Additional Insured when required by written contract between the owner and a Pierce Dealer.

One (1) Pierce Velocity Aerial 100' Platform

CERTIFICATE HOLDERDW481
City of Richland

1000 George Washington Way

Richland, WA 99352

USA

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

4/5/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION** IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER KPD Insurance, Inc. PO Box 784 Springfield OR 97477	CONTACT NAME:	FAX (A/C, No): 541-741-1674
	PHONE (A/C, No, Ext): 541-741-0550	
INSURED Hughes Fire Equipment, Inc. 910 Shelley St Springfield OR 97477	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	
	INSURER A: Traveler's Prop Cas Co of Amer	
	INSURER B: Traveler's Indem Co of America	
	INSURER C:	
	INSURER D:	
INSURER E:		
INSURER F:		

COVERAGES**CERTIFICATE NUMBER:** 1411253690**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
B	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR ☒ Lmt'd Contractual ☒ Stop gap Liab-WA GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PRO-JECT ☒ LOC ☐ OTHER:			9G187828	3/16/2018	3/16/2019	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 Stop Gap Limit \$ 1,000,000
A	☒ AUTOMOBILE LIABILITY ☒ ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☒ HIRED AUTOS ONLY ☒ NON-OWNED AUTOS ONLY			9G2G251173	3/16/2018	3/16/2019	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	☒ UMBRELLA LIAB ☒ OCCUR ☐ EXCESS LIAB ☐ CLAIMS-MADE ☐ DED ☐ RETENTION \$			CUP9G187828	3/16/2018	3/16/2019	EACH OCCURRENCE \$ 1,000,000 AGGREGATE \$ 1,000,000 \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☐ Y / ☒ N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N / A				PER STATUTE ☐ OTH-ER ☐ E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Garage Keepers Liability Customer Veh in Insd Care, Custody & Control			9G2G251173	3/16/2018	3/16/2019	\$9,999,999 Oregon \$7,900,000 Washington \$1,000 Ded-Comp \$5,000,000 Arizona \$800,000 Idaho \$1,000 Ded-Coll

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: Vendor Services.

City of Richland is included as Additional Insured per form CGD458 07/13 which includes Waiver of Subrogation. Completed Operations applies per form CGD246 08/05. Coverage is Primary & Non-Contributory per form CGD037 04/05.

CERTIFICATE HOLDER**CANCELLATION**City of Richland
1000 George Washington Way
Richland WA 99352

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

OTHER INSURANCE – ADDITIONAL INSUREDS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

PROVISIONS

COMMERCIAL GENERAL LIABILITY CONDITIONS (Section IV), Paragraph 4. (**Other Insurance**), is amended as follows:

1. The following is added to Paragraph **a. Primary Insurance**:

However, if you specifically agree in a written contract or written agreement that the insurance provided to an additional insured under this Coverage Part must apply on a primary basis, or a primary and non-contributory basis, this insurance is primary to other insurance that is available to such additional insured which covers such additional insured as a named insured, and we will not share with that other insurance, provided that:

- a. The "bodily injury" or "property damage" for which coverage is sought occurs; and

- b. The "personal injury" or "advertising injury" for which coverage is sought arises out of an offense committed

subsequent to the signing and execution of that contract or agreement by you.

2. The first Subparagraph (2) of Paragraph **b. Excess Insurance** regarding any other primary insurance available to you is deleted.

3. The following is added to Paragraph **b. Excess Insurance**, as an additional subparagraph under Subparagraph (1):

That is available to the insured when the insured is added as an additional insured under any other policy, including any umbrella or excess policy.



THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY

BLANKET ADDITIONAL INSURED (CONTRACTORS)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

1. WHO IS AN INSURED – (Section II) is amended to include any person or organization that you agree in a "written contract requiring insurance" to include as an additional insured on this Coverage Part, but:
 - a) Only with respect to liability for "bodily injury", "property damage" or "personal injury"; and
 - b) If, and only to the extent that, the injury or damage is caused by acts or omissions of you or your subcontractor in the performance of "your work" to which the "written contract requiring insurance" applies. The person or organization does not qualify as an additional insured with respect to the independent acts or omissions of such person or organization.
2. The insurance provided to the additional insured by this endorsement is limited as follows:
 - a) In the event that the Limits of Insurance of this Coverage Part shown in the Declarations exceed the limits of liability required by the "written contract requiring insurance", the insurance provided to the additional insured shall be limited to the limits of liability required by that "written contract requiring insurance". This endorsement shall not increase the limits of insurance described in Section III – Limits Of Insurance.
 - b) The insurance provided to the additional insured does not apply to "bodily injury", "property damage" or "personal injury" arising out of the rendering of, or failure to render, any professional architectural, engineering or surveying services, including:
 - i. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders or change orders, or the preparing, approving, or failing to prepare or approve, drawings and specifications; and
 - ii. Supervisory, inspection, architectural or engineering activities.
- c) The insurance provided to the additional insured does not apply to "bodily injury" or "property damage" caused by "your work" and included in the "products-completed operations hazard" unless the "written contract requiring insurance" specifically requires you to provide such coverage for that additional insured, and then the insurance provided to the additional insured applies only to such "bodily injury" or "property damage" that occurs before the end of the period of time for which the "written contract requiring insurance" requires you to provide such coverage or the end of the policy period, whichever is earlier.
3. The insurance provided to the additional insured by this endorsement is excess over any valid and collectible "other insurance", whether primary, excess, contingent or on any other basis, that is available to the additional insured for a loss we cover under this endorsement. However, if the "written contract requiring insurance" specifically requires that this insurance apply on a primary basis or a primary and non-contributory basis, this insurance is primary to "other insurance" available to the additional insured which covers that person or organization as a named insured for such loss, and we will not share with that "other insurance". But the insurance provided to the additional insured by this endorsement still is excess over any valid and collectible "other insurance", whether primary, excess, contingent or on any other basis, that is available to the additional insured when that person or organization is an additional insured under such "other insurance".
4. As a condition of coverage provided to the additional insured by this endorsement:
 - a) The additional insured must give us written notice as soon as practicable of an "occurrence" or an offense which may result in a claim. To the extent possible, such notice should include:

COMMERCIAL GENERAL LIABILITY

- i. How, when and where the "occurrence" or offense took place;
 - ii. The names and addresses of any injured persons and witnesses; and
 - iii. The nature and location of any injury or damage arising out of the "occurrence" or offense.
- b)** If a claim is made or "suit" is brought against the additional insured, the additional insured must:
- i. Immediately record the specifics of the claim or "suit" and the date received; and
 - ii. Notify us as soon as practicable.
- The additional insured must see to it that we receive written notice of the claim or "suit" as soon as practicable.
- c)** The additional insured must immediately send us copies of all legal papers received in connection with the claim or "suit", cooperate with us in the investigation or settlement of the claim or defense against the "suit", and otherwise comply with all policy conditions.
- d)** The additional insured must tender the defense and indemnity of any claim or "suit" to

any provider of "other insurance" which would cover the additional insured for a loss we cover under this endorsement. However, this condition does not affect whether the insurance provided to the additional insured by this endorsement is primary to "other insurance" available to the additional insured which covers that person or organization as a named insured as described in paragraph 3. above.

5. The following definition is added to SECTION V.
– DEFINITIONS:

"Written contract requiring insurance" means that part of any written contract or agreement under which you are required to include a person or organization as an additional insured on this Coverage Part, provided that the "bodily injury" and "property damage" occurs and the "personal injury" is caused by an offense committed:

- a. After the signing and execution of the contract or agreement by you;
- b. While that part of the contract or agreement is in effect; and
- c. Before the end of the policy period.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

XTEND ENDORSEMENT FOR COMMERCIAL INDUSTRIES

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

GENERAL DESCRIPTION OF COVERAGE – This endorsement broadens coverage. However, coverage for any injury, damage or medical expenses described in any of the provisions of this endorsement may be excluded or limited by another endorsement to this Coverage Part, and these coverage broadening provisions do not apply to the extent that coverage is excluded or limited by such an endorsement. The following listing is a general coverage description only. Limitations and exclusions may apply to these coverages. Read all the provisions of this endorsement and the rest of your policy carefully to determine rights, duties, and what is and is not covered.

- | | |
|---|---|
| A. Broadened Named Insured | J. Bodily Injury To Co-Employees And Co-Volunteer Workers |
| B. Blanket Additional Insured – Broad Form Vendors | K. Aircraft Chartered With Crew |
| C. Damage To Premises Rented To You <ul style="list-style-type: none"> • Perils of fire, explosion, lightning, smoke, water • Limit increased to \$300,000 | L. Non-Owned Watercraft – Increased From 25 Feet To 50 Feet |
| D. Blanket Waiver Of Subrogation | M. Increased Supplementary Payments <ul style="list-style-type: none"> • Cost of bail bonds increased to \$2,500 • Loss of earnings increased to \$500 per day |
| E. Blanket Additional Insured – Owners, Managers Or Lessors Of Premises | N. Medical Payments - Increased Limit |
| F. Blanket Additional Insured – Lessors Of Leased Equipment | O. Knowledge And Notice Of Occurrence Or Offense |
| G. Incidental Medical Malpractice | P. Unintentional Omission |
| H. Personal Injury – Assumed By Contract <ul style="list-style-type: none"> • Amended Bodily Injury Definition | Q. Reasonable Force – Bodily Injury Or Property Damage |

PROVISIONS

A. BROADENED NAMED INSURED

1. The following is added to **SECTION II – WHO IS AN INSURED**:

Any organization, other than a partnership or joint venture, over which you maintain ownership or majority interest on the effective date of the policy qualifies as a Named Insured. However, coverage for any such organization will cease as of the date during the policy period that you no longer maintain ownership of, or majority interest in, such organization.

2. The following replaces Paragraph **4.a.** of **SECTION II – WHO IS AN INSURED**:
 - a. Coverage under this provision is afforded only until the 180th day after you acquire or form the organization or the end of the policy period, whichever is earlier, unless reported in writing to us within 180 days.

B. BLANKET ADDITIONAL INSURED – BROAD FORM VENDORS

The following is added to **SECTION II – WHO IS AN INSURED**:

Any person or organization that is a vendor and that you have agreed in a written contract or agreement to include as an additional insured on this Coverage Part is an insured, but only with respect to liability for “bodily injury” or “property damage” that:

- a. Is caused by an “occurrence” that takes place after you have signed and executed that contract or agreement; and
- b. Arises out of “your products” which are distributed or sold in the regular course of such vendor's business.

The insurance provided to such vendor is subject to the following provisions:

- a. The limits of insurance provided to such vendor will be the limits which you agreed to provide in the written contract or agreement, or the limits shown in the Declarations of this Coverage Part, whichever are less.
- b. The insurance provided to such vendor does not apply to:
 - (1) "Bodily injury" or "property damage" for which the vendor is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that the vendor would have in the absence of the contract or agreement;
 - (2) Any express warranty authorized by you;
 - (3) Any physical or chemical change in "your products" made intentionally by such vendor;
 - (4) Repackaging, unless unpacked solely for the purpose of inspection, demonstration, testing, or the substitution of parts under instructions from the manufacturer, and then repackaged in the original container;
 - (5) Any failure to make such inspections, adjustments, tests or servicing as vendors agree to perform or normally undertake to perform in the regular course of business, in connection with the distribution or sale of "your products";
 - (6) Demonstration, installation, servicing or repair operations, except such operations performed at such vendor's premises in connection with the sale of "your products"; or
 - (7) "Your products" which, after distribution or sale by you, have been labeled or relabeled or used as a container, part or ingredient of any other thing or substance by or for such vendor.

Coverage under this provision does not apply to:

- a. Any person or organization from whom you have acquired "your products", or any ingredient, part or container entering into, accompanying or containing such products; or
- b. Any vendor for which coverage as an additional insured specifically is scheduled by endorsement.

C. DAMAGE TO PREMISES RENTED TO YOU

- 1. The following replaces the last paragraph of Paragraph 2., **Exclusions**, of **SECTION I – COVERAGES – COVERAGE A BODILY IN-**

JURY AND PROPERTY DAMAGE LIABILITY:

Exclusions c. through n. do not apply to damage to premises while rented to you, or temporarily occupied by you with permission of the owner, caused by:

- a. Fire;
- b. Explosion;
- c. Lightning;
- d. Smoke resulting from such fire, explosion, or lightning; or
- e. Water.

A separate limit of insurance applies to such damage to premises as described in Paragraph 6. of Section III – Limits Of Insurance.

This insurance does not apply to damage to premises while rented to you, or temporarily occupied by you with permission of the owner, caused by:

- a. Rupture, bursting, or operation of pressure relief devices;
- b. Rupture or bursting due to expansion or swelling of the contents of any building or structure, caused by or resulting from water;
- c. Explosion of steam boilers, steam pipes, steam engines, or steam turbines.

2. The following replaces Paragraph 6. of **SECTION III – LIMITS OF INSURANCE:**

Subject to 5. above, the Damage To Premises Rented To You Limit is the most we will pay under Coverage A for damages because of "property damage" to any one premises while rented to you, or temporarily occupied by you with permission of the owner, caused by fire; explosion; lightning smoke resulting from such fire, explosion, or lightning; or water. The Damage To Premises Rented To You Limit will apply to all damage proximately caused by the same "occurrence", whether such damage results from fire; explosion; lightning; smoke resulting from such fire, explosion, or lightning; water; or any combination of any of these.

The Damage To Premises Rented To You Limit will be the higher of:

- a. \$300,000; or
- b. The amount shown on the Declarations of this Coverage Part for Damage To Premises Rented To You Limit.

3. The following replaces Paragraph a. of the definition of “insured contract” in the **DEFINITIONS** Section:

- a. A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage to premises while rented to you, or temporarily occupied by you with permission of the owner, caused by:

- (1) Fire;
- (2) Explosion;
- (3) Lightning;
- (4) Smoke resulting from such fire, explosion, or lightning; or
- (5) Water.

is not an “insured contract”;

4. The following replaces Paragraph 4.b.(1)(b) of **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**:

- (b) That is insurance for premises rented to you, or temporarily occupied by you with the permission of the owner;

D. BLANKET WAIVER OF SUBROGATION

The following is added to Paragraph 8., **Transfer Of Rights Of Recovery Against Others To Us**, of **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**:

We waive any right of recovery we may have against any person or organization because of payments we make for injury or damage arising out of premises owned or occupied by or rented or loaned to you; ongoing operations performed by you or on your behalf, done under a contract with that person or organization; “your work”; or “your products”. We waive this right where you have agreed to do so as part of a written contract, executed by you prior to loss.

E. BLANKET ADDITIONAL INSURED – OWNERS, MANAGERS OR LESSORS OF PREMISES

The following is added to **SECTION II – WHO IS AN INSURED**:

Any person or organization that is a premises owner, manager or lessor and that you have agreed in a written contract or agreement to name as an additional insured on this Coverage Part is an insured, but only with respect to liability for “bodily injury”, “property damage”, “personal injury” or “advertising injury” that:

- a. Is “bodily injury” or “property damage” caused by an “occurrence” that takes place, or “personal injury” or “advertising injury” caused by an offense that is committed, after you have signed and executed that contract or agreement; and
- b. Arises out of the ownership, maintenance or use of that part of any premises leased to you.

The insurance provided to such premises owner, manager or lessor is subject to the following provisions:

- a. The limits of insurance provided to such premises owner, manager or lessor will be the limits which you agreed to provide in the written contract or agreement, or the limits shown on the Declarations of this Coverage Part, whichever are less.
- b. The insurance provided to such premises owner, manager or lessor does not apply to:
 - (1) “Bodily injury” or “property damage” caused by an “occurrence” that takes place, or “personal injury” or “advertising injury” caused by an offense that is committed, after you cease to be a tenant in that premises; or
 - (2) Structural alterations, new construction or demolition operations performed by or on behalf of such premises owner, manager or lessor.
- c. The insurance provided to such premises owner, manager or lessor is excess over any valid and collectible other insurance available to such premises owner, manager or lessor, unless you have agreed in a written contract for this insurance to apply on a primary or contributory basis.

F. BLANKET ADDITIONAL INSURED – LESSORS OF LEASED EQUIPMENT

The following is added to **SECTION II – WHO IS AN INSURED**:

Any person or organization that is an equipment lessor and that you have agreed in a written contract or agreement to include as an additional insured on this Coverage Part is an insured, but only with respect to liability for “bodily injury”, “property damage”, “personal injury” or “advertising injury” that:

- a. Is “bodily injury” or “property damage” caused by an “occurrence” that takes place, or “personal injury” or “advertising injury” caused by an offense that is committed, after you have

signed and executed that contract or agreement; and

- b. Is caused, in whole or in part, by your acts or omissions in the maintenance, operation or use by you of equipment leased to you by such equipment lessor.

The insurance provided to such equipment lessor is subject to the following provisions:

- a. The limits of insurance provided to such equipment lessor will be the limits which you agreed to provide in the written contract or agreement, or the limits shown on the Declarations of this Coverage Part, whichever are less.
- b. The insurance provided to such equipment lessor does not apply to any "bodily injury" or "property damage" caused by an "occurrence" that takes place, or "personal injury" or "advertising injury" caused by an offense that is committed, after the equipment lease expires.
- c. The insurance provided to such equipment lessor is excess over any valid and collectible other insurance available to such equipment lessor, unless you have agreed in a written contract for this insurance to apply on a primary or contributory basis.

G. INCIDENTAL MEDICAL MALPRACTICE

- 1. The following is added to the definition of "occurrence" in the **DEFINITIONS** Section:

Unless you are in the business or occupation of providing professional health care services, "occurrence" also means an act or omission committed in providing or failing to provide "incidental medical services" to a person.

- 2. The following is added to the **DEFINITIONS** Section:

"Incidental medical services" means:

- a. Medical, surgical, dental, laboratory, x-ray or nursing service or treatment, advice or instruction, or the related furnishing of food or beverages;
- b. The furnishing or dispensing of drugs or medical, dental, or surgical supplies or appliances;
- c. First aid; or
- d. "Good Samaritan services".

"Good Samaritan services" means any emergency medical services for which no compensation is demanded or received.

- 3. The following is added to Paragraph **2.a.(1)** of **SECTION II – WHO IS AN INSURED**:

Unless you are in the business or occupation of providing professional health care services, Paragraphs **(1)(a)**, **(b)**, **(c)** and **(d)** above do not apply to any "bodily injury" arising out of any providing or failing to provide "incidental medical services" by any of your "employees", other than an employed doctor. Any such "employees" providing or failing to provide "incidental medical services" during their work hours for you will be deemed to be acting within the scope of their employment by you or performing duties related to the conduct of your business.

- 4. The following exclusion is added to Paragraph **2.**, **Exclusions**, of **SECTION I – COVERAGES – COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY**:

Sale Of Pharmaceuticals

"Bodily injury" or "property damage" arising out of the willful violation of a penal statute or ordinance relating to the sale of pharmaceuticals committed by, or with the knowledge or consent of, the insured.

- 5. The following is added to Paragraph **5.** of **SECTION III – LIMITS OF INSURANCE**:

For the purposes of determining the applicable Each Occurrence Limit, all related acts or omissions committed in the providing or failing to provide "incidental medical services" to any one person will be considered on an "occurrence".

- 6. The following is added to Paragraph **4.b.**, **Excess Insurance**, of **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**:

This insurance is excess over any valid and collectible other insurance, whether primary, excess, contingent or on any other basis, that is available to any of your "employees" for "bodily injury" that arises out of providing or failing to provide "incidental medical services" to any person to the extent not subject to Paragraph **2.a.(1)** of **SECTION II – WHO IS AN INSURED**.

H. PERSONAL INJURY – ASSUMED BY CONTRACT

- 1. The following replaces Exclusion **e.**, **Contractual Liability**, in Paragraph **2.** of **SECTION I – COVERAGES – COVERAGE B PERSONAL AND ADVERTISING INJURY LIABILITY**:

e. Contractual Liability

"Personal injury" or "advertising injury" for which the insured is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to:

- (1) Liability for damages that the insured would have in the absence of the contract or agreement; or
 - (2) Liability for damages because of "personal injury" assumed in a contract or agreement that is an "insured contract", provided that the "personal injury" is caused by an offense committed subsequent to the execution of the contract or agreement. Solely for the purposes of liability assumed in an "insured contract", reasonable attorneys fees and necessary litigation expenses incurred by or for a party other than an insured will be deemed to be damages because of "personal injury", provided that:
 - (a) Liability to such party for, or for the cost of, that party's defense has also been assumed in the same "insured contract"; and
 - (b) Such attorney fees and litigation expenses are for defense of that party against a civil or alternative dispute resolution proceeding in which damages to which this insurance applies are alleged.
2. The following replaces the third sentence of Paragraph 2. of **SUPPLEMENTARY PAYMENTS – COVERAGES A AND B**:
- Notwithstanding the provisions of Paragraph 2.b.(2) of Section I – Coverage A – Bodily Injury And Property Damage Liability or Paragraph 2.e. of Section I – Coverage B – Personal and Advertising Injury Liability, such payments will not be deemed to be damages because of "bodily injury", "property damage" or "personal injury", and will not reduce the limits of insurance.
3. The following replaces Paragraph 2.d. of **SUPPLEMENTARY PAYMENTS – COVERAGES A AND B**:
- d. The allegations in the "suit" and the information we know about the "occurrence" or offense are such that no conflict appears to exist between the interests of

the insured and the interests of the indemnitee;

4. The following replaces the first subparagraph of Paragraph f. of the definition of "insured contract" in the **DEFINITIONS** Section:

- f. That part of any other contract or agreement pertaining to your business (including an indemnification of a municipality in connection with work performed for a municipality) under which you assume the tort liability of another party to pay for "bodily injury," "property damage" or "personal injury" to a third person or organization. Tort liability means a liability that would be imposed by law in the absence of any contract or agreement.

I. AMENDED BODILY INJURY DEFINITION

The following replaces the definition of "bodily injury" in the **DEFINITIONS** Section:

"Bodily injury" means bodily injury, mental anguish, mental injury, shock, fright, disability, humiliation, sickness or disease sustained by a person, including death resulting from any of these at any time.

J. BODILY INJURY TO CO-EMPLOYEES AND CO-VOLUNTEER WORKERS

The following is added to Paragraph 2.a.(1) of **SECTION II – WHO IS AN INSURED**:

Paragraph (1)(a) above does not apply to "bodily injury" to a co-"employee" in the course of the co-"employee's" employment by you or performing duties related to the conduct of your business, or to "bodily injury" to your other "volunteer workers" while performing duties related to the conduct of your business.

K. AIRCRAFT CHARTERED WITH CREW

The following is added to Exclusion g., **Aircraft, Auto Or Watercraft**, in Paragraph 2. of **SECTION I – COVERAGES – COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY**:

This exclusion does not apply to an aircraft that is:

- (a) Chartered with crew to any insured;
- (b) Not owned by any insured; and
- (c) Not being used to carry any person or property for a charge.

L. NON-OWNED WATERCRAFT

1. The following replaces Paragraph (2) of Exclusion g., **Aircraft, Auto Or Watercraft**, in Paragraph 2. of **SECTION I – COVERAGES – COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY**:

- (2) A watercraft you do not own that is:
 - (a) Fifty feet long or less; and
 - (b) Not being used to carry any person or property for a charge.

2. The following is added to Paragraph 2. of SECTION II – WHO IS AN INSURED:

Any person or organization that, with your express or implied consent, either uses or is responsible for the use of a watercraft that you do not own that is:

- (1) Fifty feet long or less; and
- (2) Not being used to carry any person or property for a charge.

M. INCREASED SUPPLEMENTARY PAYMENTS

1. The following replaces Paragraph 1.b. of SUPPLEMENTARY PAYMENTS – COVERAGES A AND B of SECTION I – COVERAGES:

- b. Up to \$2,500 for cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which the Bodily Injury Liability Coverage applies. We do not have to furnish these bonds.

2. The following replaces Paragraph 1.d. of SUPPLEMENTARY PAYMENTS – COVERAGES A AND B of SECTION I – COVERAGES:

- d. All reasonable expenses incurred by the insured at our request to assist us in the investigation or defense of the claim or "suit", including actual loss of earnings up to \$500 a day because of time off from work.

N. MEDICAL PAYMENTS – INCREASED LIMIT

The following replaces Paragraph 7. of **SECTION III – LIMITS OF INSURANCE:**

7. Subject to 5. above, the Medical Expense Limit is the most we will pay under Coverage C. for all medical expenses because of "bodily injury" sustained by any one person, and will be the higher of:

- (a) \$10,000; or
- (b) The amount shown on the Declarations of this Coverage Part for Medical Expense Limit.

O. KNOWLEDGE AND NOTICE OF OCCURRENCE OR OFFENSE

The following is added to Paragraph 2., **Duties In The Event of Occurrence, Offense, Claim or Suit, of SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS:**

e. The following provisions apply to Paragraph a. above, but only for the purposes of the insurance provided under this Coverage Part to you or any insured listed in Paragraph 1. or 2. of Section II – Who Is An Insured:

- (1) Notice to us of such "occurrence" or offense must be given as soon as practicable only after the "occurrence" or offense is known to you (if you are an individual), any of your partners or members who is an individual (if you are a partnership or joint venture), any of your managers who is an individual (if you are a limited liability company), any of your trustees who is an individual (if you are a trust), any of your "executive officers" or directors (if you are an organization other than a partnership, joint venture, limited liability company or trust) or any "employee" authorized by you to give notice of an "occurrence" or offense.

- (2) If you are a partnership, joint venture, limited liability company or trust, and none of your partners, joint venture members, managers or trustees are individuals, notice to us of such "occurrence" or offense must be given as soon as practicable only after the "occurrence" or offense is known by:

(a) Any individual who is:

- (i) A partner or member of any partnership or joint venture;
- (ii) A manager of any limited liability company;
- (iii) A trustee of any trust; or
- (iv) An executive officer or director of any other organization;

that is your partner, joint venture member, manager or trustee; or

- (b) Any "employee" authorized by such partnership, joint venture, limited liability company, trust or other organization to give notice of an "occurrence" or offense.

- (3) Notice to us of such "occurrence" or offense will be deemed to be given as soon as practicable if it is given in good faith as soon as practicable to your workers' compensation insurer. This applies only if you subsequently give notice to us of the "occurrence" or offense as soon as practicable after any of the persons described in Paragraphs e.(1) or (2) above discover

ers that the "occurrence" or offense may result in sums to which the insurance provided under this Coverage Part may apply.

However, if this policy includes an endorsement that provides limited coverage for "bodily injury" or "property damage" or pollution costs arising out of a discharge, release or escape of "pollutants" which contains a requirement that the discharge, release or escape of "pollutants" must be reported to us within a specific number of days after its abrupt commencement, this Paragraph e. does not affect that requirement.

P. UNINTENTIONAL OMISSION

The following is added to Paragraph 6., **Representations**, of **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**:

The unintentional omission of, or unintentional error in, any information provided by you which we relied upon in issuing this policy will not prejudice

your rights under this insurance. However, this provision does not affect our right to collect additional premium or to exercise our rights of cancellation or nonrenewal in accordance with applicable insurance laws or regulations.

Q. REASONABLE FORCE – BODILY INJURY OR PROPERTY DAMAGE

The following replaces Exclusion a., **Expected Or Intended Injury**, in Paragraph 2. of **SECTION I – COVERAGES – COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY**:

a. Expected or Intended Injury or Damage

"Bodily injury" or "property damage" expected or intended from the standpoint of the insured. This exclusion does not apply to "bodily injury" or "property damage" resulting from the use of reasonable force to protect any person or property.

EXHIBIT A
PURCHASE DETAIL FORM



April 2, 2018

City of Richland, WA
One (1) Velocity 100' Platform DW481
Build Location: Appleton, Wisconsin

Proposal Price \$ 1,247,009.00

Washington State sales tax @	8.30%	103,501.75
Washington State motor vehicle tax @	0.30%	3,741.03

Total Bid Price Including Sales Tax \$ 1,354,251.78

Prepayment Discount Options

Less chassis progress payment discount (12,799.00)

The chassis progress payment in the amount of \$426,617.00 will be due three (3) months prior to the ready for pick up from the factory date.

Less aerial device progress payment discount (6,987.00)

The aerial payment in the amount of \$349,341.00 will be due two (2) months prior to the ready for delivery from the factory date.

Payment upon completion @ factory discount (13,643.00)

If 100% prepayment option is elected, any remaining balance is due net 15 days from customer taking possession of apparatus and this discount is applicable.

* Deduct for 100% pre-payment with contract (16,742.00)

If this option is elected, the discount is in addition to the chassis progress payment discount and the payment upon completion at the factory discount.

Total Discounts for 100% Prepayment with Contract (50,171.00)

Base Proposal Price 1,247,009.00

Discounts for 100% Prepayment (50,171.00)

Proposal price including all Prepayment Discounts 1,196,838.00

Washington State sales tax @	8.30%	99,337.55
Washington State motor vehicle tax @	0.30%	3,590.51

Total Bid Price Including Prepay Discounts & Sales Tax \$ 1,299,766.06

Terms:

As currently configured, the unit qualifies for the Build My Pierce (BMP) program. The BMP program offers expedited delivery. As long as the unit stays within the BMP program, the expected delivery is 7 to 10 months. All changes to the unit will be communicated to the customer. If changes are requested that would disqualify the unit from the BMP program, the unit will be delivered according to the standard delivery time, which currently is 9.5 to 12.5 months.

The above quote is subject to change.

A performance and payment bond will be provided upon order.

An invoice will be provided 30 days prior to the chassis and aerial payment due dates if they are elected.

Payment Upon Completion Discount Terms: If 100% prepayment option is elected, any remaining balance is due net 15 days from customer taking possession of apparatus and this discount is applicable.

If payment discount options are not elected standard payment terms will apply: Final payment will be due 30 days after the unit leaves the factory for delivery. If payment is not made at that time a late fee will be applicable.

An invoice will be provided upon order processing for the 100% prepayment if elected.

The Purchasing Documents will be between Hughes Fire Equipment and the customer.

The proposal price is based on the unit being purchased through FireRescue GPO / NPPGov. This pricing is only valid for a FireRescue GPO / NPPGov purchase on PPA MPA for RFP No. 1420.

Transportation of the unit to be driven from the factory to Post Falls, Idaho and then flatbed transport from Post Falls, Idaho to Richland, WA is included in the pricing. The cost to flatbed from Post Falls, ID to Richland, WA is \$2,806.00 and is included in the above proposal price.

Flatbed transport for Post Falls, Idaho to Richland, Washington is included. However, if Hughes is unable to obtain necessary permits in the transport from Appleton, Wisconsin to Post Falls, Idaho due to the weight of the unit, and the unit must be transported on a flat bed, additional transportation charges will be the responsibility of the purchaser. Hughes will provide pricing at that time if necessary.

Two (2) factory inspection trips for three (3) fire department customer representatives is included in the above pricing. The inspection trips will be scheduled at times mutually agreed upon between the manufacture's representative and the customer. Airfare, lodging and meals while at the factory are included. If the Department elects to forgo an inspection trip \$1,850.00 per traveler (per trip) will be deducted from the final invoice.

EXHIBIT A

PURCHASE DETAIL FORM

HUGHES FIRE EQUIPMENT INC.

Date: _____

Customer Name: City of Richland

Quantity	Chassis Type	Body Type	Price per Unit
One (1)	Pierce Velocity	100' Platform DW481	\$1,247,009.00
Less	Chassis Progress Payment		(12,799.00)
Less	Aerial Device Progress Payment		(6,987.00)
Less	Payment upon Completion at Factory Discount		(13,643.00)
Less	100% Prepayment with Contract		(16,742.00)
Subtotal			\$1,196,838.00
Plus	Washington State Sales Tax @ 8.30%		\$99,337.55
Plus	Washington State Motor Vehicle Tax @ 0.30%		\$3,590.51
Total			\$1,299,766.06

Warranty Period: Standard per Pierce Proposal DW481 submitted 4/2/18.Training Requirements: Standard per Pierce Proposal DW481 submitted 4/2/18.

Other Matters:

Performance Bond: A performance and payment bond will be provided upon order in the full contract amount with a surety company as surety, conditioned that Company must faithfully perform all the provisions of this agreement.

Insurance:

Company shall obtain and maintain commercial general liability insurance with minimum limits of not less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate. Such policy shall (1) cover the City as additional insured on a primary and noncontributory basis; (2) include products/completed operation coverage; and (3) include a waiver of subrogation. Company shall provide a Certificate of Insurance on an ACORD form or its equivalent, along with copies of all necessary endorsement evidencing the coverages required herein.

Delivery, Inspection & Acceptance: As currently configured, the unit qualifies for the Build My Pierce (BMP) program. The BMP program offers expedited delivery. As long as the unit stays within the BMP program, the expected delivery is 7 to 10 months. All changes to the unit will be communicated to the customer. If changes are requested that would disqualify the unit from the BMP program, the unit will be delivered according to the standard delivery time, which currently is 9.5 to 12.5 months. F.O.B. Richland, Washington. Risk of loss shall pass to Customer upon Delivery. Upon Delivery, Customer shall have fifteen (15) days within which to inspect the Product for substantial conformance to the material Specifications, and in the event of substantial non-conformance to the material Specifications to furnish Company with written notice sufficient to permit Company to evaluate such non-conformance ("Notice of Defect"). Any Product not in substantial conformance to material Specifications shall be remedied by Company within thirty (30) days from the Notice of Defect. In the event Company does not receive a Notice of Defect within fifteen (15) days of Delivery, Product will be deemed to be in conformance with Specifications and Accepted by Customer. Flatbed transport for Post Falls, Idaho to Richland, Washington is included in the pricing. However, if Hughes is unable to obtain necessary permits in the transport from Appleton, Wisconsin to Post Falls, Idaho due to the weight of the unit, and the unit must be transported on a flat bed, additional transportation charges will be the responsibility of the purchaser. Hughes will provide pricing at that time if necessary.

This contract is available for inter-local and other municipal corporations to utilize with the option of adding or deleting any Company available options, including chassis models. Any addition or deletion may affect the unit price.

Payment Terms: A 100% prepayment in the amount of \$1,299,766.06 will be due within thirty (30) days of contract execution. If payment is not made at this time, \$50,171.00 or a portion thereof will be added to the final invoice. Final payment, including any changes during the manufacturing process, will be due no later than fifteen (15) days after delivery of apparatus to the customer's facility.

[NOTE: If deferred payment arrangements are required, the Customer must make such financial arrangements through a financial institution acceptable to Company.] All taxes, excises and levies that Company may be required to pay or collect by reason of any present or future law or by any governmental authority based upon the sale, purchase, delivery, storage, processing, use, consumption, or transportation of the Product sold by Company to the Customer shall be for the account of the Customer and shall be added to the Purchase Price. All delivery prices or prices with freight allowance are based upon prevailing freight rates and, in the event of any increase or decrease in such rates, the prices on all unshipped Product will be increased or decreased accordingly. Delinquent payments shall be subject to a carrying charge of 1.5 percent per month or such lesser amount permitted by law. Company will not be required to accept payment other than as set forth in this Agreement. However, to avoid a late charge assessment in the event of a dispute caused by a substantial nonconformance with material Specifications (other than freight), the Customer may withhold up to five percent (5%) of the Purchase Price until such time that Company substantially remedies the nonconformance with material Specifications, but no longer than sixty (60) days after Delivery. If the disputed amount is the freight charge, the Customer may withhold only the amount of the freight charge until the dispute is settled, but no longer than sixty (60) days after Delivery. Company shall have and retain a purchase money security interest in all goods and products now or hereafter sold to the Customer by Company or any of its affiliated companies to secure payment of the Purchase Price for all such goods and products. In the event of nonpayment by the Customer of any debt, obligation or liability now or hereafter incurred or owing by the Customer to Company, Company shall have and may exercise all rights and remedies of a secured party under Article 9 of the Uniform Commercial Code (UCC) as adopted by the state of Oregon.

THIS PURCHASE DETAIL FORM IS EXPRESSLY SUBJECT TO THE PURCHASE ORDER TERMS AND CONDITIONS AS OF THE PURCHASE ORDER ISSUE DATE. BETWEEN COMPANY AND THE CITY OF RICHLAND WHICH TERMS AND CONDITIONS ARE HEREBY INCORPORATED IN, AND MADE PART OF, THIS PURCHASE DETAIL FORM AS THOUGH EACH PROVISION WERE SEPARATELY SET FORTH HEREIN, EXCEPT TO THE EXTENT OTHERWISE STATED OR SUPPLEMENTED BY COMPANY HEREIN.

EXHIBIT B

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AMP DRAW REPORT 141

Hughes Fire Equipment Inc. is pleased to submit a proposal to Richland Fire Department for a **Pierce® 100' Aerial Platform** per your request for quotation. The following paragraphs will describe in detail the apparatus, construction methods, and equipment proposed. This proposal will indicate size, type, model and make of components parts and equipment, providing proof of compliance with each and every item (except where noted) in the departments advertised specifications.

PIERCE MANUFACTURING was founded in 1913. Since then we have been building bodies with one philosophy, "BUILD THE FINEST". Our skilled craftsmen take pride in their work, which is reflected, in the final product. We have been building fire apparatus since the early "forties" giving Pierce Manufacturing over 60 years of experience in the fire apparatus market. Pierce Manufacturing has built and put into service more than 51,000 apparatus, including more than 27,000 on Pierce custom chassis designed and built specifically for fire and emergency applications. Our Appleton, Wisconsin facility has over 757,000 total square feet of floor space situated on approximately 97 acres of land. Our Bradenton, Florida facility has 300,000 square feet of floor space situated on approximately 38 acres of land.

Our beliefs in high ethical standards are carried through in all of our commitments and to everyone with whom we do business. Honesty, Integrity, Accountability and Citizenship are global tenets by which we all live and work. Consequently, we neither engage in, nor have we ever been convicted of price fixing, bid rigging, or collusion in any domestic or international fire apparatus market.

Pierce has only one brand of fire apparatus "Pierce", ensuring you are receiving top of the line product that meets your specification.

In accordance with the current edition of NFPA 1901 standards, this proposal will specify whether the fire department, manufacturer, or apparatus dealership will provide required loose equipment.

Images and illustrative material in this proposal are as accurate as known at the time of publication, but are subject to change without notice. Images and illustrative material is for reference only, and may include optional equipment and accessories and may not include all standard equipment.

GENERAL DESIGN AND CONSTRUCTION

To control quality, ensure compatibility, and provide a single source for service and warranty, the custom cab, chassis, pump module and body will be entirely designed, assembled/welded and painted in Pierce owned manufacturing facilities. This includes, but not limited to the cab weldment, the pumphouse module assembly, the chassis assembly, the body and the electrical system.

QUALITY AND WORKMANSHIP

Pierce has set the pace for quality and workmanship in the fire apparatus field. Our tradition of building the highest quality units with craftsmen second to none has been the rule right from the beginning and we demonstrate that ongoing commitment by: Ensuring all steel welding follows American Welding Society D1.1-2004 recommendations for structural steel welding. All aluminum welding follows American Welding society and ANSI D1.2-2003 requirements for structural welding of aluminum. All sheet metal welding follows American welding Society B2.1-2000 requirements for structural welding of sheet metal. Our flux core arc welding uses alloy rods, type 7000 and is performed to American Welding Society standards A5.20-E70T1. Furthermore, all employees classified as welders are tested

and certified to meet the American welding Society codes upon hire and every three (3) years thereafter. Pierce also employs an American Welding Society certified welding inspector in plant during working hours to monitor weld quality.

Pierce Manufacturing operates a Quality Management System under the requirements of ISO 9001. These standards sponsored by the International Organization for Standardization (ISO) specify the quality systems that are established by the manufacturer for design, manufacture, installation and service. A copy of the certificate of compliance is included with this proposal.

In addition to the Quality Management system, we also employ a Quality Achievement Supplier program to insure the vendors and suppliers that we utilize meet the high standards we demand. That is just part of our overall "Quality at the Source" program at Pierce.

DELIVERY

The apparatus will be delivered under its own power to insure proper break-in of all components while the apparatus is still under warranty. A qualified delivery representative will deliver the apparatus and remain for a sufficient length of time to instruct personnel in proper operation, care and maintenance of the equipment delivered.

MANUAL AND SERVICE INFORMATION

At time of delivery, complete operation and maintenance manuals covering the apparatus will be provided. A permanent plate will be mounted in the driver's compartment specifying the quantity and type of fluids required including engine oil, engine coolant, transmission, pump transmission lubrication, pump primer and drive axle.

SAFETY VIDEO

At the time of delivery Pierce will also provide one (1) 39-minute, professionally produced apparatus safety video, in DVD format. This video will address key safety considerations for personnel to follow when they are driving, operating, and maintaining the apparatus, including the following: vehicle pre-trip inspection, chassis operation, pump operation, aerial operation, and safety during maintenance.

PERFORMANCE TESTS

A road test will be conducted with the apparatus fully loaded and a continuous run of no less than ten (10) miles. During that time the apparatus will show no loss of power nor will it overheat. The transmission drive shaft or shafts and the axles will run quietly and be free of abnormal vibration or noise. The apparatus when fully loaded will not have less than 25 percent nor more than 50 percent on the front axle, and not less than 50 percent nor more than 75 percent on the rear axle. The apparatus will meet NFPA 1901 acceleration and braking requirements.

SERVICE AND WARRANTY SUPPORT

Pierce dealership support will be provided by Hughes Fire Equipment, your operating Pierce authorized service center. The service center will have factory-trained mechanics on staff versed in Pierce fire apparatus. The service facility will be located within two hundred fifty (250) miles of the fire department.

In addition to the dealership, Pierce has service facilities located in both, Weyauwega, Wisconsin and Bradenton, Florida. Pierce also maintains a dedicated parts facility of over 100,000 square feet in

Appleton, Wisconsin. The parts facility stocks in excess of \$5,000,000 in parts dedicated to service and replacement parts. The parts facility employs a staff dedicated solely for the distribution and shipment of service and replacement parts.

Service parts for the apparatus being proposed can be found via Pierceparts.com which, is an interactive online tool that delivers information regarding your specific apparatus as well as the opportunity to register for training classes.

As a Pierce customer you have the ability to view the complete bill of materials for your specific apparatus, including assembly drawings, piece part drawings, and beneficial parts notations. You will also have the ability to search the complete Pierce item master through a parts search function which offers all Pierce SKU's and descriptions offered on all Pierce apparatus. Published component catalogs, which include proprietary systems along with an extensive operator's manual library is available for easy reference.

Pierce Manufacturing maintains a dedicated service and warranty staff of over 35 personnel, dedicated to customer support, which also maintains a 24-hour 7 day a week toll free hot line, four (4) on staff EVTs, and offers hands-on repair and maintenance training classes multiple times a year.

COMMERCIAL GENERAL LIABILITY INSURANCE

Certification of insurance coverage will be enclosed.

SINGLE SOURCE MANUFACTURER

Pierce Manufacturing, Inc. provides an integrated approach to the design and manufacture of our products that delivers superior apparatus and a dedicated support team. From our facilities, the chassis, cab weldment, cab, pump house (including the sheet metal enclosure, valve controls, piping and operators panel) body and aerial device will be entirely designed, tested, and hand assembled to the customer's exact specifications. The electrical system either hardwired or multiplexed, will be both designed and integrated by Pierce Manufacturing. The warranties relative to these major components (excluding component warranties such as engine, transmission, axles, pump, etc.) will be provided by Pierce as a single source manufacturer. Pierce's single source solution adds value by providing a fully engineered product that offers durability, reliability, maintainability, performance, and a high level of quality.

Your apparatus will be manufactured in Appleton, Wisconsin.

NFPA 2016 STANDARDS

This unit will comply with the NFPA standards effective January 1, 2016, except for fire department directed exceptions. These exceptions will be set forth in the Statement of Exceptions.

Certification of slip resistance of all stepping, standing and walking surfaces will be supplied with delivery of the apparatus.

All horizontal surfaces designated as a standing or walking surface that are greater than 48.00" above the ground must be defined by a 1.00" wide line along its outside perimeter. Perimeter markings and designated access paths to destination points will be identified on the customer approval print and are shown as approximate. Actual location will be determined based on materials used and actual

One (1) Pierce Velocity 100' Platform
Pierce Pulse DW481

conditions at final build. Access paths may pass through hose storage areas and opening or removal of covers or restraints may be required. Access paths may require the operation of devices and equipment such as the aerial device or ladder rack.

A plate that is highly visible to the driver while seated will be provided. This plate will show the overall height, length, and gross vehicle weight rating.

The manufacturer will have programs in place for training, proficiency testing and performance for any staff involved with certifications.

An official of the company will designate, in writing, who is qualified to witness and certify test results.

NFPA COMPLIANCY

Apparatus proposed by the bidder will meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in current edition at time of contract execution. Fire department's specifications that differ from NFPA specifications will be indicated in the proposal as "non-NFPA".

VEHICLE INSPECTION PROGRAM CERTIFICATION

To assure the vehicle is built to current NFPA standards, the apparatus, in its entirety, will be third-party, audit-certified through Underwriters Laboratory (UL) that it is built and complies to all applicable standards in the current edition of NFPA 1901. The certification will include: all design, production, operational, and performance testing of not only the apparatus, but those components that are installed on the apparatus.

A placard will be affixed in the driver's side area stating the third-party agency, the date, the standard and the certificate number of the whole vehicle audit.

INSPECTION CERTIFICATE

A third-party inspection certificate for the aerial device will be furnished upon delivery of the aerial device. The certificate will be Underwriters Laboratories Inc. Type 1 and will indicate that the aerial device has been inspected on the production line and after final assembly.

Visual structural inspections will be performed on all welds on both aluminum and steel ladders.

On critical weld areas, or on any suspected defective area, the following tests will be conducted:

- Magnetic particle inspection will be conducted on steel aerials to assure the integrity of the weldments and to detect any flaws or weaknesses. Magnets will be placed on each side of the weld while iron powder is placed on the weld itself. The powder will detect any crack that may exist. This test will conform to ASTM E709 and be performed prior to assembly of the aerial device.
- A liquid penetrant test will be conducted on aluminum aerials to assure the integrity of the weldments and to detect any flaws or weaknesses. This test will conform to ASTM E165 and be performed prior to assembly of the aerial device.
- Ultrasonic inspection will be conducted on all aerials to detect any flaws in pins, bolts and other critical mounting components.

In addition to the tests above, functional tests, load tests, and stability tests will be performed on all aerials. These tests will determine any unusual deflection, noise, vibration, or instability characteristics of the unit.

PUMP TEST

The pump will be tested, approved and certified by Underwriter's Laboratory at the manufacturer's expense. The test results and the pump manufacturer's certification of hydrostatic test; the engine manufacturer's certified brake horsepower curve; and the manufacturer's record of pump construction details will be forwarded to the Fire Department.

GENERATOR TEST

If the unit has a generator, the generator will be tested, approved, and certified by Underwriters Laboratories at the manufacturer's expense. The test results will be provided to the Fire Department at the time of delivery.

BREATHING AIR TEST

If the unit has breathing air, Pierce Manufacturing will draw an air sample from the air system and certify that the air quality meets the requirements of NFPA 1989, *Standard on Breathing Air Quality for Fire and Emergency Services Respiratory Protection*.

INSPECTION TRIPS

The bidder will provide two (2) factory inspection trips for three (3) customer representatives. The inspection trips will be scheduled at times mutually agreed upon between the manufacturer's representative and the customer. All costs such as travel, lodging and meals will be the responsibility of the bidder.

AFTERMARKET SUPPORT WEBSITE

Pierceparts.com will provide Pierce authorized dealer access to comprehensive information pertaining to the maintenance and service of their customer's apparatus. This tool will provide the Pierce authorized dealer the ability to service and support their customers to the best of their ability with factory support at their fingertips.

Pierceparts.com is also accessible to the end user through the guest login. Limited access is available and vehicle specific parts information accessible by entering a specific VIN number. All end users should see their local authorized Pierce dealer for additional support and service.

The website will consist of the following screens at the dealer level:

My Fleet Screen

The My Fleet screen will provide access to truck detail information on the major components of the vehicle, warranty information, available vehicle photographs, vehicle drawings, sales options, applicable vehicle software downloads, etc.

Parts Screens

The Parts screens will provide parts look-up capability of Pierce Manufacturing sourced items, with the aid of digital photographs, part drawings and assembly drawings. The parts search application will permit the searching of parts by item description or function group (major system category). The parts application will provide the ability to submit electronically a parts order, parts quote, or parts return request directly to Pierce Manufacturing for processing.

Warranty Screen

The Warranty screens will provide dealers the ability to submit electronically warranty claims directly to Pierce Manufacturing for reimbursement.

My Reports Screens

The My Reports screens will provide access to multiple dealer reports to allow the dealership to maintain communication with the customer on the status of orders, claims, and phone contacts.

Technical Support Screens

The Technical Support screens will provide access to all currently published Operation and Maintenance and Service Publications. Access to Pierce Manufacturing Service Bulletins and Work Instructions, containing information on current service topics and recommendations will be provided.

Training

The Training screens will provide access to upcoming training classes offered by Pierce Manufacturing along with interactive electronic learning modules (Operators Guides) covering the operation of major vehicle components will be provided. Access to training manuals used in Pierce Manufacturing training classes will be provided.

About Pierce

Access to customer service articles, corporate news, quarterly newsletters, and key contacts within the Customer Service Department will be provided. The current Customer Service Policy and Procedure Manual, detailing the operation of the Customer Service group will also be accessible.

BID BOND NOT REQUESTED

A bid bond will not be included. If requested, the following will apply:

All bidders will provide a bid bond as security for the bid in the form of a 5% bid bond to accompany their bid. This bid bond will be issued by a Surety Company who is listed on the U.S. Treasury Departments list of acceptable sureties as published in Department Circular 570. The bid bond will be issued by an authorized representative of the Surety Company and will be accompanied by a certified power of attorney dated on or before the date of bid. The bid bond will include language, which assures that the bidder/principal will give a bond or bonds as may be specified in the bidding or contract documents, with good and sufficient surety for the faithful performance of the contract, including the Basic One (1) Year Limited Warranty, and for the prompt payment of labor and material furnished in the prosecution of the contract.

Notwithstanding any document or assertion to the contrary, any surety bond related to the sale of a vehicle will apply only to the Basic One (1) Year Limited Warranty for such vehicle. Any surety bond related to the sale of a vehicle will not apply to any other warranties that are included within this bid (OEM or otherwise) or to the warranties (if any) of any third party of any part, component, attachment or accessory that is incorporated into or attached to the vehicle. In the event of any contradiction or inconsistency between this provision and any other document or assertion, this provision will prevail.

PERFORMANCE BOND, 1 YEAR

The successful bidder will furnish a Performance and Payment bond (Bond) equal to 100 percent of the total contract amount within 30 days of the notice of award. Such Bond will be in a form acceptable to the Owner and issued by a surety company included within the Department of Treasury's Listing of Approved Sureties (Department Circular 570) with a minimum A.M. Best Financial Strength Rating of A and Size Category of XV. In the event of a bond issued by a surety of a lesser Size Category, a minimum Financial Strength rating of A+ is required.

Bidder and Bidder's surety agree that the Bond issued hereunder, whether expressly stated or not, also includes the surety's guarantee of the vehicle manufacturer's Basic One (1) Year Limited Warranty period included within this proposal. Owner agrees that the penal amount of this bond will be simultaneously amended to 25 percent of the total contract amount upon satisfactory acceptance and delivery of the vehicle(s) included herein. Notwithstanding anything contained within this contract to the contrary, the surety's liability for any warranties of any type will not exceed one (1) year from the date of such satisfactory acceptance and delivery, or the actual Basic One (1) Year Limited Warranty period, whichever is shorter.

APPROVAL DRAWING

A drawing of the proposed apparatus will be prepared and provided to the purchaser for approval before construction begins. The Pierce sales representative will also be provided with a copy of the same drawing. The finalized and approved drawing will become part of the contract documents. This drawing will indicate the chassis make and model, location of the lights, siren, horns, compartments, major components, etc.

A "revised" approval drawing of the apparatus will be prepared and submitted by Pierce to the purchaser showing any changes made to the approval drawing.

ELECTRICAL WIRING DIAGRAMS

Two (2) electrical wiring diagrams, prepared for the model of chassis and body, will be provided.

VELOCITY CHASSIS

The Pierce Velocity® is the custom chassis developed exclusively for the fire service. Chassis provided will be a new, tilt-type custom fire apparatus. The chassis will be manufactured in the apparatus body builder's facility eliminating any split responsibility. The chassis will be designed and manufactured for heavy-duty service, with adequate strength and capacity for the intended load to be sustained and the type of service required. The chassis will be the manufacturer's first line tilt cab.

WHEELBASE

The wheelbase of the vehicle will be 261.00.

One (1) Pierce Velocity 100' Platform
Pierce Pulse DW481

GVW RATING

The gross vehicle weight rating will be 80,800.

FRAME

The chassis frame will be built with two (2) steel channels bolted to five (5) cross members or more, depending on other options of the apparatus. The side rails will have a 13.38" tall web over the front and mid sections of the chassis, with a continuous smooth taper to 10.75" over the rear axle. Each rail will have a section modulus of 25.992 cubic inches and a resisting bending moment (rbm) of 3,119,040 in-lb over the critical regions of the frame assembly, with a section modulus of 18.96 cubic inches with an rbm of 2,275,200 in-lb over the rear axle. The frame rails will be constructed of 120,000 psi yield strength heat-treated 0.38" thick steel with 3.50" wide flanges.

FRAME REINFORCEMENT

In addition, a mainframe inverted "L" liner will be provided. It will be heat-treated steel measuring 12.00" x 3.00" x 0.25". Each liner will have a section modulus of 7.795 cubic inches, yield strength of 110,000 psi, and rbm of 857,462 in-lb. Total rbm at wheelbase center will be 3,976,502 in-lb.

The frame liner will be mounted inside of the chassis frame rail and extend the full length of the frame.

FRONT NON-DRIVE AXLE

The Oshkosh TAK-4® front axle will be of the independent suspension design with a ground rating of 22,800 lb.

Upper and lower control arms will be used on each side of the axle. Upper control arm castings will be made of 100,000-psi yield strength 8630 steel and the lower control arm casting will be made of 55,000-psi yield ductile iron.

The center cross members and side plates will be constructed out of 80,000-psi yield strength steel.

Each control arm will be mounted to the center section using elastomer bushings. These rubber bushings will rotate on low friction plain bearings and be lubricated for life. Each bushing will also have a flange end to absorb longitudinal impact loads, reducing noise and vibrations.

There will be nine (9) grease fittings supplied, one (1) on each control arm pivot and one (1) on the steering gear extension.

The upper control arm will be shorter than the lower arm so that wheel end geometry provides positive camber when deflected below rated load and negative camber above rated load.

Camber at load will be 0 degrees for optimum tire life.

The ball joint bearing will be of low friction design and be maintenance free.

Toe links that are adjustable for alignment of the wheel to the center of the chassis will be provided.

The wheel ends will have little to no bump steer when the chassis encounters a hole or obstacle.

The steering linkage will provide proper steering angles for the inside and outside wheel, based on the vehicle wheelbase.

The axle will have a third party certified turning angle of 45 degrees. Front discharge, front suction, or aluminum wheels will not infringe on this cramp angle.

FRONT SUSPENSION

Front Oshkosh TAK-4™ independent suspension will be provided with a minimum ground rating of 22,800 lb.

The independent suspension system will be designed to provide maximum ride comfort. The design will allow the vehicle to travel at highway speeds over improved road surfaces and at moderate speeds over rough terrain with minimal transfer of road shock and vibration to the vehicle's crew compartment.

Each wheel will have torsion bar type spring. In addition, each front wheel end will also have energy absorbing jounce bumpers to prevent bottoming of the suspension.

The suspension design will be such that there is at least 10.00" of total wheel travel and a minimum of 3.75" before suspension bottoms.

The torsion bar anchor lock system allows for simple lean adjustments, without the use of shims. One can adjust for a lean within 15 minutes per side. Anchor adjustment design is such that it allows for ride height adjustment on each side.

The independent suspension was put through a durability test that simulated 140,000 miles of inner city driving.

FRONT SHOCK ABSORBERS

KONI heavy-duty telescoping shock absorbers will be provided on the front suspension.

FRONT OIL SEALS

Oil seals with viewing window will be provided on the front axle.

FRONT TIRES

Front tires will be Michelin 425/65R22.50 radials, 20 ply XFE wide base tread, rated for 22,800 lb maximum axle load and 75 mph maximum speed.

The tires will be mounted on Alcoa 22.50" x 12.25" polished aluminum disc type wheels with a ten (10) stud, 11.25" bolt circle.

REAR AXLE

The rear axle will be a Meritor™, Model RT58-185, tandem axle assembly with a capacity of 58,000 lb.

An inter-axle differential, which divides torque evenly between axles, will be provided, with an indicator light mounted on the cab instrument panel.

TOP SPEED OF VEHICLE

A rear axle ratio will be furnished to allow the vehicle to reach a top speed of 60 mph.

REAR SUSPENSION

The rear suspension will be a Hendrickson HN VariRate spring system with an equalizing beam design that distributes the load equally between the two (2) axles. The ground rating of the suspension will be 58,000 lb.

REAR OIL SEALS

Oil seals will be provided on the rear axle.

REAR TIRES

Rear tires will be eight (8) Michelin 315/80R22.50 radials, load range L, X® WORKS™ Z, rated for 66,160 lb maximum axle load and 65 mph maximum speed.

The outside tires will be mounted on Alcoa, 22.50" x 9.00" polished aluminum disc wheels with a ten (10) stud 11.25" bolt circle.

The inside tires will be mounted on 22.50" x 9.00" steel disc wheels with a ten (10) stud 11.25" bolt circle.

TIRE BALANCE

All tires will be balanced with Counteract balancing beads. The beads will be inserted into the tire and eliminate the need for wheel weights.

TIRE PRESSURE MANAGEMENT

There will be a RealWheels LED AirSecure™ tire alert pressure management system provided, that will monitor each tire's pressure. A sensor will be provided on the valve stem of each tire for a total of 10 tires.

The sensor will calibrate to the tire pressure when installed on the valve stem for pressures between 10 and 200 psi. The sensor will activate an integral battery operated LED when the pressure of that tire drops 5 to 8 psi.

Removing the cap from the sensor will indicate the functionality of the sensor and battery. If the sensor and battery are in working condition, the LED will immediately start to flash.

FRONT HUB COVERS

Stainless steel hub covers will be provided on the front axle. An oil level viewing window will be provided.

WHEEL SAFETY BANDS

The following one (1) pair wheels, located front tires, will have the Tyron Wheel Safety Bands installed. Chassis steering and handling will be improved when a tire with a band fails.

REAR HUB COVERS

Stainless steel, high hat, hub covers will be provided on the rear axle hubs.

AUTOMATIC TIRE CHAINS

One (1) pair of ONSPOT automatic tire chains will be provided at the rear. System will be electric over air operated with switch on cab instrument panel. System may be engaged at speeds up to 25 mph and operated at speeds up to 35 mph.

CHROME LUG NUT COVERS

Chrome lug nut covers will be supplied on front and rear wheels.

MUD FLAPS

Mud flaps with a Pierce logo will be installed behind the front and rear wheels.

WHEEL CHOCKS

There will be two (2) pairs of folding Ziamatic, Model SAC-44-E, aluminum alloy, Quick-Choc wheel blocks, with easy-grip handle provided.

WHEEL CHOCK BRACKETS

There will be two (2) pairs of Zico, Model SQCH-44-H, horizontal mounting wheel chock brackets provided for the Ziamatic, Model SAC-44-E, folding wheel chocks. The brackets will be made of aluminum and consist of a quick release spring loaded rod to hold the wheel chocks in place. The brackets will be mounted forward of the left side rear tire and forward of the right side rear tire.

ELECTRONIC STABILITY CONTROL

A vehicle control system will be provided as an integral part of the ABS brake system from Meritor Wabco.

The system will monitor and update the lateral acceleration of the vehicle and compare it to a critical threshold where a side roll event may occur. If the critical threshold is met, the vehicle control system will automatically reduce engine RPM, engage the engine retarder (if equipped), and selectively apply brakes to the individual wheel ends of the front and rear axles to reduce the possibility of a side roll event.

The system will monitor directional stability through a lateral accelerometer, steer angle sensor and yaw rate sensor. If spinout or drift out is detected, the vehicle control system will selectively apply brakes to the individual wheel ends of the front and rear axles to bring the vehicle back to its intended direction.

ANTI-LOCK BRAKE SYSTEM

The vehicle will be equipped with a Wabco 6S6M, anti-lock braking system. The ABS will provide a six (6) channel anti-lock braking control on both the front and rear wheels. A digitally controlled system that utilizes microprocessor technology will control the anti-lock braking system. Each wheel will be monitored by the system. When any wheel begins to lockup, a signal will be sent to the control unit. This control unit will then reduce the braking of that wheel for a fraction of a second and then reapply the brake. This anti-lock brake system will eliminate the lockup of any wheel thus helping to prevent the apparatus from skidding out of control.

AUTOMATIC TRACTION CONTROL

An anti-slip feature will be included with the ABS. The Automatic Traction Control will be used for traction in poor road and weather conditions. The Automatic Traction Control will act as an electronic

differential lock that will not allow a driving wheel to spin, thereby supplying traction at all times. The ABS electronic control unit (ECU) will work with the engine ECU, sharing information concerning wheel slip. Engine ECU will use information to control engine speed, allowing only as much throttle application as required for the available traction, regardless of how much the driver is asking for. A "mud/snow" switch will be provided on the instrument panel. Activation of the switch will allow additional tire slip to let the truck climb out and get on top of deep snow or mud.

BRAKES

The service brake system will be full air type.

The front brakes will be Knorr/Bendix disc type with a 17.00" ventilated rotor for improved stopping distance.

The brake system will be certified, third party inspected, for improved stopping distance.

The rear brakes will be Meritor™ 16.50" x 7.00" cam operated with automatic slack adjusters. Dust shields will be provided.

BRAKE SYSTEM AIR COMPRESSOR

The air compressor will be a Cummins/WABCO with 18.7 cubic feet per minute output.

BRAKE SYSTEM

The brake system will include:

- Bendix dual brake treadle valve
- Heated automatic moisture ejector on air dryer
- Total air system capacity of 8,108 cubic inches
- Two (2) air pressure gauges with a red warning light and an audible alarm, that activates when air pressure falls below 60 psi
- Spring set parking brake system
- Parking brake operated by a push-pull style control valve
- A parking "brake on" indicator light on instrument panel
- Park brake relay/inversion and anti-compounding valve, in conjunction with a double check valve system, will be provided with an automatic spring brake application at 40 psi
- A pressure protection valve will be provided to prevent all air operated accessories from drawing air from the air system when the system pressure drops below 80 psi (550 kPa)
- 1/4 turn drain valve on each air tank

The air tank will be primed and painted to meet a minimum 750-hour salt spray test.

To reduce the effects of corrosion, the air tank will be mounted with stainless steel brackets.

BRAKE SYSTEM AIR DRYER

The air dryer will be WABCO System Saver 1200 with spin-on coalescing filter cartridge and 100 watt heater.

BRAKE LINES

Color-coded nylon brake lines will be provided. The lines will be wrapped in a heat protective loom in the chassis areas that are subject to excessive heat.

AIR INLET

One (1) air inlet with 3D series male coupling will be provided. It will allow station air to be supplied to the apparatus brake system through a shoreline hose. The inlet will be located forward in the driver side lower step well of cab. A check valve will be provided to prevent reverse flow of air. The inlet will discharge into the "wet" tank of the brake system. A mating female fitting will also be provided with the loose equipment.

ALL WHEEL LOCK-UP

An additional all wheel lock-up system will be installed which applies air to the front brakes only. The standard spring brake control valve system will be used for the rear.

ENGINE

The chassis will be powered by an electronically controlled engine as described below:

Make:	Cummins®
Model:	X15
Power:	600 hp at 1800 rpm
Torque:	1850 lb-ft at 1200 rpm
Governed Speed:	2100 rpm
Emissions Level:	EPA 2017
Fuel:	Diesel
Cylinders:	Six (6)
Displacement:	912 cubic inches (14.9L)
Starter:	Delco 39MT+™
Fuel Filters:	Frame mounted spin-on style primary filter with water separator and water-in-fuel sensor

The engine will include On-board diagnostics (OBD), which provides self diagnostic and reporting. The system will give the owner or repair technician access to state of health information for various vehicle sub systems. The system will monitor vehicle systems, engine and after treatment. The system will illuminate a malfunction indicator light on the dash console if a problem is detected.

HIGH IDLE

A high idle switch will be provided, inside the cab, on the instrument panel, that will automatically maintain a preset engine rpm. A switch will be installed, at the cab instrument panel, for activation/deactivation.

The high idle will be operational only when the parking brake is on and the truck transmission is in neutral. A green indicator light will be provided, adjacent to the switch. The light will illuminate when the above conditions are met. The light will be labeled "OK to Engage High Idle."

ENGINE BRAKE

A Jacobs® engine brake is to be installed with the controls located on the instrument panel within easy reach of the driver.

The driver will be able to turn the engine brake system on/off and have a high, medium and low setting.

The engine brake will activate when the system is on and the throttle is released.

The high setting of the brake application will activate and work simultaneously with the variable geometry turbo (VGT) provided on the engine.

The engine brake will be installed in such a manner that when the engine brake is slowing the vehicle the brake lights are activated.

The ABS system will automatically disengage the auxiliary braking device, when required.

CLUTCH FAN

A Horton® fan clutch will be provided. The fan clutch will be automatic when the pump transmission is in "Road" position, and fully engaged in "Pump" position.

ENGINE AIR INTAKE

An air intake with an ember separator (to prevent road dirt, burning embers, and recirculating hot air from entering the engine) will be mounted at the front of the apparatus, on the passenger side of the engine. The ember separator will be mounted in the air intake with flame retardant, roto-molded polyethylene housing. It will be easily accessible by the hinged access panel at the front of the vehicle.

EXHAUST SYSTEM

The exhaust system will include a Single Module™ aftertreatment device to meet current EPA standards. The exhaust system will be stainless steel from the turbo to the inlet of the aftertreatment device and will be 5.00" in diameter. An insulation wrap will be provided on all exhaust pipes between the turbo and aftertreatment device to minimize the heat loss to the aftertreatment device. The exhaust will terminate horizontally ahead of the right side rear wheels. A tailpipe diffuser will be provided to reduce the temperature of the exhaust as it exits. Heat deflector shields will be provided to isolate chassis and body components from the heat of the tailpipe diffuser.

EXHAUST MODIFICATION

The tail pipe will terminate as close to the rear axle as possible without creating interference.

RADIATOR

The radiator and the complete cooling system will meet or exceed NFPA and engine manufacturer cooling system standards.

For maximum corrosion resistance and cooling performance, the entire radiator core will be constructed using long life aluminum alloy. The core will be made of aluminum fins, having a serpentine design, brazed to aluminum tubes. The tubes will be brazed to aluminum headers. The radiator core will have a minimum frontal area of 1434 square inches. Supply tank made of glass-reinforced nylon and a return tank of cast aluminum alloy will be crimped on to the core assembly using header tabs and a

compression gasket to complete the radiator core assembly. The radiator will be compatible with commercial antifreeze solutions.

There will be a full steel frame around the entire radiator core assembly. The radiator core assembly will be isolated within the steel frame by rubber inserts to enhance cooling system durability and reliability. The radiator will be mounted in such a manner as to prevent the development of leaks caused by twisting or straining when the apparatus operates over uneven ground. The radiator assembly will be isolated from the chassis frame rails with rubber isolators.

The radiator assembly will include an integral deaeration tank permanently mounted to the top of the radiator framework, with a readily accessible remote-mounted overflow tank. For visual coolant level inspection, the radiator will have a built-in sight glass. The radiator will be equipped with a 15 psi pressure relief cap.

A drain port will be located at the lowest point of the cooling system and/or the bottom of the radiator to permit complete flushing of the coolant from the system.

A heavy-duty fan will draw in fresh, cool air through the radiator. Shields or baffles will be provided to prevent recirculation of hot air to the inlet side of the radiator.

COOLANT LINES

Gates® silicone hoses will be used for all engine/heater coolant lines installed by the chassis manufacturer.

The chassis manufacturer will also use Gates brand hose on other heater, defroster and auxiliary coolant circuits. There will be some areas in which an appropriate Gates product is not available. In those instances, a comparable silicone hose from another manufacturer will be used.

Hose clamps will be stainless steel "constant torque type" to prevent coolant leakage. They will react to temperature changes in the cooling system and expand or contract accordingly while maintaining a constant clamping pressure on the hose.

FUEL TANK

A 75-gallon fuel tank will be provided and mounted at the rear of the chassis. The tank will be constructed of 12-gauge, hot rolled steel. It will be equipped with swash partitions and a vent. To eliminate the effects of corrosion, the fuel tank will be mounted with stainless steel straps.

A .75" drain plug will be located in a low point of the tank for drainage.

A fill inlet will be located on the left hand side of the body and is covered with a hinged, spring loaded, stainless steel door that is marked "Ultra Low Sulfur - Diesel Fuel Only."

A .50" diameter vent will be installed from tank top to just below fuel fill inlet.

The fuel tank will meet all FHWA 393.67 requirements including a fill capacity of 95 percent of tank volume.

All fuel lines will be provided as recommended by the engine manufacturer.

DIESEL EXHAUST FLUID TANK

A 12-gallon diesel exhaust fluid (DEF) tank will be provided and mounted in the driver's side body forward compartment.

A 0.50" drain plug will be provided in a low point of the tank for drainage.

A fill inlet will be provided and marked "Diesel Exhaust Fluid Only". The fill inlet will be located in the same compartment on the driver side of the vehicle.

The tank will meet the engine manufacturers requirement for 10 percent expansion space in the event of tank freezing.

The tank will include an integrated heater unit that utilizes engine coolant to thaw the DEF in the event of freezing.

The tank will be compartment mounted on the driver's side of the body, ahead of the rear axle.

FUEL SHUTOFF

A fuel line shutoff valve will be installed on both the inlet and outlet of the primary fuel filter.

FUEL COOLER

An air to fuel cooler will be installed in the engine fuel return line.

FUEL SEPARATOR

The engine will be equipped with a Racor in-line spin-on fuel and water separator in addition to the engine fuel filters.

TRANSMISSION

An Allison 5th generation, Model EVS 4500P, electronic, torque converting, automatic transmission will be provided.

The transmission will be equipped with prognostics to monitor oil life, filter life, and transmission health. A wrench icon on the shift selector's digital display will indicate when service is due.

Two (2) PTO openings will be located on left side and top of converter housing (positions 8 o'clock and 1 o'clock).

A transmission temperature gauge with red light and buzzer will be installed on the cab instrument panel.

TRANSMISSION SHIFTER

A six (6)-speed push button shift module will be mounted to right of driver on console. Shift position indicator will be indirectly lit for after dark operation.

The transmission ratio will be: 1st - 4.70 to 1.00, 2nd - 2.21 to 1.00, 3rd - 1.53 to 1.00, 4th - 1.00 to 1.00, 5th - 0.76 to 1.00, 6th - 0.67 to 1.00, R - 5.55 to 1.00.

TRANSMISSION COOLER

A Modine plate and fin transmission oil cooler will be provided using engine coolant to control the transmission oil temperature.

DRIVELINE

Drivelines will be a heavy-duty metal tube and be equipped with Spicer® 1810 universal joints.

The shafts will be dynamically balanced before installation.

A splined slip joint will be provided in each driveshaft where the driveline design requires it. The slip joint will be coated with Glidecoat® or equivalent.

STEERING

Dual Sheppard, Model M110, steering gears, with integral heavy-duty power steering, will be provided. For reduced system temperatures, the power steering will incorporate an air to oil cooler and an Eaton, Model VN20, hydraulic pump with integral pressure and flow control. All power steering lines will have wire braded lines with crimped fittings.

A tilt and telescopic steering column will be provided to improve fit for a broader range of driver configurations.

STEERING WHEEL

The steering wheel will be 18.00" in diameter, have tilting and telescoping capabilities, and a 4-spoke design.

LOGO AND CUSTOMER DESIGNATION ON DASH

The dash panel will have an emblem containing the Pierce logo and customer name. The emblem will have three (3) rows of text for the customer's department name. There will be a maximum of eight (8) characters in the first row, 11 characters in the second row and 11 characters in the third row.

The first row of text will be: Richland

The second row of text will be: Emergency

The third row of text will be: Services

BUMPER

A one (1) piece, ten (1) gauge, 304-2B type polished stainless steel bumper, a minimum of 10.00" high, will be attached to a bolted modular extension frame constructed of 50,000 psi tensile steel "C" channel mounted directly behind it to provide adequate support strength.

The bumper will be extended 19.00" from front face of cab.

Documentation will be provided, upon request to show that the options selected have been engineered for fit-up and approval for this modular bumper extension. A chart will be provided to indicate the option locations and will include, but not be limited to the following options: air horns, mechanical sirens, speakers, hose trays (with hose capacities), winches, lights, discharge, and suction connections.

GRAVEL PAN

A gravel pan, constructed of bright aluminum treadplate, will be furnished between the bumper and cab face. The gravel pan will be properly supported from the underside to prevent flexing and vibration of the aluminum treadplate.

CENTER HOSE TRAY

A hose tray, constructed of aluminum, will be placed in the center of the bumper extension.

The tray will have a capacity of 150' of 1.75" double jacket cotton-polyester hose.

Black rubber grating will be provided at the bottom of the tray. Drain holes are also provided.

CENTER HOSE TRAY COVER

A bright aluminum treadplate cover will be provided over the center hose tray.

The cover will be "notched" allowing the hose to be pre-connected to hose connection.

The cover will be attached with a stainless steel hinge.

A D-ring latch will secure the cover in the closed position and a pneumatic stay arm will hold the cover in the open position.

LIFT AND TOW MOUNTS

Mounted to the frame extension will be lift and tow mounts. The lift and tow mounts will be designed and positioned to adapt to certain tow truck lift systems.

The lift and tow mounts with eyes will be painted the same color as the frame.

TOW HOOKS

No tow hooks are to be provided. This truck will be equipped with a lift and tow package with integral tow eyes.

CAB

The Velocity cab will be designed specifically for the fire service and will be manufactured by Pierce Manufacturing.

To provide quality at the source and single source customer support, the cab will be built by the apparatus manufacturer in a facility located on the manufacturer's premises.

For reasons of structural integrity and enhanced occupant protection, the cab will be of heavy duty design, constructed to the following minimal standards.

The cab will have 12 main vertical structural members located in the A-pillar (front cab corner posts), B-pillar (side center posts), C-pillar (rear corner posts) and rear wall areas. The A-pillar will be constructed of 0.25" heavy wall extrusions joined by a solid A356-T6 aluminum joint casting. The B-pillar and C-pillar will also be constructed from 0.25" heavy wall extrusions. The rear wall will be constructed of two (2) 4.00" x 2.00" outer aluminum extrusions and two (2) 3.00" x 2.00" inner aluminum extrusions. All main vertical structural members will run from the floor to 7.50" x 3.50" x

0.125" thick roof extrusions to provide a cage-like structure with the A-pillar and roof extrusions being welded into a 0.75" thick corner casting at each of the front corners of the roof assembly.

The front of the cab will be constructed of a 0.25" thick firewall, covered with a 0.125" front skin (for a total thickness of 0.38"), and reinforced with 24.50" wide x 10.00" deep x 0.50" thick supports on each side of the engine tunnel. The cross-cab support will be welded to the A-pillar, 0.25" firewall, and engine tunnel, on the left and right sides.

The cab floors will be constructed of 0.1875" thick aluminum plate and reinforced at the firewall with an additional 0.25" thick cross-floor support providing a total thickness of 0.44" of structural material at the front floor area. The front floor area will also be supported with three (3) 0.50" plates bolted together that also provides the mounting point for the cab lift. This tubing will run from the front of the cab to the 0.1875" thick engine tunnel, creating the structure to support the forces created when lifting the cab.

The cab will be a full-tilt style. A 3-point cab mount system with rubber isolators will improve ride quality by isolating chassis vibrations from the cab.

The crew cab will be a totally enclosed design with the interior area completely open to improve visibility and verbal communication between the occupants.

The overall height (from the cab roof to the ground) will be approximately 102.00". The overall height listed will be calculated based on a truck configuration with the lowest suspension weight ratings, the smallest diameter tires for the suspension, no water weight, no loose equipment weight, and no personnel weight. Larger tires, wheels, and suspension will increase the overall height listed.

The cab will have an interior width of not less than 93.50". The driver and passenger seating positions will have a minimum 24.00" clear width at knee level.

To reduce injuries to occupants in the seated positions, proper head clearance will be provided. The floor-to-ceiling height inside the forward cab will be no less than 60.25". The floor-to-ceiling height inside the crew cab will be no less than 52.95" in the center position and 58.75" in the outboard positions.

The crew cab will measure a minimum of 57.50" from the rear wall to the backside of the engine tunnel (knee level) for optimal occupant legroom.

INTERIOR CAB INSULATION

The cab walls, ceiling and engine tunnel will be insulated in all strategic locations to maximize acoustic absorption and thermal insulation. The cab will be insulated with 2.00" insulation in the rear wall, 3.00" insulation in the side walls, and 1.50" insulation in the ceiling.

FENDER LINERS

Full-circular, aluminum inner fender liners in the wheel wells will be provided.

PANORAMIC WINDSHIELD

A one (1)-piece, safety glass windshield with more than 2,802 square inches of clear viewing area will be provided. The windshield will be full width and will provide the occupants with a panoramic view.

The windshield will consist of three (3) layers: the outer light, the middle safety laminate, and the inner light. The 0.114" thick outer light layer will provide superior chip resistance. The middle safety laminate layer will prevent the windshield glass pieces from detaching in the event of breakage. The inner light will provide yet another chip resistant layer. The cab windshield will be bonded to the aluminum windshield frame using a urethane adhesive. A custom frit pattern will be applied on the outside perimeter of the windshield for a finished automotive appearance.

WINDSHIELD WIPERS

Three (3) electric windshield wipers with a washer, in conformance with FMVSS and SAE requirements, will be provided. The wiper blades will be 21.65" long and together will clear a minimum of 1,783 square inches of the windshield for maximum visibility in inclement weather.

The windshield washer fluid reservoir will be located at the front of the vehicle and be accessible through the access hood for simple maintenance.

FAST SERVICE ACCESS FRONT TILT HOOD

A full-width access hood will be provided for convenient access to engine coolant, steering fluid, wiper fluid, cab lift controls, headlight power modules, and ember separator. The hood will also provide complete access to the windshield wiper motor and components. The hood will be contoured to provide a sleek, automotive appearance. The hood will be constructed of two (2) fiberglass panels bonded together and will include reinforcing ribs for structural integrity. The hood will include air cylinders to hold the hood in open and closed positions, and a heavy-duty latch system that will meet FMVSS 113 (Hood Latch System). The spring-loaded hood latch will be located at the center of the hood with a double-action release lever located behind the Pierce logo. The two (2)-step release requires the lever first be pulled to the driver side until the hood releases from the first latch (primary latch) then to the passenger side to fully release the hood (secondary latch).

ENGINE TUNNEL

To provide structural strength, the engine tunnel sidewalls will be constructed of .50" aluminum plate that is welded to both the .25" firewall and .38" heavy wall extrusion under the crew cab floor. To maximize occupant space, the top edges will be tapered.

The engine tunnel will be insulated on both sides for thermal and acoustic absorption. The underside of the tunnel will be covered with 1.00" thick polyether foam that is reinforced with an aluminized face. Thermal rating for this insulation will be -40 degrees Fahrenheit to 300 degrees Fahrenheit. The insulation will keep noise (dBA) levels at or lower than the specifications in the current edition of the NFPA 1901 standards.

CAB REAR WALL EXTERIOR COVERING

The exterior surface of the rear wall of the cab will be overlaid with bright aluminum treadplate except for areas that are not typically visible when the cab is lowered.

CAB LIFT

A hydraulic cab lift system will be provided, consisting of an electric-powered hydraulic pump, fluid reservoir, dual lift cylinders, remote cab lift controls and all necessary hoses and valves. The hydraulic pump will have a backup manual override, for use in the event of an electrical failure.

The cab lift controls will be located at the driver side front of the cab, easily accessible under the full width front access hood. The controls will include a permanently mounted raise/lower switch. For enhanced visibility during cab tilt operations, a remote control tether with on/off switch will be supplied on a coiled cord that will extend from 2.00' (coiled) to 6.00' (extended).

The cab will be capable of tilting 42 degrees and 80 degrees with crane assist to accommodate engine maintenance and removal. The cab pivots will be located 46.00" apart to provide stability while tilting the cab.

The rear of the cab will be locked down by a two (2)-point, automatic, hydraulic, double hook mechanism that fully engages after the cab has been lowered (self-locking). The dual 2.25" diameter hydraulic cylinders will be equipped with a velocity fuse that protects the cab from accidentally descending when the cab is in the tilt position.

For increased safety, a redundant mechanical stay arm will be provided that must be manually put in place on the driver side between the chassis and cab frame when cab is in the raised position. This device will be manually stowed to its original position before the cab can be lowered.

Cab Lift Interlock

The cab lift safety system will be interlocked to the parking brake. The cab tilt mechanism will be active only when the parking brake is set and the ignition switch is in the on position. If the parking brake is released, the cab tilt mechanism will be disabled.

GRILLE

A bright finished aluminum mesh grille screen, inserted behind a formed bright finished grille surround, will be provided on the front center of the cab, and will serve as an air intake to the radiator.

CAB GRILLE DESIGN

An American flag design will be painted on the cab grille.

DOOR JAMB SCUFFPLATES

All cab door jambs will be furnished with a polished stainless steel scuffplate, mounted on the striker side of the jamb.

FRONT CAB TRIM

A 10.00" band of 22-gauge polished stainless steel trim will be installed across the front of the cab, from door hinge to door hinge. The trim band will be centered on the head lights and applied with two (2)-sided tape. A 0.625" self adhesive trim strip will be applied around the perimeter of the trim band.

There will be polished stainless steel corner covers provided over the painted cab corner where the cab turn signals are located.

SIDE OF CAB MOLDING

Chrome molding will be provided on both sides of cab.

MIRRORS

One (1) Ramco, Model 6000-CCHR, polished aluminum mirror will be mounted on each of the cab doors. The mirrors will be 9.25" x 13.50", with a convex section. The mirror head will have a highly polished aluminum finish.

The flat glass in each mirror will be heated and adjustable, with remote controls that are convenient to the driver.

The convex section in each mirror will be heated and adjusted manually.

A 6.00" riser will be provided between the mirror body and support arm on each side.

CAB DOORS

The forward cab and crew cab doors will be the half-height style door. To enhance entry and egress to the cab, the forward cab doors will be a minimum of 43.59" wide x 64.71" high. The crew cab doors will measure a minimum of 37.87" wide x 64.71" high.

The forward cab and crew cab doors will be constructed of extruded aluminum with a nominal material thickness of 0.125". The exterior door skins will be constructed from 0.090" aluminum.

The forward cab door windows will include a 7.50" high x 10.00" wide drop area at the front to enhance visibility.

A customized, vertical, pull-down type door handle will be provided on the exterior of each cab door. The exterior handle will be designed specifically for the fire service to prevent accidental activation, and will provide 4.00" wide x 2.00" deep hand clearance for ease of use with heavy gloved hands. Each door will also be provided with an interior flush, open style paddle handle that will be readily operable from fore and aft positions, and be designed to prevent accidental activation. The interior handles will provide 4.00" wide x 1.25" deep hand clearance for ease of use with heavy gloved hands.

The cab doors will be provided with both interior (rotary knob) and exterior (keyed) locks exceeding FMVSS standards. The keys will be Model 751. The locks will be capable of activating when the doors are open or closed. The doors will remain locked if locks are activated when the doors are opened, then closed.

A full length, heavy duty, stainless steel, piano-type hinge with a 0.38" pin and 11-gauge leaf will be provided on all cab doors. There will be double automotive-type rubber seals around the perimeter of the door framing and door edges to ensure a weather-tight fit.

A chrome grab handle will be provided on the inside of each cab and crew cab door.

The cab steps at each cab door location will be located below the cab doors and will be exposed to the exterior of the cab.

CAB DOOR PANELS

The inner cab door panels will be constructed out of brushed stainless steel. The cab door panels will be removable.

RECESSED POCKET WITH ELASTIC COVER

To provide organized storage (clutter control) in the cab for miscellaneous equipment, the cab interior will be provided with recessed storage pockets. The pockets will be 5.63" wide x 2.00" high x 4.00" deep. The pockets will be provided with a perforated elastic material cover to secure the equipment in the pocket. The pockets will be installed in all available mounting locations of the overhead console.

ELECTRIC WINDOW CONTROLS

Each cab entry door will be equipped with an electrically operated tempered glass window. A window control panel will be located on the door panel within easy reach of the respective occupant. Each switch will allow intermittent or auto down operation for ease of use. Auto down operation will be actuated by holding the window down switch for approximately 1 second. The driver control panel will contain a control switch for each cab door's window. All other door control panels will contain a single switch to operate the window within that door.

The window switches will be connected directly to the battery power. This allows the windows to be raised and lowered when the battery switch is in the off position.

DUAL STEPS

A dual step will be provided below each cab and crew cab door. The steps will be designed with a grip pattern punched into bright aluminum treadplate material providing support, slip resistance, and drainage. The steps will be a bolt-on design and provide a 24.00" wide x 7.00" deep stepping surface. The step design raises the middle step higher and closer to the cab floor, resulting in a 12.00" distance from the step to cab floor in the cab and a 13.50" distance from the step to cab floor in the crew cab. Stepping distances from the ground to first step will be 16.50" and from first step to middle step will be 12.00".

The first step will be lit by a white 12-volt DC LED light provided on the step.

CAB EXTERIOR HANDRAILS

A 1.25" diameter slip-resistant, knurled aluminum handrail will be provided adjacent to each cab and crew cab door opening to assist during cab ingress and egress.

STEP LIGHTS

For reduced overall maintenance costs compared to incandescent lighting, there will be four (4) white LED step lights provided. The lights will be installed at each cab and crew cab door, one (1) per step. The lights will be located in the driver side front doorstep, driver side crew cab doorstep, passenger side front doorstep and passenger side crew cab doorstep.

In order to ensure exceptional illumination, each light will provide a minimum of 25 foot-candles (fc) covering an entire 15.00" x 15.00" square placed 10.00" below the light and a minimum of 1.5 fc covering an entire 30.00" x 30.00" square at the same 10.00" distance below the light.

The lights will be activated when the adjacent door is opened.

FENDER CROWNS

Stainless steel fender crowns will be installed at the cab wheel openings.

CREW CAB WINDOWS

One (1) fixed window with tinted glass will be provided on each side of the cab, to the rear of the front cab door. The windows will be sized to enhance light penetration into the cab interior. The windows will measure 20.00" wide x 20.50" high.

WINDOWS INTERIOR TRIM

For improved aesthetics, the cab side windows will include a vacuum formed ABS interior trim panel.

WINDOWS, REAR

The rear wall of the crew cab will have two (2) windows, each being 11.25" wide x 18.00" high.

WINDOW INTERIOR TRIM

For improved aesthetics, the cab rear wall windows will include a vacuum formed ABS interior trim panel.

BRACKET TO MOUNT SCBA HOLDER

There will be one (1) bracket provided for mounting air bottle brackets. Each bracket will be mounted on a 45-degree angle mounting plate located in the crew cab. Each mounting bracket will be designed to hold one (1) Ziamatic SCBA holder.

The bracket will be located behind the driver seat.

MOUNTING PLATE ON ENGINE TUNNEL

Equipment installation provisions will be installed on the engine tunnel.

A 0.25" smooth aluminum plate will be bolted to the top surface of the engine tunnel. The plate will be located to the left of the officer and on the rear of the tunnel. It will follow the contour of the engine tunnel and will run the entire length of the engine tunnel. The plate will be spaced off the engine tunnel 1.00" to allow for wire routing below the plate.

The mounting surface will be painted to match the cab interior.

CAB INTERIOR

With safety as the primary objective, the wrap-around style cab instrument panel will be designed with unobstructed visibility to instrumentation. The dash layout will provide the driver with a quick reference to gauges that allows more time to focus on the road.

The center console will be a high impact ABS polymer and will be easily removable for access to the defroster. The center console will include louvers strategically located for optimal air flow and defrost capability to the windshield.

The passenger side dashboard will be constructed of painted aluminum for durability and low maintenance. For enhanced versatility, the passenger side dash will include a flat working surface.

To provide optional (service friendly) control panels, switches and storage modules, a painted aluminum overhead console will also be provided.

To complete the cab front interior design, painted aluminum modesty panels will be provided under the dash on both sides of the cab. The driver side modesty panel will provide mounting for the battery switch and diagnostic connectors, while the passenger side modesty panel provides a glove box, and ground access to the main electrical distribution panel via quick quarter turn fasteners.

To provide a deluxe automotive interior, the engine tunnel, side walls and rear wall will be covered by a leather grain vinyl that is resistant to oil, grease, and mildew.

The headliner will be installed in both forward and rear cab sections. The headliner panel will be a composition of an aluminum panel covered with a sound barrier and upholstery.

The cab structure will include designated raceways for electrical harness routing from the front of the cab to the rear upper portion of the cab. Raceways will be extruded in the forward door frame, floor, walls and overhead in the area where the walls meet the ceiling. The raceways located in the floor will be covered by aluminum extrusion, while the vertical and overhead raceways will be covered by painted aluminum covers. The raceways will improve harness integrity by providing a continuous harness path that eliminates wire chafing and abrasion associated with exposed wiring or routing through drilled metal holes. Harnesses will be laid in place.

CAB INTERIOR UPHOLSTERY

The cab interior upholstery will be dark silver gray. All cab interior materials will meet FMVSS 302 (flammability of interior materials).

CAB INTERIOR PAINT

A rich looking interior will be provided by painting all the metal surfaces inside the cab fire smoke gray, vinyl texture paint.

CAB FLOOR

The cab and crew cab floor areas will be covered with Polydamp™ acoustical floor mat consisting of a black pyramid rubber facing and closed cell foam decoupler.

The top surface of the material has a series of raised pyramid shapes evenly spaced, which offer a superior grip surface. Additionally, the material has a 0.25" thick closed cell foam (no water absorption) which offers a sound dampening material for reducing sound levels.

CAB DEFROSTER

To provide maximum defrost and heating performance, a 54,961 BTU heater-defroster unit with 558 SCFM of air flow will be provided inside the cab. The defroster unit will be strategically located under the center forward portion of the instrument panel. For easy access, a removable metal cover will be installed over the defroster unit. The defroster will include an integral aluminum frame air filter, high performance dual scroll blowers, and ducts designed to provide maximum defrosting capabilities for the 1-piece windshield. The defroster ventilation will be built into the design of the cab dash instrument panel and will be easily removable for maintenance. The defroster will be capable of clearing 98 percent of the windshield and side glass when tested under conditions where the cab has been cold soaked at 0 degrees Fahrenheit for 10 hours, and a 2 ounce per square inch layer of frost/ice has been

able to build up on the exterior windshield. The defroster system will meet or exceed SAE J382 requirements.

CAB/CREW CAB HEATER

Two (2) 36,702 BTU auxiliary heaters with 276 SCFM (each unit) of air flow will be provided inside the crew cab, one (1) in each outboard rear facing seat riser. The heaters will include high performance dual scroll blowers, one (1) for each unit. Outlets for the heaters will be located below each rear facing seat riser and below the fronts of the driver and passenger seats, for efficient airflow. An extruded aluminum plenum will be incorporated in the cab structure that will transfer heat to the forward cab seating positions.

The heater/defroster and crew cab heaters will be controlled by an integral electronic control panel. The heater control panel will allow the driver to control heat flow to the front and rear independently. The control panel will include variable adjustment for temperature and fan control and be conveniently located on the dash in clear view of the driver. The control panel will include highly visible, progressive LED indicators for both fan speed and temperature.

AIR CONDITIONING

A high-performance, customized air conditioning system will be furnished inside the cab and crew cab. A 13.10 cubic inch compressor will be installed on the engine.

A roof-mounted condenser with a 63,000 BTU output that meets and exceeds the performance specification will be installed on the cab roof. The condenser cover to be painted to match the cab roof.

The evaporator unit will be installed in the cab, located in the center of the cab ceiling over the engine tunnel. The evaporator will include two (2) high performance cores and plenums with multiple outlets, one (1) plenum directed to the front and one (1) plenum directed to the rear of the cab.

The evaporator unit will have a 49,000 BTU rating that meets and exceeds the performance specifications.

Adjustable air outlets will be strategically located on the evaporator cover per the following:

- Four (4) will be directed towards the driver's location
- Four (4) will be directed towards the officer's location
- Eight (8) will be directed towards crew cab area

The air conditioner refrigerant will be R-134A and will be installed by a certified technician.

The air conditioner will be controlled by dual zone integral electronic control panels for the heater, defroster and air conditioner. The cab control panel will be located in the center console. For ease of operation, the control panels will include variable adjustment for temperature and fan control.

INTERIOR CAB INSULATION

The cab walls, ceiling and engine tunnel will be insulated in all strategic locations to maximize acoustic absorption and thermal insulation. The cab will be insulated with 2.00" insulation in the rear wall, 3.00" insulation in the side walls, and 1.50" insulation in the ceiling. Headliners will be constructed from a

0.20" high density polyethylene corrugated material. Each headliner will be wrapped with a 0.25" thick foil faced poly damp low emissivity foam insulation barrier for acoustic and thermal control. For ease of installation and removal, all headliners will be held in place by a dual lock fastening system.

Designed for maximum sound absorption and thermal insulation, the rear cab wall will be insulated with a 1.50" thick open cell acoustical foam. The thermal protection of the foam will provide an R-value of 4 per 1.00" thickness.

SUN VISORS

Two (2) smoked Lexan™ sun visors provided. The sun visors will be located above the windshield with one (1) mounted on each side of the cab.

There will be no retention bracket provided to help secure each sun visor in the stowed position.

GRAB HANDLE

A black rubber covered grab handle will be mounted on the door post of the driver side and passenger side cab door to assist in entering the cab. The grab handle will be securely mounted to the post area between the door and windshield.

ENGINE COMPARTMENT LIGHTS

There will be one (1) Whelen, Model 3SC0CDCR, 12-volt DC, 3.00" white LED light with Whelen, Model 3FLANGEC, chrome flange kit installed under the cab to be used as engine compartment illumination.

The light will be activated automatically when the cab is raised.

ACCESS TO ENGINE DIPSTICKS

For access to the engine oil and transmission fluid dipsticks, there will be a door on the engine tunnel, inside the crew cab. The door will be on the rear wall of the engine tunnel, on the vertical surface. The door will be 17.75" wide x 12.75" high and be flush with the wall of the engine tunnel.

The engine oil dipstick will allow for checking only. The transmission dipstick will allow for both checking and filling. An additional port will be provided for filling the engine oil.

The door will have a rubber seal for thermal and acoustic insulation. One (1) flush latch will be provided on the access door.

CAB SAFETY SYSTEM

The cab will be provided with a safety system designed to protect occupants in the event of a side roll or frontal impact, and will include the following:

- A supplemental restraint system (SRS) sensor will be installed on a structural cab member behind the instrument panel. The SRS sensor will perform real time diagnostics of all critical subsystems and will record sensory inputs immediately before and during a side roll or frontal impact event.
- A slave SRS sensor will be installed in the cab to provide capacity for eight (8) crew cab seating positions.

- A fault-indicating light will be provided on the vehicle's instrument panel allowing the driver to monitor the operational status of the SRS system.
- A driver side front air bag will be mounted in the steering wheel and will be designed to protect the head and upper torso of the occupant, when used in combination with the 3-point seat belt.
- A passenger side knee bolster air bag will be mounted in the modesty panel below the dash panel and will be designed to protect the legs of the occupant, when used in combination with the 3-point seat belt.
- Air curtains will be provided in the outboard bolster of outboard seat backs to provide a cushion between occupant and the cab wall.
- Suspension seats will be provided with devices to retract them to the lowest travel position during a side roll or frontal impact event.
- Seat belts will be provided with pre-tensioners to remove slack from the seat belt during a side roll or frontal impact event.

FRONTAL IMPACT PROTECTION

The SRS system will provide protection during a frontal or oblique impact event. The system will activate when the vehicle decelerates at a predetermined G force known to cause injury to the occupants. The cab and chassis will have been subjected, via third party test facility, to a crash impact during frontal and oblique impact testing. Testing included all major chassis and cab components such as mounting straps for fuel and air tanks, suspension mounts, front suspension components, rear suspensions components, frame rail cross members, engine and transmission and their mounts, pump house and mounts, frame extensions and body mounts. The testing provided configuration specific information used to optimize the timing for firing the safety restraint system. The sensor will activate the pyrotechnic devices when the correct crash algorithm, wave form, is detected.

The SRS system will deploy the following components in the event of a frontal or oblique impact event:

- Driver side front air bag
- Passenger side knee bolster air bag
- Air curtains mounted in the outboard bolster of outboard seat backs
- Suspension seats will be retracted to the lowest travel position
- Seat belts will be pre-tensioned to firmly hold the occupant in place

SIDE ROLL PROTECTION

The SRS system will provide protection during a fast or slow 90-degree roll to the side, in which the vehicle comes to rest on its side. The system will analyze the vehicle's angle and rate of roll to determine the optimal activation of the advanced occupant restraints.

The SRS system will deploy the following components in the event of a side roll:

- Air curtains mounted in the outboard bolster of outboard seat backs
- Suspension seats will be retracted to the lowest travel position
- Seat belts will be pre-tensioned to firmly hold the occupant in place

SEATING CAPACITY

The seating capacity in the cab will be five (5).

DRIVER SEAT

A Pierce PS6® seat will be provided in the cab for the driver. The seat design will be a cam action type with air suspension. For increased convenience, the seat will include electric controls to adjust the rake (15 degrees), height (1.12" travel) and horizontal (7.75" travel) position. Electric controls will be located below the forward part of the seat cushion. To provide flexibility for multiple driver configurations, the seat will have a reclining back, adjustable from 20 degrees back to 45 degrees forward. Providing for maximum comfort, the seat back will be a high back style with manual lumbar adjustment lever, for lower back support, and will include minimum 7.50" deep side bolster pads for maximum support. The lumbar adjustment lever will be easily located at the lower outboard position of the seat cushion. For optimal comfort, the seat will be provided with 17.00" deep dual density foam cushions designed with EVC (elastomeric vibration control).

The seat will include the following features incorporated into the side roll protection system:

- Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.
- A suspension seat safety system will be included. When activated in the event of a side roll, this system will pretension the seat belt and retract the seat to its lowest travel position.

The seat will be furnished with a 3-point, shoulder type seat belt. The seat belt will be furnished with dual automatic retractors that will provide ease of operation in the normal seating position.

OFFICER SEAT

A Pierce PS6® seat will be provided in the cab for the passenger. The seat will be a cam action type with air suspension. For increased convenience, the seat will include a manual control to adjust the horizontal position (6.00" travel). The manual horizontal control will be a towel-bar style located below the forward part of the seat cushion. For optimal comfort, the seat will be provided with 17.00" deep dual density foam cushions designed with EVC (elastomeric vibration control). To ensure safe operation, the seat will be equipped with seat belt sensors in the seat cushion and belt receptacle that will activate an alarm indicating a seat is occupied but not belted.

The seat back will be an SCBA back style with 7.5 degree fixed recline angle, and will include minimum 4.50" wide x 7.50" deep side bolster pads for maximum support. The SCBA cavity will be adjustable from front to rear in 1.00" increments, to accommodate different sized SCBA cylinders. Moving the SCBA cavity will be accomplished by unbolting, relocating, and re-bolting it in the desired location.

The seat will include the following features incorporated into the side roll protection system:

- Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.
- A suspension seat safety system will be included. When activated, this system will pretension the seat belt and then retract the seat to its lowest travel position.

The seat will be furnished with a 3-point, shoulder type seat belt. The seat belt will be furnished with dual automatic retractors that will provide ease of operation in the normal seating position.

REAR FACING PASSENGER SIDE OUTBOARD SEAT

There will be one (1) rear facing, Pierce PS6® seat provided at the passenger side outboard position in the crew cab. For optimal comfort, the seat will be provided with 17.00" deep dual density foam cushions designed with EVC (elastomeric vibration control). To ensure safe operation, the seat will be equipped with seat belt sensors in the seat cushion and belt receptacle that will activate an alarm indicating a seat is occupied but not buckled. The seat back will be an SCBA back style with 7.5 degree fixed recline angle and will include minimum 4.50" wide x 7.50" deep side bolster pads for maximum support. The SCBA cavity will be adjustable from front to rear in 1.00" increments to accommodate different sized SCBA cylinders. Moving the SCBA cavity will be accomplished by unbolting, relocating, and re-bolting it in the desired location.

The seat will include the following features incorporated into the side roll protection system:

- Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.
- A seat safety system will be included. When activated, this system will pretension the seat belt and firmly hold the occupant in the event of a side roll.

The seat will be furnished with a 3-point, shoulder type seat belt. The seat belt will be furnished with dual automatic retractors that will provide ease of operation in the normal seating position.

FORWARD FACING DRIVER SIDE OUTBOARD SEAT

There will be one (1) forward facing, Pierce PS6® seat provided at the driver side outboard position in the crew cab. To provide improved ride comfort, and maximize accessibility to the crew cab, the seat will be provided with 15.00" deep foam cushions, and the seat back will be provided with 0 degree fixed recline angle. To ensure safe operation, the seat will be equipped with seat belt sensors in the seat cushion and belt receptacle, that will activate an alarm indicating a seat is occupied but not buckled.

The seat back will be an SCBA back style. The SCBA cavity will be adjustable from front to rear in 1.00" increments, to accommodate different sized SCBA cylinders. Moving the SCBA cavity will be accomplished by unbolting, relocating, and re-bolting it in the desired location.

The seat will include the following features incorporated into the side roll protection system:

- Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.
- A seat safety system will be included. When activated, this system will pretension the seat belt around the occupant to firmly hold them in place in the event of a side roll.

The seat will be furnished with a 3-point, shoulder type seat belt. The seat belt will be furnished with dual automatic retractors that will provide ease of operation in the normal seating position.

FORWARD FACING CENTER EMS COMPARTMENT

A forward-facing EMS compartment will be provided in the crew cab at the center position.

One (1) Pierce Velocity 100' Platform
Pierce Pulse DW481

The compartment will be 42.00" wide x 48.00" high x 24.00" deep with one (1) Amdor roll up door, non-locking, with white finish. The compartment will be provided with no false floor.

The compartment will be constructed of smooth aluminum and painted to match the cab interior.

Compartment Light

There will be two (2) white LED strip lights installed, one (1) each side of the compartment opening. The lights will be controlled by an automatic door switch.

FORWARD FACING PASSENGER SIDE OUTBOARD SEAT

There will be one (1) forward facing, Pierce PS6® seat provided at the passenger side outboard position in the crew cab. To provide improved ride comfort, and maximize accessibility to the crew cab, the seat will be provided with 15.00" deep foam cushions, and the seat back will be provided with 0 degree fixed recline angle. To ensure safe operation, the seat will be equipped with seat belt sensors in the seat cushion and belt receptacle, that will activate an alarm indicating a seat is occupied but not buckled.

The seat back will be an SCBA back style. The SCBA cavity will be adjustable from front to rear in 1.00" increments, to accommodate different sized SCBA cylinders. Moving the SCBA cavity will be accomplished by unbolting, relocating, and re-bolting it in the desired location.

The seat will include the following features incorporated into the side roll protection system:

- Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.
- A seat safety system will be included. When activated, this system will pretension the seat belt around the occupant to firmly hold them in place in the event of a side roll.

The seat will be furnished with a 3-point, shoulder type seat belt. The seat belt will be furnished with dual automatic retractors that will provide ease of operation in the normal seating position.

SHELVING

There will be three (3) shelves provided in the EMS compartment. Each shelf will be constructed of 0.090" aluminum with a .75" up-turned lip. Shelving will be infinitely adjustable by means of a threaded tightener sliding in a track.

The location will be forward facing EMS cabinet.

SEAT UPHOLSTERY

All seat upholstery will be black Turnout Tuff material.

AIR BOTTLE HOLDERS

All SCBA type seats in the cab will have a "Hands-Free" auto clamp style bracket in its backrest. For efficiency and convenience, the bracket will include an automatic spring clamp that allows the occupant to store the SCBA bottle by simply pushing it into the seat back. For protection of all occupants in the cab, in the event of an accident, the inertial components within the clamp will constrain the SCBA bottle in the seat and will exceed the NFPA standard of 9G.

There will be a quantity of four (4) SCBA brackets.

SEAT BELTS

All seating positions in the cab, crew cab and tiller cab (if applicable) will have red seat belts.

To provide quick, easy use for occupants wearing bunker gear, the female buckle and seat belt webbing length will meet or exceed the current edition of NFPA 1901 and CAN/ULC - S515 standards.

The 3-point shoulder type seat belts will also include the ReadyReach D-loop assembly to the shoulder belt system. The ReadyReach feature adds an extender arm to the D-loop location placing the D-loop in a closer, easier to reach location.

SHOULDER HARNESS HEIGHT ADJUSTMENT

All seating positions furnished with 3-point shoulder type seat belts will include a height adjustment. This adjustment will optimize the belts effectiveness and comfort for the seated firefighter.

A total of six (6) seating positions will have the adjustable shoulder harness.

HELMET STORAGE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 14.1.7.4.1 requires a location for helmet storage be provided.

There is no helmet storage on the apparatus as manufactured. The fire department will provide a location for storage of helmets.

CAB DOME LIGHTS

There will be four (4) dual LED dome lights with black bezels provided. Two (2) lights will be mounted above the inside shoulder of the driver and officer and two (2) lights will be installed and located, one (1) on each side of the crew cab.

The color of the LED's will be red and white.

The white LED's will be controlled by the door switches and the lens switch.

The color LED's will be controlled by the lens switch.

In order to ensure exceptional illumination, each white LED dome light will provide a minimum of 10.1 foot-candles (fc) covering an entire 20.00" x 20.00" square seating position when mounted 40.00" above the seat.

HAND HELD LIGHT

There will be four (4) Streamlight, Model UltraStinger™ lights provided. Each light will include an AC/DC charger.

The flashlights will be mounted mounted on the dog house, locations will be determined at preconstruction.

CAB INSTRUMENTATION

The cab instrument panel will consist of gauges, an LCD display, telltale indicator lights, alarms, control switches, and a diagnostic panel. The function of instrument panel controls and switches will be One (1) Pierce Velocity 100' Platform
Pierce Pulse DW481

identified by a label adjacent to each item. Actuation of the headlight switch will illuminate the labels in low light conditions. Telltale indicator lamps will not be illuminated unless necessary. The cab instruments and controls will be conveniently located within the forward cab section directly forward of the driver. Gauge and switch panels will be designed to be removable for ease of service and low cost of ownership.

GAUGES

The gauge panel will include the following ten (10) ivory gauges with chrome bezels to monitor vehicle performance:

- Voltmeter gauge (Volts)

- Low volts (11.8 VDC)

- Amber indicator on gauge assembly with alarm

- High volts (15 VDC)

- Amber indicator on gauge assembly with alarm

- Very low volts (11.3 VDC)

- Amber indicator on gauge assembly with alarm

- Very high volts (16 VDC)

- Amber indicator on gauge assembly with alarm

- Tachometer (RPM)

- Speedometer (Primary (outside) MPH, Secondary (inside) Km/H)

- Fuel level gauge (Empty - Full in fractions)

- Low fuel (1/8 full)

- Amber indicator on gauge assembly with alarm

- Very low fuel (1/32) fuel

- Amber indicator on gauge assembly with alarm

- Engine oil pressure gauge (PSI)

- Low oil pressure to activate engine warning lights and alarms

- Red indicator on gauge assembly with alarm

- Front air pressure gauge (PSI)

- Low air pressure to activate warning lights and alarm

Red indicator on gauge assembly with alarm

- Rear air pressure gauge (PSI)

Low air pressure to activate warning lights and alarm

Red indicator on gauge assembly with alarm

- Transmission oil temperature gauge (Fahrenheit)

High transmission oil temperature activates warning lights and alarm

Amber indicator on gauge assembly with alarm

- Engine coolant temperature gauge (Fahrenheit)

High engine temperature activates an engine warning light and alarm

Red indicator on gauge assembly with alarm

- Diesel Exhaust Fluid Level Gauge (Empty - Full in fractions)

Low fluid (1/8 full)

Amber indicator on gauge assembly with alarm

All gauges and gauge indicators will perform prove out at initial power-up to ensure proper performance.

INDICATOR LAMPS

To promote safety, the following telltale indicator lamps will be integral to the gauge assembly and are located above and below the center gauges. The indicator lamps will be "dead-front" design that is only visible when active. The colored indicator lights will have descriptive text or symbols.

The following amber telltale lamps will be present:

- Low coolant
- Trac cntl (traction control) (where applicable)
- Check engine
- Check trans (check transmission)
- Aux brake overheat (Auxiliary brake overheat)
- Air rest (air restriction)
- Caution (triangle symbol)
- Water in fuel

- DPF (engine diesel particulate filter regeneration)
- Trailer ABS (where applicable)
- Wait to start (where applicable)
- HET (engine high exhaust temperature) (where applicable)
- ABS (antilock brake system)
- MIL (engine emissions system malfunction indicator lamp) (where applicable)
- SRS (supplemental restraint system) fault (where applicable)
- DEF (low diesel exhaust fluid level)

The following red telltale lamps will be present:

- Warning (stop sign symbol)
- Seat belt
- Parking brake
- Stop engine
- Rack down

The following green telltale lamps will be provided:

- Left turn
- Right turn
- Battery on

The following blue telltale lamp will be provided:

- High beam

ALARMS

Audible steady tone warning alarm: A steady audible tone alarm will be provided whenever a warning message is present.

Audible pulsing tone caution alarm: A pulsing audible tone alarm (chime/chirp) will be provided whenever a caution message is present without a warning message being present.

Alarm silence: Any active audible alarm will be able to be silenced by holding the ignition switch at the top position for three (3) to five (5) seconds. For improved safety, silenced audible alarms will intermittently chirp every 30 seconds until the alarm condition no longer exists. The intermittent chirp

will act as a reminder to the operator that a caution or warning condition still exists. Any new warning or caution condition will enable the steady or pulsing tones respectively.

INDICATOR LAMP AND ALARM PROVE-OUT

Telltale indicators and alarms will perform prove-out at initial power-up to ensure proper performance.

CONTROL SWITCHES

For ease of use, the following controls will be provided immediately adjacent to the cab instrument panel within easy reach of the driver.

Emergency master switch: A molded plastic push button switch with integral indicator lamp will be provided. Pressing the switch will activate emergency response lights and siren control. A green lamp on the switch provides indication that the emergency master mode is active. Pressing the switch again disables the emergency master mode.

Headlight / Parking light switch: A three (3)-position maintained rocker switch will be provided. The first switch position will deactivate all parking lights and the headlights. The second switch position will activate the parking lights. The third switch position will activate the headlights.

Panel backlighting intensity control switch: A three (3)-position momentary rocker switch will be provided. The first switch position decreases the panel backlighting intensity to a minimum level as the switch is held. The second switch position is the default position that does not affect the backlighting intensity. The third switch position increases the panel backlighting intensity to a maximum level as the switch is held.

The following standard controls will be integral to the gauge assembly and are located below the right hand gauges. All switches have backlit labels for low light applications.

High idle engagement switch: A two (2)-position momentary rocker switch with integral indicator lamp will be provided. The first switch position is the default switch position. The second switch position will activate and deactivate the high idle function when pressed and released. The "Ok To Engage High Idle" indicator lamp must be active for the high idle function to engage. A green indicator lamp integral to the high idle engagement switch will indicate when the high idle function is engaged.

"Ok To Engage High Idle" indicator lamp: A green indicator light will be provided next to the high idle activation switch to indicate that the interlocks have been met to allow high idle engagement.

The following standard controls will be provided adjacent to the cab gauge assembly within easy reach of the driver. All switches will have backlit labels for low light applications.

Ignition switch: A three (3)-position maintained/momentary rocker switch will be provided. The first switch position will deactivate vehicle ignition. The second switch position will activate vehicle ignition. The third momentary position will disable the Command Zone audible alarm if held for three (3) to five (5) seconds. A green indicator lamp will be activated with vehicle ignition.

Engine start switch: A two (2)-position momentary rocker switch will be provided. The first switch position is the default switch position. The second switch position will activate the vehicle's engine. The switch actuator is designed to prevent accidental activation.

4-way hazard switch: A two (2)-position maintained rocker switch will be provided. The first switch position will deactivate the 4-way hazard switch function. The second switch position will activate the 4-way hazard function. The switch actuator will be red and includes the international 4-way hazard symbol.

Heater, defroster, and optional air conditioning control panel: A control panel with membrane switches will be provided to control heater/defroster temperature and heater, defroster, and air conditioning fan speeds. A green LED status bar will indicate the relative temperature and fan speed settings.

Turn signal arm: A self-canceling turn signal with high beam headlight and windshield wiper/washer controls will be provided. The windshield wiper control will have high, low, and intermittent modes.

Parking brake control: An air actuated push/pull park brake control valve will be provided.

Chassis horn control: Activation of the chassis horn control will be provided through the center of the steering wheel.

CUSTOM SWITCH PANELS

The design of cab instrumentation will allow for emergency lighting and other switches to be placed within easy reach of the operator thus improving safety. There will be positions for up to four (4) switch panels in the overhead console on the driver's side, up to four (4) switch panels in the engine tunnel console facing the driver, up to four (4) switch panels in the overhead console on the officer's side and up to two (2) switch panels in the engine tunnel console facing the officer. All switches will have backlit labels for low light applications.

DIAGNOSTIC PANEL

A diagnostic panel will be accessible while standing on the ground and located inside the driver's side door left of the steering column. The diagnostic panel will allow diagnostic tools such as computers to connect to various vehicle systems for improved troubleshooting providing a lower cost of ownership. Diagnostic switches will allow ABS systems to provide blink codes should a problem exist.

The diagnostic panel will include the following:

- Engine diagnostic port
- Transmission diagnostic port
- ABS diagnostic port
- SRS diagnostic port (where applicable)
- Command Zone USB diagnostic port
- ABS diagnostic switch (blink codes flashed on ABS telltale indicator)

- Diesel particulate filter regeneration switch (where applicable)
- Diesel particulate filter regeneration inhibit switch (where applicable)

CAB LCD DISPLAY

A digital four (4)-row by 20-character dot matrix display will be integral to the gauge panel. The display will be capable of showing simple graphical images as well as text. The display will be split into three (3) sections. Each section will have a dedicated function. The upper left section will display the outside ambient temperature.

The upper right section will display, along with other configuration specific information:

- Odometer
- Trip mileage
- PTO hours
- Fuel consumption
- Engine hours

The bottom section will display INFO, CAUTION, and WARNING messages. Text messages will automatically activate to describe the cause of an audible caution or warning alarm. The LCD will be capable of displaying multiple text messages should more than one caution or warning condition exist.

AIR RESTRICTION INDICATOR

A high air restriction warning indicator light LCD message with amber warning indicator and audible alarm will be provided.

"DO NOT MOVE APPARATUS" INDICATOR

A flashing red indicator light, located in the driving compartment, will be illuminated automatically per the current NFPA requirements. The light will be labeled "Do Not Move Apparatus If Light Is On."

The same circuit that activates the Do Not Move Apparatus indicator will activate a pulsing alarm when the parking brake is released.

DO NOT MOVE TRUCK MESSAGES

Messages will be displayed on the Command Zone™, color display located within sight of the driver whenever the Do Not Move Truck light is active. The messages will designate the item or items not in the stowed for vehicle travel position (parking brake disengaged).

The following messages will be displayed (where applicable):

- Do Not Move Truck
- DS Cab Door Open (Driver Side Cab Door Open)
- PS Cab Door Open (Passenger's Side Cab Door Open)
- DS Crew Cab Door Open (Driver Side Crew Cab Door Open)

- PS Crew Cab Door Open (Passenger's Side Crew Cab Door Open)
- DS Body Door Open (Driver Side Body Door Open)
- PS Body Door Open (Passenger's Side Body Door Open)
- Rear Body Door Open
- DS Ladder Rack Down (Driver Side Ladder Rack Down)
- PS Ladder Rack Down (Passenger Side Ladder Rack Down)
- Deck Gun Not Stowed
- Lt Tower Not Stowed (Light Tower Not Stowed)
- Fold Tank Not Stowed (Fold-A-Tank Not Stowed)
- Aerial Not Stowed (Aerial Device Not Stowed)
- Stabilizer Not Stowed
- Steps Not Stowed
- Handrail Not Stowed

Any other device that is opened, extended, or deployed that creates a hazard or is likely to cause major damage to the apparatus if the apparatus is moved will be displayed as a caution message after the parking brake is disengaged.

SWITCH PANELS

The emergency light switch panel will have a master switch for ease of use plus individual switches for selective control. Each switch panel will contain eight (8) membrane-type switches each rated for one million (1,000,000) cycles. Panels containing less than eight (8) switch assignments will include non-functioning black appliques. Documentation will be provided by the manufacturer indicating the rated cycle life of the switches. The switch panel will be located in the overhead position above the windshield on the driver side overhead to allow for easy access.

Additional switch panel will be located in the overhead position above the windshield or in designated locations on the lower instrument panel layout.

The switches will be membrane-type and also act as an integral indicator light. For quick, visual indication the entire surface of the switch will be illuminated white whenever back lighting is activated and illuminated green whenever the switch is active. An active illuminated switch will flash when interlock requirements are not met or device is actively being load managed. For ease of use, a two (2)-ply, scratch resistant laser engraved Gravoply label indicating the use of each switch will be placed in the center of the switch. The label will allow light to pass through the letters for ease of use in low light conditions.

WIPER CONTROL

For simple operation and easy reach, the windshield wiper control will be an integral part of the directional light lever located on the steering column. The wiper control will include high and low wiper speed settings, a one (1)-speed intermittent wiper control and windshield washer switch. The control will have a "return to park" provision, which allows the wipers to return to the stored position when the wipers are not in use.

HOURLMETER - AERIAL DEVICE

An hourmeter for the aerial device will be provided and located within the cab display or instrument panel.

AERIAL MASTER

There will be a master switch for the aerial operating electrical system provided.

AERIAL PTO SWITCH

A PTO switch for the aerial with indicator light will be provided.

CUSTOMER SUPPLIED RADIO WIRING

There will be two (2) 12-volt combination wiring leads of which each will include one (1) direct battery, one (1) ignition and one (1) negative for use with radio equipment.

Each lead will be 18.00" long and be provided behind the officer's seat. The leads will be clearly marked in a coil and terminate with butt splices.

A breaker rated for 30 amps will be provided for circuit protection of the direct battery lead with a minimum of 10-gauge wire.

A breaker rated for 7.5 amps will be provided for circuit protection of the ignition lead.

The wires will be colored coded as follows:

- red for direct battery
- yellow for ignition
- black for ground

SPARE CIRCUIT

There will be four (4) pair of wires, including a positive and a negative, installed on the apparatus.

The above wires will have the following features:

- The positive wire will be connected directly to the battery switched power.
- The negative wire will be connected to ground.
- Wires will be protected to 10 amps at 12 volts DC.
- Power and ground will terminate 3' of wire coiled two (2) behind the officer's seat and two (2) behind the driver's seat.
- Termination will be with heat shrinkable butt splicing.

Wires will be sized to 125% of the protection.

This circuits may be load managed when the parking brake is applied.

SPARE CIRCUIT

There will be four (4) pair of wires, including a positive and a negative, installed on the apparatus.

The above wires will have the following features:

One (1) Pierce Velocity 100' Platform
Pierce Pulse DW481

- The positive wire will be connected directly to the battery power.
- The negative wire will be connected to ground.
- Wires will be protected to 15 amps at 12 volts DC.
- Power and ground will terminate two (2) on the left side of the officer dash and two (2) in the forward-facing EMS compartment, mounted high on the back wall PS.
- Termination will be with 15 amp, power point plug with rubber cover.
- Wires will be sized to 125% of the protection.

This circuits may be load managed when the parking brake is set.

SPARE CIRCUIT

There will be two (2) pair of wires, including a positive and a negative, installed on the apparatus.

The above wires will have the following features:

- The positive wire will be connected directly to the battery power.
- The negative wire will be connected to ground.
- Wires will be protected to 10 amps at 12 volts DC.
- Power and ground will terminate left side of the officer dash.
- Termination will be with heat shrinkable butt splicing.
- Wires will be sized to 125% of the protection.

This circuits may be load managed when the parking brake is set.

SPARE CIRCUIT

There will be one (1) pair of wires, including a positive and a negative, installed on the apparatus.

The above wires will have the following features:

- The positive wire will be connected directly to the battery power.
- The negative wire will be connected to ground.
- Wires will be protected to 2.0 amps at 12 volts DC.
- Power and ground will terminate left side of the officer dash.
- Termination will be a Blue Sea Systems part number 1016 dual USB charger socket.
- Wires will be sized to 125% of the protection.

This circuits may be load managed when the parking brake is applied.

RECESS, DASH PANEL

The dash panel across from the officer will be recessed to accommodate the mounting of miscellaneous items. The recess will be 8.25" down x 7.81" back and 20.88" wide.

STEREO RADIO

A Jensen, heavy duty AM/FM/CD/Weatherband stereo radio, with front auxiliary input will be installed per switch panel layout. There will be 5.25" speakers installed one (1) pair of 5.25" speakers in the cab. The antenna will be a roof-mounted rubber antenna located in an open space, on the cab roof.

The following features will be included:

- CD Player with Electronic Skip Protection (ESP)
- Full 7-Channel NOAA Weatherband Tuner with SAME technology
- Built-in Clock
- Audio CD, CD-R, R/W, MP3 CD compatible
- Radio Broadcast Data System Text Display
- Front panel USB input
- Front and Rear Auxiliary Audio Input
- Receives audio (A2DP/AVRCP) from Bluetooth enabled device
- Supports Bluetooth HFP to receive phone calls from BT-enabled phones
- Low battery alert (<10.8Vdc)
- Heavy Duty design with Conformal Coated Circuit Boards for maximum durability under all conditions

INFORMATION CENTER

An information center employing a 7.00" diagonal touch screen color LCD display will be encased in an ABS plastic housing.

The information center will have the following specifications:

- Operate in temperatures from -40 to 185 degrees Fahrenheit
- An Optical Gel will be placed between the LCD and protective lens
- Five weather resistant user interface switches
- Grey with black accents
- Sunlight Readable
- Linux operating system
- Minimum of 1000nits rated display
- Display can be changed to an available foreign language
- A LCD display integral to the cab gauge panel will be included as outlined in the cab instrumentation area.
- Programmed to read US Customary

GENERAL SCREEN DESIGN

Where possible, background colors will be used to provide "At a Glance" vehicle information. If information provided on a screen is within acceptable limits, a green background will be used.

If a caution or warning situation arises the following will occur:

- An amber background/text color will indicate a caution condition
- A red background/text color will indicate a warning condition
- The information center will utilize an "Alert Center" to display text messages for audible alarm tones. The text messages will be written to identify the item causing the audible alarm to sound. If more than one (1) text message occurs, the messages will cycle every second until the problem have been resolved. The background color for the "Alert Center" will change to

indicate the severity of the "warning" message. If a warning and a caution condition occur simultaneously, the red background color will be shown for all alert center messages.

- A label for each button will exist. The label will indicate the function for each active button for each screen. Buttons that are not utilized on specific screens will have a button label with no text or symbol.

HOME/TRANSIT SCREEN

This screen will display the following:

- Vehicle Mitigation (if equipped)
- Water Level (if equipped)
- Foam Level (if equipped)
- Seat Belt Monitoring Screen
- Tire Pressure Monitoring (if equipped)
- Digital Speedometer
- Active Alarms

ON SCENE SCREEN

This screen will display the following and will be auto activated with pump engaged (if equipped):

- Battery Voltage
- Fuel
- Oil Pressure
- Coolant Temperature
- RPM
- Water Level (if equipped)
- Foam Level (if equipped)
- Foam Concentration (if equipped)
- Water Flow Rate (if equipped)
- Water Used (if equipped)
- Active Alarms

VIRTUAL BUTTONS

There will be four (4) virtual switch panel screens that match the overhead and lower lighting and HVAC switch panels.

PAGE SCREEN

The page screen will display the following and allow the user to progress into other screens for further functionality:

- Diagnostics
 - o Faults
 - Listed by order of occurrence
 - Allows to sort by system
 - o Interlock

- Throttle Interlocks
 - Pump Interlocks (if equipped)
 - Aerial Interlocks (if equipped)
 - PTO Interlocks (if equipped)
- o Load Manager
 - A list of items to be load managed will be provided. The list will provide a description of the load.
 - The lower the priority numbers the earlier the device will be shed should a low voltage condition occur.
 - The screen will indicate if a load has been shed (disabled) or not shed.
 - "At a glance" color features are utilized on this screen.
- o Systems
 - Command Zone
 - Module type and ID number
 - Module Version
 - Input or output number
 - Circuit number connected to that input or output
 - Status of the input or output
 - Power and Constant Current module diagnostic information
 - Foam (if equipped)
 - Pressure Controller (if equipped)
 - Generator Frequency (if equipped)
- o Live Data
 - General Truck Data
- Maintenance
 - o Engine oil and filter
 - o Transmission oil and filter
 - o Pump oil (if equipped)
 - o Foam (if equipped)
 - o Aerial (if equipped)
- Setup
 - o Clock Setup
 - o Date & Time
 - 12 or 24-hour format
 - Set time and date
 - o Backlight
 - Daytime
 - Night time
 - Sensitivity
 - o Unit Selection
 - o Home Screen
 - o Virtual Button Setup
 - o On Scene Screen Setup
 - o Configure Video Mode

- Set Video Contrast
 - Set Video Color
 - Set Video Tint
- Do Not Move
 - o The screen will indicate the approximate location and type of item that is open or is not stowed for travel. The actual status of the following devices will indicate:
 - Driver Side Cab Door
 - Passenger's Side Cab Door
 - Driver Side Crew Cab Door
 - Passenger's Side Crew Cab Door
 - Driver Side Body Doors
 - Passenger's Side Body Doors
 - Rear Body Doors
 - Ladder Rack (if applicable)
 - Deck Gun (if applicable)
 - Light Tower (if applicable)
 - Hatch Door (if applicable)
 - Stabilizers (if applicable)
 - Steps (if applicable)
- Notifications
 - o View Active Alarms
 - Shows a list of all active alarms including date and time of the occurrence is shown with each alarm
 - Silence Alarms - All alarms are silenced
- Timer Screen
- HVAC (if equipped)
- Tire Information (if equipped)
- Ascendant Set Up Confirmation (if equipped)

Button functions and button labels may change with each screen.

VEHICLE DATA RECORDER

There will be a vehicle data recorder (VDR) capable of reading and storing vehicle information provided.

The information stored on the VDR can be downloaded through a USB port mounted in a convenient location determined by cab model. A USB cable can be used to connect the VDR to a laptop to retrieve required information. The program to download the information from the VDR will be available to download on-line.

The vehicle data recorder will be capable of recording the following data via hardwired and/or CAN inputs:

- Vehicle Speed - MPH
- Acceleration - MPH/sec

- Deceleration - MPH/sec
- Engine Speed - RPM
- Engine Throttle Position - % of Full Throttle
- ABS Event - On/Off
- Seat Occupied Status - Yes/No by Position
- Seat Belt Buckled Status - Yes/No by Position
- Master Optical Warning Device Switch - On/Off
- Time - 24 Hour Time
- Date - Year/Month/Day

Seat Belt Monitoring System

A seat belt monitoring system (SBMS) will be provided on the Command Zone™ color display and in the center overhead of the cab instrument panel. The SBMS will be capable of monitoring up to 10 seating positions indicating the status of each seat position per the following:

- Seat Occupied & Buckled = Green LED indicator illuminated
- Seat Occupied & Unbuckled = Red LED indicator with audible alarm
- No Occupant & Buckled = Red LED indicator with audible alarm
- No Occupant & Unbuckled = No indicator and no alarm

The seat belt monitoring screen will become active on the Command Zone color display when:

- The home screen is active:
 - o and there is any occupant seated but not buckled or any belt buckled with an occupant.
 - o and there are no other Do Not Move Apparatus conditions present. As soon as all Do Not Move Apparatus conditions are cleared, the SBMS will be activated.

The SBMS will include an audible alarm that will warn that an unbuckled occupant condition exists and the parking brake is released, or the transmission is not in park.

INTERCOM SYSTEM

A Setcom, IM 950W4 (1) one wireless and wired intercom system will be provided with a charging drop for the driver. The officer will have a wired intercom position provided and (2) two crew cab positions located at both forward facing seats will be provided.

The following components will be supplied with this system:

- One (1) IM-950W4 intercom/radio mixer with one wireless position
- One (1) JS-900-20 Dual jump seat station
- One (1) JS-901-20 Dual jump seat station w/Exp port
- All required cables

RADIO / INTERCOM INTERFACE CABLE

The apparatus manufacturer will supply and install one (1) radio interface cable before delivery of the vehicle.

The radio equipment to be used by the customer will be:

- Kenwood, Model TK7180

REMOTE ON/OFF SWITCH FOR AM/FM RADIO

A remote, radio on/off switch will be located within easy reach of the officer. The switch power will be directly to the battery switched power.

TWO-WAY RADIO CABLE INSTALLATION

There will be one (1) customer supplied two-way radio remote head cable sent to the apparatus manufacturers preferred radio installer for installation. The cable will be run and it will be installed above the dash between location #3 and Location #4 in the overhead.

Specific shipping requirements will be followed.

GPS / MULTIMODE ANTENNA INSTALLATION

There will be one (1) customer supplied GPS / Multimode antenna with stud mount for thick roof material to be installed on the roof. The antenna coax cable will be run per the packing list / instructions provided to the third-party installer.

Specific shipping requirements will be followed. The GPS / Multimode antenna will be sent to the apparatus manufacturers preferred installer prior to cab fabrication.

VEHICLE CAMERA SYSTEM

There will be a color vehicle camera system provided with the following:

- One (1) camera located at the rear of the apparatus, pointing rearward, displayed automatically with the vehicle in reverse.
- One (1) camera located on the right side of the apparatus, pointing rearward, displayed automatically with the right side turn signal.

The camera images will be displayed on the driver's color touchscreen multiplex display. Audio from the microphone on the rear camera will not be provided.

The following components will be included:

- One (1) SV-CW134639CAI Camera
- One (1) CS134404CI Side camera
- One (1) Amplified speaker (if applicable)
- All necessary cables

GUARD, CAMERA

One (1) polished stainless steel guard will be fastened over the rear camera.

KNOX-BOX

There will be a Knox-Box® KeySecure® 3, Model 2651, with key pad access provided. The system will allow all administration functions to be performed via a USB port. It will have a blue strobe light to warn

when the master key is in an unsecured position. The box will be surface mounted and installed in the crew cab on the rear of dog house, within the cab.

ELECTRICAL POWER CONTROL SYSTEM

The primary power distribution will be located forward of the officer's seating position and be easily accessible while standing on the ground for simplified maintenance and troubleshooting. Additional electrical distribution centers will be provided throughout the vehicle to house the vehicle's electrical power, circuit protection, and control components. The electrical distribution centers will be located strategically throughout the vehicle to minimize wire length. For ease of maintenance, all electrical distribution centers will be easily accessible. All distribution centers containing fuses, circuit breakers and/or relays will be easily accessible.

Distribution centers located throughout the vehicle will contain battery powered studs for supplying customer installed equipment thus providing a lower cost of ownership.

Circuit protection devices, which conform to SAE standards, will be utilized to protect electrical circuits. All circuit protection devices will be rated per NFPA requirements to prevent wire and component damage when subjected to extreme current overload. General protection circuit breakers will be Type-I automatic reset (continuously resetting). When required, automotive type fuses will be utilized to protect electronic equipment. Control relays and solenoid will have a direct current rating of 125 percent of the maximum current for which the circuit is protected per NFPA.

SOLID-STATE CONTROL SYSTEM

A solid-state electronics based control system will be utilized to achieve advanced operation and control of the vehicle components. A fully computerized vehicle network will consist of electronic modules located near their point of use to reduce harness lengths and improve reliability. The control system will comply with SAE J1939-11 recommended practices.

The control system will operate as a master-slave system whereas the main control module instructs all other system components. The system will contain patented Mission Critical software that maintains critical vehicle operations in the unlikely event of a main controller error. The system will utilize a Real Time Operating System (RTOS) fully compliant with OSEK/VDX™ specifications providing a lower cost of ownership.

For increased reliability and simplified use the control system modules will include the following attributes:

- Green LED indicator light for module power
- Red LED indicator light for network communication stability status
- Control system self test at activation and continually throughout vehicle operation
- No moving parts due to transistor logic
- Software logic control for NFPA mandated safety interlocks and indicators
- Integrated electrical system load management without additional components
- Integrated electrical load sequencing system without additional components
- Customized control software to the vehicle's configuration

- Factory and field re programmable to accommodate changes to the vehicle's operating parameters
- Complete operating and troubleshooting manuals
- USB connection to the main control module for advanced troubleshooting

To assure long life and operation in a broad range of environmental conditions, the solid-state control system modules will meet the following specifications:

- Module circuit board will meet SAE J771 specifications
- Operating temperature from -40C to +70C
- Storage temperature from -40C to +70C
- Vibration to 50g

IP67 rated enclosure (Totally protected against dust and also protected against the effect of temporary immersion between 15 centimeters and one (1) meter)

Operating voltage from eight (8) volts to 16 volts DC

The main controller will activate status indicators and audible alarms designed to provide warning of problems before they become critical.

CIRCUIT PROTECTION AND CONTROL DIAGRAM

Copies of all job-specific, computer network input and output (I/O) connections will be provided with each chassis. The sheets will indicate the function of each module connection point, circuit protection information (where applicable), wire numbers, wire colors and load management information.

ON-BOARD ADVANCED/VISUAL ELECTRICAL SYSTEM DIAGNOSTICS

The on-board information center will include the following diagnostic information:

- Text description of active warning or caution alarms
- Simplified warning indicators
- Amber caution indication with intermittent alarm
- Red warning indication with steady tone alarm

All control system modules, with the exception of the main control module, will contain on-board visual diagnostic LEDs that assist in troubleshooting. The LEDs will be enclosed within the sealed, transparent module housing near the face of the module. One LED for each input or output will be provided and will illuminate whenever the respective input or output is active. Color-coded labels within the modules will encompass the LEDs for ease of identification. The LED indicator lights will provide point of use information for reduced troubleshooting time without the need for an additional computer.

TECH MODULE WITH WIFI

An in-cab module will provide WiFi wireless interface and data logging capability. The WiFi interface will comply with IEEE 802.11 b/g/n capabilities while communicating at 2.4 Gigahertz. The module will provide an external antenna connection allowing a line of site communication range of up to 300 feet with a roof mounted antenna.

The module will transmit a password protected web page to a WiFi enabled device (i.e. most smart phones, tablets or laptops) allowing two levels of user interaction. The firefighter level will allow vehicle monitoring of the vehicle and firefighting systems on the apparatus. The technician level will allow diagnostic access to inputs and outputs installed on the Command Zone™, control and information system.

The data logging capability will record faults from the engine, transmission, ABS and Command Zone™, control and information systems as they occur. No other data will be recorded at the time the fault occurs. The data logger will provide up to 2 Gigabytes of data storage.

A USB connection will be provided on the Tech Module. It will provide a means to download data logger information and update software in the device.

PROGNOSTICS

A software based vehicle tool will be provided to predict remaining life of the vehicles critical fluid and events.

The system will send automatic indications to the Command Zone, color display and/or wireless enabled device to proactively alert of upcoming service intervals.

Prognostics will include:

- Engine oil and filter
- Transmission oil and filter
- Pump oil (if equipped)
- Foam oil (if equipped)
- Aerial oil and filter (if equipped)

ADVANCED DIAGNOSTICS

An advanced, Windows-based, diagnostic software program will be provided for this control system. The software will provide troubleshooting tools to service technicians equipped with a Windows-based computer or wireless enabled device. Advanced diagnostics software is for the Command Zone system only.

The service and maintenance software will be easy to understand and use and have the ability to view system input/output (I/O) information.

INDICATOR LIGHT AND ALARM PROVE-OUT SYSTEM

A system will be provided which automatically tests basic indicator lights and alarms located on the cab instrument panel.

VOLTAGE MONITOR SYSTEM

A voltage monitoring system will be provided to indicate the status of the battery system connected to the vehicle's electrical load. The system will provide visual and audible warning when the system voltage is below or above optimum levels.

The alarm will activate if the system falls below 11.8 volts DC for more than two (2) minutes.

DEDICATED RADIO EQUIPMENT CONNECTION POINTS

There will be three (3) studs provided in the primary power distribution center located in front of the officer for two-way radio equipment.

- The studs will consist of the following:
- 12-volt 40-amp battery switched power
- 12-volt 60-amp ignition switched power
- 12-volt 60-amp direct battery power

There will also be a 12-volt 100-amp ground stud located in or adjacent to the power distribution center.

ENHANCED SOFTWARE

The solid-state control system will include the following software enhancements:

All perimeter lights and scene lights (where applicable) will be deactivated when the parking brake is released.

Cab and crew cab dome lights will remain on for ten (10) seconds for improved visibility after the doors close. The dome lights will dim after ten (10) seconds or immediately if the vehicle is put into gear.

Cab and crew cab perimeter lights will remain on for ten (10) seconds for improved visibility after the doors close. The dome lights will dim after ten (10) seconds or immediately if the vehicle is put into gear.

EMI/RFI PROTECTION

To prevent erroneous signals from crosstalk contamination and interference, the electrical system will meet, at a minimum, SAE J551/2, thus reducing undesired electromagnetic and radio frequency emissions. An advanced electrical system will be used to ensure radiated and conducted electromagnetic interference (EMI) or radio frequency interference (RFI) emissions are suppressed at their source.

The apparatus will have the ability to operate in the electromagnetic environment typically found in fire ground operations to ensure clean operations. The electrical system will meet, without exceptions, electromagnetic susceptibility conforming to SAE J1113/25 Region 1, Class C EMR for 10KHz-1GHz to 100 Volts/Meter. The vehicle OEM, upon request, will provide EMC testing reports from testing conducted on an entire apparatus and will certify that the vehicle meets SAE J551/2 and SAE J1113/25 Region 1, Class C EMR for 10KHz-1GHz to 100 Volts/Meter requirements.

EMI/RFI susceptibility will be controlled by applying appropriate circuit designs and shielding. The electrical system will be designed for full compatibility with low-level control signals and high-powered two-way radio communication systems. Harness and cable routing will be given careful attention to minimize the potential for conducting and radiated EMI/RFI susceptibility.

ELECTRICAL

All 12-volt electrical equipment installed by the apparatus manufacturer will conform to modern automotive practices. All wiring will be high temperature crosslink type. Wiring will be run, in loom or conduit, where exposed and have grommets where wire passes through sheet metal. Automatic reset

One (1) Pierce Velocity 100' Platform
Pierce Pulse DW481

circuit breakers will be provided which conform to SAE Standards. Wiring will be color, function and number coded. Function and number codes will be continuously imprinted on all wiring harness conductors at 2.00" intervals. Exterior exposed wire connectors will be positive locking, and environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids.

Electrical wiring and equipment will be installed utilizing the following guidelines:

1. All holes made in the roof will be caulked with silicon. Large fender washers, liberally caulked, will be used when fastening equipment to the underside of the cab roof.
2. Any electrical component that is installed in an exposed area will be mounted in a manner that will not allow moisture to accumulate in it. Exposed area will be defined as any location outside of the cab or body.
3. Electrical components designed to be removed for maintenance will not be fastened with nuts and bolts. Metal screws will be used in mounting these devices. Also a coil of wire will be provided behind the appliance to allow them to be pulled away from mounting area for inspection and service work.
4. Corrosion preventative compound will be applied to all terminal plugs located outside of the cab or body. All non-waterproof connections will require this compound in the plug to prevent corrosion and for easy separation (of the plug).
5. All lights that have their sockets in a weather exposed area will have corrosion preventative compound added to the socket terminal area.
6. All electrical terminals in exposed areas will have silicon (1890) applied completely over the metal portion of the terminal.

All lights and reflectors, required to comply with Federal Motor Vehicle Safety Standard #108, will be furnished. Rear identification lights will be recessed mounted for protection. Lights and wiring mounted in the rear bulkheads will be protected from damage by installing a false bulkhead inside the rear compartments.

An operational test will be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order.

The results of the tests will be recorded and provided to the purchaser at time of delivery.

BATTERY SYSTEM

There will be four (4) 12-volt Exide®, Model 31S950X3W, batteries that include the following features will be provided:

- 950 CCA, cold cranking amps
- 190 amp reserve capacity
- High cycle
- Group 31
- Rating of 3800 CCA at 0 degrees Fahrenheit
- 760 minutes of reserve capacity
- Threaded stainless steel studs

Each battery case will be a black polypropylene material with a vertically ribbed container for increased vibration resistance. The cover will be manifold vented with a central venting location to allow a 45-degree tilt capacity.

The inside of each battery will consist of a "maintenance free" grid construction with poly wrapped separators and a flooded epoxy bottom anchoring for maximum vibration resistance.

BATTERY SYSTEM

There will be a single starting system with an ignition switch and starter button provided and located on the cab instrument panel.

MASTER BATTERY SWITCH

There will be a master battery switch provided within the cab within easy reach of the driver to activate the battery system.

An indicator light will be provided on the instrument panel to notify the driver of the status of the battery system.

BATTERY COMPARTMENTS

The batteries will be stored in well-ventilated compartments that are located under the cab and bolted directly to the chassis frame. The battery compartments will be constructed of 3/16" steel plate and be designed to accommodate a maximum of three (3) group 31 batteries in each compartment. The compartments will include formed fit heavy-duty roto-molded polyethylene battery tray inserts with drains on each side of the frame rails. The batteries will be mounted inside of the roto-molded trays.

JUMPER STUDS

One (1) set of battery jumper studs with plastic color-coded covers will be installed on the battery box on the driver's side. This will allow enough room for easy jumper cable access.

BATTERY CHARGER

There will be an IOTA™, Model DSL 75, battery charger with IQ4, controller provided.

The battery charger will be wired to the AC shoreline inlet through an AC receptacle adjacent to this battery charger.

There will be a Kussmaul™, Model #091-94-12, remote indicator included.

The battery charger will be located in the left body compartment mounted on the left wall as high as possible.

The battery charger indicator will be displayed through the window behind the driver seat. The display will be mounted on a bracket so that it is visible from outside the apparatus in the lower corner of the window.

AUTO EJECT FOR SHORELINE

There will be one (1) Kussmaul™, Model 091-55-20-120, 20 amp 120-volt AC shoreline inlet provided to operate the dedicated 120-volt AC circuits on the apparatus.

The shoreline inlet will include red weatherproof flip up cover.

There will be a release solenoid wired to the vehicle's starter to eject the AC connector when the engine is starting.

The shoreline will be connected to the battery charger.

There will be a mating connector body supplied with the loose equipment.

There will be a label installed near the inlet that state the following:

- Line Voltage
- Current Rating (amps)
- Phase
- Frequency

The shoreline receptacle will be located on the driver side of cab, above wheel.

ALTERNATOR

A Delco Remy®, Model 55SI, alternator will be provided. It will have a rated output current of 430 amps, as measured by SAE method J56. The alternator will feature an integral regulator and rectifier system that has been tested and qualified to an ambient temperature of 257 degrees Fahrenheit (125 degrees Celsius). The alternator will be connected to the power and ground distribution system with heavy-duty cables sized to carry the full rated alternator output.

ELECTRONIC LOAD MANAGER

An electronic load management (ELM) system will be provided that monitors the vehicles 12-volt electrical system, automatically reducing the electrical load in the event of a low voltage condition, and automatically restoring the shed electrical loads when a low voltage condition expires. This ensures the integrity of the electrical system.

For improved reliability and ease of use, the load manager system will be an integral part of the vehicle's solid state control system requiring no additional components to perform load management tasks. Load management systems which require additional components will not be allowed.

The system will include the following features:

- System voltage monitoring.
- A shed load will remain inactive for a minimum of five minutes to prevent the load from cycling on and off.
- Sixteen available electronic load shedding levels.
- Priority levels can be set for individual outputs.
- High Idle to activate before any electric loads are shed and deactivate with the service brake.
 - o If enabled:
 - "Load Man Hi-Idle On" will display on the information center.
 - Hi-Idle will not activate until 30 seconds after engine start up.
- Individual switch "on" indicator to flash when the particular load has been shed.

- The information center indicates system voltage.

The information center, where applicable, includes a "Load Manager" screen indicating the following:

- Load managed items list, with priority levels and item condition.
- Individual load managed item condition:
 - o ON = not shed
 - o SHED = shed

SEQUENCER

A sequencer will be provided that automatically activates and deactivates vehicle loads in a preset sequence thereby protecting the alternator from power surges. This sequencer operation will allow a gradual increase or decrease in alternator output, rather than loading or dumping the entire 12-volt load to prolong the life of the alternator.

For improved reliability and ease of use, the load sequencing system will be an integral part of the vehicle's solid state control system requiring no additional components to perform load sequencing tasks. Load sequencing systems which require additional components will not be allowed.

Emergency light sequencing will operate in conjunction with the emergency master light switch. When the emergency master switch is activated, the emergency lights will be activated one by one at half-second intervals. Sequenced emergency light switch indicators will flash while waiting for activation.

When the emergency master switch is deactivated, the sequencer will deactivate the warning light loads in the reverse order.

Sequencing of the following items will also occur, in conjunction with the ignition switch, at half-second intervals:

- Cab Heater and Air Conditioning
- Crew Cab Heater (if applicable)
- Crew Cab Air Conditioning (if applicable)
- Exhaust Fans (if applicable)
- Third Evaporator (if applicable)

HEADLIGHTS

There will be four (4) JW Speaker®, rectangular LED lights mounted in the front quad style, chrome housing on each side of the cab grille:

- the outside light on each side will contain a part number 055***1 low beam module
- the inside light on each side will contain a part number 055***1 high beam module
- the headlight to include chrome bezels

The low beam lights will be activated when the headlight switch is on.

The high beam and low beam lights will be activated when the headlight switch and the high beam switch is activated.

DIRECTIONAL LIGHTS

There will be two (2) Whelen 600® series, LED combination directional/marker lights provided. The lights will be located on the outside cab corners, next to the headlights.

The color of the lenses will be the same color as the LED's.

INTERMEDIATE LIGHT

There will be two (2) Weldon, Model 9186-8580-29, amber LED turn signal marker lights furnished, one (1) each side, in the rear fender panel. The light will double as a turn signal and marker light.

CAB CLEARANCE/MARKER/ID LIGHTS

There will be seven (7) amber LED lights provided to indicate the presence and overall width of the vehicle in the following locations:

- Three (3) amber LED identification lights will be installed in the center of the cab above the windshield.
- Two (2) amber LED clearance lights will be installed, one (1) on each outboard side of the cab above the windshield.
- Two (2) amber LED marker lights will be installed, one (1) on each side above the cab doors.

PLATFORM CLEARANCE/MARKER/ID LIGHTS

There will be five (5) amber LED lights provided to indicate the presence and overall width of the vehicle in the following locations:

- Three (3) amber LED identification lights will be installed on the front of the aerial basket, centered.
- Two (2) amber LED clearance/marker lights will be installed, one (1) on each corner of the aerial basket visible from the side and the front of the vehicle.

REAR CLEARANCE/MARKER/ID LIGHTING

There will be three (3) LED identification lights located at the rear installed per the following:

- As close as practical to the vertical centerline
- Centers spaced not less than 6.00" or more than 12.00" apart
- Red in color
- All at the same height

There will be two (2) LED lights installed at the rear of the apparatus used as clearance lights located at the rear of the apparatus per the following:

- To indicate the overall width of the vehicle
- One (1) each side of the vertical centerline
- As near the top as practical
- Red in color
- To be visible from the rear
- All at the same height

There will be two (2) LED lights installed on the side of the apparatus used as marker lights as close to the rear as practical per the following:

- To indicate the overall length of the vehicle
- One (1) each side of the vertical centerline
- As near the top as practical
- Red in color
- To be visible from the side
- All at the same height

The lights will be mounted with no guard.

There will be two (2) red reflectors located on the rear of the truck facing to the rear. One (1) each side, as far to the outside as practical, at a minimum of 15.00", but no more than 60.00", above the ground.

There will be two (2) red reflectors located on the side of the truck facing to the side. One (1) each side, as far to the rear as practical, at a minimum of 15.00", but no more than 60.00", above the ground.

Per FMVSS 108 and CMVSS 108 requirements.

MARKER LIGHTS

There will be one (1) pair of amber and red LED marker lights with rubber arm, located at the rear most lower corner of the body. The amber lens will face the front and the red lens will face the rear of the truck.

These lights will be activated with the running lights of the vehicle.

REAR FMVSS LIGHTING

The rear stop/tail and directional LED lighting will consist of the following:

- Two (2) Whelen®, Model M6BTT, red LED stop/tail lights
- Two (2) Whelen, Model M6T, amber LED arrow turn lights

The lights will be provided with color lenses.

The lights will be mounted in a polished combination housing.

There will be two (2) Whelen Model M6BUW, LED backup lights provided in the tail light housing.

LICENSE PLATE BRACKET

There will be one (1) license plate bracket mounted on the rear of the body.

A white LED light will illuminate the license plate. A polished stainless steel light shield will be provided over the light that will direct illumination downward, preventing white light to the rear.

LIGHTING BEZEL

There will be two (2) Whelen, Model M6FCV4P, four (4) place chromed ABS housings with Pierce logos provided for the rear M6 series stop/tail, directional, back up, scene lights or warning lights.

One (1) Pierce Velocity 100' Platform
Pierce Pulse DW481

BACK-UP ALARM

A PRECO, Model 1040, solid-state electronic audible back-up alarm that actuates when the truck is shifted into reverse will be provided. The device will sound at 60 pulses per minute and automatically adjust its volume to maintain a minimum ten (10) dBA above surrounding environmental noise levels.

CAB PERIMETER SCENE LIGHTS

There will be four (4) Amdor, Model AY-LB-12HW020, 350 lumens each, 20.00" white LED strip lights provided, one (1) for each cab door.

These lights will be activated automatically when the battery switch is on and the exit doors are opened or by the same means as the body perimeter scene lights.

PUMP HOUSE PERIMETER LIGHTS

There will be one (1) Amdor, Model AY-LB-12HW012, 190 lumens each, 12.00" LED weatherproof strip lights with brackets provided under the passenger's side pump panel running boards.

The light will be activated when the battery switch is on and controlled by the same means as the body perimeter lights.

BODY PERIMETER SCENE LIGHTS

There will be two (2) Amdor, Model AY-LB-12HW020, 350 lumens, 20.00" long, with white LED's, 12-volt lights provided.

The lights will be mounted in the following locations:

- One (1) light under the driver's side turntable access steps
- One (1) light under the passenger's side turntable access steps

The perimeter scene lights will be activated when the battery switch is on and the parking brake is applied.

STEP LIGHTS

Two (2) white LED step lights will be provided, one (1) on each side of the front body.

In order to ensure exceptional illumination, each light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light.

The lights will be actuated with the pump panel light switch.

All other steps on the apparatus will be illuminated per the current edition of NFPA 1901.

DECK LIGHTS

There will be two (2) Whelen®, Model MPBW, white 12-volt DC LED floodlights with stud bail mount provided at the rear of the hose bed, one (1) each side.

The lights will be activated by a control from a switch at the rear of the truck.

HOSE BED LIGHTS

There will be white 12-volt DC LED light strips with stainless steel protective cover, provided to light the hose bed area. Hose Bed lights will meet the photometric levels listed in NFPA 1901 for Hose Bed lighting requirements.

- Light strip will be installed along the upper edge of the left side of the hose bed.
- Light strip will be installed along the upper edge of the right side of the hose bed.

The lights will be activated by a cup switch at the rear of the apparatus no more than 62.00" from the ground.

WALKING SURFACE LIGHT

There will be Model FRP, 4" round black 12-volt DC LED floodlight with bolt mount provided to illuminate the entire designated walking surface on top of the body.

The light will be activated when the body step lights are on.

WATER TANK

It will have a capacity of 300 gallons and will be constructed of polypropylene plastic in an L-shape with a notch for hose storage. The joints and seams will be nitrogen welded inside and out. The tank will be baffled in accordance with NFPA 1901 requirements. The baffles will have vent openings at both the top and bottom of each baffle to permit movement of air and water between compartments. The longitudinal partitions will be constructed of .38" polypropylene plastic and extend from the bottom of the tank through the top cover to allow positive welding. The transverse partitions extend from 4" off the bottom to the underside of the top cover. All partitions interlock and will be welded to the tank bottom and sides. The tank top will be constructed of .50" polypropylene. It will be recessed .38" and will be welded to the tank sides and the longitudinal partitions. It will be supported to keep it rigid during fast filling conditions. Construction will include 2.00" polypropylene dowels spaced no more than 30.00" apart and welded to the transverse partitions. Two of the dowels will be drilled and tapped (.50" diameter, 13.00" deep) to accommodate lifting eyes. A sump will be provided at the bottom of the water tank. The sump will include a drain plug and the tank outlet. Tank will be installed in a fabricated "cradle" assembly constructed of structural steel. Sufficient crossmembers are provided to properly support bottom of tank. Crossmembers are constructed of steel bar channel or rectangular tubing. Tank "floats" in cradle to avoid torsional stress caused by chassis frame flexing. Rubber cushions, .50" thick x 3.00" wide, will be placed on all horizontal surfaces that the tank rests on. Stops are provided to prevent an empty tank from bouncing excessively while moving vehicle. Tank mounting system is approved by the manufacturer.

Fill tower will be constructed of .50" polypropylene and will be a minimum of 8.00" wide x 14.00" long.

Fill tower will be furnished with a .25" thick polypropylene screen and a hinged cover.

An overflow pipe, constructed of 4.00" schedule 40 polypropylene, will be installed approximately halfway down the fill tower and extend through the water tank and exit to the rear of the rear axle.

HOSE BED

The hose body will be fabricated of .125"-5052 aluminum with a nominal 38,000 psi tensile strength. One (1) Pierce Velocity 100' Platform
Pierce Pulse DW481

The sides will not form any portion of the fender compartments.

The hose body width will be 68.00" inside.

The upper edges of side panels will have a double break for rigidity.

The hose bed will be located ahead of the ladder turntable.

The hose bed will be equipped with one (1) adjustable partition located in the center of the bed.

Hose removal will be via "chutes" at each side of the body under the turntable area whenever compartmentation is not selected in place of the "chute". The hose chutes will be enclosed with a full height smooth aluminum door with a spring hinge at the top of the door.

Flooring of the hose bed will be removable aluminum grating with the top surface corrugated to aid in hose aeration.

The grating slats will be 0.50" x 4.50" with spacing between slats for hose ventilation.

Hose capacity will be a minimum of 1000' of 5.00" large diameter hose.

HOSE BED HOSE RESTRAINT

A black hose bed cover will be furnished with awning rail (aluminum retainer) fasteners at the front and velcro with jacket snaps in each corner fasteners on the sides.

RUNNING BOARDS

The running boards will be fabricated of 0.125" bright aluminum treadplate and supported by structural steel angle assemblies bolted to the chassis frame rails.

Running boards will be 11.75" deep and are spaced away from the body 0.50".

A splash guard will be provided to keep road dirt or water from splashing up onto the pump panels.

The running boards will have a riser on the body to protect the painted surface from damage by stepping on the running boards.

The entire surface of the running boards will be covered with bright aluminum treadplate.

TURNTABLE STEPS

Steps to access the turntable from the driver side and passenger side will be provided just behind the compartmentation. The steps will be a swing-down design, with the stepping area made of Morton Tread-Grip® channel. The step height for the bottom step (the distance from the top surface of the step to the ground) will not exceed 24.00" with the step in its extended position. No step height (the distance between the top surfaces of any two (2) adjacent steps) will be greater than 14.00". The stepwell will be lined with bright aluminum treadplate to act as scuffplates. The steps will be connected to the "Do Not Move Truck" indicator. A handrail will be provided on each side of the access steps. A hand hold will be provided in the left and right side of each set of access steps.

STEP LIGHTS

There will be three (3) white LED step lights provided for each set of aerial turntable access steps.

In order to ensure exceptional illumination, each light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light.

The step lights will be actuated by the aerial master switch in the cab.

SMOOTH ALUMINUM REAR WALL

The rear wall will be smooth aluminum.

TOW EYES

Two (2) rear painted tow eyes will be located at the rear of the apparatus and will be mounted directly to the torque box. The inner and outer edges of the tow eyes will be radiused.

COMPARTMENTATION

Compartmentation will be fabricated of 0.125" 5052 aluminum. The side compartments are an integral assembly with the rear fenders. Fully enclosed rear wheel housings will be provided to prevent rust pockets and for ease of maintenance. Due to the severe loading requirements of this aerial, a method of compartment body support suitable for the intended load will be provided.

The backbone of the support system will be the chassis frame rail, which is the strongest component of the chassis and is designed for sustaining maximum loads.

A support system will be used which will incorporate a floating substructure by using Neoprene Elastomer isolators to allow the body to remain rigid while the chassis goes through its natural flex. The isolators will have a broad range of proven viability in vehicular applications, be of a fail-safe design, and allow for all necessary movement in three (3) transitional and rotational modes. This will result in a 500 lb equipment rating for each lower compartment of the body.

The compartmentation in front of the rear axle will include a 3.00" steel support assemblies which are bolted to the chassis frame rails. A steel framework will be mounted to the body above these support assemblies connected to the support assemblies with isolators. There will be one (1) support assembly mounted to each chassis frame rail.

The compartmentation behind the rear axle will include 3.00" steel support assemblies which are bolted to the chassis frame rails and extend underneath to the outside edge of the body. The support assembly will be coated to isolate the dissimilar metals before it is bolted to the body. There will be one (1) support assembly mounted to each chassis frame rail.

Compartment flooring will be of the sweep out design with the floor higher than the compartment door lip. The compartment door openings are framed by flanging the edges in 1.75" and bending out again 0.75" to form an angle. Drip protection is provided over all door openings by means of bright aluminum extrusion or formed bright aluminum treadplate. Side compartment tops will be covered with bright aluminum treadplate with a 1.00" rolled over edge on the front, rear and outward side. The covers are fabricated in one (1) piece and have the corners welded. A bright aluminum treadplate cover will be

provided on the front wall of each side compartment. All screws and bolts which protrude into a compartment will have acorn nuts at the ends to prevent injury.

The body design has been fully tested. Proven engineering and test techniques such as finite element analysis, model analysis, stress coating and strain gauging have been performed with special attention given to fatigue life and structural integrity of the compartment body and substructure.

AGGRESSIVE WALKING SURFACE

All exterior surfaces designated as stepping, standing, and walking areas will comply with the required average slip resistance of the current NFPA standards.

LOUVERS

All body compartments will have a minimum of one (1) set of louvers stamped into a wall to provide the proper airflow inside the compartment and to prevent water from dripping into the compartment. These louvers will be formed into the metal and not added to the compartment as a separate plate.

DRIVER SIDE COMPARTMENTATION

A full height roll-up door compartment ahead of the rear wheels will be 41.75" wide x 56.38" high x 24.25" deep inside with a clear door opening of 38.75" wide x 56.38" high.

One (1) roll-up door compartment will be located above the fender compartments and over the rear axles. The compartment will be 72.13" wide x 33.25" high x 24.25" deep inside with a clear door opening of 63.75" wide x 25.50" high.

A compartment with a single pan stainless steel door will be located above the front stabilizer. The compartment will be 24.25" wide x 15.50" high x 24.25" deep with a door opening of 18.50" wide x 12.75" high.

There will be a notch in the rear corner of the most rearward compartment over the wheels to allow for the hose chute.

A full height roll-up door compartment will be provided behind the rear wheels that is approximately 43.75" wide x 49.25" high x 21.25" deep inside the lower 29.75", and 12.00" deep in the upper portion. The clear door opening will be approximately 40.75" wide x 41.62" high.

There will be one (1) compartment below the turntable with a lift-up door. The compartment will be approximately 39.38" wide x 18.38" high x 12.00" deep, with a door opening of approximately 35.00" wide x 14.88" high.

PASSENGER SIDE COMPARTMENTATION

A full height roll-up door compartment ahead of the rear wheels will be 41.75" wide x 56.38" high x 24.25" deep inside the lower 29.75" and 12.00" deep inside the upper portion with a clear door opening of 38.75" wide x 56.38" high.

One (1) roll-up door compartment will be located above the fender compartments and over the rear axles. The compartment will be 72.13" wide x 33.25" high x 12.00" deep inside with a clear door opening of 63.75" wide x 25.50" high.

A compartment with a single pan stainless steel door will be located above the front stabilizer. The compartment will be 24.25" wide x 15.50" high x 12.00" deep with a door opening of 18.50" wide x 12.75" high.

There will be one (1) compartment located below the turntable with a lift-up door. The compartment will be 39.38" wide x 18.38" high x 12.00" deep with a door opening of 35.00" wide x 14.88" high.

A full height roll-up door compartment behind the rear wheels will be 43.75" wide x 49.25" high x 21.25" deep inside the lower 29.75" and 12.00" deep in the upper portion. The clear door opening will be 40.75" wide x 41.62" high.

SIDE COMPARTMENT ROLLUP DOORS

There will be six (6) compartment doors installed on the side compartments, double faced, aluminum construction, painted one (1) color to match the lower portion of the body and manufactured by AMDOR™ brand rollup doors.

Doors will be constructed using 1.00" extruded double wall aluminum slats which will feature a flat smooth interior surface to provide maximum protection against equipment hang-up. The slats will be connected with a structural driven ball and socket hinge designed to provide maximum curtain diaphragm strength. Mounting and adjusting the curtain will be done with a clip system that connects the curtain to the balancer drum allowing for easy tension adjustment without tools. The slats will be mounted in reusable slat shoes with positive snap-lock securement.

Each slat will incorporate weather tight recessed dual durometer seals. One (1) fin will be designed to locate the seal within the extrusion. The second will serve as a wiping seal which will also allow for compression to prevent water ingress.

The doors will be mounted in a one (1)-piece aluminum side frame with recessed side seals to minimize seal damage during equipment deployment. All seals including side frames, top gutters and bottom panel are to be manufactured utilizing non-marring materials.

Bottom panel flange of roll-up door will be equipped with two (2) cut-outs to allow for easier access with gloved hands.

A stainless steel lift bar to be provided for opening the door and located at the bottom of each door with latches on the outer extrusion of the door frame. A ledge to be supplied over lift bar for additional area to aid in closing the door. The lift bar will be located at the bottom of door with striker latches installed at the base of the side frames. Side frame mounted door strikers will include support beneath the stainless steel lift bar to prevent door curtain bounce, improve bottom seal life expectancy and to avoid false door ajar signals.

All injection molded roll-up door wear components will be constructed of Type 6 nylon.

Each roll-up door will have a 3.00-inch diameter balancer/tensioner drum to assist in lifting the door.

The header for the roll-up door assembly will not exceed 4.00".

A heavy-duty magnetic switch will be used for control of open compartment door warning lights.

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Pierce Pulse DW481

REAR BUMPER

A 5.00" rear bumper will be furnished. Bumper will be constructed of steel framework and will be covered with polished aluminum treadplate. The bumper will be 4.00" deep x 5.00" high and will be spaced away from the body approximately 1.00". It will extend the full width of the body.

SCUFFPLATE

Brushed stainless steel will be provided on the front bulkhead areas of the body. Both sides of the front bulkhead areas will have brushed stainless steel in place of aluminum treadplate.

COMPARTMENT LIGHTING

There will be nine (9) compartments with two (2) white 12-volt DC LED compartment light strips. The dual light strips will be centered vertically along each side of the door framing. There will be two (2) light strips per compartment. The dual light strips will be in all body compartments.

Any remaining compartments without light strips will have a 6.00" diameter Truck-Lite, Model: 79384 light. Each light will have a number 1076 one filament, two wire bulb.

Opening the compartment door will automatically turn the compartment lighting on.

MOUNTING TRACKS

There will be six (6) sets of tracks for mounting shelves in: D3, D1, P1, P3, D4 and P4. These tracks will be installed vertically to support the adjustable shelves, and will be full height of the compartment. The tracks will be painted to match the compartment interior.

ADJUSTABLE SHELVES

There will be five (5) shelves with a capacity of 500 lb provided.

The shelf construction will consist of .188" aluminum painted spatter gray with 2.00" sides.

Each shelf will be infinitely adjustable by means of a threaded fastener, which slides in a track.

The shelves will be held in place by .12" thick stamped plated brackets and bolts.

The locations will be in D1 in the upper third, in P1 in the upper third, in P3 in the upper third, in D4 in the upper third and in P4 in the upper third.

SLIDE-OUT/TILT-DOWN TRAY

There will be one (1) slide-out tray provided.

The bottom of each tray will be constructed of 0.188" thick aluminum painted spatter gray while special aluminum extrusions will be utilized for the tray sides, ends, and tracks. The corners will be welded to form a rigid unit.

A spring-loaded lock will be provided on each side at the front of the tray. Releasing the locks will allow the tray to slide out approximately two-thirds (2/3) of its length from the stowed position and tip 30 degrees down from horizontal. The tray will be equipped with ball bearing rollers for smooth operation.

Rubber padded stops will be provided for the tray in the extended position.

The capacity rating of the tray will be a minimum of 215 lb in the extended position.

The vertical position of the tray within the compartment will be adjustable.

The locations will be in D3 centered between the floor and ceiling.

SLIDE-OUT FLOOR MOUNTED TRAY

There will be four (4) floor mounted slide-out trays provided.

Each tray will have 2.00" high sides and a minimum capacity rating of 500 lb in the extended position.

Each tray will be constructed of aluminum painted spatter gray

There will be two undermount-roller bearing type slides rated at 250lb each provided. The pair of slides will have a safety factor rating of 2.

To ensure years of dependable service, the slides will be coated with a finish that is tested to withstand a minimum of 1,000 hours of salt spray per ASTM B117.

To ensure years of easy operation, the slides will require no more than a 50lb force for push-in or pull-out movement when fully loaded after having been subjected to a 40-hour vibration (shaker) test under full load. The vibration drive file will have been generated from accelerometer data collected from a heavy truck chassis driven over rough gravel roads in an unloaded condition. Proof of compliance will be provided upon request.

Automatic locks will be provided for both the "in" and "out" positions. The trip mechanism for the locks will be located at the front of the tray for ease of use with a gloved hand.

The locations will be D1, P1, P4 and D4.

SWING OUT TOOLBOARD

A swing out aluminum toolboard will be provided.

It will be a minimum of .188" thick with .20" diameter holes in a pegboard pattern with 1.00" centers between holes.

A 1.00" x 1.00" aluminum tube frame will be welded to the edge of the pegboard.

The board will be mounted on a pivoting device at the front of the compartment on the top and bottom to allow easy movement in and out of the compartment. The maximum tool load will be 400 pounds.

The board will have positive lock in the stowed and extended position.

The board will be mounted on adjustable tracks from front to back within the compartment.

There will be two (2) toolboards provided. The toolboards will be spatter gray painted and installed D3.

RUB RAIL

Bottom edge of the side compartments will be trimmed with a bright aluminum extruded rub rail.

Trim will be 2.12" high with 1.38" flanges turned outward for rigidity.

The rub rails will not be an integral part of the body construction, which allows replacement in the event of damage.

BODY FENDER CROWNS

Stainless steel fender crowns will be provided around the rear wheel openings.

A rubber welting will be provided between the body and the crown to seal the seam and restrict moisture from entering.

HARD SUCTION HOSE

NFPA 1901, 2016 edition, section 9.8.2 requires a minimum of 20 ft of suction hose or 15 ft of supply hose.

Hose is not on the apparatus as manufactured. The fire department will provide suction or supply hose.

Two (2) lengths of 10' long x 6.00" diameter hose will be provided and equipped with long handle couplings provided on the ends.

HANDRAILS

The handrails will be 1.25" diameter anodized aluminum extrusion, with a ribbed design, to provide a positive gripping surface.

Chrome plated end stanchions will support the handrail. Plastic gaskets will be used between end stanchions and any painted surfaces.

Drain holes will be provided in the bottom of all vertically mounted handrails.

Handrails will be provided to meet NFPA 1901 section 15.8 requirements. The handrails will be installed as noted on the sales drawing.

FOUR AIR BOTTLE STORAGE COMPARTMENTS

A total of two (2) air bottle compartments will be provided and located one (1) on the driver's side and one (1) on the passenger's side centered between the tandem rear wheels. The air bottle compartment will consist of individual bins each designed to hold an air bottle with a maximum diameter of 7.63" and a maximum depth of 26.00".

Each compartment will hold a total of four (4) air bottles. The compartment will accommodate three (3) bottles across the top and one (1) centered below. The bottom air bottle will be accessible only when the top center bottle is removed and the hinged partition over the bottom bottle is lifted up. Each bottle will be separated by a partition.

Flooring will be rubber lined and have a drain hole. A drop-down door with support cables with pair of flush lift & turn latches will be provided for each compartment. The door will be polished stainless steel. A dielectric barrier will be provided between the door hinge, hinge fasteners and the body sheet metal.

AIR BOTTLE COMPARTMENT STRAP

Straps will be provided in the air bottle compartment to help contain the air bottles. The straps will wrap around the neck of each bottle and attach to the wall of the compartment.

SINGLE AIR BOTTLE STORAGE COMPARTMENT

A quantity of two (2) air bottle compartments, 7.75" in diameter x 26.00" deep, will be provided on the passenger side forward of the rear wheels and on the passenger side rearward of the rear wheels. A polished stainless steel door with a chrome plated flush lift & turn latch will be provided to contain the air bottle. A dielectric barrier will be provided between the door hinge, hinge fasteners and the body sheet metal.

Inside the compartment, black rubber matting will be provided.

EXTENSION LADDER

There will be one (1) 35' two (2) section aluminum Duo-Safety Series 1200-A extension ladder provided.

AERIAL EXTENSION LADDER

There will be one (1) 24' two (2) section aluminum Series 900-A extension ladder provided and located in the aerial torque box.

ROOF LADDERS

There will be two (2) 16' aluminum Duo-Safety Series 875-A roof ladders provided.

ADDED ROOF LADDER

There will be one (1) 16' roof, aluminum, Series 875-A provided.

AERIAL ATTIC EXTENSION LADDER

There will be one (1) 14' Fresno aluminum Duo-Safety Series 701 attic extension ladder provided.

AERIAL FOLDING LADDER

There will be one (1) 10' aluminum Duo-Safety Series 585-A folding ladder provided and located in the aerial torque box.

GROUND LADDER STORAGE

The ground ladders are stored within the torque box and are removable from the rear.

Ladders will be enclosed to prevent road dirt and debris from fouling or damaging the ladders.

The ladders rest in full length stainless steel slides and are arranged in such a manner that any one ladder can be removed without having to move or remove any other ladder.

An AMDOR rollup door will be provided at the rear, double faced, aluminum construction, satin aluminum and manufactured by AMDOR manufacturing. The latching mechanism will consist of a full-length lift bar lock with latches on the outer extrusion of the door frame.

A stainless plate with a two-bend flange and a stainless steel hinge will be provided to secure the aerial ladder complement. The plate assembly will be mounted to the bottom of the entrance of the torque box ladder storage area.

When the plate is vertical, it will secure the ladders and prevent them from migrating to the rear of the apparatus. When the plate is down and not securing the ladders, the roll-up door can not close, which will activate the "Open Door Indicator Light" within the cab. The roll-up door together with hinge friction will secure the plate in place during driving operations.

A door guard will be provided to prevent tools inside the torque box from damaging the roll-up door.

LADDER STORAGE LIGHTING

There will be 21.00" white 12-volt DC LED strip lights in the torque box ladder storage compartment. One (1) light will be provided on each side of the ladder storage area.

The lights will be activated when the ladder storage compartment door is opened.

PIKE POLES

There will be two (2) 12' Duo Safety pike poles with fiberglass handles provided. The pike poles will be stored in tubular holders located in the ground ladder storage compartment.

8' PIKE POLE

There will be two (2) 8' Duo Safety pike poles with fiberglass handle provided. The pike poles will be stored in tubular holders located in the ground ladder storage compartment.

6' PIKE POLE

There will be two (2) 6' Duo Safety pike poles with fiberglass handle provided. The pike poles will be stored in tubular holders located in the ground ladder storage compartment.

3' PIKE POLE

There will be two (2) 3' Duo Safety pike poles with fiberglass shaft and "D" handles shipped loose.

PIKE POLE STORAGE IN TORQUE BOX/LADDER STORAGE

There will be ABS tubing provided in the torque box/ladder storage area for a total of six (6) pike poles.

If the head of a pike pole can come into contact with a painted surface, a stainless steel scuffplate will be provided.

PUMP

Pump will be a Waterous CSU, 2000 gpm single (1) stage midship mounted centrifugal type.

Pump will be the class "A" type.

Pump will deliver the percentage of rated discharge at pressures indicated below:

- 100% of rated capacity at 150 psi net pump pressure.

-70% of rated capacity at 200 psi net pump pressure.

-50% of rated capacity at 250 psi net pump pressure.

Pump body will be close-grained gray iron, bronze fitted, and horizontally split in two (2) sections for easy removal of the entire impeller shaft assembly (including wear rings).

Pump will be designed for complete servicing from the bottom of the truck, without disturbing the pump setting or apparatus piping.

Pump case halves will be bolted together on a single horizontal face to minimize a chance of leakage and facilitate ease of reassembly. No end flanges will be used.

Discharge manifold of the pump will be cast as an integral part of the pump body assembly and will provide a minimum of three (3) 3.50" openings for flexibility in providing various discharge outlets for maximum efficiency.

The three (3) 3.50" openings will be located as follows: one (1) outlet to the right of the pump, one (1) outlet to the left of the pump, and one (1) outlet directly on top of the discharge manifold.

Impeller shaft will be stainless steel, accurately ground to size. It will be supported at each end by sealed, anti-friction ball bearings for rigid precise support. Impeller will have flame plated hubs assuring maximum pump life and efficiency despite any presence of abrasive matter in the water supply.

Bearings will be protected from water and sediment by suitable stuffing boxes, flinger rings, and oil seals. No special or sleeve type bearings will be used.

PUMP PACKING

Stuffing boxes will be of the conventional two (2) piece, split-gland type, to permit adjustment or replacement of Grafoil packing without disturbing the pump. Water will be fed into stuffing box lantern rings for proper lubrication and cooling when the pump is operating.

Lantern rings will be located at the inner ends of the stuffing boxes, to avoid having to remove them when replacing pump packing.

Wear rings will be bronze and easily replaceable to restore original pump efficiency and eliminate the need to replace the entire pump casing due to wear.

PUMP TRANSMISSION

The pump transmission will be made of a three (3) piece, aluminum, horizontally split casing. Power transfer to pump will be through a high strength Morse HY-VO silent drive chain. By the use of a chain rather than gears, 50% of the sprocket will be accepting or transmitting torque, compared to two (2) or three (3) teeth doing all the work.

Drive shafts will be 2.35" diameter hardened and ground alloy steel and supported by ball bearings. The case will be designed to eliminate the need for water cooling.

PUMPING MODE

An interlock system will be provided to ensure that the pump drive system components are properly engaged so that the apparatus can be safely operated. The interlock system will be designed to allow stationary pumping only.

AIR PUMP SHIFT

Pump shift engagement will be made by a two (2) position sliding collar, actuated pneumatically (by air pressure), with a three (3) position air control switch located in the cab. A manual back-up shift control will also be located on the left side pump panel.

Two (2) indicator lights will be provided adjacent to the pump shift inside the cab. One (1) green light will indicate the pump shift has been completed and be labeled "pump engaged". The second green light will indicate when the pump has been engaged, and that the chassis transmission is in pump gear. This indicator light will be labeled "OK to pump".

Another green indicator light will be installed adjacent to the hand throttle on the pump panel and indicate either the pump is engaged and the road transmission is in pump gear, or the road transmission is in neutral and the pump is not engaged. This indicator light will be labeled "Warning: Do not open throttle unless light is on".

The pump shift will be interlocked to prevent the pump from being shifted out of gear when the chassis transmission is in gear to meet NFPA requirements.

The pump shift control in the cab will be illuminated to meet NFPA requirements.

TRANSMISSION LOCK-UP

The direct gear transmission lock-up for the fire pump operation will engage automatically when the pump shift control in the cab is activated.

AUXILIARY COOLING SYSTEM

A supplementary heat exchange cooling system will be provided to allow the use of water from the discharge side of the pump for cooling the engine water. The heat exchanger will be cylindrical type and will be a separate unit. The heat exchanger will be installed in the pump or engine compartment with the control located on the pump operator's control panel. Exchanger will be plumbed to the master drain valve.

INTAKE RELIEF VALVE - PUMP

An Elkhart Style 40 relief valve will be installed on the suction side of the pump preset at 125 psig.

The relief valve will have a working range of 75 psig to 250 psig.

The outlet will terminate below the frame rails with a 2.50" National Standard hose thread adapter and will have a "do not cap" warning tag.

The relief valve pressure control will be located behind an access door at the right side pump panel.

PRESSURE CONTROLLER

A Pierce Pump Boss Model PBA300 pressure governor will be provided.

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Pierce Pulse DW481

A pressure transducer will be installed in the water discharge manifold on the pump.

The display panel will be located at the pump operator's panel.

PRIMING PUMP

The priming pump will be a Trident Emergency Products compressed air powered, high efficiency, multistage venturi based AirPrime System, conforming to standards outlined in the current edition of NFPA 1901.

All wetted metallic parts of the priming system are to be of brass and stainless steel construction.

One (1) priming control will open the priming valve and start the pump primer.

GARDEN HOSE DIRECT TANK FILL

There will be a 0.75" direct tank fill terminating at the DS pump panel pump panel with a female garden hose swivel thread adapter and plug.

The direct tank fill will be plumbed to the water tank dome just above the height of the overflow pipe to eliminate head pressure while in use. A stainless steel elbow will be installed in the water tank dome, pointing down to prevent water from entering the over flow tube.

PUMP MANUALS

There will be a total of two (2) pump manuals provided by the pump manufacturer and furnished with the apparatus. The manuals will be provided by the pump manufacturer in the form of two (2) electronic copies. Each manual will cover pump operation, maintenance, and parts.

PLUMBING, STAINLESS STEEL AND HOSE

All inlet and outlet lines will be plumbed with either stainless steel pipe, flexible polypropylene tubing or synthetic rubber hose reinforced with hi-tensile polyester braid. All hose's will be equipped with brass or stainless steel couplings. All stainless steel hard plumbing will be a minimum of a schedule 10 wall thickness.

Where vibration or chassis flexing may damage or loosen piping or where a coupling is required for servicing, the piping will be equipped with victaulic or rubber couplings.

Plumbing manifold bodies will be ductile cast iron or stainless steel.

All piping lines are to be drained through a master drain valve or will be equipped with individual drain valves. All drain lines will be extended with a hose to drain below the chassis frame.

All water carrying gauge lines will be of flexible polypropylene tubing.

All piping, hose and fittings will have a minimum of a 500 PSI hydrodynamic pressure rating.

PLUMBING, FOAM SYSTEM

All piping that is in contact with the foam concentrate or foam/water solution will be stainless steel. The fittings will be stainless steel or brass. Cast iron pump manifolds will be allowed.

MAIN PUMP INLETS

A 6.00" pump manifold inlet will be provided on each side of the vehicle. The suction inlets will include removable die cast zinc screens that are designed to provide cathodic protection for the pump, thus reducing corrosion in the pump.

MAIN PUMP INLET CAP

The main pump inlets will have National Standard Threads with a long handle chrome cap.

The cap will be the Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.

INLET BUTTERFLY VALVE

One (1) butterfly valve will be provided on the driver's side main pump inlet.

The 6.00" inlet valve will be provided with a built-in, adjustable pressure relief valve and a 3/4" bleeder valve will be provided on the inlet side of the valve.

The valve will be electrically operated with an Elkhart U2F electric valve actuator. An Elkhart UBEC1 valve controller with LED indicator lights will be provided at the pump operator's panel.

The electric actuator will be furnished with a manual over ride, accessible from the pump panel. A wrench will be provided to manually open or close the valve.

INLET BUTTERFLY VALVE

One (1) butterfly valve will be provided on the passenger's side main pump inlet.

The 6.00" inlet valve will be provided with a built-in, adjustable pressure relief valve and a 3/4" bleeder valve will be provided on the inlet side of the valve.

The valve will be electrically operated with an Elkhart E1F electric valve actuator. An Elkhart UBEC1 valve controller with LED indicator lights will be provided at the pump operator's panel.

The electric actuator will be furnished with a manual over ride, accessible from the pump panel. A wrench will be provided to manually open or close the valve.

VALVES

All ball valves will be Akron® Brass. The Akron valves will be the 8000-series heavy-duty style with a stainless steel ball and a simple two-seat design. No lubrication or regular maintenance is required on the valve.

Valves will have a **ten (10) year** warranty.

LEFT SIDE INLET

There will be one (1) auxiliary inlet with a 2.50" valve at the left side pump panel, terminating with a 2.50" (F) National Standard hose thread adapter.

The auxiliary inlet will be provided with a strainer, chrome swivel and plug.

Inlet valve location will be outside the pump panel.

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INLET CONTROL

The side auxiliary inlet will incorporate a quarter-turn ball valve with the control located at the inlet valve. The valve operating mechanism will indicate the position of the valve.

INLET BLEEDER VALVE

A 0.75" bleeder valve will be provided for each side gated inlet. The valves will be located behind the panel with a swing style handle control extended to the outside of the panel. The handles will be chrome plated and provide a visual indication of valve position. The swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. The water discharged by the bleeders will be routed below the chassis frame rails.

TANK TO PUMP

The booster tank will be connected to the intake side of the pump with heavy duty piping and a quarter turn 3.00" full flow line valve with the control remotely located at the operator's panel. Tank to pump line will run straight (no elbows) from the pump into the front face of the water tank and angle down into the tank sump. A rubber coupling will be included in this line to prevent damage from vibration or chassis flexing.

A check valve will be provided in the tank to pump supply line to prevent the possibility of "back filling" the water tank.

TANK REFILL

A 1.50" combination tank refill and pump re-circulation line will be provided, using a quarter-turn full flow ball valve controlled from the pump operator's panel.

LEFT SIDE DISCHARGE OUTLETS

There will be two (2) discharge outlets with a 2.50" valve on the left side of the apparatus, terminating with a 2.50" (M) National Standard hose thread adapter.

RIGHT SIDE DISCHARGE OUTLETS

There will be one (1) discharge outlet with a 2.50" valve on the right side of the apparatus, terminating with a 2.50" (M) National Standard hose thread adapter.

LARGE DIAMETER DISCHARGE OUTLET

There will be a 4.00" discharge outlet with a 4.00" Akron valve installed on the right side of the apparatus, terminating with a 4.00" (M) National Standard hose thread adapter. This discharge outlet will be actuated with a handwheel control at the pump operator's control panel.

An indicator will be provided to show when the valve is in the closed position.

FRONT DISCHARGE OUTLET

There will be one (1) 1.50" discharge outlet piped to the front of the apparatus and located in the center bumper tray.

Plumbing will consist of 2.00" piping and flexible hose with a 2.00" ball valve with control at the pump operator's panel. A fabricated weldment made of stainless steel pipe will be used in the plumbing where appropriate. The piping will terminate with a 1.50" NST with 90-degree stainless steel swivel.

There will be automatic drains provided at all low points of the piping.

DISCHARGE CAPS

Chrome plated, rocker lug, caps with chains will be furnished for all side discharge outlets.

The caps will be the Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.

OUTLET BLEEDER VALVE

A 0.75" bleeder valve will be provided for each outlet 1.50" or larger. Automatic drain valves are acceptable with some outlets if deemed appropriate with the application.

The valves will be located behind the panel with a swing style handle control extended to the outside of the side pump panel. The handles will be chrome plated and provide a visual indication of valve position. The swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. Bleeders will be located at the bottom of the pump panel. They will be properly labeled identifying the discharge they are plumbed in to. The water discharged by the bleeders will be routed below the chassis frame rails.

LEFT SIDE OUTLET ELBOWS

The 2.50" discharge outlets located on the left side pump panel will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45-degree elbow.

The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.

RIGHT SIDE OUTLET ELBOWS

The 2.50" discharge outlets located on the right side pump panel will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45 degree elbow.

The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.

LARGE DIAMETER OUTLET ELBOWS

The 4.00" outlet will be furnished with one (1) 4.00" (F) National Standard hose thread x 5.00" Storz elbow adapter with Storz cap.

DISCHARGE OUTLET CONTROLS

The discharge outlets will incorporate a quarter-turn ball valve with the control located at the pump operator's panel. The valve operating mechanism will indicate the position of the valve.

If a handwheel control valve is used, the control will be a minimum of a 3.9" diameter stainless steel handwheel with a dial position indicator built in to the center of the handwheel.

AERIAL OUTLET

The aerial waterway will be plumbed from the pump to the water tower line with 5.00" pipe and a 4.00" Akron electric valve. The electric control for the waterway valve will be located at the pump operator's panel.

An indicator will be provided to show the position of the valve.

CROSSLAY HOSE BEDS

Two (2) crosslays with 1.50" outlets will be provided. Each bed to be capable of carrying 200' and will be plumbed with 2.00" i.d. pipe and gated with a 2.00" quarter turn ball valve.

Outlets to be equipped with a 1.50" National Standard hose thread 90-degree swivel located in the hose bed so that hose may be removed from either side of apparatus.

The crosslay controls will be at the pump operator's panel.

The center crosslay dividers will be a pan style, fabricated of .090 aluminum and will provide adjustment from side to side. The divider will be painted job color.

Stainless steel vertical scuffplates will be provided at hose bed ends (each side of vehicle). Bottom of hose bed ends (each side) will also be equipped with a stainless steel scuffplate.

Crosslay bed flooring will consist of removable perforated brushed aluminum.

2.50" CROSSLAY HOSE BED FRONT OF PUMP

One (1) crosslay with 2.50" outlets will be provided at the front of the pump. This bed to be capable of carrying 200' of 2.50" double jacketed hose and will be plumbed with 2.50" i.d. pipe and gated with a 2.50" quarter turn ball valve.

Outlet to be equipped with a 2.50" National Standard hose thread 90-degree swivel located in the hose bed so that hose may be removed from either side of apparatus.

The crosslay control will be at the pump operator's panel.

The center crosslay dividers will be fabricated of 0.25" aluminum and will provide adjustment from side to side. The divider will be unpainted with a brushed finish. The remainder of the crosslay bed will be painted job color.

Stainless steel vertical scuffplates will be provided at hose bed ends (each side of vehicle). Bottom of hose bed ends (each side) will also be equipped with a stainless steel scuffplate.

Crosslay bed flooring will consist of removable perforated brushed aluminum.

CROSSLAY HOSE RESTRAINT

A 2.00" black nylon webbing design restraint will be provided across the top and ends of three (3) crosslay to secure the hose during travel. The webbing assembly is to be attached at the bottom of the crosslays with footman loops with a permanent attachment and is to attach at the top outside corners with seat belt buckles. The male end of the seat buckle will be permanently attached to the footman

loop at the top of the opening. A nylon strap will be attached to the seat belt buckle for releasing the buckle on the webbing. Velcro® will be attached to the top of the crosslay opening to secure restraint during travel.

HUSKY 3 FOAM PROPORTIONER

A Pierce Husky® 3 foam proportioning system will be provided. The Husky 3 is an on demand, automatic proportioning, single point, direct injection system suitable for all types of Class A and B foam concentrates, including the high viscosity (6000 cps), alcohol resistant Class B foams. Operation will be based on direct measurement of water flow and remain consistent within the specified flows and pressures. The system will automatically proportion foam solution at rates from .1 percent to 3.0 percent regardless of variations in water pressure and flow, up to the maximum rated capacity of the foam concentrate pump.

The design of the system will allow operation from draft, hydrant, or relay operation.

SYSTEM CAPACITY

The system will have the ability to deliver the following minimum foam solution flow rates at accuracies that meet or exceed NFPA requirements at a pump rating of 150 psi.

- 100 gpm @ 3 percent
- 300 gpm @ 1 percent
- 600 gpm @ 0.5 percent

Class A foam setting in .1 percent increments from .1 percent to 1 percent. Typical settings of 1 percent, .5 percent and .3 percent (maximum capacity will be limited to the plumbing and water pump capacity).

CONTROL SYSTEM

The system will be equipped with a digital electronic control display located on the pump operators panel. Push button controls will be integrated into the panel to turn the system on/off, control the foam percentage, and to set the operation modes.

The percent of injection will have a preset. This preset can be changed at the fire department as desired. The percent of injection will be able to be easily changed at the scene to adjust to changing demands.

Three (3) .50 tall LEDs will display the foam percentage in numeric characters. Three (3) indicator LEDs will also be included, one (1) green, one (1) red, and one (1) yellow. The LEDs will indicate various system operation or error states.

The indications will be:

- Solid Green - System On
- Solid Red - Valve Position Error
- Solid Yellow - Priming System
- Flashing Green - Injecting Foam
- Flashing Red - Low Tank Level

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- Flashing Yellow - Refilling Tank

The control display will house a microprocessor, which receives input from the systems water flow meter while also monitoring the position of the foam concentrate pump. The microprocessor will compare the values of the water flow versus the position/rate of the foam pump, to ensure the proportion rate is accurate. One (1) check valve will be installed in the plumbing to prevent foam from contaminating the water pump.

HYDRAULIC DRIVE SYSTEM

The foam concentrate pump will be powered by an electric over hydraulic drive system. The hydraulic system and motor will be integrated into one (1) unit.

FOAM CONCENTRATE PUMP

The foam concentrate pump will be of positive displacement, self-priming; linear actuated design, driven by the hydraulic system. The pump will be constructed of brass body; chrome plated stainless steel shaft, with a stainless steel piston. In order to increase longevity of the pump, no aluminum will be present in its construction.

A relief system will be provided which is designed to protect the drive system components and prevent over pressuring the foam concentrate pump

The foam concentrate pump will have minimum capacity for 3 gpm with all types of foam concentrates with a viscosity at or below 6000 cps including protein, fluoroprotein, AFFF, FFFP, or AR-AFFF. The system will deliver only the amount of foam concentrate flow required, without recirculating foam back to the storage tank. Recirculating foam concentrate back to the storage tank can cause agitation and premature foaming of the concentrate, which can result in system failure. The foam concentrate pump will be self-priming and have the ability to draw foam concentrate from external supplies such as drums or pails.

EXTERNAL FOAM CONCENTRATE CONNECTION

An external foam pick-up will be provided to enable use of a foam agent that is not stored on the vehicle. The external foam pick-up will be designed to allow continued operation after the on-board foam tank is empty, or the use of foam different than the foam in the foam tank.

PANEL MOUNTED EXTERNAL PICK-UP CONNECTION / VALVE

A bronze three (3)-way valve will be provided. The unit will be mounted to the pump panel. The valve unit will function as the foam system tank to pump valve and external suction valve. The external foam pick-up will be one (1) .75" male connection GHT (garden hose thread) with a cap.

PICK-UP HOSE

A .75" flexible hose with an end for insertion into foam containers will be provided. The hose will be supplied with a .75" female swivel GHT (garden hose thread) swivel connector. The hose will be shipped loose.

DISCHARGES

The foam system will be plumbed to the center of front bumper, front crosslay, center crosslay and rear crosslay.

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Pierce Pulse DW481

SYSTEM ELECTRICAL LOAD

The maximum current draw of the electric motor and system will be no more than 55 amperes at 12 VDC.

SINGLE FOAM TANK REFILL

The foam system's proportioning pump will be used to fill the foam tank. This will allow use of the auxiliary foam pick-up to pump the foam from pails or a drum on the ground into the foam tank. A foam shut-off switch will be installed in the fill dome of the tank to shut the system down when the tank is full. The fill operation will be controlled by a mode in the foam system controller. While the proportioner pump is filling the tank, the controller will display a flashing yellow LED to indicate that the tank is filling. When the tank is full, as determined by the float switch in the tank dome, the pump will stop and the controller will shut the yellow LED off. If it attempted to use tank fill and the refill valve and suction valve are in the wrong position, then a red LED will illuminate to indicate the improper valve position. When the valves are positioned properly, then filling will commence.

FOAM SYSTEM TRAINING

The fire department will order one (1) vehicle with this foam system. A demonstration will be provided at the apparatus manufacturers facility on the operation of the foam system.

This demonstration will include:

- A review of the foam system manual emphasizing key areas
- A walk around review of the system components on the finished truck
- A hands-on foam system start-up and foam discharge session
- Instructions on the use of the manual overrides
- The proper way to shut down and flush the foam system.

FOAM TANK

The foam tank will be an integral portion of the polypropylene water tank. The cell will have a capacity of 20 gallons of foam with the intended use of Class A foam. The foam cell will reduce the capacity of the water tank. The foam cell will have a screen in the fill dome and a breather in the lid.

FOAM TANK DRAIN

The foam tank drain will be a 1.00" quarter turn drain valve located inside the pump/plumbing compartment.

PUMP COMPARTMENT

The pump compartment will be separate from the hose body and compartments so that each may flex independently of the other. The pump compartment will be constructed of the same material as the body compartmentation.

The pump compartment substructure will be a fabricated assembly of steel tubing, angles and channels which supports both the fire pump and the side running boards.

The pump compartment will be mounted on the chassis frame rails with rubber biscuits in a four point pattern to allow for chassis frame twist.

Pump compartment, pump, plumbing and gauge panels will be removable from the chassis in a single assembly.

PUMP MOUNTING

Pump will be mounted to a substructure which will be mounted to the chassis frame rail using rubber isolators. The mounting will allow chassis frame rails to flex independently without damage to the fire pump.

LEFT SIDE PUMP CONTROL PANELS

All pump controls and gauges will be located at the left (driver's) side of the apparatus and properly identified.

Layout of the pump control panel will be ergonomically efficient and systematically organized.

The pump operator's control panel will be removable in two (2) main sections for ease of maintenance:

The upper section will contain sub panels for the mounting of the pump pressure control device, engine monitoring gauges, electrical switches, and foam controls (if applicable). Sub panels will be removable from the face of the pump panel for ease of maintenance. Below the sub panels will be located all valve controls and line pressure gauges.

The lower section of the panel will contain all inlets, outlets, and drains.

All push/pull valve controls will have 1/4 turn locking control rods with polished chrome plated zinc tee handles. Guides for the push/pull control rods will be chrome plated zinc castings securely mounted to the pump panel. Push/pull valve controls will be capable of locking in any position. The control rods will pull straight out of the panel and will be equipped with universal joints to eliminate binding.

IDENTIFICATION TAGS

The identification tag for each valve control will be recessed in the face of the tee handle.

All discharge outlets will have color coded identification tags, with each discharge having its own unique color. Color coding will include the labeling of the outlet and the drain for each corresponding discharge.

All line pressure gauges will be mounted directly above the corresponding discharge control tee handles and recessed within the same chrome plated casting as the rod guide for quick identification. The gauge and rod guide casting will be removable from the face of the pump panel for ease of maintenance. The casting will be color coded to correspond with the discharge identification tag.

All remaining identification tags will be mounted on the pump panel in chrome plated bezels.

The pump panel on the right (passenger's) side will be removable with lift and turn type fasteners.

Trim rings will be installed around all inlets and outlets.

The trim rings for the side discharge outlets will be color coded and labeled to correspond with the discharge identification tag.

PUMP PANEL CONFIGURATION

The pump panel configuration will be arranged and installed in an organized manner that will provide user-friendly operation.

PUMP OPERATOR'S PLATFORM

A pull out, flip down platform will be provided at the pump operator's control panel.

The front edge and the top surface of the platform will be made of DA finished aluminum with a Morton Cass insert.

The platform will be approximately 13.75" deep when in the stowed position and approximately 22.00" deep when extended. The platform will be 35.00" wide. The platform will lock in the retracted and the extended position.

The platform will be wired to the "step not stowed" indicator in the cab.

PUMP OPERATOR'S PLATFORM PERIMETER LIGHT

There will be an On Scene Solutions, Model Night Stick Access, 20.00" white 12-volt DC LED strip light provided to illuminate the ground area.

PUMP AND GAUGE PANEL

The pump and gauge panels will be constructed of aluminum with a painted FormCoat black finish. A polished aluminum trim molding will be provided around each panel.

The passenger's side pump panel will be removable and fastened with swell type fasteners.

PUMP COMPARTMENT LIGHT

There will be one (1) Whelen®, Model 3SC0CDCR, 3.00" white 12-volt DC LED light with Whelen, Model 3FLANGEC, flange installed in the pump compartment.

There will be a switch accessible through a door on the pump panel included with this installation.

Engine monitoring graduated LED indicators will be incorporated with the pressure controller.

Also provided at the pump panel will be the following:

- Master Pump Drain Control

VACUUM AND PRESSURE GAUGES

The pump vacuum and pressure gauges will be liquid filled and manufactured by Class 1 Incorporated.

The gauges will be a minimum of 4.00" in diameter and will have white faces with black lettering, with a pressure range of 30.00"-0-600#.

Gauge construction will include a Zytel nylon case with adhesive mounting gasket and threaded retaining nut.

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Pierce Pulse DW481

The pump pressure and vacuum gauges will be installed adjacent to each other at the pump operator's control panel.

Test port connections will be provided at the pump operator's panel. One will be connected to the intake side of the pump, and the other to the discharge manifold of the pump. They will have 0.25 in. standard pipe thread connections and non-corrosive polished stainless steel or brass plugs. They will be marked with a label.

This gauge will include a 10-year warranty against leakage, pointer defect, and defective bourdon tube.

PRESSURE GAUGES

The individual "line" pressure gauges for the discharges will be Class 1© interlube filled.

They will be a minimum of 2.00" in diameter and have white faces with black lettering.

Gauge construction will include a Zytel nylon case with adhesive mounting gasket and threaded retaining nut.

Gauges will have a pressure range of 30"-0-400#.

The individual pressure gauge will be installed as close to the outlet control as practical.

This gauge will include a 10-year warranty against leakage, pointer defect, and defective bourdon tube.

DISCHARGE OUTLET PRESSURE DISPLAY

There will be one (1) discharge that have Akron© 9325 Navigator Pro electric valve controllers provided. The controller unit will be of true position feedback design, requiring no clutches in the motor or current limiting. The controller will be completely sealed with two (2) button open and close valve position capability and a full color LCD display with backlight.

In addition to valve position the following discharges will include pressure in the display waterway outlet.

WATER LEVEL GAUGE

There will be an electronic water level gauge provided on the operator's panel that registers water level by means of five (5) colored LED lights. The lights will be durable, ultra-bright five (5) LED design viewable through 180 degrees. The water level indicators will be as follows:

- 100 percent = Green
- 75 percent = Yellow
- 50 percent = Yellow
- 25 percent = Yellow
- Refill = Red

The light will flash when the level drops below the given level indicator to provide an eighth of a tank indication. To further alert the pump operator, the lights will flash sequentially when the water tank is empty.

The level measurement will be based on the sensing of head pressure of the fluid in the tank.

The display will be constructed of a solid plastic material with a chrome plated die cast bezel to reduce vibrations that can cause broken wires and loose electronic components. The encapsulated design will provide complete protection from water and environmental elements. An industrial pressure transducer will be mounted to the outside of the tank. The field calibratable display measures head pressure to accurately show the tank level.

WATER LEVEL GAUGE

There will be two (2) additional water level indicator, Whelen®, Model PSTANK, LED module installed one (1) single light high and aft of the passenger side crew cab door and one (1) single light high and aft of the driver's side crew cab door.

This light module will include four (4) colored levels, and function similar to the water level indicator located at the operator's panel:

- First green module indicates a full water level
- Second blue module indicates a water level above 3/4 full
- Third amber module indicates a water level above 1/2 full
- Last red module indicates a water level above 1/4 full and empty
 - o Above 1/4 this light will be steady burning
 - o At empty this light will be flashing

This module will be activated when the parking brake is applied.

FOAM LEVEL GAUGE

An electronic foam level gauge will be provided on the operator's panel that registers foam level by means of five (5) colored LED lights. The lights will be durable, ultra-bright five (5) LED design viewable through 180 degrees. The foam level indicators will be as follows:

- 100 percent = Green
- 75 percent = Yellow
- 50 percent = Yellow
- 25 percent = Yellow
- Refill = Red

The light will flash when the level drops below the given level indicator to provide an eighth of a tank indication. To further alert the pump operator, the lights will flash sequentially when the foam tank is empty.

The level measurement will be based on the sensing of head pressure of the fluid in the tank.

The display will be constructed of a solid plastic material with a chrome plated die cast bezel to reduce vibrations that can cause broken wires and loose electronic components. The encapsulated design will provide complete protection from foam and environmental elements. An industrial pressure transducer will be mounted to the outside of the tank. The display will be able to be calibrated in the field and will measure head pressure to accurately show the tank level.

One (1) Pierce Velocity 100' Platform
Pierce Pulse DW481

LIGHT SHIELD

There will be a polished, 16-gauge stainless steel light shield installed over the pump operator's panel.

- There will be 12-volt DC white LED lights installed under the stainless steel light shield to illuminate the controls, switches, essential instructions, gauges, and instruments necessary for the operation of the apparatus. These lights will be activated by the pump panel light switch. Additional lights will be included every 18.00" depending on the size of the pump house.
- One (1) pump panel light will come on when the pump is in ok to pump mode.

There will be a light activated above the pump panel light switch when the parking brake is set. This is to afford the operator some illumination when first approaching the control panel.

There will be a green pump engaged indicator light activated on at the operator's panel when the pump is shifted into gear from inside the cab.

AIR HORN SYSTEM

There will be two (2) Grover air horns recessed in the front bumper. The horn system will be piped to the air brake system wet tank utilizing 0.38" tubing. A pressure protection valve will be installed in-line to prevent loss of air in the air brake system.

Air Horn Location

The air horns will be located on each side of the bumper, towards the outside.

AIR HORN CONTROL

The air horns will be actuated by two (2) cab switches, one (1) located on the officer's side on the dog house with in easy reach of the officer and one (1) switch on the driver's side with in easy reach of the driver.

ELECTRONIC SIREN

A Whelen®, Model 295SLSA1, electronic siren with noise canceling microphone will be provided.

This siren to be active when the battery switch is on and that emergency master switch is on.

Electronic siren head will be recessed in the driver side inside switch panel.

SIREN CONTROL

The electronic siren will be controllable on the siren head and horn ring only. No foot switches will be required.

The driver will have the option to control the siren or the chassis horns from the horn button by means of a selector switch located on the instrument panel.

SPEAKER

There will be one (1) Whelen®, Model SA315P, black nylon composite, 100-watt, speaker with through bumper mounting brackets and polished stainless steel grille provided. The speaker will be connected to the siren amplifier.

The speaker will be recessed in the center of the front bumper.

One (1) Pierce Velocity 100' Platform
Pierce Pulse DW481

AUXILIARY MECHANICAL SIREN

A Federal Q2B® siren will be furnished. A siren brake button will be installed on the switch panel.

The control solenoid will be powered up after the emergency master switch is activated.

The mechanical siren will be mounted on the bumper deck plate. It will be mounted on the left side. A reinforcement plate will be furnished to support the siren.

The mechanical siren will be actuated by two (2) switches, one (1) located on the officer's side and one (1) on the driver's side located with easy reach of the driver.

FRONT ZONE UPPER WARNING LIGHTS

There will be two (2) 21.50" Whelen Freedom IV LED lightbars mounted on the cab roof, one (1) on each side, above the driver's and passenger's door, facing forward.

The driver's side lightbar will include the following:

- One (1) red flashing LED module in the outside end position.
- One (1) red flashing LED module in the outside front corner position.
- One (1) red flashing LED module in the outside front position.
- One (1) red flashing LED module in the inside front position.
- One (1) red flashing LED module in the inside front corner position.

The passenger's side lightbar will include the following:

- One (1) red flashing LED module in the inside front corner position.
- One (1) red flashing LED module in the inside front position.
- One (1) red flashing LED module in the outside front position.
- One (1) red flashing LED module in the outside front corner position.
- One (1) red flashing LED module in the outside end position.

There will be clear lenses included on the lightbar.

There will be a switch in the cab on the switch panel to control the lightbars.

FRONT ZONE UPPER LIGHTING, PLATFORM

Three (3) Whelen, Model: 50R03ZRR red flashing Super LED lights will be located at the front of the platform basket.

These lights are required to meet the front upper level optical warning and optical power requirements of NFPA.

The lights will be controlled by the same switch as the lightbars.

These lights will be deactivated when the boom is lifted out of the cradle.

TRAFFIC LIGHT CONTROLLER

There will be a GTT, Model 792* strobe Opticom traffic light controller with national standard high priority remote mounted on the front edge of the cab on cab roof.

The Opticom traffic light controller will be activated by a cab switch with emergency master control.

The Opticom traffic light controller will have no momentary activation switch.

The Opticom traffic light controller will be disabled when the parking brake is applied.

CAB FACE WARNING LIGHTS

There will be four (4) Whelen®, Model M6*C, LED flashing warning lights installed on the cab face, above the headlights, mounted in a common bezel.

- The driver's side front outside warning light to be red
- The driver's side front inside warning light to be red
- The passenger's side front inside warning light to be red
- The passenger's side front outside warning light to be red

All four (4) lights will include a clear lens.

There will be a switch located in the cab, on the switch panel, to control the four (4) lights.

The inside lights may be load managed if colored or disabled if white, when the parking brake is set.

HEADLIGHT FLASHER

The high beam headlights will flash alternately between the left and right side.

There will be a switch installed in the cab on the switch panel to control the high beam flash. This switch will be live when the battery switch and the emergency master switches are on.

The flashing will automatically cancel when the hi-beam headlight switch is activated or when the parking brake is set.

SIDE ZONE LOWER LIGHTING

There will be four (4) Whelen®, Model M6*C, flashing LED warning lights with chrome trim installed per the following:

- Two (2) lights, one (1) each side on the bumper extension. The side front lights to be red.
- Two (2) lights, one (1) each side above rear wheels. The side rear lights to be red.
- The lights will include clear lense.

There will be a switch in the cab on the switch panel to control the lights.

REAR ZONE LOWER LIGHTING

There will be two (2) Whelen®, Model M6*C, LED flashing warning lights located at the rear of the apparatus.

- The driver's side rear light to be red

- The passenger's side rear light to be red

Both lights will include a lens that is clear.

There will be a switch located in the cab on the switch panel to control the lights.

REAR/SIDE ZONE UPPER WARNING LIGHTS

There will be two (2) Whelen®, Model L31H*FN, LED warning beacons provided at the rear of the truck, located one (1) each side. There will be a switch located in the cab on the switch panel to control the beacons.

The color of the lights will be red LEDs with both domes clear.

ELECTRICAL SYSTEM GENERAL DESIGN FOR ALTERNATING CURRENT

The following guidelines will apply to the 120/240 VAC system installation:

General

Any fixed line voltage power source producing alternating current (ac) line voltage will produce electric power at 60 cycles plus or minus 3 cycles.

Except where superseded by the requirements of NFPA 1901, all components, equipment and installation procedures will conform to NFPA 70, National Electrical Code (herein referred to as the NEC).

Line voltage electrical system equipment and materials included on the apparatus will be listed and installed in accordance with the manufacturer's instructions. All products will be used only in the manner for which they have been listed.

Grounding

Grounding will be in accordance with Section 250-6 "Portable and Vehicle Mounted Generators" of the NEC. Ungrounded systems will not be used. Only stranded or braided copper conductors will be used for grounding and bonding.

An equipment grounding means will be provided in accordance with Section 250-91 (Grounding Conductor Material) of the NEC.

The grounded current carrying conductor (neutral) will be insulated from the equipment grounding conductors and from the equipment enclosures and other grounded parts. The neutral conductor will be colored white or gray in accordance with Section 200-6 (Means of Identifying Grounding Conductors) of the NEC.

In addition to the bonding required for the low voltage return current, each body and driving or crew compartment enclosure will be bonded to the vehicle frame by a copper conductor. This conductor will have a minimum amperage rating of 115 percent of the nameplate current rating of the power source specification label as defined in Section 310-15 (amp capacities) of the NEC. A single conductor properly sized to meet the low voltage and line voltage requirements will be permitted to be used.

All power source system mechanical and electrical components will be sized to support the continuous duty nameplate rating of the power source.

Operation

Instructions that provide the operator with the essential power source operating instructions, including the power-up and power-down sequence, will be permanently attached to the apparatus at any point where such operations can take place.

Provisions will be made for quickly and easily placing the power source into operation. The control will be marked to indicate when it is correctly positioned for power source operation. Any control device used in the drive train will be equipped with a means to prevent the unintentional movement of the control device from its set position.

A power source specification label will be permanently attached to the apparatus near the operator's control station. The label will provide the operator with the following information:

- Rated voltage and type (ac or dc)
- Phase
- Rated frequency
- Rated amperage
- Continuous rated watts
- Power source engine speed

Direct drive (PTO) and portable generator installations will comply with Article 445 (Generators) of the NEC.

Overcurrent protection

The conductors used in the power supply assembly between the output terminals of the power source and the main over current protection device will not exceed 144.00" (3658 mm) in length.

For fixed power supplies, all conductors in the power supply assembly will be type THHW, THW, or use stranded conductors enclosed in nonmetallic liquid tight flexible conduit rated for a minimum of 194 degree Fahrenheit (90 degrees Celsius).

For portable power supplies, conductors located between the power source and the line side of the main overcurrent protection device will be type SO or type SEO with suffix WA flexible cord rated for 600-volts at 194 degrees Fahrenheit (90 degrees Celsius).

Wiring Methods

Fixed wiring systems will be limited to the following:

- Metallic or nonmetallic liquid tight flexible conduit rated at not less than 194 degrees Fahrenheit (90 degrees Celsius)
or
- Type SO or Type SEO cord with a WA suffix, rated at 600 volts at not less than 194 degrees Fahrenheit (90 degrees Celsius)

Electrical cord or conduit will not be attached to chassis suspension components, water or fuel lines, air or air brake lines, fire pump piping, hydraulic lines, exhaust system components, or low voltage wiring. In addition, the wiring will be run as follows.

- Separated by a minimum of 12.00" (305 mm), or properly shielded, from exhaust piping
- Separated from fuel lines by a minimum of 6.00" (152 mm) distance

Electrical cord or conduit will be supported within 6.00" (152 mm) of any junction box and at a minimum of every 24.00" (610 mm) of continuous run. Supports will be made of nonmetallic materials or corrosion protected metal. All supports will be of a design that does not cut or abrade the conduit or cable and will be mechanically fastened to the vehicle.

Wiring Identification

All line voltage conductors located in the main panel board will be individually and permanently identified. The identification will reference the wiring schematic or indicate the final termination point. When prewiring for future power sources or devices, the unterminated ends will be labeled showing function and wire size.

Wet Locations

All wet location receptacle outlets and inlet devices, including those on hardwired remote power distribution boxes, will be of the grounding type provided with a wet location cover and installed in accordance with Section 210-7 "Receptacles and Cord Connections" of the NEC.

All receptacles located in a wet location will be not less than 24.00" (610 mm) from the ground. Receptacles on off-road vehicles will be a minimum of 30.00" (762 mm) from the ground.

The face of any wet location receptacle will be installed in a plane from vertical to not more than 45 degrees off vertical. No receptacle will be installed in a face up position.

Dry Locations

All receptacles located in a dry location will be of the grounding type. Receptacles will be not less than 30.00" (762 mm) above the interior floor height.

All receptacles will be marked with the type of line voltage (120-volts or 240-volts) and the current rating in amps. If the receptacles are direct current, or other than single phase, they will be so marked.

Listing

All receptacles and electrical inlet devices will be listed to UL 498, Standard for Safety Attachment Plugs and Receptacles, or other appropriate performance standards. Receptacles used for direct current voltages will be rated for the appropriate service.

Electrical System Testing

The wiring and associated equipment will be tested by the apparatus manufacturer or the installer of the line voltage system.

The wiring and permanently connected devices and equipment will be subjected to a dielectric voltage withstand test of 900-volts for one (1) minute. The test will be conducted between live parts and the

neutral conductor, and between live parts and the vehicle frame with any switches in the circuit closed. This test will be conducted after all body work has been completed.

Electrical polarity verification will be made of all permanently wired equipment and receptacles to determine that connections have been properly made.

Operational Test per Current NFPA 1901 Standard

The apparatus manufacturer will perform the following operation test and ensure that the power source and any devices that are attached to the line voltage electrical system are properly connected and in working order. The test will be witnessed and the results certified by an independent third-party certification organization.

The prime mover will be started from a cold start condition and the line voltage electrical system loaded to 100 percent of the nameplate rating.

The power source will be operated at 100 percent of its nameplate voltage for a minimum of two (2) hours unless the system meets category certification as defined in the current NFPA 1901 standard.

Where the line voltage power is derived from the vehicle's low voltage system, the minimum continuous electrical load as defined in the current NFPA 1901 standard will be applied to the low voltage electrical system during the operational test.

GENERATOR

The apparatus will be equipped with a complete electrical power system. The generator will be a Harrison Model 30.0 MPC 30.0 kW Hydraulic unit. The wiring and generator installation will conform to the present National Electrical Codes Standards of the National Fire Protection Association. The installation will be designed for continuous operation without overheating and undue stress on components.

Generator Performance

- Continuous Duty Rating: 30,000 watts
- Volts: 120/240
- Amperage: 250 @ 120 volts, 125 @ 240 volts
- Phase: Single
- Cycles: 60 hertz
- Engine Speed at Engagement: Idle
- RPM range: 1020 to 2,800 (hydraulic pump)

Generator Dimensions

- Length: 40 inches

- Width: 24 inches
- Height: 20 inches
- Weight: 560 pounds (dry)

Reservoir Dimensions (must be remote mounted)

- Length: 16.5 inches
- Width: 16.5 inches
- Height: 27 inches
- Weight: 84 pounds (dry)

The output of the generator will be controlled by an internal hydraulic system. An electrical instrument gauge panel will be provided for the operator to monitor and control all electrical operations and output.

The generator will utilize the main chassis transmission to power the generator. The generator will be driven by an engine transmission power take off unit, through a hydraulic pump and motor.

The generator will be operable in any mode with an electrical control inside the cab with a pilot light to note engagement.

An electric/hydraulic valve will supply hydraulic fluid to the clutch engagement unit provided on the chassis PTO drive.

Generator Instruments and Controls

To properly monitor the generator performance a digital meter panel will be furnished and mounted next to the circuit breaker panel. The meter will indicate the following items:

- Voltage
- Amperage for both lines
- Frequency
- Generator run hours
- Over current indication
- Over temperature indication
- "Power On" indication
- Two (2) fuse holders with two (2) amp fuses (for indicator light protection)

The meter and indicators will be installed near eye level in the compartment. Instruments will be flush mounted in an appropriate sized weatherproof electrical enclosure. All instruments used will be accurate within +/- two (2) percent.

Generator Wiring:

The system will be installed by highly qualified electrical technicians to assure the required level of safety and protection to the fire apparatus operators. The wiring, electrical fixtures and components will be to the highest industry quality standards available on the domestic market. The equipment will be the type as designed for mobile type installations subject to vibration, moisture and severe continuous usage. The following electrical components will be the minimum acceptable quality standards for this apparatus:

Wiring:

All electrical wiring will be fine stranded copper S.O. type. The wire will be sized to the load and circuit breaker rating; ten (10) gauge on 30 amp circuits, 12 gauge on 20 amp circuits and 14 gauge on 15 amp circuits. The S.O. cable will be run in corner areas and extruded aluminum pathways built into the body for easy access.

Load Center:

The main load center will be a Cutler Hammer with circuit breakers rated to load demand.

Circuit Breakers:

Individual breakers will be provided for all on-line equipment to isolate a tripped breaker from affecting any other on-line equipment.

GENERATOR LOCATION

The generator will be mounted in the in the area over the pump on the left side. The flooring in this area will be either reinforced or constructed in such a manner that it will handle the additional weight of the generator.

GENERATOR START

There will be a switch provided on the cab instrument panel to engage the generator.

CIRCUIT BREAKER PANEL

The circuit breaker panel will be located high on the forward wall of compartment D5.

SUB FEED CIRCUIT BREAKER PANEL

There will be a shoreline to generator transfer switch powered sub feed circuit breaker panel installed in the high on the forward wall of compartment D5. A directory for each breaker will be provided adjacent to the circuit breaker panel. Identification of circuits will be done in a durable manner that provides years of service.

ELECTRIC CORD REEL

Furnished with the 120/240 volt AC electrical system will be an Akron cord reel. The reel will be provided with a 12 volt electric rewind switch that is guarded to prevent accidental operation and labeled for its intended use. The switch will be protected with a fuse and installed at a height not to exceed 72.00" above the operators standing position.

The reel will be capable holding 200' of 10/4, 600-volt cable.

The exterior finish of the reel will be powder coated silver from the reel manufacturer.

A Nylatron guide to be provided to aid in the payout and loading of the reel. A ball stop will be provided to prevent the cord from being wound on the reel.

A label will be provided in a readily visible location adjacent to the reel. The label will indicate current rating, current type, phase, voltage and total cable length.

A total of one (1) cord reel will be provided one (1) above the pump area on the right side and one (1) over the passenger's side front stabilizer compartment on the body.

The cord reel should be configured with four (4) conductors.

Reel Warranty

The electric reel will come with a **five (5)-year** warranty provided by the reel manufacturer.

CORD

Provided for electric distribution will be one (1) length installed on the reel of 200 feet of yellow 10/4 electrical cord. A Hubbell L14-20, 20 amp, 120/240-volt, twist lock connector body will be installed on the end of the cord.

120 VOLT RECEPTACLE

There will be two (2), 15/20 amp 120-volt AC three (3) wire straight blade duplex GFCI receptacles with interior duplex flip up covers, installed mounted high inside of the PS EMS compartments and one behind the driver's seat. The NEMA configuration for the receptacles will be 5-20R.

The receptacles will be powered from the onboard generator to shoreline power transfer switch.

There will be a label installed near the receptacles that state the following:

- Line Voltage
- Current Rating (amps)
- Phase
- Frequency
- Power Source

120 VOLT RECEPTACLE

There will be four (4), 15/20 amp 120 volt AC three (3) wire straight blade duplex receptacles with an interior duplex flip up cover, installed mounted high on the forward bulk head in P1, P4, D1 and D4. The NEMA configuration for the receptacles will be 5-20R.

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The receptacles will be powered from the onboard generator to shoreline power transfer switch.

There will be a label installed near the receptacles that state the following:

- Line Voltage
- Current Rating (amps)
- Phase
- Frequency
- Power Source

THREE SECTION 100' AERIAL PLATFORM

GENERAL INFORMATION

It is the intent of these specifications to describe a telescoping, elevating platform. The unit will consist of a three (3) section, steel ladder with a self-leveling basket attached, to the ladder fly section.

OPERATION ON GRADES

The aerial unit will be capable of operating safely, on any slope up to 10 degrees at full capacities. (Operation beyond this limit will be at the operator's discretion.)

CONSTRUCTION STANDARDS

The ladder will be constructed to meet all of the requirements as described in current NFPA 1901 standard.

These capabilities will be established in an unsupported configuration.

All structural load supporting elements of the aerial device that are made of a ductile material will have a design stress of not more than 50% of the minimum yield strength of the material based on the combination of the live load and the dead load. This 2:1 structural safety factor meets the current NFPA 1901 standard.

All structural load supporting elements of the aerial device that are made of non-ductile material will have a design stress of not more than 20% of the minimum ultimate strength of the material, based on the combination of the rated capacity and the dead load. This 5:1 safety factor meets the current NFPA 1901 standard.

The aerial device will be capable of sustaining a static load one and one-half times its rated tip load capacity (live load) in every position in which the aerial device can be placed when the vehicle is on a firm level surface.

The aerial device will be capable of sustaining a static load one and one-third times its rated tip load capacity (live load) in every position the aerial device can be placed when the vehicle is on a slope of five degrees downward in the direction most likely to cause overturning.

With the aerial device out of the cradle in the fully extended position at zero degrees elevation, a test load will be applied in a horizontal direction normal to the centerline of the ladder. The turntable will not rotate and the ladder will not deflect beyond what the product specification allows.

All welding will be in compliance with the American Welding Society standards. All welding personnel will be certified, as qualified under AWS welding codes.

All material and welds will have a structural safety factor of 2:1. This will be derived from taking into account structure weight, payload, wind load, ice load, and nozzle reactions.

The aerial device will be capable of operating in wind conditions of up to 35 mph and icing conditions of up to a 0.25" coating over the aerial structure.

All of the design criteria must be supported by the following test data:

- Strain gage testing of the complete aerial device
- Analysis of deflection data taken while the aerial device was under test load

The following standards for materials are to be used in the design of the aerial device:

- Materials are to be certified by the mill that manufactured the material
- Material testing that is performed after the mill test will be for verification only and not with the intent of changing the classification.

LADDER CONSTRUCTION

The ladder will be comprised of three (3) sections and will extend to a nominal height, of 100' above the ground, as measured by 1901 recommendations. The ladder (handrails, baserails, trusses, k-braces and rungs) will be constructed of welded, high strength steel certified by the manufacturer as being a minimum of 70,000 pounds per square inch of yield strength. Each section will be trussed diagonally, vertical and horizontally using round steel tubing. All critical points will be reinforced, for extra rigidity, and to provide a high strength-to-weight ratio. All ladder rungs will be round and welded to each section in two (2) places with "K" bracing for lateral and torsional rigidity.

The inside width dimensions of the ladder will be:

- Base Section 38.75"
- Mid Section 28.88"
- Fly Section 21.50"

The height of the handrails above the centerline of the rungs will be:

- Base Section 31.31"
- Mid Section 26.82"
- Fly Section 22.75"

VERTICAL HEIGHT

The height of the unit will extend to no less than 100', as measured by a plumb line from the top surface of the basket handrail assembly to the ground, with the basket raised to a 75-degree angle. The aerial device will be measured, in this manner, for accurate comparison.

HORIZONTAL REACH

The rated horizontal reach will be 93'. The measurement of horizontal reach will be consistent with NFPA standards.

MOUNTING OF ELEVATING PLATFORM

The aerial device will be rear mounted, to a torque box, on the truck chassis.

TORQUE BOX

A "torsion box" subframe will be installed between the two sets of stabilizers. The torque box will be constructed of 0.312" steel plate (50,000 pounds per square inch yield) with steel tubing reinforcement, on each side of the box, in the turntable area. The dimensions of the torque box will be 41.00" wide x 29.00" high x 253.50" long. The torque box subframe assembly will be capable of withstanding all torsional and horizontal loads when the unit is on the stabilizers. The torque box will be bolted to the chassis frame rails using thirty-two 0.750" SAE grade 8 bolts with nuts.

TURNTABLE

The turntable will be a 1.00" thick steel deck, coated with a non-skid, chemical resistant material in the walking areas. The stepping surfaces will meet the skid-resistance requirements of the current NFPA 1901 standard.

The turntable will measure 81.00" long x 96.00" wide. The turntable will include an enclosure for the hydraulic valves and rotation motor, which will also serve as a step, for access to the ladder.

The turntable handrails will be a minimum 42.00" high and will not increase the overall travel height of the vehicle. The handrails will be constructed from aluminum and have a slip resistant knurled surface.

ELEVATION SYSTEM

Two (2) double acting, lift cylinders will be utilized to provide smooth, precise elevation from 5 degrees below horizontal to 75 degrees above horizontal. The lift cylinder will be attached to each side of the base section. The lift cylinder rod will be chrome plated, to provide smooth operation of the aerial and reduce seal wear. The lift cylinders will be equipped with integral holding valves located in the cylinder, to prevent the unit from descending should the charged lines be severed, at any point within the hydraulic system and to maintain the ladder in the bedded position during road travel. The integral holding valves will NOT be located in the transfer tubes.

The elevation system will be controlled by the microprocessor. The microprocessor will provide the following features:

- Collision avoidance of the elevation system to prevent accidental body damage
- Automatic deceleration when the aerial device is lowered into the cradle

- Automatic deceleration at the end of stroke, in maximum raise and lower positions
- Deceleration of the aerial device from 0 to -5 degrees

EXTENSION/RETRACTION SYSTEM

A hydraulically powered, extension and retraction system will be provided through dual hydraulic cylinders and wire ropes. Each set will be capable of operating the ladder in the event of a failure, of the other. The extension cylinder rod will be chrome plated to provide smooth operation of the aerial device and reduce seal wear. The extension/retraction cylinders will be equipped, with integral holding valves, to prevent the unit from retracting should the charged line be severed, at any point within the hydraulic system. The integral holding valves will NOT be located in the transfer tubes.

Wire ropes and attaching systems used to extend and retract the fly sections will have a 5:1 safety factor based on the ultimate strength under all operating conditions. The factor of safety for the wire rope will remain above 2:1 during any extension or retraction stall. The minimum ratio of the diameter of wire rope used to the diameter of the sheave used will be 1:12. Wire ropes will be constructed of seven (7) strands over an inner wire for increased flexibility. The wire rope will be galvanized to reduce corrosion.

The extension/retraction system will be controlled by the microprocessor. The microprocessor will provide the following features:

- Automatic deceleration at the end of stroke, in maximum extend and retract positions
- Controls the rate of retraction while flowing water

All sheaves will be greaseless and all sheave pins and pivot pins will be polished stainless steel.

ROTATION SYSTEM

A 54.00" external tooth, monorace swing circle bearing will be used for the rotation system and will provide 360-degree continuous rotation. To insure proper bearing installation, both the open base bearing plate and the turntable bearing plate will be milled surfaces. The bearing will be bolted to the turntable and the base plate by a minimum of sixty grade 8, 0.88" bolts. Two (2) hydraulically driven, planetary gear boxes with drive speed reducers will be used to provide infinite and minute rotation control throughout the entire rotational travel. Two (2) spring applied, hydraulically released disc type swing brakes will be furnished to provide positive braking of the turntable assembly. Provisions will be made for emergency operation of the rotation system should complete loss of normal hydraulic power occur. The hydraulic system will be equipped with pressure relief valves which will limit the rotational torque to a nondestructive power.

The rotation system will be controlled by the microprocessor. The microprocessor will provide the following features:

- Envelope control of rotation system to prevent accidental body damage
- Prevent the aerial from being rotated into an unstable condition

MANUAL OVERRIDE CONTROLS

Manual override controls will be provided for all aerial and stabilizer functions.

LADDER SLIDE MECHANISM

UHMW polyethylene wear pads will be used between the telescoping ladder sections, to provide greater bearing surface area for load transfer. Adjustable slide pads will also be used to control side play between the ladder sections.

BASKET LEVELING SYSTEM

A basket leveling system will be provided and so designed, that the basket with it's rated load, can be supported and maintained level, relative to the turntable, regardless of the elevation or flexion of the ladder.

Basket leveling will be accomplished by hydraulic circuitry, that is independent from the main hydraulic system. The leveling of the basket features a dual master/slave hydraulic cylinder system, with each side capable of supporting the load, while maintaining the basket level. Two (2) master cylinders are mounted between the turntable and the base ladder section, with two (2) slave cylinders mounted between the ladder fly section and the basket. The slave and master cylinders are 100% matched, so as the ladder is raised or lowered, exact amounts of hydraulic fluid are transferred between the master and slave cylinders thus maintaining the basket level.

The hydraulic circuitry includes pressure operated counter balance valves, on the load side of the slave cylinders, to prevent the basket from tipping should the hydraulic lines be severed.

A momentary switch is provided, on the cab instrument panel, to level the basket should this become necessary due to ambient temperature changes. It is not necessary to start the engine and activate the main hydraulic system to level the basket.

ROTATION INTERLOCK

The microprocessor will be used to prevent the rotation of the aerial device to the side in which the stabilizers have not been fully deployed (short-jacked). The microprocessor will allow full and unrestricted use of the aerial, in the 180-degree area, on the sides where the stabilizers have been fully deployed. The system will also have a manual override, to comply with NFPA 1901.

LOAD CAPACITIES

The following load capacities will be established with the stabilizers at full horizontal extension and placed in the down position to level the truck and to relieve the weight from the tires and axles. Capacities will be based upon full extension and 360-degree rotation.

A load chart, visible at the operator's station, will be provided. The load chart will show the recommended safe load at any condition of the aerial device's elevation and extension.

35 MPH WIND CONDITIONS/DRY

Degrees of Elevation	-5 to 29	30 to 39	40 to 49	50 to 75
Basket	1000	1000	1000	1000
Fly	-	-	250	500

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Mid	-	250	500	750
Base	250	500	750	1000

WATER TOWER OPERATION

The following capacities will be based upon continuous 360-degree rotation and full extension.

35 MPH WIND CONDITIONS/WATER CHARGED

Degrees of Elevation	-5 to 29	30 to 39	40 to 49	50 to 75
Basket	500	500	500	500
Fly	-	-	250	500
Mid	-	250	500	500
Base	-	500	500	750

ELEVATION -5 TO +75 DEGREES

The aerial device will be able to maintain the above load capacities while flowing up to 1500 GPM and a nozzle position of 0 to 90 degrees to either side of the ladder centerline, as far above and below horizontal to the platform as nozzle design allows.

While flowing 1500 to 2000 GPM the nozzle position will be limited to 45 degrees either side of the ladder centerline horizontal to the platform, 30 degrees above horizontal, and as far below horizontal to the platform as nozzle design allows.

Reduced loads in the basket can be redistributed in 250 lb. increments to the fly, mid, or base as needed.

LADDER CRADLE INTERLOCK SYSTEM

A ladder cradle interlock system will be provided through the microprocessor to prevent the lifting of the aerial device from the nested position until the operator places all the stabilizers in a load supporting configuration. A switch will be installed at the boom support to prevent operation of the stabilizers once the aerial has been elevated from the nested position.

BOOM SUPPORT

A heavy-duty boom support, constructed of steel, is to be provided for support of the ladder in the travel position. The boom support will be bolted to the chassis frame as close to the front axle as design allows. On the base section of the ladder, a stainless steel scuffplate will be provided where the ladder comes into contact with the boom support.

The boom support will be located just to the rear of the chassis cab.

AERIAL BOOM SUPPORT LIGHT

There will be one (1) Amdor, Model Luma Bar H2O, white LED strip light mounted on the boom support cradle. This light will be activated when the aerial master switch is activated.

AERIAL BOOM PANEL

There will be one boom panel provided on the driver's side of the aerial ladder base section. The boom panel will be painted #279 Red.

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The boom panel will be designed so no mounting bolts are in the face of the panel. This will keep the lettering surface free of holes.

AERIAL DEVICE RUNG COVERS

Each rung will be covered with a secure, heavy-duty, fiberglass pultrusion that incorporates an aggressive, no-slip coating.

The rung covers will be glued to each rung and will be easily replaceable should the rung cover become damaged.

The center portion of each rung cover will be black and the outside 2.00" edge at each side will be safety yellow.

Under no circumstances will the rung covers be fastened to the rungs using screws or rivets.

The rung covers will have a 10-year, limited warranty.

LADDER STORAGE MOUNTING BRACKETS

Mounting will be provided on the left side of the aerial device while viewed from the turntable for storage of one (1) roof ladder. The bracket will be located inboard of the boom panel at the base section. The bracket will hold the boom panel as close to the base section as possible and include straps to secure the ladder.

The mounting brackets will accommodate a 16' Duo-Safety 875-A roof ladder as determined by the type of aerial device and the available space.

STOKES AND LYFE BRACKET STORAGE BOX

There will be an aluminum storage box provided at the base section of the aerial ladder on the right side of the aerial device while viewed from the turntable. The box will be painted to match the aerial device with the face of the box painted to match the boom sign color. The box will be located in place of the aerial boom panel and have a hinged cover with butterfly latch to secure the stokes basket and *Lyfe* brackets. The cover will have the same finish as the box. A divider will be provided to separate the stokes basket and the brackets. The box will have louvers on the side of the box facing the aerial device for ventilation.

The size of the stokes basket will be 86.00" long x 24.00" wide x 8.00" high.

The maximum capacity of this box will be 75 lb.

BASKET STRUCTURE

The complete basket structure will be constructed of welded high strength steel certified by the manufacturer to have a minimum of 46,000 lb per square inch yield strength. Modular construction of the aerial platform basket will allow for easy component replacement should the basket become damaged during use. The aerial basket will be fully tested and independent third party certified.

The flooring and front decking of the basket will be multi-piece Morton Cass material, preventing the accumulation of water on the standing surface. The floor will measure approximately 34.00" long x

92.00" wide. The stepping surfaces will meet the skid-resistance requirements of current NFPA 1901 standard.

The outside basket steps used for transferring in and out of the basket will be at the same level as the basket floor. The steps on the front are approximately 16.00" deep. The front corners of the basket step will be mitered at 45 degrees to allow the basket to be maneuvered closer to buildings when approaching at an angle. A heavy extruded rubber bumper strip will be fastened to the outside edge of the step.

Four (4) stainless steel pompier belt safety loops will be attached to the inside of the basket. Two (2) lifting eyes will be provided on the bottom side of the basket support structure.

Two (2) rubber bumpers are provided on the bottom side of the basket structure for damage protection when setting it down on a surface.

The basket interior will be illuminated as required per the current edition of NFPA 1901. All hoses and wiring at the basket will be fully enclosed. Electrical sub-components will be mounted at the rear of the basket in a separate enclosure for easy servicing while maintaining an unobstructed basket interior.

BASKET SIDES

The sides of the basket will be of solid single pan aluminum construction and, along with the basket doors, will form a continuous 42.00" high wall around the basket. The modular design of the basket will allow for easy replacement of components in case of damage.

BASKET ENTRANCES/EXITS

Two (2) swing-in, spring-loaded, self-closing double pan doors constructed of aluminum will be provided at the front of the basket. The basket doors will be provided with positive locking latches. The rear of the basket will be equipped with a vertical self-closing gate for transfer to and from the basket's ladder device. Telescoping-type handrails will be provided as a banister to bridge the gap between the basket and the fly section at all elevations.

ACCESSORY MOUNTING RECEPTACLES

Two (2) universal accessory mounting receptacles will be permanently affixed on the front of the basket to receive the **LyfeLine™** family of options such as the **Support™** rescue basket holders, **positive locking latches** rappelling arms, **LyfeLadder™** roof ladder brackets, **LyfeHoist™** winch, etc. Complete interchangeability will be required without modification to the basket.

HOSE BOX AT PLATFORM

There will be two (2) hose storage boxes with a cover and rubber hood latch provided at the platform. The boxes will be located at each side of the basket and will match the finish of the aerial device. The boxes will be sized to fit 100' of 1.75" diameter hose.

BASKET LANDING PAD EXTENSIONS

There will be extension pads provided for each of the aerial basket landing feet located on the under side of the basket

LIGHTS FOR TURNTABLE WALKWAY

There will be white LED lights provided at the aerial turntable. The lights will be located to illuminate the entire walking surface of the turntable including the area around the turntable console. These lights will be activated by the aerial master switch.

TURNTABLE CONSOLE LIGHTING

There will be one (1), TecNiq Model T10, white LED light strip mounted in the turntable console cover to illuminate the controls located on both the upper and lower portion of the turntable control station. These lights will be activated by the aerial master switch.

BASKET HEAT SHIELDS

A heat reflective shield will be provided on the front, sides and bottom of the basket.

The double pan basket access doors will form the heat shield at the front of the basket. The area between the access doors and behind the monitor will be shielded with a horizontally hinged single pan aluminum fold down panel. The side heat shields will be formed by a single sheet of .090" aluminum. These heat shields will be painted to match the aerial device.

Full under the basket heat shield protection with a non-glare finish will be provided with dual swing-down doors for ease of servicing and clean out.

INFORMATION CENTER

There will be an information center provided. The information center will operate in temperatures from -40 to 185 degrees Fahrenheit. The information center will employ a Linux operating system and a 7.00" (diagonal measurement) LCD display. The LCD will have a minimum 400nits rated, color display. The LCD will be sunlight readable. The LCD display will be encased in an ABS, black plastic housing with a gray decal. There will be five (5), weather-resistant user interface switches provided. The LCD display can be changed to an available foreign language.

OPERATION

The information center will be designed for easy operation in everyday use. There will be a page button to cycle from one screen to the next screen in a rotating fashion. A video button will allow an NTSC signal into the information center to be displayed on the LCD. If any button is pressed while viewing a video feed, the information center will return to the vehicle information screens. There will be a menu button to provide access to maintenance, setup, and diagnostic screens. All other button labels will be specific to the information being viewed.

GENERAL SCREEN DESIGN

Where possible, background colors will be used to provide vehicle information *At A Glance*. If the information provided on a screen is within acceptable limits, a green background color will be used. If the information provided on a screen is not within acceptable limits, an amber background color will indicate a caution condition and a red background color will indicate a warning condition.

Every screen in the information center will include the aerial tip temperature, the time (12- or 24-hour mode) and a text Alert Center. The time will be synchronized between all Command Zone color displays located on the vehicle. The Alert Center will display text messages for audible alarms. The One (1) Pierce Velocity 100' Platform
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text messages will identify any items causing the audible alarm to sound. If more than one (1) audible alarm is activated, the text message for each alarm will cycle every second until the problems have been resolved. The background for the Alert Center will change to indicate the severity of the warning message. Amber will indicate a caution condition and red will indicate a warning condition. If a warning and a caution condition occur simultaneously, the red background color will be shown for all Alert Center messages.

A label will be provided for each button. The label will indicate the function for each active button for each screen. If the button is not utilized on specific screens, it will have a button label with no text.

Symbols will accurately depict the aerial device type the information pertains to such as rear mount ladder, rear mount platform, mid-mount ladder or mid-mount platform.

PAGE SCREENS

The Information center will include the following pages:

The Aerial Main and Load Chart page will indicate the following information:

- Rungs Aligned and Rungs Not Aligned will be indicated with text and respective green or red colored ladder symbols.
- Ladder Elevation will be indicated via a fire apparatus vehicle with ladder symbol with the degree of elevation indicated between the vehicle and ladder.
- Water Flow (if applicable) will be indicated via a water nozzle symbol and text indicating flow / time.
- Breathing Air Levels will be indicated via an air bottle symbol and text indicating the percent (%) of air remaining. A green bar graphs shown inside the bottle will indicate oxygen levels above 20%. A red bar graph will indicate oxygen levels at or below 20%. When oxygen levels are at or below 10% the red bar graph will flash.
- The Aerial Load Chart will indicate the load limit on each section of the ladder based on actual ladder position and water flow (if applicable).
- *At A Glance* color features will be utilized on this screen. Caution type conditions will be indicated via a yellow background. Warning type conditions will be indicated via a red background. Conditions operating within acceptable limits will be indicated via a green background.

The Aerial Reach and Hydraulic Systems page will indicate the following information:

- Aerial Hydraulic Oil Temperature will be indicated with symbol and text. At a glance features will be utilized.
 - Aerial Hydraulic Oil Pressure will be indicated with a symbol and text. At a glance features will be utilized.
 - The following calculations will be indicated on a representative vehicle symbol:
 - Aerial Device Extension length.
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- Aerial Device Height indicating the height of the aerial device tip from the ground.
- Aerial Device Reach indicating the horizontal distance the aerial reaches from the turntable.
- Aerial Device Angle indicating the angle from the vehicle which the device is at.
- *At A Glance* color features will be utilized on this screen. Caution type conditions will be indicated via a yellow background. Warning type conditions will be indicated via a red background. Conditions operating within acceptable limits will be indicated via a green background.

The Level Vehicle page will indicate the following information:

- The grade of the vehicle will be indicated via a fire apparatus vehicle symbol with the degree of grade shown in text format. The symbol will tilt dependent on the vehicle grade.
- The slope of the vehicle will be indicated via a fire apparatus vehicle symbol with the degree of slope shown in text format. The symbol will tilt dependent on the vehicle slope.
- Outriggers status will be indicated via a colored symbol for each outrigger present. Each outrigger status will be defined as one of the following:
 - Outrigger stowed indicated with a silver pan located close to the vehicle
 - Outrigger fully extended indicated with a fully deployed green outrigger
 - Outrigger short-jacked indicated by a yellow outrigger partially deployed
 - Outrigger not set indicated by a red outrigger that is not set on the ground
- A text box located on the vehicle symbol will be utilized to identify the overall status of the outrigger leveling system. The following status will be indicated in the text box:
 - Deployed status will indicate all outriggers are properly set on the ground at full extension
 - Shortjacked status will indicate one or more outriggers are set on the ground but not fully extended.
 - Not Set status will indicate one or more outriggers is not properly set on the ground.
 - Stowed status will indicate all outriggers are stowed for vehicle travel.
- A bedding assist alert will indicate that the aerial device is being aligned by the Command Zone system as the operator lowers the aerial device into the cradle with the joystick.
- *At A Glance* color features will be utilized on this screen. Caution type conditions will be indicated via a yellow background. Warning type conditions will be indicated via a red background. Conditions operating within acceptable limits will be indicated via a green background.

MENU SCREENS

The following screens will be available through the Menu button:

The View System Information screen will display aerial device hours, aerial PTO hours, ladder aligned for stowing, aerial rotation angle, total water flow (if applicable), and aerial waterway valve status (if applicable).

The Set Display Brightness screen will allow brightness increase and decrease and include a default setting button.

The Configure Video Mode screen will allow setting of video contrast, video color and video tint.

The Set Startup screen allows setting of the screen that will be active at vehicle power-up.

The Set Date and Time screen has a 12- or 24-hour format, and allows setting of the time and date.

The View Active Alarms screen shows a list of all active alarms including the date and time of each alarm occurrence and shows all alarms that are silenced.

The System Diagnostics screen allows the user to view system status for each module and its respective inputs and outputs. Viewable data will include the module type and ID number; the module version; and module diagnostics information including input or output number, the circuit number connected to that input or output, the circuit name (item connected to the circuit), status of the input or output, and other module diagnostic information.

Aerial Calibrations screen indicates items that may be calibrated by the user and instructions to follow for proper calibration of the aerial device.

Button functions and button labels may change with each screen.

LOWER CONTROL STATION

A lower control station will be located at the rear of the apparatus in an easily accessible area. The controls and indication labels will be illuminated for nighttime operation. The following items will be furnished at the lower control station and will be clearly identified and conveniently located for ease of operation and viewing:

- Level assist switch
- Override switch to override microprocessor
- Emergency power unit switch

AERIAL DEVICE CONTROL STATIONS

There will be two (2) device control stations, one (1) will be referred to as the basket control station and the other as the turntable control station. All elevation, extension and rotation controls will operate from both of these locations. The controls will permit the operator to regulate the speed of the aerial functions, within the safe limits, as determined by the manufacturer and NFPA standards. The controls will be grouped and operate in an identical manner at both stations for similarity of operation. The controls will be clearly marked and lighted for nighttime operation.

Each control will be equipped with a positive lock to hold the control in a neutral position, preventing accidental activation. In addition to the neutral lock, a console cover will be provided at the turntable control station. The controls will be so designed to allow the turntable control station to immediately override the basket controls, even if the ladder is being operated by the basket controls.

TURNTABLE CONTROL STATION

The turntable control station will be located on the left side of the turntable so the operator may easily observe the basket while operating the controls.

The following items will be installed at the turntable control station, clearly identified and lighted for nighttime operation and conveniently located for ease of operation and viewing:

- Electric controls for elevation, rotation, extension/retraction
- Intercom controls
- Tip tracking light switch
- Emergency power unit switch
- Operator's load chart
- A three (3) position switch for selecting aerial operational speed.

BASKET CONTROL CONSOLE

The basket instrument panel will be located at the front center of the aerial platform. The following controls will be installed at the console and be clearly identified, illuminated for nighttime operation and conveniently located for ease of operation and viewing:

- Intercom controls
- Operator's load chart

AERIAL FUNCTION CONTROLS

The aerial function controls, elevation, rotation, extension/retraction will be mounted in a separate control box, which will be attached to the front of the platform control console, by means of an easily removable slide mechanism. The aerial function control box will have infinite positions along with three (3) fixed attachment points in the basket. The electrical connection will be by a permanently attached, strain relieved, coiled cord. The legend for the control lever functions will be illuminated.

HIGH IDLE

The high idle will be controlled by the microprocessor. The microprocessor will automatically adjust the engine rpm to compensate for the amount of load placed upon the system. The system will include a safety device that allows activation of the high idle only when the parking brake is set and the transmission is placed in neutral.

AERIAL WIRELESS REMOTE CONTROL

The aerial device will be equipped with a Hetronic wireless remote control. This remote control will operate all functions of the aerial device and one (1) water monitor electrically.

For safety reasons, the wireless remote may only be used in a water tower application, not with personnel on the aerial device.

The system will consist of the follow components:

One (1) transmitter with joysticks and toggle switches mounted in a body compartment D4.

One (1) 12-volt DC battery charger mounted near the transmitter storage cradle.

Two (2) rechargeable batteries.

One (1) receiver to control electric over hydraulic valves and one (1) water monitor through the Command Zone™ programming mounted near the transmitter.

One (1) enable maintained toggle switch to activate the wireless system mounted near transmitter storage cradle.

One (1) wireless control system enabled indicator light mounted next to the enable switch.

One (1) remote mounted receiver antenna with antenna cable mounted to the top of the body near the receiver.

System safety interlocks:

Command Zone™ programming will maintain the turntable operator's control priority over the wireless control.

An E-Stop switch on the wireless receiver or in the rear body stabilizer control compartment will turn off the aerial hydraulic diverter valve, there by stopping all aerial functions.

STABILIZERS

Two (2) sets of extendible out and down "H" type stabilizers will be provided for stability. The stabilizers will have a spread of 18'.

The stabilizers will be the double box design, with jack cylinders, that have a 4.25" internal diameter (bore) and 3.00" diameter cylinder rod. The jack cylinders will be equipped with integral holding valves, which will hold the cylinder either in the stowed position or the working position, should a charged line be severed at any point within the hydraulic system. For safety, the integral holding valves will be located in the cylinder base end, NOT in the transfer tube. Vertical jack cylinder rods will be fully enclosed by a telescoping inner box to protect the cylinder rods against damage which may occur.

The extension cylinders will be totally enclosed within the extension beams. The horizontal extension cylinders will be of the trombone type to eliminate wear and potential failure of hydraulic hoses.

The stabilizers will have the capability of 18.00" of ground penetration for set-up on uneven terrain. Extension of the horizontal beams will be activated by an extension cylinder totally enclosed within the One (1) Pierce Velocity 100' Platform
Pierce Pulse DW481

extension beams. The cylinders will be equipped with internal decelerators. The cross-section dimensions will be 13.00" high x 6.81" wide.

Each stabilizer leg will have attached to the end of the leg a 16 gauge polished stainless steel shield. The stainless steel shield will be of the split-pan design and will be a maximum 13.50" wide so as to allow the extension of the stabilizer between parked cars. This plate will serve as a protective guard and a mounting surface for warning lights. The top, forward, and rear edges will be flanged back for added strength.

STABILIZER CONTROLS

A portable stabilizer control box will be provided. The control box will be weatherproof and oil resistant. Each function and indicator light will be labeled on a metal photo panel. The control box can be taken as far away as 15' from the vehicle with an extension cable.

The stabilizer control box will include the following:

- One (1) green power indicator light for stabilizer control that will be illuminated when the aerial master and "PTO" switches in the cab are activated.
- Four (4) electric toggle switches for stabilizers: each toggle switch will control the extend/retract and raise/lower of its respective stabilizer to allow vehicle set up in restricted areas and/or on uneven surfaces.
- Auto leveling assist switch: The outrigger control system will incorporate a computerized self leveling system in addition to the standard outrigger controls. The operator will have the option to manually or automatically level the truck. The computerized system will ensure full outrigger extension, proper jack penetration, and will level the vehicle within 1/2 a degree of level for safe operation of the aerial device.
- One (1) electric toggle switch for the engaging the emergency power unit.
- One (1) red "stabilizer not stowed" indicator light: this light will illuminate when the stabilizers are not in the fully stowed position.
- Four (4) fully extended beams green indicator lights: these lights will be illuminated when each of the respective stabilizer beams are fully extended.
- Four (4) firm on ground green indicator lights: each light will be illuminated when its respective stabilizer shoe is in the load supporting condition.

Each toggle switch will activate the engine fast idle automatically.

Manual override will be supplied for each stabilizer control valve.

A "Stabilizers Not Stowed" indicator will be provided in the driver's compartment. It will illuminate automatically whenever the stabilizers are not fully stowed to prevent damage to the apparatus if moved. The stabilizer system will also be wired to the "Do Not Move Indicator Light", which will flash whenever the apparatus parking brake is not fully engaged and the stabilizers are not fully stowed.

STABILIZER PADS

A one (1) position, floating stabilizer pad will be provided on each stabilizer. The pads will require no operator adjustment during set up. The stabilizer pad will have the ability to pivot in a 360-degree plane for set up on uneven terrain.

AUXILIARY STABILIZER PADS

A set of four auxiliary pads with handles will be provided for additional load distribution on soft surfaces. Their size will be 31.00" x 26.00" and they will be constructed of a lightweight composite material. The ground contact area for each stabilizer will be such that a unit pressure not greater than 75 psi (500 kPa) will be exerted over the ground contact area when the apparatus is loaded to its maximum in-service weight and the aerial device is carrying its rated capacity in every position permitted by the manufacturer. The pads will be stored in a double stacked configuration, two (2) behind each rear tandem axle in a single bracket.

CRADLE INTERLOCK SYSTEM

A cradle interlock system will be provided to prevent the lifting of the aerial from the nested position until the operator has positioned all the stabilizers in a load supporting configuration. A switch will be installed at the cradle to prevent operation of the stabilizers once the aerial has been elevated from the nested position.

STABILIZER PINS

The stabilizer jacks will not have holes for the stabilizer pins.

STABILIZER CONTROL BOX ALUMINUM DOOR

A vertically hinged smooth aluminum door will be provided over the stabilizer control box. The door will be hinged outboard.

STABILIZER PLACEMENT

There will be four (4) lasers provided and installed on the body, one (1) next to each stabilizer. The lasers will be activated with the aerial master switch and park brake set and will provide a flashing green X on the ground to show where the outrigger pads need to be set. Laser may not be visible in direct sunlight. The individual lasers will be turned off when a stabilizer is extended beyond its stowed position as well as when the parking brake is released or the aerial master is turned off.

HYDRAULIC SYSTEM

All high-pressure hoses will have an abrasion resistant cover, and have a rating greater than or equal to the working pressure of the circuit in which they are installed. All hydraulic fittings will be plated to minimize corrosion. The fitting will use an O-ring face seal, where possible, to minimize hydraulic leaks. All pressure carrying hydraulic hoses will have a 4:1 safety rating based on burst pressure.

An interlock will be provided that prevents activation of the hydraulic pump until the transmission is placed in neutral and the parking brake is set as outlined in NFPA standards.

The hydraulic system will be of the load sense design to minimize heat build up and provide smooth control of the aerial ladder. The system will meet the performance requirement in NFPA standards, which requires adequate cooling after less than 2 1/2 hours of operations.

All hydraulic components that are non-sealing, where failure could result in the aerial movement, will comply with NFPA standards and have burst strength of 4:1. Dynamic sealing components, where failure could cause aerial movement, will have a margin of 2:1 on maximum operating pressure per NFPA standards. All hydraulic hoses, tubes, and connections will have minimum burst strength of 3:1 per NFPA standards.

A hydraulic oil pressure gauge will be supplied at the base control location per NFPA standards.

The aerial hydraulic system will be designed in such a manner that a hydraulic pump failure or line rupture will not allow the aerial or outriggers to lose position. Hydraulic holding valves will be mounted directly into cylinders. To insure reliable performance of holding valves, no hoses or tubing will be permitted between a holding valve and cylinder. The aerial will incorporate the use of trombone steel tubes inside the stabilizer beams to eliminate hydraulic hose wear and leaks. Hydraulic power to the ladder will be transferred from the pedestal by a hydraulic swivel.

HYDRAULIC RESERVOIR

The hydraulic system will consist of an oil reservoir mounted to the torque box and plumbed to the hydraulic pump. There will be plumbing for a supply and return line and a tank drain on the reservoir.

The hydraulic pump suction line will have a shut-off ball valve for pump servicing.

The hydraulic oil reservoir fill will be labeled per NFPA standards. The hydraulic system will use multi-weight, SAE grade oil. ISO grade will be based on geographical location. The manufacturer will certify that the oil meets or exceeds the hydraulic cleanliness rating of 18/15/13 per ISO 4406:1999 before delivery.

HYDRAULIC FILTERS

The system will incorporate the following filters to provide dependable service:

- Separate magnet (not on strainer)
- Reservoir suction strainer: 125 mesh
- Pressure filter with dirt alarm: Nominal 5 micron filter with a rating of 6.5 micron @ Beta 200 (99.5% efficiency); 7.5 micron @ Beta 1000 (99.9% efficiency)
- Return filter with dirt alarm: Nominal 5 micron filter with a rating of 6.5 micron @ Beta 200 (99.5% efficiency); 7.5 micron @ Beta 1000 (99.9% efficiency)
- Desiccant breather filter: Water capacity 4 fluid oz, 5 micron rating

HYDRAULIC CYLINDERS

All hydraulic cylinders used on the aerial device will be produced by a manufacturer that specializes in the production of hydraulic cylinders.

POWER TAKEOFF / HYDRAULIC PUMP

The apparatus will be equipped with a power takeoff driven by the chassis transmission and actuated by an electric shift located inside the cab. The power takeoff, which drives the hydraulic pump, will

meet all the requirements for the aerial unit operations. The hydraulic pump will be a variable displacement piston pump, for consistent and rapid response, and be capable of supplying hydraulic oil at a nominal 50gpm flow at pressures up to 3000 psi. The system will operate up to 3000 psi with flow controls to protect hydraulic components and incorporate a relief valve set at 3150 psi to prevent over pressurization. The hydraulic pump will be solely dedicated to aerial operations. An amber indicator light will be installed on the cab instrument panel to notify the operator that the power takeoff is engaged.

An interlock will be provided that allows operation of the aerial power takeoff shift only after the chassis spring brake has been set and the chassis transmission has either been placed in the neutral position or drive position after the driveline has been disengaged from the rear axle.

EMERGENCY PUMP

The hydraulic system will be designed with an auxiliary power unit meeting the guidelines of NFPA standards. The auxiliary power unit will be a 12-volt pump connected to the chassis electrical system. The pump will provide operation at reduced speeds to store the aerial device and outriggers for road transportation.

Self-centering switches will be provided at the turntable and stabilizer control station to activate the system. The system will be designed to provide a minimum of 30 minutes of hydraulic power to operate functions.

HYDRAULIC SWIVEL

The aerial ladder will be equipped with a three (3) port, high pressure hydraulic swivel which will connect the hydraulic lines from the hydraulic pump and reservoir through the rotation point to the aerial control bank. The hydraulic swivel will allow for 360 degree continuous rotation of the aerial.

ELECTRIC SWIVEL

The ladder will be equipped with an electric swivel to allow 360 degrees rotation of the aerial while connecting all electrical circuits through the rotation point. A minimum of 36 collector rings will be provided that are capable of supplying 20 amp continuous service. All collector rings will be enclosed and protected with desiccant plugs against condensation and corrosion. No oil or silicone will be used.

WATER SWIVEL

Water will be transferred to the aerial waterway by means of a 5.00" internal diameter waterway, through the swivel, permitting 360 degree continuous rotation.

12-BIT ABSOLUTE ENCODER

The aerial ladder will be equipped with a 12-Bit Absolute Encoder which provides 4096 counts per shaft turn for position and direction reference.

The 12-Bit Absolute Encoder will provide a unique binary word to reference each position and direction for all 360 degrees of rotation.

If the power is interrupted for any reason, the 12-Bit Absolute Encoder will allow power to be returned to the system without having to re-zero the settings.

The 12-Bit Absolute Encoder will be an integral part of a micro-processor based control system.

ELECTRICAL SYSTEM

The 100' platform will utilize a microprocessor-based control system. The system will consist of the following components:

A tethered stabilizer control will be provided. The tethered control will be weatherproof and oil resistant. A Super Bright LED indicator light will be labeled on a metal photo panel for each function. The electrical connection at the tethered control will be permanently attached by a strained relieved coil cord that will allow the operator to move 14ft away from the electrical connection for operation.

- Remote Stabilizer Controls
- Weatherproof and oil resistant
- One (1) green "power" indicator light
- One (1) red "stabilizer not stowed" indicator light
- One (1) electric toggle switch for auto level assist
- One (1) electric toggle switch for the emergency power unit
- One (1) electric toggle switch for each stabilizer to control:
 - Extend/retract function
 - Raise/lower function
- One (1) green "stabilizer fully extended" indicator light for each stabilizer
- One (1) green "firm on ground" indicator light for each stabilizer
- Control System Modules

Each of the control system modules will be configured as follows:

- Sealed to a NEMA 4 rating
- Operating range from -40 degrees F to 185 degrees F (-40 degrees C to 85 degrees C)
- Communicate using J1939 data link
- Two (2) diagnostic LED lights
- One (1) green light that illuminates when module has power (B+) and ground
- One (1) red light that flashes to indicate the module is capable of communicating via the data link
- Ground matrix identification system

The following control system modules will be used:

- Control Module
- Main controller for the system
- RS232 connection allows for computer diagnostics
- Power Module
- Built-in fault sensing
- Eight (8) digital outputs
- Pulse width modulating (PWM) capable
- 15A continuous per output

- Circuit protection based on actual current draw (not affected by heat)
- Constant Current Module
- Built-in fault sensing
- Four (4) analog inputs
- Eight (8) digital outputs
- Pulse width modulating (PWM) capable
- 4A continuous per output
- Circuit protection based on actual current draw (not affected by heat)
- Input Module
- 16 software selectable (digital or analog) inputs
- Output Module
- 16 digital outputs
- Input/Output Module
- Eight (8) software selectable (digital or analog) inputs
- Eight (8) digital outputs

AERIAL DEVICE LIGHTING

There will be white 12-volt DC halogen, spotlights furnished on the aerial device:

- One (1) Unity Model AG-S-7682 will be installed on the right side of the base section of the ladder.
- One (1) Unity Model AG-S-7682 will be installed on the left side of the base section of the ladder.
- One (1) Unity Model AG-S-7682 will be installed on the end of the aerial device.

Individual on/off switches will be provided on each light.

Power to the lights will be controlled by a master on/off switch at the turntable control operator's position.

The lights will be mounted below the top edge of the aerial device so as not to increase the overall height of the unit.

LIGHTING ON AERIAL LADDER

There will be TecNiq, Model D02, LED rung lighting provided on both sides of the aerial ladder base, mid, and fly sections. The lighting will be located adjacent to the ladder rungs along the lower rail of the ladder sections and will run the length of the ladder section.

The color of the sections will be:

- The base section of the ladder to be blue.
- The mid section of the ladder to be blue.
- The fly section of the ladder to be blue.

The LED rung lighting will be activated when the aerial master switch is activated.

The lights may be load managed when the parking brake is applied.

STABILIZER WARNING LIGHTS

There will be our (4) Whelen®, Model M6*C, LED flashing warning lights with Whelen, Model M6FC, chrome flanges installed, one (1) on each stabilizer cover panel.

- The front stabilizer pan lights will be red LED with a clear lens
- The rear stabilizer pan lights will be red LED with a clear lens

These warning lights will be activated by the same switch as the side warning lights.

STABILIZER BEAM WARNING LIGHTS

Two (2) 4.00" diameter red LED flashing lights will be mounted on each stabilizer, one (1) facing forward and one (1) facing rearward. The lights will be Grote Supernova 40 series LED lights. The lights will be recessed in the horizontal beam of the stabilizer. These warning lights will be activated with the aerial master switch.

STABILIZER SCENE LIGHTS

There will be one (1) Amdor Luma Bar H2O, Model AY-9500-012 LED strip light installed under each stabilizer beam to illuminate the surrounding area. A total of four (4) lights will be installed. The lights will be activated by the aerial master switch.

PLATFORM 120-VOLT ELECTRIC SYSTEM

Two (2), 20 amp, NEMA L5-20, 120-volt, three (3)-prong twist lock receptacles with weatherproof covers will be provided in the aerial platform. One (1) receptacle will be located at the platform control console and one (1) will be located at the rear of the basket. Each receptacle will be supplied from individual branch circuits protected by dedicated 20 amp/120-volt circuit breakers. All wiring will be sized to and conform to the latest edition of NEC standards.

120 VOLT UNDER PLATFORM LIGHTING

There will be two (2) Whelen, Model PFP1AC, LED 120-volt floodlights installed in semi-recessed housings Model PBA103, provided under the platform basket, under the driver side facing forward, under the passenger side facing down.

The painted parts of this light assembly to be black

Lights will be switched at the platform/tip and turntable.

120 VOLT BASKET LIGHTING

There will be one (1) Whelen, Model PFP2AP, 120-volt AC LED flood light provided at the platform basket.

The painted parts of this light assembly to be black.

The light will be located on the center, front of platform.

Light will be switched at the platform/tip and turntable

2-WAY AERIAL COMMUNICATION SYSTEM

There will be a Fire Research model ICA900-112 two-way intercom system provided. The control module will be located on the turntable operator console, provided there is room, and have an LED volume display and push-button volume control.

A hands-free module will be located at the aerial tip or platform and constantly transmit to the other module unless the control module push-to-talk button is pressed.

Each intercom unit will be weatherproof.

VIDEO CAMERA SYSTEM

There will be one (1) color CCD back-up style camera with 180-degree field of view color camera attached to the aerial ladder egress and connected to a 2.4GHz wireless transmitter. A 2.4GHz receiver will be provided at the aerial console. The camera images will be displayed through the display at the turntable console.

The following components will be supplied:

- One (1) Sharp Vision, Model SV-CW134639CAI Camera
- One (1) Sharp Vision, Model SV-WT-434 Transmitter
- One (1) Sharp Vision, Model SV-WR-096 Receiver

BREATHING AIR

Breathing air will be supplied to the aerial platform. The air system will incorporate one (1), 437 cubic foot, 4500-psi cylinder. To allow the turntable operator an unobstructed view of the platform the cylinder will be mounted directly in front of the turntable and below the ladders. The air cylinder will be interconnected through a pressure regulator located at the air cylinder. A shutoff valve with guard will be provided on the cylinder. The air will be routed to the basket using hose especially designed for use in breathing air systems. At the platform, the breathing air will be accessible via two (2) quick couplings for air masks. These will have a Hansen brass 3000-series coupling. One (1) coupling will be located at the front of the basket on the right side and one (1) coupling will be located at the rear of the basket on the left hand side. There will be a weather resistant storage compartment for two (2) air masks provided in the basket. A 50' recharge hose will be provided for refilling the air cylinder without having to remove the tank from its mounting.

The breathing air cylinder will be designed and constructed to conform to the requirements of the United Nations (UN) on the transportation of dangerous goods.

BREATHING AIR LEVEL AND WARNING SYSTEM

The level of breathing air remaining will be visible on the LCD display at all operating positions. The display will incorporate a low-pressure warning circuit that activates an audible alarm when 20% maximum air cylinder capacity remains. A second, louder audible alarm will activate when the remaining air level drops to 10% of maximum air cylinder capacity.

RAISED AERIAL PEDESTAL

The aerial pedestal will be raised to accommodate the height of the cab.

LYFECOMBO™BRACKETS

One (1) set of brackets will be supplied which will have the following three (3) options combined into one (1) set of brackets.

LyfeLadder™ brackets will be provided for use at the front of the platform basket to increase the safety of firefighters during fireground and rescue operations. **LyfeLadder** brackets will be capable of holding up to a 20' Duo-Safety roof ladder securely in place. The roof ladder will be 19.00" wide. The ladder will be secured through its beams and one (1) rung, by a bar capable of being latched in place and able to withstand a minimum of a 500-pound load while maintaining a minimum of a two to one (2:1) safety factor. The complete system will maintain and exceed this criteria as well. There will also be a latching pawl to keep the ladder in a vertical position at all times and will latch on a rung, at least two (2) rungs below the primary attachment point. There has been appropriate strain gauging and testing completed on the system, (ladder and complete holding device), proving the above criteria has been satisfied. Additionally there is a letter on file from the roof ladder manufacturer, (Duo-Safety Corporation), stating that their standard roof ladder is approved for such an application.

LyfeEye™ rappelling arms will be provided. The **LyfeEye** brackets will mount to the front of the platform basket, one (1) each side over the monitor/s and will be held in place with four (4) hardened 1.00" hitch pins, two (2) for each bracket. The **LyfeEye** brackets will be easily removable for storage. Each **LyfeEye** rappelling arm will have a capacity of 300#.

LyfeSupport™ rescue basket support brackets will be provided. The **LyfeSupport** brackets will mount to the front of the platform basket, one (1) each side over the monitor/s and will be held in place with four (4) hardened 1.00" hitch pins, two (2) for each bracket. The **LyfeSupport** brackets will be easily removable for storage. Two (2) quick clip basket straps will be used to secure the basket to the **LyfeSupport** brackets.

HITCH, WINCH MOUNT

A hitch receiver will be supplied at the driver and passenger side of the vehicle aft of the rear wheels. The hitch will not interfere with the angle of departure and will be tied directly to the frame rails. The hitch will be capable of up to a 6,000 lb direct pull. Receiver plugs will be provided for the receiver when it is not in use.

AERIAL TURNTABLE MANSAVER™ BARS

ManSaver™ bars will be installed at the aerial turntable.

AERIAL WATERWAY

The aerial waterway will be capable of being supplied by either a midship mounted pump or an external water source through a 5.00" intake at the rear of the apparatus.

A 5.00" water swivel will be installed below the aerial turntable permitting the ladder to rotate 360 degrees continuously.

A 5.00" water swivel will be installed at the aerial heel pivot pin that will permit water tower operations of -5 degrees to 75 degrees. The heel pivot pin will not be integral with the waterway swivel at any

point. The waterway design will allow complete servicing of the waterway swivel without disturbing the heel pivot pin.

A telescoping aluminum waterway will be installed beneath the center of the aerial ladder. The waterway will consist of a 5.00" diameter tube for the base section, 4.50" diameter tube for the mid-section and 4.00" diameter tube for the fly section.

A 1.50" drain will be provided for the waterway with the control at the rear of the unit.

WATERWAY SEALS

The waterway seals will be of type-B PolyPak design, composed of nitroxile seal and a nitrile wiper, which together offer maximum stability and extrusion resistance on the waterway. The seal will be capable of withstanding pressures up to 2000 psi, temperatures in excess of 250 degrees Fahrenheit and have resistance to all foam generating solutions. The seals will be internally lubricated.

The waterway seals will have automatic centering guides constructed of synthetic thermalpolymer. The guides will provide positive centering of the extendible sections within each other and the base section to insure longer service life and smoother operation.

PLATFORM WATER SYSTEM

A 4.00" (internal diameter) water swivel will connect the fly section waterway to the platform waterway. The water swivel will permit water tower operations from -5 degrees to 75 degrees. The water will be routed from the swivel to a 4.00" gear operated butterfly valve on the front of the platform using a 4.00" tube. The deluge gun will be bolted onto the butterfly valve.

A 2.50" preset pressure relief valve will be provided in the waterway system. It will be designed to protect the aerial waterway from excess pressure. It will dump water to the ground when operating.

A shower nozzle rated at 75 gpm will be provided beneath the platform for heat protection for the platform personnel. A direct linkage control for the shower nozzle will be provided.

Two (2) - 2.50" preconnects will be provided at the front of the platform. The preconnects will be gated at the platform. One preconnect will be furnished with 2.50" NST threads and anodized aluminum cap and the other will be provided with a 2.50" x 1.50" NST reducer and an anodized aluminum cap.

AERIAL MONITOR

An Akron Model 3480 monitor with stow and deploy will be provided at the front of the platform with a Akron 1500 gpm Model 5178 electric nozzle with built in stream shaper.

The monitor's functions will be controlled electrically from two (2) separate locations. One (1) control will be located at the turntable control console and the other at the basket control console.

WATERWAY FLOWMETER

Waterway flow, including total water flowed, will be monitored by the microprocessor. An LCD display will be located at the upper and lower control stations.

REAR INLET

A 5.00" NST inlet to the aerial waterway will be provided at the rear of the apparatus. It will be furnished with a 5.00" chrome plated adapter and a 5.00" chrome plated, long handle cap.

PLATFORM BASKET 1.50" OUTLET

One (1) 1.50" outlet with 1.50" gated valve at the right hand side rear of the platform basket will be provided. The outlet will terminate with 1.50" 90-degree swivel elbow. The swivel will be approximately 42.00" off of the platform floor so that the hose can be pre-connected. The 1/4 turn ball valve will be in the riser for easy reach over the hand rail.

TOOLS

The following tools will be provided for retorquing of all specified bolts as recommended by the manufacturer:

- Torque Wrench
- All Required Extensions, Sockets and Adapters
- 4-to-1 Multiplier

MANUALS

The aerial manufacturer will provide two (2) operator maintenance manuals and two (2) wiring diagrams pertaining to the aerial device.

INITIAL INSTRUCTION

On initial delivery of the fire apparatus, the contractor will supply a qualified representative to demonstrate the apparatus and provide initial instruction to the fire department regarding the operation, care, and maintenance of the apparatus for a period of three (3) days.

LOOSE EQUIPMENT

The following equipment will be furnished with the completed unit:

- One (1) bag of chrome, stainless steel, or cadmium plated screws, nuts, bolts and washers, as used in the construction of the unit.

NFPA REQUIRED LOOSE EQUIPMENT PROVIDED BY FIRE DEPARTMENT

The following loose equipment as outlined in NFPA 1901, 2016 edition, section 9.9.3 and 9.9.4 will be provided and installed by the fire department.

- 800 ft (240 m) of 2.50" (65 mm) or larger fire hose, in any combination.
- 400 ft (120 m) of 1.50" (38 mm), 1.75" (45 mm), or 2.00" (52 mm) fire hose, in any combination.
- One (1) handline nozzle, 200 gpm (750 L/min) minimum.
- Two (2) handline nozzles, 95 gpm (360 L/min) minimum.
- One (1) playpipe with shutoff and 1.00" (25 mm), 1.125" (29 mm), and 1.25" (32 mm) tips.
- One (1) SCBA complying with NFPA 1981 for each assigned seating position, but not fewer than four (4), mounted in brackets fastened to the apparatus or stored in containers supplied by the SCBA manufacturer.

- One (1) spare SCBA cylinder for each SCBA carried, each mounted in a bracket fastened to the apparatus or stored in a specially designed storage space.
- One (1) first aid kit.
- Four (4) salvage covers, each a minimum size of 12 ft × 14 ft (3.6 m × 5.5 m).
- Four (4) combination spanner wrenches.
- Two (2) hydrant wrenches.
- One (1) double female 2.50" (65 mm) adapter with National Hose threads.
- One (1) double male 2.50" (65 mm) adapter with National Hose threads.
- One (1) rubber mallet, for use on suction hose connections.
- Four (4) ladder belts meeting the requirements of NFPA 1983.
- One (1) 150 ft (45 m) light-use life safety rope meeting the requirements of NFPA 1983.
- One (1) 150 ft (45 m) general-use life safety rope meeting the requirements of NFPA 1983.
- One (1) traffic vest for each seating position, each vest to comply with ANSI/ISEA 207, *Standard for High Visibility Public Safety Vests*, and have a five-point breakaway feature that includes two (2) at the shoulders, two (2) at the sides, and one (1) at the front.
- Five (5) fluorescent orange traffic cones not less than 28.00" (711 mm) in height, each equipped with a 6.00" (152 mm) retro-reflective white band no more than 4.00" (152 mm) from the top of the cone, and an additional 4.00" (102 mm) retro-reflective white band 2.00" (51 mm) below the 6.00" (152 mm) band.
- Five (5) illuminated warning devices such as highway flares, unless the five (5) fluorescent orange traffic cones have illuminating capabilities.
- One (1) automatic external defibrillator (AED).
- If the supply hose carried does not use sexless couplings, an additional double female adapter and double male adapter, sized to fit the supply hose carried, will be carried mounted in brackets fastened to the apparatus.
- If none of the pump intakes are valved, a hose appliance that is equipped with one or more gated intakes with female swivel connection compatible with the supply hose used on one side and a swivel connection with pump intake threads on the other side will be carried. Any intake connection larger than 3.00" (75 mm) will include a pressure relief device that meets the requirements of 16.6.6.
- If the apparatus does not have a 2.50" National Hose (NH) intake, an adapter from 2.50" NH female to a pump intake will be carried, mounted in a bracket fastened to the apparatus if not already mounted directly to the intake.
- If the supply hose carried has other than 2.50" National Hose (NH) threads, adapters will be carried to allow feeding the supply hose from a 2.50" NH thread male discharge and to allow the hose to connect to a 2.50" NH female intake, mounted in brackets fastened to the apparatus if not already mounted directly to the discharge or intake.

SOFT SUCTION HOSE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 9.8.2.1 requires a minimum of 20' of suction hose or 15' of supply hose will be carried.

Hose is not on the apparatus as manufactured. The fire department will provide suction or supply hose.

STRAINER PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 9.8.2.1.1 requires a suction strainer when suction hose is provided.

The strainer is not on the apparatus as manufactured. The fire department will provide the suction strainer.

DRY CHEMICAL EXTINGUISHER PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 9.9.4 requires one (1) approved dry chemical portable fire extinguisher with a minimum 80-B:C rating mounted in a bracket fastened to the apparatus.

The extinguisher is not on the apparatus as manufactured. The fire department will provide and mount the extinguisher.

WATER EXTINGUISHER PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 9.9.4 requires one (1) 2.5 gallon or larger water extinguisher mounted in a bracket fastened to the apparatus.

The extinguisher is not on the apparatus as manufactured. The fire department will provide and mount the extinguisher.

FLATHEAD AXE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, Section 9.9.4 requires one (1) flathead axe mounted in a bracket fastened to the apparatus.

The axe is not on the apparatus as manufactured. The fire department will provide and mount the axe.

PICKHEAD AXE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, Section 9.9.4 requires one (1) pickhead axe mounted in a bracket fastened to the apparatus.

The axe is not on the apparatus as manufactured. The fire department will provide and mount the axe.

PAINT

The exterior custom cab and body painting procedure will consist of a seven (7) step finishing process as follows:

1. Manual Surface Preparation - All exposed metal surfaces on the custom cab and body will be thoroughly cleaned and prepared for painting. Imperfections on the exterior surfaces will be removed and sanded to a smooth finish. Exterior seams will be sealed before painting. Exterior surfaces that will not be painted include; chrome plating, polished stainless steel, anodized aluminum and bright aluminum treadplate.
2. Chemical Cleaning and Pretreatment - All surfaces will be chemically cleaned to remove dirt, oil, grease, and metal oxides to ensure the subsequent coatings bond well. The aluminum surfaces will be properly cleaned and treated using a high pressure, high temperature 4 step Acid Etch process. The steel and stainless surfaces will be properly cleaned and treated using a high temperature 3 step process specifically designed for steel or stainless. The chemical treatment

converts the metal surface to a passive condition to help prevent corrosion. A final pure water rinse will be applied to all metal surfaces.

3. Surfacer Primer - The Surfacer Primer will be applied to a chemically treated metal surface to provide a strong corrosion protective basecoat. A minimum thickness of 2 mils of Surfacer Primer is applied to surfaces that require a Critical aesthetic finish. The Surfacer Primer is a two-component high solids urethane that has excellent sanding properties and an extra smooth finish when sanded.
4. Finish Sanding - The Surfacer Primer will be sanded with a fine grit abrasive to achieve an ultra-smooth finish. This sanding process is critical to produce the smooth mirror like finish in the topcoat.
5. Sealer Primer - The Sealer Primer is applied prior to the Basecoat in all areas that have not been previously primed with the Surfacer Primer. The Sealer Primer is a two-component high solids urethane that goes on smooth and provides excellent gloss hold out when topcoated.
6. Basecoat Paint - Two coats of a high performance, two component high solids polyurethane basecoat will be applied. The Basecoat will be applied to a thickness that will achieve the proper color match. The Basecoat will be used in conjunction with a urethane clear coat to provide protection from the environment.
7. Clear Coat - Two (2) coats of Clear Coat will be applied over the Basecoat color. The Clear Coat is a two-component high solids urethane that provides superior gloss and durability to the exterior surfaces. Lap style and roll-up doors will be Clear Coated to match the body. Paint warranty for the roll-up doors will be provided by the roll-up door manufacture.

Each batch of basecoat color is checked for a proper match before painting of the cab and the body. After the cab and body are painted, the color is verified again to make sure that it matches the color standard. Electronic color measuring equipment is used to compare the color sample to the color standard entered into the computer. Color specifications are used to determine the color match. A Delta E reading is used to determine a good color match within each family color.

All removable items such as brackets, compartment doors, door hinges, and trim will be removed and separately if required, to ensure paint behind all mounted items. Body assemblies that cannot be finish painted after assembly will be finish painted before assembly.

Pierce Manufacturing paint finish quality levels for critical areas of the apparatus (cab front and sides, body sides and doors, and boom lettering panels) meet or exceed the Cadillac/General Motors GMW15777 global paint requirements. Orange peel levels meet or exceed the #6 A.C.T. standard in critical areas. These requirements are met in order for the exterior paint finish to be considered acceptable. The Pierce Manufacturing written paint standards will be available upon request.

The cab will be two-tone, with the upper section painted #101 black along with a shield design on the cab face and lower section of the cab and body painted 279.

PAINT - ENVIRONMENTAL IMPACT

Contractor will meet or exceed all current State regulations concerning paint operations. Pollution control will include measures to protect the atmosphere, water and soil. Controls will include the following conditions:

- Topcoats and primers will be chrome and lead free.
- Metal treatment chemicals will be chrome free. The wastewater generated in the metal treatment process will be treated on-site to remove any other heavy metals.
- Particulate emission collection from sanding operations will have a 99.99% efficiency factor.
- Particulate emissions from painting operations will be collected by a dry filter or water wash process. If the dry filter is used, it will have an efficiency rating of 98.00%. Water wash systems will be 99.97% efficient
- Water from water wash booths will be reused. Solids will be removed on a continual basis to keep the water clean.
- Paint wastes are disposed of in an environmentally safe manner.
- Empty metal paint containers will be to recover the metal.
- Solvents used in clean-up operations will be recycled on-site or sent off-site for distillation and returned for reuse.

Additionally, the finished apparatus will not be manufactured with or contain products that have ozone depleting substances. Contractor will, upon demand, present evidence that the manufacturing facility meets the above conditions and that it is in compliance with his State EPA rules and regulations.

PAINT CHASSIS FRAME ASSEMBLY

The chassis frame assembly will be finished with a single system black top coat before the installation of the cab and body, and before installation of the engine and transmission assembly, air brake lines, electrical wire harnesses, etc.

Components that are included with the chassis frame assembly that will be painted are:

- Frame rails
- Frame liners
- Cross members
- Axles
- Suspensions
- Steering gear
- Battery boxes
- Bumper extension weldment
- Frame extensions
- Body mounting angles
- Rear Body support substructure (front and rear)
- Pump house substructure
- Air tanks
- Fuel tank
- Castings
- Individual piece parts used in chassis and body assembly

Components treated with epoxy E-coat protection prior to paint:

- Two (2) C-channel frame rails

One (1) Pierce Velocity 100' Platform
Pierce Pulse DW481

- Two (2) frame liners

The E-coat process will meet the technical properties shown.

PAINT, REAR WHEELS

All wheel surfaces, inside and outside of inboard steel wheels only, will be provided with powder coat paint #101 black.

COMPARTMENT INTERIOR PAINT

The compartment interior will be painted with a gray spatter finish for ease of cleaning and to make it easier to touch up scratches and nicks.

AERIAL DEVICE PAINT COLOR

The aerial device paint procedure will consist of a seven (7) step finishing process as follows:

1. Manual Surface Preparation - All exposed metal surfaces on the aerial device structural components above the rotation point will be thoroughly cleaned and mechanically shot-blasted to remove metal impurities and prepare the aerial for painting.
2. Zinc Rich Primer - Zinc rich primer will be applied to the torque box and stabilizers.
3. Primer/Surfacer Coats - A two (2) component epoxy primer/surfacer will be applied to the mechanically shot-blasted metal surfaces to provide a strong corrosion protective base coat and to smooth out the surface. All seams will be caulked with a two (2) component epoxy caulk before painting.
4. Hand Sanding - The primer/surfacer coat of the outer surfaces of the hand rails and base rails will be lightly sanded to a smooth finish.
5. Primer Coat - A two (2) component epoxy primer coat will be applied over the sanded primer.
6. Topcoat Paint - Urethane base coat will be applied to opacity for correct color matching.
7. Clear Coat - Two (2) coats of an automotive grade two (2) component urethane will be applied.

Surfaces that will not be painted include all chrome plated, polished stainless steel, anodized aluminum and bright aluminum treadplate.

All buy out components, such as monitor, nozzle, gauges, etc. will be supplied as received from the vendor.

Removable items such as brackets will be removed and painted separately to ensure paint coverage behind all mounted items.

The aerial device components will be painted as follows using the aforementioned seven (7) step finishing process:

- Aerial basket: black 101
- Aerial device ladder sections and extension cylinders: black 101

One (1) Pierce Velocity 100' Platform
Pierce Pulse DW481

- Aerial turntable: black 101
- Aerial control console: black 101
- Aerial lift cylinders: black 101
- Aerial rotation motor (if applicable): black
- Aerial torque box, support structure and components below the rotation point: black 101
- Aerial stabilizers: black 101
- Aerial boom support: black 101

REFLECTIVE STRIPES

Three (3) reflective stripes will be provided across the front of the vehicle and along the sides of the body. The reflective band will consist of a 1.00" black stripe at the top with a 1.00" gap then a 6.00" black stripe with a 1.00" gap and a 1.00" black stripe on the bottom.

The reflective band provided on the cab face will be below the headlights on the fiberglass.

REAR CHEVRON STRIPING

There will be alternating chevron striping located on the rear-facing vertical surface of the apparatus. Covered surfaces will include the rear wall and aluminum doors. Rear compartment doors, stainless steel access doors, and the rear bumper will not be covered.

The colors will be red and fluorescent yellow green diamond grade.

Each stripe will be 6.00" in width.

This will meet the requirements of the current edition of NFPA 1901, which states that 50% of the rear surface will be covered with chevron striping.

REFLECTIVE STRIPE ON STABILIZERS

There will be a 4.00" wide fluorescent yellow green diamond grade reflective stripe provided on the forward and rear facing side of all aerial stabilizers.

JOG IN REFLECTIVE BAND

The reflective band located on each side of the apparatus body will contain one (1) jog and will be angled at approximately a 45-degrees when installed.

CAB DOOR REFLECTIVE STRIPE

A 6.00" x 16.00" black reflective stripe will be provided across the interior of each cab door. The stripe will be located approximately 1.00" up from the bottom, on the door panel.

This stripe will meet the NFPA 1901 requirement.

LETTERING

Twenty-one (21) to forty (40) reflective lettering, 3.00" high, with outline and shade will be provided.

LETTERING

There will be reflective lettering, 8.00" high, with outline and shade provided. There will be three (3) letters provided.

LETTERING

Forty-one (41) to sixty (60) reflective lettering, 10.00" high, with outline and shade will be provided.

FIRE APPARATUS PARTS MANUAL

There will be one (1) custom parts manual in USB flash drive format for the complete fire apparatus provided.

The manual will contain the following:

- Job number
- Part numbers with full descriptions
- Table of contents
- Parts section sorted in functional groups reflecting a major system, component, or assembly
- Parts section sorted in alphabetical order
- Instructions on how to locate parts

Each manual will be specifically written for the chassis and body model being purchased. It will not be a generic manual for a multitude of different chassis and bodies.

SERVICE PARTS INTERNET SITE

The service parts information included in these manuals are also available on the Pierce website. The website offers additional functions and features not contained in this manual, such as digital photographs and line drawings of select items. The website also features electronic search tools to assist in locating parts quickly.

CHASSIS SERVICE MANUALS

There will be one (1) chassis service manuals on USB flash drives containing parts and service information on major components provided with the completed unit.

The manual will contain the following sections:

- Job number
- Table of contents
- Troubleshooting
- Front Axle/Suspension
- Brakes
- Engine/Tires
- Wheels
- Cab
- Electrical, DC
- Air Systems
- Plumbing
- Appendix

The manual will be specifically written for the chassis model being purchased. It will not be a generic manual for a multitude of different chassis and bodies.

CHASSIS OPERATION MANUAL

The chassis operation manual will be provided on one (1) USB flash drive.

ONE (1) YEAR MATERIAL AND WORKMANSHIP

A Pierce basic apparatus limited warranty certificate, WA0008, is included with this proposal.

THREE (3) YEAR MATERIAL AND WORKMANSHIP

The Pierce custom chassis limited warranty certificate, WA0284, is included with this proposal.

ENGINE WARRANTY

A Cummins **five (5) year** limited engine warranty will be provided. A limited warranty certificate, WA0181, is included with this proposal.

STEERING GEAR WARRANTY

A Sheppard **three (3) year** limited steering gear warranty will be provided. A copy of the warranty certificate will be submitted with the bid package.

FIFTY (50) YEAR STRUCTURAL INTEGRITY

The Pierce custom chassis frame and crossmembers limited warranty certificate, WA0038, is included with this proposal.

FRONT AXLE THREE (3) YEAR MATERIAL AND WORKMANSHIP WARRANTY

The Pierce TAK-4 suspension limited warranty certificate, WA0050, is included with this proposal.

REAR AXLE TWO (2) YEAR MATERIAL AND WORKMANSHIP WARRANTY

A Meritor axle limited warranty certificate, WA0046, is included with this proposal.

ABS BRAKE SYSTEM THREE (3) YEAR MATERIAL AND WORKMANSHIP WARRANTY

A Meritor Wabco™ABS brake system limited warranty certificate, WA0232, is included with this proposal.

TEN (10) YEAR STRUCTURAL INTEGRITY

The Pierce custom cab limited warranty certificate, WA0012, is included with this proposal.

TEN (10) YEAR PRO-RATED PAINT AND CORROSION

A Pierce cab limited pro-rated paint warranty certificate, WA0055, is included with this proposal.

FIVE (5) YEAR MATERIAL AND WORKMANSHIP

The Pierce Command Zone electronics limited warranty certificate, WA0014, is included with this proposal.

CAMERA SYSTEM WARRANTY

A Pierce fifty-four (54) month warranty will be provided for the camera system.

COMPARTMENT LIGHT WARRANTY

The Pierce 12-volt DC LED strip lights limited warranty certificate, WA0203, is included with this proposal.

TRANSMISSION WARRANTY

The transmission will have a **five (5) year/unlimited mileage** warranty covering 100 percent parts and labor. The warranty will be provided by Allison Transmission.

Note: The transmission cooler is not covered under any extended warranty you may be getting on your Allison Transmission. Please review your Allison Transmission warranty for coverage limitations.

TRANSMISSION COOLER WARRANTY

The transmission cooler will carry a five (5) year parts and labor warranty (exclusive to the transmission cooler). In addition, a collateral damage warranty will also be in effect for the first three (3) years of the warranty coverage and will not exceed \$10,000 per occurrence. A copy of the warranty certificate will be submitted with the bid package.

WATER TANK WARRANTY

A UPF poly water tank limited warranty certificate, WA0195, is included with this proposal.

TEN (10) YEAR STRUCTURAL INTEGRITY

The Pierce apparatus body limited warranty certificate, WA0009, is included with this proposal.

ROLL UP DOOR MATERIAL AND WORKMANSHIP WARRANTY

An AMDOR roll-up door limited warranty will be provided. The roll-up door will be warranted against manufacturing defects for a period of **ten (10) years**. A **five (5) year** limited warranty will be provided on painted roll up doors.

The limited warranty certificate, WA0185, is included with this proposal.

PUMP WARRANTY

A Waterous pump limited warranty certificate, WA0225, is included with this proposal.

TEN (10) YEAR PUMP PLUMBING WARRANTY

The Pierce apparatus plumbing limited warranty certificate, WA0035, is included with this proposal.

FOAM SYSTEM WARRANTY

The Husky 3 foam system limited warranty certificate, WA0231, is included with this proposal.

TWENTY (20) YEAR AERIAL DEVICE STRUCTURAL INTEGRITY WARRANTY

The Pierce device limited warranty certificate, WA0052, is included with this proposal.

AERIAL SWIVEL WARRANTY

An Amity five (5) year limited swivel warranty will be provided. A copy of the warranty certificate will be submitted with the bid package.

HYDRAULIC SYSTEM COMPONENTS WARRANTY

Aerial hydraulic system components will be provided with a five (5) year material and workmanship limited warranty.

HYDRAULIC SEAL WARRANTY

Aerial hydraulic seals will be provided with a three (3) year material and workmanship limited warranty.

One (1) Pierce Velocity 100' Platform
Pierce Pulse DW481

A copy of the warranty certificates will be submitted with the bid package.

AERIAL WATERWAY WARRANTY

An Amity ten (10) year limited waterway warranty will be provided. A copy of the warranty certificate will be submitted with the bid package.

FOUR (4) YEAR PRO-RATED PAINT AND CORROSION

A Pierce aerial device limited pro-rated paint warranty certificate, WA0047, is included with this proposal.

FIVE (5) YEAR MATERIAL AND WORKMANSHIP

The Pierce Command Zone electronics limited warranty certificate, WA0014, is included with this proposal.

SIX (6) YEAR GENERATOR MATERIAL AND WORKMANSHIP WARRANTY

A Harrison Hydra-Gen limited warranty certificate, WA0285, is included with this proposal.

TEN (10) YEAR PRO-RATED PAINT AND CORROSION

A Pierce body limited pro-rated paint warranty certificate, WA0057, is included with this proposal.

ONE (1) YEAR MATERIAL AND WORKMANSHIP

The Pierce graphics fading and deterioration limited warranty limited warranty certificate, WA0168, is included with this proposal.

VEHICLE STABILITY CERTIFICATION

The fire apparatus manufacturer will provide a certification stating the apparatus complies with NFPA 1901, current edition, section 4.13, Vehicle Stability. The certification will be provided at the time of bid.

ENGINE INSTALLATION CERTIFICATION

The fire apparatus manufacturer will provide a certification, along with a letter from the engine manufacturer stating they approve of the engine installation in the bidder's chassis. The certification will be provided at the time of bid.

POWER STEERING CERTIFICATION

The fire apparatus manufacturer will provide a certification stating the power steering system as installed meets the requirements of the component supplier. The certification will be provided at the time of bid.

CAB INTEGRITY CERTIFICATION

The fire apparatus manufacturer will provide a cab integrity certification with this proposal. The certification will state that the cab has been tested and certified by an independent third-party test facility. Testing events will be documented with photographs, real-time and high-speed video, vehicle accelerometers, cart accelerometers, and a laser speed trap. The fire apparatus manufacturer will provide a state-licensed professional engineer to witness and certify all testing events. Testing will meet or exceed the requirements below:

- European Occupant Protection Standard ECE Regulation No.29.

- SAE J2422 Cab Roof Strength Evaluation - Quasi-Static Loading Heavy Trucks.
- SAE J2420 COE Frontal Strength Evaluation - Dynamic Loading Heavy Trucks.

Roof Crush

The cab will be subjected to a roof crush force of 22,050 lb. This value meets the ECE 29 criteria and is equivalent to the front axle rating up to a maximum of 10 metric tons.

Additional Roof Crush

The same cab will be subjected to a roof crush force of 100,000 lbs. This value exceeds the ECE 29 criteria by nearly 4.5 times.

Side Impact

The same cab will be subjected to dynamic preload where a 13,275 lb moving barrier slams into the side of the cab at 5.5 mph at a force of 13,000 ft-lbs. This test is part of the SAE J2422 test procedure and more closely represents the forces a cab will see in a rollover incident.

Frontal Impact

The same cab will withstand a frontal impact of 32,600 ft-lbs of force using a moving barrier in accordance with SAE J2420.

Additional Frontal Impact

The same cab will withstand a frontal impact of 65,200 ft-lbs of force using a moving barrier, (twice the force required by SAE J2420).

The same cab will withstand all tests without any measurable intrusion into the survival space of the occupant area.

CAB DOOR DURABILITY CERTIFICATION

Robust cab doors help protect occupants. Cab doors will survive a 200,000-cycle door slam test where the slamming force exceeds 20 G's of deceleration. The bidder will certify that the sample doors similar to those provided on the apparatus have been tested and have met these criteria without structural damage, latch malfunction, or significant component wear.

WINDSHIELD WIPER DURABILITY CERTIFICATION

Visibility during inclement weather is essential to safe apparatus performance. Windshield wipers will survive a 3 million cycle durability test in accordance with section 6.2 of SAE J198 *Windshield Wiper Systems - Trucks, Buses and Multipurpose Vehicles*. The bidder will certify that the wiper system design has been tested and that the wiper system has met these criteria.

ELECTRIC WINDOW DURABILITY CERTIFICATION

Cab window roll-up systems can cause maintenance problems if not designed for long service life. The window regulator design will complete 30,000 complete up-down cycles and still function normally when finished. The bidder will certify that sample doors and windows similar to those provided on the apparatus have been tested and have met these criteria without malfunction or significant component wear.

SEAT BELT ANCHOR STRENGTH

Seat belt attachment strength is regulated by Federal Motor Vehicle Safety Standards and should be validated through testing. Each seat belt anchor design will withstand 3000 lb of pull on both the lap and shoulder belt in accordance with FMVSS 571.210 Seat Belt Assembly Anchorages. The bidder will certify that each anchor design was pull tested to the required force and met the appropriate criteria.

SEAT MOUNTING STRENGTH

Seat attachment strength is regulated by Federal Motor Vehicle Safety Standards and should be validated through testing. Each seat mounting design will be tested to withstand 20 G's of force in accordance with FMVSS 571.207 Seating Systems. The bidder will certify that each seat mount and cab structure design was pull tested to the required force and met the appropriate criteria.

CAB DEFROSTER CERTIFICATION

Visibility during inclement weather is essential to safe apparatus performance. The defroster system will clear the required windshield zones in accordance with SAE J381 Windshield Defrosting Systems Test Procedure And Performance Requirements - Trucks, Buses, And Multipurpose Vehicles. The bidder will certify that the defrost system design has been tested in a cold chamber and passes the SAE J381 criteria.

CAB HEATER CERTIFICATION

Good cab heat performance and regulation provides a more effective working environment for personnel, whether in-transit, or at a scene. The cab heaters will warm the cab 75 F from a cold-soak, within 30 minutes when tested using the coolant supply methods found in SAE J381. The bidder will certify that a substantially similar cab has been tested and has met these criteria.

AMP DRAW REPORT

The bidder will provide, at the time of bid and delivery, an itemized print out of the expected amp draw of the entire vehicle's electrical system.

The manufacturer of the apparatus will provide the following:

- Documentation of the electrical system performance tests.
- A written load analysis, which will include the following:
 - o The nameplate rating of the alternator.
 - o The alternator rating under the conditions specified per:
 - Applicable NFPA 1901 or 1906 (Current Edition).
 - o The minimum continuous load of each component that is specified per:
 - Applicable NFPA 1901 or 1906 (Current Edition).
 - o Additional loads that, when added to the minimum continuous load, determine the total connected load.
 - o Each individual intermittent load.

All of the above listed items will be provided by the bidder per the applicable NFPA 1901 or 1906 (Current Edition).



Proposal Option List

4/5/2018

Customer: Richland Fire & Emergency Services
Representative: Waters, Dennis
Organization: Hughes Fire Equipment, Inc
Requirements Manager:
Description: 100' PAP
Body: Aerial, Platform 100', Alum Body
Chassis: Velocity Chassis, PAP/Midmount (Big Block), 2010

Bid Number: 481
Job Number:
Number of Units: 1
Bid Date: 03-15-2018
Stock Number:
Price Level: 37 (Current: 37)

Line	Option	Type	Option Description	Qty
1	0658294		Boiler Plates, Aerial 100' Platform	1
			Fire Department/Customer - Richland Fire Department	
			Operating/In conjunction W-Service Center - Operating	
			Miles - 250 Miles	
			Number of Fire Dept/Municipalities - 20	
			Bidder/Sales Organization - Hughes Fire Equipment	
			Delivery - Delivery representative	
			Dealership/Sales Organization, Service - Hughes Fire	
2	0018180		Single Source Compliance, Aerials	1
3	0584456		Manufacture Location, Appleton, Wisconsin	1
4	0584452		RFP Location: Appleton, Wisconsin	1
5	0588609		Vehicle Destination, US	1
6	0610784		Comply NFPA 1901 Changes Effective Jan 1, 2016, With Exceptions	1
7	0533351		Quint Fire Apparatus	1
8	0588612		Vehicle Certification, Aerial w/Pump	1
9	0681278		Agency, Apparatus Certification, Aerial w/Pump, U.L.	1
10	0000114		Inspection Trip(s)	2
			Qty, - 02	
			Fill in Blank - three (3)	
11	0536644		Customer Service Website	1
12	0537375		Unit of Measure, US Gallons	1
13	0030006		Bid Bond Not Requested	1
14	0582800		Performance Bond, 100 Percent w/25 Percent Warranty Bond, 1 Yr, and Payment Bond	1
15	0000007		Approval Drawing	1
16	0002928		Electrical Diagrams	1
17	0564213		Velocity Chassis, PAP/Midmount (Big Block), 2010	1
18	0000110		Wheelbase	1
			Wheelbase - 261.00	
19	0000070		GVW Rating	1
			GVW rating - 80,800	
20	0000203		Frame Rails, 13.38 x 3.50 x .375, Qtm/AXT/Imp/Vel/DCF	1
21	0060637		Frame Liner, Inv "L" 12.68" x 3.00" x .25", AXT/Vel/Imp, Full Length, 56"Qval	1
22	0508849		Axle, Front, Oshkosh TAK-4, Non Drive, 22,800 lb, Imp/Vel	1
23	0010427		Suspension, Front TAK-4, 22,800 lb, Qtm/AXT/Imp/Vel/DCF/Enf	1
24	0087572		Shock Absorbers, KONI, TAK-4, Qtm/AXT/Imp/Vel/DCF/Enf	1
25	0000322		Oil Seals, Front Axle	1
26	0686052		Tires, Front, Michelin, XFE (wb), 425/65R22.50, 20 ply, Fire Service Speed Rtng	1
27	0019611		Wheels, Front, Alcoa, 22.50" x 12.25", Aluminum, Hub Pilot	1
28	0530481		Axle, Rear, Meritor RT58-185, 58,000 lb, Velocity/Dash CF	1
29	0544244		Top Speed of Vehicle, 60 MPH	1
30	0545272		Suspen, Rear, Hendrickson HN FR 58,000# (rubber bolster spring)	1
31	0000485		Oil Seals, Rear Axle	1
32	0792675		Tires, Rear, Michelin, X WORKS Z, 315/80R22.50, LRL, Tandem	1
33	0019660		Wheels, Rear, Alcoa, 22.50" x 9.00", Aluminum-Steel, Hub Pilot, Tandem	1
34	0568081		Tire Balancing, Counteract Beads	1
35	0620569		Tire Pressure Monitoring, RealWheels, AirSecure, Valve Cap, Tandem Axle	1
			Qty, Tire Pressure Ind - 10	
36	0099183		Bands, Wheel Safety Bands, Tyron, Custom Chassis	1
			Location - front tires	
			Qty, Wheel Safety Band - 01	

Line	Option	Type	Option Description	Qty
37	0003245		Axle Hub Covers w/center hole, S/S, Front Axle	1
38	0013241		Axle Hub Covers, Rear, S/S High Hat (Tandem)	1
39	0002000		Chains, Onspot, Automatic Tire, Custom	1
40	0057936		Covers, Lug Nut, Chrome	1
41	0002045		Mud Flaps, w/logo front & rear	1
42	0601010		Chocks, Wheel, SAC-44-E, Folding, Aerials	2
			Qty, Pair - 02	
43	0601009		Mounting Brackets, Chocks, SAC-44-E, Folding, Horizontal, Aerials	2
			Qty, Pair - 02	
			Location, Wheel Chocks - Left Side Rear Tire, Forward and Right Side	
			Rear Tire, Forward	
44	0593759		ESC/ABS/ATC Wabco Brake System, Tandem Rear Axle, 2010	1
45	0030185		Brakes, Knorr/Bendix 17", Disc, Front, TAK-4	1
46	0000730		Brakes, Meritor, Cam, Rear, 16.50 x 7.00"	1
47	0020784		Air Compressor, Brake, Cummins/Wabco 18.7 CFM	1
48	0000794		Brake Reservoirs, Six	1
49	0568012		Air Dryer, Wabco System Saver 1200, Heater, 2010	1
50	0000790		Brake Lines, Nylon	1
51	0000854		Air Inlet, w/Disconnect Coupling	1
			Location, Air Coupling(s) - a) DS Step Well, Forward	
			Qty, Air Coupling (s) - 1	
52	0070810		All Wheel Lockup (Aerial/Tanker Chassis)	1
53	0795318		Engine, Cummins X15, 600 hp, 1850 lb-ft, W/OBD, EPA 2017, Velocity	1
54	0001244		High Idle w/Electronic Engine, Custom	1
55	0687994		Engine Brake, Jacobs Compression Brake, Cummins Engine	1
			Switch, Engine Brake - e) ISC/ISM/ISL9/ISX Hi Med Lo	
56	0552334		Clutch, Fan, Air Actuated, Horton Drive Master	1
57	0123135		Air Intake, w/Ember separator, Imp/Vel	1
58	0794743		Exhaust System, 5", 2017 X15 Engine, Horizontal, Right Side	1
59	0032390	SP	Exhaust, Terminated as close to the rear axle as possible	1
60	0787999		Radiator, Impel/Velocity	1
61	0616439		Cooling Hoses, Gates Silicone	1
62	0051125		Fuel Tank, 75 Gallon, Left Side Fill, Qtm/AXT/Vel/Imp/DCF/SFR/Enf	1
63	0001129		Lines, Fuel	1
64	0682451		DEF Tank, 12 Gallon, DS Fill, Forward Compartment	1
65	0552793		Not Required, Fuel Priming Pump	1
66	0582243		Shutoff Valves, Fuel Line @ Primary Filter, Cummins	1
67	0553019		Cooler, Engine Fuel, Imp/Vel, AXT/Qtm/Sab/DCF/SFR/Enf	1
68	0578959		Fuel/Water Separator, Racor Inline	1
69	0642533		Trans, Allison 5th Gen, 4500 EVS P, w/Prognostics, Imp/Vel/DCF/Enf	1
70	0512762		Transmission, Shifter, 6-Spd, Push Button, 4500, Imp/Vel/Qtm/DCF/Enf	1
			Trans, ratio - 4500 EVS, 6Spd	
71	0684459		Transmission Oil Cooler, Modine, External	1
72	0001375		Driveline, Spicer 1810	1
73	0669988		Steering, Sheppard M110 w/Tilt, TAK-4, Eaton Pump, w/Cooler	1
74	0001544		Not Required, Steering Assist Cylinder on Front Axle	1
75	0509230		Steering Wheel, 4 Spoke without Controls	1
76	0690274		Logo/Emblem, on Dash	1
			Text, Row (1) One - Richland	
			Text, Row (2) Two - Emergency	
			Text, Row (3) Three - Services	
77	0123625		Bumper, 19" Extended, Imp/Vel	1
78	0616492		Tray, Hose, Center, 19" Bumper, Outside Air Horns, Imp/Vel	1
			Grating, Bumper extension - Grating, Rubber	
			Capacity, Bumper Tray - 21) 150' of 1.75	
79	0630809		Cover, Aluminum Treadplate, One (1) D-Ring Latch, Hose Tray, Notched	1
			Stay arm, Tray Cover - b) Pneumatic Stay Arm	
80	0510226		Lift & Tow Package, Imp/Vel, AXT, Dash CF	1
81	0522573		Tow Hooks Not Required, Due to Lift and Tow Package	1
82	0651334		Cab, Velocity FR, 7000	1
83	0667982		Engine Tunnel, ISX, Impel/Velocity FR	1
84	0677478		Rear Wall, Exterior, Cab, Aluminum Treadplate	1

Line	Option	Type	Option Description	Qty
85	0122466		Cab Lift, Elec/Hyd, w/Manual Override, Imp/Vel	1
86	0123176		Grille, Bright Finished, Front of Cab, Impel/Velocity	1
87	0769753		Emblem, American Flag Painted on Cab Grille, All Custom Chassis	1
88	0002224		Scuffplates, S/S At Cab Door Jambs, 4-Door Cab	1
			Material Trim/Scuffplate - c) S/S, Polished	
89	0527032		Trim, S/S Band, Across Cab Face, Rect Lights, Velocity	1
			Material Trim/Scuffplate - c) S/S, Polished	
			Turnsignal Covers - Polished S/S Covers	
90	0087357		Molding, Chrome on Side of Cab	1
91	0502328		Mirrors, Ramco, 6000CCHR, Heated/Remote, w/Heated Convex, Door Mount	1
92	0680149		Riser, Ramco Mirror, 6.00", Pair	1
93	0651313		Door, Half-Height, Velocity FR 4-Door Cab, Level Roof	1
			Key Model, Cab Doors - 751	
94	0655511		Door Panel, Brushed Stainless Steel, Impel/Velocity 4-Door Cab	1
95	0667905		Storage Pockets w/ Elastic Cover, Recessed, Impel/Velocity FR	1
96	0667902		Controls, Electric Windows, All Cab Doors, Impel/Velocity FR	1
97	0555486		Steps, 4-Door Cab, Dual, Imp/Vel	1
			Light, Step, Additional - P25 LED	
98	0770194		Handrail, Exterior, Knurled, Alum, 4-Door Cab	1
99	0509649		Lights, Cab and Crew Cab Access Steps, P25, LED w/Bezel, 1Lt Per Step	1
100	0002140		Fenders, S/S on Cab	1
101	0122479		Window, Side of C/C, Fixed, Velocity	1
102	0552935		Trim, Cab Side Windows, Velocity	1
103	0509287		Windows, Rear CC, (2) 11.25" x 18", Velocity	1
104	0553196		Trim, Cab Rear Windows, Velocity	1
105	0663375		Mounting Provisions, 1/4" Alum, Full Engine Tunnel, Vel/Imp	1
			Mounting Provision Spacing - 1.00"	
			Material Finish, Cab Interior - Painted	
106	0657960		Bracket, 45 Degrees, To Mount Air Bottle Bracket, Crew Cab	1
			Location - behind the driver seat	
			Qty, - 01	
107	0667945		Cab Interior, Vinyl, Velocity FR, CARE	1
			Color, Cab Interior Vinyl/Fabric - a) Silver/Gray	
108	0667943		Cab Interior, Paint Color, Impel/Velocity FR	1
			Color, Cab Interior Paint - i) fire smoke gray	
109	0509532		Floor, Rubber Padded Cab & Crew Cab, Imp/Vel, Dash CF	1
110	0667936		Heater/defroster, Dual Zone Control, Impel/Velocity FR	1
111	0603345		Air Conditioning, Dual Zone Control, Velocity FR w/ ISX15 Engine	1
			Paint Color, A/C Condenser - Cover Match Roof	
112	0639675		Sun Visor, Smoked Lexan, AXT, Dash CF, Imp/Vel, Saber FR/Enforcer	1
			Sun Visor Retention - No Retention	
113	0548173		Grab Handles, Driver and Passenger Door Post, Imp/Vel	1
114	0583938		Lights, Engine Compt, Custom, Auto Sw, WIn 3SC0CDCR, 3" LED, Trim	1
			Qty, - 01	
115	0122516		Fluid Check Access, Imp/Vel	1
116	0583042		Side Roll and Frontal Impact Protection	1
117	0622618		Seating Capacity, 5 Seats	1
118	0697005		Seat, Driver, Pierce PS6, Premium, Air Ride, High Back, Safety	1
119	0696994		Seat, Officer, Pierce PS6, Premium, Air Ride, SCBA, Safety	1
120	0002517		Not Required, Radio Compartment	1
121	0102788		Not Required, Seat, Rear Facing C/C, DS Outboard	1
122	0102783		Not Required, Seat, Rr Facing C/C, Center	1
123	0122186		Seat, Rear Facing C/C, PS Outboard, Pierce PS6, Premium, SCBA, Safety	1
124	0122717		Seat, Forward Facing C/C, DS Outboard, Pierce PS6, Base, SCBA, Safety	1
125	0199536		Cabinet, EMS, Forward Facing, Center, 42 W x 48 H x 24 D, Imp/Vel	1
			Door, EMS Cabinet - Amdor Roll Up Dr, No Lock	
			False Floor, EMS Cabinet - No False Floor	
			Light, Short EMS Compt - Pierce, Both Sides	
126	0122730		Seat, Forward Facing C/C, PS Outboard, Pierce PS6, Base, SCBA, Safety	1
127	0589269		Shelf, Adjustable, EMS Compt, .75" Lip	3
			Location - forward facing EMS cabinet	
			Qty, Shelf - 03	

Line	Option	Type	Option Description	Qty
128	0566653		Upholstery, Seats In Cab, Turnout Tuff	1
			Color, Cab Interior Vinyl/Fabric - c) Black	
129	0543991		Bracket, Air Bottle, Hands-Free II, Cab Seats	4
			Qty, - 04	
130	0603867		Seat Belt, ReadyReach	1
			Seat Belt Color - Red	
131	0604863		Seat Belt Height Adjustment, 6 Seats, Imp/Vel, Dash CF	1
132	0602464		Helmet Storage, Provided by Fire Department, NFPA 2016	1
133	0647647		Lights, Dome, FRP Dual LED 4 Lts	1
			Color, Dome Lt - Red & White	
			Color, Dome Lt Bzl - Black	
			Control, Dome Lt White - Door Switches and Lens Switch	
			Control, Dome Lt Color - Lens Switch	
134	0631776		Not Required, Overhead Map Lights	1
135	0544484		Handlts, (4) Streamlight, UltraStinger w/AC/DC Charger	1
			Location, Lights - mounted on the dog house, locations will be determined at preconstruction	
136	0568369		Cab Instruments, Ivory Gauges, Chrome Bezels, Impel/Velocity 2010, Dash CF	1
137	0509511		Air Restriction Indicator, Imp/Vel, AXT, Dash CF, Enf MUX	1
138	0543751		Light, Do Not Move Apparatus	1
			Alarm, Do Not Move Truck - Pulsing Alarm	
139	0509042		Messages, Open Door/Do Not Move Truck, MUX w/Color Display	1
140	0611681		Switching, Cab, Membrane, Impel/Velocity/Quantum, Dash CF, AXT WiFi MUX	1
			Location, Emerg Sw Pnls - Driver's Side Overhead	
141	0555915		Wiper Control, 2-Speed with Intermittent, MUX, Impel/Velocity	1
142	0002565		Hourmeter, Aerial Inside Cab	1
143	0002615		Switch, Aerial 12V Master	1
144	0002617		PTO switch, w/light - aerial	1
145	0548006		Wiring, Spare, 15 A 12V DC 2nd	4
			Qty, - 04	
			12vdc power from - Battery direct	
			Wire termination - 15 amp power point plug	
			Location - 2 on the left side of the officer dash and 2 in the forward facing EMS compartment, mounted high on the back wall PS	
146	0610968		Wiring, Spare, 2.0 A 12V DC, USB Termination Blue Sea 1016 1st	1
			Qty, - 01	
			12vdc power from - Battery direct	
			Location - left side of the officer dash,	
147	0548001		Wiring, Spare, 10 A 12V DC 2nd	2
			Qty, - 02	
			12vdc power from - Battery direct	
			Wire termination - Butt Splice	
			Location - left side of the officer dash	
148	0636439		Wiring, Spare, 37.5 A 12V DC, Cust Install Radio, 30A Bat Dir, 7.5A Ign & Grnd	2
			Qty, - 02	
			Location - behind the officers seat	
149	0547505		Wiring, Spare, 10 A 12V DC 1st	4
			Qty, - 04	
			12vdc power from - Battery switched	
			Wire termination - Butt Splice	
			Location - 3' of wire coiled 2 behind the officers seat and 2 behind the drivers seat	
150	0566101		Recess, Dash Panel, Officer Side, Vel/Imp	1
151	0643196		Radio, AM/FM/CD/WB, Jensen, Front Aux In / USB / Bluetooth	1
			Speakers, AM/FM Radio - One (1) pair of speakers, Cab	
			Antenna, AM/FM Radio - c) Roof-mounted rubber antenna	
			Location, AM/FM Radio - e) switch panel	
152	0615386		Vehicle Information Center, 7" Color Display, Touchscreen, MUX	1
			System Of Measurement - US Customary	
153	0606249		Vehicle Data Recorder w/CZ and Overhead Display Seat Belt Monitor	1
154	0793724		Intercom, Setcom 950W4, 4-Pos, (D,Wireless)O,2C	1
			Location, Intercom, C Cab - 2) 2 forward facing seats	

Line	Option	Type	Option Description	Qty
155	0793667		Cable, Radio to Intercom Interface, Setcom 950, 1 Radio	1
			Radio, First Two-Way Model - TK7180	
			Radio, First Two-Way Make - Kenwood	
156	0517372		Switch, AM/FM Radio, Location and Power Feature	1
			Location - with in easy reach of the officer	
			12vdc power from - Battery switched	
157	0559508		Install Customer Provided Two-Way Radio Remote Head Cable	1
			Location - it will be installed above the dash between location #3 and	
			Location #4 in the overhead	
			Qty, - 01	
158	0616382		Install Customer Provided GPS/Multimode Antenna(s)	1
			Qty, - 01	
159	0653520		Camera, Pierce, Mux, R, RS Cameras	1
			Camera System Audio - Not Provided	
160	0684244		Guard, Polished S/S, Camera, Each	1
			Qty, - 01	
			Location - rear	
161	0680479		Key Storage, Knox-Box, KeySecure 3b, P/N 2651, USB, Blue Strobe, Cab Surface	1
			Mt	
			Location - In the crew cab on the rear of dog house	
162	0615100		Pierce Command Zone, Advanced Electronics & Control System, Diag LEDs, Vel,	1
			WiFi	
163	0624254		Electrical System, Velocity	1
164	0079166		Batteries, (4) Exide Grp 31, 950 CCA ea, Threaded Stud	1
165	0008621		Battery System, Single Start, All Custom Chassis	1
166	0123174		Battery Compartment, Imp/Vel	1
167	0614406		Charger, Sngl Sys, IOTA, DSL-75, 75 Amp, Kussmaul 091-94-12 Ind,	1
			AXT/DCF/Vel/Imp	
168	0012782		Location, Charger, Front Left Side Body Compartment	1
			Location, Battery Chrgr/Cmpr - High On Left Wall	
169	0537512		Location, Battery Charger Indicator, Display Through Window Behind Driver Seat	1
170	0016857		Shoreline, 20A 120V, Kussmaul Auto Eject, 091-55-20-120, Super	1
			Qty, - 01	
			Color, Kussmaul Cover - b) red	
			Shoreline Connection - Battery Charger	
171	0026800		Shoreline Location	1
			Location, Shoreline(s) - DS Cab Side	
172	0647728		Alternator, 430 amp, Delco Remy 55SI	1
173	0092582		Load Manager/Sequencer, MUX	1
			Enable/Disable Hi-Idle - e)High Idle enable	
174	0783153		Headlights, Rect LED, JW Spkr Evo 2, AXT/DCF/Enf/Imp/Sab/Vel	1
			Color, Headlight Bez - Chrome Bezel	
175	0648425		Light, Directional, Wln 600 LED Cmb, Cab Crn, Imp/Vel/AXT/Qtm/DCF	1
			Color, Lens, LED's - m)match LED's	
176	0620054		Light, Directional/Marker, Intermediate, Weldon 9186-8580-29 LED 2lts	1
177	0648074		Lights, Clearance/Marker/ID, Front, P25 LED 7 Lts	1
178	0647993		Lights, Clearance/Marker/ID, Platform, P25 LED, 5 Lts	1
			Light Guard - With Guard	
179	0511569		Lights, Clearance/Marker/ID, Rear, P25 LED 7Lts	1
			Light Guard - Without Guard	
180	0602938		Light, Marker End Outline, Rubber Arm, LED Marker Lamp, Rear Body	1
			Qty, Lights, Pair - 1	
181	0564683		Lights, Tail, Wln M6BTT* Red LED Stop/Tail & M6T* Amber LED Dir Arw For Hsg	1
			Color, Lens - Colored	
182	0561471		Lights, Backup, Wln M6BUW, LED, For Tail Lt Housing	1
183	0664481		Bracket, License Plate & Light, P25 LED	1
184	0556842		Bezels, Wln, (2) M6 Chrome Pierce, For mtg (4) Wln M6 lights	1
185	0589905		Alarm, Back-up Warning, PRECO 1040	1
186	0769420		Lights, Perimeter Cab, Amdor AY-LB-12HW020 LED 4Dr	1
			Z location -	
187	0769553		Lights, Perimeter Pump House, Amdor AY-LB-12HW012 LED 1lt	1
188	0768765		Lights, Perimeter Body, Amdor AY-LB-12HW020 LED 2lts, Turntable Access	1
			Control, Perimeter Lts - Parking Brake Applied	

Line	Option	Type	Option Description	Qty
189	0554198		Lights, Step, P25 LED, Aerial With Pump 2Lts, Pump Pnl Sw	1
190	0672327		Lights, Deck, Wln (2) MPBW Micro Pioneer LED Rear Flood Lights	1
			Switch, Scene Lt Cntrl - h)switch at rear	
191	0645877		Lights, Hose Bed, Sides, Dual LED Light Strips	1
			Control, Hose Bed Lts - Cup Switch At Rear	
192	0645681		Lights, Not Required, Rear Work, Deck Lights At Rear	1
193	0709438		Light, Walking Surface, FRP Flood, LED	1
194	0022153		Aerial, Platform 100', Alum Body	1
195	0554269		Body Skirt Height, 18"	1
196	0601005		Tank, Water, 300 Gallon, Poly, PAP, Notched	1
197	0003405		Overflow, 4.00" Water Tank, Poly	1
198	0028104		Foam Cell Required	1
199	0003429		Not Required, Direct Tank Fill	1
200	0593673		Alum Hose Bed Construction, 100' PAP, Smooth Aluminum Door	1
201	0003491		Hose Bed Capacity 1000' of 5.00", Ascendant, PAP, PAL	1
202	0581819		Hose Restraint, Hose Bed, Vinyl, Top, Aerial	1
			Color, Vinyl Cover - c) black	
			Type of fastener - Velcro/Snaps - Sides of Hosebed	
			Type of fastener, Front - Awning rail (aluminum retainer) - Front Hosebed	
203	0003509		Running Boards, PAP	1
204	0665275		Turntable Steps-Morton Cass, Swing Down,DS&PS,Ascend TA,PAL,PAP,Handhld Cut Outs	1
205	0554004		Lights, Step (6), P25 LED, Swing Down Access Steps, Each Side	1
206	0690023		Wall, Rear, Smooth Aluminum	1
207	0029503		Tow Eyes (2), Aerial	1
208	0013639		Construction, Compt, Alum, PAP	1
209	0009045		Compt, DS F/H F/D, Roll Drs, w/Chute, 100' PAP	1
210	0078024		Compt, DS Turntable, F/H, Roll Dr and Lift Dr, 100' PAP	1
211	0023672		Compt, IPO Stairs, Not Required, DS	1
212	0020711		Compt, PS F/H, Roll Drs, 100' PAP	1
213	0091710		Compt, PS Turntable, F/H, Roll Dr & Lift Dr, 100' PAP	1
214	0023673		Compt, IPO Stairs, Not Required, PS	1
215	0594007		Doors, Amdor, Rollup, Side Compartments	6
			Qty, Door Accessory - 06	
			Color, Roll-up Door - AMDOR Painted to Match Lower Body	
			Latch, Roll-up Door - Non-Locking Liftbar	
216	0556162		Not Req'd, Compt Blister in Front of Rear Axle	1
217	0018820		Bumper, Rear, 5" w/Treadplate Cover, Ascendant Tandem, PAP, PAL, RMAP	1
218	0509866		Scuffplate, Front Bulkheads, Brushed S/S IPO Alum Treadplate	1
219	0603083		Lights, Compt, Pierce LED, Dual Light Strips,Each Side Door,Ascendant TA,PAP,HDL	9
			Qty, - 09	
			Location, Compartment Lights - All Body Compts	
220	0603420		Shelf Tracks, Painted, Aerial	6
			Qty, Shelf Track - 06	
			Location, Shelf Track - D3, D1, P1, P3, D4 and P4	
221	0600289		Shelves, Adj, 500 lb Capacity, Full Width/Depth, Predefined Locations, Aerial	5
			Qty, Shelf - 05	
			Material Finish, Shelf - Painted - Spatter Gray	
			Location, Shelves/Trays, Predefined - D1-Upper Third, P1-Upper Third, P3-Upper Third, D4-Upper Third and P4-Upper Third	
222	0709692		Tray, 215 lb, Tilt/Slide-Out, 30 Deg, Adj, Predefined Locations	1
			Qty, Tray (slide-out) - 01	
			Location, Shelves/Trays, Predefined - D3-Centered Floor to Ceiling	
			Material Finish, Tray - Painted - Spatter Gray	
223	0603763		Tray, Floor Mounted, Slide-Out, 500lb, 2.00" Sides, 2G Aerial	4
			Qty, - 04	
			Location, Tray Slide-Out, Floor Mounted - D1, P1, P4 and D4	
			Material Finish, Tray - Painted - Spatter Gray	
224	0540317		Toolboard, Swing-out, Alum, .188", Peg Board	2
			Qty - 2	
			Location, Pivot - Front	
			Mounting, Toolboard - Adjustable Frt-back	

Line	Option	Type	Option Description	Qty
224			Finish, Pegboard/Toolboard - Painted - Spatter Gray Location, Toolboard - D3	
225	0004016		Rub Rail, Aluminum Extruded, Side of Body	1
226	0004027		Fender Crowns, Rear, S/S, Two Pair	1
227	0602343		Hose, Hard Suction, Provided by Fire Department, Quint NFPA 2016 Classification Qty, Hard Suction Hose - 2 Length, Hard Suction Hose - 10 Diameter, Hard Suction Hose - 6.00" Type of Hose Ends, Coupling, HSH - Long Handle	2
228	0626229		Handrails, Side Pump Panels, Per Print	1
229	0621698		Compt, Air Bottle, Between Tandems, Four (4) Bottles, w/ Straps, Aerial Qty, Air Bottle Comp - 2 Location, driver's/passenger's/center - 1DS & 1PS Door Finish, Fender Compt - Polished Latch, Air Bottle Compt - Pair, Flush Lift & Turn Door Type - drop down with support cable	2
230	0601235		Compt, Air Bottle, Single, Round, Fender Panel, Tandem Axle Aerials Qty, Air Bottle Comp - 2 Door Finish, Fender Compt - Polished Location, Fender Compt - Single - PS Fwd and Single - PS Rear Latch, Air Bottle Compt - Flush Lift & Turn Insert, Air Bottle Compt - Rubber Matting	2
231	0004218		Ladder, 35' Duo-Safety 1200A 2-Sect Qty, - 1	1
232	0004222		Ladder, 24' Duo-Safety 900A 2-Section Qty, - 01 Location, Extension Ladder - torque box	1
233	0004232		Ladder, (2) 16' Duo-Safety 875A Roof	1
234	0044235		Ladder, 16' Duo-Safety 875A Roof Qty, - 1	1
235	0004233		Ladder, 14' Duo-Safety Fresno 701 Qty, - 1	1
236	0004246		Ladder, 10' Duo-Safety Folding, 585A Qty, - 01 Location, Folding Ladder Aerial - torque box	1
237	0592248		Ladders Stored in Torque Box, Amdor Roll, Ascendant TA, PAL, PAP Color, Roll-up Door - AMDOR Satin Aluminum	1
238	0602100		Lights, Torque Box Ladder Storage, Pierce LED Strip Lights, 2 Lts	1
239	0775907		Pike Pole, 12' DUO Safety, Fiberglass Qty, - 02	2
240	0789564		Pike Pole, 8' DUO Safety, Fiberglass, Aerial Qty, - 02	2
241	0789566		Pike Pole, 6' DUO Safety, Fiberglass, Aerial Qty, - 02	2
242	0789586		Pike Pole, 3' DUO Safety, Fiberglass, w/D Handle Qty, - 02	2
243	0770578		Pike Pole Tubes, in Torque Box/Ladder Storage, ABS Qty, - 06	6
244	0024388		No Steps Required, Front Of Body	1
245	0004435		Pump, Waterous, CSU, 2000 GPM, Single Stage	1
246	0004481		Seal, Grafoil, Waterous	1
247	0559769		Trans, Pump, Waterous C20 Series	1
248	0635600		Pumping Mode, Stationary Only	1
249	0605126		Pump Shift, Air w/Manual Override, Split Shaft, Interlocked, Waterous	1
250	0003148		Transmission Lock-up, EVS	1
251	0004547		Auxiliary Cooling System	1
252	0014486		Not Required, Transfer Valve, Stage Pump	1
253	0777622		Valve, Relief Intake, Elkhart, w/Pressure Features Pressure Setting - 125 psig	1
254	0794959		Controller, Pressure, Pierce, Pump Boss, PBA300	1
255	0072153		Primer, Trident, Air Prime, Air Operated	1
256	0799802		Direct Tank Fill, 0.75" Garden Hose, No Valve's, Loc Panel location - DS pump panel	1

Line	Option	Type	Option Description	Qty
257	0780364		Manuals, Pump, (2) Total, Electronic Copies	1
258	0602512		Plumbing, Stainless Steel and Hose, Single Stage Pump, Control Zone	1
259	0795135		Plumbing, Stainless Steel, w/Foam System	1
260	0004645		Inlets, 6.00" - 1250 GPM or Larger Pump	1
261	0004646		Cap, Main Pump Inlet, Long Handle, NST, VLH	1
262	0668153		Valve, w/Relief, PS Inlet, 6", Elkhart UBEC1 Electric LED Control	1
263	0668151		Valve, w/Relief, DS Inlet, 6", Elkhart UBEC1 Electric LED Control	1
264	0084610		Valves, Akron 8000 series- All	1
265	0004660		Inlet, Left Side, 2.50"	1
266	0029147		Not Required, Inlet, Right Side	1
267	0004685		Valve, Inlet(s) - Outside Panel	1
268	0004700		Control, Inlet, at Valve	1
269	0092569		No Rear Inlet (Large Dia) Requested	1
270	0092696		Not Required, Cap, Rear Inlet	1
271	0064116		No Rear Inlet Actuation Required	1
272	0009648		No Rear Intake Relief Valve Required on Rear Inlet	1
273	0092568		No Rear Auxiliary Inlet Requested	1
274	0563738		Valve, .75" Bleeder, Aux. Side Inlet, Swing Handle	1
275	0029043		Tank to Pump, (1) 3.00" Valve, 3.00" Plumbing	1
276	0004905		Outlet, Tank Fill, 1.50"	1
277	0004940		Outlet, Left Side, 2.50"	2
			Qty, Discharges - 02	
278	0092570		Not Required, Outlets, Left Side Additional	1
279	0004945		Outlet, Right Side, 2.50"	1
			Qty, Discharges - 01	
280	0092571		Not Required, Outlets, Right Side Additional	1
281	0005047		Outlet, 4.00" w/4.00" Right, Handwheel	1
			Valve, Brand - Akron	
282	0649939		Outlet, Front, 1.50" w/2.00" Plumbing	1
			Fitting, Outlet - 1.50" NST with 90 degree swivel	
			Drain, Front Outlet - Automatic	
			Location, Front, Single - in center bumper tray	
283	0092575		Not Required, Outlet, Rear	1
284	0092574		Not Required, Outlet, Rear, Additional	1
285	0092573		Not Required, Outlet, Hose Bed/Running Board Tray	1
286	0085076		Caps for 1.50" to 3.00" Discharge, VLH	1
287	0563739		Valve, 0.75" Bleeder, Discharges, Swing Handle	1
288	0005091		Elbow, Left Side Outlets, 45 Degree, 2.50" FNST x 2.50" MNST, VLH	1
289	0035094		Not Required, Elbow, Left Side Outlets, Additional	1
290	0025091		Elbow, Right Side Outlets, 45 Degree, 2.50" FNST x 2.50" MNST, VLH	1
291	0089584		Not Required, Elbow, Right Side Outlets, Additional	1
292	0045099		Not Required, Elbow, Rear Outlets	1
293	0085695		Not Required, Elbow, Rear Outlets, Large, Additional	1
294	0005097		Elbow, Large Dia Outlet, 30 Deg, 4.00" FNST x 5.00" Storz	1
			Qty, - 01	
295	0062133		Control, Outlets, Manual, Pierce HW if applicable	1
296	0029106		Not Required, Deluge Outlet	1
297	0029302		No Monitor Requested	1
298	0029304		No Nozzle Req'd	1
299	0029107		No Deluge Mount	1
300	0047593		Waterway Outlet & Control, 4.00" Akron Electric	1
301	0015140		Crosslay, 1.50" Special Cap or Single Stack, (Pan Style)	2
			Capacity, Special Xlay - 200'	
			Qty, Crosslays - 2	
302	0773536	SP	Crosslays Sngl Sheet Unpainted, (1) 2.50" Std Cap, Loc. Front of Pump	1
303	0029260		Not Required, Speedlays	1
304	0693229		Hose Restraint, Crosslays, 2" Heavy Nylon Web with Seat Belt Buckle, Top, Sides	3
			Qty, - 03	
305	0624939		Foam Sys, Husky 3, Single Agent, Multi Select Feature	1
			Discharge, Foam Locations - Front Bumper Center, Crosslay Front, Crosslay Center and Crosslay Rear	

Line	Option	Type	Option Description	Qty
305			Discharge, Foam Locations - Front Bumper Center, Crosslay Front, Crosslay Center and Crosslay Rear	
306	0012126		Not Required, CAF Compressor	1
307	0592527		Refill, Foam Tank, Integral, Husky 3	1
308	0031894		Demonstration, Foam System, At Pierce	1
			Vehicle, Qty, Training, P - 1 vehicle	
309	0022539		Foam Cell, 20 Gallon, Reduce Water	1
			Type of Foam - Class "A"	
310	0697589		Drain, 1.00", Foam Tank #1, Husky 3 Foam System, Quarter Turn	1
311	0091079		Not Required, Foam Tank #2	1
312	0091112		Not Required, Foam Tank #2 Drain	1
313	0620530		Pump House, Side Control, 52", Control Zone, Aerial	1
314	0032479		Pump Panel Configuration, Control Zone	1
315	0562698		Step, Slide-Out/Fold-Out, Pump Operator Platform, Aerial	1
316	0667186		Light, Slide-Out Pump Operator Step, On Scene Solutions Access LED, Short Step	1
317	0635355		Material, Pump Panels, Side Control Painted FormCoat Black	1
			Material Finish, Pump Panel, Side Control - Painted FormCoat Black	
			Material, Pump Panel, Side Control - Aluminum	
318	0005578		Panel, Pump Access - Pass Side Only	1
319	0035501		Pump House Structure, Std Height	1
320	0583824		Light, Pump Compt, Wln 3SC0CDCR LED White	1
			Qty, - 01	
321	0586382		Gauges, Engine, Included With Pressure Controller	1
322	0005601		Throttle Included w/ Pressure Controller	1
323	0549333		Indicators, Engine, Included with Pressure Controller	1
324	0511078		Gauges, 4.00" Master, Class 1, 30"-0-600psi	1
325	0511100		Gauge, 2.00" Pressure, Class 1, 30"-0-400psi	1
326	0654026		Gauge, Pressure, Akron 9325 Controller, IAT	1
			Location - waterway outlet	
			Qty, Gauges/Disc. - 01	
327	0062586		Gauge, Water Level, Class 1, Pierce Std	1
328	0060753		Water Level Gauge, Wln PSTANK, LED 1-Light, 4-Level	2
			Qty, - 02	
			Activation, Water Level G - pb) parking brake is applied	
			Location, Water Level Gauge - PS Crew Cab - High and Aft of Door and DS Crew Cab - High and Aft Door	
329	0062992		Gauge, Foam Level, (1) Tank, Class 1, 5lt	1
330	0593161		Light Shield, S/S LED	1
331	0606697		Air Horns, (2) Grover, In Bumper	1
332	0606835		Location, Air Horns, Bumper, Each Side, Outside Frame, Outboard (Pos #1 & #7)	1
333	0660557		Control, Air Horn, DS & PS Switches, Cab Switch Panel	1
			Location 1 - on the dog house with in easy reach of the officer	
			location - with in easy reach of the driver	
334	0525667		Siren, Wln 295SLSA1, 100 or 200 Watt	1
335	0510206		Location, Elect Siren, Recessed Overhead In Console	1
			Location, Elec Siren - Overhead, DS Inside Sw Pnl	
336	0076157		Control, Elec Siren, Horn Ring	1
337	0601306		Speaker, (1) Wln, SA315P, w/Pierce Polished Stainless Steel Grille, 100 watt	1
			Connection, Speaker - siren head	
338	0601565		Location, Speaker, Frt Bumper, Recessed, Center (Pos 4)	1
339	0016080		Siren, Federal Q2B	1
340	0006095		Siren, Mechanical, Mounted Above Deckplate	1
			Location, Siren, Mech - a) Left	
341	0544892		Control, Mech Siren, DS & PS Switches	1
			Location - with easy reach of he driver	
342	0606715		Lightbar, Wln, Freedom IV-Q, 2-21.5", RRRRR RRRRR	1
			Filter, Whl Freedom Ltbrs - No Filters	
343	0056848		Lights, Frnt Zn Up, Pltform, Wln, (3) 50R03ZRR Super 500 LED, Red	1
344	0691599		Light, GTT, 792* Strobe Opticom Emitter, Remote Mounted on Cab Roof	1
			Location - on cab roof	
			Opticom Priority - b) High	
			Opticom Activation - Cab Switch & E-Master	

Line	Option	Type	Option Description	Qty
344			Momentary Opticom Activation - no activation	
345	0540460		Light, Front Zone, Wln M6*C LED, Clear Lens, 4lts Q Bezel	1
			Color, Lt DS Frnt Outside - DS Front Outside Red	
			Color, Lt PS Frnt Outside - PS Front Outside Red	
			Color, Lt DS Front Inside - r) DS Front Inside Red	
			Color, Lt PS Front Inside - r) PS Front Inside Red	
346	0653937		Flasher, Headlight Alternating	1
			Headlt flash deactivation - a)w/high beam	
347	0540679		Lights, Side Zone Lower, Wln M6*C LED, Clear Lens 2pr	1
			Location, Lights Front Side - b)each side bumper	
			Color, Lt Side Front - Red	
			Color, Lt Side Rear - Red	
			Location, Lights Rear Side - Over Rear Wheels	
348	0564655		Lights, Rear Zone Lower, Wln M6*C LED, Clear Lens, For Tail Lt Housing	1
			Color, Lt DS Rear - r) DS Rear Lt Red	
			Color, Lt PS Rear - r) PS Rear Lt Red	
349	0088745		Light, Rear Zone Upper, Wln L31HRFN LED Beacon, Red LED	1
			Color, Dome, Rear Warning - j) both domes clear	
350	0006551		Not Required, Lights, Rear Upper Zone Blocking	1
351	0006646		Electrical System, 120/240VAC, General Design	1
352	0037544		Generator, Harrison 30kW MPC Hyd, Sngl Ph (30KW Cont. Rating) W/O Interlocks	1
353	0006645		Location, Hydraulic Generator Above Pump	1
			Location, Generator(s) - Over Pump, Left Side	
354	0016752		Starting Sw, Truck Engine Powered Gen, Cab Sw Pnl	1
355	0016757		Not Required, Remote Start, Generator	1
356	0016740		Not Required, Fuel System	1
357	0016767		Not Required, Oil Drain Extension, Generator	1
358	0016771		Not Required, Routing Exhaust, Generator	1
359	0036738		Circuit Breaker Panel, Included With PTO Generator	1
			Location, Circuit Breaker Panel - D5, Forward Wall High	
360	0056604		Pump, Thru-Pump, For Hydraulic Driven Generators	1
361	0783270		Circuit Breaker Panel, Sub Feed, Cutler Hammer, Shoreline to Gen Transfer Sw	1
			Location, CB Panel - high on the forward wall of compartment D5	
362	0526994		Reel, Elect Cable, Akron, (4) Wire	1
			Qty, Cord Reels - 1	
			Reel Guide - a) Nylatron guide	
			Finish, Reel - Powder Coated Silver	
			Location, Electric Cord Reel - Above Pump, Right Side, 1 Reel and Over	
			PS Front Stabilizer Compt, 1 Reel	
363	0086632		Cord, Electric, 10/4 Yellow, 4 Wire	1
			Lengths of Elect Cord - 1	
			Feet of Yellow Cord - e)200	
			Connection, Cord - Hubbell 20A 120/240V Twst Lk	
364	0780267		Receptacle, 15/20A 120V 3-Pr 3-Wr SB Dup, GFI, Interior Cab	2
			Qty, - 02	
			Location 1 - mounted high inside of the PS EMS compartments and one behind the drivers seat	
			AC Power Source - Gen to Shoreline Transfer Switch	
			Cover, Receptacle - Interior, Flip Up Duplex Cover(s)	
365	0779722		Receptacle, 15/20A 120V 3-Pr 3-Wr, NEMA 5-20R SB Dup, 1st, Interior Body	4
			Qty, - 04	
			Location 1 - mounted high on the forward balk head in Pi,P4, D1 and D4	
			AC Power Source - Gen to Shoreline Transfer Switch	
			Cover, Receptacle - Interior, Flip Up Duplex Cover	
366	0519934		Not Required, Brand, Hydraulic Tool System	1
367	0649753		Not Required, PTO Driven Hydraulic Tool System	1
368	0649750		Not Required, Hydraulic Reels	1
369	0657391		Aerial, 100' Pierce Platform, 35 MPH Wind Rating, 400lb Tip Load Allowance	1
370	0000042		Boom Support, Rear of the Chassis Cab	1
371	0601988		Light, Boom Support, Amdor LumaBar H2O, 12" LED	1
372	0799560		Boom Support Compartment, Not Required	1
373	0658371		Boom Panel, One	1
			Paint, Color - #279 Red	

Line	Option	Type	Option Description	Qty
373			Location, - driver's side	
374	0526890		Not Required, Indicator, Extension	1
375	0688232		Rung Covers, Aerial Device	1
			Rung Cover Color - Safety Yellow	
376	0679012		Box, Stokes/Lyfe Bracket, w/Cover, Base Section, In Place of Boom Panel	1
			Finish - Painted, Aerial Device/Boom Panel	
			Latch, Door, Storage - Butterfly Latch	
			Location, Aerial Device - right side	
			Louvers - louvers	
			Size, Stokes Basket Predefined - 86"L x 24"W x 8"H	
377	0786841		Brackets Only, Roof Ladder, Base Section, Inboard of Boom Panel	1
			Qty, - 01	
			Location, Aerial Device - left side	
			Roof Ladder, Make/Model, Multi-Select - 16' Duo-Safety 875-A	
378	0600934		Basket, PAP, Wide, NFPA 2016	1
			Aerial Basket Latch - Eberhard 206	
379	0677364		Landing Pad Extensions, Under Platform Basket	1
380	0677439		Box, Hose Storage, Platform	2
			Qty, - 02	
			Latch, Door, Storage - Rubber Hood	
			Location, Aerial Basket - each side	
			Cover - cover	
			Hose Size, Hosebox - 100' of 1.75"	
381	0601972		Lights, Turntable Walkway, P25, LED	1
382	0601949		Light, Turntable Console, TecNiq T-10, LED Strip Light	1
383	0056905		Basket Heat Shields	1
384	0508717		Control Stations, 85'/100' PAP, Color Display	1
385	0709514		Remote Aerial Control, Wireless, CZII MUX Aerials, Hetronic	1
			location - D4	
386	0680909		Stabilizers, Two Sets, PAP, Split Pan	1
			Material, Stabilizer Pad - Composite	
387	0530819		Not Required, Aerial Stabilizer Pins	1
388	0548900		Door, Stabilizer Control Box, Aerial MUX, Smooth Aluminum	1
389	0615059		Stabilizer Placement, Lasers Only, 2 Sets	1
390	0596621		Hydraulic System, 100' PAP	1
391	0061893		Swivels, w/Encoder, PAL/PAP, 36 Collector Rings	1
392	0057598		Electrical System, 100' PAP	1
393	0687593		Lights, Unity AG-S-7682 Halogen On Aerial 3Lts	1
394	0653737		Lighting, Rung, LED, TecNiq, 3 Section, Base, Mid, Fly	1
			Control, Aerial Rung Lighting - Aerial Master	
			Color, Lt Aerial Fly Sect - Blue	
			Color, Lt Aerial Base Sect - Blue	
			Color, Lt Aerial Mid Sect - Blue	
395	0540743		Lights, Stabilizer Warn (2) Sets, Wln M6°C LED, Clear Lens	1
			Color, Lt Rr Stabilzr Pan - r) Pan Light Red	
			Color, Lt Fr Stabilzr Pan - r) Pan Light Red	
396	0068701		Lights, Grote Supernova LED, Stabilizer Beam, (2) Sets	1
397	0601299		Lights, Stabilizer Scene, (2) sets, Amdor H2O, LED	1
398	0016930		120 Volt To Tip, 20 Amp L5-20, PAP	1
399	0648631		Light, Wln PFP1AC, 120 Volt Under Basket, PAP 1st	2
			Qty, 120/240 Volt Light - 2	
			Location, Sw, Arl AC Lts - M)2 Pos	
			Location, Plat/Tip AC Lts - I) Under, DS Forward/PS Down	
			Color, Wln Lt Housing - Black Paint	
400	0655088		Light, Wln PFP2AP, 120 Volt LED @ Front Of Basket, PAP	1
			Qty, 120/240 Volt Light - 1	
			Location, Sw, Arl AC Lts - M)2 Pos	
			Location, Plat/Tip AC Lts - D) Center	
			Color, Wln Lt Housing - Black Paint	
401	0594648		Intercom, 2-Way Fire Research ICA900 Hands Free	1
402	0796756		Camera System, One (1), At Tip of MUX Aerial, Wireless Fixed Camera to Console	1
403	0590098		Breathing Air to Tip, (1) 4500 PSI, 85/100 PAP	1
			Refill Hose - 50'	

Line	Option	Type	Option Description	Qty
403			Breathing Air Fitting - Hansen	
			Breathing Air Mask Box - mask box platform	
404	0024742		Not Required, Mask, Breathing Air To Tip	1
405	0126600		Raised Pedestal, 3.00", Rear Mount Aerials, AXT, Velocity, Impel, Enf	1
406	0540605		Lyfe Brackets, 3-In-1, Used w/Duo-Safety 875 Ladders ONLY, Wide Basket	1
			Width - 19.00"	
407	0645579		Hitch Receiver, 6000 lb, DS/PS, Under Body Sides, Ascendant TA,PAP/PAL	1
408	0530826		Turntable Access, ManSaver Bars, Yellow	1
409	0016950		Waterway, 100' PAP	1
410	0016951		(2) Preconnects At Platform, PAP	1
411	0630802		Monitor, Akron 3480 StreamMaster II Electric	1
			Nozzle, Monitor 1, PAP - Akron 5178 Electric 1500 gpm	
412	0086971		Flowmeter, Waterway, MUX, PAP	1
413	0004836		Inlet, 5.00" at Rear w/ Pump, Ascendant Tandem, PAP, PAL	1
414	0534692		Outlet, 1.50" Gated, Right Rear of PAP Basket	1
415	0047897		Tools, Aerial	1
416	0559491		Manuals and Training, 3 Days, Platform	1
417	0007150		Bag of Nuts and Bolts	1
			Qty, Bag Nuts and Bolts - 1	
418	0602497		NFPA Required Loose Equipment, Quint, NFPA 2016, Provided by Fire Department	1
419	0602397		Soft Suction Hose, Provided by Fire Department, Quint NFPA 2016 Classification	1
420	0602382		Strainer, Provided by Fire Department, Quint NFPA 2016 Classification	1
421	0602534		Extinguisher, Dry Chemical, Quint NFPA 2016, Provided by Fire Department	1
422	0602352		Extinguisher, 2.5 Gal. Pressurized Water, Quint, NFPA 2016,Provided by Fire Dept	1
423	0007482		Not Required, Crowbars	1
424	0007484		Not Required, Claw Tools	1
425	0602883		Axe, Flathead, Quint NFPA 2016, Provided by Fire Department	1
426	0602670		Axe, Pickhead, Quint NFPA 2016, Provided by Fire Department	1
427	0007494		Not Required, Sledgehammers	1
428	0559682		Paint, Two Tone, Cab, w/Shield, Custom Cab	1
			Paint Color, Predefined - 279	
			Paint Color, Upper Area, Predefined - #101 Black	
429	0646901		Paint Chassis Frame Assy, With Liner, E-Coat, Standard	1
			Paint Color, Frame Assembly, Predefined - Standard Black	
430	0693797		No Paint Required, Aluminum Front Wheels	1
431	0687652		Paint, Rear Wheels, Tandem Axle, Alum-Stl	1
			Paint, Wheels - Black #101	
432	0007230		Compartment, Painted, Spatter Gray	1
433	0792638		Aerial Platform Paint	1
			Paint Color, Aerial Device - Black 101	
			Paint Color, Turntable - Black 101	
			Paint Color, Boom Support - black 101	
			Paint Color, Cylinders - black 101	
			Paint Color, Aerial Torque Box - black 101	
			Paint Color, Aerial Stabilizers - black 101	
			Paint Color, Aerial Basket - black 101	
			Paint Color, Aerial Rotation Motor - Black	
			Paint Color, Aerial Control Console - black 101	
434	0544129		Reflective Band, 1"-6"-1"	1
			Color, Reflect Band - A - e) black	
			Color, Reflect Band - B - p) black	
			Color, Reflect Band - C - za) black	
435	0510041		Reflective across Cab Face, Imp/Vel	1
436	0583454		Stripe, Chevron, Rear, Diamond Grade, Aerial	1
			Color, Rear Chevron DG - fluorescent yellow green	
437	0598754		Stripe, Reflective/Diamond Grade, 4.00" on Stabilizers	1
			Color, Reflect Band - A - p) fluorescent yellow green diamond grade	
438	0027341		Jog, In Reflective Stripe, Single or Multiple	1
			Qty, - 1	
439	0065687		Stripe, Reflective, Cab Doors Interior	1
			Color, Reflective - e) black	
440	0033179		Lettering Specifications, Reflective	1

Line	Option	Type	Option Description	Qty
441	0686160		Lettering, Reflective, 3.00", (21-40)	1
			Outline, Lettering - Outline and Shade	
442	0685990		Lettering, Reflective, 10.00", (41-60)	1
			Outline, Lettering - Outline and Shade	
443	0686002		Lettering, Reflective, 8.00", Each	3
			Qty, Lettering - 03	
			Outline, Lettering - Outline and Shade	
444	0772003		Manual, Fire Apparatus Parts, USB Flash Drive, Custom	1
			Qty, - 01	
445	0772037		Manual, Chassis Service, USB Flash Drive, Custom	1
			Qty, - 01	
446	0773381		Manual, Chassis Operation, One (1) USB Flash Drive, Custom	1
447	0030008		Warranty, Basic, 1 Year, Apparatus, WA0008	1
448	0611136		Warranty, Chassis, 3 Year, Velocity/Impel, WA0284	1
449	0696698		Warranty, Engine, Cummins, 5 Year, WA0181	1
450	0684953		Warranty, Steering Gear, Sheppard M110, 3 Year WA0201	1
451	0595767		Warranty, Frame, 50 Year, Velocity/Impel, Dash CF, WA0038	1
452	0595698		Warranty, Axle, 3 Year, TAK-4, WA0050	1
453	0777368		Warranty, Axle, 2 Year, Meritor, General Service, WA0328	1
454	0652758		Warranty, ABS Brake System, 3 Year, Meritor Wabco, WA0232	1
455	0019914		Warranty, Structure, 10 Year, Custom Cab, WA0012	1
456	0595813		Warranty, Paint, 10 Year, Cab, Pro-Rate, WA0055	1
457	0524627		Warranty, Electronics, 5 Year, MUX, WA0014	1
458	0695416		Warranty, Pierce Camera System, WA0188	1
459	0647720		Warranty, Pierce LED Strip Lights, WA0203	1
460	0046369		Warranty, 5-year EVS Transmission, Standard Custom, WA0187	1
461	0685945		Warranty, Transmission Cooler, WA0216	1
462	0688798		Warranty, Water Tank, Lifetime, UPF, Poly Tank, WA0195	1
463	0596025		Warranty, Structure, 10 Year, Body, WA0009	1
464	0693126		Warranty, AMDOR, Roll-up Door, 10 Year/5 Year Painted, WA0185	1
465	0063510		Warranty, Pump, Waterous, 5 Year Parts, WA0225	1
466	0648675		Warranty, 10 Year S/S Pumbing, WA0035	1
467	0657990		Warranty, Foam System, Husky 3, WA0231	1
468	0006999		Warranty, Structure, 20 Year, Aerial Device, WA0052	1
469	0687388		Warranty, Swivels, 5 Year, Aerial Device, WA0197	1
470	0685727		Warranty, Hydraulic System and Components, 3 Year/5 Year, WA0200	1
471	0687327		Warranty, Waterway, 10 Year, Aerial Device, WA0198	1
472	0595860		Warranty, Paint, 4 Year, Aerial Device, Pro-Rated, WA0047	1
473	0553455		Warranty, Electronics, 5 Year, MUX, WA0014	1
474	0609981		Warranty, Harrison Generator, 6 Year, WA0285	1
475	0595820		Warranty, Paint, 10 Year, Body, Pro-Rate, WA0057	1
476	0595412		Warranty, Graphics Lamination, 1 Year, Apparatus, WA0168	1
477	0683627		Certification, Vehicle Stability, CD0156	1
478	0794805		Certification, Engine Installation, Velocity, Cummins X15, 2017, CD0153	1
479	0686786		Certification, Power Steering, CD0098	1
480	0667417		Certification, Cab Integrity, Velocity FR, CD0009	1
481	0548950		Certification, Cab Door Durability, Velocity/Impel, CD0001	1
482	0548967		Certification, Windshield Wiper Durability, Impel/Velcoity, CD0005	1
483	0667411		Certification, Electric Window Durability, Velocity/Impel FR, CD0004	1
484	0549273		Certification, Seat Belt Anchors and Mounting, Imp/Vel/Vel SLT, CD0018	1
485	0667416		Certification, Cab Heater and Defroster, Velocity/Impel FR, CD0015	1
486	0674479		Certification, Not Available, Cab Air Conditioning Performance	1
487	0545073		Amp Draw Report, NFPA Current Edition	1
488	0002758		Amp Draw, NFPA/ULC Radio Allowance	1
489	0799248		Appleton/Florida BTO	1
490	0000033		PAP BODY	1
491	0000012		PIERCE CHASSIS	1
492	0004713		ENGINE, OTHER	1
493	0046396		EVS 4000 Series TRANSMISSION	1
494	0020011		WATEROUS PUMP	1
495	0020009		POLY TANK	1

Line	Option	Type	Option Description	Qty
496	0028048		FOAM SYSTEM	1
497	0020006		SIDE CONTROL	1
498	0020007		AKRON VALVES	1
499	0020015		ABS SYSTEM	1
500	0658751		Manufacturing Attribute	1

EXHIBIT C
WARRANTY



Electrical Analysis

4/3/2018

Bid #: 481

Job #:

Desc: 100' PAP

Sales Rep: Waters, Dennis

Customer: Richland Fire & Emergency Services

Organization: Hughes Fire Equipment, Inc

Option	Description	Type*	Minimum Load	Intermittent Load	Total Connected
0001244	High Idle w/Electronic Engine, Custom		0.00	1.20	0.00
0002000	Chains, Onspot, Automatic Tire, Custom		0.00	1.50	0.00
0002617	PTO switch, w/light - aerial		0.00	0.00	0.08
0016080	Siren, Federal Q2B		0.00	100.00	0.00
0060753	Water Level Gauge, WIn PSTANK, LED 1-Light, 4-Level		0.00	0.00	1.00
0062992	Gauge, Foam Level, (1) Tank, Class 1, 5lt		0.00	0.00	1.00
0072153	Primer, Trident, Air Prime, Air Operated		0.00	0.01	0.00
0079166	Batteries, (4) Exide Grp 31, 950 CCA ea, Threaded Stud		0.00	3.00	0.00
0086971	Flowmeter, Waterway, MUX, PAP		0.00	0.00	0.50
0122466	Cab Lift, Elec/Hyd, w/Manual Override, Imp/Vel		0.00	180.00	0.00
0502328	Mirrors, Ramco, 6000CCHR, Heated/Remote, w/Heated Convex, Door		0.00	0.00	8.00
0508717	Control Stations, 85'/100' PAP, Color Display		0.00	0.00	2.00
0526994	Reel, Elect Cable, Akron, (4) Wire		0.00	36.00	0.00
0543751	Light, Do Not Move Apparatus		0.00	2.00	0.00
0548001	Wiring, Spare, 10 A 12V DC 2nd		0.00	0.00	20.00
0549333	Indicators, Engine, Included with Pressure Controller		0.00	0.35	0.00
0561471	Lights, Backup, WIn M6BUW, LED, For Tail Lt Housing		0.00	3.20	0.00
0583824	Light, Pump Compt, WIn 3SC0CDCR LED White		0.00	0.36	0.00
0583938	Lights, Engine Compt, Custom, Auto Sw, WIn 3SC0CDCR, 3" LED,		0.00	0.30	0.00
0589905	Alarm, Back-up Warning, PRECO 1040		0.00	0.50	0.00
0593759	ESC/ABS/ATC Wabco Brake System, Tandem Rear Axle, 2010		0.00	6.00	0.00
0594648	Intercom, 2-Way Fire Research ICA900 Hands Free		0.00	0.00	0.50
0601972	Lights, Turntable Walkway, P25, LED		0.00	0.00	0.00
0610968	Wiring, Spare, 2.0 A 12V DC, USB Termination Blue Sea 1016 1st		0.00	0.00	2.50
0624939	Foam Sys, Husky 3, Single Agent, Multi Select Feature		0.00	55.00	0.00
0636439	Wiring, Spare, 37.5 A 12V DC, Cust Install Radio, 30A Bat Dir, 7.5A		0.00	0.00	75.00
0648631	Light, WIn PFP1AC, 120 Volt Under Basket, PAP 1st		0.00	0.00	1.26
0653520	Camera, Pierce, Mux, R, RS Cameras		0.00	1.20	0.00
0653737	Lighting, Rung, LED, TecNiq, 3 Section, Base, Mid, Fly		0.00	0.00	16.00
0653937	Flasher, Headlight Alternating		0.00	0.00	0.08
0660557	Control, Air Horn, DS & PS Switches, Cab Switch Panel		0.00	0.83	0.00
0667902	Controls, Electric Windows, All Cab Doors, Impel/Veloccity FR		0.00	26.00	0.00
0667936	Heater/defroster, Dual Zone Control, Impel/Veloccity FR		0.00	0.00	12.10
0680909	Stabilizers, Two Sets, PAP, Split Pan		0.00	0.00	6.00
0687994	Engine Brake, Jacobs Compression Brake, Cummins Engine		0.00	0.42	0.00
0709438	Light, Walking Surface, FRP Flood, LED		0.00	0.00	0.00
0793724	Intercom, Setcom 950W4, 4-Pos, (D,Wireless)O,2C		0.00	0.00	0.20
0547505	Wiring, Spare, 10 A 12V DC 1st	LM	0.00	0.00	40.00
0548006	Wiring, Spare, 15 A 12V DC 2nd	LM	0.00	0.00	60.00
0603345	Air Conditioning, Dual Zone Control, Velocity FR w/ ISX15 Engine	LM	0.00	0.00	80.20
0643196	Radio, AM/FM/CD/WB, Jensen, Front Aux In / USB / Bluetooth	LM	0.00	0.00	2.00
0002565	Hourmeter, Aerial Inside Cab	NFPA	0.10	0.00	0.00
0002615	Switch, Aerial 12V Master	NFPA	0.08	0.00	0.00
0002758	Amp Draw, NFPA/ULC Radio Allowance	NFPA	5.00	0.00	0.00
0009045	Compt, DS F/H F/D, Roll Drs, w/Chute, 100' PAP	NFPA	2.70	0.00	2.70
0020711	Compt, PS F/H, Roll Drs, 100' PAP	NFPA	3.60	0.00	3.60
0037544	Generator, Harrison 30kW MPC Hyd, Sngl Ph (30KW Cont. Rating)	NFPA	38.11	0.00	0.00
0056848	Lights, Frnt Zn Up, Pltform, WIn, (3) 50R03ZRR Super 500 LED, Red	NFPA	1.20	1.80	0.00
0062586	Gauge, Water Level, Class 1, Pierce Std	NFPA	1.23	0.00	0.00
0068701	Lights, Grote Supernova LED, Stabilizer Beam, (2) Sets	NFPA	3.20	0.00	0.00

* UDMC = User Defined Mission Critical, LM = User Defined Load Managed, S = Electrical Amperage Supply



Electrical Analysis

4/3/2018

Bid #: 481

Job #:

Desc: 100' PAP

Sales Rep: Waters, Dennis

Customer: Richland Fire & Emergency Services

Organization: Hughes Fire Equipment, Inc

Option	Description	Type*	Minimum Load	Intermittent Load	Total Connected
0078024	Compt, DS Turntable, F/H, Roll Dr and Lift Dr, 100' PAP	NFPA	0.90	0.00	0.90
0088745	Light, Rear Zone Upper, Wln L31HFRN LED Beacon, Red LED	NFPA	3.20	4.80	0.00
0091710	Compt, PS Turntable, F/H, Roll Dr & Lift Dr, 100' PAP	NFPA	0.90	0.00	0.90
0092582	Load Manager/Sequencer, MUX	NFPA	0.56	0.56	0.00
0199536	Cabinet, EMS, Forward Facing, Center, 42 W x 48 H x 24 D, Imp/Vel	NFPA	1.50	0.00	1.50
0509649	Lights, Cab and Crew Cab Access Steps, P25, LED w/Bezel, 1Lt Per	NFPA	1.00	0.00	0.00
0511569	Lights, Clearance/Marker/ID, Rear, P25 LED 7Lts	NFPA	0.50	0.00	0.00
0525667	Siren, Wln 295SLSA1, 100 or 200 Watt	NFPA	1.56	14.06	0.00
0540460	Light, Front Zone, Wln M6*C LED, Clear Lens, 4lts Q Bezel	NFPA	1.80	5.40	1.80
0540679	Lights, Side Zone Lower, Wln M6*C LED, Clear Lens 2pr	NFPA	3.60	5.40	0.00
0540743	Lights, Stabilizer Warn (2) Sets, Wln M6*C LED, Clear Lens	NFPA	3.60	5.40	0.00
0554004	Lights, Step (6), P25 LED, Swing Down Access Steps, Each Side	NFPA	0.30	0.00	0.00
0554198	Lights, Step, P25 LED, Aerial With Pump 2Lts, Pump Pnl Sw	NFPA	1.50	0.00	0.00
0555915	Wiper Control, 2-Speed with Intermittent, MUX, Impel/Veloccity	NFPA	2.10	8.40	0.00
0564655	Lights, Rear Zone Lower, Wln M6*C LED, Clear Lens, For Tail Lt	NFPA	1.80	2.70	0.00
0564683	Lights, Tail, Wln M6BTT* Red LED Stop/Tail & M6T* Amber LED Dir	NFPA	0.83	2.49	0.00
0568012	Air Dryer, Wabco System Saver 1200, Heater, 2010	NFPA	7.81	0.00	0.00
0568369	Cab Instruments, Ivory Gauges, Chrome Bezels, Impel/Veloccity 2010,	NFPA	1.26	0.00	0.00
0586382	Gauges, Engine, Included With Pressure Controller	NFPA	0.30	0.00	0.00
0593161	Light Shield, S/S LED	NFPA	3.00	0.00	0.00
0601299	Lights, Stabilizer Scene, (2) sets, Amdor H2O, LED	NFPA	2.00	0.00	0.00
0601949	Light, Turntable Console, TecNiq T-10, LED Strip Light	NFPA	0.20	0.00	0.00
0601988	Light, Boom Support, Amdor LumaBar H2O, 12" LED	NFPA	0.50	0.00	0.00
0602100	Lights, Torque Box Ladder Storage, Pierce LED Strip Lights, 2 Lts	NFPA	1.00	0.00	0.00
0605126	Pump Shift, Air w/Manual Override, Split Shaft, Interlocked, Watrous	NFPA	1.00	0.00	0.00
0606715	Lightbar, Wln, Freedom IV-Q, 2-21.5", RRRRR RRRRR	NFPA	6.48	0.00	9.76
0615386	Vehicle Information Center, 7" Color Display, Touchscreen, MUX	NFPA	1.20	0.00	0.00
0620054	Light, Directional/Marker, Intermediate, Weldon 9186-8580-29 LED	NFPA	0.10	0.90	0.00
0642533	Trans, Allison 5th Gen, 4500 EVS P, w/Prognostics, Imp/Vel/DCF/Enf	NFPA	2.00	2.00	0.00
0645877	Lights, Hose Bed, Sides, Dual LED Light Strips	NFPA	2.52	0.00	0.00
0647647	Lights, Dome, FRP Dual LED 4 Lts	NFPA	0.80	0.80	0.00
0647993	Lights, Clearance/Marker/ID, Platform, P25 LED, 5 Lts	NFPA	0.35	0.00	0.00
0648074	Lights, Clearance/Marker/ID, Front, P25 LED 7 Lts	NFPA	0.49	0.00	0.00
0648425	Light, Directional, Wln 600 LED Cmb, Cab Crn, Imp/Vel/AXT/Qtm/DCF	NFPA	0.70	0.70	0.00
0651334	Cab, Velocity FR, 7000	NFPA	6.80	10.20	0.00
0657391	Aerial, 100' Pierce Platform, 35 MPH Wind Rating, 400lb Tip Load	NFPA	5.00	0.00	0.00
0664481	Bracket, License Plate & Light, P25 LED	NFPA	0.07	0.00	0.00
0667186	Light, Slide-Out Pump Operator Step, On Scene Solutions Access	NFPA	0.65	0.00	0.00
0672327	Lights, Deck, Wln (2) MPBW Micro Pioneer LED Rear Flood Lights	NFPA	7.00	0.00	0.00
0682451	DEF Tank, 12 Gallon, DS Fill, Forward Compartment	NFPA	0.60	11.40	0.00
0687593	Lights, Unity AG-S-7682 Halogen On Aerial 3Lts	NFPA	23.40	0.00	0.00
0768765	Lights, Perimeter Body, Amdor AY-LB-12HW020 LED 2lts, Turntable	NFPA	0.33	0.00	0.00
0769420	Lights, Perimeter Cab, Amdor AY-LB-12HW020 LED 4Dr	NFPA	1.20	0.00	0.00
0769553	Lights, Perimeter Pump House, Amdor AY-LB-12HW012 LED 1lt	NFPA	0.18	0.00	0.00
0783153	Headlights, Rect LED, JW Spkr Evo 2, AXT/DCF/Enf/Imp/Sab/Vel	NFPA	4.20	4.20	0.00
0794959	Controller, Pressure, Pierce, Pump Boss, PBA300	NFPA	1.80	0.00	0.00
0795318	Engine, Cummins X15, 600 hp, 1850 lb-ft, W/OBD, EPA 2017, Velocity	NFPA	6.00	0.00	0.00
0796756	Camera System, One (1), At Tip of MUX Aerial, Wireless Fixed	NFPA	1.20	0.00	0.00
0647728	Alternator, 430 amp, Delco Remy 55SI	S	0.00	0.00	0.00
Load Totals:			171.01	499.08	349.58

* UDMC = User Defined Mission Critical, LM = User Defined Load Managed, S = Electrical Amperage Supply



Electrical Analysis

4/3/2018

Bid #: 481

Job #:

Desc: 100' PAP

Sales Rep: Waters, Dennis

Customer: Richland Fire & Emergency Services

Organization: Hughes Fire Equipment, Inc

Note: Minimum Continuous Load is in "Blocking Right of Way" mode.(Reference current edition of NFPA 1901)

Note: Intermittent Load items are not factored in on any alternator load comparisons. These items are included on the report for reference only and should be looked at as amp draw exclusion items. (Reference current edition of NFPA 1901)

Note: Total Connected Load "Demand" represents Total Connected Load minus any Load Managed items

Alternator Output at Idle: 253.00

Minimum Continuous Load	
Supply:	253.00
Demand:	171.01
Variance:	81.99

Alternator Output at Governed Speed: 369.00

Total Connected Load	
Supply:	369.00
Demand:	338.39
Variance:	30.61

* UDMC = User Defined Mission Critical, LM = User Defined Load Managed, S = Electrical Amperage Supply



Turning Performance Analysis

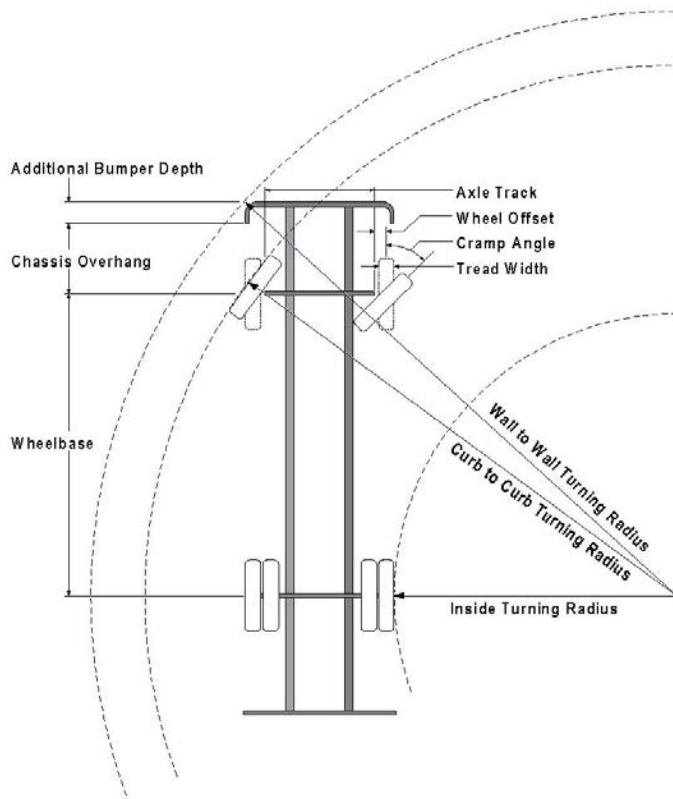
04/03/2018

Bid Number: 481

Department: Richland Fire & Emergency Services

Chassis: Velocity Chassis, PAP/Midmount (Big Block), 2010

Body: Aerial, Platform 100', Alum Body



Parameters:

Inside Cramp Angle:	45°
Axle Track:	82.92 in.
Wheel Offset:	4.68 in.
Tread Width:	17.7 in.
Chassis Overhang:	78 in.
Additional Bumper Depth:	19 in.
Front Overhang:	146.6 in.
Wheelbase:	257 in.

Calculated Turning Radii:

Inside Turn:	20 ft. 3 in.
Curb to curb:	36 ft. 8 in.
Wall to wall:	44 ft. 8 in.

Comments:

Category	Option	Description
Axle, Front, Custom	0508849	Axle, Front, Oshkosh TAK-4, Non Drive, 22,800 lb, Imp/Vel
Wheels, Front	0019611	Wheels, Front, Alcoa, 22.50" x 12.25", Aluminum, Hub Pilot
Tires, Front	0686052	Tires, Front, Michelin, XFE (wb), 425/65R22.50, 20 ply, Fire Service Speed Rtng
Bumpers	0123625	Bumper, 19" Extended, Imp/Vel
Aerial Devices	0657391	Aerial, 100' Pierce Platform, 35 MPH Wind Rating, 400lb Tip Load Allowance

Notes:

Actual Inside cramp angle may be less due to highly specialized options.

Curb to Curb turning radius calculated for 9.00 inch curb.

Definitions:	
Inside CrampAngle	Maximum turning angle of the front inside fire.
Axle Track	King-pin to King-pin distance of front axle.
Wheel Offset	Offset from the center line of the wheel to the King-pin.
Tread Width	Width of the tire tread.
Chassis Overhang	Distance of the center line of the front axle to the front edge of the cab. This does not include the bumper depth.
Additional Bumper Wheel	Depth that the bumper assembly adds to the front overhang.
Wheelbase	Distance between the center lines of the vehicles front and rear axles.
Inside Turning Radius	Radius of the smallest circle around which the vehicle can turn.
Curb to Curb Turning Radius	Radius of the smallest circle around which the vehicle's tires can turn. This measures assumes a curb height of 9 inches.
Wall to Wall Turning Radius	Radius of the smallest circle around which the vehicle's tires can turn. This measures takes into account any front overhang due to chassis , bumper extensions and or aerial devices.



Fire and Rescue Apparatus

Twenty (20) Year Structural Integrity

Pierce Aerial Device

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Each new Pierce Aerial Device shall be free from defects in material and workmanship. Aerial Device Models Covered by this warranty include: Aerial Platforms Aerial Ladders SkyBoom
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Twenty (20) Years - or - 100,000 Miles
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This warranty applies only to the torque box, turntable, aerial sections and other structural components of the aerial device, as identified in the Pierce specifications for the aerial device. This warranty shall be void if, or to the extent that the aerial device is not maintained in strict compliance with NFPA Standard 1911 in effect at time of sale, including such periodic inspections and testing by qualified third parties as are required by that Standard as it may be in effect from time to time. Proof of such compliance shall accompany any claims under this warranty. Third party testing agencies known to Pierce to be qualified for such purposes may be obtained from the Pierce Customer Service Department This warranty does not apply to damage caused by corrosion.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Ten (10) Year Structural Integrity

Custom Cab

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The Pierce Custom Cab shall be free from structural failures caused by defects in material and workmanship
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years - or - 100,000 Miles
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This warranty applies only to the cab tubular support and mounting structures and other structural components of the cab of the vehicle model, as identified in the Pierce specifications for the Fire and Rescue Apparatus. This warranty does not apply to damage caused by corrosion.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

One (1) Year Material and Workmanship

Basic Apparatus

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Portions of the apparatus manufactured by Pierce shall be free from defects in material and workmanship
Warranty Begins:	The date the apparatus is placed in service, or 60 days from the original buyer invoice date, whichever comes first.
Warranty Period Ends After:	Twelve (12) months.
Conditions and Exclusions: See Also Paragraphs 2 thru 4	No specific exclusions apply

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

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If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

NEW PRODUCT WARRANTY



**PARTICIPATING OEM SALES
DISTRIBUTOR SALES**

LIMITED WARRANTY ON NEW ALLISON AUTOMATIC TRANSMISSIONS USED IN EMERGENCY VEHICLE APPLICATIONS

Allison Transmission will provide for repairs or replacement, at its option, during the warranty period of each new Allison transmission listed below that is installed in an Emergency Vehicle in accordance with the following terms, conditions, and limitations.

WHAT IS COVERED

- **WARRANTY APPLIES** — This warranty is for new Allison transmission models listed below installed in an Emergency Vehicle and is provided to the original and any subsequent owner(s) of the vehicle during the warranty period.
- **REPAIRS COVERED** — The warranty covers repairs or replacement, at Allison Transmission's option, to correct any transmission malfunction resulting from defects in material or workmanship occurring during the warranty period. Needed repairs or replacements will be performed using the method Allison Transmission determines most appropriate under the circumstances.
- **TOWING** — Towing is covered to the nearest Allison Transmission Distributor or authorized Dealer only when necessary to prevent further damage to your transmission.
- **PAYMENT TERMS** — Warranty repairs, including parts and labor, will be covered per the schedule shown in the chart contained in section "APPLICABLE MODELS, WARRANTY LIMITATIONS, AND ADJUSTMENT SCHEDULE."
- **OBTAINING REPAIRS** — To obtain warranty repairs, take the vehicle to any Allison Transmission Distributor or authorized Dealer within a reasonable amount of time and request the needed repairs. A reasonable amount of time must be allowed for the Distributor or Dealer to perform necessary repairs.
- **TRANSMISSION REMOVAL AND REINSTALLATION** — Labor costs for the removal and re-installation of the transmission, when necessary to make a warranty repair, are covered by this warranty.
- **WARRANTY PERIOD** — The warranty period for all coverages shall begin on the date the transmission is delivered to the first retail purchaser, with the following exception:

Demonstration Service - A transmission in a new truck or bus may be demonstrated to a total of 5000 miles (8000 kilometers). If the vehicle is within this limit when sold to a retail purchaser, the warranty start date is the date of purchase. Normal warranty services are applicable to the demonstrating Dealer. Should the truck or bus be sold to a retail purchaser after these limits are reached, the warranty period will begin on the date the vehicle was first placed in demonstration service and the purchaser will be entitled to the remaining warranty.

APPLICABLE MODELS, WARRANTY LIMITATIONS, AND ADJUSTMENT SCHEDULE

APPLICABLE MODELS	WARRANTY LIMITATIONS (Whichever occurs first)		ADJUSTMENT CHARGE TO BE PAID BY THE CUSTOMER	
	Months	Transmission Miles Or Kilometers	Parts	Labor
MT, MD 3000, 3200, 3500, 3700	0-24	No Limit	No Charge	No Charge
HT with Hydraulic Controls	0-24	No Limit	No Charge	No Charge
AT, 1000 Series™, 2000 Series™, 2400 Series™	0-36	No Limit	No Charge	No Charge
HT with Electronic Controls	0-60	No Limit	No Charge	No Charge
HD 1000 EVS, 2100 EVS, 2200 EVS 2350 EVS, 2500 EVS, 2550 EVS, 3000 EVS, 3500 EVS, 4000, 4000 EVS, 4500, 4500 EVS, 4700, 4700 EVS, 4800, 4800 EVS	0-60	No Limit	No Charge	No Charge

WHAT IS NOT COVERED

- **DAMAGE DUE TO ACCIDENT, MISUSE, or ALTERATION** — Defects and damage caused as the result of any of the following are not covered:
 - Flood, collision, fire, theft, freezing, vandalism, riot, explosion, or objects striking the vehicle;
 - Misuse of the vehicle;
 - Installation into unapproved applications and installations;
 - Alterations or modification of the transmission or the vehicle, and
 - Damage resulting from improper storage (refer to long-term storage procedure outlined in the applicable Allison Service Manual)
 - Anything other than defects in Allison Transmission material or workmanship

NOTE: This warranty is void on transmissions used in vehicles currently or previously titled as salvaged, scrapped, junked, or totaled.

- **CHASSIS, BODY, and COMPONENTS** — The chassis and body company (assemblers) and other component and equipment manufacturers are solely responsible for warranties on the chassis, body, component(s), and equipment they provide. Any transmission repair caused by an alteration(s) made to the Allison transmission or the vehicle which allows the transmission to be installed or operated outside of the limits defined in the appropriate Allison Installation Guideline is solely the responsibility of the entity making the alteration(s).
- **DAMAGE CAUSED by LACK of MAINTENANCE or by the USE of TRANSMISSION FLUIDS NOT RECOMMENDED in the OPERATOR'S MANUAL** — Defects and damage caused by any of the following are not covered:
 - Failure to follow the recommendations of the maintenance schedule intervals applicable to the transmission;
 - Failure to use transmission fluids or maintain transmission fluid levels recommended in the Operator's Manual.
- **MAINTENANCE** — Normal maintenance (such as replacement of filters, screens, and transmission fluid) is not covered and is the owner's responsibility.
- **REPAIRS by UNAUTHORIZED DEALERS** — Defects and damage caused by a service outlet that is not an authorized Allison Transmission Distributor or Dealer are not covered.
- **USE of OTHER THAN GENUINE ALLISON TRANSMISSION PARTS** — Defects and damage caused by the use of parts that are not genuine Allison Transmission parts are not covered.
- **EXTRA EXPENSES** — Economic loss and extra expenses are not covered. Examples include but are not limited to: loss of vehicle use; inconvenience; storage; payment for loss of time or pay; vehicle rental expense; lodging; meals; or other travel costs.
- **"DENIED PARTY" OWNERSHIP** — Warranty repair parts and labor costs are not reimbursed to any participating or non-participating OEMs, dealers or distributors who perform warranty work for, or on behalf of, end users identified by the United States as being a "denied party" or who are citizens of sanctioned or embargoed countries as defined by the U.S. Department of Treasury Office of Foreign Assets Control. Furthermore, warranty reimbursements are not guaranteed if the reimbursement would be contrary to any United States export control laws or regulations as defined by the U.S. Department of Commerce, the U.S. Department of State, or the U.S. Department of Treasury.

OTHER TERMS APPLICABLE TO CONSUMERS AS DEFINED by the MAGNUSON-MOSS WARRANTY ACT

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Allison Transmission does not authorize any person to create for it any other obligation or liability in connection with these transmissions.

ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO THESE TRANSMISSIONS IS LIMITED IN DURATION TO THE DURATION OF THIS WRITTEN WARRANTY. PERFORMANCE OF REPAIRS AND NEEDED ADJUSTMENTS IS THE EXCLUSIVE REMEDY UNDER THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY. ALLISON TRANSMISSION SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES (SUCH AS, BUT NOT LIMITED TO, LOST WAGES OR VEHICLE RENTAL EXPENSES) RESULTING FROM BREACH OF THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY.**

** Some states do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

OTHER TERMS APPLICABLE TO OTHER END-USERS

THIS WARRANTY IS THE ONLY WARRANTY APPLICABLE TO THE ALLISON TRANSMISSION MODELS LISTED ABOVE AND IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ALLISON TRANSMISSION DOES NOT AUTHORIZE ANY PERSON TO CREATE FOR IT ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION WITH SUCH TRANSMISSIONS. ALLISON TRANSMISSION SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF THIS WARRANTY OR ANY IMPLIED WARRANTY.

QUESTIONS

If you have any questions regarding this warranty or the performance of warranty obligations, you may contact any Allison Transmission Distributor or Dealer or write to:

Allison Transmission, Inc.
P.O. Box 894
Indianapolis, IN 46206-0894
Attention: Warranty Administration PF-9

Waterous Five-Year Limited Warranty

WATEROUS warrants, to the original Buyer only, that products manufactured by WATEROUS will be free from defects in material and workmanship under normal use and service for a period of five (5) years from the date the product is first placed in service, or five and one-half (5-1/2) years from the date of shipment by WATEROUS, whichever period shall be the first to expire; provided the Buyer notifies WATEROUS, in writing, of the defect in said product within the warranty period, and said product is found by WATEROUS to be nonconforming with the aforesaid warranty. When required in writing by WATEROUS, defective products must be promptly returned by Buyer to WATEROUS at WATEROUS' plant at South St. Paul, Minnesota, or at such other place as may be specified by WATEROUS, with transportation and other charges prepaid. A Returned Material Authorization (RMA) is required for all products and parts and may be requested by phone, fax, email, or mail. The aforesaid warranty excludes any responsibility or liability of WATEROUS for:

- (a) damages or defects due to accident, abuse, misuse, abnormal operating conditions, negligence, accidental causes, use in non-firefighting applications, or improper maintenance, or attributable to written specifications or instructions furnished by Buyer;
- (b) defects in products manufactured by others and furnished by WATEROUS hereunder, it being understood and agreed by the parties that the only warranty provided for such products shall be the warranty provided by the manufacturer thereof which, if assignable, WATEROUS will assign to Buyer, if requested by Buyer;
- (c) any product or part, altered, modified, serviced or repaired other than by WATEROUS, without its prior written consent;
- (d) the cost of dismantling, removing, transporting, storing, or insuring the defective product or part and the cost of reinstallation; and
- (e) normal wear items (packing, strainers, filters, light bulbs, anodes, intake screens, mechanical seals, etc.).

ALL OTHER WARRANTIES ARE EXCLUDED, WHETHER EXPRESS OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT, WHETHER AS A RESULT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, OR ANY OTHER CAUSE OF ACTION, SHALL WATEROUS BE LIABLE FOR ANY PUNITIVE, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR FOR PERSONAL INJURY OR PROPERTY DAMAGES.

The exclusive remedy of Buyer and the sole liability of WATEROUS, whether based on contract, warranty, tort or any other basis of recovery whatsoever, is expressly limited at the election of WATEROUS to:

- (a) the replacement at the agreed point of delivery of any product or part, which upon inspection by WATEROUS or its duly authorized representative, is found not to conform to the limited warranty set forth above, or
- (b) the repair of such product or part, or
- (c) the refund or crediting to Buyer of the net sales price of the defective product or part.

BUYER'S REMEDIES CONTAINED HEREIN ARE EXCLUSIVE OF ANY OTHER REMEDY OTHERWISE AVAILABLE TO BUYER.

Waterous Company
125 Hardman Avenue South
South St. Paul, MN 55075 USA
www.waterousco.com



F-2113 (07/17/12)



Fire and Rescue Apparatus

Five (5) Year Material and Workmanship

Command Zone Electronics

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Command Zone control modules shall be free from failures caused by defects in material and workmanship
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Five (5) Years
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This limited warranty applies to all of the control modules for the Command Zone system, including the full color graphic displays. Related wire harnesses, cables and connectors are not covered under this limited warranty and are instead covered under the Pierce One Year Basic Apparatus Limited Warranty.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Certification Document CD0001 Velocity® & Impel® Cab Doors

Pierce Manufacturing certifies the integrity of the Velocity® & Impel® cab doors.

Specimens representing the substantial structural configuration of the Velocity and Impel cab front and crew doors have been successfully tested to meet the following objectives:

OBJECTIVES:

- Survive a 200,000-cycle door slam test with a slam acceleration up to 20 g's on one representative
- Validate the assembly concept of the main structure of the door by evaluating the durability of the bonding technique.
- Evaluate components, structure, and mounting of the door during and the end of the test for fatigue and failure to ensure durability.
- Verify that the door seals function properly at the end of the test.
- Evaluate the new extrusions and castings of the cab doorframe during and at the end of the test for fatigue, failure, and deformation of seal flanges.
- Evaluate various mounting options for the electronic control module for durability during portions of the slam test.

CONCLUSIONS:

- The door structure and doorframe successfully completed a 200,000-cycle door slam test with a door slam acceleration of 50 g's.

VALIDATION TEST: RD1239, RD1350

Pierce Manufacturing, Inc.

A handwritten signature in blue ink, appearing to read "James R. Lackore".



James Roger Lackore, PE
March 16, 2008





Certification Document CD0005 Velocity® & Impel® Windshield Wiper System

Pierce Manufacturing certifies the integrity of the Velocity® & Impel® Windshield Wiper System.

Specimens representing the configuration of the Velocity® & Impel® windshield wipers have been successfully tested to meet the following objectives:

OBJECTIVES:

- Complete 3,000,000 cycles of windshield wiper operation per SAE J198 § 6.2
- Inspect wiper motor, pivots, linkages, and mounts frequently to validate cumulative wiper system integrity.

CONCLUSIONS:

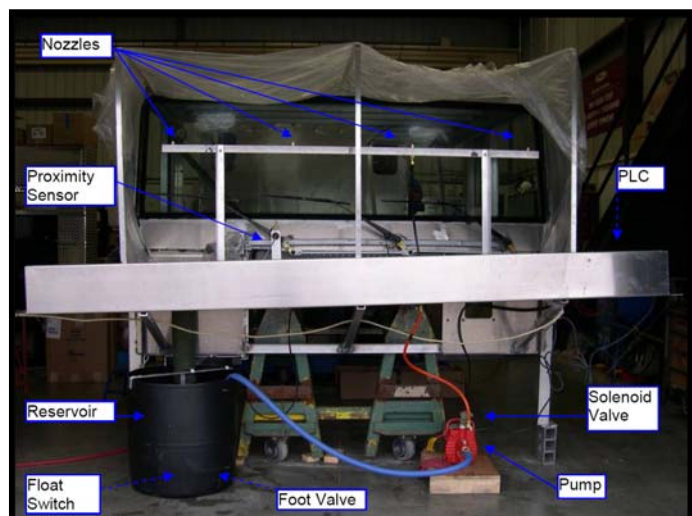
- The wiper linkage, pivots, and mounts successfully completed 4,254,000 cycles.
- The low speed circuit on the wiper motor failed at 2,954,000 cycles but it continued to operate on high speed. The low speed failure was determined to be due to water intrusion. The production wiper motors are coated in "EL-Cast Resin with a 641 hardener additive" to seal them from water intrusion to prevent failure.

VALIDATION TEST: RD1240

Pierce Manufacturing, Inc.

The seal is circular with "WISCONSIN" at the top and "PROFESSIONAL ENGINEER" at the bottom. In the center, it reads "JAMES R. LACKORE", "E-26228", and "APPLETON, WI".

James Roger Lackore, PE
March 16, 2008





Certification Document CD0018 Velocity® & Impel® Seats and Seat Belts

Pierce Manufacturing certifies the conformance of the Velocity® & Impel® cab seats and seat belts to Federal Motor Vehicle Safety Standards. Representative Velocity® & Impel® Seat and Seat Belt designs have been tested successfully in accordance with FMVSS 207.

Physical testing was performed to qualify passenger seats to meet Federal Motor Vehicle Safety Standards (FMVSS) 207 and 210. This requires that a minimum of 3,000 lbf be applied to both the lap and shoulder belts via appropriate body blocks. A third force of twenty times the mass of the seat must be applied at the center-of-gravity (CG) of the seat. All three forces are applied at the same time, reached within thirty seconds of the start of the test, and be held for a minimum of ten seconds.

A force equal to twenty times the mass of the seat was applied to each seat in the direction opposite to the combination pull. A moment of 275 lb-ft was applied to the seat with reference to the H-point.

This testing ensures that the seat mounting and seat belt anchors are adequate to retain the seats and occupants in a crash. The Federal requirements are based on the high deceleration rates of passenger vehicles, so the design requirements are significantly more conservative considering the slower crash speeds of heavy trucks.



SETUP 3

Velocity Test Cab – Hydraulic Cylinder Mounting

VALIDATION TESTS:

RD1274
RD1335
RD1352
RD1405
RD1437
RD1446

Pierce Manufacturing, Inc.

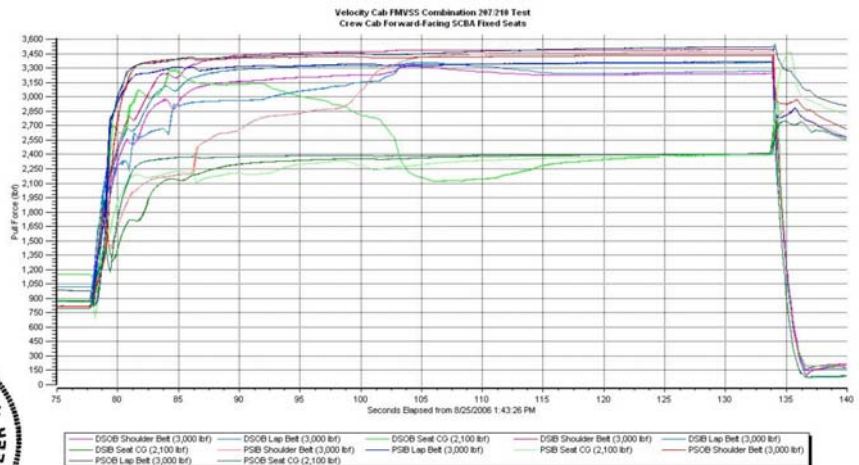


CHART G1

Velocity Test Cab – Crew Cab Forward-Facing Locations Test Results

James Roger Lackore, PE
June 17, 2008



Fire and Rescue Apparatus

Five (5) Year Material and Workmanship

Command Zone Electronics

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Command Zone control modules shall be free from failures caused by defects in material and workmanship
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Five (5) Years
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This limited warranty applies to all of the control modules for the Command Zone system, including the full color graphic displays. Related wire harnesses, cables and connectors are not covered under this limited warranty and are instead covered under the Pierce One Year Basic Apparatus Limited Warranty.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

One (1) Year Material and Workmanship Graphics Fading and Deterioration

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Each graphic lamination shall be free from defects in material workmanship, fading, and deterioration.
Warranty Begins:	The date the apparatus is placed in service, or 60 days from the original buyer invoice date, whichever comes first.
Warranty Period Ends After:	One (1) Year
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This warranty does not cover damage from lack of maintenance and cleaning (proper cleaning and maintenance procedures are detailed in the Pierce operation and maintenance manual).

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Three (3) Year Material and Workmanship TAK-4 Independent Front Suspension

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The TAK-4 Front Independent Suspension and Steering Gears shall be free from defects in material and workmanship.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Three (3) Years -or- 30,000 Miles
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This limited warranty excludes brake pads, brake rotors, seal boots and shock absorbers.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Lifetime Fifty (50) Year Structural Integrity

Chassis Frame & Crossmembers

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Custom chassis frame rail and cross members manufactured by Pierce shall be free from defects in material and workmanship
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Fifty (50) Years (Expected Life of Apparatus)
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This warranty does not apply to damage caused by corrosion.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Ten (10) Year Pro-Rated Paint and Corrosion

Cab

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Exterior surfaces of the cab painted by Pierce shall be free from blistering, peeling, corrosion or any other adhesion defect caused by defective manufacturing methods or paint material selection.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years
Conditions and Exclusions:	This limited warranty is applicable to the vehicle in the following percentage costs of warranty repair, if any: Topcoat Durability & Appearance: Gloss, Color Retention & Cracking 0-72 months 100% 73-96 months 50% 97-120 months 25% Integrity of Coating System: Adhesion, Blistering/Bubbling 0-36 months 100% 37-84 months 50% 85-120 months 25% Corrosion: Dissimilar Metal and Crevice 0-36 months 100% 37-48 months 50% 49-72 months 25% 73-120 months 10% Corrosion Perforation 0-120 months 100% This limited warranty applies only to exterior paint. Paint on the vehicle's interior is warranted only under the Pierce Basic One Year Limited Warranty. Items not covered by this warranty include: (a) Damage from lack of maintenance and cleaning (proper cleaning and maintenance procedures are detailed in the Pierce operation and maintenance manual). (b) UV paint fade. (c) Any cab not manufactured by Pierce.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Ten (10) Year Pro-Rated Paint and Corrosion

Custom Body

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Exterior surfaces of the body shall be free from blistering, peeling, corrosion or any other adhesion defect caused by defective manufacturing methods or paint material selection.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years
Conditions and Exclusions:	This limited warranty is applicable to the vehicle in the following percentage costs of warranty repair, if any: Topcoat Durability & Appearance: Gloss, Color Retention & Cracking 0-72 months 100% 73-96 months 50% 97-120 months 25% Integrity of Coating System: Adhesion, Blistering/Bubbling 0-36 months 100% 37-84 months 50% 85-120 months 25% Corrosion: Dissimilar Metal and Crevice 0-36 months 100% 37-48 months 50% 49-72 months 25% 73-120 months 10% Corrosion Perforation 0-120 months 100% This limited warranty applies only to exterior paint. Paint on the vehicle's interior is warranted only under the Pierce Basic One Year Limited Warranty. Items not covered by this warranty include: (a) Damage from lack of maintenance and cleaning (proper cleaning and maintenance procedures are detailed in the Pierce operation and maintenance manual). (b) UV paint fade. (c) Any cab not manufactured by Pierce.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Four (4) Year Pro-Rated Paint and Corrosion

Aerial Device

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Aerial device shall be free from blistering, peeling, corrosion or any other adhesion defect caused by defective manufacturing methods or paint material selection for exterior surfaces.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Four (4) Years
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This limited warranty is applicable to the vehicle in the following percentage costs of warranty repair, if any: Topcoat Durability & Appearance: Gloss, Color Retention & Cracking 0-24 months 100% 25-48 months 50% Integrity of Coating System: Adhesion, Blistering/Bubbling 0-24 months 100% 25-48 months 50% Corrosion: Dissimilar Metal and Crevice 0-24 months 100% 25-48 months 50% Corrosion Perforation 0-24 months 100% 25-48 months 50% This limited warranty applies only to exterior paint. Items not covered by this warranty include: (a) Damage from lack of maintenance and cleaning (proper cleaning and maintenance procedures are detailed in the Pierce operation and maintenance manual). (b) UV paint fade.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Ten (10) Year Structural Integrity Apparatus Body Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The apparatus body shall be free from structural failures caused by defects in material and workmanship
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years - or - 100,000 Miles
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This warranty applies only to the body tubular support and mounting structures and other structural components of the body of the vehicle model, as identified in the Pierce specifications for the Fire and Rescue Apparatus. This warranty does not apply to damage caused by corrosion.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



MANUFACTURER'S LIMITED WARRANTY - HYDRAULIC GENERATORS

FIRE & EMERGENCY VOCATION

Harrison Hydra-Gen® (Seller) extends to the original purchaser (Buyer) of goods for use (whether it be an OEM, dealer, re-seller, or end-user) the following warranty covering the Harrison Hydra-Gen® Generator System, subject to the qualifications indicated. Harrison Hydra-Gen® Generator Systems shall consist of a Harrison generator tray assembly and its' components, a Harrison hydraulic pump assembly, and a Harrison supplied meter assembly; unless otherwise specified in below guidelines.

Harrison Hydra-Gen® warrants the original purchaser that the Generator System manufactured or supplied by Harrison Hydra-Gen® will be free from defects in materials and workmanship, provided such goods are:

1. Installed, operated and maintained in accordance with the Harrison Hydra-Gen® owner's manual, and/or written installation addendums.
2. Each new application has been reviewed and approved by the Harrison Hydra-Gen® Application Engineering Group.

PERIOD OF WARRANTY

*Six (6) years or 1000 hours of usage, whichever comes first, from the date the product is shipped from Harrison to the Installer.

***The END USER must complete and return to Harrison Hydra-Gen® the Harrison Hydra-Gen® Warranty Registration Card, Form WR-1, provided in the generator manual and provided online @ www.harrisonhydragen.com, within 45 days of delivery.**

Warranty includes all parts and labor. In addition, maintenance items that are contaminated or damaged by a proven warrantable failure are covered in years 1-2, and Labor time up to 4 hours, travel time up to 2.5 hours, and mileage up to 100 miles for warranty related repairs are covered in years 1-2.

Repair or replacement parts are warranted for ninety (90) days from date of purchase, excluding labor and travel expenses. Any part repaired or replaced during the warranty period assumes the remainder of the warranty or ninety (90) days, whichever is greater.

Only components supplied by Harrison Hydra-Gen® are covered under this warranty.



There is no other express warranty. Implied warranties, including merchantability and fitness for a particular purpose, are limited to periods set forth above and to the extent permitted by law. Any and all implied warranties are excluded. In no event is Harrison Hydra-Gen® liable for incidental or consequential damages.

The Buyer (OEM, dealer, re-seller, or end-user) must notify Harrison Hydra-Gen®, an Authorized Distributor, or a designated Harrison Hydra-Gen® Service Representative, **in writing**, within thirty (30) calendar days after goods or parts failed to meet this warranty.

The sole liability of Harrison Hydra-Gen® and the Buyer's sole remedy for a failure of goods under this warranty and for any and all other claims arising out of the purchase and use of the goods, including negligence on the part of the manufacturer, shall be limited to the repair or replacement of the product, at the option of Harrison Hydra-Gen®, of the parts that do not conform to this warranty, provided that the product or parts are returned to the Harrison Hydra-Gen® manufacturing facility.

A Returned Goods Authorization (RGA) is required for all products and parts being returned, and may be requested by phone, fax, email, or mail.

Failure to make timely delivery to Harrison Hydra-Gen® of the goods claimed to be defective shall void any warranty.

Unless previous written agreements have been made between the Buyer and Harrison Hydra-Gen®, the Buyer shall be responsible for all freight and shipping charges in connection with the delivery of the goods claimed to be defective, to Harrison Hydra-Gen® at its manufacturing facility, and the return of repaired or replacement goods to the Buyer.

If Harrison Hydra-Gen® determines that no warranty coverage is available for goods claimed to be defective, whether determination is based on the warranty being voided, the product failure being due to a cause not covered by the warranty, the failure to make a timely and proper warranty claim, or otherwise, the Buyer shall have the option of either:

1. Having the goods not repaired and returned to the Buyer, freight collect.
2. Having the goods repaired, If Harrison Hydra-Gen® determines that the product is repairable, and returned to the Buyer, freight collect. The Buyer will be responsible for all costs associated with the repair and testing of the goods and shall authorize Harrison Hydra-Gen®, in writing, to have the goods repaired and tested by Harrison Hydra-Gen®.

The owner is obligated to operate and maintain the goods in accordance with the recommendations published by Harrison Hydra-Gen® in the owner's manual. The owner is



responsible for the costs associated with such maintenance and any adjustments that may be required.

This warranty shall not apply to:

1. Damages or defects caused by normal wear, accident, misuse, abuse, abnormal operating conditions, negligence, corrosion, accident causes, or attributable to written specifications or instructions furnished by the installer.
2. Damages or defects caused by improper maintenance in accordance with the Harrison Hydra-Gen® product manuals and operating guidelines.
3. Damages caused by operator error.
4. Damages or defects caused by improper installation.
5. Damages or defects caused by inadequate water drainage provided by the installer in the area where the generator is installed or stored.
6. Damages or defects caused by inadequate air flow space or ventilation provided by the installer in the area where the generator is installed.
7. Any product or part altered or modified by the installer or service facility without written prior consent by Harrison Hydra-Gen®.
8. Cost of normal maintenance, adjustments, installation or start-up.
9. Normal wear items and components needing periodic maintenance such as rubber hoses and filters.
10. Excessive labor due to components being concealed in vehicle as a result of installation.
11. Water, road debris, excessive dirt, salt, abrasive particles, or large foreign objects found in the generator.
12. Telephone or other communications expense.
13. Paint, hydraulic fluid, and interconnecting hoses (internal or external to system assemblies).

This warranty gives you specific legal rights, and you may also have other rights that may vary from state to state or province to province.

No person is authorized to give any other warranties or to assume any other liabilities behalf of Harrison Hydra-Gen®, unless made or assumed in writing by an officer of Harrison Hydra-Gen®.

Contact Harrison Hydra-Gen® for questions regarding your warranty rights and responsibilities at (281) 807-4420; or visit our website at www.harrisonhydragen.com.

NOTE: Please refer to the **MANUFACTURER'S LIMITED WARRANTY; IHT SYSTEMS** for warranty guidelines specific to the IHT system.



Fire and Rescue Apparatus

Three (3) Year Material and Workmanship Velocity and Impel Custom Chassis

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Portions of the apparatus manufactured by Pierce shall be free from defects in material and workmanship
Warranty Begins:	The date the apparatus is placed in service, or 60 days from the original buyer invoice date, whichever comes first.
Warranty Period Ends After:	Three (3) Years, or 30,000 Miles, or 5000 Engine Hours
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This limited warranty applies, where applicable, to Goldstar lamination, defroster heater coil and motor blower assembly (excluding the FET PWM module), heater, air conditioning condenser coil and fan/motor assembly, air conditioning evaporator coil and motor blower assembly (excluding the drain pan pump and thermostat), under seat heaters coil and motor blower assembly (excluding the FET PWM module), HVAC electronic switches, HVAC hoses and hard lines, heater water valve, Pierce PS6 seat frames and hardware, Pierce One-Eleven mirrors, Pierce hands-free scba holder, cracking or color loss of roto-molded components, Meritor rear axle, Wabco ABS system, cab door handles, Standen spring suspension components, and the gauge instrument cluster.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Ten (10) Year Material and Workmanship

Pierce 12V LED Strip Light

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	This limited warranty covers repairs to correct any defect related to materials or workmanship of the Pierce 12V LED strip lights installed on the apparatus occurring during the warranty period.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Year
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This limited warranty does not apply to related wire harnesses, cables, and connectors, which are covered by the Pierce one (1) year basic apparatus limited warranty.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY.

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES.

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Ten (10) Year Material and Workmanship Stainless Steel Piping Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Stainless steel piping shall be free from structural failures caused by defects in material and workmanship, or perforation caused by corrosion.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years - or - 100,000 Miles
Conditions and Exclusions: See Also Paragraphs 2 thru 4	Pierce's obligation under this warranty is limited to repairing or replacing without charge, as Pierce may elect, the stainless steel piping or components which Pierce determines to have failed due to defective material and workmanship, or perforation caused by corrosion. This warranty does not cover the use of fluoroprotein (FP) type foam. The sodium chloride within FP foam can cause long-term damage to system components if not thoroughly flushed immediately after use.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Three (3) Year Material and Workmanship Meritor Wabco ABS Brake System Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The Meritor Wabco ABS brake system shall be covered by Meritor Wabco as indicated in the attached Meritor Wabco warranty coverage description
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Three (3) Year
Conditions and Exclusions: See Also Paragraphs 2 thru 4	The exclusions listed in the attached Meritor Wabco warranty description shall apply.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



MERITOR WABCO

Safety Strong. Efficiency Smart.

Warranty
Model Year 2018 Vehicles

SIMPLER IS BETTER

Warranty coverage is essential to protecting your investment. But understanding the full details of your coverage can be challenging. This straightforward approach allows you, our valued customer, to better understand how your specific vehicle applications will be covered in your region. Our component warranty coverage is provided according to vocation/usage categories listed below.

- Linehaul covers high mileage operation (over 60,000 miles/year) on well maintained major highways of concrete or asphalt construction.
- General Service covers moderate mileage operations (less than 60,000 miles/year) on well maintained public roads (less than 10 percent off-road) typically with less than three (3) stops per mile.
- Heavy Service (Vocational) covers vehicles with more than 10 percent off-road OR moderate to frequent starts/stops typically with more than three (3) stops per mile.
- Off-Highway Service covers lower mileage operations. Vehicles are not typically licensed for highway use.

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How to Read Warranty Coverage (Example)

Number of Years	Mileage (in thousands) Unl=Unlimited	P=Parts Only P&L=Parts & Labor
3	300	P

HEAVY SERVICE (VOCATIONAL) WARRANTY INFORMATION

Heavy Service Vehicles

- Airport Rescue Fire (ARF)
- Airport Shuttle
- Asphalt Truck
- Block Truck
- Bottom Dump Trailer Combination
- Cementing Vehicle
- City Bus
- Commercial Pick-Up
- Concrete Pumper
- Construction Material Hauler
- Crash Fire Rescue (CFR)
- Mixer
- Demolition
- Drill Rig
- Dump
- Emergency Service
- Equipment Hauling
- Flatbed Trailer Hauler
- Flatbed Truck
- Fracturing Truck
- Front Loader
- Geophysical Exploration
- Hopper Trailer Combinations
- Landscaping Truck
- Liquid Waste Hauler
- Log Hauling
- Lowboy
- Michigan Special Gravel Trains
- Michigan Special Log Hauler
- Michigan Special Steel Hauler
- Michigan Special Waste Vehicle
- Municipal Dump
- Newspaper Delivery
- Package Delivery
- Pick-up and Delivery
- Rapid Intervention Vehicle (RIV)
- Rear Loader
- Recycling Truck
- Residential Pick-Up/Waste
- Rigging Truck
- Roll-Off
- Scrap Truck
- Semi-End Dump
- Sewer/Septic Vacuum
- Shuttle Bus
- Side Loader
- Snowplow/Snowblower
- Steel Hauling
- Tanker
- Tank Truck
- Tractors with Pole Trailers
- Tractor/Trailer with Jeeps
- Transfer Dump
- Transfer Vehicle
- Transit Bus
- Trolley
- Utility Truck
- Winch Truck

Heavy Service Typically Is

- On/Off road vocations (10% or more off-road) OR
- Moderate to frequent starts/stops typically more than three (3) stops per mile

Meritor WABCO Components¹

ABS (Anti-Lock Braking System) Air	3/300/P&L
ABS (Anti-Lock Braking System) Hydraulic	2/200/P&L
Electronic Braking System (EBS)	3/300/P&L
Electronic Stability Control (ESC)	3/300/P&L
Roll Stability Control (RSC)	3/300/P&L
Air Dryers (ALL)	1/100/P&L
Leveling Valves	1/100/P&L
Air Brake Valves	1/100/P&L
Emission Valves (SCR)	2/200/P&L
Clutch Controls	2/200/P&L
Air Compressors (ALL) ²	1/100/P&L
OnGuard™	3/300/P&L
OnGuardACTIVE™	3/300/P&L
OnLane™ Lane Departure Warning	3/300/P&L
Blind Spot Detection	3/300/P&L
OptiRide™	2/200/P&L
Trailer Roll Stability Support (RSS)	3/300/P&L
Trailer Control Line Filter ³	1/100/P&L
Trailer ABS Valve ³	3/300/P&L

¹ WABCO and Meritor WABCO branded components.

² WABCO compressors installed on Cummins, Mercedes, and DDC engines are not warranted or serviced by Meritor WABCO. Please contact your respective dealer/distributor of those engines for warranty and servicing.

³ An extended warranty of 4/400/P will be applied when a Meritor WABCO Trailer Control Line Filter is used in combination with a Meritor WABCO Trailer ABS valve.



TERMS AND CONDITIONS

Coverage Exclusions

Product Description

All

The cost of any repairs, replacements or adjustments to a covered product due to the following: (1) damage to the product or its component parts caused by incorrect use, installation, maintenance or repair, including without limitation (a) improper fit of mating components or brackets, (b) damaged threads, (c) cut, broken, chafed, pinched or otherwise damaged wiring (sensors, harnesses and connectors), (d) damaged sensors from removal when seized in block, or associated with sensor adjustments/alignments, and (e) damage resulting from the use or installation of non-genuine Meritor WABCO components or materials; (2) damage to the product, its component parts, or diminished product or component part performance due to incorrect operation, deviation from approved conditions or misapplication; (3) any unauthorized disassembly of the product or its component parts including without limitation (a) obliterated, defaced or missing WABCO or Meritor WABCO name plate, serial numbers or label identifying the device as a Meritor WABCO product or WABCO component, (b) changes to sealed adjusting screws, and (c) opening or attempted repair of non-serviceable components; (4) malfunction of the component due to internal contamination out of the vehicle system including without limitation (a) water and other contamination damage that is due to the use of a non-genuine air dryer cartridge or (b) valve failures due to contamination in air system, (5) complaints associated with noise, (6) damage resulting from corrosion (including oxidation of electrical devices and connections).

Air Dryers

Mounting brackets (see vehicle OEM). Desiccant cartridge housing only.

Air System Components

Normal wear items; Gladhand seals, dash valve knobs, valve actuation handles, treadles, pedals.

ABS, Electronic Stability Control (ESC), Roll Stability Control (RSC), OptiRide™, OnGuard™ and OnLane™, collectively “Electronics”

Failure of electronic components due to overvoltage condition, improper grounding, electrostatic discharge (ESD), improper shielding, electromagnetic interference (EMI), or other wiring or installation issues.

Malfunctions and failure codes caused by other electronic subsystem failures (data bus, engine, transmission, dashboard, etc.)

Hydraulic Components

For certain components, brake fluid DOT3 or DOT4 is used as the operating medium. Use of any other fluid will void all warranties associated with that component. For hydraulic braking applications the brake fluid is considered a maintenance item. Maintenance intervals are listed in TB-1367.

Coverage Limitations

Product Description

All

Any claim beyond 60 days from date of repair will not be accepted or honored under this warranty program.

Products purchased on an incomplete vehicle (glider) are limited to one year, 1/Unl/P.

For vehicles that operate full- or part-time outside of the United States and Canada, a 1-Year/Unlimited Miles parts only (1/Unl/P) will apply.

TOOLBOX™ Software

Proper diagnostics of Meritor WABCO Electronics may require the latest version of TOOLBOX™. Additional labor due to use of an outdated version of TOOLBOX™. TOOLBOX™ software, and/or the time to purchase or install latest version of TOOLBOX™ are not covered under product warranty.

TERMS AND CONDITIONS

(1) What is Covered by this Commercial Warranty?

Meritor WABCO Vehicle Control Systems warrants to the owner ("Owner") that the components listed in this publication, which have been installed by an Original Equipment Manufacturer ("OEM") as original equipment will be free from defects in material and workmanship. This warranty coverage begins from the original in-service date to the limits provided and runs concurrently with any warranties provided by OEMs and/or any service contracts that cover the components listed in this publication, if any. If the components listed in this publication are covered by an OEM warranty and/or service contract, then the OEM's warranty and/or service contract shall supersede Meritor WABCO's warranty and Owner shall comply with all OEM's warranty and/or service contract requirements for claims under such OEM's warranty and/or service contract until those agreements expire. Once those agreements expire and provided the Meritor WABCO warranty has not expired under the terms stated above, the Meritor WABCO warranty would be in effect until its expiration date.

Warranty coverage ends at the expiration of the applicable time period from the date of vehicle purchase by the first Owner, or, the applicable mileage limitation, whichever occurs first. Duration of coverage varies by component and vocation as detailed previously in this publication. Some components are warranted for parts only and the Owner must pay any labor costs associated with the repair or replacement of the component. Other components are warranted for both parts and reasonable labor to repair or replace the subject component. Additional diagnostic time due to use of an outdated version of TOOLBOX™, time to purchase or install latest version of TOOLBOX™ are the responsibility of the authorized Meritor WABCO service location and are not covered under product warranty. Components installed as replacements under this warranty are warranted only for the remainder of the original period of time or mileage under the original warranty.

(2) Designation of Vocational Use Required.

To obtain warranty coverage, each Owner must notify Meritor WABCO through the OEM new truck and/or trailer dealer of the intended vocational use of the vehicle into which the Meritor WABCO components have been incorporated prior to the vehicle in-service date. This notification may be accomplished by registering the vehicle through your OEM new truck and/or trailer dealer or with Meritor WABCO directly. Failure to notify Meritor WABCO of (I) the intended vocational use of the vehicle or (II) a change in vocational use from that which was originally designated, will result in the application of a one year, unlimited mileage, parts only warranty (1/Unl/P) from the initial in-service date.

A second Owner and each subsequent Owner must also notify Meritor WABCO as to the intended vocational use of the vehicle. This notification can be sent directly to Meritor WABCO or through the OEM new truck and/or trailer dealer. The duration and mileage coverage of this warranty cannot exceed the coverage extended to the first Owner after his or her initial designation of vocational use.

Coverage under Meritor WABCO's warranty requires that the application of products be properly approved pursuant to OEM and Meritor WABCO, approvals.

(3) What is the Cost of this Warranty?

There is no charge to the Owner for this warranty.

(4) What is not Covered by this Warranty?

In addition to the items listed on page 7, this warranty does not cover normal wear and tear, or service items; nor does it cover a component that fails, malfunctions or is damaged as a result of

(a) improper handling, storage, installation, adjustment, repair or modification including the use of unauthorized attachments or changes or modification in the vehicle's configuration, usage, or vocation from that which was originally approved by Meritor WABCO, (b) accident, fire or other casualty, natural disaster, road debris, negligence, misuse, abuse, or improper use (including loading beyond the specified maximum vehicle weight or altering engine power settings to exceed the brake system capacity), or (c) improper or insufficient maintenance (including deviation from maintenance intervals, approved lubricants, or lube levels). This warranty does not cover any component or part that is not sold by Meritor WABCO.

(5) Remedy.

The exclusive remedy under this warranty shall be the repair or replacement of the defective component at Meritor WABCO's option. Meritor WABCO reserves the right to require that all applicable covered components are available and/or returned to Meritor WABCO for review and evaluation.

(6) DISCLAIMER OF WARRANTY.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS, IMPLIED OR STATUTORY INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. SOME STATES LIMIT OR DO NOT ALLOW THE DISCLAIMER OF IMPLIED OR OTHER WARRANTIES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO THE EXTENT SUCH STATE'S LAW IS APPLICABLE TO THESE TERMS.

(7) LIMITATION OF REMEDIES.

IN NO EVENT SHALL MERITOR WABCO BE LIABLE FOR SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES OF ANY KIND OR UNDER ANY LEGAL THEORY, INCLUDING, BUT NOT LIMITED TO, TOWING, DOWNTIME, LOST PRODUCTIVITY, CARGO DAMAGE, TAXES, LOST PROFITS, COSTS OF PROCUREMENT OF A SUBSTITUTE COMPONENT OR ANY OTHER LOSSES OR COSTS RESULTING FROM A COVERED COMPONENT. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO THE EXTENT SUCH STATE'S LAW IS APPLICABLE TO THESE TERMS.

(8) TIME LIMIT ON COMMENCING LEGAL ACTION.

ANY LEGAL ACTION OR CLAIM ARISING FROM OR RELATED TO THIS WARRANTY, IN CONTRACT OR OTHERWISE, MUST BE COMMENCED WITHIN ONE YEAR FROM THE ACCRUAL OF THAT CAUSE OF ACTION, OR BE BARRED FOREVER.

(9) To Obtain Service.

If the Owner discovers within the applicable coverage period a defect in material or workmanship, the Owner must promptly give notice to either Meritor WABCO or the dealer from which the vehicle was purchased. To obtain service, the vehicle must be taken to any participating OEM new truck and/or trailer dealer or authorized Meritor WABCO service location. The dealer will inspect the vehicle and contact Meritor WABCO for an evaluation of the claim. When authorized by Meritor WABCO, the dealer will repair or replace during the term of this warranty any defective Meritor WABCO component covered by this warranty.

(10) Entire Agreement.

This is the entire agreement between Meritor WABCO and the Owner about warranty and no Meritor, Meritor WABCO employee, or dealer is authorized to make any additional warranty on behalf of Meritor WABCO unless in writing and signed by an authorized representative of Meritor WABCO.



For more information on
Meritor WABCO Warranty, call
our OnTrac Customer Service team
at 866-OnTrac1 (866-668-7221)
or visit meritorwabco.com.



Fire and Rescue Apparatus

One (1) Year Material and Workmanship Foam System & Five (5) Year Material and Workmanship Control Head Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Limited warranty 1 year parts and labor for the foam system and 5 years parts and labor for the control head.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	One (1) Year & Five (5) Year
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This warranty does not cover repair due to accidents, misuse, and excessive vibration, flying debris, storage damage (freezing), negligence or modification. This warranty is void if any modification or repairs are performed without authorization. This also voids any future warranty. This warranty does not cover cost of maintenance or repairs due to lack of required maintenance services as recommended. Performance of the required maintenance and use of proper fluids are the responsibility of the owner.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Certification Document CD0004 Velocity® & Impel® Window Regulators

Pierce Manufacturing certifies the integrity of the Velocity® & Impel® window regulators.

Specimens representing the substantial structural configuration of the Velocity® & Impel® window regulators have been successfully tested to meet the following objectives:

OBJECTIVES:

- Electric window regulators withstand 30,000 up-down cycles.

CONCLUSIONS:

- The electric window regulators withstood 30,000 cycles without failure.

VALIDATION TEST: RD1350, RD1368

Pierce Manufacturing, Inc.

A handwritten signature in blue ink, appearing to read "James R. Lackore".



James Roger Lackore, PE
March 16, 2008





Certification Document CD0015 Velocity® & Impel® Cab Heater & Defrost

Pierce Manufacturing certifies the performance of the Velocity® & Impel® cab heat and defroster systems.

The Velocity® & Impel® Heater and Defroster System was tested successfully in an environmental chamber.

Defrosting

Defroster testing was performed in accordance with *SAE J381 Windshield Defrosting Systems Test Procedure and Performance Requirements-Trucks, Buses, and Multipurpose Vehicles*.

This SAE Recommended Practice establishes uniform test procedures and performance requirements for the defrosting system of enclosed cab trucks, buses, and multipurpose vehicles. Current engineering practice prescribes that for laboratory evaluation of defroster systems, an ice coating of known thickness be applied to the windshield and left- and right-hand side windows to provide more uniform and repeatable test results, even though under actual conditions such a coating would necessarily be scraped off before driving. The test condition, therefore, represents a more severe condition than the actual condition, where the defroster system must merely be capable of maintaining a cleared viewing area.

During the test, the vehicle is cold-soaked to 0° F in a cold chamber. A prescribed layer of ice is applied to the windshield. The defroster is then run and the advancing melt boundary marked as the test proceeds.

The SAE prescribed area of the windshield was 100% cleared within the specified 30 minute period.



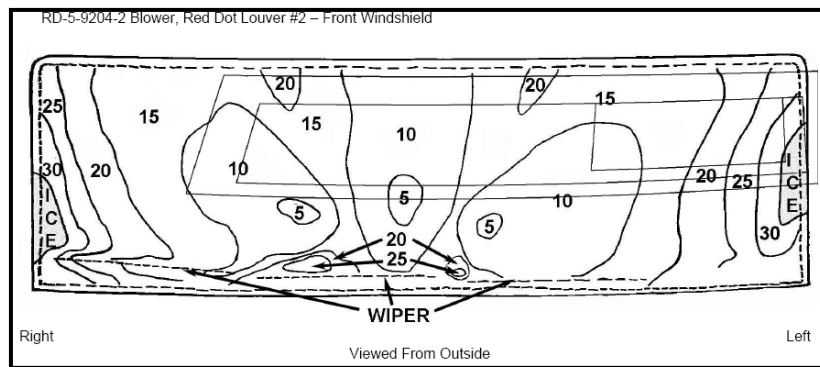
Start of Test



10 Minutes



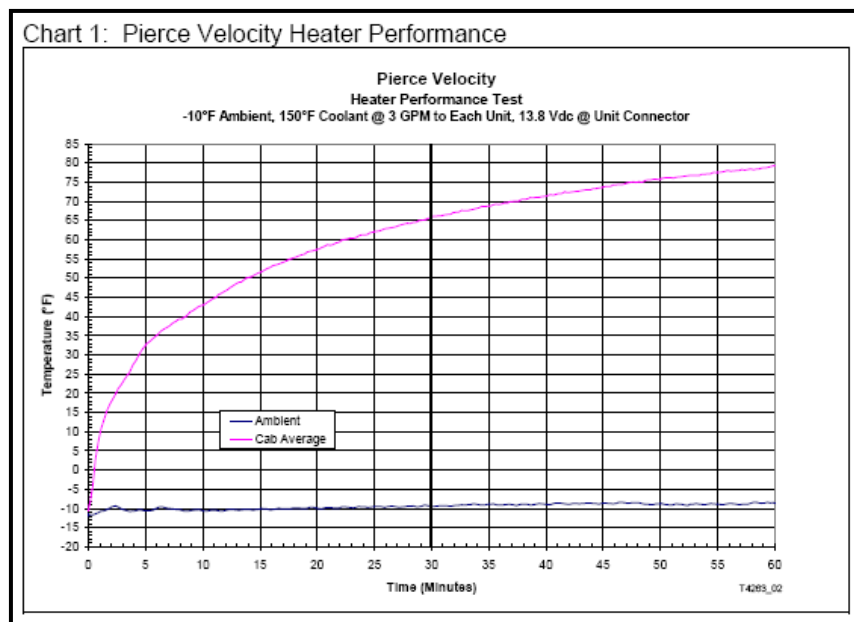
30 Minutes



Defrost Results

Heater:

Heater testing was performed using the coolant supply procedures from SAE J381. The average cab temperature increased 75° F from -10° F to 65° F within the prescribed 30 minutes. The cab was contained in a cold chamber at -10° F during the duration of the test.



VALIDATION TEST: RD1416

Pierce Manufacturing, Inc.

James Roger Lackore, PE
June 10, 2008



Certification Document CD0009 Velocity® & Impel® Cab Integrity Certification

Pierce Manufacturing certifies the integrity of the Velocity/Impel cab relative to occupant protection.

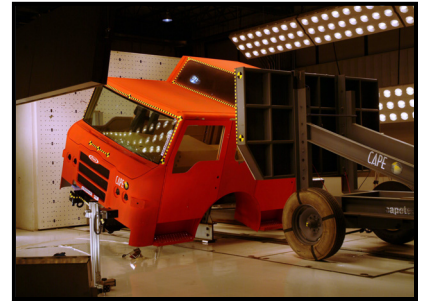
A specimen representing the substantial structural configuration of the Velocity and Impel cab models has been successfully tested in accordance with the following standards.

- SAE J2422 Cab Roof Strength Evaluation – Quasi-Static Loading Heavy Trucks.
- European Occupant Protection Standard ECE Regulation No. 29.
- SAE J2420 COE Frontal Strength Evaluation – Dynamic Loading Heavy Trucks.

Side Impact: The test cab was subjected to dynamic preload where a 13,275 lb moving barrier was slammed into the side of the cab at 5.5 mph, striking with an impact of 13,000 ft-lbs of energy. This test is not required to meet the ECE 29 standard, but is part of the SAE J2422 test procedure and more closely represents the forces a cab will see in a roll-over incident.

Roof Crush: This same test cab was then subjected to a roof crush force of 22,050 lbs. This value meets the ECE 29 criteria, which must be equivalent to the front axle rating up to a maximum of 10 metric tons.

Additional Roof Crush: The same cab was then loaded with 58,000 lbs, 85,000 lbs, and finally 100,000 lbs on the roof, exceeding the ECE test by 4.5 times!



Frontal Impact: The test cab was struck by the 13,275 lb moving barrier at a speed sufficient to impart the required 32,600 ft-lbs of energy.

The cab survived this second blow without compromising the survival space of any occupant area.

Additional Frontal Impact: The same cab was then struck a third time at a higher speed to impart 65,200 ft-lbs of energy into the cab (twice the ECE 29 level of energy).

The cab survived this third blow, again without compromising the survival space of any occupant area.

Side Crush: As an additional test of the Velocity/Impel strength, the same test cab was set on its side and loaded to 100,000 lbs. The cab in this test withstood the load without any appreciable damage or occupant space intrusion.



Pass-Fail criteria of the SAE tests and the ECE 29 test is a measure of whether the “survival space” inside the cab is compromised during any of the test loads. The Pierce cab withstood all integrity tests on the same cab without any measurable intrusion into the survival space of the occupant area.

Witnessed and Certified by:

Pierce Manufacturing, Inc.

A handwritten signature in blue ink, reading "James R. Lackore".



James Roger Lackore, PE
January 24, 2008



Certification Document CD0156 Statement of Compliance to NFPA 1901-2016 Vehicle Stability

Pierce fire apparatus comply with NFPA 1901 Section 4.13 Vehicle Stability using the tilt table method. As prescribed by the standard, each apparatus is compared to a substantially similar apparatus that has been loaded as required and tested on a tilt table per the SAE J2180 test procedure. If the apparatus configuration was not expected to meet the minimum tilt table criteria, then it will be equipped with the Electronic Stability Control option. A listing of all tested apparatus is maintained by the Research and Development lab and is available for inspection at the Appleton factory.



4.13 Vehicle Stability.

4.13.1* Rollover Stability. The apparatus shall meet the criteria defined in 4.13.1.1, or it shall be equipped with a stability control system in accordance with 4.13.1.2.

4.13.1.1 The apparatus shall meet the criteria defined in either of the following:

- (1)*The apparatus shall remain stable to 26.5 degrees in both directions when tested on a tilt table in accordance with SAE J2180, *A Tilt Table Procedure for Measuring the Static Rollover Threshold for Heavy Trucks*.
- (2) The calculated or measured center of gravity (CG) shall be no higher than 80 percent of the rear axle track width.

4.13.1.1.1 Compliance shall be certified by testing, calculating, or measuring the apparatus or by comparing the apparatus to a compliant, substantially similar example apparatus, and the certification shall be delivered with the fire apparatus.

4.13.1.1.2 The example apparatus shall be considered substantially similar if it includes a chassis with the same or higher CG height, the same or narrower rear axle track width, the same or greater water tank size and CG height, the same type of front and rear suspension, and the same type and size of aerial device.

4.13.1.1.3 For purposes of 4.13.1.1, the apparatus shall be loaded with fuel, fire-fighting agents, hose, ladders, a weight of 250 lb in each seating position, and weight equivalent to the miscellaneous equipment allowance as defined in Table 12.1.2.

4.13.1.1.3.1 If the apparatus is designed to meet a specified higher equipment loading or larger hose bed capacity or to carry additional ground ladders, these greater loads shall be included in the testing, calculating, or measuring.

4.13.1.1.3.2 The weight added to the fire apparatus for the purpose of test, calculation, or measurement shall be distributed to approximate typical in-service use of the fire apparatus while not exceeding the manufacturer's published individual compartment weight ratings.

4.13.1.2 If the apparatus is equipped with a stability control system, the system shall have, at a minimum, a steering wheel position sensor, a vehicle yaw sensor, a lateral accelerometer, and individual wheel brake controls.

VALIDATION TEST: Multiple Tests

Pierce Manufacturing, Inc.

David W. Archer
Vice President of Engineering
June 1, 2017

R. H. SHEPPARD CO., INC.
101 Philadelphia St.
Hanover, PA 17331
Pierce Manufacturing Inc.
2600 American Drive
Appleton, WI 54912

LIMITED WARRANTY: The R. H. Sheppard Co. Inc., ("Sheppard") warrants all M110PKG1 and M110SAU1 steering gears manufactured and sold to Pierce Manufacturing Inc. ("Pierce") for application on Pierce TAK-4 equipped vehicles to be free from defects of workmanship and material under normal use and service for a period of thirty six months from the in service date of the vehicle to its original owner.

Vehicle applications where Sheppard product is used require an application approval before production build. If Pierce uses Sheppard product for any purpose or application which has not been approved by Sheppard in advance, including aftermarket devices (defined as a device added to the steering system directly or indirectly affecting the performance or operation of the Sheppard product in its approved application) not tested and approved by Sheppard this limited warranty SHALL NOT APPLY AND SHALL BE VOID. SHEPPARD MAKES NO OTHER WARRANTY, EITHER EXPRESS OR IMPLIED. SHEPPARD EXPRESSLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE OR PURPOSE WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

SHEPPARD SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES OR FOR LOSS OR DAMAGE DIRECTLY OR INDIRECTLY ARISING FROM THE USE OF A PRODUCT. Pierce expressly acknowledges its obligation to inform all users (customers) of the above disclaimer.

CONDITIONS: Claims under this Limited Warranty may only be made by Pierce. In no event shall Sheppard be held liable for warranty charges by unauthorized persons. No allowance will be made for repairs or alterations, unless made with the written consent of Sheppard. Authorized Pierce dealers shall be the only authorized repair facility for Sheppard products applied to Pierce vehicles. Any warrantable repair made under this Limited Warranty must be made on or before 36 months of the in-service date for the Product to which the claim relates. Sheppard shall not be liable for claims made after such date. Sheppard product fitted to Pierce vehicles that are repaired at a repair facility other than an authorized Pierce dealer within the warranty period will be considered for payment under the guidelines of this agreement only by joint written consideration of Sheppard and Pierce warranty departments. It shall be the responsibility of the Pierce warranty department to notify Sheppard if and when this situation occurs. Sheppard will not be held responsible for damage to other steering components such as but not limited to pumps and reservoirs due to improper adjustment of steering gear relief plungers. Vehicle downtime and towing will not be considered under warranty.

REMEDIES: The sole and exclusive remedy of Pierce for Sheppard's breach of the foregoing warranty is limited to the return and repair or reimbursement as follows:

R. H. SHEPPARD CO., INC. WARRANTY
Pierce Manufacturing Inc.
Page 2

Warranty Support: In support of the Pierce dealer network, Sheppard will provide a toll-free "Hotline" service to assist in the diagnosis and troubleshooting of steering problems. The R. H. Sheppard Co., Inc. Field Service Department can be reached at 1-800-274-7437 for assistance. Sheppard will require that Pierce dealers contact this toll-free "Hotline" for approval before product is removed from a vehicle in a warranty situation. When contacted regarding a warranty situation, the Sheppard representative will provide an authorization number for removal of the product. This Returned Goods Authorization (RGA) number must be included in all warranty correspondence and attached to all returned goods.

Procedure: In the event of a warranty situation, the servicing dealer shall contact the Sheppard Hotline and receive an RGA number before replacing any steering gear. For M110PKG1 and M110SAU1 steering gear models, the dealer will first obtain an RGA number from Sheppard, and then order the replacement gear from Pierce. Replacement M110PKG1 and M110SAU1 steering gears shall be shipped from Pierce once those models are in full production. A warranty claim for both parts and labor will then be generated by the dealer and sent to Pierce. After reviewing the claim, Pierce will submit it to Sheppard for reimbursement.

Parts Reimbursement: Sheppard agrees to reimburse Pierce at Pierce's purchase price plus 30% mark-up for parts found to be defective within the warranty period. Parts being returned for warranty consideration shall be sent to the R. H. Sheppard Company, 447 E. Middle St., Hanover, PA 17331 ATTN: Warranty Dept. Sheppard's determination as to whether the part is covered by the foregoing warranty is final and conclusive. Sheppard requires the return of complete steering gears only. Individual seals replaced under warranty **should not** be returned unless specifically requested by Sheppard. All parts being returned for warranty consideration must be clearly tagged with all pertinent warranty information including, but not limited to (1) Returned Goods Authorization number (RGA); (2) claim number; (3) date in service; (4) date of failure; (5) mileage; (6) part number; (7) labor hours; (8) dealer labor rate and; (9) dollar amount claimed. Claims submitted without prior authorization are subject to rejection under this agreement.

Labor: Labor to repair Sheppard product found to be defective within the warranty period will be reimbursed at not more than 10 hours per vehicle. Labor shall be reimbursed at the rate of \$85.00 USD per hour for M110PGK1 and M110SAU1 steering gears.

Freight: Pierce will collect M110PGK1 and M110SAU1 warranty material at a designated collection point. Inbound freight to the Pierce collection point will be the responsibility of Pierce. All warranty material should be returned from the Pierce collection point to R. H. Sheppard Co. Freight Collect by a Sheppard-specified common carrier based on location of the Pierce collection point. Sheppard does not require the return of failed seals. Any freight charges incurred for the return of seals will be the responsibility of Pierce. Parts returned for warranty consideration without prior authorization are subject to rejection under this agreement and may be subject to a charge back of inbound freight charges. Parts rejected under this warranty will be returned to Pierce Freight Collect or scrapped by Sheppard at Pierce's discretion.

R. H. SHEPPARD CO., INC. WARRANTY
Pierce Manufacturing Inc.
Page 3

Outside Purchases: Pierce authorized dealers shall be the only outlet for repair, warranty service and parts for Sheppard products applied to Pierce vehicles. Sheppard will not be responsible for consumables such as hoses, belts, fluids, fittings or miscellaneous shop material that may be required for the repair of the product.

Warranty Documentation: Warranty credit memos will be issued monthly to the Pierce Warranty Department. Monthly credit memos will include (1) claim number; (2) part number; (3) parts reimbursement; (4) labor reimbursement; (5) any applicable Pierce reference number and; (6) reason for rejection or acceptance of the claim. Credit memos will be issued in U.S. funds. Debits for warranty claims will not be accepted under this agreement. Claim disposition will constitute the final and conclusive resolution of warranty claims.

Parts Retention: Sheppard will retain parts submitted for warranty consideration for a period of sixty (60) days for any material found to be rejected for warranty. Sheppard will notify Pierce within sixty (60) days of receipt of Sheppard's determination as to whether any such part is covered by this warranty. Warranty reimbursement will be issued within thirty days of receipt of material at Sheppard.

Good-Will Requests: Good-Will requests will be considered jointly between Sheppard and Pierce for equitable compensation.

RECALLS: Sheppard retains the right to review information regarding federal motor vehicle recall and /or product repair programs if Sheppard products fitted to Pierce vehicles are alleged to be non-compliant with federal motor vehicle safety standards. Sheppard retains the right to review any claims of product defect or non-compliance before participating in reimbursement of expenses incurred as a result of alleged non-compliance or defect of its products. Sheppard agrees to negotiate in good faith for the reimbursement of expenses incurred by Pierce for all administrative, material and labor cost and expense associated with any recall where Sheppard product is found to be defective or non-compliant with federal motor vehicle standards.

MISCELLANEOUS: This writing constitutes the full complete and final statement of Sheppard's limited warranty for M110PKG1 and M110SAU1 products sold to Pierce. All prior oral or written correspondence, test data, negotiations, representations, understandings and the like regarding products are merged in this writing and extinguished by it. This limited warranty may not be altered, amended extended or modified except by a writing signed by the President or Vice President of Sheppard. No employee, vendor, dealer, distributor or other representative of Sheppard has authority to make statements to extend, expand, alter or amend the terms of this Limited Warranty. Sheppard expressly disclaims any statements contrary to the Limited Warranty. Sheppard's failure at any time to enforce any of the terms and conditions stated herein shall not constitute a waiver of any provisions herein. This Limited Warranty shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania.

R. H. SHEPPARD CO., INC. WARRANTY
Pierce Manufacturing Inc.
Page 4

Any legal actions which may arise as a result of disputes, controversies or claims arising out of or related to this limited warranty shall be in such forum as Sheppard and Pierce shall agree, or, in the absence of agreement, in a court of appropriate jurisdiction other than in the county in which either party is located. This Limited Warranty shall not be assigned by Pierce.

COOPERATIVE EFFORT: Sheppard and Pierce agree to work cooperatively toward expanding this warranty coverage to a period of sixty months from the in service date. These cooperative efforts shall focus on examining the effects of increased heat generated by 2007 model engines and its impact on the entire power steering system.

AGREEMENT: This agreement is effective April 3, 2006 and may be modified by mutual agreement between Sheppard and Pierce of a signed amendment to be attached to the original Limited Warranty. There are no third party beneficiaries to this Limited Warranty. This warranty agreement applies to Pierce authorized dealers only. It does not encompass any special arrangements that Pierce may now have or that Pierce may enter into, with any other segments of the trucking industry. This warranty agreement does not apply to non-conforming product removed at Pierce assembly plants.

This Limited Warranty agreement between the R. H. Sheppard Co., Inc and Pierce Manufacturing Inc. may be terminated by either party with thirty days written notice prior to termination.

Signed at Pierce Manufacturing Inc., Appleton, WI this _____ day of _____, 2006.

R. H. SHEPPARD CO., INC.

PIERCE MANUFACTURING INC.

Authorized Signature

Authorized Signature

Title

Title



Fire and Rescue Apparatus

Five (5) Year Material and Workmanship Aerial Hydraulic System Components

Three (3) Year Material and Workmanship Aerial Hydraulic System Seals

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The aerial hydraulic system components and seals shall be free from component or structural failures caused by defects in material and/or workmanship.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Five (5) Years and Three (3) Years
Conditions and Exclusions: See Also Paragraphs 2 thru 4	Pierce's obligation under this warranty is limited to repairing or replacing without charge, as Pierce may elect, the hydraulic lines, fittings, valves, seals, cylinders, filters, pumps, hydraulic motors, rotary actuators, or components which Pierce determines to have failed due to defective material and workmanship. This warranty shall not apply unless the aerial device is inspected in accordance with NFPA 1911 Standard for Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus and the applicable Pierce Operator and Maintenance Manuals.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Five (5) Year Material and Workmanship - Transmission Oil Cooler Three (3) Year Collateral Damage Coverage

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The transmission cooler shall be free from component or structural failures caused by defects in material and/or workmanship. Collateral damage up to \$10,000 per occurrence is available for the first three (3) years.
Warranty Begins:	The date of delivery to the first retail purchaser.
Warranty Period Ends After:	Five (5) Years on Oil Cooler and three (3) years on collateral damage coverage
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This warranty does not cover repair due to accidents, misuse, and excessive vibration, flying debris, storage damage (freezing), negligence or modification. This warranty is void if any modification or repairs are performed without authorization. This also voids any future warranty. This warranty does not cover cost of maintenance or repairs due to lack of required maintenance services as recommended. Performance of the required maintenance and use of proper fluids are the responsibility of the owner. Towing is covered to the nearest distributor or authorized dealer only when necessary to prevent further damage to your transmission. Labor costs for the removal and reinstallation of goods may be covered when necessary to make repairs. Please contact your OEM for authorization. Replacement of cooler during the warranty period is limited to 100% of reasonable labor costs up to a maximum of \$700 to remove, replace, or repair the oil cooler.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

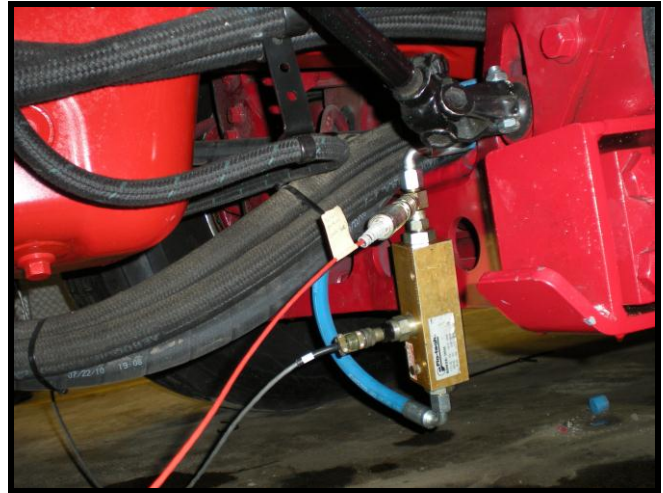
Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Certification Document CD0098 Power Steering System

Pierce Manufacturing, Inc. certifies that the power steering system as installed in our custom chassis meets the requirements of the component supplier, the NFPA 1901 and NFPA 1906 guidelines as applicable, and Pierce internal design standards.



VALIDATION TEST: RD1987, RD2055
RD2056, RD2057, RD2058, RD2059

Pierce Manufacturing, Inc.

A handwritten signature in black ink, appearing to read "David W. Archer".

David W. Archer
Director of Engineering
June 03, 2011



AMITY FIRE AND SAFETY, INC.

3750 CHESTNUT ROAD
ALBURTIS, PA 18011-0451
Phone: 610-966-3115
Fax: 610-965-6313

*** STANDARD TEN YEAR WARRANTY ***

(standard warranty is in effect for parts shipped after 4/15/10)

Telescopic Waterways

A. PRESHIPMENT TESTING All waterways fabricated by Amity are final inspected using the following pressure minimums:

1. Hydrostatic applications will be tested to 400 PSI unless specified otherwise on approved drawings. Operating pressures on installed systems are not to exceed 250 PSI at any point in the system. Warranty will be voided and Amity will not be held liable for failure and/or damage occurring from Water Hammering or freezing of water in any system.

B. COMPONENTS DESCRIPTION AND MAINTENANCE

1. All components are thoroughly greased at assembly. Since internally lubricated seals are used, regular greasing is not required. We recommend components not be greased at installation.
2. Slip Tube Assemblies may be greased at the Amity's regularly scheduled Aerial Inspections. The seals in the Slip Tube Assemblies are self-lubricating, so greasing is not mandatory. We do recommend a visual inspection of the Slip Tube Assembly while it is fully extended after initial installation, from that point on we recommend inspection every ten hours of aerial operation. If any deposits of aluminum appear, they are to be rubbed off using a Teflon scouring pad. Slip Tube Assemblies are designed to give long maintenance free service; however, like any product, problems may occur and periodic visual inspections will aid in determining if a potential problem exists and warrants a call to us. Care must be taken to keep debris off of extended tubes. We recommend wiping tubes with light oil (10 weight) or hydraulic oil after use, if tubes appear to have contamination on them. Under no circumstance are tubes to be cleaned with lacquer thinner, or any other solvent.

C. LIMITED WARRANTY, LIMITATIONS, CONDITIONS AND PROCEDURES REQUIRED.

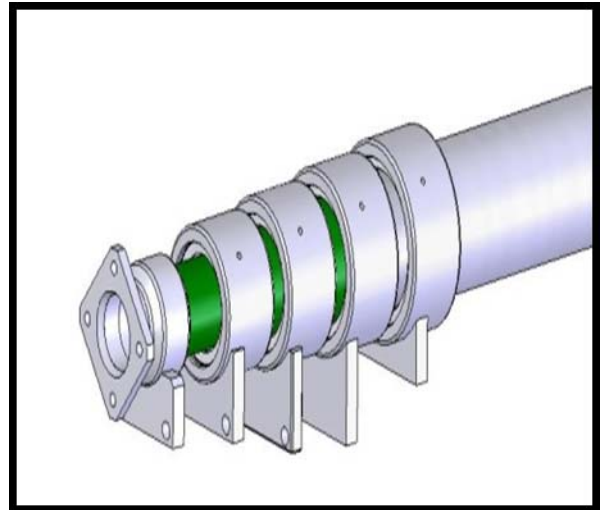
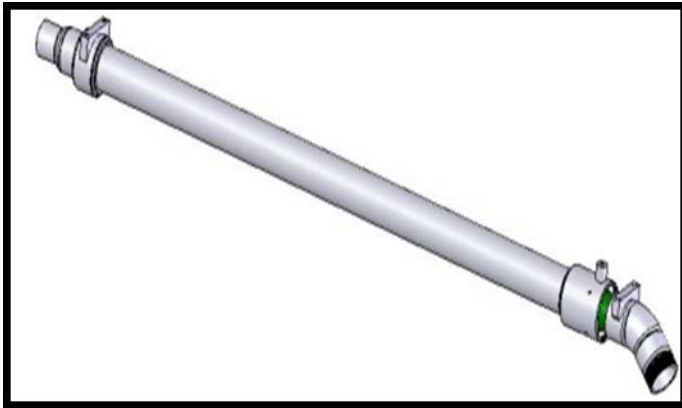
1. Products are warranted to be free of defects in labor and/or materials for a period of ten years from the date of purchase from the Amity and shall be repaired or replaced at the sole option and expense of the Amity provided the products alleged to be defective was used for its intended normal use operation and subject to the following qualifications and limitations.
2. Any alteration of product without consent from Amity is strictly forbidden and shall void warranty.
3. No welding shall be performed on finished product.
4. No responsibility is assumed for any malfunctions or damages which are occasionally caused by foreign objects which may be ingested into water system such as, but not limited to stones, sand or metal chips.
5. Amity assumes responsibility for our product, which is defective only, and therefore, it will not assume responsibility for labor to either remove or install our product unless it agrees in writing to assume such responsibility.
6. Unless otherwise approved in writing by the Amity all returns of defective (or allegedly defective products) are at Purchaser's expense and must include a RGA number issued by the Amity.
7. All warranty claims must be presented at the time the problem occurs, or as soon as practical thereafter, either called or faxed to the Amity and include the numbers on the assembly's Amity's label with a detailed explanation of the difficulty in order for the matter to be appropriately evaluated and resolved.
8. Amity will not be held liable for damage incurred during shipment.
9. No responsibility shall be assumed for misuse or improper mounting, unreasonable use or abuse of the Product and or failure to provide or use improper maintenance, failure to follow written installation and use in instruction or any use other than the customary designed use.

THE REMEDIES PROVIDED IN THE ABOVE EXPRESS LIMITED WARRANTY AND ARE THE SOLE AND EXCLUSIVE REMEDIES AVAILABLE. NO OTHER EXPRESS WARRANTIES ARE MADE. ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR

FITNESS FOR A PARTICULAR PURPOSE OR USE ARE LIMITED IN DURATION AS SET FORTH ABOVE. IN NO EVENT SHALL THE AMITY ASSUME OR BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

THE WITHIN DESCRIBED WARRANTY SHALL ONLY BE AFFORDED TO THE ORIGINAL PURCHASER OR FOR INCORPORATION INTO ANOTHER UNIT AND TO FIRST PURCHASER AS PART OF COMPLETED UNIT, HOWEVER, THE WARRANTY PERIOD OF TEN YEARS COMMENCES UPON INSTALLATION INTO FINAL ASSEMBLY WITH THE UNDERSTANDING IT IS INSTALLED WITHIN SIX MONTHS OF PURCHASE.

Dated: _____, 20__





AMITY FIRE AND SAFETY, INC.

3750 CHESTNUT ROAD
ALBURTIS, PA 18011-0451
Phone: 610-966-3115
Fax: 610-965-6313

* STANDARD FIVE YEAR WARRANTY *

(standard warranty is in effect for parts shipped after 4/15/10)

Three Function Swivel

A. PRESHIPMENT TESTING The Three Function Swivel fabricated by Amity which is exposed to pressure during normal use is subject to final inspection using the following pressure minimums:

1. Hydrostatic applications will be tested to 400 PSI unless specified otherwise on approved drawings. Operating pressures on installed systems are not to exceed 250 PSI at any point in the system. Warranty will be voided and Amity will not be held liable for failure and/or damage occurring from Water Hammering or freezing of water in any system.
2. Hydraulic applications will be tested to 4000 PSI. System operating pressure in application to be 3000 PSI maximum.
3. Dielectric and Continuity Test all circuits. 30 Amp max current loading.

B. THREE FUNCTION SWIVEL MAINTENANCE – Our Three Function Swivel has been fully tested at assembly. Under no circumstances is there to be any maintenance performed internally or externally to the Three Function Swivel by Purchaser or any other third party other than an authorized representative of or Amity itself. The Three Function Swivel is sealed and must remain so. The Three Function Swivel is designed for a long maintenance free life. Should any problems occur or replacement be necessary, first contact Amity. There is to be no field maintenance performed on the Three Function Swivel .

C. MOUNTING REQUIREMENTS – The following are the mounting requirements for the Three Function Swivel:

1. Mounting points and methods are to be determined at the initial design stage. All drawings and applicable documentation must be signed off by both parties and filed for future reference. No deviation to the approved mounting is allowed without approval from Amity.
2. The Three Function Swivel is to be mounted concentric to the center of the turntable bearing.
3. All inlet and outlet plumbing to conform to swivel mounting, under no circumstances is the Three Function Swivel to be positioned to match connections. This will avoid putting excessive loads on the Three Function Swivel. All tubing or piping to be supported by means other than the Three Function Swivel.

D. LIMITED WARRANTY, LIMITATIONS, CONDITIONS AND PROCEDURES REQUIRED.

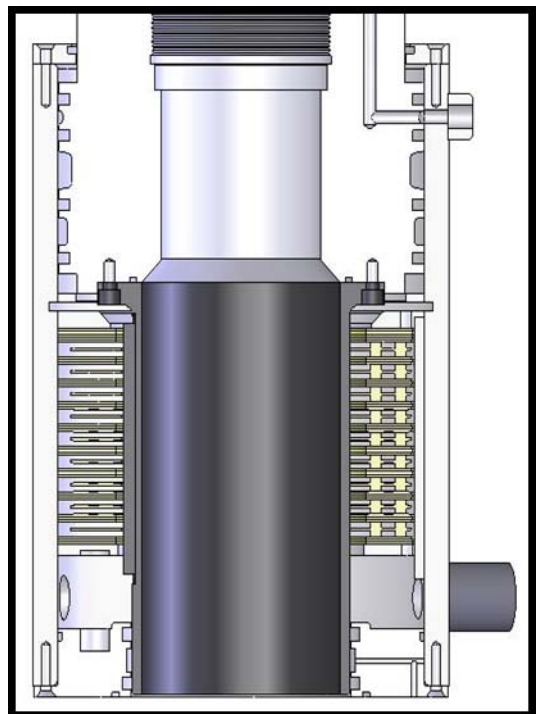
1. The Three Function Swivel is warranted to be free of defects in labor and/or materials for a period of five (5) years from the Date of Service. For purposes here, "Date of Service" shall mean the date when the Three Function Swivel, or the unit to which the Three Function Swivel is incorporated, passes final Underwriters Laboratory testing, or similarly compliant testing, and is certified for service. Evidence of such Date of Service shall be required in connection with any warranty claim by Purchaser.
2. The Three Function Swivel shall be repaired or replaced at the sole option and expense of the Amity provided the Three Function Swivel alleged to be defective was used for its intended normal use of operation and subject to the following qualifications and limitations.
3. Any alteration of the Three Function Swivel without consent from Amity is strictly forbidden and shall void warranty.
4. No welding shall be performed on finished Three Function Swivel.
5. No responsibility is assumed for any malfunctions or damages which are occasionally caused by foreign objects which may be ingested into water or hydraulic systems such as, but not limited to stones, sand or metal chips.
6. Amity assumes responsibility for our Three Function Swivel, which is defective only, and therefore, it will not assume responsibility for labor to either remove or install our Three Function Swivel unless it agrees in writing to assume such responsibility.
7. Unless otherwise approved in writing by the Amity all returns of defective Three Function Swivels (or allegedly defective Three Function Swivels) are at Purchaser's expense and must include a RGA number issued by the Amity.

8. All warranty claims must be presented at the time the problem occurs, or as soon as practical thereafter, either called or faxed to the Amity and include the numbers on the assembly's Amity's label with a detailed explanation of the difficulty in order for the matter to be appropriately evaluated and resolved.
9. Amity will not be held liable for damage incurred during shipment.
10. No responsibility shall be assumed for misuse or improper mounting, unreasonably use or abuse of the Three Function Swivel and or failure to provide or use improper maintenance, failure to follow written installation and use in instruction or any use other than the customary designed use.

THE REMEDIES PROVIDED IN THE ABOVE EXPRESS LIMITED WARRANTY AND ARE THE SOLE AND EXCLUSIVE REMEDIES AVAILABLE. NO OTHER EXPRESS WARRANTIES ARE MADE. ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE ARE LIMITED IN DURATION AS SET FORTH ABOVE. IN NO EVENT SHALL THE AMITY ASSUME OR BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

THE WITHIN DESCRIBED WARRANTY SHALL ONLY BE AFFORDED TO THE ORIGINAL PURCHASER OR FOR INCORPORATION INTO ANOTHER UNIT AND TO FIRST PURCHASER AS PART OF COMPLETED UNIT, HOWEVER, THE WARRANTY PERIOD OF FIVE YEARS IS FROM THE DATE OF SERVICE WITH THE UNDERSTANDING IT IS INSTALLED WITHIN A REASONABLE TIME PERIOD.

Dated: _____, 20__



UNITED PLASTIC FABRICATING, INC. **WARRANTY** FOR: POLY-TANK®, POLYSIDE®, INTEGRATOR™, ELLIPSE™, ELLIP-T-TANK™ & DEFENDER™

LIFETIME SERVICE WARRANTY

United Plastic Fabricating, Inc. (hereinafter called "UPF") warrants each POLY-TANK®, Booster/Foam Tank POLYSIDE® Wetside Tank, Integrator Tank/Body, ELLIPSE™ Elliptical Tank, Ellip-T-Tank Tank and DEFENDER™ Skid Tank to be free from defects in material and workmanship for the service life of the original vehicle (vehicle must be actively used in an emergency response for fire suppression). All UPF Tanks must be installed and operated in accordance with the UPF Installation and Operating Guidelines. Failure to do so can void the warranty.

Every UPF Tank is inspected and tested before leaving our facility. Should your UPF Tank require service, please notify UPF via email, fax, in writing or by calling UPF at 1-978-975-4520. Please provide the serial number, a description of the service request, the location along with the phone number and name of the contact person. Our goal is to have scheduled work completed within a reasonable time period.

Under a valid warranty claim, UPF will cover the cost to repair the UPF Tank including the customary and reasonable costs to make the tank accessible such as the removal and reinstallation of the tank if authorized in advance (pre-approved) by UPF. The warranty will not cover tanks that have been improperly installed, operated, misused, abused, or modified from its intended or designed use. Serial number must not have been altered, defaced or removed. Tanks that are not stored or installed properly which results in the tank suffering UV damage will not be covered by this agreement.

Should UPF determine that the service claim is valid under this warranty for a tank located outside of the United States and Canada, UPF will assume the costs for labor and material for the warranty repair as described above plus all travel costs to the U.S. port of embarkation. Costs for airline travel outside of the U.S. and Canada will not be the responsibility of UPF.

In the event the tank shall become stationed in an area of the world that is considered to be a war zone or where unsafe conditions exist for the safe passage of United States Nationals, as reported by the United States Department of State, (<http://www.state.gov>), and a request to perform service or warranty repairs, UPF reserves the right to refuse to honor such requests. It is the purchaser's responsibility to relocate the tank to an area where such repairs can be performed without undue risk to UPF employees or their designee. UPF will make every reasonable effort to support our products through alternative means.

For Ellipse™ elliptical tanks, a separate five year warranty provided by the subcontractor is applied to the sub-frames, chute linings (rubber isolation strips) and metal components. The stainless steel wrap provided by UPF shall be warranted by the subcontractor performing the wrap installation in accordance with their warranty in place at the time of the installation. UPF will not be liable for any warranty costs associated with the wrap, sub-frames, chute linings (rubber isolation strips) and metal components but will assist with all claims on behalf of its customer.

For PolySide® wetsided tanks and Integrator™ Tank/Body units, all polypropylene components related to the tank shall carry the standard UPF lifetime



UNITED PLASTIC FABRICATING, INC.

WARRANTY

FOR: POLY-TANK®, POLYSIDE®, INTEGRATOR™, ELLIPSE™, ELLIP-T-TANK™ & DEFENDER™

service warranty. Other polypropylene components, including but not limited to compartments, wheel wells, fenders and other body related components shall be warranted by UPF for a period of ten years. The warranty for the PolySide® and Integrator™ units excludes paint or hardware, which shall be covered by the manufacturer of the paint/hardware.

All UPF tanks 50 gallons or less utilized for non-fire applications and installed on specialty vehicles such as ATVs, trailers, boats, etc. are covered under a separate warranty policy available from UPF. Further, UPF Protector™ foam and water trailers are warranted under a separate warranty policy available from UPF.

This UPF warranty is transferable within the United States only with prior written approval by UPF (except an original apparatus manufacturer may assign this warranty to the first titled owner/lessee of the apparatus).

UPF will NOT reimburse any unnecessary work and/or work that has not been pre-approved. Any and all third party charges must be pre-authorized and approved in writing by UPF prior to commencing the work. Any unauthorized third party repairs, alterations, actions or modifications will not be covered and can void the warranty. UPF will be the sole determining authority as to whether a service claim will be valid and covered under this warranty.

In no event will UPF be liable for an amount in excess of the purchase price of the booster/foam tank at the time of manufacture or for any loss or damage, whether direct, indirect, incidental, consequential, or otherwise arising out of failure of its product. Loss of contents (water, foam, etc.) shall not be the responsibility of UPF. Further, UPF is not responsible for costs associated with service repairs to chassis, sub-frames, bodies, valves, dumps, hoses, pressure vacuum vents, and other components (i.e. liquid level transducers, etc.). Further, UPF will not cover the cost for travel of the vehicle to and from a repair facility.

This warranty contains the entire warranty. It is the sole warranty and price agreements or representation, whether oral or written, are either merged herein or expressly cancelled. UPF neither assumes, nor authorizes any person supposing to act on its behalf to change, nor assume for it, any warranty or liability concerning its product.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow exclusion or limitation or incidental or consequential damage, so the above limitation or exclusion may not apply to you. Since some states do not allow limitations on the length of an implied warranty, the above limitation may not apply to you.

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION OF THE FACE HEREOF. THERE IS NO EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. ADDITIONALLY, THIS WARRANTY IS IN LIEU OF ALL OTHER OBLIGATION OR LIABILITIES ON THE PART OF UPF.

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BULLETIN



TO: All Dealer Service Representatives

From: Kevin Hanegraaf

DATE: January 4, 2010

RE: UPF Tank Warranty Policy – Truck in Accident

Service Topic #292

To keep the UPF tank warranty valid on trucks that have been involved in a vehicular accident, it is UPF's policy that the customer must remove the tank from the truck and send it back to one of UPF's facilities for inspection. In the event that this does not take place, the warranty will be considered null and void.

The customer must remove and send the tank back to UPF for inspection in order to maintain the original warranty coverage, at which time it will be:

- *Filled with water*
- *Visually inspected*
- *Ultraviolet spark tested on articulating test stand in the dark*
- *Recommendation for repairs if necessary provided by UPF*
- *Fully evaluated and repaired by UPF*

If your customer chooses to leave the tank on the truck and wants a technician to inspect and/or repair the tank in the field, then **the warranty is no longer in effect.** This direction is upheld by UPF because the technician cannot inspect the entire tank when it is still installed on the truck.

Note: This memo is intended to relay the information Pierce has received on UPF's tank warranty for trucks that are in a vehicular accident. In the event of an actual claim, we direct you to consult with UPF's service Manager Maura Watts (800-638-8265 x253)



AMDOR Inc. TERMS OF BUSINESS AND GENERAL INFORMATION

Warranty:

All AMDOR Inc. roll-up door products are warranted for a period of 10 years from the date of delivery (with the exception of wet paint adhesion - please see below). AMDOR Inc. liability covers the replacement or repair of any component that fails due to defects in material and / or workmanship during the coverage period. We accept no liability for claims made for damages to any part (or parts) of a vehicle and / or machine (of any type) or injury claims by a person or persons assumed or alleged to have been brought about by the use or misuse of any product supplied by AMDOR Inc. Warranty coverage does not extend to door attachments including (but not limited to) decals, emblems, stripes and adhesives.

In order to initiate the claims process please contact your authorized representative of AMDOR Inc. Warranty claims must be accompanied by a written description providing full and reasonable details as to the nature of the defect. Upon receipt of your claim arrangements will be made to inspect the defective product (if necessary). Justified warranty claims will be repaired, exchanged, or credited to the customer's account at AMDOR Inc.'s discretion. All warranty claims must be approved in writing by the Customer Service Manager for AMDOR Inc. There are no exceptions to this clause.

Limited warranty coverage includes the labor associated with the disassembly and assembly of products deemed to be defective by AMDOR Inc. Labor allowances are based on a set time schedule as determined by AMDOR Inc. The maximum allowable hourly labor rate is \$ 50. All warranty labor claims must be approved in writing by an authorized representative of AMDOR Inc. prior to commencement of work. Allowances for removal and installation:

Curtain replacement:	3/4 hour
Balancer replacement:	1 hour
Door ajar switch	3/4 hour
Bottom Panel Assembly:	1/2 hour
Slat replacement:	3/4 hour
Door removal and replacement	1 1/2 hours

Items authorized for return must be accompanied by a Return Goods Authorization (RGA) number. We will accept collect shipments of items deemed to be defective provided that they are returned via the most economical carrier. Should items be

returned by means other than the most economical carrier the difference will be charged back to the sender.

AMDOR Inc. reserves the right to reject any claim when a product has been opened, interfered with or modified. Claims may also be rejected when damage to the product (or any sub-assembly) has been brought about by accident, misuse, abuse, vandalism, incorrect installation, temperature extremes, chemical exposure or any factor other than regular operating conditions.

Limited Wet Paint Match Adhesion Warranty

AMDOR Inc. warrants wet paint finishes applied by AMDOR utilizing our approved factory paint specification. All wet paint match colors must be approved in writing by an authorized OEM representative. AMDOR Inc. will provide a color spray out for this purpose. The time required for shipping and consideration of initial color spray outs will be considered over and above stated lead times. Warranty coverage will extend for a period of not less than 5 years from the date of delivery as determined by AMDOR Inc.'s Packing Slip. AMDOR reserves the right to determine whether individual units will be replaced and / or repaired by an AMDOR approved vendor. An allowance will be made for labor associated with the disassembly and assembly of individual units at the prescribed hourly rate of \$ 50 per hour. Compensation for labor will not exceed the maximum time allowance permitted for door removal and replacement. Written approval including specified allowance for time must be obtained from AMDOR prior to initiating work. Warranty coverage will extend to the following visible paint system defects:

- 1./ Loss of mechanical adhesion as evidenced by peeling, cracking or blistering which exposes the substrate material.
- 2./ Corrosion of the substrate due to paint system failure.
- 3./ Fading which results in a substantial departure from the primary AMDOR approved body color.

Wet paint adhesion limited warranty coverage will be excluded when damages to the system are determined by AMDOR Inc. to be a result of the following:

- 1./ Damage caused through the use of attachments including (but not limited to) decals, labels, adhesives, non factory approved coatings.
- 2./ Loss of gloss, discoloration or damage due to improper maintenance (including but not limited to) mechanical wash systems, pressure washers, steam cleaners, non approved wash or polishing agents.
- 3./ Abuse, acts of nature, excessive heat / cold, chemical exposure, vandalism and / or accidents.
- 4./ Scratches, chips, abrasions, or dents from any source.

This document supercedes all previous written and / or verbal warranties provided by AMDOR Inc. and / or it's affiliates.



Fire and Rescue Apparatus

54 Months Material and Workmanship

Camera System

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	This limited warranty covers repairs to correct any defect related to materials or workmanship of the Sharpvision camera system installed on the apparatus occurring during the warranty period.
Warranty Begins:	The date of delivery.
Warranty Period Ends After:	Fifty - Four (54) months
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This limited warranty does not apply to related wire harnesses, cables, and connectors, which are covered by the Pierce one (1) year basic apparatus limited warranty.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Cummins Warranty

Worldwide

Fire Apparatus/Crash Trucks



Coverage

Products Warranted

This Warranty applies to new diesel Engines sold by Cummins and delivered to the first user on or after April 1, 2007, that are used in fire apparatus truck and crash truck* applications Worldwide.

Base Engine Warranty

The Base Engine Warranty covers any failures of the Engine which result, under normal use and service, from a defect in material or factory workmanship (Warrantable Failure). This Coverage begins with the sale of the Engine by Cummins and ends five years or 100,000 miles (160,935 kilometers), whichever occurs first, after the date of delivery of the Engine to the first user.

Engine aftertreatment components included in the Cummins Critical Parts List (CPL) and marked with a Cummins part number are covered under Base Engine Warranty.

Additional Coverage is outlined in the Emission Warranty section.

These Warranties are made to all Owners in the chain of distribution and Coverage continues to all subsequent Owners until the end of the periods of Coverage.

Cummins Responsibilities

Cummins will pay for all parts and labor needed to repair the damage to the Engine resulting from a Warrantable Failure.

Cummins will pay for the lubricating oil, antifreeze, filter elements, belts, hoses and other maintenance items that are not reusable due to the Warrantable Failure.

Cummins will pay for reasonable labor costs for Engine removal and reinstallation when necessary to repair a Warrantable Failure.

Cummins will pay reasonable costs for towing a vehicle disabled by a Warrantable Failure to the nearest authorized repair location. In lieu of the towing expense, Cummins will pay reasonable costs for mechanics to travel to and from the location of the vehicle, including meals, mileage and lodging when the repair is performed at the site of the failure.

Owner Responsibilities

Owner is responsible for the operation and maintenance of the Engine as specified in Cummins Operation and Maintenance Manuals. Owner is also responsible for providing proof that all recommended maintenance has been performed.

Before the expiration of the applicable Warranty, Owner must notify a Cummins distributor, authorized dealer or other repair location approved by Cummins of any Warrantable Failure and make the Engine available for repair by such facility. Except for Engines disabled by a Warrantable Failure, Owner must also deliver the Engine to the repair facility.

Service locations are listed on the Cummins Worldwide Service Locator at cummins.com.

Owner is responsible for the cost of lubricating oil, antifreeze, filter elements and other maintenance items provided during Warranty repairs unless such items are not reusable due to the Warrantable Failure.

Owner is responsible for communication expenses, meals, lodging and similar costs incurred as a result of a Warrantable Failure.

Owner is responsible for non-Engine repairs and for "downtime" expenses, cargo damage, fines, all applicable taxes, all business costs and other losses resulting from a Warrantable Failure.

Owner is responsible for a \$100 (U.S. Dollars) deductible per each service visit under this plan in the 3rd, 4th and 5th years of Base Engine Warranty. The deductible will not be charged during the first 2 years of the Base Engine Warranty.

Limitations

Cummins is not responsible for failures or damage resulting from what Cummins determines to be abuse or neglect, including, but not limited to: operation without adequate coolants or lubricants; overfueling; overspeeding; lack of maintenance of lubricating, cooling or intake systems; improper storage, starting, warm-up, run-in or shutdown practices; unauthorized modifications of the Engine.

Any unauthorized modifications to the aftertreatment could negatively effect emissions certification and void Warranty.

Cummins is also not responsible for failures caused by incorrect oil, fuel or diesel exhaust fluid or by water, dirt or other contaminants in the fuel, oil or diesel



exhaust fluid.

This Warranty does not apply to accessories supplied by Cummins which bear the name of another company. Such non-warranted accessories include, but are not limited to: alternators, starters, fans, air conditioning compressors, clutches, filters, transmissions, torque converters, vacuum pumps, power steering pumps, fan drives and air compressors. Cummins branded alternators and starters are covered for the first two years from the date of delivery of the Engine to the first user, or the expiration of the Base Engine Warranty, whichever occurs first.

Failures resulting in excessive oil consumption are not covered beyond the duration of the Coverage or 100,000 miles (160,935 kilometers) or 7,000 hours from the date of delivery of the Engine to the first user, whichever of the three occurs first. Before a claim for excessive oil consumption will be considered, Owner must submit adequate documentation to show that consumption exceeds Cummins published standards.

Failures of belts and hoses supplied by Cummins are not covered beyond the first year from the date of delivery of the Engine to the first user or the duration of the Warranty, whichever occurs first.

Parts used to repair a Warrantable Failure may be new Cummins parts, Cummins approved rebuilt parts or repaired parts. Cummins is not responsible for failures resulting from the use of parts not approved by Cummins.

A new Cummins or Cummins approved rebuilt part used to repair a Warrantable Failure assumes the identity of the part it replaced and is entitled to the remaining Coverage hereunder.

Cummins Inc. reserves the right to interrogate Electronic Control Module (ECM) data for purposes of failure analysis.

CUMMINS DOES NOT COVER WEAR OR WEAROUT OF COVERED PARTS.

CUMMINS IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

THIS WARRANTY AND THE EMISSION WARRANTY SET FORTH HEREINAFTER ARE THE SOLE WARRANTIES MADE BY CUMMINS IN REGARD TO THESE ENGINES. CUMMINS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OR OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Emission Warranty

Products Warranted

This Emission Warranty applies to new Engines marketed by Cummins that are used in the United States** in vehicles designed for transporting persons or property on a street or highway. This Warranty applies to Engines delivered to the first user on or after September 1, 1992.

Coverage

Cummins warrants to the first user and each subsequent purchaser that the Engine is designed, built and equipped so as to conform at the time of sale by Cummins with all U.S. federal emission regulations applicable at the time of manufacture and that it is free from defects in material or factory workmanship which would cause it not to meet these regulations within the longer of the following periods: (A) Five years or 100,000 miles (160,935 kilometers) of operation, whichever occurs first, as measured from the date of delivery of the Engine to the first user or (B) The Base Engine Warranty.

If the vehicle in which the Engine is installed is registered in the state of California, a separate California Emission Warranty also applies.

Limitations

Failures, other than those resulting from defects in material or factory workmanship, are not covered by this Warranty.

Cummins is not responsible for failures or damage resulting from what Cummins determines to be abuse or neglect, including, but not limited to: operation without adequate coolants or lubricants; overfueling; overspeeding; lack of maintenance of lubricating, cooling or intake systems; improper storage, starting, warm-up, run-in or shutdown practices; unauthorized modifications of the Engine.

Any unauthorized modifications to the aftertreatment could negatively effect emissions certification and void Warranty.

Cummins is also not responsible for failures caused by incorrect oil, fuel or diesel exhaust fluid or by water, dirt or other contaminants in the fuel, oil or diesel exhaust fluid.

Cummins is not responsible for non-Engine repairs, "downtime" expenses, cargo damage, fines, all applicable taxes, all business costs or other losses resulting from a Warrantable Failure.

**CUMMINS IS NOT RESPONSIBLE FOR INCIDENTAL
OR CONSEQUENTIAL DAMAGES.**

* Airport operated crash trucks and fire department
operated trucks employed to respond to fires,
hazardous material releases, rescue and other
emergency-type situations.

** United States includes American Samoa, the
Commonwealth of Northern Mariana Islands, Guam,
Puerto Rico and the U.S. Virgin Islands.



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Bulletin 3381161
Printed in U.S.A. Rev. 08/09
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Fire and Rescue Apparatus

Two (2) Year Material and Workmanship

Meritor Axles

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The Meritor axle shall be covered by Meritor as indicated in the attached Meritor warranty coverage description
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Two (2) Year
Conditions and Exclusions: See Also Paragraphs 2 thru 4	The exclusions listed in the attached Meritor warranty description shall apply.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

MERITOR® COMMERCIAL VEHICLE SYSTEMS

WARRANTY/MODEL YEAR 2018 VEHICLES



MERITOR





WARRANTY INFORMATION CONTENTS

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How to Read Warranty Coverage

Number of Years	Mileage (in thousands) Unl=Unlimited	P=Parts Only P&L=Parts & Labor
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Notice:

Models or components that are approved for use by Meritor’s vocational guidelines contained in Meritor Publication TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, which are not specifically listed, are warranted for one year, unlimited miles, parts only (1/Unl/P).

Products purchased on an incomplete vehicle (glider) are limited to one year, unlimited miles parts only (1/Unl/P).

Advantage Program

Purchasing additional coverage on select components will continue to safeguard your investment against major repair costs after the initial base coverage expires. You can find out more about the Advantage Program by visiting www.meritor.com or by contacting Meritor at 866-OnTrac1 (866-668-7221).



LINEHAUL WARRANTY INFORMATION

Linehaul Vehicles

- | | | | |
|------------------------|-------------------|--------------------|------------------------|
| ■ Auto Hauler | ■ Flatbed | ■ Livestock Hauler | ■ Refrigerated Freight |
| ■ Bulk Hauler | ■ General Freight | ■ Moving Van | ■ Tanker |
| ■ Chip Hauler (Truck)* | ■ Grain Hauler | ■ Pipe Hauler | ■ Triples |
| ■ Doubles | | | |

* Chip Hauler vehicles require specific axle models listed below and Linehaul condition to be eligible for Linehaul warranty consideration.

Linehaul Typically Is

- High mileage operation (over 60,000 miles/year)
- Well maintained major highways of concrete or asphalt construction
- Greater than 30 miles between starting and stopping

Coverage under Meritor's warranty require that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

Front Non-Drive Steer Axles – 5/750/P&L

FD-965	FF-966	MFS-10-144A-N	MFS-12-132C-N	MFS-13-122C-N	MFS-14-143A-N
FF-941	FF-967	MFS-12-122A-N	MFS-12-143A-N	MFS-13-132B-N	
FF-942	FG-941	MFS-12-122B-N	MFS-12E-143A-N	MFS-13-132C-N	
FF-943	FG-943	MFS-12-122C-N	MFS-12-144A-N	MFS-13-143A-N	
FF-944	MFS-10-122A	MFS-12E-122A-N	MFS-13-122A-N	MFS-13-144A-N	
FF-961	MFS-10-143A-N	MFS-12-132B-N	MFS-13-122B-N	MFS-14-122A-N	

Rear Drive Single Axles – 5/750/P&L

RS-19-144/145/A	RS-21-160
MS-19-14X	RS-23-160
MS-21-144	RS-23-161
RS-21-145	RS-23-186

Rear Drive Tandem/Tridem Axles – 5/750/P&L

RT-34-144/P/A	MA-40-165	MT-40-943
RT-40-145/A	MA-40-175	MT-40-943-SP
RT-40-160/P ^{1,2}	MT-34-14X/P	RZ-166 ²
RT-46-160/P ^{1,2}	MT-40-14X/P	RZ-188
RT-46-164EH/P ^{1,2}	MT-40-14X/P	
RT-50-160/P ^{1,2}	MT-40-144/P	

Drivelines

RPL	5/500/P, 1/Unl/P&L
MXL	3/350/P, 1/Unl/P&L
155N	1/Unl/P
92N	1/Unl/P

¹ These models required for Chip Hauler and Linehaul warranty consideration.
² Each vehicle must have a Request for Application Recommendation (RAR) approved by Meritor prior to vehicle build. All RARs must identify the chassis number or VIN. Refer to Product Information Letter #303 and #396 for further details.



LINEHAUL WARRANTY INFORMATION

Brake Components

Cam Q Series Trailer Brakes	5/500/P, 1/100/L
LX500 Feature ¹	5/750/P&L
Q+ Drum Brake™	5/500/P, 1/Unl/P&L
ASA	5/500/P, 1/Unl/P&L
Hubs/Cast Drums and Other Wheel-end Components	1/Unl/P
Hydraulic Disc Brakes	1/Unl/P
All Other Brakes	1/Unl/P
STEELite X30 Drum Brake™ ²	12-Years or Wearable Life/P
EX+ Air Disc Brake™	5/500/P, 1/Unl/L

¹ Includes: bushing, seal, cam, ASA lubrication and wear coverage of 3/500/P&L.

² Based on stamped wear diameter max.

Trailer Axles

Beam and Brackets	5/500/P, 1/100/L
Wheel End Systems ¹	
Standard System ²	1/100/P&L
PreSet by Meritor ³	5/500/P&L
AxlePak5 ⁴	5P/L
AxlePak7 ⁵	7P/L

¹ Includes hub, wheel seals and wheel bearings—all systems require annual inspections and proper documentation to ensure full coverage.

² When installed by Meritor.

³ Requires approved hubcap stating PreSet by Meritor on hubcap face.

⁴ When specified with AxlePak5 wheel end system, coverage on MTIS thru-tee and stator is 5/500P, 3/500L.

⁵ When specified with AxlePak7 wheel end system, coverage on MTIS thru-tee and stator is 7/750P, 3/500L.

(For brake components and ABS coverage, refer to appropriate product warranties.)

TAG/Pusher Axles¹

TQ, TQD, TR, TRD Beam and Brackets	5/750/P&L
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¹ For brake components and ABS Coverage, refer to appropriate product warranties.

Meritor Tire Inflation System by PSI

MTIS Components	3/500/P&L
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Trailer Air Suspension Systems

MPA38/40 (Tandem Axle Parallelogram) ¹	
Major Structural Components	5/500/P, 1/100/L
Curbing Damage Warranty ²	5/500/P, 1/100/L
Height Control Valve	1/100/P&L
Shock Absorbers	2/200/P&L
Air Springs	2/200/P, 1/100/L
Bushings	7/700/P, 5/500/L
PinLoc Air Controls	1/100/P&L
PinLoc Actuator	3/300/P&L
MPA20 (Single Axle Parallelogram)	
Major Structural Components	5/500/P, 1/100/L
Height Control Valve	1/100/P&L
Shock Absorbers	2/200/P&L
Air Springs	2/200/P, 1/100/L
Bushings	7/700/P, 5/500/L
MTA (Trailing Arm)	
Major Structural Components	5/500/P, 1/100/L
Height Control Valve	1/100/P&L
Shock Absorbers	2/200/P&L
Air Springs & Rebound Straps	2/200/P, 1/100/L
Bushings	5/500/P, 3/300/L

¹ Fastener torque coverage is limited to 2/Unl P&L when torqued by Meritor (For axle and ABS coverage, refer to appropriate product warranties.)

² "Curbing damage" is defined as deformation (bending, buckling, or breakage), caused by sudden impact with a curb or similar fixed object. Damage to the RideSentry slider box (the suspension sliding subframe, consisting of the frame rails, crossmembers, and central A-frame assembly), caused by accidental trailer impact with a curb or similar fixed object, is eligible for warranty coverage. Damage to other components or damage resulting from collision with another vehicle, rollover or fire is not covered under this provision. Warranty is not transferrable to another trailer VIN, and coverage does not apply if the trailer is deemed to be a total loss, scrapped, or otherwise not salvageable.



GENERAL SERVICE WARRANTY INFORMATION

General Service Vehicles

■ Aerial Ladder Truck	■ Front Engine Commercial Chassis	■ Municipal Truck	■ Refrigerated Freight
■ Aerial Platform	■ Front Engine Integral Coach	■ Newspaper Delivery	■ School Bus
■ Ambulance	■ General Freight	■ Pick-Up and Delivery	■ Stake Truck
■ Auto Hauler	■ Intercity Coach	■ Pipe Hauler	■ Tanker
■ Beverage Truck	■ Intermodal Chassis	■ Platform Auto Hauler	■ Tanker Truck
■ Chip Hauler	■ Livestock Hauler	■ Pumper	■ Tour Bus
■ Cross Country Coach	■ Meat Packer	■ Rear Engine Integral Coach	■ Wrecker
■ Flatbed	■ Moving Van	■ Recreational Vehicles	

General Service Typically Is

- Lower mileage operations (less than 60,000 miles/year)
- Generally, on-road service (less than 10% off-road)
- An average of three (3) miles between starting and stopping

Coverage under Meritor's warranty require that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

Front Drive/Non-Drive Steer Axles – 2/Unl/P&L

FD-965	FH-941	MFS-7-153C-N	MFS-12E-122A-N	MFS-13-122C-N	MFS-18-135A-N
FF-941	FH-946 ¹	MFS-7-163C-N	MFS-12-122B-N	MFS-13-132B-N	MFS-18-193A-N
FF-942	FL-941	MFS-8-113B-N	MFS-12-122C-N	MFS-13-132C-N	MFS-20-133A-N
FF-943	FL-943	MFS-8-143A-N	MFS-12-132B-N	MFS-13-143A-N	MFS-20-135A-N
FF-944	MFS-6-151A-N	MFS-8-153B-N	MFS-12-132C-N	MFS-13-144A-N	MFS-20H-193A-N
FF-946	MFS-6-153B-N	MFS-8-163B-N	MFS-12-143A-N	MFS-14-122A-N	MFS-22H-135A-N
FF-961	MFS-6-162B-N	MFS-10-122A	MFS-12-144A-N	MFS-14-143A-N	MFS-22H-193A-N
FF-966	MFS-6-153C-N	MFS-10-143A-N	MFS-12E-143A-N	MFS-16-122A-N	
FF-967	MFS-6-162C-N	MFS-10-144A-N	MFS-13-122A-N	MFS-16-143A-N	
FG-941	MFS-7-113C-N	MFS-12-122A-N	MFS-13-122B-N	MFS-18-133A-N	

¹ Can also be used with reduced steer angles in tag position in Coach Applications.

Rear Drive Single Axles – 2/Unl/P&L

MS-17-13X	MS-21-144	RC-23-162 ¹	MS-26-616	79163
MS-17-14X	MS-23-17X	RC-23-165 ¹	MS-26-616-SP	
MS-19-13X	RS-21-145/A	RS-23-160	RS-30-185	
MS-19-14X	RS-21-160	RS-23-161	MS-30-616	
RS-17-144/145/A	RC-22-145	RS-23-186	MS-30-616-SP	
RS-19-144/145/A	RC-22-145/A	RS-24-160	RS-35-380	
MS-21-13X	RC-23-160	RC-25-160	71162	
MS-21-14X	RC-23-161	RS-26-185	71163	

¹ 3/Unl/P&L if PreSet by Meritor.

Rear Drive Tandem – 3/Unl/P&L

RT-40-160/P	RT-46-164EH/P
RT-46-160/P	RT-50-160/P

Drivelines

RPL	4/400/P, 1/Unl/P&L
MXL	3/350/P, 1/Unl/P&L
155N	1/Unl/P
92N	1/Unl/P

Rear Drive Tandem/Tridem Axles – 2/Unl/P&L

MT-34-14X/P	MT-44-14X/P	MT-58-616
RT-34-144/P/A	RT-44-145/P	RT-58-185 ¹
MT-40-14X/P	RT-46-169	MT-70-380
MT-40-144/P	MT-52-616	RZ-166
RT-40-145/A	RT-52-185 ¹	RZ-188

¹ Each vehicle must have a Request for Application Recommendation (RAR) approved by Meritor prior to vehicle build. All RARs must identify the chassis number or VIN. Refer to Product Information Letter #303 and #396 for further details.



GENERAL SERVICE WARRANTY INFORMATION

Brake Components

Cam Q Series Trailer Brakes	3/Unl/P, 1/Unl/L
LX500 Feature ¹	3/Unl/P&L
Cam P ³	2/200/P
Cam	3/Unl/P
Q+ Drum Brake™	3/Unl/P&L
Q+ Drum Brake™ ³	2/200/P&L
ASA	3/Unl/P
ASA ³	2/200/P
Hubs/Cast Drums and Other Wheel-end Components	1/Unl/P
Hydraulic Disc Brakes	1/Unl/P
All Other Brakes	1/Unl/P
STEELite X30 Drum Brake™ ²	12-Years or Wearable Life/P
EX+ Air Disc Brake™	2/Unl/P&L

¹ Includes: bushing, seal, cam, ASA lubrication and wear coverage of 1/Unl/P.

² Based on stamped wear diameter max.

³ Applies to Tour Bus and Cross Country Coach only.

Trailer Axles

Beam and Brackets ¹	5/Unl/P, 1/Unl/L
Wheel End Systems ²	
Standard System ³	1/Unl/P&L
AxlePak5 ⁴	5P/L
AxlePak7 ⁵	7P/L

¹ 9000 Series is 3/Unl/P, 1/Unl/L

² Includes hub, wheel seals and wheel bearings—all systems require annual inspections and proper documentation to ensure full coverage.

³ When installed by Meritor.

⁴ When specified with AxlePak5 wheel end system, coverage on MTIS thru-tee and stator is 5/500P, 3/500L.

⁵ When specified with AxlePak7 wheel end system, coverage on MTIS thru-tee and stator is 7/750P, 3/500L.

(For brake components and ABS coverage, refer to appropriate product warranties.)

Chassis Axles (2000 Series/ChassiPak)

Beam & Brackets	6/Unl/P, 1/Unl/L
Wheel End Systems ¹	
Standard System	1/Unl/P&L
AxlePak7	7P/L
Beam and Brackets	7P/1L

¹ Includes hub, wheel seals and wheel bearings—all systems require annual inspections and proper documentation to ensure full coverage.

Trailer Air Suspension Systems

MPA38/40 (Tandem Axle Parallelogram) ¹	
Major Structural Components	5/Unl/P, 1/Unl/L
Curbing Damage Warranty ²	5/500/P, 1/100/L
Height Control Valve	1/Unl/P&L
Shock Absorbers	2/Unl/P&L
Air Springs	2/Unl/P, 1/Unl/L
Bushings	7/700/P, 5/500/L
PinLoc Air Controls	1/Unl/P&L
PinLoc Air Actuator	3/Unl/P&L
MPA20 (Single Axle Parallelogram)	
Major Structural Components	5/Unl/P, 1/Unl/L
Height Control Valve	1/Unl/P&L
Shock Absorbers	2/Unl/P&L
Air Springs	2/Unl/P, 1/Unl/L
Bushings	7/700/P, 5/500/L
MTA (Trailing Arm)	
Major Structural Components	5/Unl/P, 1/Unl/L
Height Control Valve	1/Unl/P&L
Shock Absorbers	2/Unl/P&L
Air Springs and Rebound Straps	2/Unl/P, 1/Unl/L
Bushings ³	5/Unl/P, 3/Unl/L

(For axle and ABS coverage, refer to appropriate product warranties.)

¹ Fastener torque coverage is limited to 2/Unl P&L when torqued by Meritor

² "Curbing damage" is defined as deformation (bending, buckling, or breakage), caused by sudden impact with a curb or similar fixed object. Damage to the RideSentry slider box (the suspension sliding subframe, consisting of the frame rails, crossmembers, and central A-frame assembly), caused by accidental trailer impact with a curb or similar fixed object, is eligible for warranty coverage. Damage to other components or damage resulting from collision with another vehicle, rollover or fire is not covered under this provision. Warranty is not transferrable to another trailer VIN, and coverage does not apply if the trailer is deemed to be a total loss, scrapped, or otherwise not salvageable.

³ Raw wood applications 3/Unl/P, 1/Unl/L

TAG/Pusher Axles

TQ, TQD, TR, TRD Beam and Brackets ¹	3/Unl/P, 1/Unl/L
MC12002, MC14002, MC16003, FH946	2/Unl/P&L

(For brake components and ABS coverage, refer to appropriate product warranties.)

¹ 3/UNL/P&L if sold with PreSet by Meritor.

Meritor® Tire Inflation System by PSI

MTIS Components	3/500/P&L
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HEAVY SERVICE WARRANTY INFORMATION

Heavy Service Vehicles

■ Airport Rescue Fire (ARF)	■ Drill Rig	■ Michigan Special Gravel Trains	■ Shuttle Bus
■ Airport Shuttle	■ Dump	■ Michigan Special Log Hauler	■ Side Loader
■ Asphalt Truck	■ Emergency Service	■ Michigan Special Steel Hauler	■ Snowplow/Snowblower
■ Block Truck	■ Equipment Hauling	■ Michigan Special Waste Vehicle	■ Steel Hauling
■ Bottom Dump Trailer	■ Flatbed Trailer Hauler	■ Municipal Dump	■ Tanker
■ Combination	■ Flatbed Truck	■ Rapid Intervention Vehicle (RIV)	■ Tank Truck
■ Cementing Vehicle	■ Fracturing Truck	■ Rear Loader (Refuse)	■ Tractors with Pole Trailers
■ City Bus	■ Front Loader	■ Recycling Truck	■ Tractor/Trailer with Jeeps
■ Commercial Pick-Up	■ Geophysical Exploration	■ Residential Pick-Up (Refuse)	■ Transfer Dump
■ Concrete Pumper	■ Hopper Trailer Combinations	■ Rigging Truck	■ Transfer Vehicle
■ Construction Material Hauler	■ Landscaping Truck	■ Roll-Off	■ Transit Bus
■ Crash Fire Rescue (CFR)	■ Liquid Waste Hauler	■ Scrap Truck	■ Trolley
■ Mixer	■ Log Hauling	■ Semi-End Dump	■ Utility Truck
■ Demolition	■ Lowboy	■ Sewer/Septic Vacuum	■ Winch Truck

Heavy Service Typically Is

- Moderate mileage operation (less than 60,000 miles per year)
- On/Off road vocations (10% or more off-road)
- Moderate to frequent stops/starts (up to 10 stops per mile)

Coverage under Meritor's warranty require that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

Front Drive/Non-Drive Steer Axles – 2/Unl/P&L

FD-965	FH-941	MFS-8-113B-N	MFS-12-132C-N	MFS-13-155	MFS-22H-135A-N	MX-17-140
FF-941	FH-946	MFS-8-153B-N	MFS-12-143A-N	MFS-14-122	MFS-22H-193A-N	MX-19-140
FF-942	FL-941	MFS-8-163B-N	MFS-12-144A-N	MFS-14-143A-N	RF-16-145	MX-21-140
FF-943	FL-943	MFS-10-122A	MFS-12-155	MFS-16-122A-N	RF-21-160	MX-21-160
FF-944	MFS-6-151A-N	MFS-10-143A-N	MFS-13-122	MFS-16-143A-N	MX-10-120	MX-23-160
FF-946	MFS-6-153B	MFS-10-144A-N	MFS-13-122B-N	MFS-18-133A-N	MX-10-120 EVO	MX-810
FF-961	MFS-6-162B	MFS-12-122	MFS-13-122C-N	MFS-18-135A-N	MX-12-120	
FF-966	MFS-6-162C	MFS-12-122B-N	MFS-13-132B-N	MFS-18-193A-N	MX-12-120 EVO	
FF-967	MFS-7-113C-N	MFS-12-122C-N	MFS-13-132C-N	MFS-20-133A-N	MX-14-120	
FG-941	MFS-7-153C-N	MFS-12E-122	MFS-13-143A-N	MFS-20-135A-N	MX-16-120	
FG-943	MFS-7-163C-N	MFS-12-132B-N	MFS-13-144A-N	MFS-20H-193A-N	MX-18-120	

Drivelines

RPL	3/Unl/P, 1/Unl/P&L
92N	1/Unl/P&L
MXL	1/Unl/P&L

Rear Drive Single Axles – 2/Unl/P&L

MS-17-14X	RS-23-160	MS-30-616-SP
RS-17-144/145/A	RC-23-161	RS-30-185/380
MS-19-14X	RS-23-161	MS-35-380
RS-19-144	RS-23-186/380	RS-38-380
MS-21-114	RC-23-162	RC-25-160
MS-21-14X	RC-23-165	RC-26-633
RS-21-145	RS-24-160	MT-58-616
RS-21-145/A	RS-25-160	MT-58-616-SP
RS-21-160	MS-26-616	71162
RC-22-145	MS-26-616-SP	71163
RC-23-160	RS-26-185/380	79163
RH-23-160	MS-30-616	



HEAVY SERVICE WARRANTY INFORMATION

Rear Drive Tandem/Tridem Axles – 2/Unl/P&L

MT-34-14X/P	RT-44-145/P	MT-58-616	RZ-166
RT-34-144/P/A	RT-46-169	MT-58-616-SP	RZ-188
MT-40-14X/P	MT-52-616	RT-58-185/380 ^{1,2}	
RT-40-145/A	MT-52-616-SP	RT-70-380	
MT-44-14X/P	RT-52-185/380 ^{1,2}	MT-70-380	

¹ Axle model designated will vary according to options and variations specified on these axles. Contact Meritor Axle Applications Engineering for details.

² Each vehicle must have a Request for Application Recommendation (RAR) approved by Meritor prior to vehicle build. All RARs must identify the chassis number or VIN. Refer to Product Information Letter #303 and #396 for further details.

Brake Components

Cam P	3/Unl/P
Cam P ³	2/100/P
Cam Cast Plus™	2/100/P&L
Q+ Drum Brake™	3/Unl/P&L
Q+ Drum Brake™ ²	2/100/P&L
ASA	3/Unl/P
ASA ²	2/100/P
Hubs/Cast Drums and Other Wheel-end Components	1/Unl/P
Hydraulic Disc Brakes	1/Unl/P
All Other Brakes	1/Unl/P
EX+ Air Disc Brake	2/100/P&L

¹ Based on stamped wear diameter max.

² Applies to City Bus, Trolley, Shuttle Bus and Airport Shuttle only.

³ Warranty for all non-Meritor ASAs supplied by Meritor for all Heavy Service vocations is 1/100/P.

Transfer Cases – 1/Unl/P

MTC-4208	MTC-4213	T-2119
MTC-4210	T-2111	

Rear Drive Tandem – 3/Unl/P&L

RT-40-160/P/A³
RT-46-160/P/A^{1,3}
RT-46-164EH/P/A^{2,3}
RT-50-160/P/A³

¹ U.S. only. Canadian warranty = 1/Unl/P for combination vehicles only.

² Axle model designated will vary according to options and variations specified on these axles. Contact Meritor Axle Applications Engineering for details.

³ Each vehicle must have a Request for Application Recommendation (RAR) approved by Meritor prior to vehicle build. All RARs must identify the chassis number or VIN. Refer to Product Information Letter #303 and #396 for further details.

Meritor Tire Inflation System by PSI

MTIS Components	3/500/P&L
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Trailer Air Suspension Systems

MTA (Trailing Arm)	
Major Structural Components ¹	5/Unl/P, 1/Unl/L
Height Control Valve	1/Unl/P&L
Shock Absorbers	2/Unl/P&L
Air Springs	2/Unl/P, 1/Unl/L
Bushings ¹	5/Unl/P, 3/Unl/L

¹ Raw wood applications 3/Unl/P, 1/Unl/L

(For axle and ABS coverage, refer to appropriate product warranties.)

Center Non-drive Axles – 2/Unl/P&L

MC26000
71063
79063

Trailer Axles

Beam and Brackets ¹	5/Unl/P, 1/Unl/L
Wheel End Systems ²	
Standard System ³	1/Unl/P&L

¹ 9000 Series is 3/Unl/P, 1/Unl/L.

² Includes hub, wheel seals and wheel bearings—all systems require annual inspections and proper documentation to ensure full coverage.

³ When installed by Meritor.

(For brake components and ABS coverage, refer to appropriate product warranties.)



OFF-HIGHWAY SERVICE WARRANTY INFORMATION

Industrial And Off-Highway Service Vehicles

- | | | | |
|-----------------------|--------------------------|-----------------------|--------------------|
| ■ Load-On/Load-Off | ■ Yard Jockey | ■ Specialized Mining | ■ Rail Car Mover |
| ■ Port Tractor | ■ All-Terrain Crane | ■ Excavator | ■ Loader |
| ■ Rail Yard Spotter | ■ Rough Terrain Crane | ■ Compactor | ■ Tow Tractor |
| ■ Roll-On/Roll-Off | ■ Forestry | ■ Fertilizer Spreader | ■ Pushback Tractor |
| ■ Stevedoring Tractor | ■ Material Handling | ■ Snow Blower | |
| ■ Trailer Spotter | ■ Specialized Heavy Haul | ■ Mining | |

Industrial And Off-Highway Service Typically Is

- Low mileage operation
- Low speed vehicle speed restriction
- Vehicles are **not** typically licensed for highway use
- Six (6) starts/stops per mile (typical)

Coverage under Meritor's warranty require that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

Drive Steer Axles – 1/Unl/P

MOR MOX MOC

Front Non-Drive Steer Axles – 1/Unl/P

FF - 941	MFS-12-143A-N	MFS-18-135A-N
FF - 943	MFS-12-144A-N	MFS-18-193A-N
FF - 961	MFS-13-143A-N	MFS-20-133A-N
FF - 966	MFS-13-144A-N	MFS-20-135A-N
FG - 941	MFS-14-143A-N	MFS-20H-193A-N
FG - 943	MFS-16-122A-N	MFS-22H-135A-N
FL - 941	MFS-16-143A-N	MFS-22H-193A-N
FL - 943	MFS-18-133A-N	MON-ZO FAMILY

Planetary Axles – 1/Unl/P

MOR MOX MOC MOT

Rear Drive Single Axles – 1/Unl/P

RS-23-186	RS-24-160-SP	RS-30-185
RS-23-380	MS-30-616	RS-30-380
RS-24-160	MS-30-616-SP	MS-35-380

Drivelines – 1/Unl/P

RPL MXL

Rear Drive Tandem Axles – 2/Unl/P

MT-44-14X/P	MT-58-616	RT-44-145/P	RT-50-160/P
MT-52-616	MT-58-616-SP	RT-46-160/P	RZ-166
MT-52-616-SP	MT-70-380	RT-46-164EH/P	

Brake Components

Cam P	3/Unl/P
Q+ Drum Brake™	3/Unl/P&L
ASA	3/Unl/P
Hubs/Cast Drums and Other Wheel-end Components	1/Unl/P
Hydraulic Disc Brakes	1/Unl/P
All Other Brakes	1/Unl/P



TERMS AND CONDITIONS

Coverage Exclusions

Product Description

All

The cost of any repairs, replacements or adjustments to a covered component (1) associated with noise; (2) resulting from the use or installation of non-genuine Meritor components or materials; (3) due to vibration associated with improper operation or misapplication of drivetrain components; and (4) damage resulting from corrosion.

For axle assemblies supplied by Meritor with suspension and interface brackets designed and/or attached by non-Meritor parties, Meritor warranty coverage does not apply to the brackets, bracket attachment methods, and field issues caused by brackets or bracket attachments to any covered component unless specified in a separate OEM agreement.

Front Axles

King Pin Bushings.

Rear Axles

Self-contained traction equalizers and oil filters. The use of NoSPIN differentials will result in the exclusion of axle shafts from warranty considerations. NoSPIN is a product of Eaton.

ASA

Boot and bushing. Bent, broken, over-torqued, missing or otherwise damaged pawl assemblies.

Cam Brake

Brake lining wear and brake shoe “rust-jacking.”

Disc Brake

Pad wear, rotor wear.

Coverage Limitations

Product Description

All

Any claim beyond 60 days from date of repair will not be accepted or honored under this warranty program. Products purchased on an incomplete vehicle (glider) are limited to one year, unlimited miles parts only (1/Unl/P).

Front Axles

Tie rod and tie rod ends limited to 3-year/300,000-mile or published vocational coverage, whichever is less. Wheel seals, gaskets and wheel bearings are covered for 1 year/unlimited miles if the wheel end equipment is supplied and assembled by Meritor.

Rear Axles

Pinion and through shaft seals limited to 3-year/300,000-mile or published vocational coverage, whichever is less, if yoke is installed by Meritor. If yoke is not installed by Meritor, then Meritor does not warrant pinion seals. Wheel seals, gaskets and wheel bearings are covered for 1 year/unlimited miles if the wheel end equipment is supplied and assembled by Meritor.

Rear Axles

The Meritor® breather part number A-2297-C-8765 with A-3196-J-1336 hose must be used for eligibility of any potential warranty consideration relating to contamination and/or loss of lube in axles.

Cam Brake

Limited to bracket, brake spider and camshaft structural integrity.

STEELite X30

Wearable life is up to the discard diameter of the drum.

Disc Brake

Warranty coverage for boots, seals, bushings and pins is 2/200/P. Warranty coverage for pads is 1/100/P.

Warranty coverage on vehicles with 1,850 lb-ft engine torque and over may be reduced on individual drivetrain components. Contact your Meritor representative for specific details.

TERMS AND CONDITIONS

(1) What is Covered by this Commercial Warranty?

Meritor Inc. warrants to the owner ("Owner") that the components listed in this publication, which have been installed by an Original Equipment Manufacturer ("OEM") as original equipment in vehicles licensed for on-highway use, will be free from defects in material and workmanship. This warranty coverage begins only after the expiration of the OEM's vehicle warranty for the applicable covered components. Warranty coverage ends at the expiration of the applicable time period from the date of vehicle purchase by the first Owner, or, the applicable mileage limitation, whichever occurs first. Duration of coverage varies by component and vocation as detailed elsewhere in this warranty statement.

Some components are warranted for parts only and the Owner must pay any labor costs associated with the repair or replacement of the component. Other components are warranted for both parts and reasonable labor to repair or replace the subject component. Components (whether new, used or remanufactured) installed as replacements under this warranty are warranted only for the remainder of the original period of time or mileage under the original warranty.

For certain components, coverage requires the use of specific extended drain interval or synthetic lubricants. For further information about lubrication and maintenance, see Meritor publication Maintenance Manual Number I and the applicable Meritor maintenance manual for the product in question. Other conditions and limitations applicable to this warranty are detailed below.

(2) Designation of Vocational Use Required.

To obtain warranty coverage, each Owner must notify Meritor through the OEM new truck and/or trailer dealer of the intended vocational use of the vehicle into which the Meritor components have been incorporated prior to the vehicle in-service date. This notification may be accomplished by registering the vehicle through your OEM new truck and/or trailer dealer or with Meritor directly. Failure to notify Meritor of (I) the intended vocational use of the vehicle or (II) a change in vocational use from that which was originally designated, will result in the application of a one year, unlimited mileage, parts only warranty (1/Unl/P) from the initial in-service date.

A second Owner and each subsequent Owner must also notify Meritor as to the intended vocational use of the vehicle. This notification can be sent directly to Meritor or through the OEM new truck and/or trailer dealer. The duration and mileage coverage of this warranty cannot exceed the coverage extended to the first Owner after his or her initial designation of vocational use.

Coverage under Meritor's warranty requires that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

(3) What is the Cost of this Warranty?

There is no charge to the Owner for this warranty.

(4) What is not Covered by this Warranty?

This warranty does not cover normal wear and tear; nor does it cover a component that fails, malfunctions or is damaged as a result of (I) improper installation, adjustment, repair or modification (including the use of unauthorized attachments or changes or modification in the vehicle's configuration, usage, or vocation from that which was originally approved by Meritor), (II) accident, natural disaster, abuse, or improper use (including loading beyond the specified maximum vehicle weight or altering engine power settings to exceed the axle and/or driveline capacity), or (III) improper or insufficient maintenance (including deviation from approved lubricants, change intervals, or lube levels). This warranty does not cover any component or part that is not sold by Meritor. For vehicles that operate full or part time outside of the United States and Canada, a one year, unlimited mileage, parts only warranty (1/Unl/P) will apply.

(5) Remedy.

The exclusive remedy under this warranty shall be the repair or replacement of the defective component at Meritor's option. Meritor reserves the right to require that all applicable failed materials are available and/or returned to Meritor for review and evaluation.

(6) Disclaimer of Warranty.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES OR CONDITIONS, EXPRESSED, IMPLIED OR STATUTORY INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE.

(7) Limitation of Remedies.

In no event shall Meritor be liable for special, incidental, indirect, or consequential damages of any kind or under any legal theory, including, but not limited to, towing, downtime, lost productivity, cargo damage, taxes, or any other losses or costs resulting from a defective covered component.

(8) To Obtain Service.

If the Owner discovers within the applicable coverage period a defect in material or workmanship, the Owner must promptly give notice to either Meritor or the dealer from which the vehicle was purchased. To obtain service, the vehicle must be taken to any participating OEM new truck and/or trailer dealer or authorized Meritor service location. The dealer will inspect the vehicle and contact Meritor for an evaluation of the claim. When authorized by Meritor, the dealer will repair or replace during the term of this warranty any defective Meritor component covered by this warranty.

(9) Entire Agreement.

This is the entire agreement between Meritor and the Owner about warranty and no Meritor employee or dealer is authorized to make any additional warranty on behalf of Meritor. This agreement allocates the responsibilities for component failure between Meritor and the Owner.

Vehicle models, brands and names depicted herein are the property of their respective owners, and are not in any way associated with Meritor, Inc., or its affiliates.



Meritor Heavy Vehicle Systems, LLC
2135 West Maple Road
Troy, Michigan 48084 USA

For more information:
call Ontrac at 866-668-7221
or visit meritor.com

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Revised 01-17 (47865/11900)



Certification Document CD0153 Engine Installation – Velocity GHG17 Cummins X15 Engine

Pierce Manufacturing, Inc. certifies that the GHG2017 Cummins X15 Engine as installed in a Velocity chassis meets the engine installation requirements of the engine manufacturer, the NFPA 1901 and NFPA 1906 guidelines as applicable, and Pierce engine design standards.

Validation testing was conducted in the Pierce wind tunnel chassis dynamometer and cooling test laboratory. Test results have been reviewed and accepted by representatives of the engine supplier.



Pierce Manufacturing, Inc.

A handwritten signature in black ink, likely belonging to David W. Archer.

David W. Archer
Vice President of Engineering
June 1, 2017



March 13, 2017

Mr. Chad Radtke
Pierce Manufacturing Inc.
2600 American Drive
Appleton, WI 54913

Dear Chad:

We have reviewed the installation of the Cummins 2017 X15 engine in the Velocity chassis and have found that the engine models listed below are installed in concurrence with our installation recommendations. Please notify us if there are any changes to the installation of these engines. If any changes are made, they must be reviewed and a new statement will be issued regarding concurrence.

Engine Models Reviewed: X15 600
X15 565
X15 505

Please let me know if you need any additional information.

Sincerely,

A handwritten signature in black ink, likely belonging to Michael Bartkowski.

Michael Bartkowski
General Sales Manager, OEM On-Highway

cc: John Schultz, Jon Stege, Kevin Bourgo

Cummins Sales and Service
800 West Ryan Road
Oak Creek, WI 53154
Tel (414) 768-7400
Fax (414) 768-9441
salesandservice.cummins.com



Warranty Policies and Procedures

WARRANTIES

All manufacturers' warranties assume that the vehicle is properly maintained and used in service, which is normal to the particular vehicle. Normal service means service that does not subject the vehicle to stresses or impacts greater than normal results from the careful use of the vehicle or chassis. All warranties are provided by the vehicle or component manufacturer not Hughes Fire Equipment, Inc.

Manufacturer's warranties are subject to the terms at which the vehicle/component was delivered. For specifics, please refer to the Manufacturer Warranty included in the selling documents provided at the time of sale.

Manufacturer's Warranty*

Pierce Manufacturing, Skeeter Brush Trucks, Braun Industries and EJ Metals, through Hughes Fire Equipment, provide Manufacturer's warranties that warrants against defects in product and workmanship. This limited Manufacturer warranty shall apply only if the vehicle is properly maintained and used in service, which is normal to the particular vehicle.

Component Warranty*

Manufacturer warranties provided by individual manufactures other than Pierce Manufacturing, Skeeter Brush Trucks, Braun Industries and EJ Metals, may apply.

MANUFACTURER WARRANTY START DATE

New vehicle Manufacturer warranty start date is based on the delivery of the new apparatus.

Vehicle Warranty start date begins:

Upon leaving the factory for Pierce Manufacturing, Skeeter Brush Trucks, Braun Industries and EJ Metals. Pierce Manufacturing, Inc. however, may provide a 60-day grace period after leaving the factory to put the unit in service.

PRE-AUTHORIZATION

Pre-authorization is required for all Manufacturer warranty repairs. If the unit is within the one year Manufacturer warranty and a warranty issue occurs which is a defect in product, workmanship, or design, we will file the repair under the provisions of the applicable warranty.

In some cases, we may not be able to determine if a repair is warranted until a defective part is reviewed by the manufacturer to determine the cause of failure. Items may not be warranted until the cause has been determined.

In cases of discovery within the Manufacturer warranty period, and risk of completion exists outside of the terms of the warranty period, Hughes Fire Equipment must be notified in writing of the failure date before the manufacturer warranty period expires.

Hughes Fire Equipment's *Service Manager* must be notified for pre-authorization for all Manufacturer warranty repairs. In most cases, a Hughes Service Technician will be dispatched to provide any and all warranty work. This will be determined on a case by case basis by the Hughes Service Manager. Please contact the Hughes Service Manager if you have any questions about a current or pending warranty.

In some cases, suppliers of components may offer warranties beyond the Pierce Manufacturing, Skeeter Brush Trucks, Braun Industries and EJ Metals Warranty. When cases where a supplier offers a warranty longer than the Pierce Manufacturing, Skeeter Brush Trucks, Braun Industries or EJ Metals, stated warranty, we must contact the supplier directly for their support. The terms of the supplier warranty shall apply. Failure to follow supplier's warranty procedures may nullify warranty coverage for that part

or Service. Please contact our *Service Manager* for more information. Certain component warranties are to be handled directly with the component manufacturer such as engine, transmission, drive-train, commercial chassis, etc.

TROUBLESHOOTING

Reimbursement for troubleshooting by a manufacturer is governed by the manufacturer's rules. It is suggested that Hughes Fire Equipment's service manager be notified before two (2) hours of troubleshooting is expended on the diagnosis of a problem. Hughes Fire Equipment technicians are not authorized to make Manufacturer warranty decisions. Authorization may be given to continue troubleshooting or the trouble may be referred to the supplier for assistance. This will ensure timely repairs as well as keeping costs down.

NOTE: Diagnosis in excess of 2 hours may be the responsibility of the customer.

EXCESSIVE TIME TO REPAIR

The Manufacturer reserves the right to dispute repair times that are beyond normal time allowances.

RETURN OF DEFECTIVE PARTS

If parts used in the repair of an apparatus are required to be returned by the Manufacturer and the customer provided necessary repairs for Hughes Fire Equipment, the customer will receive notification. Customers will be invoiced for all parts whether warranty or aftermarket. Customers have 30 days to return the defective component after the repair or the warranty claim may be rejected by the Manufacturer and no credit will be given for part(s). Labor may or may not be covered.

If you work directly through a supplier and not Hughes Fire Equipment, you may be liable to cover the replacement costs. Hughes Fire Equipment is not liable for non-returned parts or labor if you choose to contact the supplier directly.

When sending parts back, parts must be tagged with a job number along with a copy of the repairs stating the complaint, the cause and the correction.

SUPPLIER REPAIRS

Refer major component supplier warranty problems directly to the supplier to determine if it is a supplier problem. Major component supplier's include, but are not limited to, axle, engine, transmission, and commercial chassis suppliers. Failure to follow the supplier's guidelines may void warranty coverage.

If it is a major component supplier-related problem, the supplier will repair the defective part and handle all necessary paperwork.

Neither Hughes Fire Equipment nor Pierce should be invoiced for work performed when it is a major supplier's failure.

If it is a Pierce Manufacturing, Skeeter Brush Trucks, Braun Industries or EJ Metals, related problem, the supplier may, with pre-approval from Hughes Fire Equipment Service Manager and/or the Manufacturer, make the repairs and invoice Hughes Fire Equipment directly or refer the unit back to Hughes Fire Equipment for repair. If you do not get a timely response from a supplier, please contact Hughes Fire Equipment Service Manager immediately and we will assist in getting a resolution of the problem from the supplier for you.

SUBLET LABOR

Fire departments and municipalities that wish to perform their own minor warranty repairs may do so only with pre-approval from Hughes Fire Equipment.



All approved sublet warranty work that is reimbursed by the manufacturer will be paid as a credit on their Hughes Fire Equipment's customer account. The credit may be used against outstanding or future invoices.

SUBLET LABOR (CONT.)

Fire departments or municipalities that prefer to have a check issued for the reimbursed sublet warranty work will need to submit a request in writing via email, fax, or mail to Hughes Fire Equipment after they have received the credit memo. The request should state that a check is to be sent in lieu of the credit and contain the name of the person requesting the check.

REJECTED WARRANTY ITEMS

Some of the major reasons for claim and part rejection are listed below:

- Additional service work requested by the owner over and above that necessary to satisfy the Manufacturer warranty obligation
- Adjustments, routine maintenance and lubrication
- Job time excessive or job overlapped
- Labor or parts out of specified Manufacturer warranty period
- Labor is not allowed for repairs on products that have been subject to misuse, accident, neglect or alteration
- Labor for a modification that is not our standard, or proposed, in order to satisfy customer for acceptance
- Commercial chassis or vendor warranty parts and labor
- Additional testing or training not specified

Other general reasons for a claim rejection are:

- Out of Manufacturer warranty period
- Not from model and/or serial number designated
- Manufacturer warranty valid only to original owner
- Insufficient information provided to substantiate failure or return
- Damaged in shipment; submit claim to carrier
- Lack of maintenance (this is the customer's responsibility)
- Damaged by insufficient lubrication
- Damaged from improper operation or abuse
- Damaged during removal or installation by sales representative/customer
- Damage caused by lack of water
- Damage from hitting solid objects
- Damage caused by reversing battery leads
- Damage caused by foreign material

Pre-delivery and maintenance items not covered by Manufacturer warranty include cleaning, lubrication and adjustment of:

- Transfer valve controls and switches
- Relief valve micro switch
- Door locks, ladder locks, mirrors, and equipment holding devices
- Valve guides and controls
- Primer and drain controls
- Loose wiring, door switches or connectors
- Loose screws, fittings, lights, etc
- Belt tension
- Gauge calibration
- Relief or dump valve setting

Hughes Fire Equipment, Inc.

Authorized Representative

Printed Name/Title

Date

Also not covered is replacing:

- Lost tags and knobs
- Light bulbs
- Equipment lost or stolen
- Broken lenses and windshields
- Tire, road hazards
- Wheels - due to loose lug nuts
- Lubricant or anti-freeze
- Service call or Hazmat disposal charges
- Resetting of circuit breakers
- Replacement of fuses

Finally, damage resulting from lack of any of the following is also not covered under Manufacturer warranty:

- Proper air pressure
- Coolant
- Lubricant
- Maintenance

TIMING FOR SUBMITTING A MANUFACTURER WARRANTY REIMBURSEMENT FORM

The failure date must have occurred within the Manufacturer warranty period for the problem to be covered by warranty. Please refer to the specific Manufacturer warranty for your vehicle.

Failure identification to completion of the work must be no more than 30 days. Completion of work to submission of claim must also be no more than 30 days.

In cases where the unit is not out of service, completion of the work may be more than 30 days but should be within a reasonable time frame. If the completion of the work will not occur within the Manufacturer warranty period, Hughes must be notified of the failure date and intended date for completion of the work before the Manufacturer warranty period expires.

CRITERIA FOR DETERMINING TRUCKS AS "OUT OF SERVICE"

Trucks that are unable to safely respond to a scene or perform required operation of the pump or aerial device due to a mechanical or electrical malfunction.

Trucks NOT considered "out of service" (trucks experiencing non-critical issues that do not affect the ability to respond to a scene):

- trucks taken out of service for scheduled maintenance or repairs
- minor cab or body damage
- missing compartment doors
- broken window
- air conditioning malfunction
- paint, corrosion, or graphics (non-safety related)
- cosmetic issues (missing wheel covers, etc)
- non-safety related lighting
- customer add-on equipment
- minor oil leaks

Customer

Authorized Representative

Printed Name/Title

Date



No regrets when you choose Pierce.

Peak Expertise, Stability & Support.



A LOT'S RIDING ON YOUR INVESTMENT.

This is a big one. The safety of firefighters and families, the security of property and the well-being of the entire community depend on your decision. Lives and reputations ride on your investment. Make sure help is always on the way.

Go with longevity. Go with the #1 industry authority that protects the legacies great community leaders leave behind. When you invest in Pierce® fire apparatus, you're making the smartest call for the long haul.





HUGHES FIRE EQUIPMENT: Unmatched Support

In business for over 30 years, staffed by employees with more than 350 years of combined experience

4 sales and service centers

Employing 60+ professionals dedicated to providing the best sales and service experience, always desiring to go above and beyond

Pierce Platinum level dealer

In-depth understanding of purchasing consortiums such as FireRescue GPO

30+

YEARS OF
SERVICE

350+

YEARS OF
COMBINED
EXPERIENCE

4

SALES &
SERVICE
CENTERS

60+

DEDICATED
PROFESSIONALS





PIERCE: Untouchable Fire Apparatus Expertise

No one manufactures more custom apparatus, invests as heavily in Research and development; or understands firefighters' needs better.

Thousands of years of cumulative experience. 100+ years in existence.

More than 30 patents relied upon internationally.

First single-source manufacturer of custom fire apparatus to achieve ISO 9001 certification in North America. Only manufacturer to have third party UL certification on the entire apparatus.

Pierce continually elevates the way departments protect and perform.

\$5M
PARTS
INVENTORY

250
FULL-TIME
ENGINEERS

#1
RESEARCH,
DEVELOPMENT
& SAFETY

1,600+
MANUFACTURING
EMPLOYEES





OSHKOSH: Unshakable Stability

Rock solid financials. A century of history paved by numerous industry-first contributions.

Global recognition as a World's Most Ethical Company (Ethisphere Institute).

Complete transparency as a public traded company.

Greater strength from shared engineering and technology Corporation-wide.

America's Best Large Employers list by Forbes.

Oshkosh arms Pierce with proven strength, tremendous stability and unquestionable integrity.

**OVER
13,000**
EMPLOYEES
WORLDWIDE

A WORLD'S
MOST ETHICAL
COMPANY

UL/ULC
CERTIFIED

GLOBALLY
USED
PATENTS



NO REGRETS WHEN
YOU CHOOSE
PIERCE.



A LOT'S RIDING ON YOUR INVESTMENT.

The safety of firefighters and families, the security of property and the well-being of the entire community depend on your decision. Lives and reputations ride on your investment. Make sure help is always on the way.

Go with longevity. Go with the #1 industry authority that protects the legacies great community leaders leave behind. When you invest in Pierce® fire apparatus, you're making the right call for the long haul.



No other manufacturer has a stronger foundation of expertise, stability and support.

Unmatched Support

- In business for over 30 years, staffed by employees with more than 350 years of combined experience
- 3 sales and service centers
- Employing 43 professionals dedicated to providing the best sales and service experience, always desiring to go above and beyond
- In-depth understanding of purchasing consortiums such as FireRescue GPO

Untouchable Fire Apparatus Expertise

- Over 30,000 custom chassis built
- More than 30 patents attributed to our continued investment in research, development and safety
- Thousands of years of cumulative experience
- First single-source manufacturer of custom fire apparatus in North America to achieve ISO 9001 certification
- Only manufacturer to have third party, Underwriters Laboratories certification on the entire apparatus

Unshakable Stability

- Rock-solid financials as an Oshkosh Corporation Company
- Oshkosh named a World's Most Ethical Company by Ethisphere Institute
- Recognized as a 2016 Best Governance, Risk, and Compliance Program by NYSE Governance Services
- Complete transparency of a public traded company
- Greater strength from shared engineering and technology across all of Oshkosh Corporation
- With over 100 years of history and numerous industry-first contributions, we're not going anywhere
- America's Best Large Employers list by Forbes



200+
FULL-TIME
ENGINEERS

PIERCE

3RD PARTY
CERTIFIED
NFPA
1901-2009

PIERCE



**OVER 13,000
EMPLOYEES
WORLDWIDE**

OSHKOSH

**ISO 9001
CERTIFICATION**

PIERCE & OSHKOSH



**GLOBALLY
USED
PATENTS**

OSHKOSH



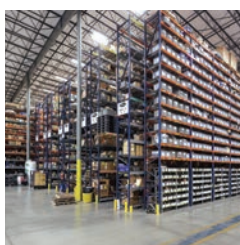
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COMPANIES™**
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RESEARCH,
DEVELOPMENT
& SAFETY

PIERCE

1,600+
MANUFACTURING
EMPLOYEES

PIERCE



**UL/ULC
CERTIFIED**

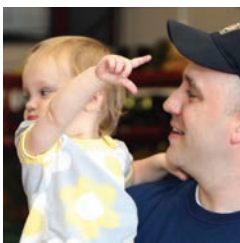
PIERCE & OSHKOSH

**SINGLE
SOURCE**

PIERCE

**\$9M
PARTS
INVENTORY**

PIERCE



**24/7
RESPONSE**

HUGHES FIRE
EQUIPMENT



VOLUNTEER & COMBINATION
OFFICERS SECTION

Pierce leads the industry in sponsorships that support families of fallen firefighters, recognize outstanding achievement and further the education and safety of the fire service.

www.piercemfg.com



Pierce Manufacturing Inc., An Oshkosh Corporation Company
P.O. Box 2017, Appleton WI 54912-2017 USA



Specifications, descriptions and illustrative material in this literature are as accurate as known at the time of publication, but are subject to change without notice.

Illustrations may include optional equipment and accessories and may not include all standard equipment. All measurements are nominal values.

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P-0108-SLLSTBLTYSS-HGHS 1/17

www.hughesfire.com / 1-800-747-6510



PROUDLY SERVING YOU, WHILE YOU SERVE YOUR COMMUNITY

Offering comprehensive shop and mobile factory service fully customized to meet your needs.

Our ASE, EVT and Pierce® Master certified technicians take great pride in providing all of the services you need to keep your fleet ready. Whether it's warranty work, preventative maintenance, general repairs or inspections, our team is trained at the highest level to inspect, maintain and service all of your emergency vehicles including non-Pierce apparatus. We are also pleased to offer competitive pricing on parts and service.

24/7

24/7 MOBILE ON-SITE, ON-CALL SERVICE

Serving Oregon, Washington, Idaho, Alaska, Montana, Arizona & Clark County Nevada



UPGRADES

Mobile Pump Testing

On-Site Pump Service

CZ (Command Zone)
Inspection & Troubleshooting

SRP Diagnostics
(Side Rollover Protection)

Tak-4 Inspection & Adjustment

Chassis Inspection/Repair

Ladder Testing

TESTING INSPECTIONS

Idle Reduction Technology

Tower Upgrades/Installs

LED Lighting Upgrades

Generator & Light Equipment Installation

Lighting & Siren Installations

COMPREHENSIVE MOBILE SERVICES

REPAIRS

Warranty

Pump Service & Repairs

Suspension Repair

Transmission Service

Diesel Service

Brake Repair

1-800-747-6510

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Serving Oregon, Washington, Idaho, Alaska,
Montana, Arizona & Clark County Nevada



24/7

MOBILE ON SITE, ON CALL SERVICE

On-site Oil & Fluid Changes

ALL Preventative Maintenance
Needs & Inspections from
Minor to Annual Services.

Maintenance Tracking

ALL Pump Service Needs
(Pierce® Ultimate Configuration, Darley,
Waterous)

MAINTENANCE

After Hours Emergency Contact System Procedure

- If you have a unit "out of service" after normal business hours, dial 800-747-6510
- Press "9" for the "emergency out of service" voicemail box
- Once a voicemail message is left, the system begins calling technicians cell phones in 5 minute intervals until someone checks the message.
- Make sure to leave the following information on your voicemail message:
 - Name
 - Department you are calling from
 - Apparatus brand/type, and/or Pierce job number
 - Cause of out of service condition
 - Contact information

Pierce Manufacturing, Inc. – 2600 American Drive, Appleton, WI 54914 Manufacturing and Parts Distribution

- Consistent parts stock level of \$5 million
- Customer accessible web site with access to vehicle number, sort able search for part numbers. Pictures of parts also included.
- www.pierceparts.com (log in as guest)
- Pierce's "Out of Service" tracking system which requires all out of service vehicles be recorded, discussed addressed in the daily upper management meeting until the problem is resolved and the unit back into service.
- Pierce refurbishment facilities in Weyauwega Wisconsin and Bradenton Florida

Hughes Fire Equipment, Inc. – 910 Shelley Street, Springfield, OR 97477 Corporate Sales and Service Headquarters – 800-747-6510

- 7,500 sq. ft. shop space dedicated to emergency apparatus repair.
- \$255,000 parts inventory
- 3 mobile service vehicles, plus 1 mobile service unit in Idaho.
- 2 service writers, 1 technical advisor, and 6 factory trained fire service technicians (assorted levels of EVT and ASE certifications)
- 4 full time Pierce certified service parts and warranty specialists
- 24/7 emergency contact system in place. Daily hours of operation 7 am to 4 pm.
- Support staff includes sales management, finance and special event coordination.
- Additional services include pump testing, ladder testing, welding, electrical testing and repair.
- Regional service contractors

Hughes Fire Equipment, Inc. – 19204 NE San Rafael St. Portland, OR 97230 Regional Service Facility – 800-747-6510

- 2,500 sq. ft. of shop space dedicated to emergency apparatus repair with 2 bays
- 2 mobile service vehicles
- 1 service coordinator, 1 shop manager, and 1 factory trained fire service technician
- 24/7 Emergency contact system in place. Daily hours of operation 7:30 am to 4 pm.
- Additional services include pump testing, ladder testing, welding, electrical testing and repair.

Hughes Fire Equipment, Inc. – 5159 W. Roosevelt Street, Phoenix, AZ 85043
Regional Service Facility – 800-747-6510

- 15,000 sq. ft. shop space dedicated to emergency apparatus repair including 5 bays.
- \$240,000 parts inventory
- Scheduling, troubleshooting, warranty, parts and administrative functions will be handled both through the main office in Springfield, Oregon and the office in Phoenix, AZ.
- Service will be provided at the dedicated emergency apparatus repair facility at the address above.
- Mobile service will be available through the Hughes location in Springfield, Oregon and the location in Phoenix, Arizona, with 2 mobile service units in Phoenix.
- 1 service manager, 1 service coordinator, and 4 factory trained fire service technicians with various levels of EVT certifications
- 1 full time Pierce certified parts specialist.
- 24/7 emergency contact system in place. Daily hours of operation 7 am to 3:30 pm.
- Support staff includes sales management, finance and special event coordination.
- Additional services include pump testing, ladder testing, welding, electrical testing and repair.

Hughes Fire Equipment, Inc. – 5011 Burlington Way, Suite A, Tacoma, WA 98409
Regional Service Facility – 800-747-6510

- 7,500 sq. ft. of shop space dedicated to emergency apparatus repair with 3 bays
- \$165,000 parts inventory
- 3 mobile service vehicles
- 1 service coordinator, 4 factory trained fire service technicians (assorted levels of EVT and ASE certifications), and 1 parts consultant
- 24/7 Emergency contact system in place. Daily hours of operation 7 am to 3:30 pm.
- Additional services include pump testing, ladder testing, welding, electrical testing and repair.



Hughes Fire Equipment, Inc. Contact Information

Hughes Fire Equipment, Inc. is an authorized dealer representative for Pierce Manufacturing, Inc., Braun Industries, Frontline Communications, E.J. Metals, Skeeter Brush Trucks and Sealegs. We provide sales and support for these products in Alaska, Arizona, Clark County of Nevada, Idaho, Montana, Oregon and Washington. For specific sales territory coverage, please see our website: www.hughesfire.com. Service for Oregon, Idaho and Montana are provided through our corporate facility, located in Springfield, Oregon. Service for Idaho and Montana is provided through our corporate facility in Oregon via on-site road service. Service for Washington and Alaska are provided in our service facility in Tacoma, Washington. Service for Arizona and Nevada is provided through our facility in Phoenix, Arizona. During normal business hours, please call 541-747-0072 and your call will be directed. If you have a unit out of service outside of normal business hours, please call 800-747-6510, press "9" for the emergency out of service voicemail and your message will be forwarded immediately to a technician.

Sales

Rex Hughes: President

541-747-0072 - Office
541-954-4207 - Cell
rhughes@hughesfire.com

**Dan Hays: North Division Vice President
and Sales Representative, WA**

253-848-2679 - Office
206-910-4789 - Cell
dhays@hughesfire.com

Sheri Taylor: Sales Manager

541-747-0072 - Office
staylor@hughesfire.com

Sales (Continued)

Chris Callies: Sales Representative, AZ

480-486-0257 - Cell
ccallies@hughesfire.com

Ron Gilbert: Sales Representative, AZ/NV

602-370-1942 - Cell
rgilbert@hughesfire.com

Gary Greenwell: Sales Representative, ID

208-859-0682 - Cell
ggreenwell@hughesfire.com

Nick Hendricks: Sales Representative, OR

503-961-4749 - Cell
nhendricks@hughesfire.com

Terry Hill: Sales Representative, WA

360-460-3676 - Cell
thill@hughesfire.com

John Keffer: Sales Representative, WA

425-652-2628 - Cell
jkeffer@hughesfire.com

Andy Klein: Sales Representative, AK/WA

360-450-7264 - Cell
aklein@hughesfire.com

Jim Renner: Sales Representative, OR/WA

541-521-9360 - Cell
jrenner@hughesfire.com

Tracie Richards: Sales Representative, AZ/NV

480-250-5306 - Cell
trichards@hughesfire.com

Andy Siebers: Sales Representative, ID/MT/WA

509-822-1703 - Cell
asiebers@hughesfire.com

Dennis Waters: Sales Representative, OR/WA

509-521-1901 - Cell
dwaters@hughesfire.com

Service and Parts

Sonny Ovens: Sr. Technical Advisor

541-747-0072 - Office
541-968-2107 - Cell
sovens@hughesfire.com

Alec Naslund: Service Writer, OR/ID/MT

541-747-0072 - Office
541-505-2109 - Cell
anaslund@hughesfire.com

Kyle Dickens: Service Writer, OR/ID/MT

541-747-0072 - Office
kdickens@hughesfire.com

Matt Larsen: Shop Foreman, OR

541-747-0072 - Office
541-913-0676 - Cell
mlarsen@hughesfire.com

McKenzie Hughes: Service Coordinator, OR

541-747-0072 - Office
541-653-6040 - Cell
mhughes@hughesfire.com

Stephanie Englebert: Service Writer, WA/AK

541-747-0072 - Office
senglebert@hughesfire.com

Dean Stock: Service Coordinator, AZ/NV

541-747-0072 - Office
dstock@hughesfire.com

Ron Perez: Shop Foreman, AZ

602-803-8988 - Cell
rperez@hughesfire.com

Duane Pedersen: Parts Manager

541-747-0072 - Office
dpedersen@hughesfire.com

**Bob Preston, Jacob Cantwell, Jimmy
McCoy: Parts Specialists**

541-747-0072 - Office
parts@hughesfire.com

EXHIBIT D
PUBLIC PROCUREMENT AUTHORITY
CONTRACT AND MASTER PRICE
AGREEMENT

Sixth Amendment to Fire Apparatus Master Price Agreement

Pricing and Product Adjustment

This Amendment to the Master Price Agreement is effective this 1st day of February, 2018 by the PUBLIC PROCUREMENT AUTHORITY ("Purchaser") and Pierce Manufacturing Inc. ("Vendor") based upon the sales and/or service of Fire Apparatus.

RECITALS

WHEREAS, Purchaser and Vendor entered into a Master Price Agreement on or about August 13, 2015 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into an Amendment to the Master Price Agreement on or about February 13, 2016 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Second Amendment to the Master Price Agreement on or about March 28, 2016 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Third Amendment to the Master Price Agreement on or about October 31, 2016 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Fourth Amendment to the Master Price Agreement on or about January 31, 2017 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Fifth Amendment to the Master Price Agreement on or about May 29, 2017 and by this reference incorporated herein; and

WHEREAS, Article 4.1 of the Master Price Agreement provides for price adjustments in six (6) month increments based on manufacturer cost increase; and

WHEREAS, Vendor has provided notice of pricing adjustment due to manufacturer cost increase on or about November 29, 2017; and

WHEREAS, Vendor has updated its product offering to reflect current chassis of products included in the Master Price Agreement and to remove models that have been discontinued; and

WHEREAS, Vendor has provided notice of product updates and discontinued models on or about November 29, 2017; and

WHEREAS, Purchaser and Vendor desire that the Master Price Agreement shall be amended in part to reflect the pricing and product adjustment;

NOW, THEREFORE, Purchaser and Vendor enter into the following:

SIXTH AMENDMENT TO FIRE APPARATUS MASTER PRICE AGREEMENT

1. Adjustment to Pricing and Products on Fire Apparatus. Attachment A to the Master Price Agreement shall be amended in its entirety to read as follows:

“ATTACHMENT A

to Master Price Agreement by and between VENDOR and PURCHASER.

PRODUCTS, SERVICES, SPECIFICATIONS AND PRICES

ATTACHMENT A PRODUCTS, SERVICES, SPECIFICATIONS, AND PRICING

BASE MODEL SPECIFICATIONS

1.0 AERIAL PRODUCT

ID #	DESCRIPTION	PIERCE PRICE 2018
1.2	Arrow XT XT, Alum, Single, 1500 Pump, 75' HD, Aluminum Ladder, Quint	\$ 773,590.00
1.3	Arrow XT XT, Alum, Tandem, 1500 Pump, 105' HD Steel Ladder, Quint	\$ 886,645.00
1.4	Arrow XT XT, Alum, Tandem, No Pump, 105' HD Steel Ladder	\$ 819,146.00
1.6	Arrow XT XT, Alum, Tandem, 1500 Pump, 75' HD Steel Ladder, Quint	\$ 785,163.00
1.7	Arrow XT XT, Alum, Single, 1500 Pump, 75' HD Steel Ladder, Quint	\$ 763,205.00
1.8	Arrow XT XT, Alum, Tandem, 1500 Pump, 100' HD Aluminum Ladder, Quint	\$ 943,004.00
1.9	Arrow XT, Alum, Tandem, No Pump, 100' HD Aluminum Ladder	\$ 876,720.00
1.10	Arrow XT, Alum, Tandem, 1500 Pump, 85' Steel Platform, Quint	\$ 973,029.00
1.11	Arrow XT, Alum, Tandem, No Pump, 85' Steel Platform	\$ 904,189.00
1.12	Arrow XT, Alum, Tandem, 1500 Pump, 100' Steel Platform, Quint	\$ 1,061,324.00
1.14	Arrow XT, Alum, Tandem, 1500 Pump, 100' Aluminum Platform, Quint	\$ 1,129,660.00
1.15	Arrow XT, Alum, Tandem, No Pump, 100' Aluminum Platform	\$ 1,054,309.00

1.16	Arrow XT, Alum, Tandem, 2000 Pump, 95' Mid-Mount Steel Platform	\$ 1,122,756.00
1.17	Arrow XT, Alum, Tandem, No Pump, 95' Mid-Mount Steel Platform	\$ 1,053,582.00
1.18	Arrow XT, Alum, Tandem, 2000 Pump, 100' Mid-Mount Steel Ladder, Quint	\$ 991,000.00
1.19	Arrow XT, Alum, Tandem, No Pump, 100' Mid-Mount Steel Ladder	\$ 923,187.00
1.21	Arrow XT, Alum, Single, 1250 Pump, 61'/55/ Sky-Boom	\$ 653,471.00
1.24	Arrow XT, Alum, Single, 75' HAL PUC Quint	\$ 801,165.00
1.25	Arrow XT, Alum, Tandem, 105' HD Steel Ladder PUC	\$ 922,222.00
1.26	Arrow XT, Alum, Tandem, 100' Steel Platform PUC	\$ 1,094,025.00
1.27	Arrow XT, Single, 1500 Pump, 107' Aerial	\$ 1,005,208.00
1.28	Arrow XT, Single, 2000 Pump, 110' Platform	\$ 1,023,371.00
1.29	Arrow XT, Ascendant Tiller NPNT	\$ 1,282,294.00
1.30	Arrow XT, Ascendant Tiller Quint	\$ 1,373,697.00

2.0 PUMPER PRODUCT

ID #	DESCRIPTION	PIERCE PRICE 2018
2.1	Saber FR, Alum, Single, 1250 Pumper, 750 Water	\$ 356,905.00
2.2	Impel, Alum, Single, 1250 Pump, 750 Water	\$ 398,717.00
2.3	Impel, Alum, Single, 1500 Pump, PUC, 750 Water	\$ 465,128.00
2.5	Freightliner M2-106, 2-Door, Alum, Single, 1250 Pump, 750 Water	\$ 220,828.00
2.6	International 4400, 2-door, Alum, Single, 1250 Pump, 750 Water	\$ 229,923.00
2.7	Kenworth T370, 2-Door, Alum, Single, 1250 Pump, 750 Water	\$ 228,852.00
2.8	Peterbilt 337, 2-Door, Alum, Single, 1250 Pump, 750 Water	\$ 237,726.00
2.9	Freightliner M2-106, 4-Door, Galv, Single, 1000 Pump, 4x4 Wildland	\$ 357,263.00

3.0 RESCUE

ID #	DESCRIPTION	PIERCE PRICE 2018
3.1	Arrow, Alum, Single, Non-Walk-In, HDR	\$ 411,311.00
3.2	Saber FR, Alum, Single, Non-Walk-In HDR	\$ 339,926.00

3.3	Freightliner M2-106, 2-Door, Alum, Single, Non-Walk-In, HDR	\$ 238,310.00
3.4	International 7400, 2-Door, Alum, Single, Non-Walk-In, HDR	\$ 212,770.00
3.5	Kenworth T370, 2-Door, Alum, Single, Non-Walk-In, HDR	\$ 214,239.00
3.6	Peterbilt 337, 2-Door, Alum, Single, Non-Walk-In, HDR	\$ 222,801.00
3.7	Saber FR, Alum, Single, Walk-In, HDR	\$ 367,354.00
3.8	Arrow XT, Alum, Single, Walk-In, HDR	\$ 448,322.00
3.9	Freightliner M2-106, 2-Door, Alum, Single, Walk-In HDR	\$ 238,303.00
3.10	International 7400, 2-Door, Alum, Single, Walk-In, HDR	\$ 246,065.00
3.11	Kenworth T370, 2-Door, Alum, Single, Walk-In, HDR	\$ 238,047.00
3.12	Peterbilt 337, 2-Door, Alum, Single, Walk-In, HDR	\$ 255,606.00
3.13	Ford F550, 4-Door, Alum, Single, 12' Non-Walk-In	\$ 147,746.00

4.0 TANKER

ID #	DESCRIPTION	PIERCE PRICE 2018
4.1	International, 2-Dr, Alum, Tandem, 500 Pump, 3000 Water, DX	\$ 232,609.00
4.2	Impel, Alum, Tandem, 1250 Pump, 2000 Water, Tanker/Pumper	\$ 483,032.00
4.3	International, 2-Dr, Single, 1000 Pump, 2100 Water DX	\$ 222,281.00
4.4	International 4400, 2-Dr, Single, 1000 Pump, 2100 Water, DX	\$ 228,805.00
4.5	Kenworth T370, 2-Dr, Single, 1000 Pump, 2100 Water, DX	\$ 225,181.00
4.6	Saber FR, 4-Dr, Single, 1500 Pump, 1800 Water, Pumper/Tanker	\$ 374,144.00
4.7	Impel, Aluminum, Tandem, 1250 Pump, 2500 Water, Elliptical	\$ 476,658.00
4.8	Saber FR, Aluminum, Single, 1250 Pump, 1800 Water, Elliptical	\$ 413,553.00
4.10	Kenworth T370, 2Dr, Alum, Tandem, 500 Pump, 3000 Water, DX	\$ 240,337.00
4.11	International 7500, 2-Dr, Alum, Tandem Rear, 500 pump, 3000 Water, DX	\$ 253,114.00

ATTACHMENT A
PRODUCTS, SERVICES, SPECIFICATIONS, AND PRICING

OPTION CATALOG PRICING: SAMPLING

Note: We have provided a price range for several option categories. The reason for this is the extensive volume of options Pierce offers along with the variety of options within and across product categories. For example, Pierce manufactures 7 different custom cabs. In each cab family, there are up to 10 different configurations which are tied to options specific to a certain product offering (e.g. Pumper, Aerial, Rescue, Tanker, etc.). The price range encompasses the low and high end for that particular category. This is a sampling of what we offer as our order configurator includes over 30,000 options. This number of options is too extensive to list individually.

1.0 CUSTOM CHASSIS

PUBLISHED OPTIONS:		PRICE RANGE	
562564	Various Arrow XT Cabs	55,317.00	75,710.00
689045	Various Dash CF Cabs	54,872.00	60,671.00
625652	Various Enforcer Cabs	48,636.00	62,230.00
647271	Various Impel FR Cabs	48,869.00	74,608.00
559725	Various Quantum Cabs	56,856.00	66,162.00
625654	Various Saber FR Cabs	46,500.00	61,198.00
647244	Various Velocity FR Cabs	52,365.00	77,344.00

2.0 AXLE,FRONT

PUBLISHED OPTIONS:		PRICE RANGE	
566636	Axle, Front, Dana, 16,000 - 23,000 lb	8,658.00	9,312.00
637708	Axle, Front, Meritor 18,000 - 21,500 lb,	10,568.00	39,025.00
624947	Axle, Front, Marmon Herrington 21,500 (FWD)	34,782.00	39,023.00
30262	Axle, Front, Oshkosh TAK-4, Non Drive, 19,500 - 24,000 lb	28,893.00	31,731.00

3.0 AXLE,REAR

PUBLISHED OPTIONS:		PRICE RANGE	
690933	Axle, Front, Dana, 16,000 - 40,000 lb	9,283.00	27,808.00
10404	Axle, Rear, Eaton, 24,000 - 31,000 (FWD)	23,954.00	31,651.00
37001	Axle, Tiller, Meritor 34,000 - 48,000 lb	26,275.00	32,312.00
52481	Axle, Tiller Trailer, Oshkosh TAK-4, 26,000 - 52,000	48,278.00	81,328.00
530472	Axle, Rear, Meritor, 17,000 - 60,000 lb	8,793.00	42,818.00
644866	Axle, Rear, Oshkosh TAK-4 T3, 26,000 - 52,000 lb, Rear Steer	14,689.00	18,429.00

4.0 BRAKES

PUBLISHED OPTIONS:		PRICE RANGE	
20674	ABS Brake Systems, Tandem Rear Axle	6,599.00	12,832.00
10670	ABS Brake Systems , Single rear axle	5,900.00	10,928.00
705	Brakes, Cam, Front,	686.00	945.00
740	Brakes, Cam, Rear (single - Tandem)	703.00	1,509.00
508676	Brakes, EX225, 17", Disc Plus, Front (and or TAK-4)	686.00	1,325.00
509206	Brakes, Meritor, EX225, Disc Plus, Rear (single - tandem)	860.00	1,711.00

593759	ESC/ABS/ATC Brake System (single - tandem)	10,928.00	11,627.00
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5.0 COMPARTMENTS ACCESSORIES

PUBLISHED OPTIONS:		PRICE RANGE	
4002	Matting, .13" Rubber in Compt per	61.00	
3934	Dust Filter, All Compt Louvers per	102.00	
4005	Alum Treadplate on Compt Floor per	151.00	
3990	Grating, Wood in Compt per	233.00	
539811	Box, Poly Tool per	297.00	
13919	Partition, Adjustable, Vertical Compt	431.00	
562776	Toolboard, .188" Alum, Rr Wall Compt,w/Track, No Holes, Painted	765.00	
27093	Rack, Air Bags inside Compt, 6-Slot	1,192.00	
558501	Drawer Assembly, CTECH, Four Drawers, Up To 24" Wide	2,171.00	

6.0 COMPARTMENT, PUMPER

PUBLISHED OPTIONS:		PRICE RANGE	
83648	Med Body, Roll/Lap, Various Heights & Depths	2,927.00	17,337.00
83661	Long Body, Roll/Lap, Various Heights & Depths	5,839.00	23,752.00
585287	PUC Body, Roll/Lap, Various Lengths, Heights & Depths	7,865.00	37,965.00
6708	HDRP Body, Roll/LAP, Various Length, Heights & Depths	15,382.00	16,112.00

7.0 COMPARTMENT, TANKERS

PUBLISHED OPTIONS:		PRICE RANGE	
231	Long Tanker Body, Rollup/Lap, Various Heights & Depths	1,283.00	16,471.00
63851	Extended Tanker Body, Rollup/Lap, Various Heights & Depths	4,203.00	28,493.00

8.0 ENGINE

PUBLISHED OPTIONS:		PRICE RANGE	
623882	Engine, Cummins ISL9, 350 - 450 hp, 1150 - 1250 ft-lb W/OBD	83,612.00	101,360.00
623942	Engine, Cummins ISX12, 400 - 600 hp, 1550 ft-lb, W/OBD	115,233.00	131,440.00
610863	Engine, DDC DD13, 450 - 525 hp	103,141.00	121,599.00

9.0 FOAM SYSTEMS

PUBLISHED OPTIONS:		PRICE RANGE	
5414	Foam Sys, Eductor	7,719.00	8,075.00
65417	Foam Sys, 1600 - 2002	9,346.00	22,281.00
592633	Foam Sys, Husky 3, Single Agent	10,875.00	
95358	Foam Sys, Husky 12, (Single Agent)	19,458.00	
95353	Foam Sys, Husky 12, (Dual Agent)	22,121.00	
676901	Foam Sys, Husky Single Agent, Industrial	37,722.00	113,634.00

10.0 Foam Cells

PUBLISHED OPTIONS:		PRICE RANGE	
5446	Foam Cell, 20 - 60 Gallon	1,667.00	2,562.00
88466	Foam Tank, 1000 - 2500 Gallon	11,261.00	24,955.00

11.0 GENERATORS

PUBLISHED OPTIONS:		PRICE RANGE	
684098	Generator, Gas,	2,148.00	8,028.00
20947	Generator, Diesel	16,179.00	31,874.00
649150	Generator, Hydraulic	20,126.00	46,557.00

12.0 GRAPHICS

PUBLISHED OPTIONS:		PRICE RANGE	
684084	Lettering, Vinyl, 1.00 - 4.00 (1 - 160)	204.00	1,740.00
686417	Lettering, Gold Leaf, 1.00 - 11.00 (1 - 160)	510.00	6,517.00

13.0 LADDER STORAGE

PUBLISHED OPTIONS:		PRICE RANGE	
4296	Rack, Ladders in Hosebed/Between Tank & Side Sheet	1,084.00	5,831.00
14308	Rack, Quic-Lift	7,206.00	9,030.00
2773	Rack, Ladder, Hydraulic	11,006.00	13,546.00

14.0 LIGHTING

PUBLISHED OPTIONS:		PRICE RANGE	
0006372	Lightbar, Various Brand, Length & Function	789.00	7,415.00
0689545	Lights, Compt, LED	119.00	6,529.00
647803	Lights, Clearance/Marker/ID	131.00	235.00
648293	Light, Directional, Front	381.00	1,120.00
0058128	Lights, Front, Warning	97.00	6,728.00
0041878	Lights, Front Zone Lower	497.00	2,142.00
644038	Lights, Perimeter Scene, Cab	202.00	1,514.00
65704	Lights, Rear Scene	60.00	658.00
41634	Light, Side Zone Upper	408.00	2,985.00

15.0 LIGHT TOWERS

PUBLISHED OPTIONS:		PRICE RANGE	
0636216	Light Tower, NS2.3-1500 MAG, 2-750W Magnafire Lts, 120 VAC Cld 7.5'	9,545.00	
0636206	Light Tower, NS2.3-6000 OPT, 4-1500W Optimum Lts, 240 VAC Cld 7.5'	10,858.00	
0642218	Light Tower KL450, 6-500W Lights, 120 Volt AC, Cld	13,779.00	
0636195	Light Tower, NS4.5-6000 OPT, 4-1500W Optimum Lts, 240 VAC Cld 15'	16,647.00	
0523461	Light Vertical Tower, IWM 7-25-9000 OPT 6-1500W 240V Optimum 25'	21,821.00	

16.0 SAFETY SYSTEMS

PUBLISHED OPTIONS:		PRICE RANGE	
583042	Side Roll and Frontal Impact Protection	12,640.00	
583040	Frontal Impact Protection	3,087.00	
583041	Side Roll Protection	9,903.00	

17.0 SHEVELING/TRAYS

<i>PUBLISHED OPTIONS:</i>		<i>PRICE RANGE</i>
0687079	Shelves, Adjustable, 500 lb Capacity, Full Width (each)	213.00
647042	Tray, Floor Mounted, Slide-Out, w/ Side Slides, 200lb, 2.00" Sides (each)	703.00
3984	Tray, 250 lb Slide-out, 2" Sides - Adj. Height (each)	579.00
3983	Tray, 500 lb Slide-out, 2" Sides - Adj. Height (each)	1,002.00
83986	Tray, 215 lb, Tilt/Slide-Out, 30 Deg, Adj (each)	748.00

18.0 TRANSMISSION

<i>PUBLISHED OPTIONS:</i>		<i>PRICE RANGE</i>
642569	Trans, Allison 5th Gen, 3000 EVS P, With Prognostics	25,551.00
642574	Trans, Allison 5th Gen, 3000 EVS PR, With Prognostics	39,383.00
642579	Trans, Allison 5th Gen, 4000 EVS P, With Prognostics	37,636.00
642594	Trans, Allison 5th Gen, 4000 EVS PR, With Prognostics	49,640.00
642532	Trans, Allison 5th Gen, 4500 EVS P	40,388.00
642601	Trans, Allison 5th Gen, 4500 EVS PR, With Prognostics	52,466.00

19.0 UNDERCOATING

<i>PUBLISHED OPTIONS:</i>		<i>RANGE + 6%</i>
695507	Rust Proof, Torque Box	315.00
599008	Rust Proof/Undercoat, Custom Chassis	616.00
7379	Undercoating, Pumper/Rescue/Tanker	682.00
631674	E-Coat, TAK-4 Components, Front Axle, Black	692.00
646119	E-Coat, TAK-4 Components, Tiller Axle, Black	692.00
652945	E-Coat, Under Body/Chassis Component Package	1,939.00
25070	Corrosion Prevention Treatment, Dissimilar Metal	2,356.00

20.0 Water Tanks

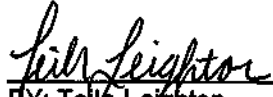
<i>PUBLISHED OPTIONS:</i>		<i>RANGE + 6%</i>	
9308	Tank, Water, 200 - 500 Gallon, Poly, Aerial	7,565.00	10,164.00
28244	Tank, Water, 500 - 30000 Gallon, Poly	7,601.00	27,575.00

The pricing above is current as of February 1, 2018.

2. **Full Force and Effect.** In each and every other respect, the terms of the Master Price Agreement, as amended, entered into between the parties on or about August 13, 2015 shall remain in full force and effect during the term of the agreement and the parties hereto hereby ratify said Master Price Agreement in its entirety, as if fully set out herein, along with the modifications identified herein.

IN WITNESS WHEREOF, the parties have hereto signed this Amendment on the day and year first above written.

PUBLIC PROCUREMENT AUTHORITY:

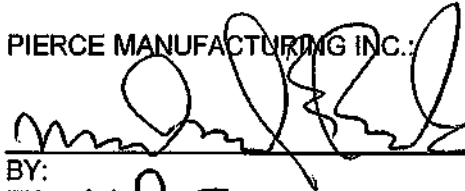


Date 02/01/2018

BY: Tella Leighton

ITS: Contract Manager

PIERCE MANUFACTURING INC.:



Date 02/01/2018

BY:

ITS: VP Finance

Fifth Amendment to Fire Apparatus Master Price Agreement

Product Addition and Price Correction

This Amendment to the Master Price Agreement is entered into this 29th day of May 2017 by PUBLIC PROCUREMENT AUTHORITY ("Purchaser") and PIERCE MANUFACTURING, INC. ("Vendor") based upon the sales and/or service of Fire Apparatus.

RECITALS

WHEREAS, Purchaser and Vendor entered into a Master Price Agreement on or about August 13, 2015 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into an Amendment to the Master Price Agreement on or about February 13, 2016 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Second Amendment to the Master Price Agreement on or about March 28, 2016 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Third Amendment to the Master Price Agreement on or about October 31, 2016 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Fourth Amendment to the Master Price Agreement on or about January 31, 2017 and by this reference incorporated herein; and

WHEREAS, Vendor included the Arrow XT Aerial Product Line in its Proposal; and

WHEREAS, new Arrow XT Aerial Products have become available; and

WHEREAS, Vendor has provided notice, on or about May 2, 2017, to include the new Arrow XT Aerial Products at comparable pricing offered for existing Arrow XT Aerial Products in the Master Price Agreement; and

WHEREAS, Vendor adjusted Price List on or about January 31, 2017; and

WHEREAS, Vendor has provided notice on or about April 25, 2017 to correct a scrivener error on the price of an Aerial Product from the January 31, 2017 Price List Update; and

WHEREAS, Purchaser and Vendor desire that the Master Price Agreement shall be amended in part to reflect the product addition and price list correction.

NOW, THEREFORE, Purchaser and Vendor enter into the following:

AMENDMENT TO MASTER PRICE AGREEMENT

1. **Product Addition and Price List Correction.** Attachment A to the Master Price Agreement shall be amended in part to reflect the following product addition and price list correction:

1.0 Aerial Product

ID#	Description	Price
1.27	Arrow XT, Single, 1500 Pump, 107' Aerial	\$975,930.00
1.28	Arrow XT, Single, 2000 Pump, 110' Platform	\$993,564.00
1.29	Arrow XT, Ascendant Tiller NPNT	\$1,244,946.00
1.30	Arrow XT, Ascendant Tiller Quint	\$1,333,686.00

2. **Full Force and Effect.** In each and every other respect, the terms of the Master Price Agreement, as amended, entered into between the parties on or about August 13, 2015 shall remain in full force and effect during the term of the agreement and the parties hereto hereby ratify said Master Price Agreement in its entirety, as if fully set out herein, along with the modifications identified herein.

IN WITNESS WHEREOF, the parties have hereto signed this Amendment on the day and year first above written.

PUBLIC PROCUREMENT AUTHORITY



Date 5/29/17

BY: Heidi Arnold
ITS: Contract Manager

PIERCE MANUFACTURING, INC.



Date 5.29.17.

BY: Kristina Spang
ITS: Sr. Sales Operations Manager

Fourth Amendment to Fire Apparatus Master Price Agreement

Pricing Adjustment

This Amendment to the Master Price Agreement is effective this 31st day of January, 2017 by the PUBLIC PROCUREMENT AUTHORITY ("Purchaser") and Pierce Manufacturing Inc. ("Vendor") based upon the sales and/or service of Fire Apparatus.

RECITALS

WHEREAS, Purchaser and Vendor entered into a Master Price Agreement on or about August 13, 2015 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into an Amendment to the Master Price Agreement on or about February 13, 2016 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Second Amendment to the Master Price Agreement on or about March 28, 2016 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Third Amendment to the Master Price Agreement on or about October 31, 2016 and by this reference incorporated herein; and

WHEREAS, Article 4.1 of the Master Price Agreement provides for price adjustments in six (6) month increments; and

WHEREAS, Vendor has provided notice of pricing adjustment on or about September 9, 2016; and

WHEREAS, Purchaser and Vendor desire that the Master Price Agreement shall be amended in part to reflect the price adjustment;

NOW, THEREFORE, Purchaser and Vendor enter into the following:

FOURTH AMENDMENT TO FIRE APPARATUS MASTER PRICE AGREEMENT

1. **Adjustment to Pricing on Fire Apparatus.** Attachment A to the Master Price Agreement shall be amended in its entirety to read as follows:

Fourth Amendment Price List has been removed, but is available upon request. Current Price List is included in Attachment A in the Amendment set forth at the beginning of this document.

20.0 Water Tanks

PUBLISHED OPTIONS		PRICE RANGE	
9308	Tank, Water, 200 - 500 Gallon, Poly, Aerial	7,345.00	9,868.00
28244	Tank, Water, 500 - 30000 Gallon, Poly	7,380.00	26,772.00

The pricing above is current as of February 1, 2017.

2. **Full Force and Effect.** In each and every other respect, the terms of the Master Price Agreement, as amended, entered into between the parties on or about August 13, 2015 shall remain in full force and effect during the term of the agreement and the parties hereto hereby ratify said Master Price Agreement in its entirety, as if fully set out herein, along with the modifications identified herein.

IN WITNESS WHEREOF, the parties have hereto signed this Amendment on the day and year first above written.

PUBLIC PROCUREMENT AUTHORITY:

Heidi Arnold Date 12/26/16
BY: Heidi Arnold
ITS: Contract Manager

PIERCE MANUFACTURING INC.:

[Signature] Date 12/26/16
BY:
ITS: VP Finance

Third Amendment to Fire Apparatus Master Price Agreement

Dealer List Adjustment

This Amendment to the Master Price Agreement is entered into this 31st day of October, 2016 by PUBLIC PROCUREMENT AUTHORITY ("Purchaser") and PIERCE MANUFACTURING, INC. ("Vendor") based upon the sales and/or service of Fire Apparatus.

RECITALS

WHEREAS, Purchaser and Vendor entered into a Master Price Agreement on or about August 13, 2015 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into an Amendment to the Master Price Agreement on or about February 13, 2016 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Second Amendment to the Master Price Agreement on or about March 28, 2016 and by this reference incorporated herein; and

WHEREAS, Vendor has provided a list of dealers authorized to sell Fire Apparatus under the terms of the Master Price Agreement; and

WHEREAS, Vendor has provided notice, on or about September 19, 2016, that the list of authorized dealers has been updated and can be found electronically online; and

WHEREAS Vendor desires to provide a link where the current list of dealers authorized to sell Fire Apparatus under the terms of the Master Price Agreement can be found online; and

WHEREAS, Purchaser and Vendor desire that the Master Price Agreement shall be amended in part to reflect the addition of the dealer link;

NOW, THEREFORE, Purchaser and Vendor enter into the following:

AMENDMENT TO MASTER PRICE AGREEMENT

1. **Dealer list for Fire Apparatus.** Attachment A to the Master Price Agreement shall be amended in part to include the following link where the current list of

dealers authorized to sell Fire Apparatus under the terms of the Master Price Agreement can be found online:

<http://www.piercemfg.com/find-a-dealer>

2. **Full Force and Effect.** In each and every other respect, the terms of the Master Price Agreement, as amended, entered into between the parties on or about August 13, 2015 shall remain in full force and effect during the term of the agreement and the parties hereto hereby ratify said Master Price Agreement in its entirety, as if fully set out herein, along with the modifications identified herein.

IN WITNESS WHEREOF, the parties have hereto signed this Amendment on the day and year first above written.

PUBLIC PROCUREMENT AUTHORITY:

Heidi Arnold Date 10/31/16
BY: Heidi Arnold
ITS: contract manager

PIERCE MANUFACTURING, INC.:

[Signature] Date 10/28/16
BY:
ITS:

Second Amendment to Fire Apparatus Master Price Agreement

Product Line Addition and Dealer List Update

This Amendment to the Master Price Agreement is entered into this 6th day of March, 2016 by PUBLIC PROCUREMENT AUTHORITY ("Purchaser") and PIERCE MANUFACTURING, INC. ("Vendor") based upon the sales and/or service of Fire Apparatus.

RECITALS

WHEREAS, Purchaser and Vendor entered into a Master Price Agreement on or about August 13, 2015 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into an Amendment to the Master Price Agreement on or about February 13, 2016 and by this reference incorporated herein; and

WHEREAS, Vendor included the Arrow XT Aerial Product Line in Its Proposal; and

WHEREAS, a new Arrow XT Aerial Product has become available; and

WHEREAS, Vendor has provided notice, on or about February 29, 2016, to include the new Arrow XT Aerial Product at comparable pricing offered for existing Arrow XT Aerial Products in the Master Price Agreement; and

WHEREAS, A list of authorized dealers for Vendor is identified in the Master Price Agreement; and

WHEREAS, Vendor has provided notice that the list of authorized dealers has been updated on or about March 6, 2016; and

WHEREAS, Purchaser and Vendor desire that the Master Price Agreement shall be amended in part to reflect the product line addition and authorized dealer list update.

NOW, THEREFORE, Purchaser and Vendor enter into the following:

AMENDMENT TO MASTER PRICE AGREEMENT

1. **Product Addition.** Attachment A to the Master Price Agreement shall be amended in part to reflect the following product addition:

1.0 Aerial Product

ID#	Description	Price
1.27	Arrow XT, Single, 1500 Pump, 107' Aerial	\$759,891.00

2. **Dealer List for Fire Apparatus.** Attachment A to the Master Price Agreement shall be amended in part to replace the list of authorized dealers with the one below:

Principal/Authorized Dealer	Principal	Telephone	Fax	Mailing Address	Email Address
ATLANTIC EMERGENCY SOLUTIONS INC.	JOE PACE	(703) 3939211	(703) 3939244	12351 RANDOLPH RIDGE LANE, MANASSAS VA 20109	jpace@atlanticemergency.com
CHURCHVILLE FIRE EQUIPMENT CORP	STEVE GULVIN	(585)2931888	(585)2931833	348 SANFORD RD S, CHURCHVILLE NY 14625-9548	stevegulvin@churchvillefire.com
CONRAD FIRE EQUIPMENT INC	PAUL SCHULTZ	(813)7805521	(813)7805251	887 N 44TH AVE COURT, CLATHE RS 68061	pauls@conradfire.com
EMERGENCY EQUIPMENT PROFESSIONALS	JEFF KUNTZ	(662)2804728	(662)3427251	PO Box 1739, SOUTHAVEN MS 38671	jkuntz@eeproinc.com
EMERGENCY VEHICLE SPECIALIST	ROBERT WHARTON, JR.	(501) 3273200	(501)3273200	PO BOX 267, MEMPHIS TN 38106	rwharton@evmsmid-south.com
FRINLEY FIRE EQUIPMENT CO INC	JOHN W FRINLEY	(740)9624328*	(740)9626422	20 SOUTH 6TH STREET, MCCONNELSVILLE OH 43768	jwfrinley@frinleyfire.com
FIRE & SAFETY SERVICES LTD	DAVE RUSSELL	(800)4008017	(800)4128613	280 RYAN STREET, SOUTH PLAINFIELD NJ 07080	drussell@f-s-s.com
FIRE APPARATUS & EQUIPMENT INC	LESLIE NILES	(320)5743418*	(320)5743412	P.O. BOX 297, APPLETON WI 54912-0297	nilesleslie@gmail.com
FIREMATIC	PETER C HARRATTY	(631)9243181*	(631)9246202	PO BOX 187, YAPHANE NY 11989-0187	pharratty@firematic.com
FRONT RANGE FIRE APPARATUS LTD	DUANE DOUGETTE	(303)4499911*	(303)4491203	7608 MILLER COURT, LONGMONT CO 80504	ddouane@frontrangefire.com
GLICK FIRE EQUIPMENT CO INC	DOUG GLICK	(717)2994120*	(717)2994324	PO BOX 69, SHOKETOWN PA 17576-0069	doug@glkfire.com
GLOBAL EMERGENCY PRODUCTS	MIKE MIXCOLO, JR.	(630)8984995	(630)9781155	1401 N FARNSWORTH AVE, AURORA IL 60505-1611	mmixcolo@tawco1.com
GOLDEN STATE FIRE APPARATUS INC	RYAN WHISIT	(209)5204422	(209)5204484	1237 DOKER DRIVE, MODESTO CA 95351	ryan@GoldenStateFire.com
HALT FIRE INC	TODD LINCOLN	(248)6890800*	(248)6898120	50168 WEST PONTIAC TRAIL, UNIT 5, WALKOM MI 48393	tlincolln@haltfire.net
HUGHES FIRE EQUIPMENT INC	REX HUGHES	(541)7470072	(541)7470073	910 SPELLEY ST, SPRINGFIELD OR 97477	rhughes@hughesfire.com
MINUTEMAN FIRE AND RESCUE APPARATUS	JEFF FOURNER	(608)6883112*	(608)2168388	2181 PROVIDENCE HIGHWAY, WALPOLE MA 02081	fourner@minutemantrucks.com
NORTH STAR FIRE APPARATUS	BRAD WHITE	(920)4684994	(920)8323517	2600 AMERICAN DRIVE, APPLETON, WI 54914	bwhite@nstarsfire.com
RELIANT FIRE APPARATUS INC	SCOTT KRUEGER	(262) 2976020	(262) 2975022	880 ENTERPRISE DRIVE, PO BOX 470, SLINGER WI 53088	scottk@reliantfire.com
ROSS EQUIPMENT COMPANY INC	MEHRILL ROSS	(801)5662431*	(801)5650671	7285 SOUTH 700 W, MIDVALE UT 84047	merrill@rossequip.com
SCHUHMACHER FIRE EQUIPMENT LLC	JOHN SCHUHMACHER	(636)2393867*	(636)2397830	2000 E 5TH STREET, WASHINGTON MO 63090	jsf312@schuhglobal.net
SIDDONS-MARTIN EMERGENCY GROUP INC	PAT SIDDONS	(281)4426806*	(281)4420850	14233 INTERDRIVE WEST, HOUSTON TX 77032	pat.siddons@siddons-martin.com
SOUTH COAST FIRE EQUIP INC	KEVIN NEWELL	(909)8738900*	(909)8738700	2020 S BAKER AVE, ONTARIO CA 91761	kevin@southcoastfire.net
SPARTAN FIRE & EMERGENCY APPARATUS	ROBERT E FORN IV	(864)5822376*	(864)5822377	319 SOUTHPORT ROAD, BOEBUCK SC 29316	rforne@spartanfire.com
TEN-8 FIRE EQUIPMENT INC	DANN BOUYER	(941)7667719*	(941)7662598	2904 55TH AVE DRE, BRADENTON FL 34203-6312	dannbouyer@ten8fire.com

3. **Full Force and Effect.** In each and every other respect, the terms of the Master Price Agreement, as amended, entered into between the parties on or about August 13, 2015 shall remain in full force and effect during the term of the agreement and the parties hereto hereby ratify said Master Price Agreement in its entirety, as if fully set out herein, along with the modifications identified herein.

IN WITNESS WHEREOF, the parties have hereto signed this Amendment on the day and year first above written.

PUBLIC PROCUREMENT AUTHORITY

Heidi Arnold Date 3/28/16
BY: Heidi Arnold
ITS: Contract Manager

PIERCE MANUFACTURING, INC.

Michael E. Pack Date 3/22/16
BY: Michael E. Pack
ITS: VP Finance

Amendment to Fire Apparatus Master Price Agreement

Pricing Adjustment

This Amendment to the Master Price Agreement is effective as of the 13th day of February, 2016 by the Pueblo Procurement Authority ("Purchaser") and Pierce Manufacturing Inc. ("Vendor") based upon the sales and/or service of Fire Apparatus.

RECITALS

WHEREAS, Purchaser and Vendor entered into a Master Price Agreement on or about August 13, 2015 and by this reference incorporated herein; and

WHEREAS, Article 4.1 of the Master Price Agreement provides for price adjustments in six (6) month increments; and

WHEREAS, Vendor has provided notice of pricing adjustment on or about December 10, 2016; and

WHEREAS, Purchaser and Vendor desire that the Master Price Agreement shall be amended in part to reflect the price adjustment;

* NOW, THEREFORE, Purchaser and Vendor enter into the following:

AMENDMENT TO FIRE APPARATUS MASTER PRICE AGREEMENT

1. Adjustment to Pricing on Fire Apparatus. Attachment A to the Master Price Agreement shall be amended in its entirety to read as follows:

"ATTACHMENT A

to Master Price Agreement by and between VENDOR and PURCHASER.

PRODUCTS, SERVICES, SPECIFICATIONS AND PRICES

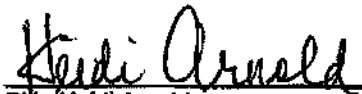
First Amendment Price List has been removed, but is available upon request. Current price list is included in the Attachment A in the Amendment set forth at the beginning of this document.

The pricing above is current as of February 13, 2016.

2. **Full Force and Effect.** In each and every other respect, the terms of the Master Price Agreement, as amended, entered into between the parties on or about August 13, 2015 shall remain in full force and effect during the term of the agreement and the parties hereto hereby ratify said Master Price Agreement in its entirety, as if fully set out herein, along with the modifications identified herein.

IN WITNESS WHEREOF, the parties have hereto signed this Amendment on the day and year first above written.

PUBLIC PROCUREMENT AUTHORITY



Date 1/27/16

BY: Heidi Arnold

ITS: Contract Manager

PIERCE MANUFACTURING INC.



Date 1/27/16

BY: Michael E. Pack

ITS: VP Finance

PUBLIC PROCUREMENT AUTHORITY
MASTER PRICE AGREEMENT

This Master Price Agreement is effective as of the date of the last signature below (the "Effective Date") by and between the PUBLIC PROCUREMENT AUTHORITY ("PPA" or "Purchaser") and PIERCE MANUFACTURING INC. ("Vendor").

RECITALS

WHEREAS, the Vendor is in the business of selling certain FIRE APPARATUS and related products and services, as further described herein; and

WHEREAS, the Vendor desires to sell and the Purchaser desires to purchase certain products and related services all upon and subject to the terms and conditions set forth herein; and

WHEREAS, Purchaser and Vendor desires to extend the terms of this Master Price Agreement to benefit other qualified government members of National Purchasing Partners, LLC dba FireRescue GPO, dba Public Safety GPO, dba Law Enforcement GPO and dba NPPGov;

NOW, THEREFORE, Vendor and Purchaser, intending to be legally bound, hereby agree as follows:

ARTICLE 1 – CERTAIN DEFINITIONS

- 1.1 "Parties" shall mean the Purchaser and Vendor.
- 1.2 "Agreement" shall mean this Master Price Agreement, including the main body of this Agreement and Attachments A-F attached hereto and by this reference incorporated herein, including Purchaser's Request for Proposal RFP No.1420 (herein "RFP") and Vendor's Proposal submitted in response to the RFP (herein "Vendor's Proposal") as referenced and incorporated herein as though fully set forth (sometimes referred to collectively as the "Contract Documents").
- 1.3 "Applicable Law(s)" shall mean all applicable federal, state, and local laws, statutes, ordinances, codes, rules, regulations, standards, orders, and other governmental requirements of any kind.
- 1.4 "Employee Taxes" shall mean all taxes, assessments, charges and other amounts whatsoever payable in respect of, and measured by the wages of, the Vendor's employees (or subcontractors), as required by the Federal Social Security Act and all amendments thereto and/or any other applicable federal, state or local law.
- 1.5 "Purchaser's Destination" shall mean such delivery location(s) or destination(s) as Purchaser may prescribe from time to time.
- 1.6 "Products and Services" shall mean the products and/or services to be sold by Vendor hereunder as identified and described on Attachment A hereto and incorporated herein, as may be updated from time to time by Vendor to reflect products and/or services offered by Vendor generally to its customers.
- 1.7 "Purchase Order" shall mean any authorized written, electronic, or fax order sent or made by Purchaser pursuant hereto, including, but not limited to, written purchase orders, requisitions sent by fax machine,

and orders in such other form and/or mode of transmission as Purchaser and Vendor may from time to time agree. In addition, the parties agree that this Agreement and accepted Purchase Orders constitute a contract for the sale of goods and/or services and satisfy all statutory and legal formalities of a contract.

- 1.8 “Unemployment Insurance” shall mean the contribution required of Vendor, as an employer, in respect of, and measured by, the wages of its employees (or subcontractors) as required by any applicable federal, state or local unemployment insurance law or regulation.
- 1.9 “National Purchasing Partners (NPP)” is a subsidiary of two nonprofit health care systems. The Government Division of NPP, herein after referred to as “NPPGov,” provides group purchasing marketing and administrative support for governmental entities within the membership. NPPGov’s membership includes participating public entities across North America.
- 1.10 “Lead Contracting Agency” shall mean the Public Procurement Authority, which is the governmental entity that issued the Request for Proposal and awarded this resulting Master Price Agreement.
- 1.11 “Participating Agencies” shall mean members of National Purchasing Partners for which Vendor has agreed to extend the terms of this Master Price Agreement pursuant to Article 2.5 and Attachment C herein. For purposes of cooperative procurement, “Participating Agency” shall be considered “Purchaser” under the terms of this agreement.

ARTICLE 2 – AGREEMENT TO SELL

- 2.1 Vendor hereby agrees to sell to Purchaser such Products and Services as Purchaser may order from time to time by Purchase Order and accepted in writing by vendor, all in accordance with and subject to the terms, covenants, and conditions of this Agreement. Products and services may be sold through any authorized Vendor dealer as indicated in Vendor’s Proposal and listed in Attachment A. Vendor’s current authorized dealer list as amended will be available on Vendor website. Purchaser agrees to purchase those Products and Services ordered by Purchaser by Purchase Order in accordance with and subject to the terms, covenants, and conditions of this Agreement. In lieu of a Purchase Order, the customer or vendor contract may be acceptable.
- 2.2 All Purchase Orders issued by Purchaser to Vendor for Products during the Term (as hereinafter defined) of this Agreement are subject to the provisions of this Agreement as though fully set forth in such Purchase Order. The vendor holds authority to negotiate above and beyond the terms of this agreement to meet the customer or vendor contract requirements. In the event that the provisions of this Agreement conflict with any Purchase Order issued by Purchaser to Vendor, the provisions of this Agreement shall govern. No other terms and conditions, including, but not limited to, those contained in Vendor’s standard printed terms and conditions, on Vendor’s order acknowledgment, invoices or otherwise, shall have any application to or effect upon or be deemed to constitute an amendment to or to be incorporated into this Agreement, any Purchase Order, or any transactions occurring pursuant hereto or thereto, unless this Agreement shall be specifically amended to adopt such other terms and conditions in writing by the parties.
- 2.3 Notwithstanding any other provision of this Agreement to the contrary, Purchaser shall have no obligation to order or purchase any Products and Services hereunder and the placement of any Purchase Order shall be in the sole discretion of Purchaser. This Agreement is not exclusive. Vendor expressly acknowledges and agrees that Purchaser may purchase at its sole discretion, Products and Services which are identical or similar to the Products and Services described in this Agreement from any third party.

2.4 Except as otherwise expressly set forth herein, in case of any conflict or inconsistency between any of the Contract Documents, the documents shall prevail and apply in the following order of priority:

- (i) This Agreement;
- (ii) Vendor's Proposal; and
- (iii) The RFP.

Vendor has provided a list of Exceptions to the RFP Solicitation identified in Vendor's Proposal. Vendor's Exceptions to the RFP are hereby **approved** and by this reference incorporated herein.

Notwithstanding the foregoing, to the extent there is any conflict between any provision set forth in the main body of this Agreement and any pricing provisions, information and/or schedule(s) set forth in Vendor's Proposal incorporated as Attachment D, the pricing provisions, information and/or schedule(s) set forth in the Vendor's Proposal shall control.

2.5 Extension of contract terms to National Purchasing Partners, LLC

2.5.1 Pursuant to Section 1.0 of the RFP, Vendor agrees to extend the same terms, covenants and conditions available to Purchaser under this Agreement to other government agencies and non-profit entities that are members of National Purchasing Partners, that have executed an Intergovernmental Cooperative Purchasing Agreement (IGA) as a Participating Agency as may be required by the government agency's local regulations, and that wish to access this Agreement in accordance with Attachment C which is attached hereto and incorporated herein by reference. Each Participating Agency will be exclusively responsible for and deal directly with Vendor on matters relating to ordering, delivery, inspection, acceptance, invoicing, and payment for Products and Services in accordance with the terms and conditions of this Agreement as if it were "Purchaser" hereunder. Any disputes between a Participating Agency and Vendor will be resolved directly between them under and in accordance with the laws of the State in which the Participating Agency exists. Pursuant to the IGA, the Lead Contracting Agency shall not incur any liability as a result of the access and utilization of this Agreement by other Participating Agencies.

2.5.2 *This Solicitation meets the public contracting requirements of the Purchaser and may not be appropriate under or meet Participating Agencies' procurement laws. Participating Agencies are urged to seek independent review by their legal counsel to ensure compliance with all local and state solicitation requirements.*

2.5.3 Vendor acknowledges execution of a Vendor Administration Fee Agreement with National Purchasing Partners, LLC, pursuant to the terms of the RFP.

2.6 Oregon Public Agencies are prohibited from use of products and services offered under this contract that are already provided by qualified nonprofit agencies for disabled individuals as listed on the Department of Administrative Service's Procurement List ("Procurement List") pursuant to ORS 279.835-.855. See www.OregonRehabilitation.org/qrf for more information. Vendor shall not sell products and services identified on the Procurement List (e.g., reconditioned toner cartridges) to Purchaser or Participating Agencies within the state of Oregon or to public institutions in other states with similar restrictions.

ARTICLE 3 – TERM AND TERMINATION

- 3.1 The initial contract term shall be for two (2) calendar years from the effective date of this Agreement. Upon termination of the original two (2) year term, this Agreement shall extend for up to three (3) successive one (1) year periods; provided that the Lead Contracting Agency and/or the proposer may opt to decline extension of the MPA by providing notification in writing at least thirty (30) calendar days prior to the annual extension anniversary of the original term.
- 3.2 Either party may terminate this Agreement by written notice to the other party if the other party breaches any of its obligations hereunder and fails to remedy the breach within thirty (30) days after receiving written notice of such breach from the non-breaching party.

ARTICLE 4 – PRICING, INVOICES, PAYMENT, AND DELIVERY

- 4.1 Purchaser shall pay Vendor for all Products and Services ordered and delivered in compliance with the terms and conditions of this Agreement on the terms and at the pricing specified for each such Product and Service on Attachment A. The pricing schedule for Products and Services set forth on Attachment A hereto shall remain fixed for the initial six (6) months of the Agreement and will be reviewed and updated by Vendor in six (6) month increments based on the next manufacturer price increase or other indicators that warrant price adjustments. This may include but not limited to changes in the National Fire Protection Association (NFPA) standards and/or Environmental Protection Agency (EPA) requirements.

Pricing contained in Attachment A shall be extended to all NPPGov, FireRescue GPO and Law Enforcement GPO members upon execution of the IGA.

- 4.2 Vendor shall submit original invoices to Purchaser in form and substance and format reasonably acceptable to Purchaser. All invoices must reference the Purchaser's Purchase Order number, contain an itemization of amounts for Products and Services purchased during the applicable invoice period and any other information reasonably requested by Purchaser, and must otherwise comply with the provisions of this Agreement and such reasonable requirements as may be prescribed by Purchaser from time to time. Invoices shall be addressed as directed by Purchaser.
- 4.3 Unless otherwise specified, Purchaser is responsible for any and all applicable sales taxes. Applicable sales tax may be added to the Vendor pricing, in which case the Purchaser is not required to pay sales tax direct to the purchaser's state.
- 4.4 Purchaser shall not be responsible for any additional costs or expenses incurred by Vendor in connection with the Products and Services except those set forth in Attachment A and Attachment F, including (but not limited to) the "Pre-Delivery Expenses" section of Attachment F.
- 4.5 Price reductions or discount increases may be offered at any time during the contract term and shall become effective upon notice of acceptance from Purchaser.
- 4.6 Unless otherwise expressly agreed upon in writing by the parties (in a Purchase Order or otherwise), and as set forth in Attachments D and F herein, Vendor shall deliver Products to the requesting Participating Agency FOB Manufacturer's facility. As set forth in Attachment F, Vendor will, upon Participating Agency's request, assist with coordinating transportation of the Product, provided that such shipping/delivery costs are not included in the pricing and will be the sole responsibility of the Participating Agency.

- 4.7 Vendor shall have the risk of loss of or damage to any Products until delivery to Purchaser at shipping point (FOB Manufacturer's facility). Purchaser shall have the risk of loss of or damage to the Products after delivery to Purchaser. Notwithstanding the foregoing, and unless otherwise expressly agreed to by the Parties in writing, title to Products shall not transfer to Purchaser until Purchaser has fully satisfied all of its payment obligations hereunder. Note: final payment is different than an elected pre-payment, and cannot to be used interchangeable.

ARTICLE 5 – INSURANCE

- 5.1 During the term of this Agreement, Vendor shall maintain at its own cost and expense (and shall cause any subcontractor to maintain) insurance policies providing insurance of the kind and in the amounts generally carried by reasonably prudent manufacturers in the industry, with one or more reputable insurance companies licensed to do business in Oregon and any other state or jurisdiction where Products and Services are sold hereunder. Such certificates of insurance shall be made available to the PPA within thirty (30) days of request.
BY SIGNING THE AGREEMENT PAGE THE VENDOR AGREES TO THIS REQUIREMENT AND FAILURE TO MEET THIS REQUIREMENT WILL RESULT IN CANCELLATION OF THIS MASTER PRICE AGREEMENT.
- 5.2 All insurance required herein shall be maintained in full force and effect until all work or service required to be performed under the terms of the Master Price Agreement is satisfactorily completed and formally accepted. Any failure to comply with the claim reporting provisions of the insurance policies or any breach of an insurance policy warranty shall not affect coverage afforded under the insurance policies to protect the Public Procurement Authority. The insurance policies may provide coverage that contains deductibles or self-insured retentions. Such deductible and/or self-insured retentions shall not be applicable with respect to the coverage provided to the Public Procurement Authority under such policies. Vendor shall be solely responsible for the deductible and/or self-insured retention and the Public Procurement Authority, at its option, may require Vendor to secure payment of such deductibles or self-insured retentions by a surety bond or an irrevocable and unconditional letter of credit.
- 5.3 Vendor shall carry Workers' Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction over Vendor's employees engaged in the performance of the work or services, as well as Employer's Liability insurance. Vendor waives all rights against the Public Procurement Authority and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by the Workers' Compensation and Employer's Liability or commercial umbrella liability insurance obtained by Vendor pursuant to this agreement.
- 5.4 Insurance required herein shall not be permitted to expire, be canceled, or materially changed without prior written notice to the Public Procurement Authority. The Public Procurement Authority will be sent an updated certificate of insurance twice annually with current effective policies.
- 5.5 Notwithstanding the foregoing, to the extent there is any conflict between any provision set forth in Article 5 of this Agreement and any insurance provisions, information and/or certificate(s) set forth in or attached to Vendor's Proposal incorporated as Attachment D, the insurance provisions, information and/or certificate(s) set forth in or attached to Vendor's Proposal shall control.

ARTICLE 6 – INDEMNIFICATION AND HOLD HARMLESS

- 6.1 Vendor agrees that it shall indemnify, defend and hold harmless Purchaser, its respective officials, directors, employees and agents (collectively, the “Indemnities”), and National Purchasing Partners, LLC from and against any and all damages, claims, proceedings, losses, expenses, costs, obligations and liabilities (including without limitation reasonable attorney’s fees), suffered directly or indirectly by any of the Indemnities to the extent, or arising out of any third-party claim alleging: (i) any breach of any covenant, representation or warranty made by Vendor in this Agreement, (ii) any failure by Vendor to perform or fulfill any of its obligations, covenants or agreements set forth in this Agreement, (iii) the negligence or intentional misconduct of Vendor, any subcontractor of Vendor, or any of their respective employees or agents, (iv) any failure of Vendor, its subcontractors, or their respective employees to comply with any Applicable Law, (v) any litigation, proceeding or claim by any third party relating in any way to the obligations of Vendor under this Agreement or Vendor’s performance under this Agreement, (vi) any Employee Taxes or Unemployment Insurance, or (vii) any claim alleging that the Products and Services or any part thereof infringe any third party’s U.S. patent, copyright, trademark, trade secret or other intellectual property interest. Such obligation to indemnify shall not apply where the damage, claim, loss, expense, cost, obligation or liability is due to the breach of this Agreement by, or negligence or willful misconduct of, Purchaser or its officials, directors, employees, agents or contractors. In addition, Vendor shall not be liable for infringement claims related to nonstandard or special-order product, the design of which is provided to Vendor by Purchaser. The amount and type of insurance coverage requirements set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph. The provisions of this Article shall survive the expiration or termination of this Agreement.
- 6.2 LIMITATION OF LIABILITY: IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT, INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR INJURIES TO PERSONS OR TO PROPERTY OR LOSS OF PROFITS OR LOSS OF FUTURE BUSINESS OR REPUTATION, WHETHER BASED ON TORT OR BREACH OF CONTRACT OR OTHER BASIS, EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.
- 6.3 The same terms, conditions and pricing of this Agreement may be extended to government members of National Purchasing Partners, LLC. In the event the terms of this Agreement is extended to other government members, each government member (procuring party) shall be solely responsible for the ordering of goods and services under this Agreement. A non-procuring party shall not be liable in any fashion for any violation by a procuring party, and the procuring party shall hold non-procuring parties or unrelated purchasing parties harmless from any liability that may arise from action or inaction of the procuring party.

ARTICLE 7 – WARRANTIES

Purchaser shall refer to Vendor’s Proposal for all Vendor and manufacturer express warranties, as well as those warranties provided under Attachment B herein. Warranties tie to the specific unit purchased at time of sale.

ARTICLE 8 - INSPECTION AND REJECTION

- 8.1 Purchaser shall have the right to inspect and test Products at any time prior to shipment from Manufacturer's facility. Products for which a written notice of defect has not been delivered to the Vendor within fifteen (15) days prior to delivery shall be deemed accepted by Purchaser. The payment for Products shall in no way impair the right of Purchaser to reject nonconforming Products, or to avail itself of any other remedies to which it may be entitled.
- 8.2 If any of the Products are found at any time to be materially defective in material or workmanship, damaged, or otherwise not in conformity with the requirements of this Agreement or any applicable Purchase Order, and a written notice of defect has been delivered to the Vendor within fifteen (15) days of delivery, as its exclusive remedy, Purchaser may at its option and at Vendor's sole cost and expense, elect either to (i) return any damaged, non-conforming or defective Products to Vendor for correction or replacement, or (ii) require Vendor to inspect the Products and remove or replace damaged, non-conforming or defective Products with conforming Products. If Purchaser elects option (ii) in the preceding sentence and Vendor fails within thirty (30) days of written notice thereof to initiate the necessary inspection, removal and replacement, Purchaser, at its option, may inspect the Products and Vendor shall bear the cost thereof. Payment by Purchaser of any invoice shall not constitute acceptance of the Products covered by such invoice, and acceptance by Purchaser shall not relieve Vendor of its warranties or other obligations under this Agreement.
- 8.3 The provisions of this Article shall survive the expiration or termination of this Agreement.

ARTICLE 9 – SUBSTITUTIONS

Except as otherwise permitted hereunder, Vendor may not make any substitutions of Products, or any portion thereof, of any kind without the prior written consent of Purchaser. However vendor substitutions that do not change the fit, form, and/or function of the product and are insignificant in nature, such as cosmetic changes, do not require prior written consent.

ARTICLE 10 - COMPLIANCE WITH LAWS

- 10.1 Vendor agrees to comply with all Applicable Laws. At Vendor's expense, secure and maintain in full force during the term of this Agreement, all licenses, permits, approvals, authorizations, registrations and certificates, if any, required by Applicable Laws in connection with the performance of its obligations hereunder. At Purchaser's request, Vendor shall provide to Purchaser copies of any or all such licenses, permits, approvals, authorizations, registrations and certificates.
- 10.2 Purchaser has taken all required governmental action to authorize its execution of this Agreement and there is no governmental or legal impediment against Purchaser's execution of this Agreement or performance of its obligations hereunder.

ARTICLE 11 – PUBLICITY / CONFIDENTIALITY

- 11.1 Except as otherwise expressly authorized herein, no news releases, public announcements, advertising materials, or confirmation of same, concerning any part of this Agreement or any Purchase Order issued hereunder shall be issued or made without the prior written approval of the parties or the commencement of the agreement to the public forum. Neither party shall in any advertising, sales materials or in any other

way use any of the names or logos of the other party without the prior written approval of the other party or the commencement of the agreement to the public forum. The vendor is to market this program as an avenue to procure fire apparatus and will require marketing material to promptly initiate awareness including but not limited to names and logos. Notwithstanding the foregoing, following the completion of a sale to any Participating Agency hereunder, Vendor shall have the right to make general news releases and/or public announcements confirming the sale of a Product to such Participating Agency without the prior written approval of the parties, so long as such general news release and/or public announcement do not reference this Agreement (and/or any of the terms, covenants, and conditions set forth herein).

- 11.2 Any knowledge or information which Vendor or any of its affiliates shall have disclosed or may hereafter disclose to Purchaser, and which in any way relates to the Products and Services covered by this Agreement shall not, unless otherwise designated by Vendor, be deemed to be confidential information, and shall be acquired by Purchaser, free from any confidentiality restrictions, as part of the consideration for this Agreement. Note: designation of confidential material required and to be retained by Vendor.

ARTICLE 12 - RIGHT TO AUDIT

Subject to Vendor's reasonable security and confidentiality procedures, Purchaser, or any third party retained by Purchaser, may at any time upon prior reasonable notice to Vendor, during normal business hours, audit the books, records and accounts of Vendor to the extent that such books, records and accounts pertain to sale of any Products and Services hereunder or otherwise relate to the performance of this Agreement by Vendor and are related to a sale which has been made hereunder this agreement. Vendor shall maintain all such books, records, and accounts for a period of at least three (3) years after the date of expiration or termination of this Agreement. The Purchaser's right to audit under this Article 12 and Purchaser's rights hereunder shall survive the expiration or termination of this Agreement for a period of three (3) years after the date of such expiration or termination.

ARTICLE 13 - REMEDIES

Except as otherwise provided herein, any right or remedy of Vendor or Purchaser set forth in this Agreement shall not be exclusive, and, in addition thereto, Vendor and Purchaser shall have all rights and remedies under applicable law, including without limitation, equitable relief. The provisions of this Article shall survive the expiration or termination of this Agreement.

ARTICLE 14 - RELATIONSHIP OF PARTIES

Vendor is an independent contractor and is not an agent, servant, employee, legal representative, partner or joint venturer of Purchaser. Nothing herein shall be deemed or construed as creating a joint venture or partnership between Vendor and Purchaser. Neither party has the power or authority to bind or commit the other.

ARTICLE 15 - NOTICES

All notices required or permitted to be given or made in this Agreement shall be in writing. Such notice(s) shall be deemed to be duly given or made if delivered by hand, by certified or registered mail or by nationally recognized overnight courier to the address specified below:

If to Purchaser:
Public Procurement Authority
25030 SW Parkway Ave.
Suite 330
Wilsonville OR 97070
ATTN: Heidi Arnold

If to Vendor:
Pierce Manufacturing Company
2600 American Drive
Appleton, WI 54914
ATTN: Mark Smith

Either party may change its notice address by giving the other party written notice of such change in the manner specified above.

ARTICLE 16 - FORCE MAJEURE

Delay in performance or non-performance of any obligation contained herein shall be excused to the extent such failure or non-performance is caused by force majeure. For purposes of this Agreement, "force majeure" shall mean any cause or agency preventing performance of an obligation which is beyond the reasonable control of either party hereto, including without limitation, fire, flood, sabotage, shipwreck, embargo, strike, explosion, labor trouble, accident, riot, acts of governmental authority (including, without limitation, acts based on laws or regulations now in existence as well as those enacted in the future), acts of God, and delays or failure in obtaining raw materials, supplies or transportation. A party affected by force majeure shall promptly provide notice to the other, explaining the nature and expected duration thereof, and shall act diligently to remedy the interruption or delay if it is reasonably capable of being remedied. In the event of a force majeure situation, deliveries or acceptance of deliveries that have been suspended shall not be required to be made upon the resumption of performance.

ARTICLE 17 - WAIVER

No delay or failure by either party to exercise any right, remedy or power herein shall impair such party's right to exercise such right, remedy or power or be construed to be a waiver of any default or an acquiescence therein; and any single or partial exercise of any such right, remedy or power shall not preclude any other or further exercise thereof or the exercise of any other right, remedy or power. No waiver hereunder shall be valid unless set forth in writing executed by the waiving party and then only to the extent expressly set forth in such writing.

ARTICLE 18 - PARTIES BOUND; ASSIGNMENT

This Agreement shall inure to the benefit of and shall be binding upon the respective successors and assigns of the parties hereto, but it may not be assigned in whole or in part by Vendor without the prior written consent of Purchaser which shall not be unreasonably withheld or delayed. Vendor shall not delegate its duties under this Agreement nor assign monies due or to become due to it hereunder without prior written consent of Purchaser. Purchaser may freely assign this Agreement to an instrumentality thereof or to a third party responsible for administering this Agreement on behalf of Purchaser.

ARTICLE 19 - SEVERABILITY

To the extent possible, each provision of this Agreement shall be interpreted in such a manner as to be effective and valid under applicable law. If any provision of this Agreement is declared invalid or unenforceable, by judicial determination or otherwise, such provision shall not invalidate or render unenforceable the entire Agreement, but rather the entire Agreement shall be construed as if not containing the particular invalid or unenforceable provision or provisions and the rights and obligations of the parties shall be construed and enforced accordingly.

ARTICLE 20 - INCORPORATION; ENTIRE AGREEMENT

- 20.1 All the provisions of the Attachments hereto are hereby incorporated herein and made a part of this Agreement. In the event of any apparent conflict between any provision set forth in the main body of this Agreement and any provision set forth in the Attachments, including the RFP and/or Vendor's Proposal, the provisions shall be interpreted, to the extent possible, as if they do not conflict. In the event that such an interpretation is not possible, the provisions set forth in the main body of this Agreement shall control; provided, however, that, notwithstanding the foregoing, to the extent there is any conflict between any provision set forth in the main body of this Agreement and any pricing provisions, information and/or schedule(s) set forth in Vendor's Proposal incorporated as Attachment D, the pricing provisions, information and/or schedule(s) set forth in the Vendor's Proposal shall control.
- 20.2 This Agreement (including Attachments and Contract Documents hereto) constitutes the entire agreement of the parties relating to the subject matter hereof and supersedes any and all prior written and oral agreements or understandings relating to such subject matter.

ARTICLE 21 - HEADINGS

Headings used in this Agreement are for convenience of reference only and shall in no way be used to construe or limit the provisions set forth in this Agreement.

ARTICLE 22 - MODIFICATIONS

This Agreement may be modified or amended only in writing executed by both parties hereto.

ARTICLE 23 - GOVERNING LAW

This Agreement shall be governed by and interpreted in accordance with the laws of the state of Oregon or in the case of a Participating Agency's use of this agreement, the laws of the state in which the Participating Agency exists, without regard to its choice of law provisions.

ARTICLE 24 - COUNTERPARTS

This Agreement may be executed in counterparts all of which together shall constitute one and the same Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year last written below.

PURCHASER:

Signature: _____

Heidi Arnold

Printed Name: _____

Heidi Arnold

Title: _____

Contracts Manager

Public Procurement Authority

Dated: _____

Aug 13, 2015

VENDOR:

Signature: _____

Michael Pack

Printed Name: _____

Michael Pack

Title: _____

VP Finance

Pierce Manufacturing Company

Dated: _____

8-13-15

ATTACHMENT A

to Master Price Agreement by and between VENDOR and PURCHASER.

PRODUCTS, SERVICES, SPECIFICATIONS AND PRICES

Original Price List has been removed but is available upon request. Current Price List is included in Attachment A in the Amendment set forth at the beginning of this document.

ATTACHMENT B

to Master Price Agreement by and between VENDOR and PURCHASER.

ADDITIONAL SELLER WARRANTIES

To the extent possible, Vendor will make available all warranties from third party manufacturers of Products not manufactured by Vendor, as well as any warranties identified in this Agreement and Vendor's Proposal.

Warranty

Option #	Description	Category
0652758	Warranty, ABS Brake System, 3 Year, Meritor Wabco, WA0232	Warranty, ABS, Custom
0057002	Warranty, Structure, 10 Year, Aerial Device, Sky Arm, WA0053	Warranty, Aerial Device
0006999	Warranty, Structure, 20 Year, Aerial Device, WA0052	Warranty, Aerial Device
0685727	Warranty, Hydraulic System and Components, 3 Year/5 Year, WA0200	Warranty, Aerial Device, Added
0632349	Warranty, Aerial Device, Snozzle, WR0007	Warranty, Aerial Device, Snozzle
0595780	Warranty, Service, 1 Year, Refurb, WA0032	Warranty, Body, Structural
0596025	Warranty, Structure, 10 Year, Body, WA0009	Warranty, Body, Structural
0596022	Warranty, Structure, 10 Year, Encore Rescue, WA0016	Warranty, Body, Structural
0596023	Warranty, Structure, 10 Year, PMFD Rescue, WA0015	Warranty, Body, Structural
0596024	Warranty, Structure, 15 Year, HDR, WA0010	Warranty, Body, Structural
0596027	Warranty, Structure, 2 Year, Mini Pumper, WA0001	Warranty, Body, Structural
0596026	Warranty, Structure, 5 Year, Tanker/Pumper, WA0005	Warranty, Body, Structural
0019914	Warranty, Structure, 10 Year, Custom Cab, WA0012	Warranty, Cab
0695416	Warranty, Pierce Camera System, WA0188	Warranty, Camera System
0553301	Warranty, Chassis, 3 Year, Velocity/Impel, WA0037	Warranty, Chassis
0596017	Warranty, Frame, 50 Year, Custom Chassis, WA0013	Warranty, Chassis Frame
0681622	Warranty, Basic Vehicle, 1 yr or 100,000 Miles, KW-T800	Warranty, Chassis, Commercial
0681665	Warranty, Basic Vehicle, 1 yr or 100,000 Miles, Peterbilt 367	Warranty, Chassis, Commercial
0681666	Warranty, Basic Vehicle, 1 yr, IHC 7400/7500/7600	Warranty, Chassis, Commercial
0681667	Warranty, Basic Vehicle, 1 yr, KW-T370	Warranty, Chassis, Commercial
0648597	Warranty, Basic Vehicle, Severe Service, 1 yr or 50,000 Miles Peterbilt	Warranty, Chassis, Commercial
0648403	Warranty, Basic Vehicle, Severe Service, 1 yr or 50,000 Miles, Kenworth	Warranty, Chassis, Commercial
0648375	Warranty, Basic Vehicle, Severe Service, 1 yr or 80,000 Km, Canada, Kenworth	Warranty, Chassis, Commercial
0648376	Warranty, Basic Vehicle, Severe Service, 1 yr or 80,000 Km, Canada, Peterbilt	Warranty, Chassis, Commercial
0638262	Warranty, Basic Vehicle, 5 yrs/100,000 Miles, FXP	Warranty, Chassis, Commercial
0553455	Warranty, Electronics, 5 Year, MUX, WA0014	Warranty, Command Zone Body
0647720	Warranty, Pierce LED Strip Lights, WA0203	Warranty, Compartment Lights

Option #	Description	Category
0696698	Warranty, Engine, Cummins, 5 Year, WA0181	Warranty, Engine
0696696	Warranty, Engine, Detroit DD13, 5 Year, WA0180	Warranty, Engine
0030008	Warranty, Basic, 1 Year, Apparatus, WA0008	Warranty, Fire Apparatus
0080020	Warranty, Commercial Chassis, Statement Not Required	Warranty, Fire Apparatus
0657846	Warranty, Foam System, Husky 12, WA0231	Warranty, Foam System
0657990	Warranty, Foam System, Husky 3, WA0231	Warranty, Foam System
0595424	Warranty, Frame, 10 Year, Encore Rescue, WA0017	Warranty, Frame, Encore Rescue, Commercial Chassis
0663011	Warranty, Axle, 1 Year, Marmon Harrington, General Service	Warranty, Front Axle
0530523	Warranty, Axle, 2 Year, Meritor, General Service, WA0046	Warranty, Front Axle
0595698	Warranty, Axle, 3 Year, TAK-4, WA0050	Warranty, Front Axle
0696094	Warranty, Axle, Eaton/Dana, 3 Year Parts and Labor, WA0184	Warranty, Front Axle
0595421	Warranty, Goldstar, 3 Year, Apparatus, WA0018	Warranty, Graphics
0595412	Warranty, Graphics Lamination, 1 Year, Apparatus, WA0168	Warranty, Graphics
0524627	Warranty, Electronics, 5 Year, MUX, WA0014	Warranty, Multiplexed Electrical System
0661058	Warranty, Electronics, Weldon V-MUX	Warranty, Multiplexed Electrical System
0595860	Warranty, Paint, 4 Year, Aerial Device, Pro-Rated, WA0047	Warranty, Paint, Aerial Device
0595820	Warranty, Paint, 10 Year, Body, Pro-Rate, WA0057	Warranty, Paint, Body
0595547	Warranty, Paint, 12 Year, S/S Body, Pro-Rate, WA0058	Warranty, Paint, Body
0595282	Warranty, Cab Paint, As Provided By Chassis Manufacturer, Commercial	Warranty, Paint, Cab
0595813	Warranty, Paint, 10 Year, Cab, Pro-Rate, WA0055	Warranty, Paint, Cab
0648675	Warranty, 10 Year S/S Pumbing, WA0035	Warranty, Plumbing
0035034	Warranty, Plumbing, Standard	Warranty, Plumbing
0582298	Warranty, Pump, Darley, 3 Year Parts, 3 Year Labor, WA0179	Warranty, Pump
0582368	Warranty, Pump, Darley, 6 Year Parts, 3 Year Labor, WA0179	Warranty, Pump
0639206	Warranty, Pump, Hale, 1 Year Parts, WA0248	Warranty, Pump
0639211	Warranty, Pump, Hale, 5 Year Parts, 2 Year Labor, WA0248	Warranty, Pump
0516693	Warranty, Pump, Pierce, PUC, 6 Year, WA0039	Warranty, Pump
0004575	Warranty, Pump, Waterous, 2 Year Parts, WA0227	Warranty, Pump
0063510	Warranty, Pump, Waterous, 5 Year Parts, WA0225	Warranty, Pump

Option #	Description	Category
0530524	Warranty, Axle, 2 Year, Meritor, General Service, WA0046	Warranty, Rear Axle
0644874	Warranty, Axle, 3 Year, TAK-4, IRS, WA0249	Warranty, Rear Axle
0564751	Warranty, Axle, Eaton/Dana, 3 Year Parts and Labor, WA0184	Warranty, Rear Axle
0693126	Warranty, AMDOR, Roll-up Door, 10 Year/5 Year Painted, WA0185	Warranty, Roll-up Doors
0693127	Warranty, Gortite, Roll-up Door, 6 Year, WA0190	Warranty, Roll-up Doors
0681118	Warranty, ROM, Roll-up Door, 7 Year, WA0206	Warranty, Roll-up Doors
0684953	Warranty, Steering Gear, Sheppard M110, 3 Year WA0201	Warranty, Steering Gear
0684952	Warranty, Steering Gear, TRW Ross TAS, 1 Year WA0202	Warranty, Steering Gear
0687388	Warranty, Swivels, 5 Year, Aerial Device, WA0197	Warranty, Swivels, Aerial Device
0001508	Warranty, 1-year Transmission (std MT)	Warranty, Transmission
0021516	Warranty, 5-Year EVS Transmission, Standard Comm, WA0187	Warranty, Transmission
0060356	Warranty, Transmission, Standard Ford	Warranty, Transmission
0685945	Warranty, Transmission Cooler, WA0216	Warranty, Transmission Cooler
0688798	Warranty, Water Tank, Lifetime, UPF, Poly Tank, WA0195	Warranty, Water Tank

ATTACHMENT C

to Master Price Agreement by and between VENDOR and PURCHASER.

PARTICIPATING AGENCIES

Purchaser served as the Lead Contracting Agency in cooperation with National Purchasing Partners and on behalf of other government agencies that desire to access the Master price Agreement. Vendor must deal directly with any Participating Agency concerning the placement of orders, issuance of the purchase orders, contractual disputes, invoicing, and payment. The Purchaser is acting as "Lead Contracting Agency" for the Participating Agencies and shall not be held liable for any costs, damages, etc., incurred by any Participating Agency.

The subsequent contract shall be construed to be in accordance with and governed by the laws of the state in which the Participating Agency exists. Each Participating Agency is required to execute an Intergovernmental Cooperative Purchasing Agreement ("IGA"), as set forth on the National Purchasing Partners web site, www.nppgov.com and www.firerescue-gpo.com. The IGA allows the Participating Agency to purchase Products and Services from the Vendor in accordance with each Participating Agency's legal requirements.

ATTACHMENT D

to Master Price Agreement by and between VENDOR and PURCHASER.

Pierce Manufacturing, Inc's proposal in response to PPA RFP #1420 FIRE APPARATUS, published on October 22, 2014 and submitted on February 12, 2015 to the Public Procurement Authority is not attached hereto but is incorporated by reference herein.

ATTACHMENT E

to Master Price Agreement by and between VENDOR and PURCHASER.

Public Procurement Authority's Request for Proposal #1420 FIRE APPARATUS, published on October 22, 2014 and closing on February 12, 2015 is not attached hereto but is incorporated by reference herein.

ATTACHMENT F

to Master Price Agreement by and between **VENDOR** and **PURCHASER**.

ADDITIONAL VENDOR TERMS OF PURCHASE

This attachment includes the following:

- Performance Bonds
- Pre-Payment Discount
- Pre-Delivery Expenses
- Transportation Expenses
- Manuals
- Service
- Training

Performance Bonds

A performance bond is a surety bond issued to guarantee satisfactory completion of a project by a contractor. In other words, it is a guarantee that if a Manufacturer goes out of business or bankrupt the Fire Department will not be at a loss. This is especially important if pre-payment options are elected. If a customer does not require a performance bond and makes any payment in advance, the customer could potentially be out those funds and not receive the apparatus they purchased. The rate for a performance bond is set for a given manufacturer by a surety company that has evaluated the manufacturer's ability to satisfy contractual obligations, the lower the rate the more confidence the surety company is expressing in the manufacturer. Pierce Manufacturing Inc. can currently provide a performance bond at a cost of \$2.70 per \$1,000.00 of contract amount. The actual rate will vary from time to time.

Payment & pricing options:

Chassis Progress Payment Discount: Discount of approximately 2.5% to 3% of custom chassis price is offered if chassis progress payment is made three (3) months prior to the RFP (ready for pick up from the factory) date. Example: Chassis progress payment in the amount of \$220,714.00 could earn a discount of (\$6,621.00). This discount is not available for Commercial chassis products.

Aerial Device Progress Payment Discount: Discount of approximately 1.5% to 2% of aerial device price is offered if aerial device progress payment is made two (2) months prior to the RFP (ready for pick up from the factory) date. Example: Aerial device progress payment in the amount of \$310,385.00 could earn a discount of (\$6,207.00).

Pre-Payment Discount

Discount amount varies dependent upon apparatus price, delivery schedule, and extent of pre-payment and applicable rate. If elected, payment for the entire contract amount is due within thirty (30) days of contract

execution. This deduction is in addition to all other discounts listed above. If this option is elected, final payment for any changes processed during manufacturing is due prior to the unit leaving the factory for delivery.

Multi-Unit Purchase Discount:

Discounts may be available for identical multi-unit purchases. Discount varies dependent upon number of identical units purchased and will be handled on a case by case basis.

Pre-Delivery Expenses

Dealer provided options can be added to the apparatus contract upon request and will be handled by the Pierce authorized dealer. Dealer provided options can vary depending upon the customer's request and can include but are not limited to the items listed below. Pricing will be provided to each customer upon request and varies by dealership and customer location.

- Factory inspection trips
- Weekly construction photo progress reports beginning at the cab weld stage and typically ending one week prior to the RFP date. Includes approximately 6 reports.
- Orientation DVD specific to your apparatus
- Loose Equipment
- Engine and or transmission diagnostic software
- Monitors
- Hose
- Intercom System
- Radio Equipment
- Rescue Tools and Equipment
- Pre delivery service consisting of basic fluid and filter's
- Custom fabrication for tool mounting and communication equipment
- Other items as requested by customer

Transportation Expenses

Prices quoted in PPA RFP #1420 are FOB Manufacturer's facility. Transportation of the apparatus from the factory to the customer's facility can be added to the contract. In most cases the apparatus is delivered to the Pierce authorized dealer facility in your area for a Pre-Delivery inspection and the installation of any dealer provided options, if applicable. If there is not a Pierce authorized dealer facility in close proximity to your location the apparatus may be delivered directly to your facility. The cost for this transportation varies dependent upon the type of apparatus and the proximity of your facility to the location of the manufacturer's facility. Delivery is conducted in accordance with DOT regulations.

Delivery charges can vary from as low as \$1,000.00 to as high as \$15,000.00 or more if flatbed, barge, or container ship transport is required.

If delivery is added to the contract, upon arrival of the apparatus from the factory at the authorized dealer

facility, a pre-delivery inspection is conducted to address any issues that may have arisen during transportation from the factory. Below is an example of the in-depth inspection provided by Hughes Fire Equipment, Inc. on apparatus sold within their authorized sales territory. Pre-delivery inspections may vary slightly among Pierce authorized dealerships.

1. Fill Water Tank, monitor tank level gauge for accuracy, check for leaks or seepage into foam tanks
2. Check all engine and drive train fluid levels, such as engine oil, transmission fluid, differential oil, power steering fluid, wheel hub oil, engine coolant; pump transmission fluid, cab lift fluid, windshield wiper fluid, ladder rack fluid etc.
3. Check all compartment doors for adjustment
4. Check all compartment lighting
5. Operate all equipment racks and reels for proper extension and retraction
6. Check calibration of CZ II time and temperature, set for local time zone
7. Fill foam cells with water, add dye packet or soap solution, and check for external leaks as well as seepage into the water tank. Monitor foam level gauge for accuracy.
8. Check tire pressure, set as needed
9. Torque all wheel lug nuts
10. Torque suspension U-bolts to manufacturer spec's
11. Grease chassis
12. Inspect hoses and wiring harnesses for proper routing and signs of abrasion
13. Verify operation of all water pump components including primer pump fluid level, dry vacuum test, pressure governor/relief valve, transfer valve, cap all discharges and check for gauge accuracy
14. Verify operation of all foam system components (use dyed water or soap solution to simulate foam) including foam system hydraulic fluid level, while discharging water operate system, verify color/bubbly water in each discharge plumbed for foam, flush system, verify operation of fill pump if equipped
15. Operate generator or inverter including check hydraulic fluid level (PTO driven), check engine oil (engine driven), operate all 120v lighting and appliances, verify power at all cord reels
16. Operate all external lights and warning systems including headlights, turn signals, hazards, brake lights, backup lights, emergency lighting, 12v scene lighting, perimeter (step/pump panel) lighting, siren/air horn/electric horn
17. Verify the operation of all interior controls in the cab including heater/ac, windshield wipers, electric mirrors, electric windows, high idle, verify warning alarm and light, "do not move truck"
18. Drain water tank, foam cells and water pump prior to delivery to customer
19. Burnish brakes, custom chassis only
20. Address any issues that developed during transportation of apparatus from factory
21. Fill fuel tank prior to delivery to customer
22. Wash and detail
23. Delivery apparatus to customer facility if required by contract

If any warranty repair items arise during the Pre-delivery inspection they are addressed and repaired prior to delivery of the apparatus to the customer when possible. If delivery of the apparatus to the customer's facility occurs prior to completion of an open warranty item a service technician is sent to the customer's facility to complete such repairs under warranty when possible.

Manuals

The manufacturer shall supply at time of delivery, complete operation and maintenance manuals covering the complete apparatus as delivered. A permanent plate shall be mounted in the driver's compartment which specifies the quantity and type of fluid required including engine oil, engine coolant, transmission, pump transmission lubrication, pump primer and drive axle.

Service

The authorized Pierce dealer is able to render prompt service and furnish replacement parts in addition to operating a factory authorized service center and parts repository capable of satisfying the warranty service requirements and parts requirements of the vehicle(s) being purchased.

The Pierce authorized Dealer has staffing of factory-trained mechanics, well versed in all aspects of service for all major components of the apparatus.

As the manufacturer, facilities are available in Appleton, WI, Weyauwega, WI, and Bradenton, FL. These facilities are equipped with factory personnel and inventory in excess of \$5 million in inventory dedicated to service and replacement parts to ensure quick response and minimize down time.

Furthermore, Pierce Manufacturing Inc. houses inventory in a dedicated facility, with a dedicated shipping area that ensures service parts are given priority and extends a customized, Pierce aftermarket website for authorized Dealers to conduct business in real-time.

Parts identification is provided to both the dealer and the Fire Department through an on line web based application for the specific truck. Access will be granted using the specific VIN number of the vehicle and the online web application provides the ability to view complete bills of materials, digital photographs, parts drawings, assembly drawings, and access to all current operation, maintenance and service publications. The end user can access this information via the Guest Login.

Pierce Manufacturing Inc. maintain a 24 hour/ 7 day a week, toll free emergency hot line and employs a staff of 30+ dedicated individuals to troubleshooting and parts support.

Both Pierce and their authorized Dealers are capable of providing both in-house and on-site service for the apparatus along with training per request.

Replacement parts and various levels of service after delivery are available from your local Pierce authorized dealer, including but not limited to those shown below:

SERVICE:

- Warranty repair for Pierce product line for all items with the exception of those that must be handled directly by the component manufacture such as engine etc.
- Direct access to Pierce technical support
- Routine preventative maintenance
- Annual aerial ladder testing

- Pump testing
- Ground ladder testing
- NFPA 1911 annual inspections maintenance and testing
- Repairs from small minor issues to major overhauls and many other services
- Dealer repair services extend to most other fire and emergency rescue product lines in addition to Pierce Manufacturing
- Service provided by EVT, ASE, Pierce and industry specific certified technicians
- All Pierce authorized sales and service dealer have access to Pierce's extensive level of technical and customer service support staff

PARTS:

- OEM supplier of large assortment of products supplied with fire and emergency rescue vehicles
- Large inventory of parts on-site - Example: Hughes Fire facilities inventory over \$400,000.00 worth of over 2000 of the most commonly required parts and components required for apparatus repair. This level of inventory enables "out of service" time to be kept to a bare minimum.
- All Pierce authorized sales and service dealers have access to Pierce's extensive level of replacement parts inventory, which is in excess of \$5M as well as any Pierce required fabrication services

Training

Every aerial product purchase has training included with a Pierce certified trainer that performs onsite operational training.

Customer Service also offers operational and maintenance training throughout the calendar year at regional locations for a nominal fee per person. List of classes offered can be viewed at any time and registered online at www.pierceparts.com.



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Resolutions – Adoption

Key Element: Key 6 - Community Amenities

Subject:

Resolution No. 68-18, Authorizing Submission of a Grant Application to the Washington State Recreation and Conservation Office

Department:

Parks & Public Facilities

Ordinance/Resolution Number:

68-18

Document Type:

Resolution

Recommended Motion:

Adopt Resolution No. 68-18, authorizing submission of a Washington State Recreation and Conservation Office Grant application.

Summary:

The Washington State Recreation and Conservation Office (RCO) offers competitive grant funding for a variety of park and recreation projects throughout the state. The City's adopted Capital Improvement Program (CIP) includes the Rivers to Ridges Trail: Badger Mountain Section Project (pg. 80) intended to complete a missing section of trail connecting the popular Badger Mountain Centennial Trail with a City-owned section of trail on Little Badger Mountain. Connecting these two trail segments will complete a missing link within the Rivers to Ridges Trail.

If awarded, the grant would facilitate the purchase of privately owned land in the vicinity of the Westcliffe Heights and Summerview Terrace preliminary plats to be used for a future trail alignment. Dedication of land to the City from the owner of Westcliffe Heights and from the Friends of Badger Mountain would contribute the required \$350,000 non-cash match to the desired \$350,000 state grant.

Staff recommends approval of Resolution No. 68-18.

Fiscal Impact:

Land donations will provide the necessary non-cash match requirement for the grant. Each parcel is privately owned (or has otherwise been pre-qualified) and meets the State's requirements for non-cash match.

Attachments:

- I. Resolution No. 68-18

RESOLUTION NO. 68-18

A RESOLUTION of the City of Richland authorizing the preparation and submittal of an application to the Washington State Recreation and Conservation Office (RCO Grant #18-1304, Little Badger Mountain Public Ridge Trail) for grant funding to acquire land for future trail construction on Badger Mountain.

WHEREAS, the Washington State Recreation and Conservation Office (RCO) has issued a call for grant programs; and

WHEREAS, Parks & Public Facilities staff have evaluated the grant opportunities offered by RCO and recommend an application that will provide additional community amenities; and

WHEREAS, the grant application is to acquire property from the owners of the preliminary plats of Westcliffe Heights and Reserve at Summerview Terrace for future construction of a portion of the Rivers to Ridges Trail; and

WHEREAS, the Rivers to Ridges Trail is identified as a high priority trail in the *2014-2019 City of Richland Parks, Trails, Open Space and Facilities Master Plan*; and

WHEREAS, the City of Richland and the Friends of Badger Mountain have partnered to apply for this grant; and

WHEREAS, this resolution authorizes the Richland City Manager identified below (in section 2) to act as the authorized representative on behalf of Richland to legally bind the City with respect to the above Project for which we seek grant funding assistance managed through the Recreation and Conservation Office ("Office"); and

WHEREAS, state grant assistance is requested by Richland to aid in financing the cost of the Project referenced above.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Richland as follows:

Section 1. Richland has applied for or intends to apply for funding assistance managed by the Office for the above "Project(s)."

Section 2. City Manager Cynthia D. Reents is authorized to act as representative/agent for the City of Richland with full authority to bind the organization regarding all matters related to the Project, including but not limited to, full authority to: (1) approve submittal of a grant application to the Office; (2) enter into a project agreement(s) on behalf of Richland; (3) sign any amendments thereto on behalf of Richland; (4) make any decisions and submissions required with respect to the Project(s);

and (5) designate a project contact(s) to implement the day-to-day management of the grant(s).

Section 3. Richland has reviewed the sample project agreement on the Recreation and Conservation Office's WEBSITE at:

<https://rco.wa.gov/documents/manuals&forms/SampleProjAgreement.pdf>.

Richland understands and acknowledges that if offered a project agreement to sign in the future, it will contain an indemnification and legal venue stipulation (applicable to any sponsor) and a waiver of sovereign immunity (applicable to Tribes) and other terms and conditions substantially in the form contained in the sample project agreement and that such terms and conditions of any signed project agreement shall be legally binding on the sponsor if Richland's representative/agent enters into a project agreement on Richland's behalf. The Office reserves the right to revise the project agreement prior to execution and shall communicate any such revisions with the above authorized representative/agent before execution.

Section 4. Richland acknowledges and warrants, after conferring with its legal counsel, that its authorized representative/agent has full legal authority to enter into a project agreement(s) on its behalf, that includes indemnification, waiver of sovereign immunity (as may apply to Tribes), and stipulated legal venue for lawsuits and other terms substantially in the form contained in the sample project agreement or as may be revised prior to execution.

Section 5. Grant assistance is contingent on a signed project agreement. Entering into any project agreement with the Office is purely voluntary on Richland's part.

Section 6. Richland understands that grant policies and requirements vary depending on the grant program applied to, the grant program and source of funding in the project agreement, the characteristics of the project, and the characteristics of Richland.

Section 7. Richland further understands that *prior to* Richland's authorized representative/agent executing the project agreement(s), the RCO may make revisions to its sample project agreement and that such revisions could include the indemnification, the waiver of sovereign immunity, and the legal venue stipulation. Richland accepts the legal obligation that it shall, prior to execution of the project agreement(s), confer with its authorized representative/agent as to any revisions to the project agreement from that of the sample project agreement. Richland also acknowledges and accepts that if its authorized representative/agent executes the project agreement(s) with any such revisions, all terms and conditions of the executed project agreement (including but not limited to the indemnification, the waiver of sovereign immunity, and the legal venue stipulation) shall be conclusively deemed to be executed with Richland's authorization.

Section 8. Any grant assistance received will be used for only direct eligible and allowable costs that are reasonable and necessary to implement the project(s) referenced above.

Section 9. Richland acknowledges and warrants, after conferring with its legal counsel, that no additional legal authorization beyond this authorization is required to make the indemnification, the waiver of sovereign immunity (as may apply to Tribes), and the legal venue stipulation substantially in form shown on the sample project agreement or as may be revised prior to execution legally binding on Richland upon execution by its representative/agent.

Section 10. If match is required for the grant, Richland understands Richland must certify the availability of match at least one month before funding approval. In addition, Richland understands it is responsible for supporting all non-cash matching share commitments to this project should they not materialize.

Section 11. Richland acknowledges that if it receives grant funds managed by the Office, the Office will pay Richland on only a reimbursement basis. Richland understands reimbursement basis means that Richland will only request payment from the Office after Richland incurs grant eligible and allowable costs and pays them. The Office may also determine an amount of retainage and hold that amount until the Project is complete.

Section 12. Richland acknowledges that any property acquired with grant assistance must be dedicated for the purposes of the grant in perpetuity unless otherwise agreed to in writing by Richland and the Office. Richland agrees to dedicate the property in a signed "Deed of Right" for fee acquisitions, or an "Assignment of Rights" for other than fee acquisitions (which documents will be based upon the Office's standard versions of those documents), to be recorded on the title of the property with the county auditor.

Section 13. Richland acknowledges that any property acquired in fee title must be immediately made available to the public unless otherwise provided for in policy, the project agreement, or authorized in writing by the Office Director.

Section 14. This resolution/authorization is deemed to be part of the formal grant application to the Office.

Section 15. Richland warrants and certifies, after conferring with its legal counsel, that this resolution/authorization was properly and lawfully adopted following the requirements of the organization and applicable laws and policies and that the City of Richland has full legal authority to commit Richland to the warranties, certifications, promises and obligations set forth herein.

BE IT FURTHER RESOLVED that this resolution shall take effect immediately.

ADOPTED by the City Council of the City of Richland, Washington, at a regular meeting on the 17th day of April, 2018.

ROBERT J. THOMPSON
Mayor

ATTEST:

APPROVED AS TO FORM:

MARCIA HOPKINS, City Clerk

HEATHER KINTZLEY, City Attorney



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Resolutions – Adoption

Key Element: Key 1 - Financial Stability & Operational Effectiveness

Key 2 - Infrastructure & Facilities

Subject:

Resolution No. 69-18, Awarding Bid to Sturgeon Electric Company, Inc. for Construction of the Stevens L-32 and L-41 Electrical Distribution Lines

Department:

Energy Services

Ordinance/Resolution Number:

69-18

Document Type:

Resolution

Recommended Motion:

Adopt Resolution No. 69-18, authorizing the City Manager to sign and execute an agreement with Sturgeon Electric Company, Inc. for \$280,887.68 for construction of the Stevens L-32 and L-41 electrical distribution line, and to execute change orders up to 10% of the approved contract amount.

Summary:

The City of Richland Energy Services (RES) completed a twelve-year long-range electric utility infrastructure plan in 2014. A primary objective of the plan was to identify targeted infrastructure improvements required in order to sustain reliable service to existing electric utility customers. The City's 2018 Capital Improvement Plan (CIP) identified the construction of the Stevens L-32 and L-41 distribution lines.

These reconstructed distribution feeders, connecting Stevens Substation and the Thayer Substation, will increase capacity of the existing infrastructure, enhance reliability, and enable RES to switch electrical load from one substation to the other in the event of damage or to complete maintenance.

The City received five (5) bids on March 28, 2018, with the lowest qualified bid of \$280,887.68 from Sturgeon Electric Company, Inc. of Troutdale, Oregon. The other four (4) bids ranged from \$353,381.41 to \$683,712.09. The engineer's estimate for the project was \$648,060.07 and was based upon past contract bids with similar construction.

Construction will begin in April and be completed by August of 2018.

Staff recommends approval of Resolution No. 69-18.

Fiscal Impact:

This project is included in the City's approved 2018 Capital Improvement Plan for the Electric Utility, and funding of \$280,887.68 is in the City's approved 2018 Budget.

Attachments:

1. Resolution No. 69-18
2. Bid Summary

RESOLUTION NO. 69-18

A RESOLUTION of the City of Richland authorizing award of bid to Sturgeon Electric Company, Inc. for the Stevens L-32 and L-41 electrical distribution lines.

WHEREAS, the City of Richland operates and maintains an electric utility, referred to as Richland Energy Services (RES), consisting of substations, distribution equipment and infrastructure that delivers power to customers served by RES; and

WHEREAS, RES, with consulting services provided by HDR Engineering Inc. ("HDR"), completed a Long Range Plan ("Plan") for the City's electric utility in December, 2014; and

WHEREAS, a primary objective of the Plan was to identify targeted infrastructure improvements required in order to sustain reliable service to existing electric utility customers; and

WHEREAS, the City has a need to rebuild a substation distribution feeder tie between the Stevens Substation and the Thayer Substation; and

WHEREAS, distribution line construction to implement the design and equipment installation was identified in the City's 2018-2023 Capital Improvement Plan (CIP); and

WHEREAS, funds in the City's 2018 Electric Utility Fund approved budget include renewals and replacement through the City's CIP for this project; and

WHEREAS, Sturgeon Electric Company, Inc. has been selected by RES as the lowest responsive bidder through a competitive and sealed bid process to provide the construction of the Stevens L-32 and L-41 electrical distribution lines.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Richland that the City Manager is authorized to sign and execute an agreement with Sturgeon Electric Company, Inc. in the amount of \$280,887.68 for construction of the Stevens L-32 and L-41 electrical distribution lines, and to execute change orders up to ten percent (10%) of the approved contract amount.

BE IT FURTHER RESOLVED that this resolution shall take effect immediately.

ADOPTED by the City Council of the City of Richland, Washington, at a regular meeting on the 17th day of April, 2018.

ROBERT J. THOMPSON
Mayor

ATTEST:

APPROVED AS TO FORM:

MARCIA HOPKINS, City Clerk

HEATHER KINTZLEY, City Attorney



City of Richland

DATE BIDS OPENED:	3/28/2018	ITB #	18-0033
Electrical Distribution Line, Stevens L-32, L-41			

Item	Description	Qty	Unit	ENGINEER'S ESTIMATE		STURGEON ELECTRIC TROUTDALE, OR		DJ'S ELECTRICAL BRUSH PRARIE, WA	
				Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
A1	Mobilization per Task Order	1	EA	\$20,000.00	20,000.00	32,346.96	32,346.96	3,000.00	3,000.00
A2	Install 50-3 pole	24	EA	\$3,000.00	72,000.00	1,177.94	28,270.56	3,000.00	72,000.00
A3	Install E10 Down Guy	6	EA	\$220.00	1,320.00	151.32	907.92	300.00	1,800.00
A4	Install E15 Down Guy	12	EA	\$280.00	3,360.00	151.32	1,815.84	350.00	4,200.00
A5	Install E10SW Sidewalk Down Guy	1	EA	\$250.00	250.00	242.11	242.11	400.00	400.00
A6	Install F20 Plate Anchor	2	EA	\$500.00	1,000.00	544.75	1,089.50	600.00	1,200.00
A7	Install F24 Plate Anchor	6	EA	\$500.00	3,000.00	1,900.36	11,402.16	700.00	4,200.00
A8	Install Single Phase A5	1	EA	\$420.00	420.00	90.79	90.79	250.00	250.00
A9	Install Single Phase A7	1	EA	\$420.00	420.00	484.22	484.22	500.00	500.00
A10	Install Three Phase C7	1	EA	\$440.00	440.00	665.80	665.80	800.00	800.00
A11	Install Three Phase C7-1	1	EA	\$440.00	440.00	665.80	665.80	825.00	825.00
A12	Install Three Phase DC-C1	23	EA	\$720.00	16,560.00	696.07	16,009.61	1,000.00	23,000.00
A13	Install Three Phase DC-C7-1	2	EA	\$800.00	1,600.00	696.07	1,392.14	1,500.00	3,000.00
A14	Install Pole Ground GRP	15	EA	\$200.00	3,000.00	60.53	907.95	70.00	1,050.00
A15	Install Cutout 100A SC100	16	EA	\$494.00	7,904.00	60.53	968.48	150.00	2,400.00
A16	Install MOV Arrester SMOVR	6	EA	\$500.00	3,000.00	60.53	363.18	125.00	750.00
A17	Install MOV Arrester SMOVT	12	EA	\$500.00	6,000.00	60.53	726.36	125.00	1,500.00
A18	Install Primary 336 ACSR	21,432	LF	\$6.00	128,592.00	3.45	73,940.40	1.50	32,148.00
A19	Install Neutral 336 ACSR	3,572	LF	\$6.00	21,432.00	0.92	3,286.24	1.50	5,358.00
A20	Install 1/0 JAL Primary	88	LF	\$18.00	1,584.00	6.05	532.40	3.15	277.20
A21	Install 750 JAL Primary	687	LF	\$26.00	17,862.00	3.63	2,493.81	10.00	6,870.00
A22	Install 1/0 JAL Stress Cone USC10.1	2	EA	\$450.00	900.00	181.58	363.16	300.00	600.00
A23	Install 750 AL UJ Stress Cone USC75.0	6	EA	\$550.00	3,300.00	302.64	1,815.84	600.00	3,600.00
A24	Install 1/0 JAL Elbow ULBE1J	2	EA	\$250.00	500.00	121.06	242.12	57.00	114.00
A25	Install 1/0 AL Elbow ULBE1	2	EA	\$250.00	500.00	121.06	242.12	57.00	114.00
A26	Install 200A Protective Cap ULBCAP	4	EA	\$120.00	480.00	6.05	24.20	27.00	108.00
A27	Install 4 Way Junction Feed-Thru ULBJ4	2	EA	\$300.00	600.00	242.11	484.22	100.00	200.00
A28	Install Vault Ground GRU01	2	EA	\$250.00	500.00	242.11	484.22	100.00	200.00
A29	Install Vault V3B w/ V3STL Lid	2	EA	\$1,000.00	2,000.00	2,421.10	4,842.20	1,000.00	2,000.00
A30	Install Single Phase O/H Transformer TO25-F	2	EA	\$900.00	1,800.00	484.22	968.44	400.00	800.00
A31	Install Single Phase O/H Transformer TO37.5-F	1	EA	\$1,000.00	1,000.00	484.22	484.22	450.00	450.00
A32	Install Single Phase O/H Transformer TO50-F	7	EA	\$1,100.00	7,700.00	484.22	3,389.54	500.00	3,500.00

				ENGINEER'S ESTIMATE		STURGEON ELECTRIC TROUTDALE, OR		DJ'S ELECTRICAL BRUSH PRARIE, WA	
Item	Description	Qty	Unit	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
A33	Install Single Phase O/H Transformer TO75-F	2	EA	\$1,300.00	2,600.00	484.22	968.44	550.00	1,100.00
A34	Install Secondary Clevis and Spool JCLEVIS	46	EA	\$160.00	7,360.00	30.26	1,391.96	300.00	13,800.00
A35	Install 1/0 TXP O/H Secondary	1449	LF	\$2.50	3,622.50	1.09	1,579.41	1.50	2,173.50
A36	Install 4/0 TXP O/H Secondary	353	LF	\$3.00	1,059.00	1.03	363.59	1.70	600.10
A37	Install 350 ATP U/G Secondary	45	LF	\$3.50	157.50	6.05	272.25	2.00	90.00
A38	Install U/G Secondary Connector JUCONN4W	3	LF	\$250.00	750.00	30.26	90.78	50.00	150.00
A39	Install 3" Secondary Riser RS3	1	EA	\$2,000.00	2,000.00	484.22	484.22	300.00	300.00
A40	Install 3" Primary Riser RP3	2	EA	\$700.00	1,400.00	968.44	1,936.88	350.00	700.00
A41	Install Secondary Handhole VHH30"	1	EA	\$3,000.00	3,000.00	484.22	484.22	250.00	250.00
A42	Install LED Cobra Head Lights w/ Arms LR100L & LS100L	3	EA	\$800.00	2,400.00	242.11	726.33	200.00	600.00
A43	Trenching, Excavating, Backfill and Installing 3" Sch. 40 Conduit	15	LF	\$40.00	600.00	18.16	272.40	50.00	750.00
A44	Transfer 3" Primary Riser RP3	1	EA	\$2,000.00	2,000.00	726.33	726.33	150.00	150.00
A45	Transfer 5" Primary Riser RP5	1	EA	\$2,500.00	2,500.00	968.44	968.44	200.00	200.00
A46	Transfer 3" Secondary Risers RP3	8	EA	\$550.00	4,400.00	484.22	3,873.76	150.00	1,200.00
A47	Transfer E10SP Span Guy	4	EA	\$550.00	2,200.00	60.53	242.12	150.00	600.00
A48	Remove Single Phase A5	2	EA	\$200.00	400.00	30.26	60.52	150.00	300.00
A49	Remove Single Phase A7	1	EA	\$200.00	200.00	121.06	121.06	250.00	250.00
A50	Remove Three Phase A9	1	EA	\$200.00	200.00	121.06	121.06	200.00	200.00
A51	Remove Three Phase C7	1	EA	\$304.00	304.00	242.11	242.11	400.00	400.00
A52	Remove Three Phase C7-1	1	EA	\$304.00	304.00	242.11	242.11	450.00	450.00
A53	Remove Three Phase DC-C1	23	EA	\$420.00	9,660.00	242.11	5,568.53	700.00	16,100.00
A54	Remove Three Phase DC-C7-1	2	EA	\$450.00	900.00	242.11	484.22	900.00	1,800.00
A55	Remove E10 Down Guy	10	EA	\$160.00	1,600.00	54.47	544.70	200.00	2,000.00
A56	Remove E15 Down Guy	2	EA	\$180.00	360.00	54.47	108.94	200.00	400.00
A57	Remove E10SP Span Guy	4	EA	\$180.00	720.00	54.47	217.88	500.00	2,000.00
A58	Remove F20 Anchor Plate	3	EA	\$100.00	300.00	60.53	181.59	200.00	600.00
A59	Remove 40' Pole	2	EA	\$600.00	1,200.00	484.22	968.44	800.00	1,600.00
A60	Remove 45' Pole	8	EA	\$600.00	4,800.00	484.22	3,873.76	800.00	6,400.00
A61	Remove 50' Pole	17	EA	\$600.00	10,200.00	484.22	8,231.74	1,000.00	17,000.00
A62	Remove 1 1/2" Primary Riser RP1	2	EA	\$700.00	1,400.00	242.11	484.22	150.00	300.00
A63	Remove Pole Ground GRP	13	EA	\$150.00	1,950.00	30.26	393.38	70.00	910.00
A64	Remove Primary 1/0 ACSR	6,743	LF	\$18.00	121,374.00	0.46	3,101.78	1.00	6,743.00
A65	Remove Primary 2/0 CU	21,459	LF	\$1.80	38,626.20	0.34	7,296.06	1.25	26,823.75



				ENGINEER'S ESTIMATE		STURGEON ELECTRIC TROUTDALE, OR		DJ'S ELECTRICAL BRUSH PRARIE, WA	
Item	Description	Qty	Unit	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
A66	Remove Primary #4 Bare Copper	444	LF	\$1.80	799.20	3.03	1,345.32	0.80	355.20
A67	Remove Primary #6 Bare Copper	172	LF	\$1.80	309.60	3.03	521.16	0.70	120.40
A68	Remove Secondary Wire #6 CU WP	801	LF	\$1.80	1,441.80	3.03	2,427.03	0.70	560.70
A69	Remove Secondary #6 TPX AL	332	LF	\$1.80	597.60	3.03	1,005.96	0.70	232.40
A70	Remove U/G Primary #1/0 AL	88	LF	\$2.50	220.00	4.24	373.12	1.00	88.00
A71	Remove U/G Primary #750 AL	537	LF	\$3.00	1,611.00	1.82	977.34	3.00	1,611.00
A72	Remove 1/0 AL Stress Cone USC1.0 AL	3	EA	\$140.00	420.00	60.53	181.59	100.00	300.00
A73	Remove 750 AL Stress Cone USC75.0	6	EA	\$150.00	900.00	60.53	363.18	150.00	900.00
A74	Remove 100A Cutout SC100	15	EA	\$150.00	2,250.00	36.32	544.80	75.00	1,125.00
A75	Remove MOV Arrester SMOVR	6	EA	\$150.00	900.00	30.26	181.56	75.00	450.00
A76	Remove Single Phase O/H Transformer TO25-F	2	EA	\$750.00	1,500.00	302.64	605.28	200.00	400.00
A77	Remove Single Phase O/H Transformer TO50-F	5	EA	\$750.00	3,750.00	302.64	1,513.20	250.00	1,250.00
A78	Remove Single Phase O/H Transformer TO75-F	3	EA	\$750.00	2,250.00	302.64	907.92	300.00	900.00
A79	Remove Secondary Rack 3 Spool JBUS3	30	EA	\$200.00	6,000.00	30.26	907.80	200.00	6,000.00
A80	Remove Secondary Clevis and Spool JCLEVIS	8	EA	\$160.00	1,280.00	30.26	242.08	100.00	800.00
A81	Remove 3" Secondary Riser RS3	1	EA	\$500.00	500.00	242.11	242.11	150.00	150.00
A82	Remove HPS Cobra Head Lights w/ Arms LR100L & LS100L	3	EA	\$800.00	2,400.00	121.06	363.18	100.00	300.00
A83	Flagging	1	LS	\$5,000.00	5,000.00	4,840.00	4,840.00	20,000.00	20,000.00
A84	ROW Permitting	1	LS	\$600.00	600.00	220.00	220.00	2,000.00	2,000.00
A85	Trench Safety	1	LS	\$1,000.00	1,000.00	500.00	500.00	2,500.00	2,500.00
A86	Lash Communication to New Poles When Applicable	15	EA	\$200.00	3,000.00	121.06	1,815.90	80.00	1,200.00
SUBTOTAL					\$596,740.40		\$258,644.27		\$325,397.25
8.6% SALES TAX					51,319.67		22,243.41		27,984.16
TOTAL					\$648,060.07		\$280,887.68		\$353,381.41
GRAND TOTAL					\$648,060.07		\$280,887.68		\$353,381.41



City of Richland

DATE BIDS OPENED:	3/28/2018	ITB #	18-0033
Electrical Distribution Line, Stevens L-32, L-41			

Item	Description	Qty	Unit	POTELCO INC. SUMNER, WA		MICHELS CORP NEENAH, WI		WILSON CONSTRUCTION CANBY, OR	
				Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
A1	Mobilization per Task Order	1	EA	30,000.00	30,000.00	12,195.68	12,195.68	26,014.21	26,014.21
A2	Install 50-3 pole	24	EA	2,000.00	48,000.00	6,976.17	167,428.08	4,120.23	98,885.52
A3	Install E10 Down Guy	6	EA	300.00	1,800.00	152.45	914.70	569.06	3,414.36
A4	Install E15 Down Guy	12	EA	400.00	4,800.00	152.45	1,829.40	569.06	6,828.72
A5	Install E10SW Sidewalk Down Guy	1	EA	500.00	500.00	457.34	457.34	812.95	812.95
A6	Install F20 Plate Anchor	2	EA	1,000.00	2,000.00	762.23	1,524.46	1,625.88	3,251.76
A7	Install F24 Plate Anchor	6	EA	1,000.00	6,000.00	762.23	4,573.38	1,625.88	9,755.28
A8	Install Single Phase A5	1	EA	400.00	400.00	304.89	304.89	569.06	569.06
A9	Install Single Phase A7	1	EA	700.00	700.00	304.89	304.89	731.65	731.65
A10	Install Three Phase C7	1	EA	600.00	600.00	609.78	609.78	2,601.42	2,601.42
A11	Install Three Phase C7-1	1	EA	1,200.00	1,200.00	914.68	914.68	2,601.42	2,601.42
A12	Install Three Phase DC-C1	23	EA	1,200.00	27,600.00	609.78	14,024.94	1,951.07	44,874.61
A13	Install Three Phase DC-C7-1	2	EA	2,400.00	4,800.00	1,219.57	2,439.14	4,552.49	9,104.98
A14	Install Pole Ground GRP	15	EA	500.00	7,500.00	152.45	2,286.75	243.88	3,658.20
A15	Install Cutout 100A SC100	16	EA	500.00	8,000.00	152.45	2,439.20	292.66	4,682.56
A16	Install MOV Arrester SMOVR	6	EA	300.00	1,800.00	152.45	914.70	195.10	1,170.60
A17	Install MOV Arrester SMOVT	12	EA	400.00	4,800.00	152.45	1,829.40	195.10	2,341.20
A18	Install Primary 336 ACSR	21,432	LF	5.00	107,160.00	4.88	104,588.16	4.68	100,301.76
A19	Install Neutral 336 ACSR	3,572	LF	3.00	10,716.00	4.88	17,431.36	4.88	17,431.36
A20	Install 1/0 JAL Primary	88	LF	8.00	704.00	15.24	1,341.12	8.13	715.44
A21	Install 750 JAL Primary	687	LF	10.00	6,870.00	9.15	6,286.05	5.69	3,909.03
A22	Install 1/0 JAL Stress Cone USC10.1	2	EA	2.50	5.00	304.89	609.78	243.88	487.76
A23	Install 750 AL UJ Stress Cone USC75.0	6	EA	400.00	2,400.00	381.12	2,286.72	292.66	1,755.96
A24	Install 1/0 JAL Elbow ULBE1J	2	EA	200.00	400.00	76.22	152.44	406.48	812.96
A25	Install 1/0 AL Elbow ULBE1	2	EA	300.00	600.00	76.22	152.44	406.48	812.96
A26	Install 200A Protective Cap ULBCAP	4	EA	200.00	800.00	15.24	60.96	81.30	325.20
A27	Install 4 Way Junction Feed-Thru ULBJ4	2	EA	400.00	800.00	152.45	304.90	3,576.95	7,153.90
A28	Install Vault Ground GRU01	2	EA	500.00	1,000.00	609.78	1,219.56	2,926.60	5,853.20
A29	Install Vault V3B w/ V3STL Lid	2	EA	5,000.00	10,000.00	1,143.34	2,286.68	2,626.60	5,253.20
A30	Install Single Phase O/H Transformer TO25-F	2	EA	500.00	1,000.00	1,829.35	3,658.70	1,300.71	2,601.42
A31	Install Single Phase O/H Transformer TO37.5-F	1	EA	500.00	500.00	1,829.35	1,829.35	1,300.71	1,300.71
A32	Install Single Phase O/H Transformer TO50-F	7	EA	600.00	4,200.00	2,439.14	17,073.98	1,463.30	10,243.10

				POTELCO INC. SUMNER, WA		MICHELS CORP NEENAH, WI		WILSON CONSTRUCTION CANBY, OR	
Item	Description	Qty	Unit	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
A33	Install Single Phase O/H Transformer TO75-F	2	EA	600.00	1,200.00	2,439.14	4,878.28	1,625.88	3,251.76
A34	Install Secondary Clevis and Spool JCLEVIS	46	EA	150.00	6,900.00	76.22	3,506.12	81.30	3,739.80
A35	Install 1/0 TXP O/H Secondary	1449	LF	3.00	4,347.00	4.57	6,621.93	6.50	9,418.50
A36	Install 4/0 TXP O/H Secondary	353	LF	3.50	1,235.50	6.10	2,153.30	6.50	2,294.50
A37	Install 350 ATP U/G Secondary	45	LF	4.50	202.50	7.62	342.90	40.64	1,828.80
A38	Install U/G Secondary Connector JUCONN4W	3	LF	100.00	300.00	38.11	114.33	406.48	1,219.44
A39	Install 3" Secondary Riser RS3	1	EA	1,000.00	1,000.00	304.89	304.89	1,951.07	1,951.07
A40	Install 3" Primary Riser RP3	2	EA	1,500.00	3,000.00	304.89	609.78	2,601.42	5,202.84
A41	Install Secondary Handhole VHH30"	1	EA	750.00	750.00	304.89	304.89	1,951.07	1,951.07
A42	Install LED Cobra Head Lights w/ Arms LR100L & LS100L	3	EA	250.00	750.00	304.89	914.67	406.48	1,219.44
A43	Trenching, Excavating, Backfill and Installing 3" Sch. 40 Conduit	15	LF	15.00	225.00	4.57	68.55	385.86	5,787.90
A44	Transfer 3" Primary Riser RP3	1	EA	750.00	750.00	304.89	304.89	1,300.71	1,300.71
A45	Transfer 5" Primary Riser RP5	1	EA	1,000.00	1,000.00	762.23	762.23	1,951.07	1,951.07
A46	Transfer 3" Secondary Risers RP3	8	EA	550.00	4,400.00	304.89	2,439.12	1,300.71	10,405.68
A47	Transfer E10SP Span Guy	4	EA	300.00	1,200.00	304.89	1,219.56	325.17	1,300.68
A48	Remove Single Phase A5	2	EA	200.00	400.00	76.22	152.44	195.10	390.20
A49	Remove Single Phase A7	1	EA	400.00	400.00	152.45	152.45	390.22	390.22
A50	Remove Three Phase A9	1	EA	500.00	500.00	152.45	152.45	260.14	260.14
A51	Remove Three Phase C7	1	EA	400.00	400.00	304.89	304.89	520.29	520.29
A52	Remove Three Phase C7-1	1	EA	600.00	600.00	609.78	609.78	520.29	520.29
A53	Remove Three Phase DC-C1	23	EA	1,000.00	23,000.00	609.78	14,024.94	812.95	18,697.85
A54	Remove Three Phase DC-C7-1	2	EA	1,200.00	2,400.00	1,219.57	2,439.14	2,276.24	4,552.48
A55	Remove E10 Down Guy	10	EA	250.00	2,500.00	76.22	762.20	243.88	2,438.80
A56	Remove E15 Down Guy	2	EA	300.00	600.00	76.22	152.44	243.88	487.76
A57	Remove E10SP Span Guy	4	EA	500.00	2,000.00	76.22	304.88	406.48	1,625.92
A58	Remove F20 Anchor Plate	3	EA	500.00	1,500.00	304.89	914.67	650.36	1,951.08
A59	Remove 40' Pole	2	EA	1,000.00	2,000.00	609.78	1,219.56	1,300.71	2,601.42
A60	Remove 45' Pole	8	EA	1,000.00	8,000.00	762.23	6,097.84	1,300.71	10,405.68
A61	Remove 50' Pole	17	EA	1,000.00	17,000.00	1,219.57	20,732.69	1,300.71	22,112.07
A62	Remove 1 1/2" Primary Riser RP1	2	EA	500.00	1,000.00	304.89	609.78	1,300.71	2,601.42
A63	Remove Pole Ground GRP	13	EA	150.00	1,950.00	76.22	990.86	81.30	1,056.90
A64	Remove Primary 1/0 ACSR	6,743	LF	2.00	13,486.00	1.22	8,226.46	2.27	15,306.61
A65	Remove Primary 2/0 CU	21,459	LF	3.00	64,377.00	1.52	32,617.68	2.27	48,711.93



				POTELCO INC. SUMNER, WA		MICHELS CORP NEENAH, WI		WILSON CONSTRUCTION CANBY, OR	
Item	Description	Qty	Unit	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
A66	Remove Primary #4 Bare Copper	444	LF	3.00	1,332.00	3.05	1,354.20	4.06	1,802.64
A67	Remove Primary #6 Bare Copper	172	LF	3.00	516.00	3.05	524.60	4.06	698.32
A68	Remove Secondary Wire #6 CU WP	801	LF	3.00	2,403.00	3.05	2,443.05	4.06	3,252.06
A69	Remove Secondary #6 TPX AL	332	LF	1.50	498.00	1.52	504.64	4.06	1,347.92
A70	Remove U/G Primary #1/0 AL	88	LF	3.00	264.00	7.62	670.56	8.13	715.44
A71	Remove U/G Primary #750 AL	537	LF	5.00	2,685.00	7.62	4,091.94	8.13	4,365.81
A72	Remove 1/0 AL Stress Cone USC1.0 AL	3	EA	100.00	300.00	30.49	91.47	130.07	390.21
A73	Remove 750 AL Stress Cone USC75.0	6	EA	200.00	1,200.00	30.49	182.94	130.07	780.42
A74	Remove 100A Cutout SC100	15	EA	250.00	3,750.00	30.49	457.35	97.56	1,463.40
A75	Remove MOV Arrester SMOVR	6	EA	150.00	900.00	30.49	182.94	81.30	487.80
A76	Remove Single Phase O/H Transformer TO25-F	2	EA	400.00	800.00	762.23	1,524.46	975.53	1,951.06
A77	Remove Single Phase O/H Transformer TO50-F	5	EA	400.00	2,000.00	914.68	4,573.40	975.53	4,877.65
A78	Remove Single Phase O/H Transformer TO75-F	3	EA	400.00	1,200.00	914.68	2,744.04	1,300.71	3,902.13
A79	Remove Secondary Rack 3 Spool JBUS3	30	EA	100.00	3,000.00	30.49	914.70	243.88	7,316.40
A80	Remove Secondary Clevis and Spool JCLEVIS	8	EA	100.00	800.00	15.24	121.92	65.03	520.24
A81	Remove 3" Secondary Riser RS3	1	EA	250.00	250.00	304.89	304.89	1,300.71	1,300.71
A82	Remove HPS Cobra Head Lights w/ Arms LR100L & LS100L	3	EA	200.00	600.00	76.22	228.66	243.88	731.64
A83	Flagging	1	LS	15,657.32	15,657.32	6,966.15	6,966.15	21,816.55	21,816.55
A84	ROW Permitting	1	LS	1,000.00	1,000.00	348.31	348.31	205.61	205.61
A85	Trench Safety	1	LS	2,500.00	2,500.00	304.89	304.89	274.15	274.15
A86	Lash Communication to New Poles When Applicable	15	EA	420.00	6,300.00	304.89	4,573.35	243.88	3,658.20
SUBTOTAL					\$514,983.32		\$522,392.66		\$629,569.14
8.6% SALES TAX					44,288.57		44,925.77		54,142.95
TOTAL					\$559,271.89		\$567,318.43		\$683,712.09
GRAND TOTAL					\$559,271.89		\$567,318.43		\$683,712.09



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Resolutions – Adoption

Key Element: Key 3 - Economic Vitality
Key 4 - Targeted Investments

Subject:

Resolution No. 70-18, Approving the Second Round of Business License Reserve Fund Awards

Department:

Community Development Services

Ordinance/Resolution Number:

70-18

Document Type:

Resolution

Recommended Motion:

Adopt Resolution No. 70-18, approving the second round of Business License Reserve Fund (BLRF) appropriations and authorizing the City Manager to sign and execute agreements with award recipients.

Summary:

Each year, applications are solicited for the Business License Reserve Fund (BLRF), and applications are presented by staff to the Economic Development Committee (EDC) for review and funding recommendations.

The second round of applicants made project presentations to the EDC at its March 26, 2018 meeting. The EDC considered four (4) applications for the second round of 2018 funding, and made the following recommendations:

- \$ 18,000 - Tri-City Regional Chamber (Live @ 5)
- \$ 50,000 - Parks & Public Facilities (City Hall Art)
- \$ 40,000 - Public Works (Swift Blvd sidewalk and ADA improvements)
- \$ 16,460 - Economic Development (Additional CIP program funds)

Staff recommends approval of Resolution No. 70-18, approving the funding recommendations made by the EDC for funding from the Business License Reserve Fund.

Fiscal Impact:

If all Business License Reserve Fund applications are approved as recommended, all BLRF funding for 2018 will be allocated.

Attachments:

1. Resolution No. 70-18
2. BLRF Funding Report - Phase II

RESOLUTION NO. 70-18

A RESOLUTION of the City of Richland awarding the distribution of funds from the Business License Reserve Fund.

WHEREAS, Richland Municipal Code (RMC) 5.04.385 establishes a reserve funded through a portion of fees for business licenses which is to be used to promote business activities for the purposes of core development, tourism, general economic development, capital expenditure for community improvements, and the prevention of blight; and

WHEREAS, City staff estimates that \$244,460 remains available for eligible projects in 2018; and

WHEREAS, City staff solicited applications for projects to be considered by the Economic Development Committee and Richland City Council for funding in 2018; and

WHEREAS, at its March 26, 2018 meeting, the Economic Development Committee provided a positive recommendation to allocate an additional \$124,460 toward projects determined eligible under RMC 5.04.385 and RMC 5.04.387 as listed on the Business License Reserve Fund Project Application List, attached hereto as **Attachment A**.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Richland that the City Manager is authorized to sign and execute Business License Reserve Fund funding agreements for projects listed on the Business License Reserve Fund Project Application List, attached hereto as **Attachment A** and incorporated by reference.

BE IT FURTHER RESOLVED that this resolution shall take effect immediately.

ADOPTED by the City Council of the City of Richland, Washington, at a regular meeting on the 17th day of April, 2018.

ROBERT J. THOMPSON
Mayor

ATTEST:

APPROVED AS TO FORM:

MARCIA HOPKINS, City Clerk

HEATHER KINTZLEY, City Attorney

Attachment A

Business License Reserve Fund Project Application List

Projects	Award Amount
BLRF2018-009 TCRCC Radio Tri-Cities Live @ Five	\$18,000
BLRF2018-010 Richland Parks & Rec – City Hall Art	\$50,000
BLRF2018-011 Richland Public Works Swift Corridor	\$40,000
BLRF2018-002 Economic Development Commercial Imp. Program	\$16,460
TOTAL AWARDS:	\$124,460



BUSINESS AND ECONOMIC DEVELOPMENT OFFICE
STAFF REPORT

PREPARED BY: Zach Ratkai, Economic Development Manager
SUBJECT: 2018 Business License Reserve Fund Applications
Phase II Funding Report
MEETING DATE: April 17th, 2018 Regular Meeting

RECOMMENDATION

Staff and the Richland Economic Development Committee (EDC) recommends the Richland City Council concur with the recommendations for approval as outlined below, based upon the guidelines and procedures for the Business License Reserve Program and the committee's discussion.

Project #	Amount	Recommendation
BLRF2018-009	\$18,000.00	Approve as Detailed Below
Applicant and Description Tri-City Regional Chamber of Commerce – Radio Tri-Cities – Live @ Five Annual Live @ 5 Summer Concert Series at the HAPO stage. Event to run for 9-11 weeks beginning Thursday, May 31 st . At the initial presentation on January 15, 2018, the applicant gave vague detail as to for what specific purpose the funding would be used. The EDC then tabled their decision on the funding and invited the applicants to present at the March 27 th EDC meeting. At that time, the applicants outlined that the requested BLRF funding would be used to supplement their expenses in advertising the event, particularly in funding for advertising air time that would otherwise be used for outside advertisers. Additionally, the applicants outlined that the event has expanded from nine (9) to eleven (11) weeks and implored the EDC for continued support and partnership for this event that brings thousands of attendees, and potential business patrons, to the Richland Central Business District.		
Previous Award 2016 - \$11,000.00		
Recommendation Notes This is a joint application made by the Tri-City Regional Chamber of Commerce and Radio Tri-Cities to support Live @ Five. Per the new guidelines instituted last year, the committee must determine whether this collaboration and proposed project is eligible for funding. If eligible, the contract signatory must be the Tri-City Regional Chamber of Commerce. The EDC's workshop discussion noted the lack of past transparency for what services/advertising were being reimbursed and how the City was represented in the advertising. For that reason, staff recommends the committee require the applicant to provide detailed itemization in their invoices.		
Conditions for Approval <i>All invoices for reimbursement must provide an itemized list of what services were rendered and their cost, including the approximate number of advertisements aired and digital marketing purchased to promote the event.</i>		

- *The City of Richland logo be utilized to demonstrate sponsorship where appropriate, and the City be listed as a sponsor when other sponsors are announced in audio advertising.*

Project #	Amount	Recommendation
BLRF2018-010	\$50,000.00	Approve as Requested
Applicant and Description <u>Richland Parks and Public Facilities – Art Installation at City Hall</u> The project team has a vision to incorporate Richland's history and geography into the new City Hall building and grounds through public art. Several interesting COR historic facility elements such as sizable valves, handles, levers, doors, etc, have been secured and will be incorporated into the facility; the lead architect will develop pen and ink architectural drawings of alphabet houses, and geographic images will be included on glass security panels, among other art. Applicant original request was \$40,000. The Economic Development Committee recommended approval of \$50,000 based on presentation and discussion with applicant. Staff concurs with recommendation. Recommendation Notes Staff directed the applicant that all art funded through this mechanism be in places within city hall that are accessed by the public at large. This includes outside on the grounds of the facility and interior locations readily accessed by the public (not necessarily inside conference rooms or office areas). Previous Award 2017 – Art Installation at City Hall - \$45,000.00 (amount adjusted by City Council action)		

Project #	Amount	Recommendation
BLRF2018-002 (amendment)	\$16,460.00 (additional)	Approve as Requested
Applicant and Description <u>Richland Community Development Services – Commercial Improvement Program (CIP)</u> The CIP is a yearly program that offers grants for façade and storefront improvements to commercial buildings throughout Richland. Grants are awarded for 50% of project costs, the award not to exceed \$10,000. In 2017 the CIP program awarded around \$40,000 for projects totaling over \$98,000 in value. The Economic Development Department requested additional funds for 2018 due to the success of the program. Council has previously approved over \$40,000 of the initial \$50,000 of Commercial Improvement Program funding for 2018. Staff wished to offer more opportunity for community benefit in 2018. Applicant original request was \$10,283. The Economic Development Committee recommended approval of \$16,460, the remaining 2018 funds in the Business License Reserve Fund in order to make available additional opportunities for Commercial Improvement. Recommendation Notes The EDC approved the allocation of the remaining available BLRF funding (\$16,460) for the CIP program in order to continue its success in assisting local business. Previous Award 2018 – Commercial Improvement Program - \$50,000.00		

Project #	Amount	Recommendation
BLRF2018-011	\$40,000.00	Approve as Requested
Applicant and Description <u>Richland Public Works – Swift Blvd. Sidewalk and Wheelchair Ramp Improvements</u> Project proposal to enhance Swift Boulevard from Stevens Drive to Jadwin Avenue. This section fronts the Library, Kadlec Hospital and the new City Hall site. Improvements planned are in line with the Swift Corridor Plan and will include upgraded signals and roadway improvements for increased mobility for vehicles, pedestrians, and bicyclists through the construction of landscape areas within the sidewalk, the incorporation of trees into the finished streetscape, and painted bike lanes, among other amenities. Additionally, Public Works staff stated that additional funding sources and partners increase the City's chance of obtaining a grant through the Benton County Rural Capital Fund program.		
Previous Award 2018 – ADA Improvements - \$25,700.00		



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Resolutions – Adoption

Key Element: Key 3 - Economic Vitality

Subject:

Resolution No. 73-18, Approving the Surplus of .44 Acres of Property Along Keene Road

Department:

Community Development Services

Ordinance/Resolution Number:

73-18

Document Type:

Resolution

Recommended Motion:

Adopt Resolution No. 73-18, authorizing the surplus of .44 acres along the Keene Road Trail Park adjacent to 2290 Keene Road, and directing staff to negotiate with the owner of 2290 Keene Road for the purchase of said property.

Summary:

The City has been approached by the property owner of 2290 Keene Road to inquire if the City would be willing to surplus any of the Keene Road Trail Park land.

The additional land would provide increased development potential for 2290 Keene Road by adding .44 acres to the property.

Staff reviewed the request and determined it to be reasonable since the trail corridor right-of-way in this particular location is wider than in other areas along the trail corridor. The area sought is an underutilized and very narrow (approximately 34') strip of land adjacent to the Keene Road multi-purpose trail. If approved, the hard-surfaced trail will not be affected by transfer of the property.

On February 8, 2018, the Parks and Recreation Commission recommended by unanimous vote that the park property be sold to the adjacent property owner. The Economic Development Committee and Planning Commission also made recommendations to surplus and sell the .44 acres, with those meetings occurring on March 26 and March 28, 2018, respectively.

Staff recommends approval of Resolution 73-18, approving the surplus of .44 acres of property adjacent to 2290 Keene Road.

Fiscal Impact:

Development of this land will add additional revenue and increase the need for City services. The final development will determine the amount of this increase and City services needed.

Attachments:

1. Resolution No. 73-18
2. Staff Report

RESOLUTION NO. 73-18

A RESOLUTION of the City of Richland declaring certain real property surplus to the City's needs and available to sell, lease or exchange.

WHEREAS, the City of Richland owns a 10.4-acre parcel of land within the Keene Road Trail Park adjacent to privately owned land; and

WHEREAS, the adjacent property owner has requested 0.44 acres of the 10.4-acre property legally described in **Exhibit A** and depicted in **Exhibit B**, both of which are attached hereto and incorporated by reference, be declared surplus to the City's needs and offered for sale to Washington Securities and Investment Corporation as the abutting landowner; and

WHEREAS, at its February 8, 2018 meeting, the Parks and Recreation Commission provided a positive recommendation to surplus said property; and

WHEREAS, at its March 26, 2018 meeting, the Economic Development Committee provided a positive recommendation to surplus said property; and

WHEREAS, at its March 28, 2018 meeting, the Planning Commission provided a positive recommendation to surplus said property; and

WHEREAS, on April 17, 2018, Richland City Council held a duly advertised public hearing in accordance with Richland Municipal Code (RMC) 3.06.030 to receive public comment on the declaration of surplus.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Richland as follows:

Section 1. The City Council finds and declares that certain real property described in the attached **Exhibit A** and depicted in the attached **Exhibit B** is no longer needed and is therefore surplus to the City's needs.

Section 2. Staff is directed to negotiate solely with Washington Securities and Investment Corporation for potential acquisition of the property based on its standing as the adjacent landowner requesting surplus and sale of the 0.44-acre property.

BE IT FURTHER RESOLVED that this resolution shall take effect immediately.

ADOPTED by the City Council of the City of Richland, Washington, at a regular meeting on the 17th day of April, 2018.

ROBERT J. THOMPSON
Mayor

ATTEST:

APPROVED AS TO FORM:

MARCIA HOPKINS, City Clerk

HEATHER KINTZLEY, City Attorney

EXHIBIT A

THAT PORTION OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 22, TOWNSHIP 9 NORTH, RANGE 28 EAST, WILLAMETTE MERIDIAN, BENTON COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

COMMENCING AT THE WEST ONE-QUARTER CORNER OF SAID SECTION 22, SAID CORNER BEING THE NORTHWEST CORNER OF LOT 3, SHORT PLAT NO. 2302, ACCORDING TO THE SURVEY THEREOF RECORDED IN VOLUME 1 OF SHORT PLATS, PAGE 2302, RECORDS OF SAID COUNTY AND STATE; THENCE ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 22 AND THE WEST LINE OF SAID LOT 3 SOUTH $00^{\circ}29'36''$ WEST 16.51 FEET TO THE SOUTHWEST CORNER OF SAID LOT 3 AND THE TRUE POINT OF BEGINNING;

THENCE ALONG THE SOUTH LINE OF SAID LOT 3 SOUTH $68^{\circ}03'36''$ EAST 250.80 FEET; THENCE CONTINUING ALONG SAID SOUTH LINE AND ALONG A CURVE TO THE RIGHT THROUGH A CENTRAL ANGLE OF $03^{\circ}24'38''$ HAVING A RADIUS OF 5920.55 FEET AND AN ARC LENGTH OF 352.43 FEET TO THE SOUTHEAST CORNER OF SAID LOT 3; THENCE ALONG THE PROJECTION OF THE EAST LINE OF SAID LOT 3 SOUTH $27^{\circ}19'33''$ WEST 34.02 FEET; THENCE ALONG A NON-TANGENT CURVE TO THE LEFT, THE RADIUS POINT OF WHICH BEARS SOUTH $25^{\circ}20'21''$ WEST, THROUGH A CENTRAL ANGLE OF $03^{\circ}23'57''$ HAVING A RADIUS OF 5886.55 FEET AND AN ARC LENGTH OF 349.24 FEET; THENCE NORTH $68^{\circ}03'36''$ WEST 179.41 FEET; THENCE NORTH $23^{\circ}02'40''$ EAST 15.50 FEET; THENCE NORTH $68^{\circ}03'36''$ WEST 64.42 FEET TO A POINT ON THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 22; THENCE NORTH $00^{\circ}29'36''$ EAST ALONG SAID WEST LINE 19.88 FEET TO THE TRUE POINT OF BEGINNING.

CONTAINS 0.44 ACRES MORE OR LESS.

EXHIBIT B

EXISTING PARCEL A
LOT 3, SHORT PLAT NO. 2302, ACCORDING TO THE SURVEY THEREOF RECORDED IN VOLUME 1 OF SHORT PLATS, PAGE 2302, RECORDS OF BENTON COUNTY, WASHINGTON.

EXISTING PARCEL B
THAT PORTION OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 22, TOWNSHIP 8 NORTH, RANGE 28 EAST, WILLAMETTE MERIDIAN, BENTON COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:
THAT STRIP OF LAND 200.00 FEET IN WIDTH OF THE ABANDONED OREGON-WASHINGTON RAILROAD AND NAVIGATION COMPANY'S RAILROAD RIGHT OF WAY, LYING WEST OF A PUBLIC ROAD KNOWN AS GLENNDALE DRIVE.
EXCEPT THE SOUTH 70.00 FEET THEREOF FOR A PUBLIC ROAD KNOWN AS KEENE ROAD.

TRANSFER DESCRIPTION PARCEL B TO PARCEL A
THAT PORTION OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 22, TOWNSHIP 8 NORTH, RANGE 28 EAST, WILLAMETTE MERIDIAN, BENTON COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:
COMMENCING AT THE WEST ONE-QUARTER CORNER OF SAID SECTION 22, SAID CORNER BEING THE NORTHWEST CORNER OF LOT 3, SHORT PLAT NO. 2302, RECORDS OF SAID COUNTY AND STATES THENCE ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 22 AND THE WEST LINE OF SAID LOT 3 SOUTH 07°29'30" WEST 18.51 FEET TO THE SOUTHWEST CORNER OF SAID LOT 3 AND THE TRUE POINT OF BEGINNING.
THENCE ALONG THE SOUTH LINE OF SAID LOT 3 SOUTH 88°03'30" EAST 250.80 FEET; THENCE CONTINUING ALONG SAID SOUTH LINE AND ALONG A CURVE TO THE RIGHT THROUGH A CENTRAL ANGLE OF 07°24'30" HAVING A RADIUS OF 3820.55 FEET AND AN ARC LENGTH OF 352.43 FEET; THENCE ALONG A NON-TANGENT CURVE TO THE LEFT, THE RADIUS POINT OF WHICH BEARS SOUTH 28°20'21" WEST, THROUGH A CENTRAL ANGLE OF 07°23'57" HAVING A RADIUS OF 3886.55 FEET AND AN ARC LENGTH OF 348.24 FEET; THENCE NORTH 88°03'30" WEST 179.41 FEET; THENCE NORTH 23°02'40" EAST 15.50 FEET; THENCE NORTH 88°03'30" WEST 64.42 FEET TO A POINT ON THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 22; THENCE NORTH 07°29'30" EAST ALONG SAID WEST LINE 19.88 FEET TO THE TRUE POINT OF BEGINNING.

ADJUSTED PARCEL B
THAT PORTION OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 22, TOWNSHIP 8 NORTH, RANGE 28 EAST, WILLAMETTE MERIDIAN, BENTON COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:
THAT STRIP OF LAND 200.00 FEET IN WIDTH OF THE ABANDONED OREGON-WASHINGTON RAILROAD AND NAVIGATION COMPANY'S RAILROAD RIGHT OF WAY, LYING WEST OF A PUBLIC ROAD KNOWN AS GLENNDALE DRIVE.
EXCEPT THE SOUTH 70.00 FEET THEREOF FOR A PUBLIC ROAD KNOWN AS KEENE ROAD.

ADJUSTED PARCEL A
THAT PORTION OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 22, TOWNSHIP 8 NORTH, RANGE 28 EAST, WILLAMETTE MERIDIAN, BENTON COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:
COMMENCING AT THE WEST ONE-QUARTER CORNER OF SAID SECTION 22, SAID CORNER BEING THE NORTHWEST CORNER OF LOT 3, SHORT PLAT NO. 2302, RECORDS OF SAID COUNTY AND STATES THENCE ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 22 AND THE WEST LINE OF SAID LOT 3 SOUTH 07°29'30" WEST 18.51 FEET TO THE SOUTHWEST CORNER OF SAID LOT 3 AND THE TRUE POINT OF BEGINNING.
THENCE ALONG THE SOUTH LINE OF SAID LOT 3 SOUTH 88°03'30" EAST 250.80 FEET; THENCE CONTINUING ALONG SAID SOUTH LINE AND ALONG A CURVE TO THE RIGHT THROUGH A CENTRAL ANGLE OF 07°24'30" HAVING A RADIUS OF 3820.55 FEET AND AN ARC LENGTH OF 352.43 FEET; THENCE ALONG A NON-TANGENT CURVE TO THE LEFT, THE RADIUS POINT OF WHICH BEARS SOUTH 28°20'21" WEST, THROUGH A CENTRAL ANGLE OF 07°23'57" HAVING A RADIUS OF 3886.55 FEET AND AN ARC LENGTH OF 348.24 FEET; THENCE NORTH 88°03'30" WEST 179.41 FEET; THENCE NORTH 23°02'40" EAST 15.50 FEET; THENCE NORTH 88°03'30" WEST 64.42 FEET TO A POINT ON THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 22; THENCE NORTH 07°29'30" EAST ALONG SAID WEST LINE 19.88 FEET TO THE TRUE POINT OF BEGINNING.

RECORD OF SURVEY NO. _____
FOR A BOUNDARY LINE ADJUSTMENT
WASHINGTON SECURITIES & INVESTMENT CORP
PORTIONS OF THE NW1/4 OF THE NW1/4 OF SECTION 22, TOWNSHIP 8 NORTH, RANGE 28 EAST, WILLAMETTE MERIDIAN, CITY OF RICHLAND, BENTON COUNTY, WASHINGTON

VICINITY MAP

MONUMENT NOTES
[1] FOUND 5/8" REBAR
[2] FOUND 5/8" REBAR & CAP "MORLEY 13302"
[3] FOUND 5/8" REBAR & CAP "TOWNT SURVEY PLS 13171"
[4] FOUND 5/8" REBAR & CAP "TOWNT SURVEY PLS 45774"

SURVEYORS NOTES
1. DATE OF SURVEY/MONUMENTS VISITED: DECEMBER, 2017.
2. BASIS OF BEGINNING: NW1/4X3/4E ALONG THE NORTH LINE OF THE NW1/4 OF SECTION 22, T8N, R28E, W4E, PER SHORT PLAT NO. 2302, RECORDS OF SAID COUNTY AND WASHINGTON.
3. UNITS OF MEASURE: US SURVEY FEET GROUND DISTANCES.
4. EQUIPMENT/PROCEDURES: TOPCON Hiper 6000, PIV METHOD, LINEAR CLOSURES MEET OR EXCEED STANDARDS CONTAINED IN WAC 332-130-080.
5. FOUND CORNER AS NOTED.
6. SET 5/8" REBAR & CAP "TOWNT SURVEY PLS 45774"

AUDITOR'S CERTIFICATE
FILED FOR RECORD THIS _____ DAY OF _____, 2018 A.D. AT _____, WA.
AND RECORDED IN VOLUME _____ OF SURVEYS, PAGE _____ AT THE REQUEST OF CHRISTOPHER C. AMMANN.
BENTON COUNTY AUDITOR
FEE NO. _____

SURVEYOR'S CERTIFICATE
THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE SURVEY RECORDING ACT AT THE REQUEST OF GREG MARVELL IN MARCH 2018.

CHRISTOPHER C. AMMANN
CERTIFICATE NO. 45774

PERMIT SURVEYING INC
2845 Robertson Drive
Richland, Washington 99354
Office 509-926-4120
Fax 509-971-0200

DATE: 03/23/18
SCALE: 1"=100'
DRAWN BY: OCA
APPROVED BY: OCA
PROJECT: 17082
SHEET 1 OF 1

GRAPHIC SCALE
0 50' 100' 200'
1 INCH = 100' FT.

LINE	BEARING	LENGTH
L1	N00°29'30"E	18.88
L2	N88°03'30"W	64.42
L3	N88°03'30"E	15.50
L4	S07°29'30"W	34.55

STAFF REPORT

TO: CITY COUNCIL
FILE: M2018-102

PREPARED BY: PHIL PINARD
MEETING DATE: APRIL 17, 2018

GENERAL INFORMATION:

APPLICANT: CITY OF RICHLAND

REQUEST: CONSIDERATION OF RECOMMENDATION TO SURPLUS LAND.

LOCATION: DEVELOPED OPEN SPACE PROPERTY LOCATED ADJACENT TO 2290 KEENE ROAD.

REASON FOR REQUEST

The City was approached by the property owner of 2290 Keene Road which lies west of Queensgate Drive. The property owner inquired if the City would be willing to surplus any of the Keene Road Trail Park land.

The additional land would provide increased development potential for the 2290 Keene Road Property by adding approximately half an acre to the property.

Staff reviewed the request and determined that the request to surplus a portion of Keene Road Park adjacent to 2290 Keene Road is reasonable as the trail corridor right-of-way is wider in this location than other areas along the trail corridor.

On February 8, 2018 the Parks and Recreation Commission voted unanimously to recommend that the park property be sold to the adjacent property owner.

The Economic Development Committee and Planning Commission recommended surplus and sale of the property at their March 26 and 28 meetings, respectively.

Before the park portion of the site can be sold, the City Council must make a determination that the property can be declared surplus. City Code requires that the Council consider the Economic Development Committee and Planning Commission's recommendation in making a final decision on whether the property should be considered surplus.

FINDINGS AND CONCLUSIONS

Staff has completed their review of the request to recommend this City property surplus and available for sale, subject to the recommended conditions of approval:

1. The Comprehensive Plan designates the subject site as “Developed Open Space”. The site is currently zoned “Parks and Public Facilities”.
2. The Economic Development Committee is required to consider and forward a recommendation to City Council on the appropriateness of declaring the property surplus pursuant to RMC Section 3.06.030;
3. The City-owned property under consideration for surplus consists of approximately half an acre and is currently located within the established boundaries of the Keene Road Trail Park.
4. A determination to surplus the property is intended to accomplish the following four objectives of the City policy for consideration of sale or lease of municipal property (RMC 3.06.010 (c)), which are to be achieved in a balanced manner to ensure that none are over-emphasized to the detriment of the others:
 - Stimulate the development of the City’s economic base;
 - Meet the financial obligations resulting from prior property transactions by retiring infrastructure debt;
 - Provide capital for economic development purposes and for parkland operations; and
 - Provide a source of general revenue to the City over and above the tax yields.
5. The anticipated use of the property is for the construction of mixed use commercial.
6. Based on the above findings and conclusions, a recommendation to surplus the property would be in the best interest of the community of Richland.

RECOMMENDATION

Staff recommends that the Economic Development Committee concur with the findings and conclusions set forth in the staff report and forward a recommendation to the City Council to surplus the property, allowing for staff to negotiate the transfer of ownership to Washington Securities and Investment Corporation.

ATTACHMENTS

- A – Overview Map
- B – Vicinity Map
- C – Site Survey



Overview Map

Item: Keene Road Surplus Property
Applicant: City of Richland
File #'s: M2018-102



Vicinity Map

Item: Keene Road Surplus Property
Applicant: City of Richland
File #'s: M2018-102

N



EXISTING PARCEL A

LOT 3, SHORT PLAT NO. 2302, ACCORDING TO THE SURVEY THEREOF RECORDED IN VOLUME 1 OF SHORT PLATS, PAGE 2302, RECORDS OF BENTON COUNTY, WASHINGTON.

EXISTING PARCEL B

THAT PORTION OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 22, TOWNSHIP 9 NORTH, RANGE 28 EAST, WILLAMETTE MERIDIAN, BENTON COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

COMMENCING AT THE WEST ONE-QUARTER CORNER OF SAID SECTION 22, SAID CORNER BEING THE NORTHWEST CORNER OF LOT 3, SHORT PLAT NO. 2302, ACCORDING TO THE SURVEY THEREOF RECORDED IN VOLUME 1 OF SHORT PLATS, PAGE 2302, RECORDS OF SAID COUNTY AND STATE; THENCE ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 22 AND THE WEST LINE OF SAID LOT 3 SOUTH 00°29'36" WEST 16.51 FEET TO THE SOUTHWEST CORNER OF SAID LOT 3 AND THE TRUE POINT OF BEGINNING;

THENCE ALONG THE SOUTH LINE OF SAID LOT 3 SOUTH 68°03'36" EAST 250.80 FEET; THENCE CONTINUING ALONG SAID SOUTH LINE AND ALONG A CURVE TO THE RIGHT THROUGH A CENTRAL ANGLE OF 03°24'38" HAVING A RADIUS OF 5920.55 FEET AND AN ARC LENGTH OF 352.43 FEET TO THE SOUTHEAST CORNER OF SAID LOT 3; THENCE ALONG THE PROJECTION OF THE EAST LINE OF SAID LOT 3 SOUTH 27°19'33" WEST 34.02 FEET; THENCE ALONG A NON-TANGENT CURVE TO THE LEFT, THE RADIUS POINT OF WHICH BEARS SOUTH 25°20'21" WEST, THROUGH A CENTRAL ANGLE OF 03°23'57" HAVING A RADIUS OF 5886.55 FEET AND AN ARC LENGTH OF 349.24 FEET; THENCE NORTH 68°03'36" WEST 179.41 FEET; THENCE NORTH 23°02'40" EAST 15.50 FEET; THENCE NORTH 68°03'36" WEST 64.42 FEET TO A POINT ON THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 22; THENCE NORTH 00°29'36" EAST ALONG SAID WEST LINE 19.88 FEET TO THE TRUE POINT OF BEGINNING.

TRANSFER DESCRIPTION PARCEL B TO PARCEL A

THAT PORTION OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 22, TOWNSHIP 9 NORTH, RANGE 28 EAST, WILLAMETTE MERIDIAN, BENTON COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

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CONTAINS 0.44 ACRES MORE OR LESS.

ADJUSTED PARCEL A

LOT 3, SHORT PLAT NO. 2302, ACCORDING TO THE SURVEY THEREOF RECORDED IN VOLUME 1 OF SHORT PLATS, PAGE 2302, RECORDS OF BENTON COUNTY, WASHINGTON.

TOGETHER WITH THAT PORTION OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 22, TOWNSHIP 9 NORTH, RANGE 28 EAST, WILLAMETTE MERIDIAN, BENTON COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

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ADJUSTED PARCEL B

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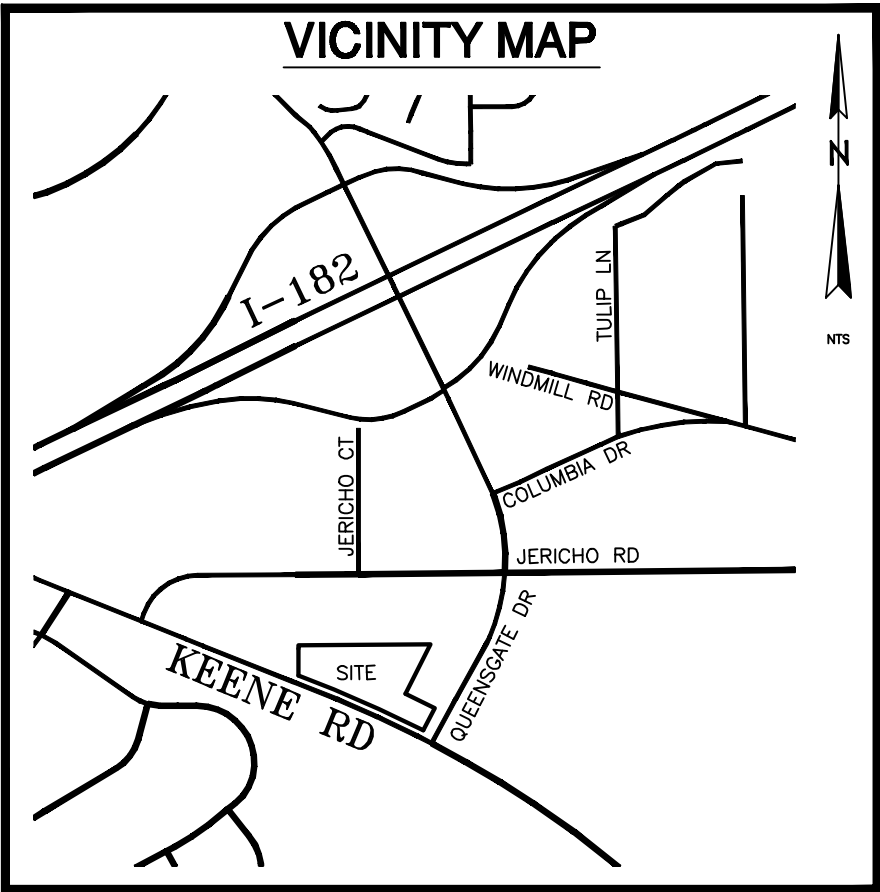
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EXCEPT THAT PORTION THEREOF DESCRIBED AS FOLLOWS:

COMMENCING AT THE WEST ONE-QUARTER CORNER OF SAID SECTION 22, SAID CORNER BEING THE NORTHWEST CORNER OF LOT 3, SHORT PLAT NO. 2302, ACCORDING TO THE SURVEY THEREOF RECORDED IN VOLUME 1 OF SHORT PLATS, PAGE 2302, RECORDS OF SAID COUNTY AND STATE; THENCE ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 22 AND THE WEST LINE OF SAID LOT 3 SOUTH 00°29'36" WEST 16.51 FEET TO THE SOUTHWEST CORNER OF SAID LOT 3 AND THE TRUE POINT OF BEGINNING;

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RECORD OF SURVEY NO. _____
FOR A BOUNDARY LINE ADJUSTMENT
PREPARED FOR
WASHINGTON SECURITIES &
INVESTMENT CORP
PORTIONS OF THE NW1/4 OF THE SW1/4, SECTION 22,
TOWNSHIP 9 NORTH, RANGE 28 EAST, WILLAMETTE MERIDIAN,
CITY OF RICHLAND, BENTON COUNTY, WASHINGTON



MONUMENT NOTES

- [1] FOUND 5/8" REBAR
- [2] FOUND 5/8" REBAR & CAP "WORLEY 13352"
- [3] FOUND 5/8" REBAR & CAP "PERMIT SURVEY PLS 13171"
- [4] FOUND 5/8" REBAR & CAP "PERMIT SURVEY PLS 45774"

SURVEYOR'S NOTES

1. DATE OF SURVEY/MONUMENTS VISITED: DECEMBER, 2017.
2. BASIS OF BEARING: N89°39'36"E ALONG THE NORTH LINE OF THE SW1/4 OF SECTION 22, T9N, R28E, WM, PER SHORT PLAT NO. 2302 ACCORDING TO THE SURVEY THEREOF RECORDED IN VOLUME 1 OF SHORT PLATS, PAGE 2302, RECORDS OF BENTON COUNTY, WASHINGTON.
3. UNITS OF MEASURE: US SURVEY FEET GROUND DISTANCES.
4. EQUIPMENT/PROCEDURES: TOPCON HIPER GNSS, RTK METHOD. LINEAR CLOSURES MEET OR EXCEED STANDARDS CONTAINED IN WAC 332-130-090.
5. ● FOUND CORNER AS NOTED.
6. ⊙ SET 5/8" REBAR & CAP "PERMIT SURVEY PLS 45774."

AUDITOR'S CERTIFICATE

FILED FOR RECORD THIS _____ DAY OF _____, 2018 A.D. AT _____ M.,
AND RECORDED IN VOLUME _____ OF SURVEY'S, PAGE _____ AT THE REQUEST OF
CHRISTOPHER C. AMMANN.
BENTON COUNTY AUDITOR _____
FEE NO. _____

SURVEYOR'S CERTIFICATE

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME
OR UNDER MY DIRECTION IN CONFORMANCE WITH THE
REQUIREMENTS OF THE SURVEY RECORDING ACT AT THE
REQUEST OF GREG MARKEL IN MARCH 2018.

CHRISTOPHER C. AMMANN
CERTIFICATE NO. 45774

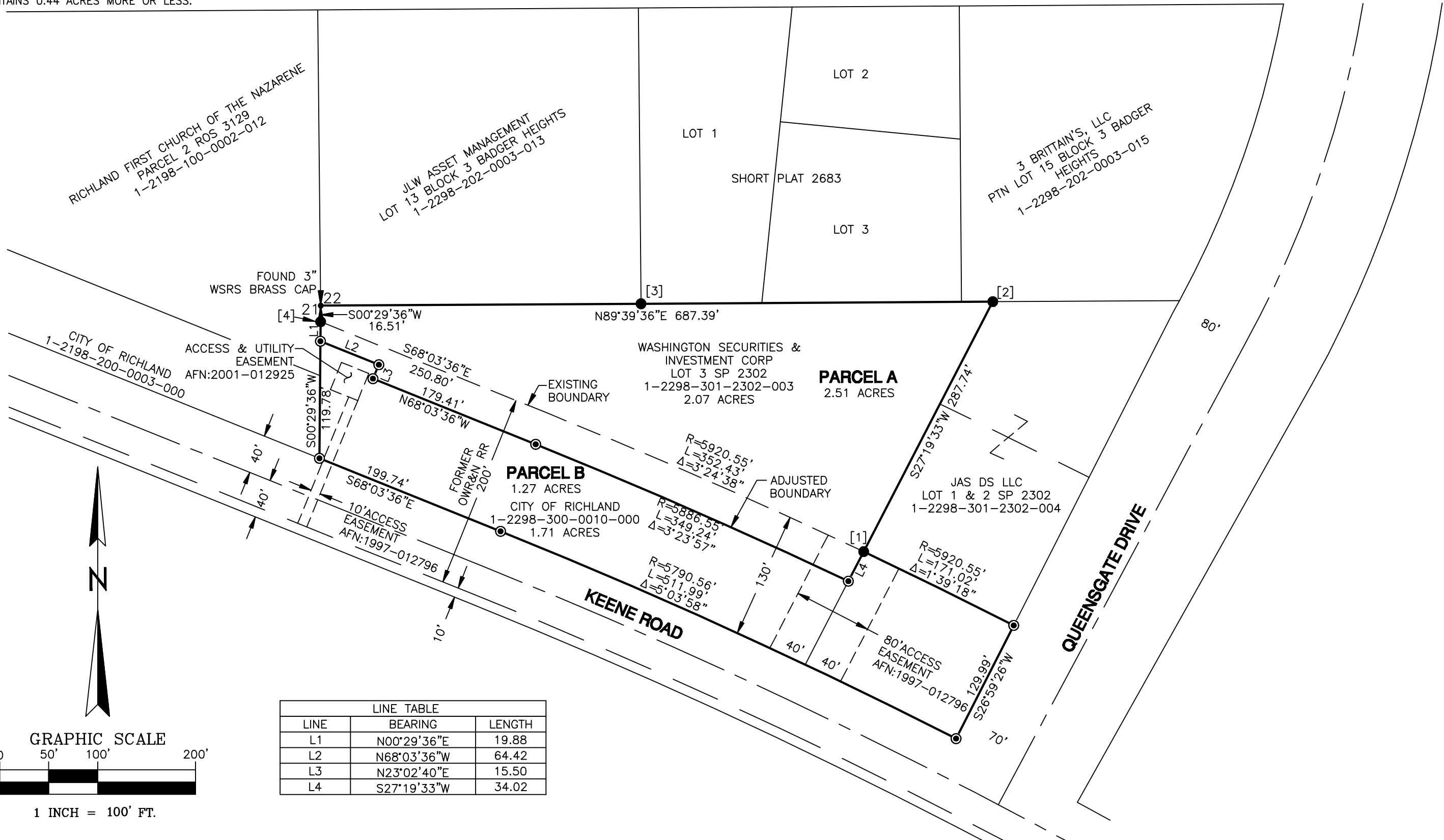
DATE



2245 Robertson Drive
Richland, Washington 98354

Office 509-375-4123
Fax 509-371-0899

DATE: 03/23/18
SCALE: 1"=100'
DRAWN BY: CCA
APPROVED BY: CCA
PROJECT: 17082
SHEET 1 OF 1



LINE TABLE		
LINE	BEARING	LENGTH
L1	N00°29'36"E	19.88
L2	N68°03'36"W	64.42
L3	N23°02'40"E	15.50
L4	S27°19'33"W	34.02



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Resolutions – Adoption

Key Element: Key 2 - Infrastructure & Facilities

Subject:

Resolution No. 77-18, Authorizing the Award of Bid to All Star, Inc. for the 2018 ADA Ramp Project

Department:
Public Works

Ordinance/Resolution Number:
77-18

Document Type:
Resolution

Recommended Motion:

Adopt Resolution No. 77-18, authorizing the City Manager to sign and execute an agreement with All Star, Inc. for the 2018 ADA Ramp Project, and to execute change orders as indicated therein.

Summary:

This proposed contract award will implement an important element of the 2018 Pavement Preservation Program. Federal regulations require the City to bring sidewalk access ramps into compliance with American's with Disabilities Act (ADA) specifications when certain resurfacing treatments are applied. This includes streets that are either paved or have a micro-surface treatment. In recent years, this work was completed by the City's Streets Maintenance Division; however, due to expansion of the Pavement Preservation Program, staff recommends contracting for this work.

This year's project covers various ramps located in the south central core of Richland. Included as Alternative A is ADA ramp work along Van Giesen between Birch and Thayer where a recent micro-surfacing project has been completed. Additional work (Alternative B) in this contract is new sidewalk in front of Sagebrush Elementary at the corner of Wright & Frankfort. This sidewalk infill project is proposed in response to a resident request and to bring a City-owned facility into compliance with sidewalk requirements. A separate funding source for this work has been identified so that it does not erode the budget focus of the Pavement Preservation Program.

On April 9, 2018, three (3) bids were received. The low bid was \$198,794.29, and the high bid was \$274,159.00. Engineer's estimate was \$204,690.00. All of these figures include award of both alternates.

Work will start this spring and be completed by mid-June.

Staff recommends approval of Resolution No. 77-18.

Fiscal Impact:

The total cost of this contract, including a construction contingency and engineering, is estimated at \$254,500, of which \$30,600 will be required for the city property sidewalks on Wright Avenue. Costs will be funded from the Pavement Preservation Program budget, which has a current available balance of \$405,316, and from the Parks and Facilities Renewal & Replacement budget, which has a starting budget of \$378,000.

Attachments:

1. Resolution No. 77-18
2. 4-09-18 - 2018 ADA Ramps - 18-0002 - Allstar Construction Group

RESOLUTION NO. 77-18

A RESOLUTION of the City of Richland authorizing the award of bid to All Star Inc. for the 2018 ADA Compliance Project.

WHEREAS, the 2018 - 2023 Capital Improvement Plan (CIP) includes a fully-funded project titled Pavement Preservation Program; and

WHEREAS, City staff have completed all project development and design work required to advance the 2018 ADA Compliance Project, which is a component of the Pavement Preservation Program, to construction; and

WHEREAS, this project is a required preparatory project to be completed before the City's upcoming micro-surfacing project and residential overlay project; and

WHEREAS, City staff solicited bids in accordance with the City's purchasing policies, receiving and opening three (3) bids on April 9, 2018; and

WHEREAS, All Star Inc. submitted the lowest responsible bid of the three (3) bids received; and

WHEREAS, the project budget is adequate to complete the project using the lowest responsible bid; and

WHEREAS, the City's best interests are served by completing the project in accordance with the CIP, project design and the lowest responsible bid.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Richland that the City Manager is authorized to sign and execute a contract with All Star Inc. in the amount of \$198,794.29, and to execute change orders up to the amount of \$25,000 to fulfill the project's design intent.

BE IT FURTHER RESOLVED that this resolution shall take effect immediately.

ADOPTED by the City Council of the City of Richland, Washington, at a regular meeting on the 17th day of April, 2018.

ROBERT J. THOMPSON
Mayor

ATTEST:

APPROVED AS TO FORM:

MARCIA HOPKINS, City Clerk

HEATHER KINTZLEY, City Attorney

City of Richland

DATE BIDS OPENED: April 9, 2018	ITB # 18-0002
2018 ADA RAMPS	

				ENGINEER'S ESTIMATE		ALLSTAR CNST GROUP RICHLAND, WA		WHEELER EXCAVATION LLC BENTON CITY, WA	
Item	Description	Qty	Unit	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
	Schedule A: BASE BID ADA RAMPS								
A-1	Mobilization.	1.0	LS	\$12,500.00	12,500.00	4,440.00	4,440.00	15,855.00	15,855.00
A-2	SPCC plan (All Schedules).	1.0	LS	500.00	500.00	1,055.00	1,055.00	1,538.00	1,538.00
A-3	Project temporary traffic control.	1.0	LS	10,000.00	10,000.00	2,454.00	2,454.00	6,511.00	6,511.00
A-4	Flaggers & spotters.	120.0	HR	60.00	7,200.00	56.72	6,806.40	51.00	6,120.00
A-5	Site restoration.	1.0	LS	9,750.00	9,750.00	5,981.00	5,981.00	11,800.00	11,800.00
A-6	Cement concrete sidewalk for ADA ramp.	287.0	SY	65.00	18,655.00	133.26	38,245.62	180.00	51,660.00
A-7	Sawcutting cement concrete curb.	443.0	LF	15.00	6,645.00	17.78	7,876.54	22.00	9,746.00
A-8	Detectable warning surface.	372.0	SF	50.00	18,600.00	15.16	5,639.52	40.00	14,880.00
A-9	Concrete retaining wall (1' to 2.5').	361.0	SF	100.00	36,100.00	62.33	22,501.13	98.00	35,378.00
A-10	Chain link fence, 4' tall.	18.0	LF	75.00	1,350.00	92.01	1,656.18	40.00	720.00

Schedule A: BASE BID ADA RAMPS SUBTOTAL **\$121,300.00** **\$96,655.39** **\$154,208.00**

0% SALES TAX **-** **-** **-**

Schedule A: BASE BID ADA RAMPS TOTAL **\$121,300.00** **\$96,655.39** **\$154,208.00**

Alternative #1 - ADA ramps on Van Giesen									
A1-1	Project temporary traffic control.	1.0	LS	\$5,000.00	5,000.00	2,454.00	2,454.00	5,396.00	5,396.00
A1-2	Flaggers & spotters.	100.0	HR	60.00	6,000.00	56.72	5,672.00	51.00	5,100.00
A1-3	Site restoration.	1.0	LS	7,200.00	7,200.00	6,067.08	6,067.08	11,000.00	11,000.00
A1-4	Cement concrete sidewalk for ADA ramp.	242.0	SY	65.00	15,730.00	133.26	32,248.92	186.00	45,012.00
A1-5	Cement concrete sidewalk 4" thick.	32.0	SY	50.00	1,600.00	152.05	4,865.60	215.00	6,880.00
A1-6	Sawcutting cement concrete curb.	352.0	LF	15.00	5,280.00	17.91	6,304.32	22.00	7,744.00
A1-7	Detectable warning surface.	324.0	SF	50.00	16,200.00	15.16	4,911.84	44.00	14,256.00
A1-8	Cement concrete curb & gutter.	28.0	LF	75.00	2,100.00	61.33	1,717.24	98.00	2,744.00
A1-9	Extruded curb.	42.0	LF	25.00	1,050.00	59.33	2,491.86	24.00	1,008.00
A1-10	Asphalt patching (3" ACP / 6" CSTC).	11.0	SY	\$120.00	1,320.00	267.90	2,946.90	138.00	1,518.00
A1-11	Chain link fence, 4' tall.	16.0	LF	75.00	1,200.00	92.01	1,472.16	40.00	640.00
A1-12	Storm drain catch basin frame & grate.	1.0	EA	750.00	750.00	400.00	400.00	587.00	587.00

Alternative #1 - ADA ramps on Van Giesen SUBTOTAL **\$63,430.00** **\$71,551.92** **\$101,885.00**

0% SALES TAX **-** **-** **-**

Alternative #1 - ADA ramps on Van Giesen TOTAL **\$63,430.00** **\$71,551.92** **\$101,885.00**

Item	Description	Qty	Unit	ENGINEER'S ESTIMATE		ALLSTAR CNST GROUP RICHLAND, WA		WHEELER EXCAVATION LLC BENTON CITY, WA	
				Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
	Alternative #2 - Sidewalk & ADA at 507 Wright Avenue								
A2-1	Site restoration.	1.0	LS	\$3,000.00	3,000.00	1,759.25	1,759.25	1,885.00	1,885.00
A2-2	Project temporary traffic control.	1.0	LS	2,000.00	2,000.00	737.90	737.90	557.00	557.00
A2-3	Cement concrete sidewalk for ADA ramp.	8.0	SY	65.00	520.00	133.26	1,066.08	200.00	1,600.00
A2-4	Cement concrete sidewalk 4" thick.	118.0	SY	50.00	5,900.00	152.05	17,941.90	80.00	9,440.00
A2-5	Cement concrete sidewalk 6" thick.	56.0	SY	60.00	3,360.00	28.96	1,621.76	113.00	6,328.00
A2-6	Sawcutting cement concrete curb.	15.0	LF	15.00	225.00	17.91	268.65	17.00	255.00
A2-7	Detectable warning surface.	10.0	SF	50.00	500.00	15.16	151.60	44.00	440.00
A2-8	Concrete curb & gutter (for driveway).	58.0	LF	60.00	3,480.00	61.33	3,557.14	27.00	1,566.00
A2-9	Asphalt patching (2" ACP / 4" CSTC).	13.0	SY	75.00	975.00	267.90	3,482.70	141.00	1,833.00

Alt. #2 - Sidewalk & ADA at 507 Wright Avenue SUBTOTAL	\$19,960.00	\$30,586.98	\$23,904.00
0% SALES TAX	-	-	-

Alternative #2 - Sidewalk & ADA at 507 Wright Avenue TOTAL	\$19,960.00	\$30,586.98	\$23,904.00
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Schedule A: BASE BID ADA RAMPS	\$121,300.00	\$96,655.39	\$154,208.00
Alternative #1 - ADA ramps on Van Giesen	63,430.00	71,551.92	101,885.00
Alternative #2 - Sidewalk & ADA at 507 Wright Avenue	19,960.00	30,586.98	23,904.00
GRAND TOTAL (BASE BID. ALT 1 & ALT 2)	\$204,690.00	\$198,794.29	\$279,997.00

Schedule A: BASE BID ADA RAMPS	\$121,300.00	\$96,655.39	\$154,208.00
Alternative #1 - ADA ramps on Van Giesen	63,430.00	71,551.92	101,885.00
TOTAL (BASE BID & ALT 1)	\$184,730.00	\$168,207.31	\$256,093.00

City of Richland

DATE BIDS OPENED:	April 9, 2018	ITB #	18-0002
2018 ADA RAMPS			

MORENO & NELSON CNST WALLA WALLA, WA		
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Item	Description	Qty	Unit	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
Schedule A: BASE BID ADA RAMPS									
A-1	Mobilization.	1.0	LS	14,000.00	14,000.00		-		-
A-2	SPCC plan (All Schedules).	1.0	LS	1,500.00	1,500.00		-		-
A-3	Project temporary traffic control.	1.0	LS	4,500.00	4,500.00		-		-
A-4	Flaggers & spotters.	120.0	HR	54.00	6,480.00		-		-
A-5	Site restoration.	1.0	LS	6,900.00	6,900.00		-		-
A-6	Cement concrete sidewalk for ADA ramp.	287.0	SY	246.00	70,602.00		-		-
A-7	Sawcutting cement concrete curb.	443.0	LF	22.00	9,746.00		-		-
A-8	Detectable warning surface.	372.0	SF	24.00	8,928.00		-		-
A-9	Concrete retaining wall (1' to 2.5').	361.0	SF	135.00	48,735.00		-		-
A-10	Chain link fence, 4' tall.	18.0	LF	100.00	1,800.00		-		-

Schedule A: BASE BID ADA RAMPS SUBTOTAL **\$173,191.00** **\$0.00** **\$0.00**

0% SALES TAX **-** **-** **-**

Schedule A: BASE BID ADA RAMPS TOTAL **\$173,191.00** **\$0.00** **\$0.00**

Alternative #1 - ADA ramps on Van Giesen									
A1-1	Project temporary traffic control.	1.0	LS	820.00	820.00		-		-
A1-2	Flaggers & spotters.	100.0	HR	54.00	5,400.00		-		-
A1-3	Site restoration.	1.0	LS	4,400.00	4,400.00		-		-
A1-4	Cement concrete sidewalk for ADA ramp.	242.0	SY	240.00	58,080.00		-		-
A1-5	Cement concrete sidewalk 4" thick.	32.0	SY	156.00	4,992.00		-		-
A1-6	Sawcutting cement concrete curb.	352.0	LF	22.00	7,744.00		-		-
A1-7	Detectable warning surface.	324.0	SF	24.00	7,776.00		-		-
A1-8	Cement concrete curb & gutter.	28.0	LF	72.00	2,016.00		-		-
A1-9	Extruded curb.	42.0	LF	50.00	2,100.00		-		-
A1-10	Asphalt patching (3" ACP / 6" CSTC).	11.0	SY	400.00	4,400.00		-		-
A1-11	Chain link fence, 4' tall.	16.0	LF	115.00	1,840.00		-		-
A1-12	Storm drain catch basin frame & grate.	1.0	EA	1,400.00	1,400.00		-		-

Alternative #1 - ADA ramps on Van Giesen SUBTOTAL **\$100,968.00** **\$0.00** **\$0.00**

0% SALES TAX **-** **-** **-**

Alternative #1 - ADA ramps on Van Giesen TOTAL **\$100,968.00** **\$0.00** **\$0.00**

				MORENO & NELSON CNST WALLA WALLA, WA					
Item	Description	Qty	Unit	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
Alternative #2 - Sidewalk & ADA at 507 Wright Avenue									
A2-1	Site restoration.	1.0	LS	6,500.00	6,500.00		-		-
A2-2	Project temporary traffic control.	1.0	LS	1,025.00	1,025.00		-		-
A2-3	Cement concrete sidewalk for ADA ramp.	8.0	SY	250.00	2,000.00		-		-
A2-4	Cement concrete sidewalk 4" thick.	118.0	SY	150.00	17,700.00		-		-
A2-5	Cement concrete sidewalk 6" thick.	56.0	SY	158.00	8,848.00		-		-
A2-6	Sawcutting cement concrete curb.	15.0	LF	40.00	600.00		-		-
A2-7	Detectable warning surface.	10.0	SF	40.00	400.00		-		-
A2-8	Concrete curb & gutter (for driveway).	58.0	LF	100.00	5,800.00		-		-
A2-9	Asphalt patching (2" ACP / 4" CSTC).	13.0	SY	400.00	5,200.00		-		-
Alt. #2 - Sidewalk & ADA at 507 Wright Avenue SUBTOTAL					\$48,073.00		\$0.00		\$0.00
0% SALES TAX					-		-		-
Alternative #2 - Sidewalk & ADA at 507 Wright Avenue TOTAL					\$48,073.00		\$0.00		\$0.00
Schedule A: BASE BID ADA RAMPS					\$173,191.00		\$0.00		\$0.00
Alternative #1 - ADA ramps on Van Giesen					100,968.00		0.00		0.00
Alternative #2 - Sidewalk & ADA at 507 Wright Avenue					48,073.00		0.00		0.00
GRAND TOTAL (BASE BID. ALT 1 & ALT 2)					\$322,232.00		\$0.00		\$0.00
Schedule A: BASE BID ADA RAMPS					\$173,191.00		\$0.00		\$0.00
Alternative #1 - ADA ramps on Van Giesen					100,968.00		-		-
TOTAL (BASE BID & ALT 1)					\$274,159.00		\$0.00		\$0.00



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Resolutions – Adoption

Key Element: Key I - Financial Stability & Operational Effectiveness

Subject:

Resolution No. 79-18, Approving a Purchase Order to Acquire Ambulance Billing and Collection Services with Systems Design EMS, LLC

Department:

Fire & Emergency Services

Ordinance/Resolution Number:

79-18

Document Type:

Resolution

Recommended Motion:

Adopt Resolution No. 79-18, authorizing the City Manager to sign and execute a purchase order to acquire ambulance billing and collection services from Systems Design EMS, LLC through a cooperative purchasing agreement.

Summary:

The City processes all ambulance billings for emergency transports made by Richland Fire & Emergency Services. The billing process requires staff to implement the initial patient care reports, then submit documentation to Finance for processing with Medicare, Medicaid, and all public and private insurances. This practice is not efficient given the ongoing training demands associated with changes in insurance requirements and the constant need for adequate backup coverage.

Some agencies outsource the ambulance billing function due to these identified challenges. A third-party billing vendor is able to provide adequate coverage and timely and accurate billing processes without fail. Based on the appeal of outsourcing to a third party vendor, the City has determined to "piggyback" onto an existing cooperative purchasing agreement to acquire these services.

RCW 39.34.030 and RMC 3.04.100 allow the City to waive the requirements of the formal bid process in favor of another agency's cooperative purchasing agreement so long as the solicitation for the cooperative purchasing agreement meets all City's requirements. Richland's Purchasing Manager confirms that the solicitation and contract between Mid-Columbia Fire & Rescue ("Mid-Columbia") and Systems Design EMS, LLC meets all requirements set forth in RCW 39.34.030 and RMC 3.04.100.

The piggybacking process allows the City to issue a purchase order directly to Systems Design EMS, LLC for these services. The contract will dictate the cost of services to be billed for each transport as described. Given the City's estimated transports, the purchase order shall not exceed \$100,000 on an annual basis. The contract is set to terminate on July 1, 2020, unless Mid-Columbia extends the agreement for an additional five (5) years, at which point the City will also have the option to extend. Staff recommend approval of Resolution No. 79-18.

Fiscal Impact:

Funding will come from the City's Medical Services Fund. For the 2018 budget, this service is currently in salaries and benefits, which will be transferred to contract services to cover costs. The cost shall not exceed \$100,000 on an annual basis.

Attachments:

1. Resolution No. 79-18
2. Contracting Documents for Ambulance Billing and Collection Services

RESOLUTION NO. 79-18

A RESOLUTION of the City of Richland authorizing a purchase order with Systems Design West, LLC for ambulance billing and collection services.

WHEREAS, RCW 39.34.030 and RMC 3.04.100 allow for waiver of the City's formal solicitation process when a suitable cooperative purchasing agreement is available; and

WHEREAS, the acquisition of goods or services under an established cooperative purchasing agreement (also known as "Piggybacking") allows the City to use the terms and conditions of an established contract in lieu of a formal bid process; and

WHEREAS, although the City has historically performed the ambulance billing function internally, the City seeks to outsource this services to a third-party billing vendor to alleviate staffing issues, and to ensure timely and accurate billing, collection, and patient account services; and

WHEREAS, Mid-Columbia Fire & Rescue, located in The Dalles, Oregon ("Mid-Columbia"), has contracted with Systems Design West, LLC for ambulance billing and collection services. The contract between Mid-Columbia and Systems Design West, LLC is a cooperative purchasing agreement available to the City; and

WHEREAS, Mid-Columbia's solicitation and its resulting cooperative purchasing agreement have been reviewed by Richland's Purchasing Manager to ensure compliance with RCW 39.34.030 and RMC 3.04.100; and

WHEREAS, the solicitation process met the City's requirements and specifications for outsourcing ambulance billing and collection services, and are the same as those listed in Mid-Columbia's solicitation; and

WHEREAS, the City will pay Systems Design West, LLC the same rates and fees for ambulance billing and collection services as those paid by Mid-Columbia; and

WHEREAS, the terms of the City's agreement with Systems Design West, LLC will mirror those found in Mid-Columbia's contract, to include a termination date of July 1, 2020 and a possible option to extent for an additional five (5) years, depending on whether Mid-Columbia acts on its option to extend its agreement five (5) years past the termination date.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Richland that the City Manager is authorized to sign and execute a purchase order with Systems Design West, LLC for ambulance billing and collection services.

BE IT FURTHER RESOLVED that the purchase order amount shall not exceed \$100,000 annually. This amount is based on an estimate of the number of billable transports made by Richland Fire & Emergency Services and the established ambulance billing cost associated with said transports.

BE IT FURTHER RESOLVED that this resolution shall take effect immediately.

ADOPTED by the City Council of the City of Richland, Washington, at a regular meeting on the 17th day of April, 2018.

ROBERT J. THOMPSON
Mayor

ATTEST:

APPROVED AS TO FORM:

MARCIA HOPKINS, City Clerk

HEATHER KINTZLEY, City Attorney

INSERT CITY OF RICHLAND PURCHASE ORDER HERE

Services for Ambulance Billing & Collection Services

Not to Exceed Amount (Annually): \$100,000

Consultant Name: Systems Design West, LLC

Cooperative Purchasing Agreement (Piggyback) RFP No. MCRF15-01 Mid-Columbia Fire & Rescue, The Dalles, Oregon

Terms: Cooperative Contract No. MCRF15-01 / Cooperative Purchase Agreement

Exhibit A: RFP Number: MCRF 15-01

Exhibit B: Professional Services Agreement – Mid-Columbia Fire & Rescue and Systems Design West, LLC.



CITY OF RICHLAND PURCHASE ORDER TERMS AND CONDITIONS

The following terms and conditions are agreed to by the Seller (Supplier) whose name appears on the face of this Purchase Order and the City of Richland (City). Seller hereby acknowledges and agrees that these terms and conditions shall apply and are hereby incorporated into this Purchase Order, or other agreement, between Seller and the City under which Seller agrees to provide goods and services.

INDEPENDENT CONTRACTOR: The Seller, and any and all employees of the Seller or other persons engaged in the performance of any work or services required of the Seller under this Purchase Order, are independent contractors and shall not be considered employees of the City. Seller shall be solely responsible for the operation of its business and the supervision of its employees. Any and all claims that arise at any time under any Workers' Compensation Act on behalf of said employees or other persons while so engaged, and any and all claims made by a third party as a consequence of any act or omission on the part of the Seller's employees or other persons engaged in any of the work or services required to be provided under this Purchase Order, shall be the sole obligation and responsibility of the Seller.

COMPLIANCE WITH ALL LAWS, LICENSES AND PERMITS: In the performance of their duties, Seller shall comply with all applicable federal, state, local laws and regulations. This Purchase Order shall be governed and construed according to the laws of the State of Washington.

INDEMNIFICATION/HOLD HARMLESS: Seller shall defend, indemnify and hold the City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or in connection with the performance of this Purchase Order/Contract, except for injuries and damages caused by the sole negligence of the City. Seller expressly waives its immunity under industrial insurance, Title 51 RCW, to the limited extent necessary to effectuate its indemnification obligation to the City and for no other purpose.

INSURANCE: If requested by the City, Seller shall furnish to the City a certificate of insurance showing the Seller carries adequate public liability and property damage insurance with insurers suitable to the City, in amounts acceptable to the City and adequate workers' compensation insurance (or evidence of authority to self-insure). The failure by Seller to furnish such certificate of insurance to the City will not constitute a waiver of the requirement for such certificate or of any other provision on this Purchase Order.

ACCEPTANCE: Commencement of performance pursuant to this Purchase Order constitutes acceptance hereof by Seller.

PAYMENT TERMS: Unless otherwise negotiated, the terms of payment shall be net 30 days from receipt of proper invoice. PO numbers must be noted on all invoices.

SHIPPING/TITLE: Unless otherwise specified, all goods are to be shipped prepaid, FOB Destination. Regardless of FOB Point, Seller agrees to bear all risks of loss, injury, destruction of goods and materials ordered herein which occur prior to delivery. Except as otherwise expressly provided herein, title to and risk of loss on all items shipped by Seller to City shall pass to the City upon City's inspection and acceptance of such items at the specified City location. Such loss, injury, or destruction shall not release Seller from any obligation hereunder.

REJECTION: All goods or materials purchased herein are subject to approval by the City. Any rejection of goods or materials resulting because of nonconformity to the terms and specifications of this order, whether held by the City or returned will be at Seller's risk and expense.

TAXES: Unless otherwise definitely specified, the City agrees to pay all State of Washington sales or use tax. The City is exempted from payment of Federal Excise Tax. No federal tax shall be included in price.

CHANGES WITHOUT NOTICE PROHIBITED: This Purchase Order, together with any written instructions issued herein, contains the complete and final agreement between the City and the Seller and no agreement or other understating in any way purporting to alteration in any of the terms, conditions, delivery, price, quality, quantities, or specifications of this order will be effective without written consent of the City prior to shipment.

ASSIGNMENT: This Purchase Order is not assignable by Seller either in whole or in part, without the prior written approval of the City.

EXHIBIT A

RFP Number MCRF 15-01



RFP Number: MCRF 15-01
Date Issued: March 12, 2015

Ambulance Billing and Collection Services

Submittal Date and Time:
April 14, 2015, 5:00 PM PST

Submit Responses To:

**Ambulance Billing RFP
Mid-Columbia Fire and Rescue
1400 W. 8th St.
The Dalles, Oregon 97058**

Attention: Fire Chief, Robert Palmer

ANNOUNCEMENT

Mid-Columbia Fire and Rescue REQUEST FOR PROPOSALS AMBULANCE BILLING AND COLLECTION SERVICES MCFR 15-01

Qualified entities are invited to submit a proposal to furnish Ambulance billing and collection services for Mid-Columbia Fire and Rescue District.

The RFP documents may be obtained at Mid-Columbia Fire and Rescue, 1400 W. 8th St. The Dalles, Oregon 97058 or online at www.mcfr.org or by selecting Invitation to Bid.

Proposals must be submitted by 5:00 p.m. Pacific Standard Time, April 14, 2015 and must contain one (1) original and two (2) printed copies with supporting materials.
The proposal must be sent to:

**Ambulance Billing RFP
Mid-Columbia Fire and Rescue
1400 W. 8th St.
The Dalles, Oregon 97058**

Attention: Fire Chief, Robert Palmer

Proposals must be submitted in a separate, sealed envelope plainly marked with the opening date and time and clearly marked as follows: "SEALED PROPOSAL" – Ambulance billing and collection services MCFR 15-01.

The Fire District reserves the right to waive informalities not inconsistent with the law and to reject any or all proposals.

Published: The Dalles Chronicle March 13, 2015

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Section I	Schedule
Section II	Background Information
Section III	Scope of Work
Section IV	Proposal Format and Content
Section V	Evaluation Criteria and Award
Section VI	Proposal Terms and Condition
Section VII	Attachments

SECTION I – SCHEDULE

The schedule represents the Fire Districts best estimate that will be followed:

- March 12, 2015 Release RFP Notification
- April 14, 2015 Final Submittal Date
- April 21, 2015 Formal recommendation to Fire District Board
- May 1, 2015 Allowance of seven (7) calendar day protest period, from notice to award.
- May 4, 2015 Award Contract and Implementation
- **July 1, 2015** Implementation complete and contract begins

All questions regarding the RFP should be directed to Fire Chief Robert Palmer.
Send questions to:

Fire Chief Robert Palmer
Mid-Columbia Fire and Rescue
1400 W. 8th St.
The Dalles, Oregon 97058
rpalmer@mcfr.org
Phone 541-296-9445
Fax: 541-296-8656

Questions or requests for clarification directed to any employee or elected official of the Fire District other than the Purchasing Agent may be grounds for disqualification from the process.

SECTION II – BACKGROUND INFORMATION

INTRODUCTION

Mid-Columbia Fire & Rescue (MCFR) is in the Columbia Gorge area approximately 85 miles east of Portland, Oregon on Interstate 84.

Critical Infrastructure in our response area includes The Dalles Hydroelectric Dam, operated by the US Corp of Engineers, the Bonneville Power Administration's Celilo Converter Station and the Big Eddy-Knight 500 KVA Transmission Sub-Station supplying hydro-electric power to Southern California and the Southwest United States.

Our response area covers over 20 miles of Federal Highway Interstate 84 that is the main transport corridor from the Port of Portland to the rest of the US and over 90 percent of the commercial shipping coming into Oregon from the east. We also have 24 miles of the main east-west route of the Union Pacific Railway as well as one of the major natural gas trans-state pipelines that dissects our jurisdiction,

We also protect the only hospital in Wasco County, Mid-Columbia Medical Center, the only college in a six county area and the largest Google data storage facility on the west coast.

MCFR is the result of two agencies merging together. Originally The City of The Dalles Fire Department; Hook and Ladder Co No. 1 was established May 3, 1859. George A. Liebe originally a blacksmith and later a banker is considered the *Father of the The Dalles Fire Department* which was an all-volunteer department until 1933 when the first paid "firemen" were hired.

The WASCO Rural Fire District originally formed from Oregon State Wildland Fire Zone 2, contracted with The Dalles Fire Department for fire protection in 1967 for 10 years. In 1978 this contract ended and the rural fire district operated as a separate agency. In 1993-94 talks began again, this time the fire district and the city merged together and on July 1, 1995 Mid-Columbia Fire & Rescue became the newly formed fire district serving both the City of The Dalles and the surrounding area formerly WASCO Rural Fire Protection District.

Today we provide fire protection and fire code enforcement for a 100 square mile area and the only Advance Life Support Ambulance Service to 200 square miles. Our administration is managed by a Fire Chief and three Division Chiefs that oversee each of the following; Code Enforcement, Fire & EMS Training and Volunteer Coordinator. We provide the day to day operations with 21 career (paid) paramedics/firefighter, 12 volunteer firefighters & EMTs and 25 additional support and cadet volunteers.

The Fire District is managed by a five member publicly elected Board of Directors who set policy and approve the annual budget. The principal sources of revenues are property taxes and revenue received from ambulance transport reimbursement.

SECTION III – SCOPE OF WORK

GENERAL

The Fire District is soliciting proposals from qualified entities to provide ambulance billing and collection services.

Below is an activity history of the Advanced Life Support (ALS) and Basic Life Support (BLS) EMS calls for the years 2010 through 2014 and the 2014.

The Fire District charges \$1100.00 per ALS call and \$800 for BLS calls.

Transfers are charged based on ALS vs. BLS level of care.

Mileage at \$16.25 per mile is also charged.

Billed EMS Calls	ALS	BLS	Annual Total
2014	1202	596	1797
2013	1141	542	1683
2012	1328	503	1831
2011	1144	563	1707
2010	1140	647	1787

SUCCESSFUL BIDDER'S FEE FOR SERVICES PROVIDED:

The Fire District desires an all-inclusive rate for performing the billing and collection services. The successful bidder's services to be provided will be based on a flat fee and shall cover all costs including but not limited to telephone and postage expenses, office supplies, and any other overhead expenses or administrative support.

The Fee for Services should be submitted using Attachment C.

Fees shall remain fixed throughout the term of the contract.

The contract period will be for five (5) years, with an option to extend another five (5) years.

All payments for EMS transport services shall be deposited in a bank account specified by MCFR. The contractor shall deposit checks not less than weekly. Funds may be deposited electronically to MCFR's bank account directly by the Contractor, insurance payers, Medicare, or Medicaid.

MCFR currently uses an independent collection agency. All accounts considered in “Write Off” status will be sent to MCFR for review. All accounts must contain “biller’s notes” showing reasonable attempts to collect and details of the claim progress, including noting conversations with the patient, responsible party, insurance company etc.

ELIGIBILITY REQUIREMENTS

Proposers must meet the following minimum requirements:

- 1) Each respondent shall be licensed to provide services in the State of Oregon and provide copies of such license(s)
- 2) Billing system must be able to receive data files electronically from *Emergency Reporting Systems Inc.*, and maintain NEMESIS compliance.
- 3) Entity must provide current copies of insurance coverage, including workers compensation, general liability, professional liability and auto coverage (if applicable).
- 4) Entity must provide a letter of intent to sign the ***Business Associate Agreement-HIPPA*** (Attachment C)
- 5) Entity must provide a listing of current Ambulance/EMS and medical billing customers with contact information (names and phone numbers)
- 6) Entity must assign sufficient experienced qualified personnel to conduct the services in an efficient and professional manner.
- 7) Entity must have experience filing claims with governmental programs such as Medicare and Medicaid as well as health insurance programs (HMOs and PPOs), Oregon DMAP, PIP Insurance etc.
- 8) Entity must submit a proposed Scope of Service statement with the RFP response
- 9) Entity must submit a description of their billing software system
- 10) Entity must submit a system disaster recovery plan, as well as, a full description of system backup and recovery plans
- 11) Entity must show proof of providing similar services to other public agencies located in the Northwest. Northwest shall be defined as Oregon and Washington States.
- 12) Describe experience and familiarity with Fire Med programs, and a proposal to manage collections for this program.

- 13) Provide a copy of your last fiscal year internal audit. Please identify any past, known, pending or active litigation relating to billing fraud or impropriety against your agency. Also any current/past customer you have performed billing services for related to Medicare, Medicaid, as well as any third party insurance provider.
- 14) Describe the agencies you are currently providing electronic EMS billing for. Specifically include and confirm.
- 15) Any other services as agreed by the parties in order to effectively collect transport fees
- 16) Entity must agree to allow for Inter-local / Inter-State purchasing from this agreement in accordance with Oregon and Washington laws.

INTER-LOCAL AGREEMENT OREGON

Pursuant to the **Oregon Revised Statute 279A.215 [Formerly ORS 279.015 (l)(g)]** any purchasing contracting agency or agencies in Oregon may establish contracts or price agreements under the terms, conditions, and prices of this contract without competitive bidding, provided that the purchasing contracting agency complied with all competitive bidding requirements, and no material change is made with the purchasing contracting agency in the terms, conditions or prices of the original contract. The contractor agrees to extend the terms, conditions and prices of the original contract to such purchasing contracting agency or agencies during the period from the effective date of the original contract, if the original contract is extended by mutual agreement by the parties thereto.

INTER-STATE AGREEMENT

Public or purchasing agencies from Oregon and Washington may utilize this contract for interstate cooperative procurements, according to the requirements of ORS 279A.220 and RCW 39.34.

A proposer's failure to meet these minimum requirements shall cause their proposal to be considered non-responsive and their proposal will be eliminated from further consideration.

Late proposals will not be considered, regardless of the reason.

FIRE DISTRICT RESPONSIBILITIES

- The Fire District will generate all billable and non-billable claims on electronic software. The claims will go through an "in-house" Quality Management review to make sure all pertinent information is contained in the reports before they are released to the billing agency. In addition, the EMS staff will make a reasonable effort to gather any additional information, such as the responsible insurance company information, general demographics of the patient and any other information which may assist in the billing process.

- The Fire District will pay the successful bidder within thirty (30) days of receiving its monthly invoice for EMS billing services for the prior month at the agreed upon rates listed in the contract.
- The Fire District will provide at least two contacts for the purpose of day to day billing operations to be able to answer questions and obtain requested information that may be required from the successful bidder. The Fire District normal business hours will be Monday- Friday 8am-5pm, excluding holidays.

SUCCESSFUL BIDDERS RESPONSIBILITIES:

- Facilitate billing from reports generated by emergency services personnel, which includes electronic run reports, ancillary documents, hospital face sheet from the receiving hospitals
- Receive, process, and store all documents on a secure server.
- Demonstrate a minimum track record of five (5) years of billing insurance companies, including Medicare, Medicaid, Third Party Insurances and HMO's, Commercial Insurances, Auto Insurances, Worker's Compensation and patients directly.
 - ❖ Billing, filing, storing (both on and off-site), and receiving Medicare and Medicaid claims and payments electronically.
 - ❖ Transmit/receive Medicare claims via the required national format, or any future standard Medicare or Medicaid may require.
 - ❖ Filing electronic claims with all Commercial Insurance Carriers that accept electronic claims.
- Maintain an office that operates, at a minimum, during normal business hours of 8:00 am to 5:00 pm Monday through Friday, excluding holidays, and have a toll free number for billing inquiries.
- Interact with the receiving medical facility to obtain additional data to complete the billing process.
- Promptly address issues that may arise in connection with this agreement and/or day to day billing questions from Fire District staff.
- Possess and maintain the necessary equipment to perform billing and collection services.
- Maintain necessary credentialing contracts with insurance providers. All credentialing contracts will be approved and signed by the Fire Chief.

SERVICES TO BE PERFORMED

Successful bidders shall provide the following services:

- The contractor shall initiate appropriate bills within two (2) business days after receipt of a PHC report, in amounts based on the most recent dated fee schedule, as provided to the Contractor by MCFR, in form and content reasonably satisfactory to MCFR. The Contractor is responsible for invoicing, collection, and generation of any and all insurance forms and filings, record maintenance and preparation of standard and/or custom reports, as requested by MCFR.
- File all insurance claim forms for all patients based upon information received from the patient or obtained from successful bidder's research done at referring and/or receiving health care facilities to obtain payment.
- Comply with attorney requests for billing charges in a timely manner.
- Any claim denials for medically necessary transports shall be resubmitted properly and within the time frame provided and additional information provided within the resubmission to show validity of the claim for maximum benefit.
- Follow-up on electronically submitted and mailed claims for which payment has not been received at thirty (30), sixty (60), and ninety (90) days following initial submittal. Follow-up efforts and results must be documented and available to the Fire District for review. Provide the Fire District with necessary refund request including all pertinent information relating to refund payments to patients and/or insurance companies, indicating the refund payee's name, address and reason for refund.
- Refunds (checks drawn) will be sent for approval and signature by the Fire Chief.
- Provide support and education to improve collection process to assist the Fire District to reduce denials due to charting mistakes.

REPORTS:

Within ten (10) days of the end of the prior month, the successful bidders shall submit the following reports:

- Distribution of Charges and Collections – This report will track the charges, payments and financial class mix of all patients for a given month or other specified period.
- Ages Receivable Report – This report will have outstanding invoices sorted by date or account for thirty (30), sixty (60), ninety (90), one-hundred twenty (120), and over one hundred twenty days (121+) days. This report will also provide totals for these categories.
- Patient Alpha Listing – This report lists all patients alphabetically by patient last name.
- Monthly Payment Listing – This report lists payments, required charge offs (contractual adjustments), and refunds posted to each patient's account.

- Overpayment (refund) Report – This report lists all patients due refunds as a result of overpayment on account.
- Bank account reconciliation that ties to the Monthly Payment Listing and the Overpayment (refund) Report, a listing of Non-sufficient Funds (NSFs) and other bank fees and adjustments.

SECTION IV – PROPOSAL FORMAT AND CONTENT

FORMAT AND CONTENT

The Fire District discourages overly lengthy and costly proposals. In order for the Fire District to evaluate proposals fairly and completely, proposers must follow the format set out herein and provide all of the information requested.

Proposals must include the complete name and address of the company and the name, mailing address, and telephone number of the person the City should contact regarding the proposal.

SUBMITTAL REQUIREMENT

Proposers are required to submit their proposals in accordance with the maximum number of pages and content requirements indicated in the following table. Proposals shall not be written in a font size smaller than 12 point in any portion of the document.

Each section of the proposal shall be identified and assembled in the order listed in the Proposal Content Requirements below. Failure to provide a proposal in conformance with these requirements may cause a proposal to be declared non-responsive and eliminated from further consideration.

Maximum Number of Pages	Proposal Content Requirements
1	Item 1: Proposal Transmittal Form-with original signatures (Attachment A)
1	Item 2: Fee Schedule (Attachment B)
15	Item 3: Eligibility Requirements (include attachments)
1	Letter of Intent to sign <i>Business Associate Agreement -HIPPA</i> (Attachment C)
5	Current copies of insurance and bonding certifications
2	Item 4: Responsibilities
25	MAXIMUM TOTAL PAGES FOR RFP SUBMITTAL

PROPOSAL TRANSMITTAL FORM

The Proposers must include a fully completed and signed Proposal Transmittal Form as the cover sheet to the RFP (Attachment A). Failure to include this form fully completed and including an original signature shall cause the proposal to be declared non-responsive and eliminated from further consideration.

MINIMUM REQUIREMENTS

Proposers must indicate how they meet each of the minimum requirements, if any, listed in Section III of this RFP.

SECTION V – EVALUATION CRITERIA AND AWARD

INITIAL EVALUATION

Initially, all proposals will be reviewed by the Fire Chief to determine if they are administratively responsive to the RFP. Those proposals that are administratively responsive will be distributed to the evaluation committee. The committee will determine if the proposal meets all of the minimum requirements. This is a pass/fail evaluation. The proposals that pass the minimum requirements evaluation will be evaluated based on the evaluation criteria described below.

EVALUATION CRITERIA

A Selection Committee will review proposals that are received. Proposals that are nonresponsive to the requirements shall not be included for evaluation.

Proposal Complies with the RFP Requirements. YES _____ NO _____

If NO, indicate the manner, items number, description in which the proposal is non-confirming. Non-confirming proposals will not be considered: Attach a separate sheet if needed. _____

Responsive proposals will be evaluated under the criteria set forth below. For each criterion, the proposal will receive a number of points within the available range for that criterion.

CRITERION	SCORE
Responsiveness to RFP	5
Ability to Perform Services	40
Fees	20
Unique Features	10
References	20
Ability to meet the schedule	5
TOTAL	100 Points

Each Selection committee member shall determine which of the following descriptions applies to each of the forgoing proposal evaluation criteria:

EXCELLENT (1.0): *Of the highest or finest quality; exceptional; superior; superb; exquisite.*

Proposer provided information for a given criteria that satisfied the requirements and described specifically how and what will be accomplished in such a manner that exhibited an exceptional degree of understanding, skill and competency, both qualitatively and quantitatively. Demonstrated the Proposer's ability to perform and deliver far and beyond expectation.

VERY GOOD (0.8): *To a high degree; better than or above competent.*

Proposer provided information for a given criteria that satisfied the requirements and described specifically how and what will be accomplished in such a manner that exhibited a very high degree of understanding, skill and competency, both qualitatively and quantitatively. Demonstrated the Proposer's ability to perform and deliver beyond expectation.

GOOD (0.6): *Having positive or desirable qualities; competent; skilled; above average.*

Proposer provided information for a given criteria that satisfied the requirements and described specifically how and what will be accomplished in such a manner that exhibited a skillful degree of understanding, skill and competency, both qualitatively and quantitatively. Demonstrated the Proposer's ability to perform and deliver at the expected level.

FAIR (0.4): *Average; moderate; mediocre; adequate; sufficient; satisfactory; standard.*

Proposer provided information for a given criteria that satisfied the requirements and described sufficiently how and what will be accomplished in a manner that exhibited adequate and average degree of understanding, skill and competency, both qualitatively and quantitatively. Demonstrated the Proposer's ability to perform and deliver at a level slightly below expectation.

POOR (0.2): *Inadequate; lacking; inferior quality; of little or less merit; substandard; marginal.*

Proposer provided information for a given criteria that did not satisfy the requirements and described in an inadequate manner how and what will be accomplished.

Demonstrated the Proposer's ability to perform and deliver at a substandard and inferior level.

UNACCEPTABLE (0.0):

Proposer failed to provide any information for a given criteria, provided information that could not be understood, or did not provide the information for a given category as requested.

After the Selection Committee member has determined the description applicable to the Proposal evaluation criteria, the number of points available for each criterion shall be totaled.

In the event of multiple agencies with equally high scores the District may form a Competitive Range and establish a short list of proposers. Those proposers will have the opportunity to elaborate on their proposal and answer specific questions regarding their proposal. The interview process will be scored separately and utilize the same criteria as outlined above.

AWARD

Award shall be made to the responsive proposer whose proposal conforms to the solicitation and is determined in writing to be the most advantageous to the Fire District taking into consideration cost/price and the evaluation factors set forth in the Request for Proposals.

The Fire District reserves the right to accept or reject any and all proposals on such basis as the purchaser deems to be in its best interest, and is not bound to accept low bid.

SECTION VI – PROPOSAL TERMS AND CONDITIONS

TERMS OF CONTRACT

The initial contract term shall be for an initial five (5) year term. Fees quoted shall remain fixed for the initial five (5) year term

STIPULATIONS

The Proposer shall hold the Fire District free and harmless for all claims, liability and losses caused by the actions or failures to act on the part of the billing service, and the Proposer shall fully indemnify the Fire District for all such claims, liability and losses should they occur. The Fire District shall be named as an additional insured on a certificate of insurance issued and maintained during the term of the contract between the Fire District and the ambulance billing provider.

The Proposer shall have Workers' Compensation Insurance in accordance with the state law in which the entity operates. The Proposer shall furnish Fire District with evidence of this coverage before the execution of the contract.

TERMINATION

This agreement may be terminated by either party at any time upon ninety (90) days written notice of termination to the other party. Upon termination of the agreement, for whatever reason, the Proposer shall deliver all records and pertinent correspondence concerning the accounts and collection activities thereto to the Fire District, and the billing service will otherwise cooperate with the Fire District or their assignees to affect an orderly transfer of the collection of the Fire District accounts receivable. If either party should terminate this agreement, the billing service shall be entitled to receive from the Fire District, any and all payments due to the billing service up to and including the actual date of termination and transfer of accounts receivable. The billing service must turn over all records and have them delivered to a location designated by the Fire District upon termination of the contract.

EXAMINATION OF PROPOSALS

Proposers should carefully examine the entire RFP and any addenda thereto, and all related materials and data referenced in the RFP. Proposers should become fully aware of the nature of the work and the conditions likely to be encountered in performing the work.

REQUEST FOR PROPOSAL FORMAT

Proposals must be made in strict accordance with the format provided herein.

BULLETINS AND ADDENDA

Any bulletins or addenda to the proposal specifications issued during the period between issuance of the RFP and receipt of proposals are to be considered covered in the proposal and in awarding a contract they will become a part thereof. Receipt of bulletins or addenda shall be acknowledged by proposals in their cover letter.

FALSE OR MISLEADING STATEMENTS

If, in our opinion, a proposal contains false or misleading statements or references that do not support a function, attribute, capability, or condition as contended, the entire proposal shall be rejected.

CLARIFICATION OF PROPOSAL

We reserve the right to obtain clarification of any point in a proposer's proposal or to obtain additional information necessary to properly evaluate a particular proposal. Failure of a proposer to respond to such a request for additional information or clarification may result in rejection of the proposal.

RESPONSIVENESS

The proposal should respond to all requirements of this RFP to the maximum extent possible. Proposers are asked to clearly identify any limitations or exceptions to the requirements inherent in the proposed system. Alternative approaches will be given consideration, if the approach clearly offers us increased benefits.

REJECTION OF PROPOSAL

Proposals that are not prepared in accordance with the instructions to proposers may be rejected or disqualified. If not rejected, the Mid-Columbia Fire and Rescue may demand correction of any deficiency and accept the corrected proposal upon compliance with these instructions to proposing proposers.

PROPOSAL MODIFICATIONS

Any bidder may modify their proposal in writing, which may be hand delivered or sent by certified mail up to two days prior to the closing time. The written communication should not reveal the price as this will not be known until the sealed bid is opened. Modifications will be accepted by the Fire District, and binding upon the responding entity, where the modification:

- Is received by the Fire District at the place designated for submission of RFP responses prior to the deadline.
- Clearly states “MCFR 15-01 Mid-Columbia Fire and Rescue Ambulance Billing and Collection Services” and the name of the responding entity.
- Is signed by the same individual who signed the original submittal.

The modification document shall include a photocopy of each page of the original submittal which the responding entity seeks to modify, with the modification and the respondent’s signature clearly set out in ink on each page. Facsimile modification documents will be accepted within a sealed envelope provided that the Proposer’s signature is clearly legible.

Should there be more than one submittal modification from a responding entity, the last modification received prior to the deadline shall be opened and applied to the submittal. All earlier modifications shall be returned to the responding entity unopened.

Any modification, which fails to meet any requirement of this section, shall be rejected and the submittal shall be considered as if no modification has been attempted.

ORAL CHANGE/INTERPRETATION

No oral change or interpretation of any provision contained in this RFP is valid whether issued at a pre-proposal conference or otherwise. Written addenda will be issued when changes, clarifications, or amendments to proposal documents are deemed necessary by the Fire District.

LATE SUBMISSIONS

Regardless of cause, late qualifications will not be accepted and will automatically be disqualified from further consideration. It shall be at the proposer's sole risk to assure delivery at the designated office by the designated time. Late qualifications will not be opened and may be returned to the proposer at the expense of the proposer or destroyed if requested.

WITHDRAWAL OF PROPOSALS

At any time prior to the scheduled closing time for receipt of RFP submittals, any responding entity may withdraw their submittal, either personally or by written request. However, a proposal may not be withdrawn after opening.

ACCEPTANCE OF PROPOSALS

The contents of the proposal of the successful proposer will become, at our option, a contractual obligation if a contract ensues. Failure of the successful proposal to accept this obligation may result in cancellation of the award.

Proposals submitted are offers only and the decision to accept or reject is a function of quality, reliability, capability, reputation, and expertise of the proposing proposers. The Fire District reserves the right to terminate the selection process at any time and to reject any or all proposals.

The Fire District reserves the right to accept the Proposal that is, in its judgment, the best and most favorable to the interests of the Fire District and to the public; to reject the low price Proposal; to accept any item of any Proposal; to reject any and all Proposals; and to waive irregularities and informalities in any Proposal submitted or in the Request for Proposal process, provided; however, the waiver of any prior defect or informality shall not be considered a waiver of any future or similar defect or informality. Proposers should not rely upon or anticipate such waivers in submitting their proposals.

PROPOSAL ACCEPTANCE PERIOD

Award of this proposal is anticipated to be announced within ten (10) calendar days after proposals are due, although all offers must be complete and irrevocable for ninety (90) days following submission date.

DISPOSITIONS OF PROPOSALS

All materials submitted in response to this RFP will become the property of Mid-Columbia Fire and Rescue. One copy shall be retained for the official files of the Fire District and will become public record after award of the Contract.

CONFIDENTIALITY

The content of all proposals will be kept confidential until the selection of the Contractor is announced. At that time, the selected proposal is open for review by the competing proposers, excluding any tabulations and evaluations thereof. After the award of the Contract, all proposals, tabulations and evaluations will then become public information.

CONFIDENTIAL/PROPRIETARY INFORMATION

After award of the contract, proposals shall become public information except for proprietary information. If a proposer wishes individual pages, which contain actual business, proprietary information held confidential, each page must be marked and an explanation furnished of its proprietary nature. In addition to marking individual pages, the Proposal's Cover will also be annotated with the words "THIS PROPOSAL CONTAINS PROPRIETARY INFORMATION". "Confidential and Proprietary" information is not meant to include any information which, at the time of disclosure, is generally known by the public and/or competitors.

NEWS RELEASES

News releases pertaining to the award resulting from the RFPs shall not be made without prior written approval of the Fire Chief.

CONFLICTS OF INTEREST

No member of the governing body of Mid-Columbia Fire and Rescue or other officer, employee or agent who exercises any functions or responsibilities in connection with the carrying out of the project shall have any personal interests, direct or indirect, in any ensuing contract as a result of this RFP. The contractor for itself and its principal employees, officers, agents, directors, or shareholders covenants that neither the contractor nor any of the listed classes of individuals has nor shall acquire any interest, direct or indirect, in the project, direct or indirect, to which the contract pertains which would conflict in any manner or degree with the performance of its work hereunder. The successful proposer further covenants that in its performance of the contract no person having such interest shall be employed, without first disclosing his/hers potential conflict

INSURANCE

Successful proposer shall maintain throughout the period of this contract, insurance in the following minimum requirements:

- **Commercial General Liability Insurance:** The Contractor is required to provide Commercial General Liability (CGL) insurance on an occurrence form with limits not less than \$1,000,000 Combined Single Limit per Occurrence and \$2,000,000 in the Aggregate not excluding premise operations, independent contractors, products and completed operations, broad form property damage, blanket contractual, collapse, and underground hazards.

- Comprehensive Automobile Liability Insurance: The Contractor shall cover all owned, hired, and non-owned vehicles with coverage limits not less than \$100,000 single limit per occurrence for bodily injury and property damage.
- Workers' Compensation and Employers' Liability Insurance: Statutory requirements by the applicable state law or regulation. Employers' Liability insurance shall be \$100,000 each accident for bodily injury, \$500,000 policy limits for bodily injury by disease, \$100,000 per employee for bodily injury by disease.
- Professional Liability, including Valuable Papers Coverage: In the amount of \$500,000, or the contract ceiling price, whichever shall be greater.
- Without limiting its indemnification, the Contractor shall maintain, until acceptance of the project by the Owner, all insurance specified and minimum limits set forth.

OWNER'S RESPONSIBILITIES

The Fire District will provide a project manager to assist the contractor, coordinate the work and administer the contract.

STATUTORY REQUIREMENTS

The consultant chosen will be expected to comply with all Federal, State, County and City laws and statutes. Sections from State of Oregon Statutes and Administrative Rules are listed, for your reference, because of their particular applicability to this project.

- Mid-Columbia Fire & Rescue
- Oregon Revised Statute
- Oregon Administrative Rules
- The proposer chosen must comply with all Federal non-discrimination and affirmative action requirements, including Title VII of the Civil Rights Act of 1964 and 1992; Equal Employment Opportunity (EEO) provisions contained in 41 CFR Part 60
- Proposers certify, by the submission of their proposal that they comply with applicable portions of the Federal Civil Rights Act of 1964, the Equal Employment Opportunity Act, and regulations issued under these acts by the state and federal governments. Proposers not in compliance with these requirements will be declared non-responsive
- Selected entity will maintain compliance with the Public Laws, Acts, and Codes of Federal Regulations (CFR) contained in the ***Business Associate Agreement-HIPPA*** (Attachment D)

LICENSING REQUIREMENTS

Section 701.015 of the Oregon Revised Statutes requires that all businesses, wishing to engage in business in Oregon obtain a license. Prior to award of any contract, the successful proposer will be required to provide the Fire District with a copy of a current Oregon Business License.

SELECTION PROCESS

Mid-Columbia Fire and Rescue, through a selection committee, will review the submitted proposal using the evaluation criteria. Contract negotiations will begin with the most qualified and suitable entity to determine whether an agreement can be reached. If an agreement cannot be reached, then the Fire District may negotiate with the next most qualified and suitable entity. The final contract will be submitted to the Board of Directors for approval.

AWARD OF CONTRACT

A contract may be awarded to the responsible and responsive entity whose proposal is determined to be the most advantageous to the Fire District, taking into consideration price and the evaluation factors set out in the request for proposals.

RIGHT TO REJECT AND NOT AWARD

The Fire District may accept or reject any and all proposals or waive irregularities, and reserves the right not to award the contract when it is in the best interest of the Fire District to do so.

RIGHT TO APPEAL

Per Public Contracting rule a Written protest must be submitted within seven (7) calendar days after issuance of the notice of intent to Award the Contract. Informal notices will not be accepted.

SECTION VII – ATTACHMENTS

A - PROPOSAL TRANSMITTAL FORM

B - FEE SCHEDULE

C - BUSINESS ASSOCIATE AGREEMENT-HIPPA

ATTACHMENT A
PROPOSAL TRANSMITTAL FORM
*This form is to be completed in full, signed and submitted as the
cover sheet of the proposal.*

I certify that I am a duly authorized representative of the entity listed below and that information and materials enclosed with this proposal accurately represent the capabilities of the office listed below for providing the services indicated and comply with all provisions in this RFP. In addition, I certify that I am a company officer empowered to bind the company to the requirements of this RFP and to our proposal. The Fire District is hereby authorized to request anyone identified in this proposal to furnish any pertinent information deemed necessary to verify information provided or regarding reputation and capabilities of the entity.

A. Amendments

The proposer represents to the Fire District that it has relied upon no oral representations from the Fire District in the preparation of this proposal. If any amendments are issued to this RFP, proposer must acknowledge the receipt of such amendments in the space provided on the line below or by signing the amendment and submitting it before the submittal deadline, unless the amendment states otherwise. Proposals that fail to acknowledge receipt of amendments may be considered non-responsive and be eliminated from further consideration.

The proposer acknowledges receipt of the following Amendments: _____

B. Original Signature

This Transmittal Form must include an original signature. A proposal shall be considered non-responsive and eliminated from further consideration if an original signature is not included.

Signature of Representative

Office Address for which this submittal is made:

Date: _____

Street: _____

Name: _____

PO Box: _____

Title: _____

City State Zip: _____

Entity: _____

Phone: _____

Email address: _____

Fax: _____

Oregon Business License No.: _____

ATTACHMENT B

FEE SCHEDULE

AMBULANCE BILLING AND COLLECTION SERVICES

Price Proposal Sheet

RFP responses must be completed as described in the RFP, indicate an understanding of the scope of services to be provided, and include sufficient documentation to verify vendor past history and competency in providing like services as well as the intent to continue doing the same in the foreseeable future.

\$ _____ per billable account

Date	_____
Signed	_____
Title	_____
Name of Entity	_____
Entity Address	_____
City, State, Zip	_____
Phone Number	_____
Fax Number	_____
Email address	_____
Web Site	_____

Attachment C
Business Associate Agreement-HIPPA
Between Mid-Columbia Fire and Rescue (Fire
District) and _____

This Business Associate Agreement ("Agreement") between Mid-Columbia Fire and Rescue and _____ is executed to ensure that _____ will appropriately safeguard protected health information ("PHI") that is created, received, maintained, or transmitted on behalf of Mid-Columbia Fire and Rescue in compliance with the applicable provisions of Public Law 104-191 of August 21, 1996, known as the Health Insurance Portability and Accountability Act of 1996, Subtitle F – Administrative Simplification, Sections 261, *et seq.*, as amended ("HIPAA"), and with Public Law 111-5 of February 17, 2009, known as the American Recovery and Reinvestment Act of 2009, Title XII, Subtitle D – Privacy, Sections 13400, *et seq.*, the Health Information Technology and Clinical Health Act, as amended (the "HITECH Act").

A. General Provisions

1. **Meaning of Terms.** The terms used in this Agreement shall have the same meaning as those terms defined in HIPAA.
2. **Regulatory References.** Any reference in this Agreement to a regulatory section means the section currently in effect or as amended.
3. **Interpretation.** Any ambiguity in this Agreement shall be interpreted to permit compliance with HIPAA.

B. Obligations of Business Associate

_____ agrees that it will:

1. Not use or further disclose PHI other than as permitted or required by this Agreement or as required by law;
2. Use appropriate safeguards and comply, where applicable, with the HIPAA Security Rule with respect to electronic protected health information ("e-PHI") and implement appropriate physical, technical and administrative safeguards to prevent use or disclosure of PHI other than as provided for by this Agreement;
3. Report to Mid-Columbia Fire and Rescue any use or disclosure of PHI not provided for by this Agreement of which it becomes aware, including any security incident (as defined in the HIPAA Security Rule) and any breaches of unsecured PHI as required by 45 CFR §164.410. Breaches of unsecured PHI shall be reported to Mid-Columbia Fire and Rescue without unreasonable delay but in no case later than 60 days after discovery of the breach;

4. In accordance with 45 CFR §164.502(e)(1)(ii) and 45 CFR §164.308(b)(2), ensure that any subcontractors that create, receive, maintain, or transmit PHI on behalf of _____ agree to the same restrictions, conditions, and requirements that apply to _____ with respect to such information;
5. Make PHI in a designated record set available to Mid-Columbia Fire and Rescue and to an individual who has a right of access in a manner that satisfies Mid-Columbia Fire and Rescue's obligations to provide access to PHI in accordance with 45 CFR §164.524 within 30 days of a request;
6. Make any amendment(s) to PHI in a designated record set as directed by Mid-Columbia Fire and Rescue, or take other measures necessary to satisfy Mid-Columbia Fire and Rescue obligations under 45 CFR §164.526;
7. Maintain and make available information required to provide an accounting of disclosures to Mid-Columbia Fire and Rescue or an individual who has a right to an accounting within 60 days and as necessary to satisfy Mid-Columbia Fire and Rescue obligations under 45 CFR §164.528;
8. To the extent that _____ is to carry out any of Mid-Columbia Fire and Rescue obligations under the HIPAA Privacy Rule, _____ shall comply with the requirements of the Privacy Rule that apply to Mid-Columbia Fire and Rescue when it carries out that obligation;
9. Make its internal practices, books, and records relating to the use and disclosure of PHI received from, or created or received by _____ on behalf of Mid-Columbia Fire and Rescue, available to the Secretary of the Department of Health and Human Services for purposes of determining _____ and Mid-Columbia Fire and Rescue compliance with HIPAA and the HITECH Act;
10. Restrict the use or disclosure of PHI if Mid-Columbia Fire and Rescue notifies _____ of any restriction on the use or disclosure of PHI that Mid-Columbia Fire and Rescue has agreed to or is required to abide by under 45 CFR §164.522; and

If Mid-Columbia Fire and Rescue is subject to the Red Flags Rule (found at 16 CFR §681.1 *et seq.*), _____ agrees to assist Mid-Columbia Fire and Rescue in complying with its Red Flags Rule obligations by: (a) implementing policies and procedures to detect relevant Red Flags (as defined under 16 CFR §681.2); (b) taking all steps necessary to comply with the policies and procedures of Mid-Columbia Fire and Rescue Identity Theft Prevention Program; (c) ensuring that any agent or third party who performs services on its behalf in connection with covered accounts of Mid-Columbia Fire and Rescue agrees to implement reasonable policies and procedures designed to detect, prevent, and mitigate the risk of identity theft; and (d) alerting Mid-Columbia Fire and Rescue of any Red Flag incident (as defined by the Red Flag Rules) of which it becomes aware, the steps it has taken to mitigate any potential harm that may have occurred, and provide a report to Mid-Columbia Fire and Rescue

of any threat of identity theft as a result of the incident.

C. Permitted Uses and Disclosures by Business Associate

The specific uses and disclosures of PHI that may be made by _____ on behalf of Mid-Columbia Fire and Rescue include:

1. The preparation of invoices to patients, carriers, insurers and others responsible for payment or reimbursement of the services provided by Mid-Columbia Fire and Rescue to its patients;
2. Preparation of reminder notices and documents pertaining to collections of overdue accounts;
3. The submission of supporting documentation to carriers, insurers and other payers to substantiate the healthcare services provided by Mid-Columbia Fire and Rescue to its patients or to appeal denials of payment for the same; and
4. Other uses or disclosures of PHI as permitted by HIPAA necessary to perform the services that _____ has been engaged to perform on behalf of Mid-Columbia Fire and Rescue.

D. Termination

1. Mid-Columbia Fire and Rescue may terminate this Agreement if Mid-Columbia Fire and Rescue determines that _____ has violated a material term of the Agreement.
2. If either party knows of a pattern of activity or practice of the other party that constitutes a material breach or violation of the other party's obligations under this Agreement, that party shall take reasonable steps to cure the breach or end the violation, as applicable, and, if such steps are unsuccessful, terminate the Agreement if feasible.
3. Upon termination of this Agreement for any reason, _____ shall return to Mid-Columbia Fire and Rescue or destroy all PHI received from Mid-Columbia Fire and Rescue, or created, maintained, or received by _____ on behalf of Mid-Columbia Fire and Rescue that _____ still maintains in any form _____ shall retain no copies of the PHI. If return or destruction is infeasible, the protections of this Agreement will extend to such PHI.

Agreed to this ____ day of _____, 2015

Mid-Columbia Fire and Rescue

Signature: _____

Title: *Robert Palmer, Fire Chief*

Date: _____

Signature: _____

Title: _____

Date: _____

Date: _____

EXHIBIT B

Professional Services Agreement – Mid-
Columbia Fire & Rescue, The Dalles, Oregon

PROFESSIONAL SERVICES AGREEMENT

This Professional Services Agreement ("AGREEMENT") is made and entered into this 1st day of July, 2015 by and between, Mid Columbia Fire and Rescue ("Fire District") 1400 W. 8th St. The Dalles, Oregon 97058, and Systems Design West, LLC a Washington limited liability company having their principal place of business located at 19265 Powder Hill Place NE Poulsbo, Washington 98370 hereinafter referred to as the ("Consultant") Collectively the Fire District and the Consultant shall be known as the "PARTIES".

RECITALS:

(a) WHEREAS, the Fire District and the Consultant desire to enter into a "Professional Services Agreement",

(b) NOW, THEREFORE, in consideration for the mutual obligations contained herein the Fire District and the Consultant, each intending to be legally bound by this agreement, hereby mutually covenant and agree as follows:

1. SCOPE OF SERVICES. The Consultant shall provide to the Fire District specific services related to the billing and payment processing of EMS patient transport services that are provided to the general public by the Fire District. The following Scope of Services shall be incorporated into this contract as general services performed by the Fire District and the Consultant under this agreement.

1.1 The Fire District, with assistance from Consultant, shall apply for Provider Status or updated Status with Medicare, Medicaid, and all public and private insurances which will be billed as a part of this Scope of Services. The Fire District shall assist the Consultant to obtain the necessary certifications, numbers and documentation needed for Consultant to provide the services identified in sections 1.2 and 1.3 below. The Fire District agrees to furnish and assist the Consultant with the following:

(a) The Fire District agrees to provide a complete and legible "PCR" (Patient Care Report) to the Consultant including patient name, address and pertinent billing and insurance information from the field, including a copy of the patient signature for authorization of benefits and responsibility for payment, authorizing billing of Medicare, Medicaid and any insurance the patient is a subscriber to. The original patient signature must be maintained by the Fire District and made available to the Consultant and/or insurance payers upon request. Each batch of PCRs sent to the Consultant for billing shall be accompanied by a Batch Log, wherein each transport is itemized and identified as to level of service and total amount billed by the Fire District. The amounts to be billed will be determined by the Fire District in the form of a resolution or ordinance to be incorporated into this agreement as an attachment exhibit.

(b) The Fire District agrees to furnish the Consultant with hospital ER forms (face/admit sheets) with demographic and insurance information attached to the PCR if requested by Consultant. Copies of any payments made directly to the Fire District will be forwarded to the Consultant for accounting purposes in a timely manner. The Fire District agrees to generate any refund checks due to overpayments identified by the Consultant directly to the payer to which the refund is due, based on detailed information provided by

the Consultant. The Fire District shall provide additional information as may be required by insurance companies or other agencies in order to facilitate the Consultant's obligations to the Fire District.

(c) The Fire District agrees to furnish to the Consultant to be made part of this agreement as an attachment: resolutions pertaining to this Scope of Services; specific write off policies; collections procedures; rates and fees to be charged by the Fire District and administered by Consultant as part of the Scope of Services performed under this agreement.

1.2 Upon receipt of the PCRs from the Fire District, the Consultant shall: set up a patient account in Consultant's proprietary software application and create a patient record; perform all billing operations including follow up statements and any necessary rebilling of EMS patient transport services provided by the Fire District to the subscriber's medical insurances, Medicare, Medicaid and any and all known secondary insurance providers; produce and forward CMS 1500 forms and/or electronic medical claims per payer's rules and regulations within the legal boundaries of all federal and state laws; produce and mail an initial invoice and subsequent statements to all private patient accounts on behalf of the Fire District; file any applicable appeals to insurance payers and/or Medicare and Medicaid on behalf of the patient if necessary to pursue the claim.

1.3 The Consultant shall: receive at its facilities all payments (except those directly deposited into the Fire District's account by insurances and Medicare/Medicaid via EFT) Explanations of Benefits and Electronic Remittance Advices; account for all payments; deposit all funds directly into the Fire District's "deposit only" account; forward deposit information to the Fire District within 24 hours of such deposit; initiate and forward refund information and adjustments made on behalf of the patient's account to the Fire District. The Consultant shall provide to the Fire District a minimum of four (4) standard reports each month including: a) Aged Accounts Receivable b) Month End Summary c) Annual Collection Statistics d) Transaction Journal. These reports will include information related to amounts billed, amounts collected and uncollected, insurance and Medicare/Medicaid allowable and disallowable.

1.4 The Consultant shall provide live customer service to Fire District's patients via toll free phone numbers to answer patient billing questions Monday through Friday from 8:00am through 6:00 pm, Pacific Standard Time (except Federal holidays).

1.5 The Consultant shall provide all labor, materials and equipment necessary to perform the work specified in the above scope of services.

2. FEES, EXPENSES, & PAYMENT. For and in consideration of the services provided by the Consultant identified above, the Fire District shall pay to the Consultant an amount not to exceed **\$ 19.50** per transport per the Scope of Services & attached proposal performed under this agreement. The Fire District shall remit payment for services rendered under this agreement to the Consultant within 30 days from receipt of Consultant's monthly invoice to the Fire District.

3. PAYMENT OF TAXES. The Consultant shall be liable for any and all federal, state, and local sales, excise taxes and assessments as a result of the payment for services rendered under this agreement.

4. TERM OF AGREEMENT. The Consultant shall commence the work called for in this agreement on the date of the agreement and perform such work uninterrupted for an initial period of 5 years and an option to extend for an additional 5 years per MCFR RFP 15-01 unless the agreement is terminated by either party. This agreement may be amended upon the anniversary date by the parties upon mutual agreement of terms and conditions with the acknowledgement of an amendment to the Professional Services Agreement to be signed by both parties of the agreement.

5. SCHEDULE OF ATTACHMENT EXHIBITS. The following attachments are acknowledged by the parties and made part of this Agreement.

- # 1: Rates to be charged per transport (to be amended from time to time)
- # 2: EMS Policies to be administered
- # 3: State of Washington Records Storage Policy
- # 4: Systems Design Liability Insurance policies
- # 5: Business Associate Agreement
- # 6: Mid Columbia Fire & Rescue RFP-MCRF 15-01 SDW, LLC Proposal dated 4-14-2015

6. INDEPENDENT CONSULTANT STATUS. The Consultant performs this Agreement as an independent Consultant, not as an employee of Fire District. Nothing herein contained shall be deemed or construed by the parties hereto, nor by any third party, as creating the relationship of principal and agent or of partnership or of joint venture between the parties hereto, it being understood and agreed that neither method of computation of payment nor any other provision contained herein nor any acts of the parties hereto, shall be deemed to create any relationship between the parties hereto other than the relationship of Fire District and an independent Consultant.

7. TERMINATION. Either party may terminate this agreement with a minimum of 90 days' notice to the other party. The Consultant shall upon termination by either party provide 60 days of follow up service to the outstanding patient accounts including posting payments, making deposits, and two (2) months of follow up reports to the Fire District. Consultant shall deliver and document the return of all documentation in Consultants possession per the attached "Records Storage Agreement". In the event this agreement is terminated by either party and the terms for payment for services include a percent of collections method, Fire District shall pay to Consultant the agreed upon percentage of collected revenues until all accounts created by Consultant are settled.

8. INSURANCE. The Consultant shall maintain statutory minimum Worker's Compensation or Labor and Industry insurance as required by the laws of any state or country in which Services are performed. The Consultant will provide and make as part of this agreement as an attachment, a certificate of liability insurance with a minimum amount of commercial general liability of \$ 1,000,000 per occurrence and an aggregate of \$ 2,000,000 and maintain such insurance for the duration of this agreement. The Consultant shall provide an annual updated Certificate of Insurance to the Fire District upon the policy expiration date. The Consultant shall provide notice to the Fire District in the event the policy is cancelled or terminated for any reason prior to the policy expiration date.

9. END USER SOFTWARE LICENSE & CONFIDENTIAL INFORMATION. The term "CONFIDENTIAL INFORMATION AND SOFTWARE" shall mean: (i) any and all Information and proprietary software which is disclosed or provided by either party ("OWNER OF THE INFORMATION") to the other ("RECIPIENT") verbally, electronically, visually, or in a written or other tangible form which is either identified or should be reasonably understood to be confidential or proprietary; and (ii) Confidential Information may include, but not be limited to, trade secrets, computer programs, software, documentation, formulas, data, inventions, techniques, marketing plans, strategies, forecasts, client lists, employee information, and financial information, confidential information concerning Fire District and Consultant's business or organization, as the parties have conducted it or as they may conduct it in the future. In addition, Confidential Information may include information concerning any of past, current, or possible future products or methods, including information about research, development, engineering, purchasing, manufacturing, accounting, marketing, selling, leasing, and/or software (including third party software).

9.1 TREATMENT OF CONFIDENTIAL INFORMATION. Fire District's Confidential Information shall be treated as strictly confidential by Recipient and shall not be disclosed by Recipient to any third party except to those third parties operating under non-disclosure provisions no less restrictive than in this Section and who have a justified business "need to know". Fire District shall protect the deliverables resulting from Services with the same degree of care. This agreement imposes no obligation upon the Parties with respect to Confidential Information which either party can establish by legally sufficient evidence: (a) was in the possession of, or was rightfully known by the Recipient without an obligation to maintain its confidentiality prior to receipt from Fire District; (b) is or becomes generally known to the public without violation of this Agreement; (c) is obtained by Recipient in good faith from a third party having the right to disclose it without an obligation of confidentiality; (d) is independently developed by Recipient without the participation of individuals who have had access to the Confidential Information; or (e) is required to be disclosed by court order or applicable law, provided notice is promptly given to the Fire District and provided further that diligent efforts are undertaken to limit disclosure.

9.2 CONFIDENTIALITY AND DISCLOSURE OF PATIENT INFORMATION. Use and Disclosure of Protected Health Information. The parties hereto agree that in order for the Consultant to perform its duties as expected by the Fire District, it will be necessary for the Consultant to use and disclose Protected Health Information ("PHI"), as such term is defined at 45 CFR §164.501. The parties of this agreement further acknowledge and make part of this agreement as an attachment to this agreement a "Business Associate Agreement" to be maintained and updated whenever applicable by either party of this agreement.

9.3 PERMITTED AND REQUIRED USES AND DISCLOSURE OF PHI. The Parties hereto agree that the Consultant may use and disclose PHI in order to carry out any Payment function covered under the definition of "Payment" contained in 45 CFR §164.501. The Parties hereto further agree that the Consultant may use or disclose PHI for any use or disclosure that is required by law.

10. INDEMNITY. Each Party ("INDEMNIFYING PARTY") shall indemnify and hold the other Party ("INDEMNIFIED PARTY") harmless against any third party claim, including costs and reasonable attorney's fees, in which the Indemnified Party is named as a result of the negligent or intentional acts or failure to act by the Indemnifying Party, its employees or agents, while performing its obligations hereunder, which result in death, personal injury, or tangible property damage. This indemnification obligation is contingent

upon the Indemnified Party providing the Indemnifying Party with prompt written notice of such claim, information, all reasonable assistance in the defense of such action, and sole authority to defend or settle such claim.

11. SURVIVABILITY. The terms of Section 8 and 9 shall survive termination of this Agreement. If the Parties have executed a separate agreement that contains confidentiality terms prior to or contemporaneously with this Agreement, those separate confidentiality terms shall remain in full force to the extent they do not conflict. The "Business Associate Agreement" has terms incorporated to establish the continuance of covenants for the parties to disclose PHI for the continued operations of "Payment".

12. WARRANTIES AND REPRESENTATIONS. Each party warrants that it has the right and power to enter into this Agreement and an authorized representative has executed this Agreement. Consultant warrants that the Services will be performed in a professional and workmanlike manner in accordance with recognized industry standards. To the extent Services provided by Consultant are advisory; no specific result is assured or guaranteed. Consultant EXPRESSLY DISCLAIMS ALL OTHER REPRESENTATIONS OR WARRANTIES, WHETHER EXPRESSED OR IMPLIED.

13. NOTICE. Any notice, demand, request, consent, approval, or other communication that either party desires or is required to give to the other party related to any of the content of this agreement shall be presented in writing and served personally or sent by prepaid, first class mail to the addresses set forth below. Either party may change its address by notifying the other party of its change of address in writing.

Fire District:	Mid Columbia Fire and Rescue 1400 W. 8 th Street The Dalles, OR 97058
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Consultant:	Systems Design West, LLC 19265 Powder Hill PI NE Poulsbo, WA 98370
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14. NONWAIVER. No modification to this Agreement nor any failure or delay in enforcing any term, exercising any option, or requiring performance shall be binding or construed as a waiver unless agreed to in writing by both parties. No delay or omission of the right to exercise any power by either party shall impair any such right or power, or be construed as a waiver of any default or as acquiescence therein. One or more waivers of any covenant, term or condition of this Agreement by either party shall not be construed by the other party as a waiver of a subsequent breach of the same covenant, term or condition.

15. APPLICABLE LAW. The laws of the State of Washington shall govern the construction, validity, performance and enforcement of this Agreement. Venue as to any action, claim, or proceeding arising out of, or based upon this Agreement, including, but not limited to, any action for declaratory or injunctive relief, shall be the appropriate court in the State of Washington.

16. CONFLICT OF INTEREST. The Consultant covenants, warrants and represents that the Consultant or any employees of Consultant has no interest and shall not acquire any interest, direct or indirect, which would

conflict in any manner with the subject matter or the performance of this Agreement. The Consultant further covenants, warrants and represents that in the performance of this Agreement, no person having any such interest shall be employed by the Consultant in the future.

17. INTER-LOCAL AGREEMENT OREGON

Pursuant to the **Oregon Revised Statute 279A.215 [Formerly ORS 279.015 (l)(g)]** any purchasing contracting agency or agencies in Oregon may establish contracts or price agreements under the terms, conditions, and prices of this contract without competitive bidding, provided that the purchasing contracting agency complied with all competitive bidding requirements, and no material change is made with the purchasing contracting agency in the terms, conditions or prices of the original contract. The contractor agrees to extend the terms, conditions and prices of the original contract to such purchasing contracting agency or agencies during the period of three (3) years from the effective date of the original contract, and for up to two additional years if the original contract is extended by mutual agreement by the parties thereto. Minor modifications to this contract, for not more than 10 percent of the original price, shall not be considered "material changes" to the original contract.

Public or purchasing agencies from Oregon and Washington may utilize this contract for interstate cooperative procurements, according to the requirements of ORS 279a.220 and RCW 39.34

18. INTER-LOCAL AGREEMENT WASHINGTON

Pursuant to **Revised Code of the Washington (RCW) 39.34.030(5)** any purchasing contracting agency or agencies may establish contracts or price agreements under the terms, conditions, and prices of this contract without competitive bidding, provided that the purchasing contracting agency complied with all competitive bidding requirements, and no material change is made with the purchasing contracting agency in the terms, conditions or prices of the original contract. The contractor agrees to extend the terms, conditions, and prices of the original contract to such purchasing contracting agency or agencies during the period of three (3) years from the effective date of the original contract, and for up to two additional years if the original contract is extended by mutual agreement by the parties thereto. Minor modifications to this contract, shall not be considered "material changes" to the original contract.

Public or purchasing agencies from Oregon and Washington may utilize this contract for interstate cooperative procurements, according to the requirements of ORS 279a.220 and RCW 39.34.

19. ENTIRE AGREEMENT. This Agreement and any schedules, appendices, attachments and exhibits attached hereto sets forth all of the covenants, promises, agreements, conditions and understandings between the parties hereto, and there are no covenants, promises, agreements, conditions or understandings, either oral or written, between them other than as herein set forth. Except as herein otherwise expressly provided, no contemporaneous or subsequent agreement, understanding, alteration, amendment, change or addition to this Agreement, or any schedule, appendix, exhibit or attachment thereto shall be binding upon the parties of this Agreement hereto unless reduced to writing and signed by both parties. This Agreement constitutes a final, complete and exclusive statement of the agreement between the parties.

The Parties hereby agree to all of the above terms, conditions, covenants and have executed this Agreement by a duly authorized representative.

Dated this 27th day of May, 2015

Mid Columbia Fire and Rescue
"Fire District"

By Robert F. Palmer
Print: Robert F. Palmer
Title: Fire Chief

Dated this 30th day of May, 2015

Systems Design West, LLC
"Consultant"

By [Signature]
Print: Mark Spire
Title: CEO, Managing Member



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Items for Approval

Key Element: Key I - Financial Stability & Operational Effectiveness

Subject:

Appointments to the Planning Commission: Francesca Maier and Douglas Eadie

Department:
City Attorney

Ordinance/Resolution Number:
N/A

Document Type:
General Business Item

Recommended Motion:

Approve the appointments of Francesca Maier to Position No. 2 and Douglas Eadie to Position No. 7 on the Planning Commission.

Summary:

The Planning Commission position terms currently held by James Wise (No. 2) and Debbie Berkowitz (No. 7) expired on March 31, 2018.

Chair Wallner and Council Liaison Alvarez are recommending the appointment of Francesca Maier to Position No. 2 and Douglas Eadie to Position No. 7.

The position terms are for six (6) years, effective April 1, 2018 through March 31, 2024.

Candidate applications and resumes are on file in the City Clerk's Office.

Fiscal Impact:

None.

Attachments:

I. Recommendations



MEMORANDUM

TO: Richland City Clerk

FROM: Amanda Wallner, Planning Commission Chairwoman

DATE: March 2, 2018

SUBJECT: Planning Commission Vacancies

On March 2, 2018, City Council Liaison, Alvarez, Director Jensen, Vice Chair Madsen and myself considered 6 candidates for the Planning Commission vacancies for positions held by James Wise and Debbie Berkowitz.

The candidates recommended to fill the vacancies are as follows:

Position #2:

Currently Held by:

James Wise

Selected Candidate:

Francesca Maier

Position #7

Currently Held by:

Debbie Berkowitz

Selected Candidate:

Douglas Eadie

If you have any questions, please feel free to contact me.

Amanda Wallner, Chairwoman
Planning Commission



COUNCIL AGENDA ITEM COVERSHEET

Council Date: 04/17/2018

Agenda Category: Expenditures - Approval

Key Element: Key I - Financial Stability & Operational Effectiveness

Subject:

Expenditures from March 26, 2018 - April 6, 2018 for \$11,593,326.14 including Check Nos. 255930-256217, Wire Nos. 6809-6836, Payroll Check Nos. 132062-132586, and Payroll Wire/ACH Nos. 10396-10418

Department:

Administrative Services

Ordinance/Resolution Number:

Document Type:

Expenditures

Recommended Motion:

Approve the expenditures from March 26, 2018, to April 6, 2018 in the amount of \$11,593,326.14.

Summary:

Breakdown of Expenditures:

Check Nos.	255930-256217	745,482.79
Wire Nos.	6809-6836	8,371,076.06
Payroll Check Nos.	132062-132586	20,672.79
Payroll Wires/ACH	10396-10418	2,456,094.50
TOTAL		\$11,593,326.14

Fiscal Impact:

Yes

Total Disbursements: \$11,593,326.14. Disbursements (wire transfers) include \$3,805,597.00 for purchase power and \$3,081,774.86 for bond related payments.

Attachments:

1. Wire Transfers
2. Voucher Listing Report

VOUCHER LISTING REPORT
SUMMARY OF WIRE TRANSFERS
MARCH 26 - APRIL 6, 2018

Payee	Wire Description	Amount
Claim Wires - Wire No. 6809 to 6836		
AW Rehn Insurance	Fire Health Reimbursement Account	21,000.00
Battelle PNNL	Facility Fee Reimbursement	945,000.00
Bonneville Power Administration	Purchase Power	3,805,597.00
CIGNA Health/Matrix/QBE/VSP	Insurance Claims	353,634.57
Discovery Benefits	Section 125	7,855.10
Department of Licensing	Firearms Online Pmt for Concealed Licenses	1,002.00
Payment Processing, Inc.	Landfill Merchant Service Fees	1,668.44
Richland Golf Management Corporation	Col. Pt. Operating Reimb	153,544.09
US Bank National Association	Pre-payment for November Principal-Electric Bonds	2,710,174.86
US Bank Trust	Principal & Interest - Public Facilities District	371,600.00
	Total Claim Wire Transfers	\$ 8,371,076.06
Payroll Wires & Direct Deposits (ACH) - Wire No. 10396 to 10418		
Payroll Wires *see description below	Total Payroll Wire Transfers & Deposits	\$ 2,456,094.50
Total Claim & Payroll Wires/ACH		\$ 10,827,170.56

*Payroll Wires - transactions represent; employee payroll, payment of benefits, payroll taxes and other related payroll benefits.



City Of Richland

VL-1 Voucher Listing

From: 3/26/2018 To: 4/6/2018

Vendor	P.O. Number	Invoice Number	Check #	Purpose of Purchase	Invoice Amount
FUND 001	GENERAL FUND				
Division:	000	UNASSIGNED			
BUECHLER, KENNETH		18-123 BUECHLER	256110	18-123 INSPECTOR EXAM PREP	\$880.15
CITY OF RICHLAND		032018	256028	CASHIER SHORTAGE-GOMEZ	\$2.60
				CASHIER SHORTAGE-ELLERTSON	\$2.50
				CASHIER SHORTAGE-DAMRELL	\$0.04
				CASHIER SHORTAGE-ZEPEDA	\$10.75
ENNIS, MIKE		18-024 ENNIS	256038	18-024 BAT CERT COURSE	\$901.75
PERMIT REFUND		2018-000328	255990	1209 COUNTRY RIDGE-REFUND-SEPA	\$355.00
		2018-000494	256180	HOUSE SIZE DECREASED-REFND DIF	\$431.20
RATKAI, N. ZACH		18-003 RATKAI	256072	18-003 IEDC TRAINING	\$240.00
UNASSIGNED TOTAL ****					\$2,823.99
Division:	001	CITY COUNCIL			
FETROW, KIM		1802	255959	COUNCIL/CM PHOTOS	\$325.80
LEMLEY, PHILLIP		18-164 LEMLEY	256151	18-164 NLC CONCRESSIONAL CI	\$574.10
CITY COUNCIL TOTAL ****					\$899.90
Division:	100	CITY MANAGER			
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$50.46
CITY MANAGER TOTAL ****					\$50.46
Division:	101	CITY CLERK			
BARHAM, DEBBY		031618	256020	REIMB MILEAGE WMCA CONF	\$32.70
CODE PUBLISHING INC		59460	256118	RMC SUPPLEMENT UPDATE MAR 18	\$209.65
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$32.84
CITY CLERK TOTAL ****					\$275.19
Division:	102	CITY ATTORNEY			
BELL BROWN & RIO PLLC		957	256099	PROSECUTION SRVCS-APRIL	\$22,716.09
FAST SIGNS		139-56863	255955	360 DEGREES SAFETY DECALS	\$567.44
XEROX CORPORATION		092477370	256013	MX4-344681 BASE/PRINTS-FEB	\$64.01
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$52.25
CITY ATTORNEY TOTAL ****					\$23,399.79
Division:	110	ASSISTANT CITY MANAGER			
XEROX CORPORATION		092477370	256013	MX4-344681 BASE/PRINTS-FEB	\$236.69
				MX4-344681 BASE/PRINTS-FEB	\$63.05
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$34.27
ASSISTANT CITY MANAGER TOTAL ****					\$334.01
Division:	111	COMMUNICATIONS & MARKETING			
CITY OF RICHLAND		18-066 MACHART	256029	18-066 WPPI	\$839.61
MACHART, KELLY		031618	256058	REIMB MILEAGE 3/3-3/16/18	\$20.38
PITNEY BOWES INC		3305613270	256070	1ST QTR 2018 LEASE-PB SENDPRO	\$8,348.40



City Of Richland

VL-1 Voucher Listing

From: 3/26/2018 To: 4/6/2018

Vendor	P.O. Number	Invoice Number	Check #	Purpose of Purchase	Invoice Amount
RED LION HANFORD HOUSE		27667	256073	EMPLOYEE BREAKFAST-2017 AWARDS	\$7,316.98
WEST COAST PAPER COMPANY		10512148	256208	PAPER 100# WHITE	\$258.03
XEROX CORPORATION		092477391	256013	BG2-946472 BASE/PRINTS-FEB	\$762.46
				BG2-946472 BASE/PRINTS-FEB	\$384.40
		092477392		B35-458536 BASE-FEBRUARY	\$140.31
		092477393		XU6-476287 BASE/PRINTS-MARCH	\$1,771.71
				XU6-476287 BASE/PRINTS-MARCH	\$425.01
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$12.75
				PHONE CHARGES 3/1-3/31/18	\$0.27
				PHONE CHARGES 3/1-3/31/18	\$12.62
COMMUNICATIONS & MARKETING TOTAL ****					\$20,292.93
Division:	112	CABLE COMMUNICATIONS			
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$13.97
CABLE COMMUNICATIONS TOTAL ****					\$13.97
Division:	113	HANFORD COMMUNITIES			
LUNDGREN, REGINA E		RCH-SB-558	256152	SPEAKERS BUREAU - MARCH	\$320.00
XEROX CORPORATION		092477370	256013	MX4-344681 BASE/PRINTS-FEB	\$64.01
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$9.07
HANFORD COMMUNITIES TOTAL ****					\$393.08
Division:	120	FIRE			
BLAISING FIRE & WATER INC	S017796	60797	256104	MKII TACTICAL FIRST RESPONDER	\$624.00
BUECHLER, KENNETH		18-123 BUECHLER	256110	18-123 FIRE INSPECTOR EXAM	\$20.70
CALLBACK STAFFING SOLUTIONS LLC		007958	255941	STAFFING CALLBACK SRVCS-MARCH	\$216.13
CITY OF RICHLAND		18-123 BUECHLER	256115	18-123 FIRE INSPECTOR EXAM	\$880.15
COLUMBIA FITNESS		M433	255947	STEPMaster REPAIR/LABOR-ST 72	\$1,076.55
FRONTIER		03/18 2530045365	255960	SILVER CLOUD PHONE LINE	\$66.64
IMAGETREND INC	P058554	110683	255966	Software Licensing Agreement f	\$1,575.10
	P058554			Software Licensing Agreement f	\$346.84
RAMSAY, KEITH		032618	256183	REIMB CONVERTER	\$10.72
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$185.42
FIRE TOTAL ****					\$5,002.25
Division:	130	POLICE			
101 CLEANERS		01/18-9427360	255930	UNIFORM LAUNDRY SRVCS-JAN	\$156.34
		02/18-9427360		UNIFORM LAUNDRY SRVCS-FEB	\$171.63
CASCADE NATURAL GAS CORP		03/18-75997100005	255943	NAT GAS 871 GW WAY 2/15-3/16	\$1,247.07
CITY OF PASCO		2018-00000005	255945	COP-ANIMAL CONTROL SERV-MARCH	\$21,599.25
		2018-00000007		1/3 COST MEIER INV 18034	\$766.67
CITY OF RICHLAND		18-074 PECK	256115	18-074 CRIME PREVENTION THR	\$636.91
FRONTIER	S017844	04/18 2061882614	256133	TELEPHONE CHARGE 3/19/18 - 4/1	\$69.28
HUMAN FACTOR RESEARCH GROUP INC		9889	255965	INSTRUCTOR POLO	\$46.21



City Of Richland

VL-1 Voucher Listing

From: 3/26/2018 To: 4/6/2018

Vendor	P.O. Number	Invoice Number	Check #	Purpose of Purchase	Invoice Amount
INTERNATIONAL ASSN OF CHIEFS OF POLICE		1001298362	255967	2018 IACP DUES-C LEE	\$150.00
INTERNATIONAL ASSOC OF LAW ENFORCEMENT		23069/2018	256050	2018 DUES-A. GROW	\$50.00
INTL ASSN OF LAW ENFORCEMENT PLANNERS		2018 DUES-GROW	255968	IALEP 2018 DUES-GROW	\$85.00
LARSEN GUNSMITHING & FIREARMS	P058941	9373	255975	SUREFIRE X300U-A-BK - SUREFIRE	\$667.89
LN CURTIS & SONS	P058753	INV166023	255977	SCA-FIA SAFARI - RED FIREARM	\$233.49
	P058753			FREIGHT	\$6.17
MOON SECURITY SERVICES INC		918390	256166	RPD RANGE MONITORING	\$59.90
PC MALL GOV INC	P058900	B07183270101	255985	Adobe Acrobat Pro 2017 Gov Lic	\$339.58
RIVER CITY TOWING INC		16139	255991	TOW CHARGE	\$48.87
		16149		TOW CHARGE	\$48.87
		16172		TOW CHARGE	\$48.87
		16175		TOW CHARGE	\$48.87
		16182		TOW CHARGE	\$48.87
SPRINT		LCI-291913	255996	RPD PHONE TRACE 18-03597	\$120.00
WA STATE TACTICAL OFFICERS ASN		368	256005	2018 WSTOA TEAM DUES	\$100.00
WASHINGTON TRAFFIC SAFETY COMMISSION		031218	256006	WSTSC CONFERENCE-DOSS	\$103.49
WOODHOUSE, TODD		18-151 WOODHOUSE	256215	18-151 GUNARAMA	\$18.00
XEROX CORPORATION		092477379	256013	LX5-691308 BASE/PRINTS-FEB	\$242.70
		092477380		LX5-691344 BASE/PRINTS-FEB	\$244.27
		092477381		LX5-694258 BASE/PRINTS-FEB	\$250.76
		092477382		MX4-345491 BASE/PRINTS-FEB	\$464.73
		092477383		MX4-345537 BASE/PRINTS-FEB	\$231.66
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$311.25
				PHONE CHARGES 3/1-3/31/18	\$6.94
POLICE TOTAL ****					\$28,623.54
Division:	210	ADMINISTRATIVE SERVICES			
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$20.33
ADMINISTRATIVE SERVICES TOTAL ****					\$20.33
Division:	211	FINANCE			
ALLIED ENVELOPE	S017836	186521	255932	INSIDE DELIVERY & STACKING OF	\$68.70
	S017836			WINDOW ENVELOPE, REVERSE FLAP,	\$620.92
	S017836			ADJUST TAX	(\$0.01)
BENTON FRANKLIN COMMUNITY ACTION COMMITTEE		2017Q4-CR-HH	256100	HHANDS APPLICATIONS 4TR 2017	\$430.00
FEDERAL EXPRESS CORP		6-106-32016	256129	SHIPPING CHARGES FEB	\$9.43
GRIMES, KYLIE		022218	256045	REIMB MILEAGE 1/9-2/22/18	\$27.52
JETPAY PAYMENT SERVICES, FL, LLC		2019243	256142	MERCHANT SRVC CHRGS FEB 18	\$37,040.48
STATE AUDITOR'S OFFICE		L124180	256196	AUDIT SERVICES-FEB 2018	\$9,289.62
STEEBER'S LOCK SERVICE		647667	256197	LIBRARY LOCKBOX KEY	\$5.43
XEROX CORPORATION		092477384	256216	MX4-346672 BASE/PRINTS-FEB	\$294.24
		092477385		LX5-692029 BASE/PRINTS-FEB	\$212.20



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Vendor	P.O. Number	Invoice Number	Check #	Purpose of Purchase	Invoice Amount
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$134.94
				PHONE CHARGES 3/1-3/31/18	\$0.22
				PHONE CHARGES 3/1-3/31/18	\$77.23
FINANCE TOTAL ****					\$48,210.92
Division:	212	PURCHASING			
CANON FINANCIAL SERVICES, INC	S017832	18426698	255942	CONTRACT CHARGE (LEASE) PERIOD	\$158.95
	S017832			CONTRACT CHARGE (LEASE) PERIOD	\$39.74
	S017832			BW METER CHARGE PERIOD OF	\$12.78
	S017832			CLR METER USAGE PERIOD OF	\$7.86
	S017832			CLR METER USAGE PERIOD OF	\$1.97
	S017832			BW METER CHARGE PERIOD OF	\$3.19
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$60.41
				PHONE CHARGES 3/1-3/31/18	\$44.21
PURCHASING TOTAL ****					\$329.11
Division:	213	INFORMATION TECHNOLOGY			
ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE INC	P058928	93430415	255953	ESRI Annul Renewal 4/4/2018 -	\$55,386.00
UNITED PARCEL SERVICE	S017846	000986641138	256204	GROUND PKG TO MAGTECK FOR IT	\$4.00
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$44.18
				PHONE CHARGES 3/1-3/31/18	\$254.14
INFORMATION TECHNOLOGY TOTAL ****					\$55,688.32
Division:	220	HUMAN RESOURCES			
CITY OF RICHLAND		18-104 JUBB	256115	18-104 LABOR LAW CONFERENCE	\$74.00
		18-105 RETTIG		18-105 LABOR LAW CONFERENCE	\$94.90
EMPLOYMENT SCREENING SERVICES, INC		39380241194	256125	BACKGROUND/REFERENCE CHECKS	\$635.00
		39382541337		BACKGROUND/REFERENCE CHECKS	\$95.00
		39386241563		BACKGROUND/REFERENCE CHECKS	\$87.00
INTL PUBLIC MANAGEMENT ASSOCIATION		INV-35109-X4P3K0	256139	JUBB-2018 IPMA DUES	\$149.00
ON SCENE MEDICAL SERVICES, P.C.		1015	256066	PRE EMP-PHYSICALS/HEARING/VACC	\$155.00
				PRE EMP-PHYSICALS/HEARING/VACC	\$3,312.00
PARKER, RACHELL		18-106 PARKER	256174	18-106 LABOR LAW CONFERENCE	\$89.00
PUBLIC SAFETY SELECTION PC		3884	256182	POLYGRAPH EXAM-POLICE OFFICER	\$400.00
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$72.98
HUMAN RESOURCES TOTAL ****					\$5,163.88
Division:	300	COMMUNITY &DEVELOPMENT SERVICE			
CITY OF RICHLAND		18-144 JENSEN	256115	18-144 WSDOT WORKSHOP	\$236.23
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$20.64
				PHONE CHARGES 3/1-3/31/18	\$113.83
				PHONE CHARGES 3/1-3/31/18	\$6.31



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XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$20.58
				PHONE CHARGES 3/1-3/31/18	\$27.90
				PHONE CHARGES 3/1-3/31/18	\$20.27
COMMUNITY & DEVELOPMENT SERVICE TOTAL ****					\$445.76
Division:	301	DEVELOPMENT SERVICES			
CITY OF RICHLAND		18-039 BORING	256029	18-039 ICC TRAINING	\$291.87
MID COLUMBIA ENGINEERING INC	P058675	ST009764	255979	ANISA GARCIA, CLERICAL ASSISTA	\$801.10
DEVELOPMENT SERVICES TOTAL ****					\$1,092.97
Division:	302	REDEVELOPMENT			
CITY OF RICHLAND		18-033 THOMAS	256029	18-033 IEDC/BR&E TRAINING	\$160.00
REDEVELOPMENT TOTAL ****					\$160.00
Division:	303	LIBRARY			
FRONTIER	S017835	03/18 5099433152	255960	TELEPHONE CHARGE 3/4/18 - 4/3/	\$379.99
SILLER, DAURICE		18-160 SILLER	256192	18-160 LIBRARY FURNITURE SP	\$64.00
SILVA, ANN		18-159 SILVA	256193	18-159 LIBRARY FURNITURE SP	\$64.00
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$153.52
LIBRARY TOTAL ****					\$661.51
Division:	330	PARKS & RECREATION ADMIN			
MID COLUMBIA COMM FORESTRY COUNCIL		2018-04	256062	2018 MEMBERSHIP FEE-SCHIESSL	\$750.00
PARKS & RECREATION ADMIN TOTAL ****					\$750.00
Division:	331	PARKS & REC - RECREATION			
FRONTIER	S017844	04/18 2061882614	256133	TELEPHONE CHARGE 3/19/18 - 4/1	\$195.74
J&S DREAMLAND EXPRESS		17082A	256141	HCS TRAIN RENTAL EGGNITE	\$500.00
RICHLAND ACE HARDWARE		61049	256074	BOLTS/FASTENERS/ADAPTERS	\$16.45
		61097		CLAMP/PIPE/TEE/CAP/PLUG/ELBOW	\$41.26
		61135		CABLE TIES	\$19.53
TRI CITIES STEELBAND ASSOCIATION		100	256203	HCS EGGNITE PERFORMANCE	\$275.00
WILL BE KIDS INFLATABLES		EGGNITE	256212	BOUNCE HOUSE RENTAL FEE	\$173.28
XEROX CORPORATION		092477369	256013	MX4-322135 BASE/PRINTS-FEB	\$231.35
				MX4-322135 BASE/PRINTS-FEB	\$92.66
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$6.31
				PHONE CHARGES 3/1-3/31/18	\$37.85
				PHONE CHARGES 3/1-3/31/18	\$97.83
PARKS & REC - RECREATION TOTAL ****					\$1,687.26
Division:	335	PARKS & REC - PARKS&FACILITIES			
BADGER MOUNTAIN IRRIGATION DISTRICT		2018 WESTCLIFFE	255935	2018 BMID ASSESSMNT WESTCLIFFE	\$888.40
BASIN SOD INC		4769	256021	SOD	\$154.96
				SOD	\$154.97
BEAVER BARK & ROCK		866588	255936	SOD	\$64.94



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BEAVER BARK & ROCK		867452	255936	SOIL	\$52.11
BUELL RECREATION LLC	P058882	ORRIC 022718	255939	CLAMP HARDWARE PACKAGE PART NO	\$28.50
	P058882			FLATWASHER PART NO 0210033 FOR	\$0.91
	P058882			3/8 X 3/4 SS BHCS FOR OAK PARK	\$22.28
	P058882			FRIEGHT	\$439.83
	P058882			CHUTE SLIDE ENTRANCE PART NO	\$1,130.53
	P058882			FLAT WASHER PART NO 021-0032 F	\$1.82
	P058882			12 X 12 SHADE CANOPY FOR OAK P	\$2,101.41
	P058882			HARDWARE PACKAGE PART NO 03-11	\$39.10
BUILDERS HARDWARE & SUPPLY CO INC		S3625528.001	256026	BHS ACCESS CONTROL SERVICE	\$325.76
CONSOLIDATED ELECTRICAL DISTRIBUTORS INC		3627-589776	255948	RECEPTACLE	\$215.01
		3627-589810		LAMP	\$69.53
		3627-589850		EMT/STRAPS/WASHER/CONN/CPLG	\$52.31
COX EXCAVATING		325440	255950	SAND	\$521.28
EWING IRRIGATION PRODUCTS INC		4958481	255954	COUPLING/TUBING/VARI-FLOW	\$28.75
		4968463	256039	SPECTRUM JET/PIPE/COUPLING/LID	\$90.08
		4982969		CONNECTORS/SOLENOID	\$195.69
		4989494		SOLENOID/BONNETT ASSY	\$246.24
FARMERS EXCHANGE		54751	256128	WEED EATERS	\$760.18
FERGUSON ENTERPRISES INC		6060308	256041	20V LI-ION BATTERY PACK	\$412.56
FRONTIER	S017844	04/18 2061882614	256133	TELEPHONE CHARGE 3/19/18 - 4/1	\$32.68
	S017844			TELEPHONE CHARGE 3/19/18 - 4/1	\$1,120.91
G & R AG PRODUCTS INC		2177777-0001-02	256042	TAPE/CLAMP/POLYELBOW/POLYPRO	\$15.27
		2177852-0001-02		HOSE	\$24.67
GRAINGER	S017833	9718575815	255961	KEYED PADLOCK ITEM #1U160	\$118.33
	S017833	9718870497		V-BELT PULLEY ITEM #5RJA2	\$412.54
	S017833	9722645273		FILTER ELEMENT 4" ITEM #40AY60	\$235.17
	S017833	9722645281		OIL FILTER ITEM #4ZJ99	\$622.66
HERC RENTALS INC		29901534-001	256046	BOBCAT/TRAILER RENTAL	\$298.65
IRRIGATION SPECIALISTS INC		1232725-01	255969	RAINBIRDS/NOZZLES	\$92.69
KENNEWICK INDUSTRIAL & ELECTRICAL SUPPLY		365469	255972	POP-UP/COUPLER/NIPPLE	\$22.39
		365876	256055	VALVE	\$61.98
		366340		CONTROL	\$333.92
KENNEWICK IRRIGATION DISTRICT		2018-120981030011	256147	2018 ASSESS-BROOKSTONE PARK	\$650.36
		2018-125981020005		2018 ASSESS-DESERT RIM PARK	\$819.16
		2018-125983000005		2018 ASSESS-KEENE RD TRAIL	\$423.27
		2018-125983020010		2018 ASSESS-CHAPARRAL PARK	\$730.04
		2018-125983040006		2018 ASSESS-CHAPARRAL PARK	\$651.72
		2018-126983100001		2018 ASSESS-BADGER MTN PARK	\$518.13
		2018-127984000001		2018 ASSESS-GALA PARK	\$554.31
		2018-136983050009		2018 ASSESS-CLAYBELL PARK	\$423.04



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Vendor	P.O. Number	Invoice Number	Check #	Purpose of Purchase	Invoice Amount
PLATT ELECTRIC SUPPLY		P690834	255986	POWER PACK	\$67.79
		P947365		LIGHTS	\$31.05
RICHLAND ACE HARDWARE		215263	255989	PVC CAPS	\$53.76
		215292	256074	GLOVES/UTILITY KNIFE	\$37.97
		215310		FASTENERS	\$7.75
		215311		CONNECTORS	\$31.55
		61014		STRAP/FASTENERS	\$13.22
		61020	255989	RATCHET/FASTENERS	\$30.88
				RATCHET/FASTENERS	\$30.40
		61067		BATTERIES/PVC	\$23.72
		61077		DRILL BIT SET/EXTENTION CORD	\$83.60
		61091	256074	IMPACT SET/SCREWDRIVE GUIDE	\$26.04
		61114		GARDEN SPADE	\$30.40
SPRAGUE PEST SOLUTIONS		3466864	256079	MARCH 2018 MONTHLY SERVICE-FS1	\$103.17
		3466865		MARCH 2018 MONTHLY SERVICE-FS2	\$103.17
		3466867		MARCH 2018 MONTHLY SERVICE-FS3	\$103.17
		3466868		MARCH 2018 MONTHLY SERVICE-FS4	\$103.17
STONEWAY ELECTRIC SUPPLY		S102328602.001	256080	LIGHTING CONTACTOR	\$653.54
TACOMA SCREW PRODUCTS INC		22205128	256082	ROD/NUT	\$7.61
UNITED PARCEL SERVICE	S017846	000986641138	256204	GROUND PKG TO AGTERRA TECH FOR	\$6.16
WILBUR ELLIS COMPANY	S017812	11543041/11553231	256011	ESPLANADE 200 SC 1 EACH - 2.5	\$3,044.60
		11570536	256087	FERTILIZER	\$17,811.57
		11570801		ESPLANADE	\$159.10
		11571470		COMPLETE SOIL ANALYSIS	\$416.61
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$99.21
PARKS & REC - PARKS&FACILITIES TOTAL ****					\$39,238.25
Division:	900	NON-DEPARTMENTAL			
ARBAUGH & ASSOCIATES INC		1657	256018	ARBAUGH CONTRACT FEES-FEB 18	\$1,470.00
NON-DEPARTMENTAL TOTAL ****					\$1,470.00
GENERAL FUND Total ***					\$237,027.42
FUND	101	CITY STREETS			
Division:	401	STREETS MAINTENANCE			
ARROW CONSTRUCTION SUPPLY INC		210013	256019	PATCHER RENTAL	\$1,629.00
BC SALES CO INC		B467750	256023	BOOTS-RENTZ #I407045	\$260.59
		B467751		BOOTS-SHINES #I407019	\$184.57
FRONTIER	S017844	04/18 2061882614	256133	TELEPHONE CHARGE 3/19/18 - 4/1	\$32.68
	S017844			TELEPHONE CHARGE 3/19/18 - 4/1	\$57.21
GRAINGER	S017833	9716484036	255961	PORT. ELEC. HEATER ITEM #3VU33	\$58.75
HERC RENTALS INC		29889638-001	255964	LIQUID PROPANE	\$42.03



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HERC RENTALS INC		29892797-001	255964	LIQUID PROPANE	\$28.17
		29894783-001		LIQUID PROPANE	\$19.50
		29896932-001		LIQUID PROPANE	\$6.93
		29898359-001		LIQUID PROPANE	\$26.43
INLAND ASPHALT CO		2579656	256049	1/2" HMA ASPHALT	\$234.84
MONARCH MACHINE & TOOL CO INC		F194998	256064	PLATES PR DRAWING	\$110.09
NORTHWEST SIGN RECYCLING LLC		2946	255982	HYDROSTRIPPING	\$208.70
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$25.23
STREETS MAINTENANCE TOTAL ****					\$2,924.72
CITY STREETS Total ***					\$2,924.72
FUND 112	INDUSTRIAL DEVELOPMENT FUND				
Division:	305	ECONOMIC DEVELOPMENT			
ARBAUGH & ASSOCIATES INC		1657	256018	ARBAUGH CONTRACT FEES-FEB 18	\$150.00
CITY OF RICHLAND		18-003 RATKAI	256029	18-003 IEDC TRAINING	\$240.00
RATKAI, N. ZACH			256072	18-003 IEDC TRAINING	\$36.00
TRI CITY REGIONAL CHAMBER OF COMMERCE		51349	256084	TCRCC MEMBER DUES 2018	\$5,250.00
ECONOMIC DEVELOPMENT TOTAL ****					\$5,676.00
Division:	306	ECONOMIC DEVELOPMENT PROJECTS			
PERMIT SURVEYING INC		17159-3.INV	256178	LOGSTON RD RELIQUISHMENT	\$2,455.00
SHANNON & WILSON INC	P058789	8408	256190	AMENDMENT #1 ADDITIONAL	\$1,275.50
ECONOMIC DEVELOPMENT PROJECTS TOTAL ****					\$3,730.50
INDUSTRIAL DEVELOPMENT FUND Total ***					\$9,406.50
FUND 117	CRIMINAL JUSTICE SALES TAX				
Division:	131	CJST POLICE ACTIVITY			
MENKE JACKSON BEYER LLP		02/2018-013	256159	CODE ENFORCEMENT-TARR, V.	\$1,969.50
WA STATE CRIMINAL JUSTICE TRAINING		201129768	256003	CT LEVEL 1 INSTRUCTOR-MUAI #1	\$350.00
		201129811		CT LEVEL 1 INSTRUCTOR-MUAI #2	\$300.00
		201129851		DT LEVEL 2 INSTRUCTOR-MUAI	\$350.00
		201129870		DT FIREARMS RETENTION-MUAI	\$225.00
CJST POLICE ACTIVITY TOTAL ****					\$3,194.50
CRIMINAL JUSTICE SALES TAX Total ***					\$3,194.50
FUND 150	HOTEL/MOTEL FUND				
Division:	307	HOTEL/MOTEL TAX			
HEIDI ELKINGTON HEY		025	256137	2018 BICYCLE TOURISM MARKETING	\$500.00
HOTEL/MOTEL TAX TOTAL ****					\$500.00
HOTEL/MOTEL FUND Total ***					\$500.00



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FUND 153	COMMUNITY DEV BLOCK GRANT				
Division:	308	CDBG PROGRAM			
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$6.60
				PHONE CHARGES 3/1-3/31/18	\$6.31
CDBG PROGRAM TOTAL ****					\$12.91
COMMUNITY DEV BLOCK GRANT Total ***					\$12.91
FUND 154	HOME FUND				
Division:	309	HOME PROGRAM			
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$6.60
HOME PROGRAM TOTAL ****					\$6.60
HOME FUND Total ***					\$6.60
FUND 301	STREETS CAPITAL CONSTRUCTION				
Division:	402	ARTERIAL STREETS			
BEAVER BARK & ROCK		866659	256024	CONCRETE	\$158.53
BERGER ABAM ENGINEERS INC	S054546	322029	255937	CO #4 - CONSTRUCTION SUPPORT	\$4,949.68
FLETCHER & SIPPEL LLC		38847	256132	CENTER PARKWAY-LEGAL SERVICES	\$112.00
JUB ENGINEERS INC	P059006	114360	256146	DUPORTAIL BRIDGE - CNST ENG FO	\$836.26
MENKE JACKSON BEYER LLP		02/2018-077	256159	CENTER PKWY TCRY LEGAL SERVICE	\$465.60
SHANNON & WILSON INC	P058789	8407	256190	HENDERSON LOOP WEST - Geotechn	\$12,835.36
WA STATE DEPARTMENT OF ECOLOGY		2018-WAR306162	256004	QUEENSGATE STRM CONST PERMIT	\$273.51
WA STATE DEPT OF TRANSPORTATION	P058735	RE-313ATB80313024	256207	SR 240/KINGSGATE TRAFFIC SIGNA	\$267.34
WESTERN CONCRETE ACCESSORIES		27232	256086	DET WARNING SYSTEMS BLANKET	\$797.27
		27242		BROOM/FLOAT MAG/TROWEL	\$166.89
		27243	256008	BROOM COVER/KNEE PAD	\$56.28
ARTERIAL STREETS TOTAL ****					\$20,918.72
STREETS CAPITAL CONSTRUCTION Total ***					\$20,918.72
FUND 380	PARK PROJECT CONSTRUCTION				
Division:	337	PARKS & REC PROJECTS			
BOYD'S TREE SERVICE LLC		5979	256025	GEOTHALS PRK TREE REMOVAL/TRIM	\$2,175.19
C & E TRENCHING LLC	P058750	C332-17/RETAINAGE	255940	CONNECT WATER TO FIRE SPRINKLE	\$892.80
F & AO, USAED, WALLA WALLA		559614	256127	HOWARD AMON SAND BEACH EXT	\$1,700.00
SPOHN RANCH INC	P058068	C117-17/RETAINAGE	255995	DESIGN AND CONSTRUCT SKATEPARK	\$4,821.23
TREETOP PRODUCTS CONSOLIDATED	S017765	TP00013211	256000	SHIPPING	\$1,149.72
	S017765			X-LARGE MESSAGE BOARDS	\$7,606.20
PARKS & REC PROJECTS TOTAL ****					\$18,345.14
PARK PROJECT CONSTRUCTION Total ***					\$18,345.14



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FUND 385	GENERAL GOVT CONSTRUCTION				
Division:	900	NON-DEPARTMENTAL			
MONARCH MACHINE & TOOL CO INC		A194345	255980	HR PLATE-CAMERA MOUNT	\$51.93
NON-DEPARTMENTAL TOTAL ****					\$51.93
GENERAL GOVT CONSTRUCTION Total ***					\$51.93
FUND 401	ELECTRIC UTILITY FUND				
Division:	000				
BADGER MTN SOUTH DEVELOPMENT LLC		2017-W VINEYD PH1	256096	DEV REFUND-W VINEYARD PH1	\$30,600.00
BAUDER, MILO B		2017-CRSTD HLLS 8	256098	DEV REFUND-CRESTED HILLS 8	\$600.00
		2017-FLCNCRST PH1		DEV REFUND-FALCONCREST PH1	\$4,800.00
H2 PRE-CAST INC	P058876	137833	255962	VAULT, SWITCH RING, DEADFRONT	\$4,245.83
HAYDEN HOMES		2017-CLWTR CK PH2	256135	DEV REFUND-CLEARWATER CRK P	\$6,600.00
		2017-CLWTR CK PH3		DEV REFUND-CLEARWATER CRK PH3	\$4,200.00
		2017-CLWTR CK PH4	256136	DEV REFUND-CLEARWATER CRK PH4	\$12,600.00
LAND TO LOTS LLC		2017-BRNTNGHM PH3	256150	DEV REFUND-BRNTNGHM HGTS PH	\$600.00
MAGULA, AARON		2017-DWELLINGS	256155	DEV REFUND-THE DWELLINGS	\$1,200.00
MBM ASSOCIATES		2017-SKYLN MW PH5	256156	DEV REFUND-SKYLINE MDW PH5	\$5,400.00
MICHAEL E HENRY		2017-HEARTHWOOD	256160	DEV REFUND-HEARTHWOOD	\$1,800.00
MID COLUMBIA LAND DEVELOPMENT LLC		2017-VENETO VILAG	256161	DEV REFUND-VENETO VILLAGGIO	\$3,600.00
MIKE BROOKS		2017-BRKSHIRE PH7	256162	DEV REFUND-BROOKSHIRE EST PH 7	\$600.00
MT HOOD FASTENER COMPANY	S017809	194341	255981	SS BOLT, ASSEMBLY, 1/2-13 X 1-	\$386.00
	S017809			FRIEGHT	\$48.72
	S017809			SS BOLT, ASSEMBLY, 1/2-13 X 1-	\$186.00
	S017809			SS BOLT, ASSEMBLY, 1/2-13 X 2-	\$208.00
NORTH STONE RICHLAND LLC		2017-GRAYHAWK PH1	256170	DEV REFUND-GRAYHAWK PH1	\$26,400.00
		2017-GRAYHAWK PH2		DEV REFUND-GRAYHAWK PH2	\$11,400.00
RC OF WASHINGTON		2017-WHT BLF PH1	256185	DEV REFUND-WHITE BLUFFS PH1	\$2,400.00
		2017-WHT BLF PH2		DEV REFUND-WHITE BLUFFS PH 2	\$2,400.00
		2017-WHT BLF PH3		DEV REFUND-WHITE BLUFFS PH3	\$10,200.00
		2017-WHT BLF PH4		DEV REFUND-WHITE BLUFFS PH4	\$4,200.00
RON ASMUS HOMES INC		2017-HTS MDW PH4	256187	DEV REFUND-HGHTS AT MDW PH4	\$1,200.00
		2017-HTS MDW PH5		DEV REFUND-HGHTS AT MDW PH5	\$4,200.00
SULLIVAN ROWELL PROPERTIES		2017-HORN CRK PH2	256198	DEV REFUND-HORN CREEK PH2	\$3,600.00
UTILITY VAULT COMPANY	P058420	010217073/CM09758	256205	VAULT V13, 56X56X66 BASE,	\$977.40
	P058420			VAULT COVER V11/V13, 36 X 36	\$2,117.70
	P058420	010217491/CM09758		VAULT, SWITCH RING, DEADFRONT	\$5,973.00
	P058420			VAULT COVER,V3,24X36 STEEL	\$515.85
WESCO DISTRIBUTION INC	P058897	842554	256007	ADJUST TAX	(\$0.01)
	P058897			FUSELINK,6K,REMOVEABLE HEAD	\$111.10



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From: 3/26/2018 To: 4/6/2018

Vendor	P.O. Number	Invoice Number	Check #	Purpose of Purchase	Invoice Amount
WESCO DISTRIBUTION INC	P058897	842554	256007	FUSE, 600V 5A BUSS KTK-5	\$85.79
	P058897			FUSELINK,10K,REMOVEABLE HEAD	\$77.11
	P058897			FUSE,250V FRN-R35, 35A DUAL	\$6.89
	P058897			FUSE, 250V BUSS NON-125 125AMP	\$287.90
	P058897			FUSE,250V FRN-R100, 100A DUAL	\$30.95
WESTCLIFFE LLC		2017-WSTCLF 14/15	256210	DEV REFUND-WESTCLIFFE PH14/15	\$4,800.00
		2017-WSTCLF PH12		DEV REFUND-WESTCLIFFE PH12	\$600.00
		2017-WSTCLF PH13		DEV REFUND-WESTCLIFFE PH13	\$1,800.00
WILSON, BILL		2017-HDN HLLS PH3	256214	DEV REFUND-HIDDEN HILLS PH3	\$7,200.00
TOTAL ****					\$168,258.23
Division:	501	BUSINESS SERVICES			
ABADAN INC		AR13015	256090	SCANNING AND PRINTS	\$43.09
ARBAUGH & ASSOCIATES INC		1657	256018	ARBAUGH CONTRACT FEES-FEB 18	\$840.00
BLAIR, JEANNETTE		033118	256103	REIMB MILEAGE MAR 2018	\$91.56
FRONTIER	S017844	04/18 2061882614	256133	TELEPHONE CHARGE 3/19/18 - 4/1	\$92.10
MITCHELL, FRANK		033118	256163	REIMB MILEAGE MAR 2018	\$49.60
WHITNEY, CLINT		2018 TUITION	256010	SPR 2018 TUITION REIMB-WHITNEY	\$2,000.00
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$55.71
				PHONE CHARGES 3/1-3/31/18	\$127.42
				PHONE CHARGES 3/1-3/31/18	\$54.72
				PHONE CHARGES 3/1-3/31/18	\$121.82
				PHONE CHARGES 3/1-3/31/18	\$104.66
BUSINESS SERVICES TOTAL ****					\$3,580.68
Division:	503	POWER OPERATIONS			
BATTERIES PLUS BULBS		250-351594	256022	13-3.6V LITHIUM BATTERIES	\$110.07
BEAVER BARK & ROCK		864456	256024	LAVA ROCK	\$27.14
BOYD'S TREE SERVICE LLC	P058846	6033	256109	TREE PRUNING AND VEGETATION MG	\$7,978.48
	P058846	6054		TREE PRUNING AND VEGETATION MG	\$7,978.48
FASTENAL COMPANY		WARIC72642	256040	SAFETY GLASSES-SUAREZ	\$26.68
		WARIC73374		POWER TOOL TRUCK CHARGER	\$130.45
		WARIC73377		HEADLAMP-HENNING	\$22.42
		WARIC73482		SAFETY GLASSES-MARLOW	\$85.22
HERC RENTALS INC		29861998-001	256046	LIGHT TOWER RENTAL	\$70.59
		29871692-001		LIGHT TOWER RENTAL	\$70.59
IRON HORSE VAC LLC		3710	256051	HYDRO-VAC FOWLER ST	\$431.69
METALFAB INC		42825	256060	38 PLATE 18" X 56" W/HOLES	\$121.63
PAPE' MATERIAL HANDLING		8047500	256068	EXCAVATOR RENTAL & DELIVERY	\$1,216.32
RICHLAND ACE HARDWARE		60769	256074	DRILL BIT #4	\$41.26
TOTAL SITE SERVICES LLC	P057669	C42-17/PMT 4	256202	HAGEN RD LINE DISTRIBUTION CON	\$6,243.74
	P057669			CO #1 - EXTRA WORK ADDED	\$337.90



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UNITED PARCEL SERVICE	S017839	000986641128	256002	WEIGHT CORRECTION FOR PKG TO H	\$0.47
	S017839			GROUND PKG TO HJ ARNETT FOR PO	\$4.47
POWER OPERATIONS TOTAL ****					\$24,897.60
Division:	504	SYSTEMS DIVISION			
BLUEROOM	P058679	2579455	255938	2018 POL SERVICE-1032 UNIVERSI	\$82.00
OXARC INC		30301413	256067	NITROGEN	\$41.65
PLATT ELECTRIC SUPPLY		P876737	256071	COMPRESSION COUPLING	\$71.62
RICHLAND NAPA		404226	256075	HOSE CLAMP	\$7.04
SD MYERS LLC	S017807	777842	255992	PCB TEST FOR SAMPLE #18-01	\$38.00
STONEMAN ELECTRIC SUPPLY		S102299427.002	256080	CONDUIT CONNECTOR	\$148.96
		S102327928.001		GRAY WIRE/CONDUIT	\$445.32
UNITED PARCEL SERVICE	S017839	000986641128	256002	WEIGHT CORRECTION FOR PKG TO S	\$0.35
SYSTEMS DIVISION TOTAL ****					\$834.94
Division:	505	ENERGY POLICY MGMT			
AIR TIGHT REMODELING		170-540	256091	902 SANFORD-REBATE-WINDOWS	\$72.00
BENTON PUD		03/18-30228005	256101	ELECTRIC SRVCS 02/22-03/22/18	\$582.19
BOB RHODES HEATING & A/C INC		095858	256107	1692 FOXGLOVE-REBATE-HP	\$1,000.00
CITY OF RICHLAND		330300	256116	1331 JADWIN-REBATE-WINDOWS	\$488.28
		650400		1958 BIRCH-REBATE-HP	\$1,000.00
DAYCO HEATING & AIR		66248	256034	1701 ELEMENTARY-REBATE-HP	\$1,000.00
	P058893	66255	255951	WEATHERWISE LOAN: MITCHELL, 19	\$11,270.51
DELTA HEATING & COOLING INC		25395	256035	340 SANFORD-REBATE-HP	\$800.00
ENERGY NORTHWEST		17ES11540FY180021	256037	3000 GW WAY-REBATE-COMM LIGHT	\$3,220.00
M CAMPBELL & COMPANY INC		169128	256153	1600 ALAMOSA-REBATE-HP	\$1,000.00
PERFECTION GLASS	P058398	9993662337	256069	WEATHERWISE LOAN: MCNAIR, 1331	\$10,259.44
		9993663554	256177	223 JADWIN-REBARE-WINDOWS	\$90.00
		9993664177	256069	602 TAYLOR-REBATE-WINDOWS	\$11.83
SMITH INSULATION INC		14143-COFR	256194	514 WRIGHT-REBATE-WINDOWS	\$175.89
ENERGY POLICY MGMT TOTAL ****					\$30,970.14
Division:	506	TECHNICAL SERVICES			
BC SALES CO INC		B467706	256023	SAFETY VESTS-3444,4702	\$25.96
FASTENAL COMPANY		WARIC73399	256040	JOBBER DRILL BIT	\$16.38
		WARIC73447		VARI-BIT DRILL BIT	\$134.72
TECHNICAL SERVICES TOTAL ****					\$177.06
ELECTRIC UTILITY FUND Total ***					\$228,718.65
FUND	402	WATER UTILITY FUND			
Division:	000				
SHADOW MOUNTAIN INDUSTRIAL PROPERTIES		18-00475/476	256078	HYDRANT METER REFUND 18-00476	\$750.00
				HYDRANT METER REFUND 18-00475	\$750.00



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Vendor	P.O. Number	Invoice Number	Check #	Purpose of Purchase	Invoice Amount
UNASSIGNED TOTAL ****					\$1,500.00
Division: 411 WATER ADMINISTRATION					
ARBAUGH & ASSOCIATES INC		1657	256018	ARBAUGH CONTRACT FEES-FEB 18	\$540.00
WATER ADMINISTRATION TOTAL ****					\$540.00
Division: 412 WATER OPERATIONS					
CASCADE NATURAL GAS CORP		03/18-28638100009	255943	NAT GAS 110 SAINT 2/15-3/16/18	\$10.85
CITY OF RICHLAND		18-023 DESPARTE	256029	18-023 BAT CERT COURSE	\$901.75
DESPARTE, DEVIN		031218	256036	REIMB PER DIEM BAT TEST	\$18.00
FASTENAL COMPANY		WARIC73730	255956	5/8"-18 FHNZ YZ 8	\$2.53
GRAINGER	S017833	9715098415	255961	V-BELT ITEM #3X471	\$28.08
	S017833	9716012795		V-BELT ITEM #3X471	\$28.08
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$63.75
WATER OPERATIONS TOTAL ****					\$1,053.04
Division: 413 WATER MAINTENANCE					
CENTRAL HOSE & FITTINGS INC		C005780	255944	FIRE HOSE/NST/FIREHOUSE	\$383.86
CITY OF RICHLAND		18-022 OLSON	256029	18-022 BAT CERT COURSE	\$901.75
		18-024 ENNIS		18-024 BAT CERT COURSE	\$901.75
ENNIS, MIKE		031218	256038	REIMB PER DIEM/FUEL BAT TES	\$44.27
		18-024 ENNIS		18-024 BAT CERT COURSE	\$20.00
FERGUSON ENTERPRISES INC		6051019	255958	HOLE SAW/ARBOR SNAP BACK	\$111.90
HD FOWLER COMPANY INC		I4762711	255963	SPADE BITS/TUBING CUTTER	\$1,143.99
OLSON, STEVE		031218	256065	REIMB MEAL BAT TEST	\$18.00
PUMPTech INC	S017775	0126853-IN	255987	ITEM #96678908 SEAL, LIP, OIL,	\$101.00
	S017775			ADJUST FOR TAX	(\$0.03)
	S017775			ITEM #96874675 SHAFT, PUMP, AE	\$1,509.27
	S017775			ITEM #96693577 IMPELLER, AE,	\$11,284.90
	S017775			ITEM #96697155 RING, CASING,	\$913.87
	S017775			ITEM #96690109 SEAL, MECH, JC,	\$553.86
	S017775			FREIGHT	\$218.80
	S017775			ITEM #96666408 BEARING BALL,	\$118.92
	S017775			ITEM #96692390 SEAL, LIP, OIL,	\$69.23
	S017775			ITEM #96691812 O-RING,	\$55.39
	S017775			ITEM #96691194 GASKET, BRG COV	\$55.39
	S017775			ITEM #96667494 BEARING, BALL,	\$86.34
	S017775			ITEM #96670559 O-RING, 0.14X-	\$55.39
	S017775			ITEM #96697080 GASKET, CASING,	\$27.69
RICHLAND ACE HARDWARE		61052	255989	CAPS	\$3.03
		61121	256074	WIRE BRUSH	\$5.42
STEEBER'S LOCK SERVICE		647662	255997	PADLOCKS/DUPLICATE KEYS	\$52.02
TACOMA SCREW PRODUCTS INC		22204854	255999	GLOVES/CUT OFF WHEEL	\$32.86



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XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$20.04
WATER MAINTENANCE TOTAL ****					\$18,688.91
WATER UTILITY FUND Total ***					\$21,781.95
FUND 403	WASTEWATER UTILITY FUND				
Division:	000				
NORTHPOINT ELECTRICAL CONTRACTING INC		C279-17/RETAINAGE	256171	GENERATOR INSTALL @ COLUMBIA P	\$581.70
UNASSIGNED TOTAL ****					\$581.70
Division:	421	SEWER CAPITAL PROJECTS			
IRON HORSE VAC LLC		3719	256140	WWTF DIGESTER #2 CLEANING	\$15,725.28
TACOMA SCREW PRODUCTS INC		22204031	255999	SCREWS	\$340.97
SEWER CAPITAL PROJECTS TOTAL ****					\$16,066.25
Division:	422	SEWER OPERATIONS			
COLE INDUSTRIAL INC		YA26226	255946	WWTP BOILER ANNUAL MAINT/TUNE	\$4,937.11
HERC RENTALS INC		29879118-001	255964	LIQUID PROPANE	\$21.67
IRRIGATION SPECIALISTS INC		1232847-01	255969	COMPRESSION COUPLINGS	\$21.55
PARAMOUNT SUPPLY COMPANY		688363	255984	SEPCO 500LB	\$593.44
		689105		GARLOCK3000 SHEETS	\$694.74
		693297		SEPCO 500LB	\$593.44
RANCH AND HOME INC		50071561	255988	HOSE BIBB VALVES/FITTINGS	\$30.36
RICHLAND ACE HARDWARE		215221	255989	HOSE BIBB VALVE	\$21.70
STONEWAY ELECTRIC SUPPLY		S102324127.001	255998	PILOT LIGHT CONN	\$297.86
TACOMA SCREW PRODUCTS INC		22204165	255999	GASKET MAKER/HAMMER TIPS	\$85.65
		22204280		SCREWS/NUTS/WASHERS	\$66.37
UNITED PARCEL SERVICE	S017839	000986641128	256002	WEIGHT CORRECTION FOR COLLECT	\$0.33
	S017839			2 COLLECT PKGS FROM USA BLUEBO	\$7.67
	S017846	000986641138	256204	WEIGHT CORRECTION FOR PKG FROM	\$0.17
WIN-911 SOFTWARE		118XT488-201855	256012	ANNUAL MAINTENANCE/LICENSE	\$495.00
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$103.11
SEWER OPERATIONS TOTAL ****					\$7,970.17
Division:	423	SEWER MAINTENANCE			
RICHLAND ACE HARDWARE		60933	255989	TAPE MEASURE/SNIPS/UTLTY KNIFE	\$60.78
TACOMA SCREW PRODUCTS INC		22204463	255999	SCREWS/NUTS/WASHERS	\$164.99
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$1.39
SEWER MAINTENANCE TOTAL ****					\$227.16
WASTEWATER UTILITY FUND Total ***					\$24,845.28
FUND 404	SOLID WASTE UTILITY FUND				
Division:	431	SOLID WASTE ADMINISTRATION			
JOYCE ZIKER PARKINSON PLLC		49537	256145	LANDFILL CONTAMINATION-INSURAN	\$1,496.50



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Vendor	P.O. Number	Invoice Number	Check #	Purpose of Purchase	Invoice Amount
JOYCE ZIKER PARKINSON PLLC		49538	255971	LANDFILL CONTAMINATION-LEGAL	\$2,807.00
SOLID WASTE ADMINISTRATION TOTAL ****					\$4,303.50
Division: 432 SOLID WASTE COLLECTION					
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$21.63
SOLID WASTE COLLECTION TOTAL ****					\$21.63
Division: 433 SOLID WASTE DISPOSAL					
BLASDEL, JEREMY		032218	256105	REIMB CDL RENEWAL	\$85.00
FRONTIER	S017844	04/18 2061882614	256133	TELEPHONE CHARGE 3/19/18 - 4/1	\$126.46
GRAINGER	S017833	9720771626	255961	DC GEARMOTOR ITEM #1LPW4	\$185.60
JASSO, RAUL		031618	256052	REIMB CDL RENEWAL	\$102.00
STEEBER'S LOCK SERVICE		646904	255997	DUPLICATE KEYS	\$30.95
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$44.59
SOLID WASTE DISPOSAL TOTAL ****					\$574.60
SOLID WASTE UTILITY FUND Total ***					\$4,899.73
FUND 405 STORMWATER UTILITY FUND					
Division: 441 STORMWATER					
KENNEWICK IRRIGATION DISTRICT	P059005	2018 IRRIGATION	255973	2018 IRRIGATION ASSESSMENT, PA	\$470.61
	P059005			2018 IRRIGATION ASSESSMENT, PA	\$424.52
	P059005			2018 IRRIGATION ASSESSMENT, PA	\$376.95
	P059005			2018 IRRIGATION ASSESSMENT, PA	\$367.79
	P059005			2018 IRRIGATION ASSESSMENT, PA	\$332.41
RICHLAND ACE HARDWARE		60980	255989	CPVC TEE/CAP/PIPE	\$13.60
STORMWATER TOTAL ****					\$1,985.88
STORMWATER UTILITY FUND Total ***					\$1,985.88
FUND 407 MEDICAL SERVICES FUND					
Division: 000					
AMBULANCE REFUND		2015-00265	255974	REFUND-INSURANCE PAID CLAIM	\$966.00
		2015-02419	256056	REFUND-PENSER PAID CLAIM	\$550.40
		2016-02836	256063	REFUND-NATIONWIDE PAID CLAIM	\$122.45
		2016-04504	256047	REFUND-L&I PAID CLAIM	\$202.77
		2016-05761	256056	REFUND-L&I PAID CLAIM	\$553.85
		2016-06128		REFUND-L&I PAID CLAIM	\$532.35
		2017-00418	256077	REFUND-OVERPAYMENT	\$144.60
		2017-04168	256016	REFUND-L&I PAID CLAIM	\$576.00
UNASSIGNED TOTAL ****					\$3,648.42
Division: 121 AMBULANCE					
CALLBACK STAFFING SOLUTIONS LLC		007958	255941	STAFFING CALLBACK SRVCS-MARCH	\$98.24
IMAGETREND INC	P058554	110683	255966	Software Licensing Agreement f	\$578.06



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Vendor	P.O. Number	Invoice Number	Check #	Purpose of Purchase	Invoice Amount
LIFE ASSIST INC		840259	255976	DIPHENHYDRAMINE/RACEPINEPHRINE	\$104.72
AMBULANCE TOTAL ****					\$781.02
MEDICAL SERVICES FUND Total ***					\$4,429.44
FUND 502	EQUIPMENT MAINTENANCE FUND				
Division:	214	EQUIPMENT MAINTENANCE			
A & E TOWING LLC		3166	255931	TOW CHARGE VEH 2341 WO 49932	\$118.37
		3167	256089	TOW CHARGE VEH 3306 WO 49964	\$423.54
ALTEC INDUSTRIES INC		10918113	256017	HYD CYL VEH 3325 WO 49952	\$1,773.94
AMERICAN RADIATOR INC		AA101622	256092	OIL COOLER VEH 6544 WO 49709	\$637.48
APPLIED INDUSTRIAL TECH INC		7012779507	255933	MAINT SUPP VEH 3284 WO 49953	\$182.50
AUDIO WORKS		244561	256094	KEY FOBS VEH 9500 WO 50032	\$1,466.10
AUTOZONE		3733210654	255934	SHOP TOOLS	\$21.49
		3733214858	256095	HEADLAMP VEH 3284 WO 50025	\$11.07
BLUE TARP FINANCIAL INC		39992716	256106	VEH 3405 WO 49979	\$377.81
COLEMAN OIL COMPANY		CL76477	256119	CARD LOCK FUEL 03/19-03/25/18	\$15,119.25
COLUMBIA GRAIN & FEED INC		157401	256120	CHAIN COVER VEH 5047 WO 49971	\$3.57
CUMMINS, INC		009-99316	256032	INLINE 7	\$966.14
		009-99360		ACTUATOR VEH 3290 WO 50009	\$5,168.21
		009-99419	256121	INJECTOR VEH 3285 WO 50021	\$1,074.04
		018-33224	256032	QUICKSERVE LICENSE	\$376.00
FEDERAL SIGNAL CORPORATION		6823109	255957	CABLE ASSY VEH CREDIT WO CREDI	(\$74.93)
GENUINE AUTO GLASS OF TRI CITIES LLC		628414	256043	WINDSHIELD VEH 1210 WO 49999	\$252.56
GRAINGER	S017833	9719243926	255961	CYLINDER ITEM #4Z189	\$332.00
JIM'S PACIFIC GARAGES INC		X100115241	256053	WRONG GASKET VEH 3306	\$3.27
		X100115242		CREDIT GASKET VEH 3306	(\$3.27)
		X100115248	255970	GASKET VEH 3306 WO 49964	\$4.05
		X100115331	256053	CORE CR REMAN MOTOR VEH 3306	(\$168.00)
		X100115577		SEAT VEH 3320 WO 49704	\$760.20
		X100115589		SHOP TOOL	\$32.82
		X100115846		AIR VALVE VEH 3306 WO 49964	\$51.95
MCCURLEY CHEVROLET		464600	256059	KEY PROGRAM VEH 3403 WO 49941	\$65.16
		941259	255978	SHOP OIL	\$1,691.90
		941264		GASKET VEH 1108 WO 49936	\$29.24
		941508		GASKET/FLTR VEH 2341 WO 499332	\$95.64
		941528		CONTROLL VEH 2341 WO 49932	\$212.78
		941805	256157	HOSES VEH 1208 WO 50002	\$145.38
		941956		CAP VEH 2373 WO 49752	\$42.23
		941966		MOTORS VEH 2375 WO 50027	\$288.75
MOBILE FLEET SERVICE INC		1280780009	256164	SENSOR VEH 3338 WO 49991	\$1,590.03
		1280810028		BEZEL VEH 3204 WO 49945	\$469.05



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Vendor	P.O. Number	Invoice Number	Check #	Purpose of Purchase	Invoice Amount
MONARCH MACHINE & TOOL CO INC		A195308	255980	BORE HOLES VEH 3337 WO 49911	\$2,219.78
		A195330	256165	FAB TRAY VEH 5047 WO 49971	\$147.90
		A195369		PLATE VEH 3320 WO 49704	\$16.62
		F195293	255980	WHEEL SHAFTS VEH 7145 WO 49902	\$337.53
		F195338	256165	RIGGER PINS VEH 3251 WO 50011	\$684.18
PAPE' MATERIAL HANDLING		7983385	255983	FILTERS VEH 7158 WO 49905	\$217.91
		7983602	256173	FILTERS VEH 7158 WO 49905	\$272.68
PLATT ELECTRIC SUPPLY		P981915	256071	SHOP SUPPLY	\$50.67
PROFESSIONAL AUTOMOTIVE PAINT DIST LLC DBA		S9-3745589	256181	PAINT VEH 5047 WO 49971	\$21.49
RANCH AND HOME INC		60139446	255988	HARDWARE VEH 5047 WO 49971	\$7.59
		60139507	256184	PUMP VEH 3278 WO 50010	\$519.06
RDO EQUIPMENT CO		W57798	256186	SENSOR VEH 7141 WO 50028	\$638.85
		W57910		ANNUAL SVC VEH 6587 WO 50037	\$1,868.59
		W57912		ANNUAL SVC VEH 6588 WO 50030	\$2,389.59
RICHLAND NAPA		408005	256075	SHOP TOOL	\$168.31
		408080		FUEL FILTER VEH 3306 WO 49964	\$30.69
		408091		TRANS RANGE WRONG PART	(\$172.03)
		408101		WIPER BLADES VEH 2432 WO 49767	\$21.52
		408102		BRAKE CLEAN VEH 5049 WO 49858	\$5.41
		408103		LAMP VEH 5043 WO 49992	\$12.71
		408116		WIPER BLADES VEH 1208 WO 49762	\$20.31
		408122		CIRCUIT VEH 3301 WO 49935	\$10.19
		ARV/34934709	256195	SHOP TOOLS	\$424.35
SOLID WASTE SYSTEMS INC		0103926-IN	255994	G-LINK VEH 3337 WO 4911	\$2,613.78
TACOMA SCREW PRODUCTS INC		22205140	255999	LOCTITE VEH 5047 WO 49971	\$103.73
		22205259		SHOP SUPPLY	\$408.21
		22205485	256199	SHOP SUPPLY	\$388.85
		03-128404	256200	TIRES VEH 1208 WO 50002	\$716.03
TIRE FACTORY INC		03-128446	256083	TIRES VEH 2431 WO 49995	\$697.00
		03-128542		LT REPAIR VEH 3316 WO 49994	\$22.75
		03-128563		TIRES VEH 3333 WO 49996	\$867.87
		03-128564		TIRES VEH 3280 WO 49993	\$1,586.95
		03-128582		WHEEL CHG VEH 2443 WO 49997	\$99.70
		03-128592		TIRES VEH 4142 WO 49998	\$837.53
		03-128611	256200	TRK REPAIR VEH 4148 WO 50023	\$31.39
		03-128678		WHEEL CHG VEH 2439 WO 50008	\$99.70
		58694	256201	WIRE ASSY VEH 5043 WO 49992	\$76.69
		16 041999	256001	YOKE SHAFT VEH 3320 WO 49704	\$2,890.70
WESTERN PETERBILT INC		H290772	256009	CLAMP/GASKET VEH 3290 WO 49891	\$285.86
		H291023		SWITCH VEH 3290 WO 49891	\$130.19
WESTERN STATES EQUIPMENT COMPANY		CM00046751	256211	RETURNED PLUG	(\$239.48)



City Of Richland

VL-1 Voucher Listing

From: 3/26/2018 To: 4/6/2018

Vendor	P.O. Number	Invoice Number	Check #	Purpose of Purchase	Invoice Amount
WESTERN STATES EQUIPMENT COMPANY		IN000595812	256211	ADAPTER VEH 3219 WO 49706	\$20.56
		IN000595814		SEAL VEH 3286 WO 49728	\$1.90
		IN000597980		HOSE ASSY VEH 3286 WO 49728	\$84.11
		IN000597999		PLUG VEH 3315 WO 49730	\$7.17
		IN000600283		COUPLING VEH 3285 WO 49732	\$52.82
		IN000603826		SLEEVE VEH 3285 WO 49732	\$127.06
		IN000603872		FILTERS VEH 7090 WO 49986	\$526.72
		IN000606559		START SYS VEH 7138 WO 49957	\$8,093.05
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$71.57
EQUIPMENT MAINTENANCE TOTAL ****					\$64,056.63
EQUIPMENT MAINTENANCE FUND Total ***					\$64,056.63
FUND 503	EQUIPMENT REPLACEMENT FUND				
Division:	215	EQUIPMENT REPLACEMENT			
BLAC-RAC MANUFACTURING INC		3387	256102	UPFIT VEH 2475	\$486.30
		3388		UPFIT VEH 2476	\$486.30
		3389		UPFIT VEH 2477	\$486.30
FEDERAL SIGNAL CORPORATION		6821154	256130	UPFIT VEH 2480	\$76.63
		6822521	255957	SIGNAL VEH 2481 WO PL UPFIT	\$712.94
		6825483	256130	UPFIT VEH 2476	\$1,900.50
		6825484		UPFIT VEH 2478	\$1,900.50
		6831382		UPFIT VEH 2480	\$239.46
		6831383		UPFIT VEH 2479	\$478.92
		6831384		UPFIT VEH 2477	\$478.92
		6831385		UPFIT VEH 2475	\$239.46
		6831386		UPFIT VEH 2476	\$239.46
		6831388		UPFIT VEH 2478	\$239.46
		6834119		UPFIT VEH 2479	\$19.11
		6834121		UPFIT VEH 2477	\$19.11
		6835251		UPFIT VEH 2480	\$457.10
		6835253		UPFIT VEH 2479	\$457.10
		6835254		UPFIT VEH 2477	\$457.10
JOHN DEERE EXCHANGE	P058647	116117707	255952	PRICE ADJUSTMENT	\$0.01
	P058647			ONE (1) NEW 2018 JOHN DEERE MO	\$13,661.03
SETINA MFG CO		158097	256189	UPFIT VEH 2477	\$2,194.48
		158098		UPFIT VEH 2479	\$2,040.15
WORD BOATS, LLC	S017843	43189	256088	PONTOON BOAT, MOTOR POD, DECKI	\$9,596.00
	S017843			SALES TAX @ 9.9%	\$950.00
ZIONS BANK	P059033	2018/PYMT 8	256217	WESTMARK BRUSH TRUCK #5042 INT	\$5,931.54
	P059033			WESTMARK BRUSH TRUCK #5042 ANN	\$38,354.44
EQUIPMENT REPLACEMENT TOTAL ****					\$82,102.32



City Of Richland

VL-1 Voucher Listing

From: 3/26/2018 To: 4/6/2018

Vendor	P.O. Number	Invoice Number	Check #	Purpose of Purchase	Invoice Amount
EQUIPMENT REPLACEMENT FUND Total ***					\$82,102.32
FUND 505	PUBLIC WORKS ADMIN & ENGINEER				
Division:	450	PW ADMIN & ENGINEERING			
ABADAN INC		AR13684	256015	PLOTTER MYLAR	\$516.05
		AR13833		ASBUILTS	\$143.35
CITY OF RICHLAND		18-061 BOSHART	256029	18-061 LSAW 2018 CONFERENCE	\$728.10
IMT INC		9456	256048	HORN CREEK TESTING M17416	\$417.00
		9460		AMON WASTE WAY M18019	\$1,937.00
PENWELL, DAN		033018	256175	REIMB EXCISE TAX	\$13.00
PERFECT IMAGE		8569	256176	PHOTOS/SLIDES CD TO DVD	\$284.26
XO COMMUNICATIONS SERVICES LLC		0303305243	256014	PHONE CHARGES 3/1-3/31/18	\$192.99
PW ADMIN & ENGINEERING TOTAL ****					\$4,231.75
PUBLIC WORKS ADMIN & ENGINEER Total ***					\$4,231.75
FUND 520	HEALTH CARE/BENEFITS PLAN				
Division:	222	EMPLOYEE BENEFIT PROGRAM			
MAGELLAN BEHAVIORAL HEALTH		APR 2018	256154	EAP PREMIUMS-APRIL	\$727.12
MOSS ADAMS LLP		3460927	256167	CLAIMS AUDIT-ZENITH 2015-16	\$8,612.50
EMPLOYEE BENEFIT PROGRAM TOTAL ****					\$9,339.62
HEALTH CARE/BENEFITS PLAN Total ***					\$9,339.62
FUND 611	FIREMAN'S PENSION				
Division:	216	FIRE PENSION			
BAKER, MARSHALL R		APRIL 2018	256097	MEDICARE PREMIUM/BAKER	\$129.00
BOWLS, DAVID			256108	MEDICARE PREMIUM/BOWLS	\$104.90
CANFIELD, HARRY R			256111	MEDICARE PREMIUM/CANFIELD	\$119.00
CARRICK, HENRY			256112	MEDICARE PREMIUM/CARRICK	\$134.00
CLARK, FRANK M			256117	MEDICARE PREMIUM/CLARK	\$104.90
DOWNES, DANNY			256123	MEDICARE PREMIUM/DOWNES	\$134.00
ELIASON, CURTIS			256124	MEDICARE PREMIUM/ELIASON	\$134.00
ESTY, RAYMOND J			256126	MEDICARE PREMIUM/ESTY	\$135.10
FERRIANS, ALLEN LARRY			256131	MEDICARE PREMIUM/FERRIANS	\$130.00
HOUCHIN, EARL			256138	MEDICARE PREMIUM/HOUCIN	\$104.90
JOHNSON, NEILS E			256143	MEDICARE PREMIUM/JOHNSON	\$110.00
JONES, HAROLD			256144	MEDICARE PREMIUM/JONES	\$123.00
KEYS, JACK D			256148	MEDICARE PREMIUM/KEYS	\$134.00
LAHTI, ROGER P			256149	MEDICARE PREMIUM/LAHTI	\$104.90
MURRAY, DAVID			256168	MEDICARE PREMIUM/MURRAY	\$110.00
MYERS, EDWARD A			256169	MEDICARE PREMIUM/MYERS	\$119.00



City Of Richland

VL-1 Voucher Listing

From: 3/26/2018 To: 4/6/2018

Vendor	P.O. Number	Invoice Number	Check #	Purpose of Purchase	Invoice Amount
OWEN, MICHAEL		APRIL 2018	256172	MEDICARE PREMIUM/OWEN	\$110.00
POLLARD, JAMES			256179	MEDICARE PREMIUM/POLLARD	\$104.90
RONEY, LARRY			256188	MEDICARE PREMIUM/RONEY	\$113.00
SIEMENS, DONALD			256191	MEDICARE PREMIUM/SIEMENS	\$125.00
WEST, ROYAL			256209	MEDICARE PREMIUM/WEST	\$116.00
WILLIAMSON, CRAIG E			256213	MEDICARE PREMIUM/WILLIAMSON	\$108.00
FIRE PENSION TOTAL ****					\$2,607.60
FIREMAN'S PENSION Total ***					\$2,607.60
FUND 641		SOUTHEAST COMMUNICATIONS CTR			
Division:	600	SECOMM OPERATIONS GENERAL			
AT&T LONG DISTANCE		03/18 03030107210	256093	FAX LINES 2/21/17-3/22/18	\$36.31
CENTURYLINK		0318-509-624-3863	256113	GENERAL 3/16-04/16/18	\$7.32
CHARTER COMMUNICATIONS		04/18 0706114	256114	CABLE SERVICE 03/30-04/29/18	\$29.86
FRONTIER		04/18 2061881060	256133	GENERAL 03/19-04/18/18	\$209.72
SOLARWINDS INC	P058907	IN365723	255993	SOLARWINDS MAINTENANCE RENEWAL	\$322.18
UNITED PARCEL SERVICE	S017839	000986641128	256002	GROUND PKG TO MICROSOFT CONSUM	\$11.40
	S017839			WEIGHT CORRECTION FOR PKG TO	\$3.15
VANGUARD CLEANING SYSTEM OF INLAND NW		76543	256206	BCES JANITORIAL SRVCS-APRIL	\$375.00
SECOMM OPERATIONS GENERAL TOTAL ****					\$994.94
SOUTHEAST COMMUNICATIONS CTR Total ***					\$994.94
FUND 642		800 MHZ PROJECT			
Division:	610	800 MHZ			
BENTON PUD		03/18-14900001	256101	UTILITY SRVCS 2/27-3/26/18	\$531.34
SOLARWINDS INC	P058907	IN365723	255993	SOLARWINDS MAINTENANCE RENEWAL	\$322.18
800 MHZ TOTAL ****					\$853.52
800 MHZ PROJECT Total ***					\$853.52
FUND 643		EMERGENCY MANAGEMENT			
Division:	620	STATE / LOCAL ASSISTANCE			
AT&T LONG DISTANCE		03/18 03030107210	256093	FAX LINES 2/21/17-3/22/18	\$9.08
CHARTER COMMUNICATIONS		04/18 0706114	256114	CABLE SERVICE 03/30-04/29/18	\$29.86
SOLARWINDS INC	P058907	IN365723	255993	SOLARWINDS MAINTENANCE RENEWAL	\$80.54
VANGUARD CLEANING SYSTEM OF INLAND NW		76543	256206	BCES JANITORIAL SRVCS-APRIL	\$62.50
STATE / LOCAL ASSISTANCE TOTAL ****					\$181.98
Division:	621	RADIOLOGICAL EMGCY PREPAREDNES			
AT&T LONG DISTANCE		03/18 03030107210	256093	FAX LINES 2/21/17-3/22/18	\$9.08
CHARTER COMMUNICATIONS		04/18 0706114	256114	CABLE SERVICE 03/30-04/29/18	\$29.87



City Of Richland

VL-1 Voucher Listing

From: 3/26/2018 To: 4/6/2018

Vendor	P.O. Number	Invoice Number	Check #	Purpose of Purchase	Invoice Amount
GEORGE, JORDAN		032718	256134	REIMB DRILL EXPENSE	\$83.18
SOLARWINDS INC	P058907	IN365723	255993	SOLARWINDS MAINTENANCE RENEWAL	\$80.55
VANGUARD CLEANING SYSTEM OF INLAND NW		76543	256206	BCES JANITORIAL SRVCS-APRIL	\$62.50
RADIOLOGICAL EMGCY PREPAREDNESS TOTAL ****					\$265.18
Division:	622	DOE EMERGENCY PREPAREDNESS			
AT&T LONG DISTANCE		03/18 03030107210	256093	FAX LINES 2/21/17-3/22/18	\$9.07
CHARTER COMMUNICATIONS		04/18 0706114	256114	CABLE SERVICE 03/30-04/29/18	\$29.86
SOLARWINDS INC	P058907	IN365723	255993	SOLARWINDS MAINTENANCE RENEWAL	\$80.54
VANGUARD CLEANING SYSTEM OF INLAND NW		76543	256206	BCES JANITORIAL SRVCS-APRIL	\$62.50
DOE EMERGENCY PREPAREDNESS TOTAL ****					\$181.97
Division:	623	JURISIDICITION			
AT&T LONG DISTANCE		03/18 03030107210	256093	FAX LINES 2/21/17-3/22/18	\$9.08
CHARTER COMMUNICATIONS		04/18 0706114	256114	CABLE SERVICE 03/30-04/29/18	\$29.86
SOLARWINDS INC	P058907	IN365723	255993	SOLARWINDS MAINTENANCE RENEWAL	\$80.55
VANGUARD CLEANING SYSTEM OF INLAND NW		76543	256206	BCES JANITORIAL SRVCS-APRIL	\$62.50
JURISIDICITION TOTAL ****					\$181.99
EMERGENCY MANAGEMENT Total ***					\$811.12
FUND	803	UTILITY BILL CLEARING FUND			
Division:	000				
ADVANCED UTILITY ACCOUNTS PAYABLE INVOICES		CISPAY14953	256031	Customer Refund	\$88.77
		CISPAY14954	256076	Customer Refund	\$8.75
		CISPAY14955	256030	Customer Refund	\$121.38
		CISPAY14956	256057	Customer Refund	\$421.39
		CISPAY14957	256054	Customer Refund	\$198.19
		CISPAY14958	256085	Customer Refund	\$8.67
		CISPAY14959	256033	Customer Refund	\$168.80
		CISPAY14960	256081	Customer Refund	\$100.41
		CISPAY14961	256027	Customer Refund	\$91.73
		CISPAY14962	256044	Customer Refund	\$2.57
		CISPAY14963	256061	Customer Refund	\$119.28
		CISPAY14964	256158	Customer Refund	\$105.70
		CISPAY14965	256122	Customer Refund	\$0.28
UNASSIGNED TOTAL ****					\$1,435.92
UTILITY BILL CLEARING FUND Total ***					\$1,435.92



City Of Richland

VL-1 Voucher Listing

From: 3/26/2018 To: 4/6/2018

Vendor	P.O. Number	Invoice Number	Check #	Purpose of Purchase	Invoice Amount
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Invoice Total: ****

\$745,482.79

Number of Invoices

Amount

Vouchers In Richland	102	\$65,205.72
Vouchers In Tri Cities	67	\$156,437.15
Vouchers In WA	142	\$167,551.71
Vouchers Outside WA	317	\$356,288.21
Vouchers Final Total.....	628	\$745,482.79

Ob ject Category	Title	Total	Percentage
2	BENEFITS	\$5,277.81	0.71%
3	SUPPLIES	\$175,482.55	23.54%
4	OTHER SERVICES & CHARGES	\$265,310.90	35.59%
5	INTERGOVERNMENTAL SERVICES	\$1,972.28	0.26%
6	CAPITAL PROJECTS	\$37,088.67	4.98%
	MACHINERY & EQUIPMENT	\$37,816.34	5.07%
7	DEBT SERVICE PRINCIPAL	\$38,354.44	5.14%
8	INTEREST	\$5,931.54	0.8%
	REFUNDS	\$1,435.92	0.19%
	INVENTORY PURCHASES	\$176,812.34	23.72%
	Total	\$745,482.79	