

Moscow City Council



Regular Meeting ~Agenda~

Laurie M. Hopkins
City Clerk

www.ci.moscow.id.us

208.883.7015

**Monday
October 16, 2023**

7:00 PM

**Council Chambers
206 E. Third St.**

The Moscow Mayor, City Council and Staff welcome you to tonight's meeting. This meeting is open to the public. We appreciate and encourage public participation. For regular agenda items, an opportunity for public comment is sometimes provided after the staff report. However, the formality of procedures varies with the purpose and subject of the agenda item; therefore, the Mayor may exercise discretion in deciding when to allow public comment during the course of the proceedings and limitations may be placed on the time allowed for comments. Citizens wishing to comment on business that is not on the agenda will be provided the opportunity to do so during the public comment item on the agenda. If you plan to address the Council, you will find a list of "Tips for Addressing the Council" in the door pocket outside the City Council Chambers. Please note that Moscow City Council meetings are televised, videotaped and/or recorded. Links to view the City Council meeting live can be found on the City website, YouTube, Facebook and Spectrum Cable 1301. Thank you for your interest in City government.

PLEDGE OF ALLEGIANCE

PROCLAMATION

Domestic Violence Action Month

CONSENT AGENDA

1. All Consent Items (ACTION ITEM)

A. Approval of Moscow City Council October 2, 2023 Minutes - Laurie M. Hopkins

B. Disbursement Report September 2023 - Sarah Banks

Staff presented the September 2023 Accounts Payable Report to the Public Works / Finance Committee on October 10th, 2023. The Committee received the report and approved the disbursements as presented.

ACTION: Accept the Disbursements Report for the month of September 2023.

C. Woodbury 1st Addition Development Agreement Amendment - Todd Drage

Woodbury Land LLC, has submitted to the City a request to modify the phasing for the Woodbury 1st Addition Subdivision. The final plat, titled Woodbury 1st Addition, and the Development Agreement for the Addition was approved by City Council on Monday, October 17, 2022. Section X - Phasing, in the original agreement contained a figure that detailed 17 single family lots being included in a 1st phase, 17 single family lots included in a 2nd phase, and then the remaining 45 lots being included in a 3rd phase. The agreement amendment provides a new figure, detailing 22 lots being included in the 1st phase and the remaining 57 lots in a 2nd phase. Additionally, this amendment requires off-site public improvements to Mountain View Road to be completed in the 1st phase; however, it allows 15 building permits to be issued prior to the completion of the off-site improvements. The amendment to the agreement with the original agreement included as an attachment to the amendment has been included with this packet. This was reviewed by the Public Works/Finance Committee on

October 9, 2023 and recommended for approval.

ACTION: Approve the Development Agreement amendment with Woodbury Land LLC for the Woodbury 1st Addition.

D. Amended Solid Waste Franchise Agreement - Tim Davis

Latah Sanitation, Inc. (LSI) has engaged our staff to discuss several aspects of the existing Franchise Agreement in which their present expenditures are surpassing the adjustments for compensation based on the Consumer Price Index (CPI). Our team subsequently sought and received the necessary data from LSI concerning their current expenses related to roll cart and dumpster services. These assessments confirmed that the current compensation structure does not adequately account for the rising costs associated with equipment replacement. Additionally, LSI has expressed a need for fuel cost relief, which is being considered as part of the proposed amended agreement. Furthermore, our staff has incorporated LSI's request to assume responsibility for roll-off container services and associated billing into the amendment terms. This was reviewed by the Public Works/Finance Committee on October 9, 2023 and recommended for approval.

ACTION: Approve the amended Sanitation Franchise Agreement.

E. Moscow Police Department – Annual Small Grant Requests and Awards – Alisa Anderson

The City of Moscow Police Department (MPD) applies for several small grants on an annual basis which assist the department with the purchase of equipment, including bullet-proof vests. The grants are also used to host various traffic enforcement mobilizations and other prevention and safety activities. The grants awarded to MPD provide funding and resources to protect our youngest citizens, for operational and personal safety equipment, and for program support to implement and host multiple safety programs. These resources assist MPD in their mission of community-oriented policing to improve the quality of life for Moscow residents through community partnerships and problem-solving approaches, while also making sure the officers are outfitted and equipped with items needed to safely do their jobs. The MPD is requesting approval and/or ratification of the funding requests and awards for small grants applied for in an amount not to exceed a combined total of \$50,000 for the FY2024 fiscal year. This item was reviewed by the Public Works/Finance Committee on October 9, 2023, and recommended for approval.

ACTION: Approve funding requests and awards for small grants applied for by the Moscow Police Department not to exceed a combined total of \$50,000 for the FY2024 fiscal year.

F. Moscow Police Department – Office of Highway Safety Grant Award – Alisa Anderson

The Moscow Police Department (MPD) is requesting to accept an award from the Idaho Traffic Safety Commission (ITSC) for the Federal Fiscal Year (FFY) 2024 Highway Safety Grant. The program addresses specific behaviors related to traffic safety priority areas and safety deficiencies within local law enforcement jurisdictions and is focused on combatting traffic crashes resulting in fatal and serious injuries. The MPD is requesting to accept a grant award in the amount of \$75,000 requiring an in-kind match of \$18,750. This item was reviewed by the Public Works/Finance Committee on October 9, 2023, and recommended for approval.

ACTION: Approve the Moscow Police Department to accept an award for the Office of Highway Safety Grant FFY 2024 for \$75,000 with an in-kind match of \$18,750.

REGULAR AGENDA

- 2. Mayors Appointments (ACTION ITEM)**
- 3. Public Comment and Mayor's Response Period (limit 15 minutes)**
- 4. Citizen Commission Report - Parks & Recreation Commission – David Schott / Catherine Harner**
- 5. Alternative Water Supply Update – Tyler Palmer**

6. Proposed City of Moscow Procurement and Purchasing Policy (ACTION ITEM) - Bill Belknap

The City of Moscow currently does not have established policies and procedures for purchasing supplies, materials, and services on behalf of the City. The lack of an established policy has resulted in confusion at times regarding employee purchasing authority as well as the ability for employees to sign contracts and agreements on behalf of the City. Staff have prepared a draft Procurement and Purchasing Policy to provide guidance on legal obligations and requirements, establish employee purchase authority limits, establish employee contract signatory authority limits, as well as establish standards related to City vendor charge accounts and appropriate use of credit cards. Staff will present the policy for the Council's review and consideration. This was reviewed by the Public Works/Finance Committee on October 9, 2023 and recommended for approval.

PROPOSED ACTIONS: Approve the proposed Resolution adopting the proposed Procurement and Purchasing Policy; or take other action deemed appropriate.

7. Ladder Truck Fire Engine Purchase Approval (ACTION ITEM) - Bill Belknap

The City's existing Fire Department ladder truck engine is reaching the end of its serviceable life and needs replacement. In accordance with Section 1.3.8 of the Master Services Agreement between the University and the City dated January 13, 2021, the University has agreed to participate in one-half of the cost of the purchase of the replacement ladder truck engine. The City has obtained a quote for the replacement ladder truck engine from Hughes Fire Equipment through the Houston-Galveston Area Council Cooperative Purchasing Program, which totals \$1,549,896, after \$162,564 in pre-payment discounts (see attached quote). The quoted pricing is valid until October 27, 2023, with full payment due by the end of October 2024 in order to secure the pre-payment discounts. Currently, the estimated delivery time for the ladder truck engine is 44-49 months from the date of order. Staff has provided the University of Idaho with the required 12-month advance notice of the intent to purchase the replacement ladder truck engine. Staff wishes to accept the quote prior to October 27th in order to avoid additional price escalation, and to provide the full payment by the end of October 2024 and is seeking Council approval at this time. The City has accumulated the City's portion of the purchase price within the City's Fleet Fund. This item was reviewed and recommended for approval by the Public Works and Finance Committee at their October 9, 2023 meeting.

PROPOSED ACTIONS: Approve placing the order for the replacement ladder truck fire engine; or take other action deemed appropriate.

REPORTS

City Council

Mayor

ADJOURN

NOTICE: It is the policy of the City of Moscow that all City-sponsored public meetings and events are accessible to all people. If you need assistance in participating in this meeting or event due to a disability under the ADA, please contact the City's ADA Coordinator by phone at (208) 883-7600, TDD (208) 883-7019, or by email at adaordinator@ci.moscow.id.us at least 48 hours prior to the scheduled meeting or event to request an accommodation. The City of Moscow is committed to ensuring that all reasonable accommodation requests are fulfilled.

DOMESTIC VIOLENCE ACTION MONTH PROCLAMATION

- WHEREAS,** domestic violence violates an individual's dignity, security, and humanity and is a crime with sweeping effects on our community's safety and health; and,
- WHEREAS,** survivors of domestic violence should have help to find the compassion and healing they deserve, and perpetrators of violence should be held accountable for their actions; and
- WHEREAS,** all residents of Moscow should feel safe and at peace in their homes; and
- WHEREAS,** our youth deserve information and education on healthy relationships, boundaries, and consent; and
- WHEREAS,** Alternatives to Violence of the Palouse (ATVP) is committed to ending violence in our community through prevention education, and has been providing services to those affected by violence for 43 years; and
- WHEREAS,** a local coalition of organizations exists to directly confront domestic violence, including law enforcement officers, victims' advocates, prosecutors, healthcare providers, faith leaders, and concerned Moscow residents; and
- WHEREAS,** the City of Moscow is an important partner in ATVP's vision to create a community that is safe, equitable, and free from oppressions that lead to domestic violence.

NOW, THEREFORE, I, Arthur D. Bettge, Mayor for the City of Moscow, do hereby proclaim the month of October 2023 as

Domestic Violence Action Month

in the City of Moscow, and I encourage all citizens to reflect and to honor victims and survivors of domestic violence in our community, and also use this month to take action towards ending violence on the Palouse.



DATED this 16th day of October, 2023.

Arthur D. Bettge, Mayor

Moscow City Council



Regular Meeting ~Minutes~

www.ci.moscow.id.us

Laurie M. Hopkins
City Clerk

208.883.7015

**Monday
October 2, 2023**

7:00 PM

**Council Chambers
206 E. Third St.**

The meeting was called to order at 7:00 p.m.

PRESENT: Mayor Art Bettge, Drew Davis, Sandra Kelly, Maureen Laflin, Hailey Lewis, Julia Parker, Gina Taruscio

OTHERS: Representative Brandon Mitchell

STAFF: Bill Belknap, Mia Bautista, Cody Riddle, Brian Nickerson, Laurie M. Hopkins

PLEDGE OF ALLEGIANCE

Council Vice President Taruscio led the Pledge of Allegiance.

PROCLAMATION

Fire Prevention Month

Council President Laflin read the proclamation and presented it to Chief Nickerson. Nickerson thanked the Mayor and Council and emphasized how important prevention is. The Fire Department recently held an event where they provided citizens smoke alarms.

CONSENT AGENDA

1. All Consent Items (ACTION ITEM)

A. Approval of Moscow City Council September 18, 2023 Minutes - Laurie M. Hopkins

B. Houston-Galveston Area Council of Governments Interlocal Contract for Cooperative Purchasing - Bill Belknap

Idaho Code § 67-2807 authorizes political subdivisions of the State of Idaho to participate in cooperative purchasing agreements with the State of Idaho, other Idaho political subdivisions, other government entities, or associations thereof with the approval of its governing board. The Houston-Galveston Area Council of Governments (H-GAC) is a cooperative purchasing consortium that conducts public competitive procurements compliant with state statutes and provides an efficient means of procuring certain goods and services. The City has previously participated in the program and purchased the last two fire engines through the program. The City desires to continue to participate in the H-GAC program and is seeking Council approval to execute a new Interlocal Contract for Cooperative Purchasing and authorize the Mayor's signature. This was reviewed by the Administrative Committee on September 25, 2023 and recommended for approval.

ACTION: Approve the Interlocal Contract for Cooperative Purchasing and authorize the Mayor's signature thereon through the proposed resolution.

C. Idaho Public Television Tower Lease Agreement - Bill Belknap

The City is currently working toward the replacement of the City's emergency communications radio system due to the current equipment reaching end-of-life as well as system coverage deficiencies. One component of that project will include the installation of additional radio

antennas and equipment on the radio tower located on Paradise Ridge which is owned by the State of Idaho and operated by Idaho Public Television (IPTV). Staff worked with IPTV to prepare a lease agreement to allow the installation of the new equipment planned for installation with the new radio system. The Lease Agreement was approved by the City Council on May 15th of this year. However, after that approval, IPTV and the University of Idaho identified a use limitation within the site lease between IPTV and the University of Idaho that would potentially preclude the City's proposed emergency communications use on the site. The University of Idaho Board of Regents approved an amended site lease at their August meeting to address this conflict, and the City and IPTV have amended the lease agreement to reflect the amended site lease and extend the lease term to be concurrent with IPTV's site lease. The agreement is back before the Council for approval with these modifications. This was reviewed by the Administrative Committee on September 25, 2023 and recommended for approval.

ACTION: Approve the proposed lease agreement.

D. Idaho Counties Risk Management Program Joint Powers Subscriber Agreement - Bill Belknap

The Idaho Counties Risk Management Program (ICRMP) provides the City with liability and property insurance coverage. ICRMP has updated its Joint Powers Subscribers Agreement that describes member's rights and obligations, ICRMP governance and other general provisions. ICRMP is requesting the Mayor's signature on the updated Joint Powers Subscribers Agreement. This was reviewed by the Administrative Committee on September 25, 2023 and recommended for approval.

ACTION: Approve the Joint Powers Subscriber Agreement.

Taruscio moved and Kelly seconded to approve the consent agenda as presented. Roll Call Vote: Ayes: Unanimous. Nays: None. Abstentions: None. Motion carried.

REGULAR AGENDA

2. Mayors Appointments (ACTION ITEM)

None offered.

3. Public Comment and Mayor's Response Period (limit 15 minutes)

None offered.

4. Citizen Commission Report

None offered.

5. Proposed Repeal of Moscow City Code Chapter 10, Title 5 (ACTION ITEM) - Bill Belknap

Recent judicial decisions have identified that it is unclear whether the City has the authority to continue to charge the public street lighting fee that was established in 1998. Out of an abundance of caution, City staff is recommending that the City cease the collection of this fee until there is legislative or judicial action that firmly establishes the authority to collect public lighting fees. Staff has prepared an ordinance to repeal Chapter 10 of Title 5 which established the street light fee for the Council's consideration. This was reviewed by the Administrative Committee on September 25, 2023 and recommended for approval.

PROPOSED ACTIONS: Approve the Ordinance repealing Chapter 10, Title 5 of Moscow City Code under suspension of the rules requiring three complete and separate readings and that it be read by title and published by summary; or consider the Ordinance on first reading and that it be read by title; or reject the Ordinance; or take such other action deemed appropriate.

Belknap introduced the item as written above. Council members were in support and had no questions.

Kelly moved to approve the Ordinance repealing Chapter 10, Title 5 of Moscow City Code under suspension of the rules requiring three complete and separate readings and that it be read by title and published by summary. Lewis seconded. Roll Call Vote: Ayes: Unanimous. Nays: None. Abstentions: None. Motion carried.

Council President Laflin read Ordinance 2023-08 by title:

AN ORDINANCE OF THE CITY OF MOSCOW, IDAHO, A MUNICIPAL CORPORATION OF THE STATE OF IDAHO; PROVIDING FOR THE REPEAL OF MOSCOW CITY CODE TITLE 5, CHAPTER 10 PUBLIC LIGHTING; PROVIDING THAT THE PROVISIONS OF THIS ORDINANCE BE DEEMED SEVERABLE; AND PROVIDING FOR THIS ORDINANCE TO BE IN FULL FORCE AND EFFECT FROM THE DATE OF ITS PASSAGE, APPROVAL, AND PUBLICATION ACCORDING TO LAW.

6. Proposed Amendment to the FY2024 Fee Resolution (ACTION ITEM) - Bill Belknap

Recent judicial decisions have identified that it is unclear whether the City has the authority to continue to charge the public street lighting fee that was established in 1998. Out of an abundance of caution, City staff is recommending that the City cease the collection of this fee until there is legislative or judicial action that firmly establishes the authority to collect public lighting fees. Additionally, recent updates to the City's cost allocation model have resulted in the ability to defer some of the proposed sanitation rate increases. Staff has prepared a resolution to amend the adopted FY2024 fee resolution to incorporate these fee amendments for the Council's consideration. This was reviewed by the Administrative Committee on September 25, 2023 and recommended for approval.

PROPOSED ACTIONS: Approve the proposed Resolution, or take other action deemed appropriate.

Belknap introduced the item as written above. Taruscio expressed support regarding deferring the roll cart fee increase. Taruscio moved, Kelly seconded, to approve the resolution. Roll Call Vote: Ayes: Unanimous. Nays: None. Abstentions: None. Motion carried.

REPORTS

City Council

Planning and Zoning Commission – Taruscio said they had a public hearing of a replat north of Moscow.

Palouse Basin Aquifer Committee – Kelly said the Committee is looking towards the future as to who to talk with regarding one of the plans.

SMART Transit – Lewis said the Board discussed strategic planning for the next 5-10 years.

Sustainable Environment Commission – Laflin said they heard a presentation from Paul Kimmel regarding what Avista is doing for climate change.

Mayor

No report.

ADJOURN

It was moved, seconded and mutually agreed upon to adjourn at 7:21 p.m.

Arthur D. Bettge, Mayor

ATTEST:

Laurie M. Hopkins, City Clerk

COMMITTEE / CITY COUNCIL STAFF REPORT

DATE: Monday, October 16, 2023



AGENDA ITEM TITLE

Disbursement Report September 2023 - Sarah Banks

RESPONSIBLE STAFF

Sarah Banks, Finance Director

ADDITIONAL PRESENTER(S)

DESCRIPTION

Accounts Payable Report for the month ending September 30, 2023. A summary of the major expenditures has been approximated by category and represents 97% of the total expenditure of \$5,042,126.72.

Payroll	\$1,299,337.00
Professional Services	\$196,816.00
Sanitation	\$359,552.00
Capital Outlay	\$836,580.00
Capital Outlay-Improvements	\$1,668,754.00
Minor Equipment	\$28,932.00
Supplies	\$223,321.00
Utilities	\$87,528.00
Contractual Payments	\$141,564.00
ACH Wells Fargo	\$51,593.00
Total	\$4,893,977.00

REVIEWED BY

The Public Works/Finance Committee received the report and approved the disbursements as presented.

PROPOSED ACTIONS

ACTION: Accept the Disbursements Report for the month of September 2023.

STAFF RECOMMENDATION

Accept the Disbursements Report for the month of September 2023.

OTHER RESOURCES

FISCAL IMPACT

PERSONNEL IMPACT

ATTACHMENTS

1. September Revenue Report 2023
2. Cash & Investments Balances September 2023
3. Disbursement Report September 2023
4. Major Expenditures September 2023

RECEIPTS REPORT FOR SEPTEMBER 2023

		Taxes	Franchise Fees	Licenses & Permits	Intergovernmental	Charges for Services	Fines & Penalties	Investment Income	Refunds & Reimbursements	Contributions & Donations	Other	
	FUND NAME											Grand Total
Fund #												
101	GENERAL	7,923.70	96,334.99	118,658.43	0.00	155,258.82	15,590.10	304,339.60	3,372.65	0.00	5,268.22	706,746.51
105	STREETS	414.66	0.00	0.00	0.00	24,956.27	0.00	0.00	1,919.00	0.00	0.00	27,289.93
120	RECREATION AND CULTURE	0.00	0.00	25.00	0.00	23,520.40	0.00	0.00	540.94	19,001.00	-4.01	43,083.33
121	MSD COMMUNITY PLAY FIELDS	0.00	0.00	0.00	3,079.60	4,050.00	0.00	0.00	0.00	0.00	0.00	7,129.60
123	1912 CENTER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
128	TRANSIT CENTER	0.00	0.00	0.00	0.00	1,582.24	0.00	0.00	0.00	0.00	0.00	1,582.24
220	WATER	0.00	0.00	0.00	0.00	789,859.67	0.00	1,471.56	0.00	0.00	0.00	791,331.23
230	SEWER	0.00	0.00	0.00	0.00	704,817.17	0.00	1,858.09	330.15	0.00	0.00	707,005.41
235	STORMWATER	0.00	0.00	0.00	0.00	49,289.27	0.00	0.00	0.00	0.00	0.00	49,289.27
240	SANITATION	0.00	0.00	0.00	0.00	539,345.88	0.00	0.00	0.00	0.00	0.00	539,345.88
290	FLEET	0.00	0.00	0.00	0.00	82,535.53	0.00	0.00	143.62	0.00	0.00	82,679.15
295	INFORMATION SYSTEMS	0.00	0.00	0.00	0.00	139,503.00	0.00	25,000.00	1,225.00	0.00	0.00	165,728.00
320	WATER CAPITAL PROJECTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
330	SEWER CAPITAL PROJECTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
335	STORMWATER CAPITAL FUND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
340	SANITATION CAPITAL PROJECTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
350	CAPITAL PROJECTS	0.00	0.00	1,250.00	0.00	0.00	0.00	30,006.33	22,808.00	0.00	0.00	54,064.33
355	LID CONSTRUCTION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
380	HAMILTON P&R	0.00	0.00	0.00	0.00	0.00	0.00	3,241.73	0.00	0.00	0.00	3,241.73
590	BOND & INTEREST	1,199.13	0.00	0.00	0.00	0.00	0.00	448.44	0.00	0.00	0.00	1,647.57
595	LID FUNDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL	9,537.49	96,334.99	119,933.43	3,079.60	2,514,718.25	15,590.10	366,365.75	30,339.36	19,001.00	5,264.21	3,180,164.18

City of Moscow
Cash and Investments
Balances as of 9/30/2023

Fund		Year to Date Balance
General Fund	\$	8,727,112.69
Street Fund	\$	2,194,076.54
Recreation & Culture	\$	1,728,759.93
MSDCP	\$	116,443.05
1912 Fund	\$	68,865.08
Transit Center	\$	48,954.93
Water	\$	3,994,413.39
Sewer	\$	4,808,467.12
Stormwater	\$	249,741.03
Sanitation	\$	4,078,111.67
Fleet	\$	5,805,167.54
Information Systems	\$	5,553,486.55
Water Capital	\$	5,871,436.90
Sewer Capital	\$	17,732,734.87
Stormwater Capital	\$	469,684.45
Capital Projects	\$	7,274,559.12
Sanitation Capital	\$	7,074,053.72
LID Construction	\$	210.68
Hamilton	\$	785,775.54
Bond & Interest	\$	501,690.84
LID Funds	\$	35,611.11
Payroll Service	\$	1,128,925.05
Total Cash & Investments	\$	78,248,281.80

DISBURSEMENTS REPORT FOR SEPTEMBER 2023											
	FUND NAME	ACCOUNTS PAYABLE	ACCOUNTS PAYABLE	ACCOUNTS PAYABLE	ACCOUNTS PAYABLE	WELLSFARGO CC ACH	ACCOUNTA PAYABLE ACH	VOID CHECKS	PAYROLL	PAYROLL	GRAND TOTALS
DATE		9/7/2023	9/14/2023	9/21/2023	9/28/2023	9/12/2023	9/14/2023		9/8/2023	9/22/2023	
BATCH #		AP 9.8.2023	AP 9.15.2023	AP 9.22.2023	AP 9.29.2023	9/26/2023 AP 9.12.2023 AP 9.22.2023	AP 9.15.2023		PR 80	PR 81	
CHECK #'s		106541-106616	106617-106696	106697-106762	106763-106853	September's CC ACH's	September's ACH's		21584	21585	
Fund #											
101	GENERAL	16,279.17	25,128.41	17,758.76	123,221.93	33,930.15			360,158.86	393,434.46	969,911.74
105	STREETS	35,235.04	24,662.97	5,869.39	564.74	387.84			29,859.29	31,578.21	128,157.48
120	RECREATION AND CULTURE	16,346.04	28,971.49	1,509.94	23,090.38	8,576.77			77,159.09	68,810.34	224,464.05
121	MSD COMM. PLAY FIELDS	344.19	37.98						2,561.25	2,847.15	5,790.57
123	1912 CENTER		10,750.00								10,750.00
128	TRANSIT CENTER	1,038.87	928.98		802.08						2,769.93
220	WATER	64,922.34	22,887.78	48,581.99	92,199.17	1,724.72			50,783.78	55,169.31	336,269.09
230	SEWER	38,500.22	40,661.60	103,789.55	50,201.71	2,987.40	19,083.27		53,045.87	55,601.52	363,871.14
235	STORMWATER	5,852.30	1,583.58	33,139.46	3,964.52	270.28			17,414.89	17,693.60	79,918.63
240	SANITATION	130,952.30	1,966.16		13,379.19	352.99	209,516.45		7,682.12	7,880.04	371,729.25
290	FLEET	13,265.48	1,500.60	369.05	4,854.07	181.63			10,958.27	11,250.08	42,379.18
295	INFORMATION SYSTEMS	23,688.18	6,128.79	481.10	9,102.14	3,181.45			20,656.03	24,792.75	88,030.44
320	WATER CAPITAL PROJECTS		518,526.55	19,592.92							538,119.47
330	SEWER CAPITAL PROJECTS		1,042.69	275,816.43							276,859.12
335	STORMWATER CAPITAL PROJECTS			10,960.00							10,960.00
340	SANITATION CAPITAL PROJ										0.00
350	CAPITAL PROJECTS	100.00	1,537,445.51	53,622.62	978.50						1,592,146.63
355	LID CONSTRUCTION										0.00
380	HAMILTON - PARKS & REC										0.00
590	BONDS & INTEREST										0.00
890	URBAN RENEWAL AGENCY										0.00
941	PAYROLL CLEARING FUND										0.00
	TOTAL	346,524.13	2,222,223.09	571,491.21	322,358.43	51,593.23	228,599.72	0.00	630,279.45	669,057.46	5,042,126.72

Julia Parker

Sandra Kelly

Drew Davis

Sarah L. Banks, Finance Director

Major Expenditures for September 2023

<u>Professional Services</u>		<u>Sanitation</u>		<u>Utilities</u>	
Evcar, Inc.	\$ 4,549.89	Finlev Buttes Landfill	\$ 124,518.48	Avista Utilities	\$ 87,528.27
6b16,ITC, Parks, Streets, Fleet Janitorial services		MSW Transport & Disposal - August 2023		August 2023	
Gropp, LLC	\$ 3,786.10	Finlev Buttes Landfill	\$ 6,433.82		\$ 87,528.27
Repair for exhaust fan at the Blower Building		Fuel relief August 2023			
IIA Lifting Services, Inc.	\$ 2,878.86	Latah Sanitation (ACH Payment)	\$ 228,599.72		
Sewer plant inspection - including vehicles #1-04, 1-13 & 1-14		Monthly LSI Billing for August 2023		<u>Payroll</u>	\$ 1,299,336.91
John Deere Financial	\$ 5,727.73		\$ 359,552.02		
Diagnose and repair oil leak in Ball Field mower #7-32 (Recreation)				<u>Contractual Payments</u>	
Motorola Solutions, Inc.	\$ 22,335.00	<u>Supplies</u>		Heart of the Arts	\$ 10,750.00
Motorola Solutions - Spillman 2022 True Up		Consolidated Supply Co.	\$ 15,686.47	Infosend, Inc.	\$ 3,775.20
POE Asphalt Paving, Inc.	\$ 14,000.00	Re-stock on inventory for Water Department		City of Pullman	\$ 100,000.00
Logan/Hunter: Remove existing failed asphalt and repave		Enviro-Clean Equipment, Inc.	\$ 3,454.13	U of I - Mayor's Golf Tournament	\$ 8,189.63
Roto Rooter Service	\$ 6,250.00	Headsets		Alta Science and Engineering, Inc.	\$ 12,219.00
SE Lift Station Pumping		Oxarc, Inc.	\$ 3,936.52	Skyhawks Sports Academy	\$ 4,051.00
Viva Cleaning Company	\$ 4,105.48	Chlorine and SO2		Inland Oasis-West Side Food Pantry	\$ 2,579.35
WRRF, Water Ops, Magyar-janitorial services August		Premier Industries	\$ 3,475.00		\$ 141,564.18
Viva Cleaning Company	\$ 3,500.00	Playground bark			
Parks restrooms-August		Rubberway, Inc.	\$ 3,740.56	<u>ACH Wells Fargo</u>	
Blue Logix, LLC	\$ 3,058.00	Turf for Milton Arthur Playground		Commercial Card Expense - September 1st	\$ 15,322.35
Wastewater Scada Screen Upgrade		Thatcher Company of Montana	\$ 10,686.94	Commercial Card Expense - September 9th	\$ 11,889.66
Clements, Brown & McNichols, P.A.	\$ 5,180.00	Aluminum Sulfate		Commercial Card Expense - September 15th	\$ 14,580.97
Attorney fees for utility billing lawsuit		Whitney Equipment, Co.	\$ 2,795.42	Commercial Card Expense - September 22nd	\$ 9,800.25
Evcar, Inc.	\$ 4,549.89	Valves for repairs on sewer			
Janitorial services for multiple City locations		Wintergreen Corporation	\$ 3,560.92		\$ 51,593.23
GG Gutters, Inc.	\$ 3,069.66	Downtown lights			
Custodial Services MPD, HIRC & EYC Sept 1-15		Envirofax, Inc.	\$ 34,225.00	<u>Capital Outlay- Improvements</u>	
Phillip R. Stradley	\$ 6,531.73	Basin Mixers (Budgeted item)		BBC, LLC	\$ 1,068,210.00
Downtown fountain & Mountain view basbeall fields booster		Envirofax, Inc.	\$ 33,580.00	Edington Subdivision-Conestoga Dr Extension	
Phillip R. Stradley	\$ 2,978.50	Basin Mixers (Budgeted item)		Doolittle Holdings, LLC	\$ 477,971.68
Restroom stall for dewatering building toilet		Granich Engineered Products, Inc.	\$ 2,896.30	Pay App 1 for the AR Chip Seal 2023 Project	
Rain for Rent	\$ 12,154.14	Repair parts for South East Lift Station		Geoprofessional Innovation Corporation	\$ 4,706.50
South East Lift Station Emergency Repair		H.D Fowler Company	\$ 9,972.83	Pullman HWY Transmission Water Main General Testing	
SynTier Engineering, Inc.	\$ 2,500.00	Supplies & gate valves for C.St hydrant, hydrant replacements at Thatuna & Jefferson		Sprenger Construction	\$ 9,542.51
Analysis for Woodbury Frontage Improvement on the N Mtn View Rd Curve		LN Curtis & Sons	\$ 6,542.22	Pay App 4 for Mountain View Restroom Renovation	
Blue Logix, LLC	\$ 18,000.00	New nozzles		D & L Supply Company	\$ 7,215.00
Wastewater Scada Screen Upgrade		Uline	\$ 5,214.97	Man hole lids and ring and catch basin lids	
Best Western Plus University Inn	\$ 2,976.00	Cabinet & parts bins for the filter plant		Ferguson Waterworks	\$ 4,307.91
FY23 Food for resident prog 75th anniv event		Consolidated Supply Co.	\$ 12,287.15	Pipe couplers and joints	
Fisher Systems, Inc.	\$ 4,090.73	1" and 2" restock of service brass		Selway Construction Group, LLC.	\$ 42,000.00
FS3 - Fire alarm panel install		Galls, LLC	\$ 5,180.30	Nelson Avenue Improvements 2023	
GG Gutters, Inc.	\$ 3,069.66	General Equipment order		Welch-Comer Engineers	\$ 54,800.00
PD, RD, YC Janitorial services - Sept. 16-30		Phillip R. Stradley	\$ 3,084.19	Lilly Street Recon - August Invoice 2023 - Task 1 and EXP	
Great West Engineering, Inc.	\$ 9,225.69	Headworks Screen			\$ 1,668,753.60
Landfill Closure Planning		Phillip R. Stradley	\$ 47,250.63		
Great West Engineering, Inc.	\$ 3,697.00	Spare well motor for Well #6			
Landfill Closure Planning		Phillip R. Stradley	\$ 9,358.40	<u>Capital Outlay</u>	
Huber Technology, Inc.	\$ 23,740.00	Spare pump for Well #6		Ascorp, Inc. dba/DEBCO	\$ 513,820.05
Huber Technology		Oxarc, Inc.	\$ 3,383.38	Pay App 2 for Pullman Hwy Transmission Water Main	
Phillip R. Stradley	\$ 6,176.60	Chlorine and SO2		Consolidated Supply Co.	\$ 12,128.88
Mail LS Level Controls		Stoneway Electric Supply	\$ 3,009.83	2" setters for Nelson/Alturas	
Motorola Solutions, Inc.	\$ 2,747.72	Light Pole by IPS		Consolidated Supply Co.	\$ 6,772.14
APX4500 Enhanced VHF Mobile + APX O2 CH (GREY) + Accessories			\$ 223,321.16	Ridgeview Addition services	
Cherle Patricia Poulson	\$ 3,190.50			Big Sky Development, Inc.	\$ 264,308.43
Tone and Stretch Summer/Fall session 2023				Pay App 2 for the Lincoln South of Public Sewer Project 2023	
Viva Cleaning Company	\$ 4,105.48	<u>Minor Equipment</u>		Blue Logix, LLC	\$ 5,289.00
WRRF, Water Ops, Magyar-janitorial services September		Uniform2Gear, Inc.	\$ 7,288.96	Programming for the Indian Hills Booster Station	
Viva Cleaning Company	\$ 3,500.00	SRT vests for Tesdahl, Patton, Morris and Rosendahl		J-U-B Engineering, Inc.	\$ 6,225.52
Parks restrooms-September		Gropp, LLC	\$ 11,115.00	Booster Station Phase II - Task 2 August 2023	
Ziply Fiber	\$ 5,141.54	AC & Heater replacement for the Distribution office		McKinney Construction	\$ 11,768.62
PRI phone lines and long distance September		Phillip R. Stradlev	\$ 10,527.78	Milton Arthur Park Playground Installation Pay App#3	
	\$ 196,815.90	Sump pump for the Filter Plant		Raindrop Sprinklers, Inc.	\$ 4,975.00
			\$ 28,931.74	Sprinkler Modifications for the HLAC 2023	
				Consolidated Supply Co.	\$ 11,292.43
				2" meter settes for Nelson (3) and Edgington (2)	
				\$ 836,580.07	

			Major Expenditures	\$ 4,893,977.08	97%	of the total expenditures of	\$5,042,126.72	
Large Expenditures								
Envirofax, Inc.	\$	34,225.00	City of Pullman	\$	100,000.00	Selway Construction Group, LLC	\$	42,000.00
Basin Mixers (Budgeted item)			ID Airport Aid Program State FY23 funds			Nelson Avenue Improvements 2023		
Envirofax, Inc.	\$	33,580.00	BBC, LLC	\$	1,068,210.00	Welch-Comer Engineers	\$	54,800.00
Basin Mixers (Budgeted item)			Edington Subdivision-Conestoga Dr Extension			Lilly Street Recon - August Invoice 2023 - Task 1 and EXP		
Phillip R. Stradley	\$	47,250.63	Doolittle Holdings, LLC	\$	477,971.68	Ascorp, Inc. dba/DEBCO	\$	513,820.05
Spare well motor for Well #6			Pay App 1 for the AR Chip Seal 2023 Project			Pay App 2 for Pullman Hwy Transmission Water Main		
Big Sky Development, Inc.	\$	264,308.43						
Pay App 2 for the Lincoln South of Public Sewer Project 2023								

Large Expenditures total: \$2,636,165.79

COMMITTEE / CITY COUNCIL STAFF REPORT

DATE: Monday, October 16, 2023



AGENDA ITEM TITLE

Woodbury 1st Addition Development Agreement Amendment - Todd Drage

RESPONSIBLE STAFF

Todd Drage, Engineering Technician

ADDITIONAL PRESENTER(S)

DESCRIPTION

Woodbury Land LLC, has submitted to the City a request to modify the phasing for the Woodbury 1st Addition Subdivision. The final plat, titled Woodbury 1st Addition, and the Development Agreement for the Addition was approved by City Council on Monday, October 17, 2022. Section X - Phasing, in the original agreement contained a figure that detailed 17 single family lots being included in a 1st phase, 17 single family lots included in a 2nd phase, and then the remaining 45 lots being included in a 3rd phase. The agreement amendment provides a new figure, detailing 22 lots being included in the 1st phase and the remaining 57 lots in a 2nd phase. Additionally, this amendment requires off-site public improvements to Mountain View Road to be completed in the 1st phase; however, it allows 15 building permits to be issued prior to the completion of the off-site improvements. The amendment to the agreement with the original agreement included as an attachment to the amendment has been included with this packet.

This was reviewed by the Public Works/Finance Committee on October 9, 2023 and recommended for approval.

REVIEWED BY

Public Works / Finance Committee

PROPOSED ACTIONS

ACTION: Approve the Development Agreement amendment with Woodbury Land LLC for the Woodbury 1st Addition.

STAFF RECOMMENDATION

Approve the Development Agreement amendment with Woodbury Land LLC for the Woodbury 1st Addition.

OTHER RESOURCES

n/a

FISCAL IMPACT

n/a

PERSONNEL IMPACT

n/a

ATTACHMENTS

1. Amendment to Development Agreement - Woodbury 1st Addition_final

AMENDMENT TO DEVELOPMENT AGREEMENT
BETWEEN WOODBURY LAND LLC
AND CITY OF MOSCOW, IDAHO

THIS AMENDMENT TO DEVELOPMENT AGREEMENT BETWEEN WOODBURY LAND LLC AND CITY OF MOSCOW, IDAHO (hereinafter "Amendment") is entered into this _____ day of _____, 2023, by and between Woodbury LLC, whose current address is 1004 Dairy Lane, Moscow, Idaho, 83843, being the Developer of real property as described in the Development Agreement (hereinafter "DEVELOPER"), and the City of Moscow, Idaho, a municipal corporation of the State of Idaho, 206 East Third Street, Moscow, Idaho, 83843 (hereinafter "CITY");

WITNESSETH:

WHEREAS, DEVELOPER wishes to amend, and CITY agrees to amend, the Development Agreement Between Woodbury Land LLC and City of Moscow, Idaho for the Woodbury 1st Addition Subdivision, executed on November 16, 2022, attached as Attachment "A" (hereinafter "Agreement"); and

WHEREAS, the Parties agree to amend Section X. Phasing, including the relevant Attachment "C";

NOW, THEREFORE, DEVELOPER and CITY agree that all matters stated above are found to be true and correct and are incorporated herein by reference as if copied in their entirety and shall be adopted with the following amendments of the Agreement:

A. Section X. PHASING, is hereby amended to delete the existing Section X. of the Agreement and shall be replaced with the following:

X. PHASING:

Pursuant to the approval of the Moscow City Council, DEVELOPER may develop the real property described herein in the following two (2) Phases, reflected in Attachment "C".

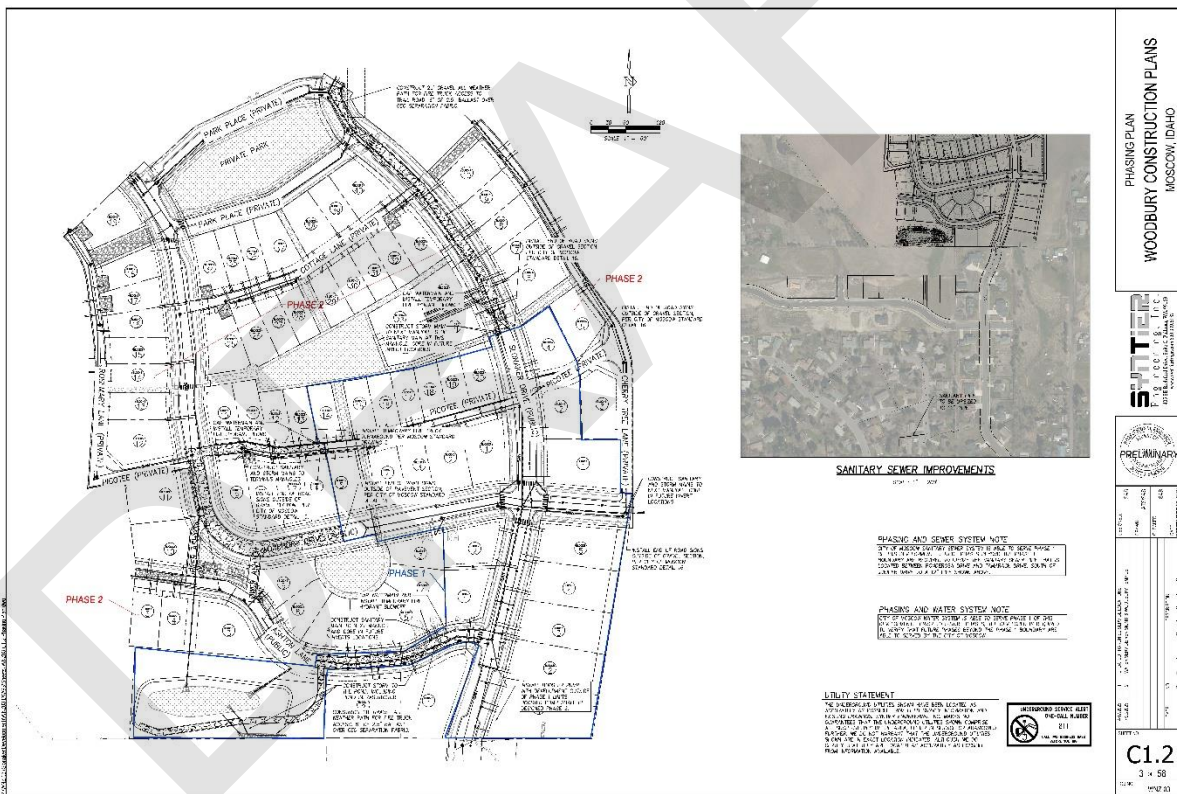
1. Phase I – Completion of the Mountain View Road turning lane and Mountain View Road widening and public improvements described in Section II. B and C of this Agreement. Additionally, all public improvements and appurtenances shown as Phase I on the Phasing Plan included as Attachment "C", and as required by Moscow City Code Sections 5-1-4 and 5-1-5, and Section II. A of this Agreement. Upon completion of the public improvements as described in Section II. A. of this Agreement, DEVELOPER is authorized to obtain up to 15 building permits within the Phase I boundary prior to the full completion of the Mountain View Road turning lane and Mountain View Road widening and public improvements described in Section II. B and C of this Agreement.

2. Phase II – Completion of the public improvements described in Section II. D of this Agreement. Additionally, all public improvements and appurtenances shown as Phase II on the Phasing Plan included as Attachment “C”, and as required by Moscow City Code Sections 5-1-4 and 5-1-5, and Section II. A of this Agreement.

No building permit shall be issued for any phase of this development until after all public improvements, related to each preceding phase of this development, are completed, installed and accepted by CITY in accordance with this Agreement.

All proposed phasing of this development has been submitted and approved of prior to the execution of this Agreement and shall not be modified unless agreed in writing and specifically approved by the City Council. Separate construction plans and specifications shall be prepared and shall be submitted for each Phase of this subdivision.

- B. Attachment “C” is hereby amended to delete the existing Attachment “C” of the Agreement and shall be replaced with the following:



- C. All other terms and conditions of the Agreement that are not modified by this Amendment, shall remain in full force and effect.

IN WITNESS WHEREOF, the Parties have executed this Amendment to be effective the date first above written.

I, Mark Wintz, certify under penalty of perjury pursuant to the law of the State of Idaho, that I am an authorized agent to bind Woodbury Land LLC to this Amendment.

DEVELOPER:

Woodbury Land LLC

CITY:

City of Moscow, Idaho

Mark Wintz, Manger

Arthur D. Bettge, Mayor

ATTEST:

Laurie M. Hopkins, City Clerk

ACKNOWLEDGMENT

STATE OF IDAHO)
) ss.
COUNTY OF LATAH)

On this _____ day of _____, 2023, before me, a Notary Public in and for said State, appeared Mark Wintz, known to me to be the person named above and acknowledged that he executed the foregoing document as the duly authorized representative of Woodbury Land LLC.

Notary Public for the State of Idaho

Residing at _____

My commission expires _____

Attachment "A"

DEVELOPMENT AGREEMENT BETWEEN WOODBURY LAND LLC AND CITY OF MOSCOW, IDAHO

NO. 626804
AT THE REQUEST OF
City of Moscow
DATE & HOUR
11/18/22 4:29 pm
TONYA DODGE
LATAH COUNTY RECORDER
FEE \$ 25 BY: [Signature]

THIS DEVELOPMENT AGREEMENT BETWEEN WOODBURY LAND LLC AND THE CITY OF MOSCOW, IDAHO is entered into this 18th day of November, 2022, by and between Woodbury Land LLC, whose address is 1004 Dairy Lane, Moscow Idaho, 83843 (hereinafter "DEVELOPER"), and the City of Moscow, Idaho, a municipal corporation of the State of Idaho, 206 East Third Street, Moscow, Idaho, 83843 (hereinafter "CITY");

WITNESSETH:

WHEREAS, DEVELOPER desires to develop property to be known as The Woodbury 1st Addition ; and

WHEREAS, DEVELOPER understands that improvements required herein are standards required pursuant to Moscow City Code Title 5, Chapter 1 and are authorized by Idaho Code Sections 67-6513 and 67-6518; and

WHEREAS, DEVELOPER and CITY believe that, without the public improvements required herein, CITY would not be able to otherwise provide for mitigation of the effects of the subdivision development on the ability of CITY to deliver services, without compromising quality of such service delivery to current City residents, or without imposing substantial additional costs upon current City residents to accommodate the proposed subdivision; and

WHEREAS, CITY desires to ensure that the public improvements described in Section II of this Agreement, are constructed; and

WHEREAS, DEVELOPER understands that a waiver of public improvements is available pursuant to the Moscow City Code, but DEVELOPER specifically does not wish to request such a waiver and wishes to enter into this Agreement; and

WHEREAS, DEVELOPER enters into this Agreement of DEVELOPER's own free will and accord, without coercion, without inducement, and at DEVELOPER's request; and

WHEREAS, DEVELOPER has read this Agreement, has understood it, and has had the opportunity to avail itself of legal and other counsel prior to entering into this Agreement and prior to signing it;

NOW, THEREFORE, DEVELOPER and CITY hereby agree as follows:

I. PROPERTY AFFECTED.

This Agreement affects property to be known as The Woodbury 1st Addition more particularly described as follows:

LAND DESCRIPTION

DESCRIPTION OF A PORTION OF PARCELS 3 AND 7 AS DESCRIBED IN QUITCLAIM DEED RECORDED UNDER INSTRUMENT NO. 460076, RECORDS OF LATAH COUNTY, SITUATE IN THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 4 AND THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 5 OF TOWNSHIP 39 NORTH, RANGE 5 WEST, B.M., LATAH COUNTY, STATE OF IDAHO, BEING MORE FULLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 4, SAID POINT BEING NORTH 00°33'28" WEST A DISTANCE OF 1322.72 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION 4;

THENCE ALONG THE NORTH LINE OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 5 SOUTH 89°42'12" WEST A DISTANCE OF 340.66 FEET;

THENCE DEPARTING SAID NORTH LINE NORTH 03°36'03" EAST A DISTANCE OF 160.19 FEET;

THENCE NORTH 84°54'56" WEST A DISTANCE OF 10.83 FEET;

THENCE NORTH 04°59'10" EAST A DISTANCE OF 115.14 FEET;

THENCE NORTH 07°58'57" EAST A DISTANCE OF 20.00 FEET

THENCE NORTH 07°43'37" WEST A DISTANCE OF 150.95 FEET;

THENCE SOUTH 78°51'24" WEST A DISTANCE OF 65.33 FEET;

THENCE NORTH 03°50'28" EAST A DISTANCE OF 173.73 FEET TO THE BEGINNING OF A TANGENT CURVE TO THE LEFT;

THENCE ALONG SAID TANGENT CURVE TO THE LEFT WITH A RADIUS THAT BEARS NORTH 86°09'32" WEST A DISTANCE OF 490.00 FEET, A CENTRAL ANGLE OF 10°28'49", LONG CHORD BEARING NORTH 01°23'57" WEST A DISTANCE OF 89.50 FEET, AN ARC LENGTH OF 89.63 FEET;

THENCE NORTH 06°38'21" WEST A DISTANCE OF 90.81 TO THE BEGINNING OF A TANGENT CURVE TO THE LEFT;

THENCE ALONG SAID TANGENT CURVE TO THE LEFT WITH A RADIUS THAT BEARS SOUTH 83°21'39" WEST A DISTANCE OF 140.00 FEET, A CENTRAL ANGLE OF 38°38'47", LONG CHORD BEARING NORTH 25°57'45" WEST A DISTANCE OF 92.65 FEET, AN ARC LENGTH OF 94.43 FEET;

THENCE NORTH 55°47'32" EAST A DISTANCE OF 20.33 FEET;

THENCE NORTH 46°24'49" EAST A DISTANCE OF 110.00 FEET;

THENCE NORTH 46°14'08" EAST A DISTANCE OF 60.00 FEET;

THENCE SOUTH 42°30'42" EAST A DISTANCE OF 14.43 FEET;

THENCE NORTH 47°25'44" EAST A DISTANCE OF 93.50 TO THE
 BEGINNING OF A TANGENT CURVE TO THE RIGHT;
 THENCE ALONG SAID TANGENT CURVE TO THE RIGHT WITH A
 RADIUS THAT BEARS SOUTH 42°34'16" WEST A DISTANCE OF 72.00
 FEET, A CENTRAL ANGLE OF 17°30'38", LONG CHORD BEARING
 NORTH 56°11'03" EAST A DISTANCE OF 21.92 FEET, AN ARC LENGTH
 OF 22.00 FEET;
 THENCE NORTH 64°56'22" EAST A DISTANCE OF 171.36 TO THE
 BEGINNING OF A TANGENT CURVE TO THE RIGHT;
 THENCE ALONG SAID TANGENT CURVE TO THE RIGHT WITH A
 RADIUS THAT BEARS SOUTH 25°03'38" EAST A DISTANCE OF 72.00
 FEET, A CENTRAL ANGLE OF 24°13'56", LONG CHORD BEARING
 NORTH 77°03'21" EAST A DISTANCE OF 30.22 FEET, AN ARC LENGTH
 OF 30.45 FEET;
 THENCE NORTH 89°10'19" EAST A DISTANCE OF 24.71 FEET;
 THENCE NORTH 32°35'45" EAST A DISTANCE OF 9.59 FEET;
 THENCE SOUTH 55°45'07" EAST A DISTANCE OF 60.02 FEET;
 THENCE SOUTH 32°35'45" WEST A DISTANCE OF 9.10 FEET;
 THENCE SOUTH 28°57'37" EAST A DISTANCE OF 30.22;
 THENCE SOUTH 52°27'41" WEST A DISTANCE OF 45.94 FEET TO THE
 BEGINNING OF A TANGENT CURVE TO THE RIGHT;
 THENCE ALONG SAID TANGENT CURVE TO THE RIGHT WITH A
 RADIUS THAT BEARS SOUTH 37°32'19" WEST A DISTANCE OF 730.00
 FEET, A CENTRAL ANGLE OF 08°42'04", LONG CHORD BEARING
 SOUTH 48°06'39" EAST A DISTANCE OF 110.75 FEET, AN ARC LENGTH
 OF 110.86 FEET;
 THENCE NORTH 45°24'27" EAST A DISTANCE OF 89.66;
 THENCE NORTH 46°22'47" EAST A DISTANCE OF 40.35 FEET TO THE
 BEGINNING OF A NON-TANGENT CURVE TO THE RIGHT;
 THENCE ALONG SAID NON-TANGENT CURVE TO THE RIGHT WITH A
 RADIUS THAT BEARS SOUTH 46°09'34" WEST A DISTANCE OF 860.00
 FEET, A CENTRAL ANGLE OF 18°56'24", LONG CHORD BEARING
 SOUTH 34°22'14" EAST A DISTANCE OF 282.99 FEET, AN ARC LENGTH
 OF 284.28 FEET TO THE BEGINNING OF A REVERSE CURVE TO THE
 LEFT;
 THENCE ALONG SAID REVERSE CURVE TO THE RIGHT WITH A
 RADIUS THAT BEARS NORTH 66°57'23" EAST A DISTANCE OF 190.00
 FEET, A CENTRAL ANGLE OF 13°35'10", LONG CHORD BEARING
 SOUTH 29°50'12" EAST A DISTANCE OF 44.95 FEET, AN ARC LENGTH
 OF 45.05 FEET;
 THENCE SOUTH 36°41'44" EAST A DISTANCE OF 84.59 FEET TO THE
 BEGINNING OF A TANGENT CURVE TO THE RIGHT;
 THENCE ALONG SAID TANGENT CURVE TO THE RIGHT WITH A
 RADIUS THAT BEARS SOUTH 53°10'04" WEST A DISTANCE OF 110.00
 FEET, A CENTRAL ANGLE OF 20°57'32", LONG CHORD BEARING

SOUTH 26°12'58" EAST A DISTANCE OF 40.01 FEET, AN ARC LENGTH OF 40.24 FEET;

THENCE SOUTH 15°44'12" EAST A DISTANCE OF 28.73 FEET TO THE BEGINNING OF A TANGENT CURVE TO THE RIGHT;

THENCE ALONG SAID TANGENT CURVE TO THE RIGHT WITH A RADIUS THAT BEARS SOUTH 74°15'48" WEST A DISTANCE OF 110.00 FEET, A CENTRAL ANGLE OF 15°34'53", LONG CHORD BEARING SOUTH 07°56'45" EAST A DISTANCE OF 29.82 FEET, AN ARC LENGTH OF 29.91 FEET;

THENCE SOUTH 00°09'19" EAST A DISTANCE OF 213.19 FEET;

THENCE SOUTH 00°09'19" EAST A DISTANCE OF 60.24 FEET;

THENCE NORTH 85°02'10" WEST A DISTANCE OF 11.16 FEET;

THENCE SOUTH 09°17'54" WEST A DISTANCE OF 369.47 FEET TO THE NORTH LINE OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF AFOREMENTIONED SECTION 4;

THENCE ALONG SAID NORTH LINE NORTH 89°49'43" WEST A DISTANCE OF 460.08 FEET TO THE POINT OF BEGINNING.

CONTAINING: 898,545 SQUARE FEET OR 20.63 ACRES OF LAND, MORE OR LESS.

II. PUBLIC IMPROVEMENTS.

DEVELOPER agrees to install, at DEVELOPER's expense, within the subdivision, public improvements and appurtenances required by Moscow City Code Title 5, Chapter 1, Sections 1-4 and 1-5, including, but not limited to:

- A. Water mains, valves, fire hydrants, water services, sanitary sewer mains and stubs, storm sewer mains and stubs, storm water detention facilities, street lighting, franchise utilities, erosion control, streets, paving, curbs, traffic control devices (to include but not be limited to stop signs and street signs), and sidewalks; all in accordance with CITY Standards duly adopted by Resolution of the City Council and in accordance with approved engineering plans; and
- B. Widening and frontage improvements to Mountain View Road to improve the road to the CITY's Minor Arterial Standard defined by City of Moscow Standard Construction Drawing Number 1f. The extents of the widening and frontage improvements are on the eastern and southern side of Mountain View Road from the current northern property line at 1714 East F Street, to the eastern extent of the intersection of Mountain View Road and Slonaker Drive, all in accordance with CITY Standards and in accordance with approved engineering plans; DEVELOPER shall be responsible for completion of the design and fifty percent (50%) of the design and construction costs associated with the improvements; and
- C. Construction of a left turn lane from eastbound Mountain View Road onto Slonaker Drive, all in accordance with CITY Standards and in accordance with approved engineering plans; and

- D. The CITY has identified in the Will Serve Letter included as Attachment A that additional water and sewer infrastructure will be required to serve certain portions of the Woodbury 1st Addition. The developer shall design and construct all necessary infrastructure to address the constraints and issues identified in the Will Serve Letter, and will not proceed until said infrastructure is completed, installed, and accepted by the City for each phase of the Woodbury 1st Addition all in accordance with CITY Standards and in accordance with approved engineering plans.

III. TERM.

This Agreement shall remain in full force and effect in accordance with all of its terms and conditions as follows:

- A. Until all public improvements have been completed and accepted by CITY; and
- B. Until the warranty period for public improvements has expired; and
- C. Until all development fees, as required and assessed by CITY, have been paid in full.

IV. CITY'S COVENANT.

CITY shall issue building permits to DEVELOPER's property only after the following have occurred:

- A. Payment of all applicable developmental fees required and assessed by CITY; and
- B. CITY has determined that the construction of all required public improvements is complete or after adequate security, as described in Moscow City Code Section 5-1-10 and as described in Sections VI, VII and VIII herein, has been provided to ensure construction and warranty repairs of the required public improvements; and
- C. Compliance with applicable CITY permit issuance requirements.

V. DEVELOPER'S COVENANT.

- A. DEVELOPER agrees to construct, at DEVELOPER's expense, the public improvements described in Section II of this Agreement, all in accordance with CITY approved engineering design plans, to CITY standards, during and under the terms of this Agreement; and
- B. DEVELOPER agrees to furnish to CITY, at DEVELOPER's expense, engineering design plans (for the required public improvements) prepared by an Idaho Licensed Professional Engineer. Such plans shall be approved by the Moscow City Engineer prior to beginning any public improvements' construction; and

- C. DEVELOPER agrees that DEVELOPER shall construct the public improvements described in Section II of this Agreement, within twelve (12) months from the date of the issuance of the first building permit in the development; and
- D. If DEVELOPER fails to complete installation of the required public improvements within twelve (12) months from the date of the issuance of the first building permit, to CITY standards and as per the approved plans, CITY shall revoke occupancy of the entire development and shall revoke any applicable permit issued to DEVELOPER by CITY.

VI. SECURITY FOR IMPROVEMENTS.

In lieu of DEVELOPER's construction and installation of all public improvements required herein, and CITY'S acceptance of such for ownership and maintenance, CITY agrees that, upon receipt of the adequate security described in Moscow City Code Section 5-1-10, it will issue building permits (upon payment of all CITY development fees and satisfaction of Moscow City Code requirements) for DEVELOPER's development. If DEVELOPER fails to complete installation of the public improvements as required by CITY within twelve (12) months from the date of the issuance of the first building permit in the development, CITY may utilize the security and cause the improvements to be made and CITY may cause improvements to be made and attach a lien on the property in the amount of CITY expense incurred as a result of DEVELOPER's failure to comply with this Agreement. Any engineering or construction costs in excess of the security shall be borne by DEVELOPER. Any additional construction services that shall be performed subject to the laws of the State of Idaho, relative to public works contracting and bidding, shall be borne by DEVELOPER.

VII. FORM OF SECURITY.

DEVELOPER agrees to provide security for the public improvements in the amount to be determined by the City Engineer. This security shall be in the form of cash, construction bond, irrevocable letter of credit from a certified bank or financial institution, or such other form of security acceptable to CITY. Such security shall be provided to CITY prior to the issuance of building permits by CITY. The security must be effective for a minimum period of one (1) year from the date of the issuance of the first building permit in the development. If this security is in the form of an irrevocable letter of credit or bond, the secured improvements shall be constructed at least ninety (90) days prior to the expiration date of the security. If the public improvements identified and described in Section II are not completed within twelve (12) months from the issuance of the first building permit in the development, CITY may claim the security and complete the said improvements using the security. The amount of the security may, from time to time, be modified as deemed appropriate by the City Engineer as conditions warrant.

If for any reason the security for such improvements shall be withdrawn by DEVELOPER or the security or financial institution, or the value or terms thereof shall be compromised in any way, CITY shall immediately cease issuing building permits and shall revoke any

building permits and/or occupancy permits issued pursuant to the terms contained herein, and further, DEVELOPER shall hold CITY harmless for any and all causes of action or damages alleged to have been sustained because of the revocation of such building permits. If any building permits and/or occupancy permits are revoked pursuant to this Section, such building permits and/or occupancy permits shall be re-issued upon receipt by CITY of new or additional security as required herein.

VIII. WARRANTY.

- A. All required public improvements, once constructed and accepted by CITY for ownership and maintenance, shall remain free of defects in materials and workmanship for a period of one (1) year following the date of CITY's written acceptance of such required public improvements (i.e., warranty period).
- B. DEVELOPER shall be responsible for correcting any and all deficiencies which occur within the one (1) year warranty period.
- C. Prior to issuance of any building permit in the development, a warranty Security or performance bond in the amount of fifteen percent (15%) of the estimated value of the required public improvements, as determined by the City Engineer, shall be furnished to CITY by the DEVELOPER. This warranty Security shall be held by the CITY, or shall name the CITY as a holder of the warranty or as the beneficiary of the bond, and shall be in effect for a minimum period of one (1) year from the date of CITY's written acceptance of the public improvements described in Section II of this Agreement.
- D. If DEVELOPER fails to correct all deficiencies within a reasonable amount of time, CITY may claim the warranty Security and correct the deficiencies.
- E. The warranty Security may be in any form allowed under Section VII of this Agreement.

IX. PARKLAND DEDICATION.

As part of the subdivision process, this proposed lot division falls under the following requirements of parkland dedication codes of the City:

The required parkland dedication for the Woodbury 1st Addition is 0.65 acres. The parkland dedication for this Addition has been deferred to a future Addition per the City of Moscow Parks and Recreation Commission's recommendation, and upon mutual agreement and as proposed by DEVELOPER as detailed in DEVELOPER's letter dated August 18, 2021 and attached as Exhibit B to the Attached, Attachment B. The deferred parkland dedication will comprise of a natural area comprised of approximately 133,793 SF (3.07 acres) and a 49,493 SF (1.14 acres) area that total 183,256 F (4.2 acres) for open space that will include grading, a detention basin, and a ten-foot (10') wide gravel (pathway base) pathway provided by DEVELOPER, as detailed in Attachment B, and which are fully incorporated into this Agreement.

X. PHASING.

Pursuant to the approval of the Moscow City Council, DEVELOPER may develop the real property described herein in the following three (3) Phases.

1. Phase I – Completion of the Mountain View Road turning lane, and, Mountain View Road widening and public improvements described in Section II. B and C of this Agreement. Additionally, all public improvements and appurtenances shown as Phase I on the Phasing Plan included as Attachment C as required by Moscow City Code Sections 5-1-4 and 5-1-5, and Section II. A of this Agreement.
2. Phase II – Completion of all public improvements and appurtenances shown as Phase II on the Phasing Plan included as Attachment C as required by Moscow City Code Sections 5-1-4 and 5-1-5, and Section II. A of this Agreement.
3. Phase III - Completion of the public improvements described in Section II. D of this Agreement. Additionally, all public improvements and appurtenances shown as Phase III on the Phasing Plan included as Attachment C as required by Moscow City Code Sections 5-1-4 and 5-1-5, and Section II. A of this Agreement.

No building permit shall be issued for any phase of this development until after all public improvements, related to each preceding phase of this development, are completed, installed and accepted by CITY in accordance with this Agreement.

All proposed phasing of this development has been submitted and approved of prior to the execution of this Agreement and shall not be modified unless agreed in writing and specifically approved by the City Council. Separate construction plans and specifications shall be prepared and shall be submitted for each Phase of this subdivision.

XI. AS-CONSTRUCTED DRAWINGS.

DEVELOPER agrees to furnish, prior to acceptance by CITY of the public improvements as required herein, one (1) set of complete, mylar and AutoCAD, final as-constructed drawings for the public improvements described herein, unless such requirement is waived by the City Engineer.

XII. FAILURE TO COMPLY.

DEVELOPER agrees to pay all expenses incurred by CITY in enforcing this Agreement.

XIII. BINDING ON HEIRS, ASSIGNS AND PURCHASER.

This Agreement shall be binding upon the heirs, executors, administrators, and assignees of the Parties, and subsequent purchasers of and/or within the property described herein.

XIV. OCCUPANCY.

DEVELOPER agrees that no person shall be allowed to occupy any part of the development for any purpose until the described public improvements are completed and accepted by CITY for maintenance or as otherwise provided for by a subsequent development agreement between the Parties.

XV. VENUE AND ATTORNEY FEES.

The Parties agree that, should any provision of this Agreement be litigated in the future, venue for such litigation shall be with the District Court of the Second Judicial District of the State of Idaho in and for the County of Latah. In the event either Party incurs legal expenses to enforce the terms and conditions of this Agreement, the prevailing Party is entitled to recover attorney's fees and other costs and expenses, whether the same are incurred with or without a lawsuit.

XVI. MODIFICATION.

DEVELOPER and CITY agree that the provisions of this Agreement may be modified only upon request of DEVELOPER accompanied by a complete set of development plans, and acceptance of such modification by the Moscow City Council or by a subsequent development agreement between the Parties.

XVII. COVENANTS TO RUN WITH LAND.

This Agreement shall run with the land affected hereby, as shall all covenants contained herein, and shall be to the benefit of CITY, its successors and assigns. This Agreement shall be recorded with the Latah County Recorder.

XVIII. NOTICES.

Any notice required or called for by this Agreement shall be deemed served upon the Party to whom it is sent when delivered by certified United States mail to the following addresses:

DEVELOPER

Woodbury Land LLC
1004 Dairy Lane
Moscow, ID 83843
Phone: 208-596-5555

CITY

City of Moscow, Idaho
Scott Bontrager, City Engineer
P O Box 9203
Moscow, ID 83843
Phone: (208) 883-7000
Facsimile: (208) 883-7018

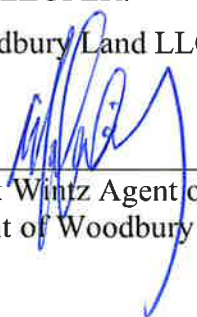
XIX. UNDERSTANDING.

DEVELOPER has read and understood this Agreement and agrees with the contents and conditions thereof. DEVELOPER understands that the terms of this Agreement are contractually and legally binding and that no verbal statement to the contrary, by any person, can void or alter the terms of this Agreement. Specifically, DEVELOPER has had the opportunity to avail itself of legal counsel and of other counsel before entering into this Agreement and before signing it, and hereby enters into it knowingly, voluntarily, willingly, and without inducement.

IN WITNESS WHEREOF, the Parties have executed this Agreement to be effective the date first above written.

DEVELOPER:

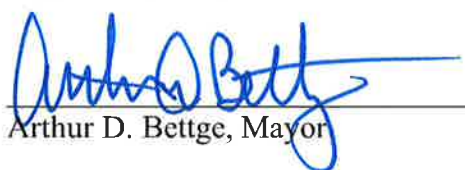
Woodbury Land LLC



Mark Wintz Agent of Wintz Company LLC,
Agent of Woodbury Land LLC

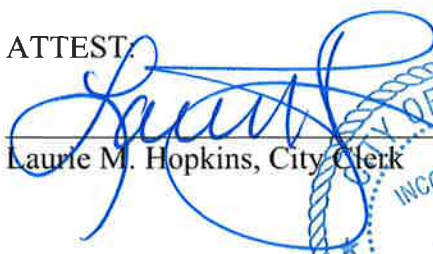
CITY:

City of Moscow, Idaho



Arthur D. Bettge, Mayor

ATTEST:



Laurie M. Hopkins, City Clerk



STATE OF IDAHO)
) ss:
 COUNTY OF LATAH)

On this 10th day of November, 2022, before me, the undersigned, a Notary in and for said State, personally appeared Mark Wintz known to me to be the Authorized Registered Agent of Wintz Company LLC, the Authorized Registered Agent of Woodbury Land LLC who is the owner of the affected property.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year herein above written.



Corey O'Brien
 NOTARY PUBLIC Idaho
 Residing at Latah
 My Commission 8/15/2025

Attachment A



Heart of the Arts

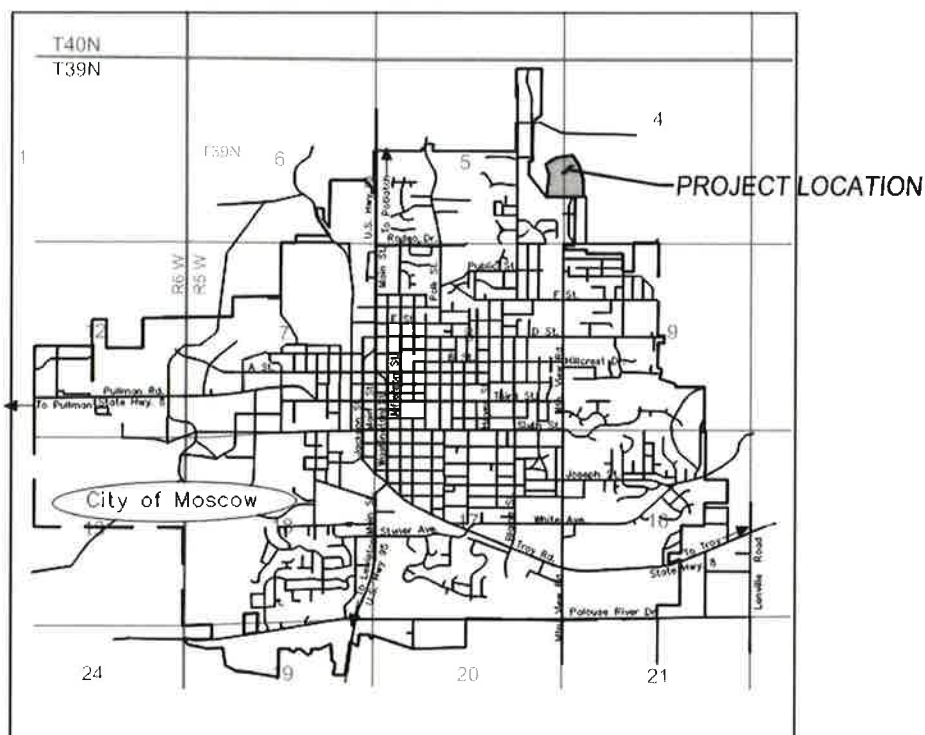
September 14, 2022

Mark Wintz
Woodbury Land LLC
1004 Dairy Lane
Moscow, ID 83843

Re: **"Will Serve" & "As-Built" Notice for the Woodbury 1st Addition**

To Whom It May Concern:

This letter is notice that the City of Moscow (City) will provide water and sewer services to the Woodbury 1st Addition Subdivision and upon completion of a one-year warranty period will assume ownership of, operate, and maintain the associated infrastructure as currently designed. The Woodbury 1st Addition (Addition), as shown on Figure 1 below, is located at the northeast edge of Moscow's City limits.

Figure 1: Woodbury 1st Addition Location

As currently designed, Woodbury 1st Addition is comprised of 72 single-family (SF) lots and 7 residential office (RO) lots. The Addition is currently proposed as being completed in three phases with 17 SF lots in Phase I, 17 SF lots in Phase II, and the remaining lots in a 3rd phase. Figure 2 below provides the general layout of the Addition as designed in Syntier Engineering Inc.'s civil design plan set, dated September 1, 2022.

Water System Analysis

To evaluate the proposed addition in regards to the city's ability to provide water services, the City's Comprehensive Water System Plan (CWSP) was used.

Arthur D. Bettge
Mayor

Sandra Kelly
Council President

Maureen Laflin
Council Vice-President

Hailey Lewis
Council Member

Julia Parker
Council Member

Gina Taruscio
Council Member

Anne Zabala
Council Member

Bill Belknap
City Supervisor

City of Moscow, City Hall
c/o Bill Belknap, City Supervisor
206 East 3rd Street
P.O. Box 9203
Moscow ID 83843
Phone (208) 883-7000
Fax (208) 883-7018

Website: www.ci.moscow.id.us
Hearing Impaired (208) 883-7019



Additionally, the city consulted with HDR Engineering who utilized the City's existing hydraulic model to evaluate the proposed new infrastructure and water demand. The model was used to evaluate whether the City's current water infrastructure could provide the development fire hydrant flow while maintaining a minimum distribution pressure of (+) twenty (20) pounds per square inch (psi). The model was also used to verify that an acceptable minimum pressure of 40 psi during typical demand conditions could be maintained throughout the Addition.

It should be noted that Moscow's current water system has been modified a bit since the adoption of the CWSP. Present water storage and well capacity statistics are as follows:

- 4.5 million gallons of storage; derived from the accumulated volumes of three reservoirs: 2 million; 2 million; 0.5 million.
- Six supply wells able to produce 9,600 gpm.

Moscow's yearly daily average water usage = 2.3 million gallons; peak day usage = 4.9 million gallons. The system is operated to maintain 2.0 million gallon minimum storage.

The 1st Addition's average daily demand on the City's water supply is estimated to be 0.0195 million gallons per day (gpd). This estimate was derived from the developed acreage of the property and the water use factor specified in the CWSP. The table below provides the details of this estimate.

Table 1: Woodbury 1st Addition Water Demand

Demographic	Usage ¹	Water Use Factor (gpd ² /Unit)	Number of Units	Total (gpd)	Million (gpd)
Single family Dwelling Units	247	gpd/unit	79	19,513	0.0195
Duplex Dwelling Units	100	gpd/unit	-	-	-
Multi-family Dwelling Units	126	gpd/unit	-	-	-
Mobile Home Dwelling Units	40	gpd/unit	-	-	-
Developed non-residential acres	444	gpd/acre	-	-	-
TOTAL				19,513	0.0195
1) Usage rates obtained from CWSP table 4-10					
2) gpd = Gallons per day					

As detailed in the 4-water modeling technical memorandums attached to this letter, HDR's modeling results show the City of Moscow can serve peak water supply demand while maintaining the required minimum distribution pressure and fire flow for the proposed Woodbury 1st Addition for water service connections below an elevation of 2,681 feet (ft). For water service connections above 2,681 feet, a small booster pump station (BPS) will be required to be constructed to boost the pressures to the required minimum 40 psi. Syntier Engineering's construction plans have phased the 1st Addition to allow construction of the lots below 2,681 ft in the first two phases of the development and then, to construct the required BPS for the phase where the higher elevation lots require boosting.

Relying on the water modeling analysis, the City is able to verify that the necessary steps are taken to be able to serve the Addition. The City is able to





require in the phasing portion of the Addition's Development Agreement that a BPS is designed and constructed prior to the City issuing building permits for the any lots where the service connections are above elevation 2,681 ft.

Sewer System Analysis

The City has reviewed Syntier Engineering's civil design plan set, which details sewage from the development property gravity flowing to the City's existing gravity infrastructure which then gravity flows through existing City sewer mains to eventually arrive at the City's Waste Water Treatment Facility (WWTF). The orange clouding shown on Figure 3 below provides the path from the Addition to the WWTF.

To analyze the City's capability to take on the additional sewage generated from the Addition, the capacity of the sewer system downstream of the Addition and the capacity at the City's Waste Water Treatment Facility (WWTF) is required. To analyze the sewer system from the Addition to the WWTF the City's Facility Plan titled "*City of Moscow, Idaho Comprehensive Sewer System Plan*" (CSSP) that was developed to satisfy IDAPA 58.01.16.410 was used. The CSSP is the document that the City has used since its' completion in 2011 to identify existing collection system deficiencies, determine future needs, and develop a vision for the future collection system with an implementation strategy. The analysis discussed below, and any section, figure, table, and page numbers referenced are cited from the City's 2011 CSSP. A link to the City's website where a copy of the CSSP can be found below the signature line of this letter.

To analyze future potential development like the Woodbury 1st Addition, areas of development were identified in the CSSP within growth horizon scenarios projected out 5, 20, and 50 years into the future. With these future development areas and time horizons identified, the CSSP modeled the impacts of these future developments on the City's sewer system's capacity. As described in CSSP Section 6.2, the modeled results and the corresponding sewer system's capacity were illustrated throughout the CSSP with color coded capacity usage as a percentage of maximum capacity. From this growth versus system capacity model analysis, a list of sewer system improvements was developed by identifying areas where future development would exceed the current system's capacity. This list is provided in CSSP table 6.3, and the priorities impacting the Woodbury 1st Addition property are provided in Table 2 below.

Table 2: CSSP Table 6.3 – Development Levels Triggering Improvements

Priority	Improvement/Location	Additional Upstream ERUs
1a	36" Paradise Creek Interceptor to Wastewater Treatment Plant	0
1a	30" Paradise Creek Interceptor extension Connect "Dry Line" (along Troy Hwy)	0
1b	Troy Road / White Avenue Interceptor	0
2a	Misc. "Maintenance" Pipes	0

The area encompassing the Woodbury 1st Addition was incorporated in the 50-year future growth horizon development as illustrated on CSSP Appendix Page 177 and included here as Figure 3 below. Figure 3, provides the color-coded pipe



capacity model analysis for the City's sewer system under the 50-year future-growth model scenario with Priority 1a, 1b and 3, system improvement projects completed (in other words the City's sewer system was modeled as though priority projects 1a and 1b and 3 had been completed). Since the completion of the CSSP, priorities 1a and 1b were completed as the CSSP advised. In addition to the completion of priorities 1a and 1b two segments of sewer main along the Woodbury 1st Addition sewer flow path were identified as "surcharged" at the 50-year growth scenario as shown highlighted in red on figure 3 below.

One of the segments, "Mountain View Road near 7th" was identified in the CSSP as a Capital Improvement Project (see CSSP PDF page 193) because it was originally constructed with a near "flat" slope. This Project was completed in 2015 as advised in the CSSP.

The other segment, "Thatuna Ave & Juniper" was identified in the CSSP as a Capital Improvement Project (see CSSP PDF page 194) again because of a segment of pipe with "low or flat slope". The CSSP advised that the location be investigated to determine the feasibility of correcting the slope and stated that increased maintenance through accelerated cleaning schedules may be a desired alternative to replacement. Upon investigation and monitoring, the City determined that this location had excess capacity and did not pose adverse impacts due to surcharge. Since the completion of the CSSP, an increased inspection and maintenance schedule has been used. Currently, this segment serves 23 equivalent residential units (ERU). Based on field observations of the sewer main segment, the City has determined that the increased inspection and maintenance schedule can be used to serve the additional 34 ERUs planned to contribute from Phase I and II of Woodbury 1st Addition. For Phase III and future Additions however, this segment identified in Capital Project CSSP page 194 will need to be replaced.

For the final sewer capacity component, the City has verified that Moscow's Waste Water Treatment Facility has the capacity for the additional flow that this development will generate. The facility was designed for 4.0 mgd average daily flow and a peak flow of 10 mgd. The City's present average daily flow (yearly avg.) is 1.98 mgd and the present highest ever peak flow measured was 10.56 mgd during a large hydrologic event.

Ownership and As-built confirmation

The City agrees to assume ownership of, operate, and maintain the infrastructure for the Woodbury 1st Addition if and when it has been constructed per the final approved civil design plan sets and all of the conditions of the Development's Development Agreement between the City and Developer have been satisfied. The City agrees to inspect and oversee the construction of the public utilities and require the completion of "As-Built" engineering plans upon completion of the work as detailed in the Development Agreement. Upon completion and acceptance of the as-built drawings, City agrees to submit said drawings to the Idaho Department of Environmental Quality (IDEQ) for state approval and record.

Review and Approval of future Additions and Development

As HDR's water modelling memorandums indicates, additional water distribution infrastructure will be required if/when Phase III of the 1st Addition and future Additions are constructed. Additionally, as demonstrated in the CSSP, a segment





of sewer main will require correcting as a part of the 1st Addition's Phase III construction and for future Woodbury Additions. The completion of these water and sewer components prior to Phase III has been specified in Syntier Engineering's September 1st civil design plan set and will be a condition of the Woodbury 1st Addition Development Agreement. As demonstrated in this review, the City is able to provide sewer and water services to the first and second phases of the Woodbury 1st Addition and have evaluated and planned for future infrastructure upgrades to be completed with the construction of Phase III.

To ensure the City's ability to serve additional developments and additions, when additional growth occurs the City will evaluate each new addition and provide Will Serve analysis for IDEQ review and approval.

Please feel free to phone me at (208) 883-7028 or e-mail me at tdrage@ci.moscow.id.us if you have any questions.

Sincerely,

Todd Drage

Todd Drage
Engineering Technician, City of Moscow

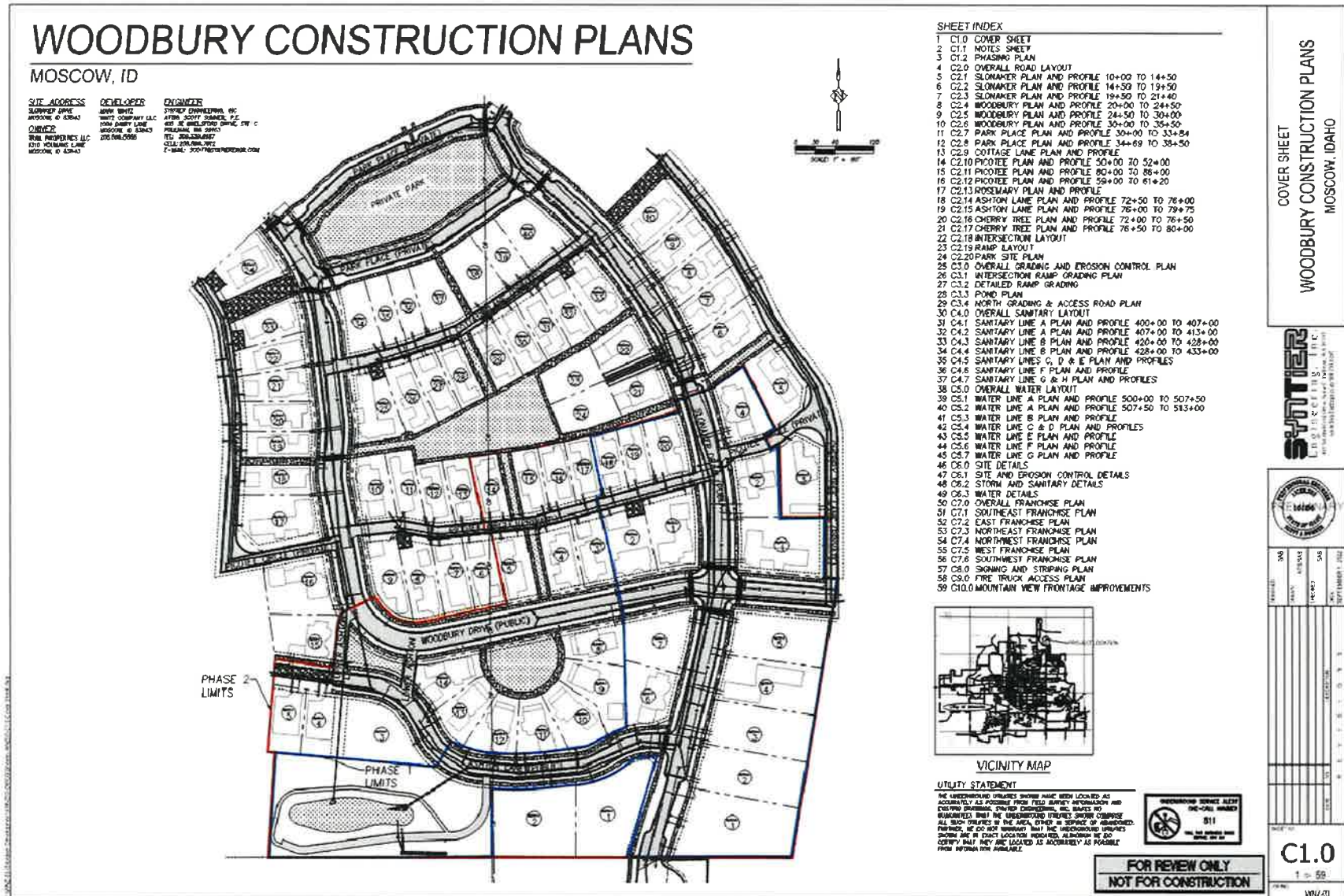
Cc: Scott Sumner, Syntier Engineering

Attachments: HDR Engineering's 4 Water Modelling Memos

Links: Moscow's Sewer and Water Facility Plan website link
<https://www.ci.moscow.id.us/484/Plans-Studies>



Figure 2: Woodbury 1st Addition General Layout



COVER SHEET
WOODBURY CONSTRUCTION PLANS
MOSCOW, IDAHO

SYNTIER
ENGINEERING, INC.
407 W. WASHINGTON ST., STE. C
MOSCOW, ID 83843

SCALE
1" = 50'

DATE
SEPTEMBER 2022

REVISIONS

NO.	DATE	DESCRIPTION
1	SEP 2022	ISSUED FOR REVIEW

C1.0
1 of 59

WLL:ZJ

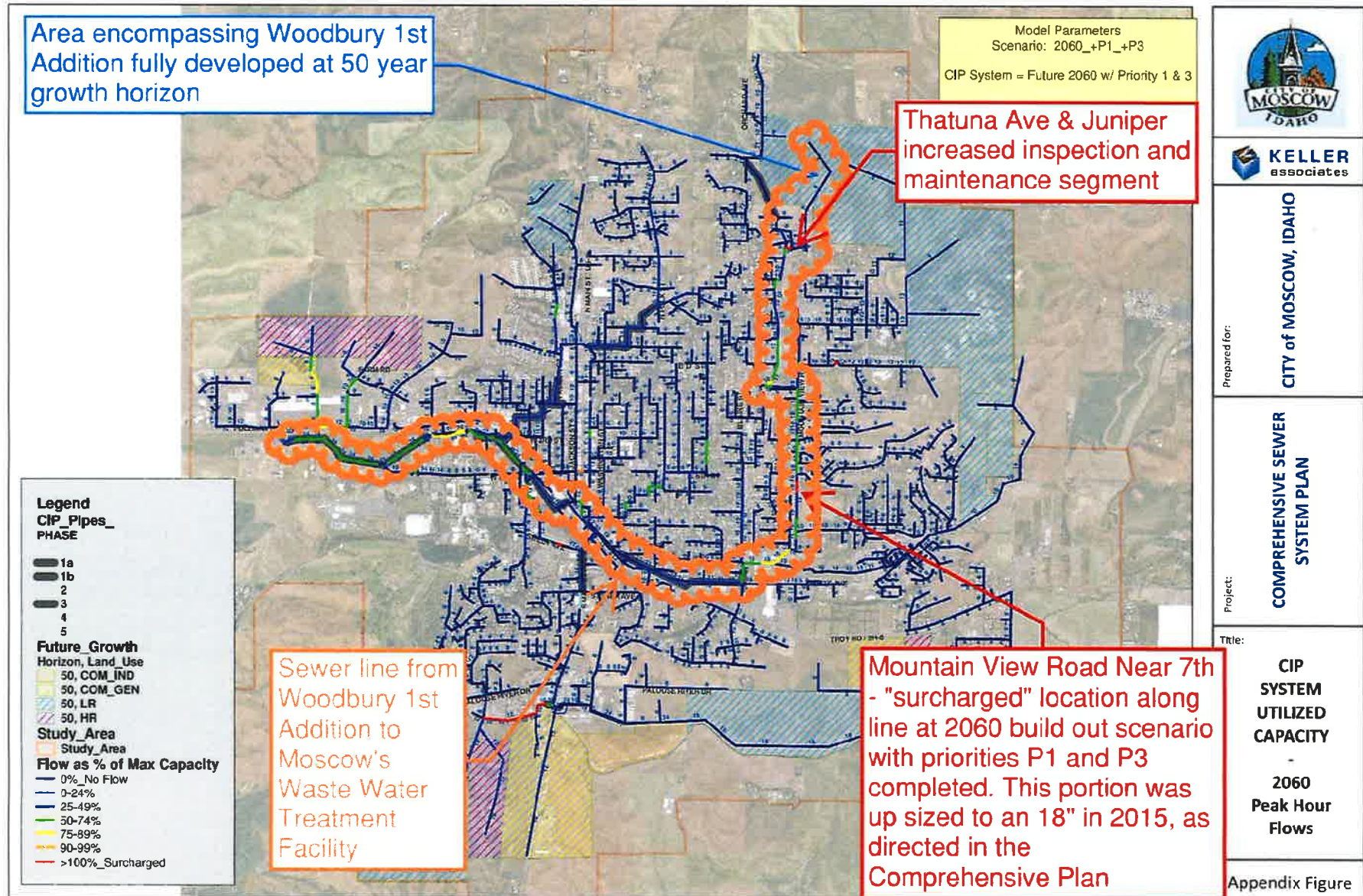
VICINITY MAP

UTILITY STATEMENT
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED AS ACCURATELY AS POSSIBLE FROM FIELD SURVEY INFORMATION AND EXISTING RECORDS. SYNTIER ENGINEERING, INC. MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN CORRESPOND TO THE ACTUAL UTILITIES IN THE AREA, EITHER IN DEPTH OR HORIZONTAL LOCATION. IT IS THE RESPONSIBILITY OF THE USER TO VERIFY THE LOCATION AND DEPTH OF ANY UTILITIES SHOWN ARE IN EXACT LOCATION INDICATED, ALTHOUGH WE DO CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE DATA AVAILABLE.

NO UNDERGROUND UTILITIES SHOWN
811
CALL BEFORE YOU DIG

**FOR REVIEW ONLY
NOT FOR CONSTRUCTION**

Figure 3: CSSP 50 Year Growth Horizon with Priorities Impacting the Logos Property Identified





Technical Memorandum

To: Michael Parker (City of Moscow)
From: David Kuhns (HDR)
Date: 8/23/2022
Subject: Task Order 4 – Woodbury Development 1st Addition Supply

Introduction

HDR Engineering Inc. (HDR) has previously completed three analyses related to the Woodbury Development within the City of Moscow (City). These include:

- Attachment A** • *Ponderosa – Woodbury Development Hydraulic Impacts Analysis TM (8/20/2021)* – an initial analysis to determine impacts to the water system and new Ponderosa BPS given the addition of the Woodbury Development and potential build-out area to the east.
- Attachment B** • *Task Order 4 – Updated Woodbury Analysis TM (4/21/2022)* – updated analysis of the Woodbury Development given most recent development drawings.
- Attachment C** • *Task Order 4 – Ponderosa BPS Ability to Serve Woodbury Analysis TM (2022-05-17)* – analysis of the ability for the existing Ponderosa BPS to serve the Woodbury Development

It is anticipated that the Woodbury Development will ultimately be supplied via the Ponderosa Pressure Zone via the proposed future Ponderosa Booster Pump Station (BPS). However, as the existing Ponderosa BPS may have its capacity exceeded during peak demand conditions, until the new BPS is built and online, it is planned to have the 1st Addition of the Woodbury Development supplied from the Main Pressure Zone via a feed on Slonaker Drive.

This technical memorandum (TM) summarizes the current hydraulic analysis for this condition.

Analysis

The current InfoWater Pro hydraulic model of the distribution system as maintained by HDR was utilized for the analysis. System demands included the anticipated demands of the 1st Addition of the Woodbury Development along with other anticipated developments throughout the City.

Figure 1 illustrates the available fire flow for the 1st Addition of the Woodbury Development given a direct, non-boosted connection to the Main Pressure Zone on Slonaker Drive calculated using a steady-state model run. The available fire flow is calculated as the flow available while maintaining a 20 psi pressure throughout the distribution system during peak demands with fire suppression storage depleted. The available fire flow exceeded 1,500 gpm throughout the development.

An extended period simulation (EPS) model run was completed during peak summer conditions to determine the minimum pressures seen in the development which are illustrated on Figure 2. It was found that higher elevation locations within the 1st Addition of the Woodbury Development have pressures that drop below the minimum required 40 psi. The minimum hydraulic grade line (HGL) elevation is estimated to be 2,773 feet. Given this HGL elevation, any elevation above 2,681 feet would have a pressure less than 40 psi.

To obtain adequate pressures throughout the 1st Addition of the Woodbury Development, a small BPS could be placed on the 10-inch pipe feeding the development on Slonaker Drive. As fire flows can be met without pumping, the pump station would be sized to only meet domestic (non-fire flow) demands for the 1st Addition of the Woodbury Development with a check valve or PRV feature placed parallel to the BPS for supplying fire flows. The BPS could be sized to boost by a head of 50 feet which would place the HGL similar to when the area would be fed from the future Ponderosa BPS. The BPS can also use a variable

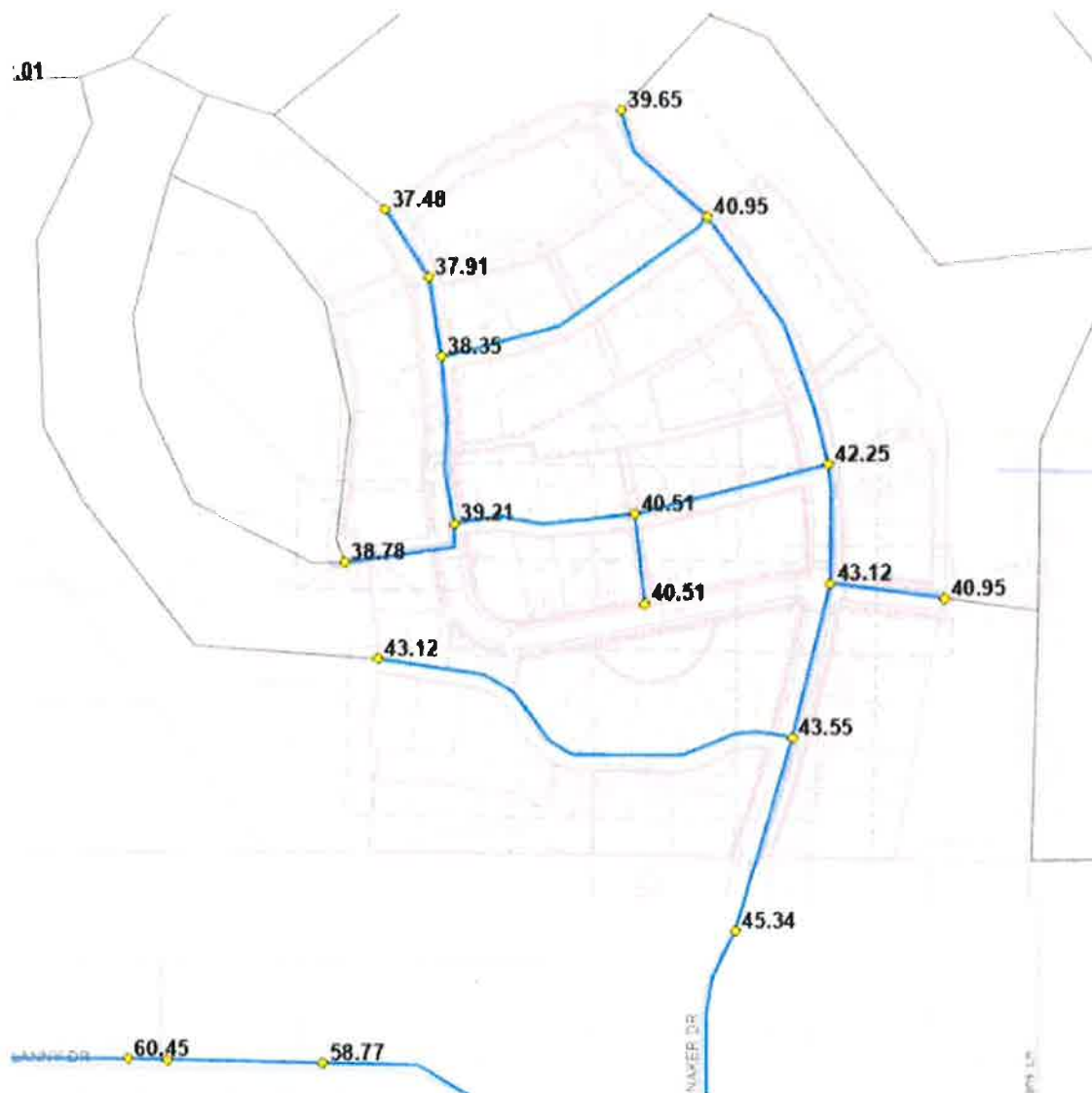
frequency drive (VFD) to maintain a downstream pressure setpoint and a hydropneumatic tank system to reduce pump starts during low demand periods.

Alternatively, for initial phases of construction, if service connections remain below an elevation of 2,681 feet, a BPS is not needed.

Figure 1. Available fire flow with a direct (non-pumping) connection to the Main Pressure Zone



Figure 2. Minimum pressures during peak demand conditions with a direct (non-pumping) connection to the Main Pressure Zone



Summary

If connecting the 1st Addition of the Woodbury Development to the Ponderosa Pressure Zone, during peak demand conditions, it is predicted that demands may exceed the capacity of the existing Ponderosa BPS and therefore cannot be served by the Ponderosa Pressure Zone until the proposed Ponderosa BPS is in place.

In the interim, the 1st Addition of the Woodbury Development can be served with a connection to the Main Pressure Zone on Slonaker Drive. A small BPS could be placed on Slonaker Drive sized for domestic (non-fire) demands while a check valve or PRV could be placed in parallel to the BPS to supply fire flows directly (without pumping) to the development.

For initial construction phases of the 1st Addition of the Woodbury Development, a BPS is not needed if service connections remain below an elevation of 2,681 feet and could have domestic and fire demands served directly from the Main Pressure Zone while meeting minimum pressure requirements.

Technical Memorandum



To: Michael Parker (City of Moscow)
From: David Kuhns, PE (HDR)
Date: August 20, 2021
Subject: Ponderosa - Woodbury Development Hydraulic Impacts Analysis

Background

The Woodbury Development is planned to be within the Ponderosa Pressure Zone within the City of Moscow (City). The Ponderosa Pressure Zone is supplied via the Ponderosa Booster Pump Station (BPS). However, the existing BPS will be replaced by a new Ponderosa BPS, the design of which has been completed by JUB Engineers, Inc. A previous hydraulic analysis identifying pump design points and system curves for the new Ponderosa BPS was completed by HDR (*Indian Hills BPS and Ponderosa BPS Hydraulic Design Points TM*, revised June 9, 2020).

The Woodbury Development was not part of the previous analysis completed. The City requested HDR to complete an initial analysis to determine impacts to the water system and new Ponderosa BPS given the addition of the Woodbury Development. That analysis is summarized in this technical memorandum (TM).

Forecasted Demands

The previous analysis for determining hydraulic design points for the new Ponderosa BPS was based on analyzing existing demands (based on 2018 meter consumption). The existing demands for the Ponderosa Pressure Zone were estimated by using the 2018 consumption measured by service meters within the pressure zone plus non-revenue demands. Non-revenue demands were assumed to be 22 percent of revenue (metered) demands similar to the total water system. 20-year forecasted demands for the zone were then estimated by using the same growth rate used for the total water system from the City's 2012 Comprehensive Water System Plan (CWSP).

The demands for the Woodbury Development were estimated based on the water use factors in the 2012 CWSP. This includes:

- Equivalent residential unit (ERU) average day demand (ADD) equal to 247 gallons per day. This is the typical metered consumption for a single family residential (SFR) connection.
- Maximum day demand (MDD) to ADD ratio of 2.2.
- Non-revenue demand equal to 22 percent of metered consumption.

The Woodbury Development is planned to initially have 74 SFR lots. At buildout, the development will have 270 SFR lots. At buildout, the development's demands are equivalent to:

- ADD = 56.5 gallons per minute (gpm)
- MDD = 124.3 gpm

To the east of the Woodbury Development is an area that the City has also previously identified as a future growth area which may also be part of the Ponderosa Pressure Zone. The demands for this future growth area were estimated by assuming a SFR lot density similar to the Woodbury Development. The Woodbury Development covers approximately 83.3 acres with a lot density of 3.24 lots per acre. The future growth area is approximately 119.5 acres which is equivalent to 387 SFR lots if assuming the same SFR lot density as the Woodbury Development.

A summary of the demands given these assumptions is presented in Table 1. From Table 1, it can be seen that the growth of the Woodbury Development plus the future growth area will exceed the previously

forecasted growth assuming the 2012 CWSP's growth rate. The location of the Woodbury Development and the future growth area in relation to the existing Ponderosa Pressure Zone is shown on Figure 1.

Figure 1. Ponderosa Pressure Zone, Woodbury Development, and future growth area



Note: Highlighted areas indicate future growth areas by the City.

Table 1. Ponderosa Pressure Zone Demands

Demand	Existing (2018)	20-year previously assumed	Existing (2018) + Woodbury Buildout	Existing (2018) + Woodbury Buildout + Future Growth Area Buildout
ADD (gpm)	24	48	80	161
MDD (gpm)	52	105	176	354
PHD (gpm)	150	254	382	670
Fire flow (gpm)	1,500	1,500	1,500	1,500
MDD + fire flow (gpm)	1,552	1,605	1,676	1,854

Source Capacity Analysis

The Ponderosa Pressure Zone is a closed pressure zone (no gravity storage). Therefore, all demands are directly supplied from the BPS. The new Ponderosa BPS includes a jockey pump (24 gpm), two duty pumps (each at 150 gpm), and two fire pumps (each at 1,500 gpm). Because the BPS serves a closed pressure zone, the BPS should be sized so that the peak hour demand (PHD) can be met with the largest pump out of service as well as meeting the MDD plus fire flow with the largest pump out of service.

A source capacity analysis (spreadsheet calculation) was completed based on the nameplate flow capacities of each pump to the forecasted demands of Table 1. This analysis is shown on Table 2 which indicates that the nameplate capacities when considering all pumps with the largest out of service is capable of meeting the peak demand condition (MDD + fire flow) of existing demands plus buildout of the Woodbury Development. However, a slight deficiency exists when adding the buildout of the future growth area.

Additionally, if looking at non-fire flow conditions, the estimated PHD cannot be met for the Woodbury Development buildout without exceeding the nameplate flow rate or using a fire pump. When considering the buildout of the future growth area, a fire pump would also need to be utilized to meet MDD. The BPS designer should verify that the fire pump can be utilized for this condition and be operationally efficient as it may be beneficial to modify the design point of the pumps prior to construction if it would mean better efficiencies and operations for the long-term.

Table 2. Ponderosa BPS source capacity analysis

	Existing (2018)	20-year previously assumed	Existing (2018) + Woodbury Buildout	Existing (2018) + Woodbury Buildout + Future Growth Area Buildout
Ponderosa Pressure Zone projected demands (gpm)				
Average day demand (ADD)	24	48	80	161
Maximum day demand (MDD)	52	105	176	354
Peak hour demand (PHD)	150	254	382	670
Fire flow demand	1,500	1,500	1,500	1,500
Sources (gpm)				
Jockey Pump		24		
Duty Pump 1		150		
Duty Pump 2		150		
Fire Pump 1		1,500		
Fire Pump 2		1,500		
Total capacity		3,324		
Total capacity (excluding fire pumps)		324		
Total capacity with largest offline		1,824		
Source surplus (deficiency) checks (gpm)				
ADD with largest pump offline	1,800	1,776	1,744	1,663
MDD + fire with largest pump offline	272	219	148	(30)
PHD with largest pump offline	1,674	1,570	1,442	1,154
MDD without fire pumps	272	219	148	(30)
PHD without fire pumps	174	70	(58)	(346)

Note: Assumes source pumps are operating at the maximum production rate (i.e., for 24 hours per day)

The *Indian Hills BPS and Ponderosa BPS Hydraulic Design Points TM* provided system curves which are still valid. However, the table of buildout (20-year demand) design points—which are based on PHD, MDD + fire flow, and ADD + fire flow—will see a slight change in flow and head requirements due to the increase in forecasted demands as summarized in Table 1. For example, the 20-year demand for MDD + fire flow was 1,605 gpm, but with the Woodbury Development buildout increases to 1,676 gpm. This further increases to 1,854 gpm if considering buildout of the future growth area.

The designer should verify if the new Ponderosa BPS should only meet the existing demands of the Ponderosa Pressure Zone plus the buildout demands of the Woodbury Development, or if it should also be designed to meet the additional demands of the potential future growth area. The pumps in the current design should then be verified if they are capable of meeting the higher demands without modifications using the previously provided system curves, plus their calculated pump station head losses.

Hydraulic Modeling

A water system hydraulic model scenario was run to evaluate including demands for the buildout of the Woodbury Development plus the future growth area to identify the potential for low pressure issues on the suction side of the new Ponderosa BPS. The model indicated that given the pipe improvements proposed by the Ponderosa BPS, which includes adding a pipe to allow the pump station suction to be supplied from both Lanny Drive and Ponderosa Drive (through Orchard Avenue), the distribution system on the suction side of the new BPS will have adequate capacity to meet pressure requirements for the MDD plus a 1,500 gpm fire flow.

The hydraulic model was also updated with the pump curves for the jockey, duty, and fire pumps for the new Ponderosa BPS based on using the basis of design pumps in the new Ponderosa BPS specifications. The modeling indicates that the combination of the two duty pumps and the jockey pump can meet the PHD for the existing plus the buildout Woodbury Development demands. However, the pumps are not operating at their design points, with all pumps operating further to the right on their respective pump curves.

Given 2030 PHD with the buildout Woodbury Development, the hydraulic model has the jockey pump and duty pumps operating at the following conditions:

- Jockey pump: 43 gpm at 51.6 feet of head
- Duty pumps: each operating at 170 gpm at 53 feet of head (variable frequency drive at 0.93 percent speed)

The Ponderosa BPS designer should verify if this operating point is in the acceptable operating range (AOR) of the pumps.

In addition, the model verifies the spreadsheet calculation that the duty pumps alone cannot meet the PHD if the potential future growth area is also at full buildout. One of the fire pumps would also need to be operating to meet that condition.

Conclusion

Initial hydraulic modeling of the new Ponderosa BPS shows that the pump station can meet the demands of the buildout Woodbury Development plus the existing Ponderosa Pressure Zone demands while meeting the 1,500 gpm fire flow. However, the BPS designer shall verify that the new operating points fall within the AOR of the pumps.

In addition, the new Ponderosa BPS may need modifications if it is intended to also meet the buildout demands of the potential future growth area as there is currently a deficiency in meeting the PHD without using one of the fire pumps. If it is acceptable to use one of the fire pumps to meet the PHD, it should be verified that the turndown of the fire pump using a variable frequency drive (VFD) covers the full range above the maximum operating point of the duty plus jockey pumps.

Technical Memorandum



To: Michael Parker (City of Moscow)
From: David Kuhns (HDR)
Date: 4/21/2022
Subject: Task Order 4 – Updated Woodbury Analysis

Introduction

HDR Engineering Inc. (HDR) has previously completed an analysis called Ponderosa - Woodbury Development Hydraulic Impacts Analysis (August 20, 2021) for the City of Moscow (City). The previous analysis had the Woodbury Development and a buildout area to the east all supplied via the Ponderosa Pressure Zone through the Ponderosa Booster Pump Station (BPS). The City provided a new set of Woodbury drawings dated March 17, 2022. HDR, as part of this project, updated the hydraulic model runs based upon the latest Woodbury drawings.

The latest Woodbury drawings only included the first phase of the Woodbury Development and, unlike the previous analysis, has the development supplied via the Main Pressure Zone through a connection on Slonaker Drive. The previous analysis had assumed 10-inch piping for all proposed pipes and made assumptions on the piping alignments. The model was updated to match the pipe placement and diameters for the first phase of the development. Pipeline elevations were also updated for the first phase of the development based on the grading shown on the revised drawings (previous modeling assumed all model nodes at an elevation of 2,680 feet).

The results of the analysis are summarized within this technical memorandum (TM).

Analysis

The hydraulic analysis completed checks to see if a 1,500 gpm fire flow could be met in the development without the distribution system dropping below 20 psi, that pressures stay above 40 psi during peak demands (without fire flow), and that high pressures do not exceed 80 psi.

Below is a summary of the analysis completed.

- Figure 1 illustrates the low pressures expected in the first phase of the development given an extended period simulation (EPS) model run during typical peak summer demands and being part of the Main Pressure Zone. Pressures drop below 40 psi for areas of the development.
- Figure 2 illustrates the high pressures anticipated in the first phase of the development given an EPS model run during typical winter demands and being part of the Main Pressure Zone. Pressures do not exceed 80 psi for the development.
- Figure 3 illustrates the pressures expected during a steady-state model run with maximum day demand (MDD) and fire suppression storage depleted and being part of the Main Pressure Zone. Pressures do not drop below 20 psi for the development.
- Figure 4 illustrates the available fire flow calculated with a steady-state model run with MDD and fire suppression storage depleted and being part of the Main Pressure Zone. Available fire flow exceeds 1,500 gpm for the development.

The same scenarios were also run in the model but with the development part of the Ponderosa Pressure Zone via a connection off of Arborcrest Road.

- Figure 5 illustrates the low pressures expected in the first phase of the development given an EPS model run during typical peak summer demands and being part of the Ponderosa Pressure Zone. Pressures exceed 40 psi for the development.
- Figure 6 illustrates the high pressures expected in the first phase of the development given an EPS model run during typical winter demands and being part of the Ponderosa Pressure Zone. Pressures do not exceed 80 psi in the development.
- Figure 7 illustrates the available fire flow calculated with a steady-state model run with MDD and fire suppression storage depleted and being part of the Ponderosa Pressure Zone. Available fire flow exceeds 1,500 gpm in the development.

Figure 1. EPS summer low pressures without fire, part of Main Pressure Zone (psi)

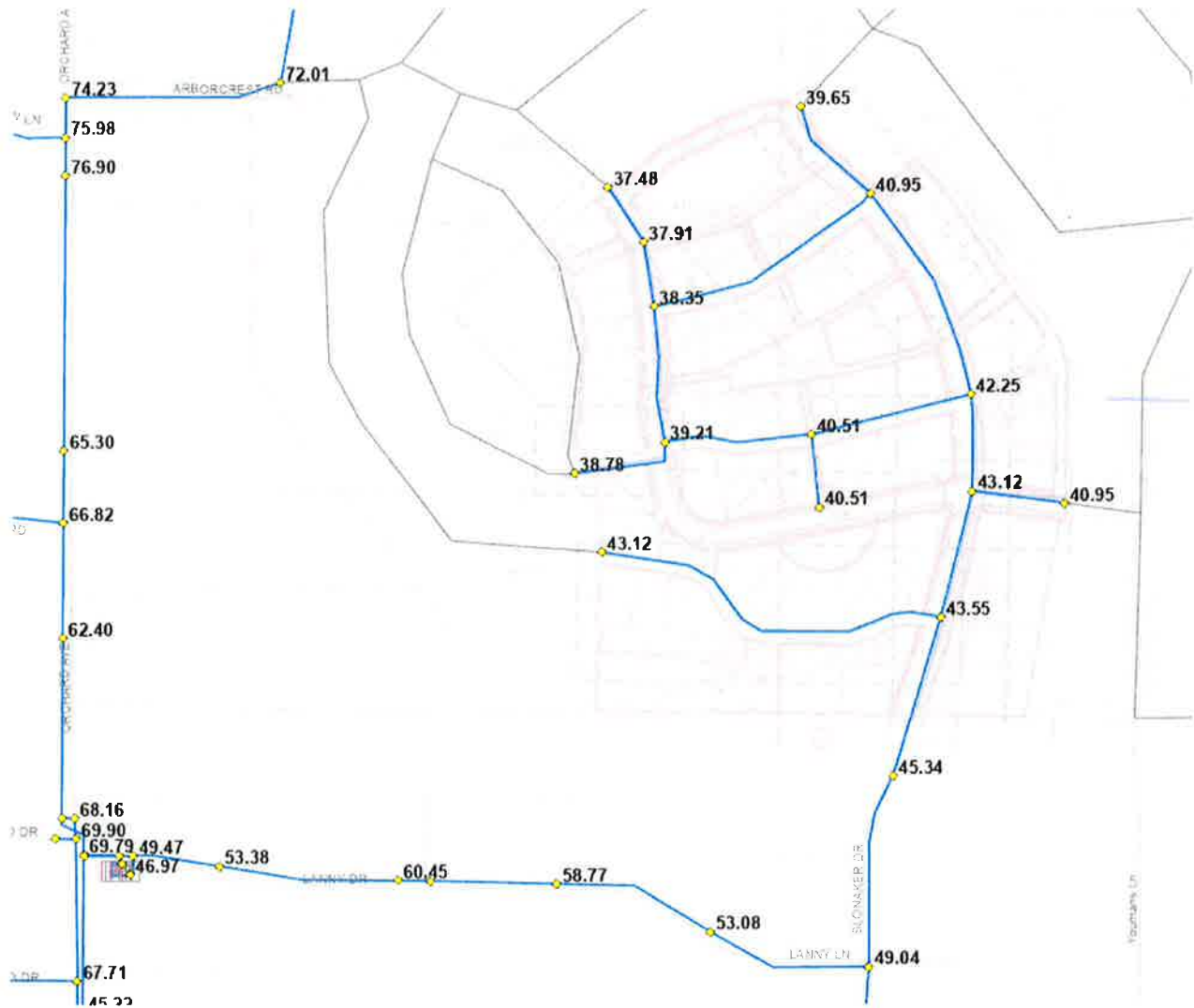


Figure 2. EPS winter low pressures without fire, part of Main Pressure Zone (psi)

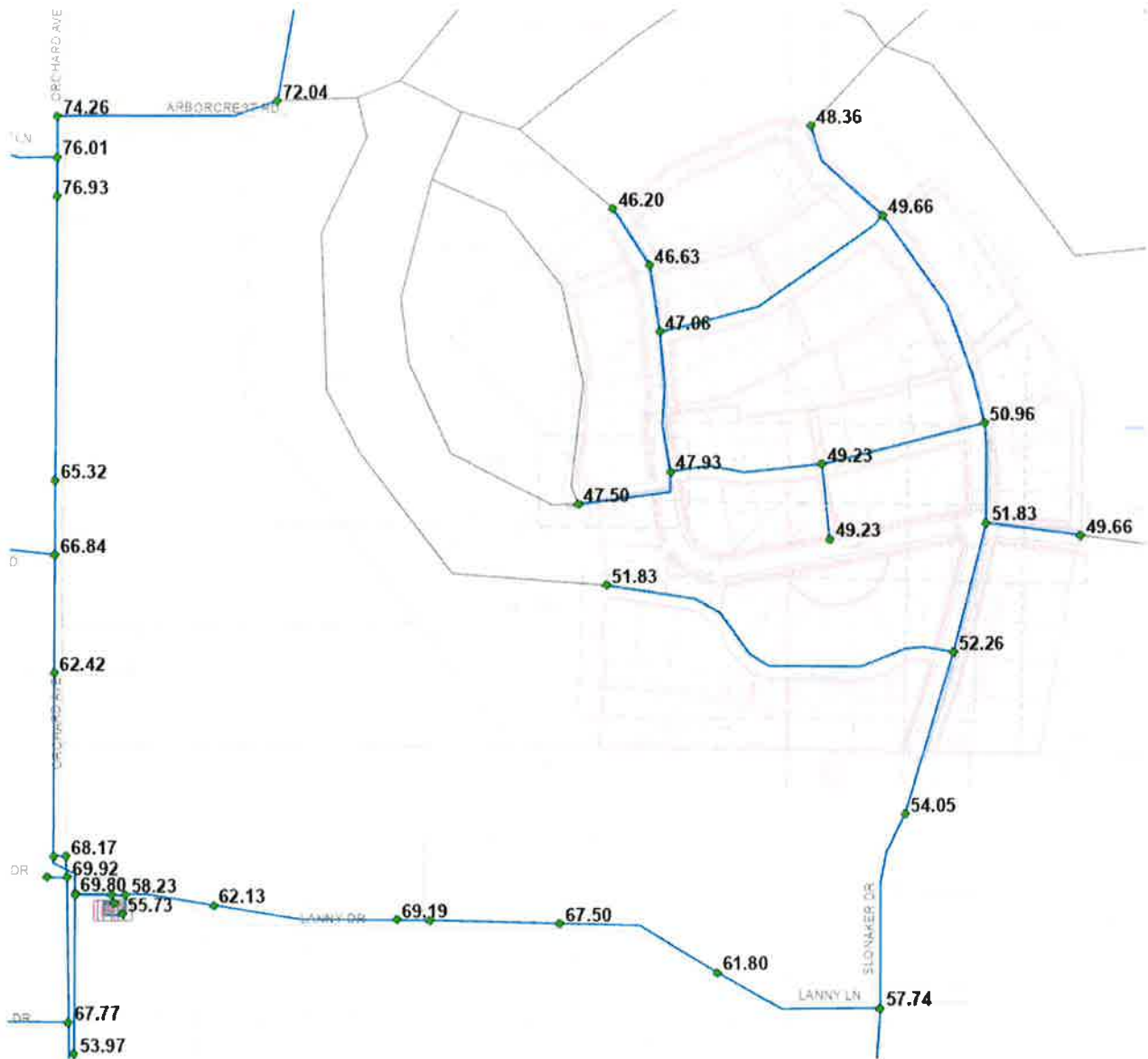


Figure 3. Steady-state pressure during MDD with fire suppression storage depleted, part of Main Pressure Zone (psi)

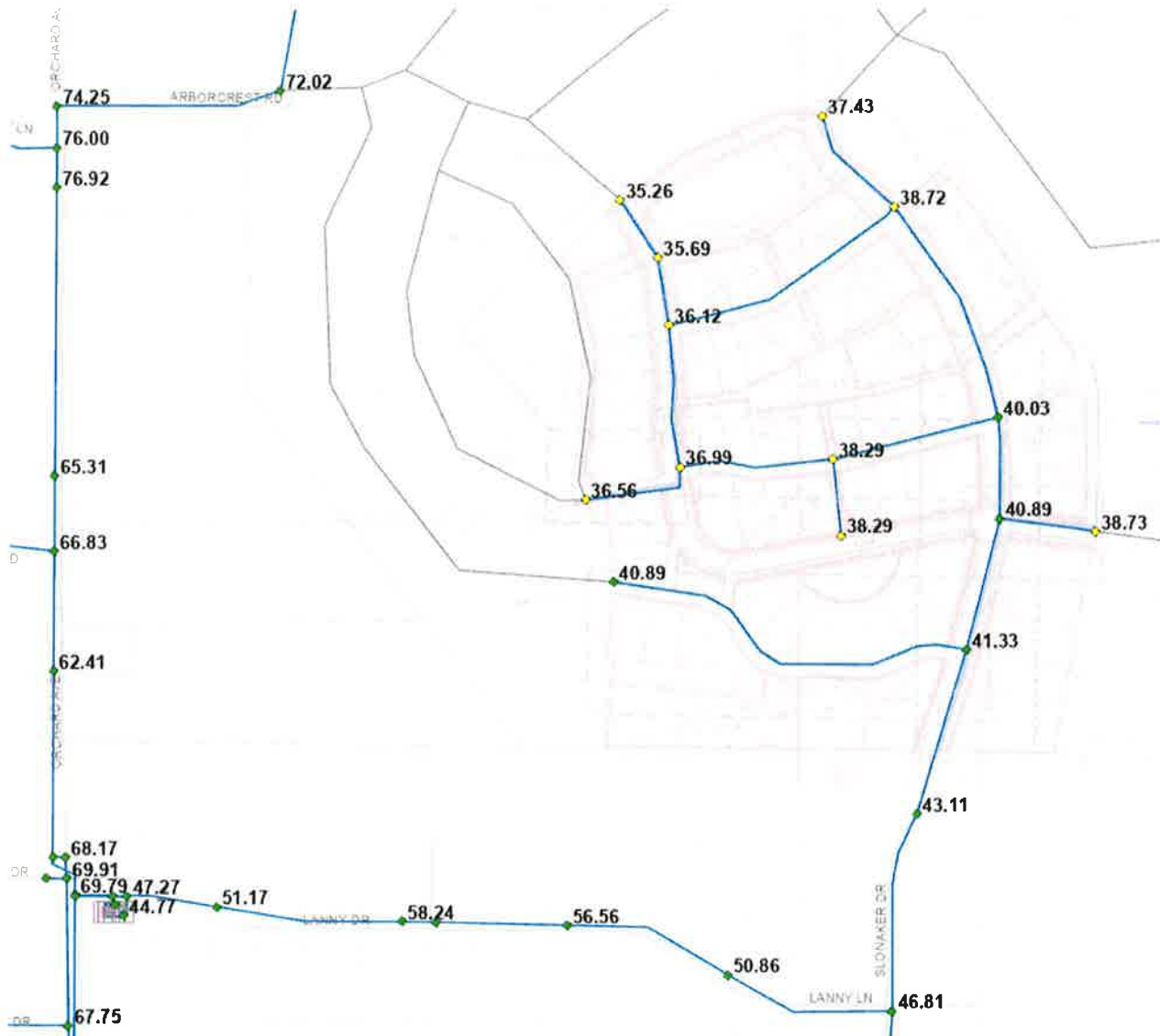


Figure 4. Steady-state available fire flow, part of Main Pressure Zone (gpm)

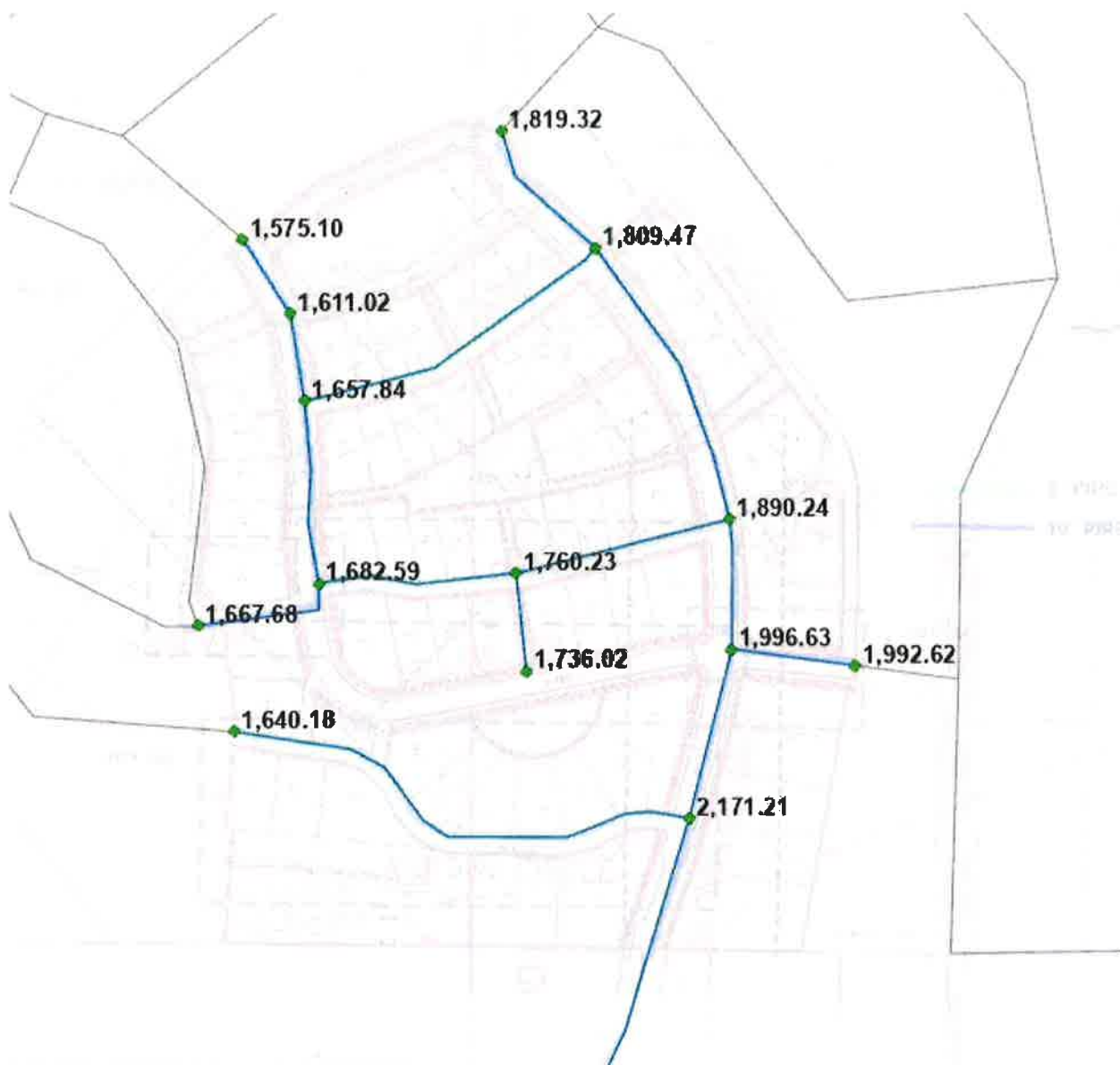


Figure 5. EPS summer low pressures without fire, part of Ponderosa Pressure Zone (psi)

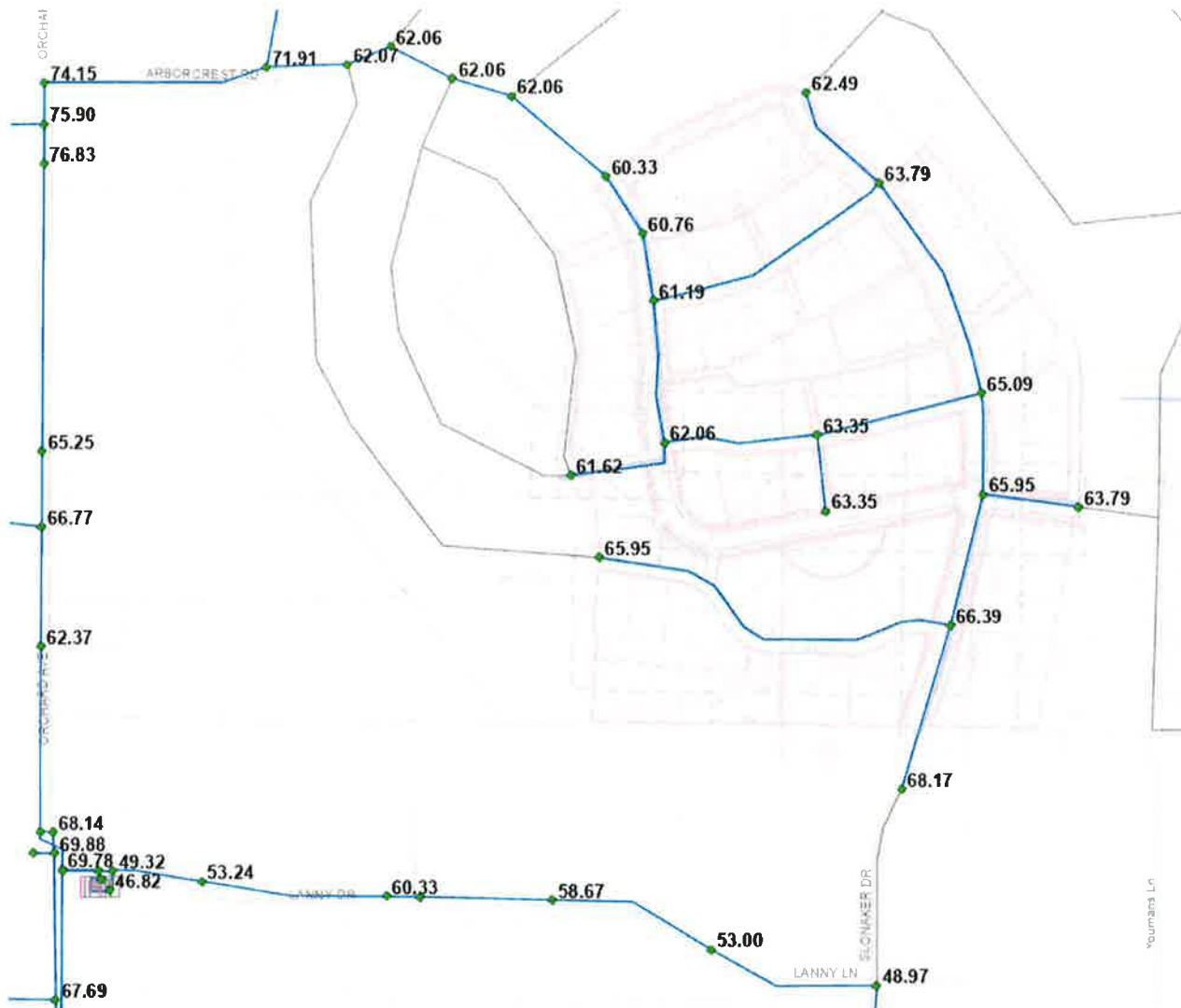
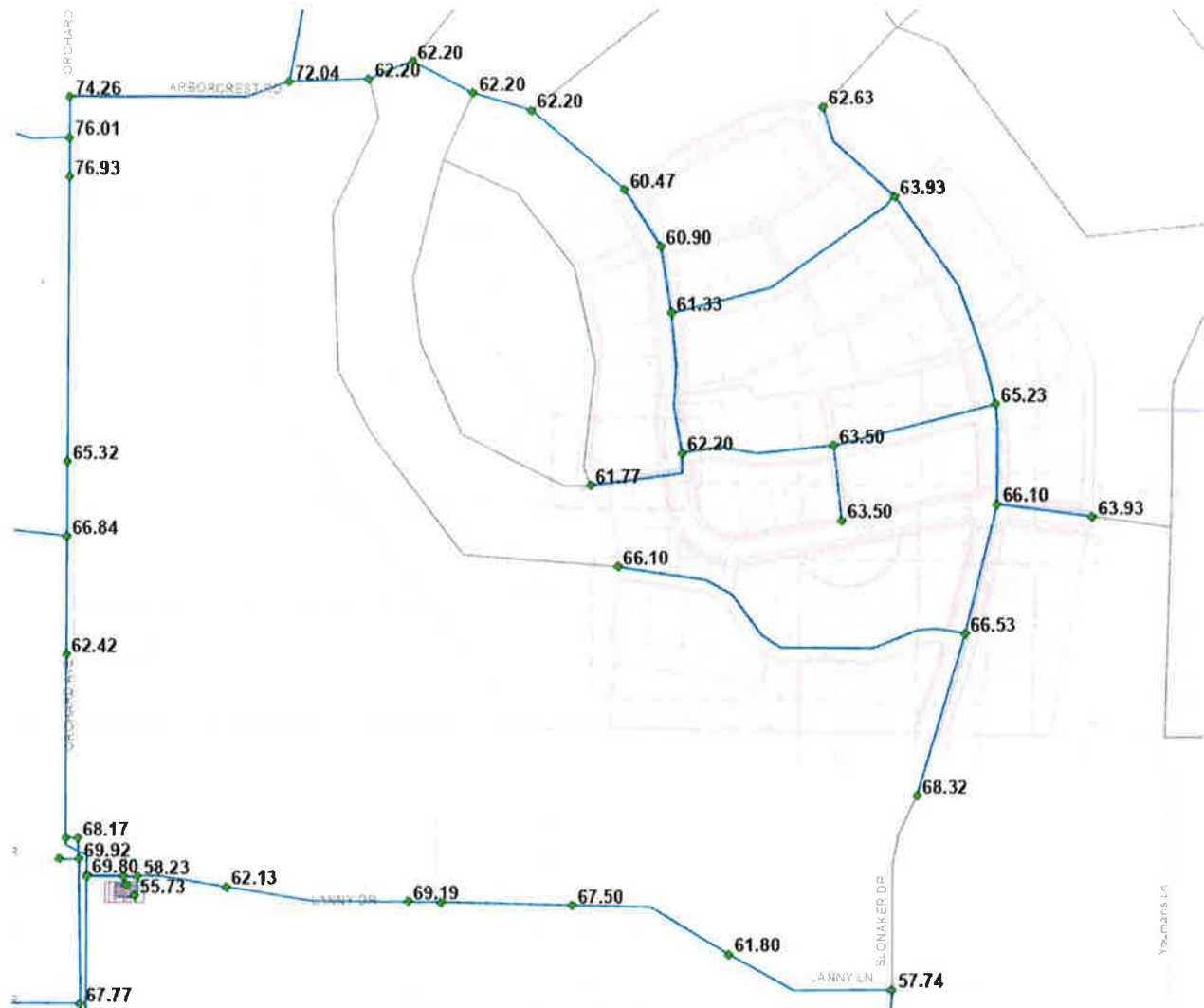


Figure 6. EPS winter low pressures without fire, part of Ponderosa Pressure Zone (psi)



Given that the system pressures could potentially drop below 40 psi during peak demand conditions, the development (or at least the low pressure areas) should be part of the Ponderosa Pressure Zone. A piping connection to the Main Pressure Zone could continue to be constructed for emergency purposes but either left closed with an isolation valve, check valve, or pressure reducing valve.

The TM for the Ponderosa - Woodbury Development Hydraulic Impacts Analysis (August 20, 2021) still applies if the Woodbury Development is still part of the Ponderosa Pressure Zone. Otherwise, if part of the Main Pressure Zones, the demands for the Ponderosa BPS will decrease to what was previously assumed.

Technical Memorandum



To: Michael Parker (City of Moscow)
From: David Kuhns (HDR)
Date: 5/17/2022
Subject: Task Order 4 – Ability of Existing Ponderosa BPS to Serve the Woodbury Development

Introduction

HDR Engineering Inc. (HDR) has previously completed two analyses related to the Woodbury Development. These include the following:

- *Ponderosa – Woodbury Development Hydraulic Impacts Analysis Draft TM (8/20/2021)* – an initial analysis was performed to determine impacts to the existing water system and new Ponderosa BPS given the addition of the Woodbury Development and potential build-out area to the east.
- *Task Order 4 – Updated Woodbury Analysis TM (4/21/2022)* – updated the analysis of the Woodbury Development given the most recent development drawings provided by the City.

It is anticipated that the Woodbury Development will be supplied via the Ponderosa Pressure Zone to provide adequate system pressure. The Ponderosa Pressure Zone is supplied from the Main Pressure Zone via the Ponderosa Booster Pump Station (BPS). The Ponderosa BPS is planned to be replaced with a new Ponderosa BPS with increased capacity. The previous modeling efforts performed assumed the new Ponderosa BPS would be in place as part of the analysis. However, the new BPS may not be in place prior to construction of the first phase of the Woodbury Development (phase 1). The City has requested HDR to perform an analysis to determine if the existing Ponderosa BPS has the capacity to serve the first phase of the new development.

The results of the analysis which evaluates the available capacity of the existing Ponderosa BPS is summarized within this technical memorandum (TM).

Analysis

The existing Ponderosa BPS has an existing duty pump rated for 200 gallons per minute (gpm) at 74 feet of total dynamic head (TDH) and an existing fire booster pump rated for 1,000 gpm at 102 feet TDH.

As part of the 8/20/2021 TM, HDR estimated demands for the existing (2018) Ponderosa Pressure Zone plus the Woodbury Development full build-out demands. Since that analysis only included the full build-out demands for the Woodbury Development, demands for phase 1 of the Woodbury Development were estimated for this analysis. Phase 1 of the development proposes 73 single family residential (SFR) parcels and a 0.8 acre park area. The estimated demands are summarized in Table 1.

The Ponderosa Pressure Zone is a closed pressure zone (no gravity storage). Typically, a BPS designed to serve a closed pressure zone would be sized so that the peak hour demand (PHD) can be met with the largest pump out of service as well as meeting the maximum day demand (MDD) plus fire flow with the largest pump out of service. However, since the existing Ponderosa BPS only has a single fire pump, the fire flow capacity is assumed with both pumps online.

Table 1. Estimated Ponderosa Pressure Zone demands

Demand	Existing (2018)	Existing (2018) + Phase 1 Woodbury	Existing (2018) + Woodbury Buildout	Existing (2018) + Woodbury Buildout + Future Growth Area Buildout
Average day demand, ADD (gpm)	24	40	80	161
Maximum day demand, MDD (gpm)	52	91	176	354
Peak hour demand, PHD (gpm)	150	227	382	670
Fire flow (gpm)	1,500	1,500	1,500	1,500
MDD + fire flow (gpm)	1,552	1,591	1,676	1,854

Capacity Analysis via Nameplate Capacity

A source capacity analysis (spreadsheet calculation) was completed based on the nameplate flow capacities for each pump to the forecasted demands of Table 1 and is summarized in Table 2. With the 1,500 gpm residential fire flow requirement from the City's 2012 Comprehensive Water System Plan, the existing pump station's nameplate capacity is currently deficient to meet the MDD plus the fire flow goal with the deficiency only increasing as additional demands are placed on the existing BPS. For meeting the PHD, the existing pump station is capable of meeting the current PHD but is predicted to be deficient for meeting the PHD once phase 1 of the Woodbury Development is constructed, with this deficiency increasing as further demands are placed on the BPS with additional development.

Table 2. Source capacity analysis

	Existing (2018)	Existing (2018) + Phase 1 Woodbury	Existing (2018) + Woodbury Buildout	Existing (2018) + Woodbury Buildout + Future Growth Area Buildout
Ponderosa Pressure Zone projected demands (gpm)				
Average day demand (ADD)	24	40	80	161
Maximum day demand (MDD)	52	91	176	354
Peak hour demand (PHD)	150	227	382	670
Fire flow demand	1,500	1,500	1,500	1,500
Sources (gpm)				
Duty Pump			200	
Fire Pump			1,000	
Total capacity			1,200	
Total capacity with largest offline			200	
Source surplus (deficiency) checks (gpm)				
ADD with largest pump offline	176	160	120	39
MDD + fire	(352)	(391)	(476)	(654)
PHD with largest pump offline	50	(27)	(182)	(470)

Note: Assumes source pumps are operating at the maximum production rate (i.e., for 24 hours per day)

Capacity Analysis via Hydraulic Model with Pump Curve

While a deficiency is shown after looking at nameplate capacity, the hydraulic model was utilized with the pump curve for the duty pump to validate if the phase 1 Woodbury Development demand could be met by operating further to the right along the pump curve.

The existing PHD for the Ponderosa BPS is estimated to be 150 gpm. With the Ponderosa BPS duty pump operating at full speed, the modeled discharge pressure during the existing PHD is 84 psi. The lowest pressure in the system is at the north end of Arborcrest Road with a modeled pressure of 54 psi.

When adding the predicted demands for phase 1 of the Woodbury Development, during PHD conditions the modeled discharge pressure for the Ponderosa BPS is 70 psi and the north end of Arborcrest Road is 40 psi. The minimum allowable pressure during peak demand conditions is 40 psi. Given the modeling, adding phase 1 of the Woodbury Development places the existing Ponderosa BPS right at its maximum capacity. However, it may not be acceptable to the City to have the pressure at the north end of Arborcrest Road potentially drop approximately 14 psi in their low pressure and operating at 40 psi during PHD conditions versus the current low pressure of 54 psi. This will need to be confirmed with the City if acceptable.

For fire flow conditions, the existing Ponderosa BPS currently cannot meet the 1,500 gpm required fire flow from the 2012 Comprehensive Water System Plan. However, portions of the Ponderosa Pressure Zone can meet this requirement if taking into consideration gravity flows from the Main Pressure Zone through the check valve located on Orchard Avenue.

Summary

Considering only the nameplate capacity of the existing Ponderosa BPS, adding phase 1 of the Woodbury Development would cause a deficiency to meet peak hour demands (PHD).

However, when using the hydraulic model with a pump curve, phase 1 of the Woodbury Development would cause the Ponderosa BPS to be operating right at its maximum capacity to meet PHD, including Phase 1. However at this condition, the northern portion of Arborcrest Road would be at 40 psi—a 14 psi decrease over the predicted current low pressure.

The developer has also not provided their own calculation of water demands for the Woodbury Development. If the demands of phase 1 of the Woodbury Development exceed HDR's predicted demands, the pressure at the north end of Arborcrest Road would drop below 40 psi during PHD conditions and would not meet minimum pressure requirements.

It should also be noted that the existing Ponderosa BPS currently cannot meet the 1,500 gpm required fire flow from the 2012 Comprehensive Water System Plan for the entire pressure zone. However, portions of the Ponderosa Pressure Zone can meet this requirement if taking into consideration gravity flows from the Main Pressure Zone through the check valve located on Orchard Avenue.



City of Moscow Parks and Recreation

Memo

To: Mike Ray, Planning Manager

From: David Schott, Parks and Facilities Manager

Date: September 22, 2022

Re: Parkland Dedication Requirements for the Proposed Woodbury Subdivision Final Plat

As part of the subdivision process, this proposed subdivision falls under the requirements of the parkland dedication codes of the City.

There is 512,046 SF (11.75 acres) of net developable area platted in the Woodbury subdivision. Of the 512,046 SF (11.75 acres), 448,308 SF (10.29 acres) is zoned R-2 Moderate Density, Single Family Residential. The other 63,738 SF (1.46 acres) is zoned NB Neighborhood Business.

The R-2 requires five percent (5%) of required parkland dedication. There is 448,308 SF (10.29 acres) of net developable area, which requires 22,415 SF (0.51 acres) of parkland dedication.

The NB requires nine percent (9%) of required parkland dedication. There is 63,738 SF (1.46 acres) of net developable area, which requires 5,736 SF (0.13 acres) of parkland dedication.

The total parkland dedication requirement for this phase of the Woodbury subdivision is 28,151 SF (0.65 acres).

It is my recommendation to defer the parkland dedication requirements for this phase to a later of the entire subdivision for a natural area comprised of approximately 133,793 SF (3.07 acres) and a 49,493 SF (1.14 acres) area that total 183,256 SF (4.2 acres) for open space that will include grading, a detention basin, and a ten-foot (10') wide gravel (pathway base) pathway provided by the developer.

The WintzCompany, LLC has submitted a letter to this effect, Exhibit A.

It is anticipated the parkland dedication requirements for the entire subdivision would be approximately 2.3 acres +/- . Said 4.2 acres of parkland dedication, together with agreed upon improvements to the

parkland property, would satisfy all parkland dedication requirements for the entire Woodbury subdivision.

It is my opinion that as proposed, the owner meets (exceeds) the parkland dedication requirements for this subdivision.

The Parks and Recreation Commission considered and recommended approval on August 26, 2021.

Please do not hesitate to contact my office with any questions or clarifications.

Exhibit A

WintzCompany, LLC

General Contracting / RE Development

August 18th, 2021

David Shott
650 N. Van Buren Street
Moscow, ID, 83843

Re: Woodbury park dedication

Dear David,

In order to meet our parks dedication requirements for the Woodbury subdivision, we would like to offer the naturalized area on our southwest boundary. This area comprised of an 133,793 sf area and a 49,463 sf area that together total 183,256 +/- (see attached) will include a detention basin as a water feature and a ten-foot wide gravel path that meanders along the slope. The area overlooks an adjacent low lying natural drainage area, some portion of which has been dedicated to a nature conservancy, consisting of a few ponds that attract waterfowl and various other animals. We envision this naturalized greenspace, being a popular walking area and a possible connector to the larger pathway system.

The entire space consists of approximately 4.2 acres and if completed as designed would meet the parkland dedication requirement for the entire 82 acres proposed for Woodbury. Additionally, Wintz Company proposes to do the grading improvements along with construction of the pathway and placement of gravel if the City is willing to contribute the trees, shrubs and maintenance.

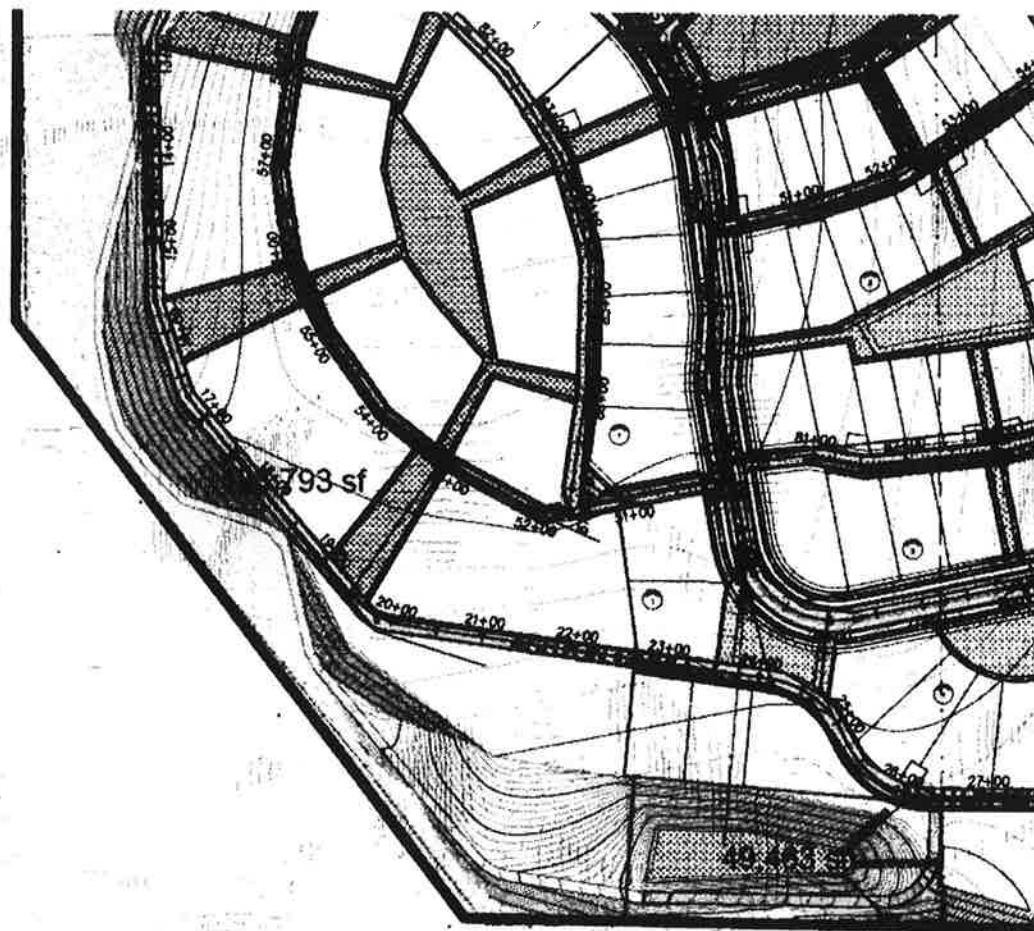
Wintz Company has an agreement with the present land owners to purchase successive phases as we build out the larger project. This proposed area will be part of Phase 2 and will be purchased after Phase 1 is complete. After the purchase of the Phase Two area, Wintz Company would be able to make the dedication to the City but until then our parkland dedication would be suspended by mutual agreement.

Let us know if this is agreeable. We look forward to working with you on creating some fantastic parkland.

Best Regards,

Mark Wintz

Wintz Company, LLC – 1004 Dairy Lane, Moscow, ID 83843 – mark@wintzcompany.com (208) 586 - 5555





SCALE: 1" = 200'

CITY OF MOSCOW SANITARY SEWER SYSTEM IS ABLE TO SERVE PHASE 1 AND PHASE 2 OF THIS DEVELOPMENT. FUTURE PHASES BEYOND THE PHASE 2 BOUNDARY ARE REQUESTED TO UPDATE THE SANITARY SEWER PIPE THAT IS LOCATED BETWEEN PONDEROSA DRIVE AND TAMARRAC DRIVE, SOUTH OF JUPITER DRIVE, TO A 12" PIPE SHOWN ABOVE.

CITY OF MOSCOW WATER SYSTEM IS ABLE TO SERVE PHASE 1 AND PHASE 2 OF THIS DEVELOPMENT. FUTURE PHASES BEYOND THE PHASE 2 BOUNDARY ARE REQUIRED TO HAVE A BOOSTER PUMP STATION. BOOSTER PUMP STATION WILL BE DESIGNED WHEN FUTURE PHASES ARE NOT ABLE TO MEET FIRE AND DOMESTIC WATER REQUIREMENTS.

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED AS ACCURATELY AS POSSIBLE FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. SYNTECH ENGINEERING, INC. MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHER, WE DO NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN EXACT LOCATION INDICATED. ALTHOUGH WE DO CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE.



SPATIUM
Engineering, Inc.
405 SE Irishford Drive, Suite C Portland, VA 99161
www.spatiumengineering.com



SHEET NO.	DATE	NO.	DESCRIPTION	SAS	DESIGNED
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3 OF 59

COMMITTEE / CITY COUNCIL STAFF REPORT

DATE: Monday, October 16, 2023



AGENDA ITEM TITLE

Amended Solid Waste Franchise Agreement - Tim Davis

RESPONSIBLE STAFF

Tim Davis, Sanitation Operations Manager

ADDITIONAL PRESENTER(S)

DESCRIPTION

Latah Sanitation, Inc. (LSI) has approached staff regarding a number of areas within the current Franchise Agreement where their current costs are outstripping the Consumer Price Index (CPI) adjustments for compensation. Staff requested and received demonstrations from LSI regarding current roll cart costs and dumpster costs and confirmed that the current equipment compensation is not keeping up with replacement costs. Fuel relief has also been requested by LSI and is contemplated in the amended agreement. Staff also implemented into the amendment, the terms of a request by LSI to take over the roll-off container services and billing for said services.

REVIEWED BY

This was reviewed by the Public Works/Finance Committee on October 9, 2023 and recommended for approval.

PROPOSED ACTIONS

ACTION: Approve the amended Sanitation Franchise Agreement.

STAFF RECOMMENDATION

Approve the amended Sanitation Franchise Agreement.

OTHER RESOURCES

FISCAL IMPACT

PERSONNEL IMPACT

ATTACHMENTS

1. FirstAmendmentSolidWasteFranchiseAgreement_LSI_Final_with_attachments_with_track_changes

**FIRST AMENDMENT TO SECOND EXTENSION OF AND
AMENDMENT TO 2003 SOLID WASTE FRANCHISE
AGREEMENT INCLUDING AMENDMENTS TO FRANCHISE
AGREEMENT EXHIBITS**

THIS FIRST AMENDMENT TO SECOND EXTENSION OF AND AMENDMENT TO 2003 SOLID WASTE FRANCHISE AGREEMENT (hereinafter "First Amendment"), made and entered into this _____ day of _____, 2023 by and between the City of Moscow, a Municipal Corporation of the State of Idaho (hereinafter referred to as "City"), and Latah Sanitation, Inc. (dba Inland Northwaste), an Idaho Corporation (hereinafter referred to as "Franchisee").

WITNESSETH:

WHEREAS, on August 4, 2003, City Council passed Ordinance No. 2003-20, where the City granted a non-exclusive franchise to Franchisee for the operation of a solid waste collection and disposal system for a term of ten (10) years beginning October 1, 2003 and ending September 30, 2013; and

WHEREAS, on September 26, 2003, the City and Franchisee entered into a Solid Waste Franchise Agreement for a term of ten (10) years beginning October 1, 2003 and ending September 13, 2013, with the City having the unqualified discretion to renew the Franchise Agreement for one successive term of ten (10) years; and

WHEREAS, on April 15, 2013, the City and Franchisee entered into an extension of and amendment to the 2003 Solid Waste Franchise Agreement with Franchisee; and

WHEREAS, on April 15, 2013, City Council passed and the Mayor approved Ordinance No. 2013-07 amending Moscow City Code Title 9, Chapter 9, to include provisions for the new roll carts to be used in solid waste collections; with an effective date of August 1, 2013 and

WHEREAS, on April 6, 2015, City Council approved the proposal from Franchisee for single stream recycling program which included new roll carts to be used in the new curbside single stream recycling program; and

WHEREAS, on December 7, 2015 City Council approved Ordinance 2015-18, amending Exhibit D of the April 15, 2013 Extension of and Amendment to 2003 Solid Waste Franchise Agreement related to single stream curbside collection of recyclables and entered into a second extension of and amendment to the 2003 Solid Waste Franchise Agreement with Franchisee modifying the term and renewals section providing that the term of the Non-Exclusive Franchise shall be amended to expire on September 30, 2035; and

WHEREAS, on September 8, 2020, City Council approved Resolution 2020-20, accepting amendments to Franchise Documents, specifically Exhibits "A", "C", "D", "E", and "G" of the Second Extension of and Extension to the 2003 Solid Waste Franchise Agreements to address the

recycling policy changes in China which disrupted the recycling commodity markets worldwide. The Amendments also addressed the tire and household hazardous waste disposal costs; the change of City to perform public recycling education in house; added compensation for extra routing; and allowed direct reimbursement costs for actual paid invoices of tire and household hazardous waste disposal. Prior to Council approving Resolution 2020-20, Franchisee reviewed and was in agreement with the Amendments to the Exhibits as detailed in Resolution 2020-20; and

WHEREAS, subsequent to the passing of Resolution 2020-20, the Parties did not execute a written Amendment to the Second Extension of and Extension to the 2003 Solid Waste Franchise Agreement adopting the changes made to Exhibits “A”, “C”, “D”, “E” and “G” as presented and accepted by City Council through Resolution 2020-20. This First Amendment includes the changes made to the Exhibits as reflected in Resolution 2020-20, in addition to other amendments agreed upon by the Parties; and

WHEREAS, on July 14, 2022, Franchisee submitted a proposal to the City for “Roll-Off Program Adjustments”, whereby Franchisee shared they invested in the expansion of their roll-off dumpster inventory by adding 8-yard, 11-yard, 15-yard, and 45-yard roll-off dumpsters. The containers currently offered are 22-yard and 30-yard containers. Franchisee is also proposing to take over the direct billing for roll-off container services currently being billed by the City of Moscow. Hauling rates will remain the same and rental rates will be restructured and simplified to a flat daily rate. The City will continue to retain the tonnage tipping fees for roll-off container services under the proposal. The program adjustments require a modification to Franchise Document, Exhibit “G”; and

WHEREAS, the Parties intend to modify the Second Extension of and Amendment to the 2003 Franchise Agreement and Franchise Documents through this First Amendment;

NOW, THEREFORE, it is agreed, for and in consideration of the mutual covenants and promises between the Parties hereto, as follows:

- A. All matters stated above are found to be true and correct and are incorporated herein by reference as if copied in their entirety and shall be adopted by the Parties along with the following sections of this First Amendment.
- B. Pursuant to Section 2. B. of the Second Extension of and Amendment to 2003 Solid Waste Franchise Agreement executed on December 7, 2015, the Parties agree to amend the Franchise Documents Exhibits as detailed herein:
 1. Franchisee and City accept the amendments to the Franchise Document, Exhibit “A”, attached hereto as Attachment 1 and titled “2023 Amendment to Exhibit “A” General Specifications”;
 2. Franchisee and City accept the amendments to the Franchise Document, Exhibit “B”, attached hereto as Attachment 2 and titled “2023 Amendment to Exhibit “B” Specifications for Solid Waste Collection Within City Limits;

3. Franchisee and City accept the amendments to the Franchise Document, Exhibit “C”, attached hereto as Attachment 3 and titled “2023 Amendment to Exhibit “C” Specifications for Solid Waste Processing Facility (SWPF)”;
 4. Franchisee and City accept the amendments to the Franchise Document, Exhibit “D”, attached hereto as Attachment 4 and titled “2023 Amendment to Exhibit “D” Curbside Collection of Recyclables”;
 5. Franchisee and City accept the amendments to the Franchise Document, Exhibit “E”, attached hereto as Attachment 5 and titled “2023 Amendment to Exhibit “E” Specifications for Recycling Center”;
 6. Franchisee and City accept the amendments to the Franchise Document, Exhibit “F”, attached hereto as Attachment 6 and titled “2023 Amendment to Exhibit “F” Definitions”;
 7. Franchisee and City accept the amendments to the Franchise Document, Exhibit “G”, attached hereto as Attachment 7 and titled “2023 Amendment to Exhibit “G” Fee Schedule”;
 8. Franchisee and City accept the amendments to the Franchise Document, Exhibit “H”, attached hereto as Attachment 8 and titled “2023 Amendment to Exhibit “H” Insurance Certificates and Performance Bonds”;
 9. Franchisee and City accept the amendments to the Franchise Document, Exhibit “I”, attached hereto as Attachment 9 and titled “2023 Amendment to Exhibit “I” Map of Collection Routes”;
 10. Franchisee and City accept the amendments to the Franchise Document, Exhibit “J”, attached hereto as Attachment 10 and titled “2023 Amendment to Exhibit “J” Specifications for Wastewater Biosolids Composting Facility”.
- C. Parties acknowledge that the 2013 and 2015 Franchise Agreement Amendments were executed without separate amendments for the Franchise Documents Exhibits as required by Section 2. B. of the Second Extension of and Amendment to 2003 Solid Waste Franchise Agreement executed on December 7, 2015. Both Parties acknowledge and agree that the Amendments were valid and binding upon both Parties and waive any rights to claim breach as it applies to the acceptance and validity of the terms of the Amendments. The Parties acknowledge that the lack of separate Amendments having been executed by a separate amendment for each Exhibit was an oversight.
- D. All other terms of the original 2003 Solid Waste Franchise Agreement and subsequent Extensions and Amendments unmodified by this First Amendment to Second Extension of and Amendment to the 2003 Solid Waste Franchise Agreement remain in full force and effect; all Exhibits prior to this First Amendment are hereby replaced by the Amended Exhibits reflected in the attached, Attachments 1 – 10.

E. Future Amendments.

The Parties agree to amend Section 2. B. of the Second Extension of and Amendment to 2003 Solid Waste Franchise Agreement, dated December 7, 2015, by deleting the existing Section 2. B language that states the following:

“Amendments: If Franchise Document/s are amended, a separate Amendment for each Exhibit shall be written.”

The Parties agree that Section 2.B. shall be amended by adding the following language that will replace the deleted language noted above:

“If Franchise Documents are amended, only the pertinent document(s), including the pertinent exhibit(s) is/are required to be amended in writing, a separate amendment for each Exhibit that is unchanged by the amendment is not required.”

- F. All other provisions of the Second Extension of and Amendment to 2003 Solid Waste Franchise Agreement, dated December 7, 2015, that are unchanged by this First Amendment shall remain in full force and effect.

IN WITNESS WHEREOF, said Franchisee and City have caused this First Amendment to the Second Extension of and Amendment to the 2003 Solid Waste Franchise Agreement to be executed on the day and year first above written.

I, Brandon Johnson, certify under penalty of perjury pursuant to the State of Idaho, that I am an authorized agent to bind Latah Sanitation, Inc. (dba Inland Northwest) to this First Amendment.

LATAH SANITATION, INC.

CITY OF MOSCOW

By: _____
Brandon Johnson, CEO

By: _____
Arthur D. Bettge, Mayor

ATTEST:

By: _____
Laurie M. Hopkins, City Clerk

Approved As To Form

By: _____
Mia Bautista, City Attorney

ACKNOWLEDGMENT

On this ____ day of _____, 2023, appeared before me, a notary public of the State of Idaho, Brandon Johnson, in his official capacity as CEO of Latah Sanitation, Inc. dba Inland Northwaste, known to me, and acknowledged that he executed the same.

Notary Public for the State of Idaho
Residing at _____
My Commission Expires: _____

Attachment 1

2023 AMENDMENT TO EXHIBIT “A”

GENERAL SPECIFICATIONS

- 1.0 Scope of Work
- 2.0 Holidays
- 3.0 Complaints
- 4.0 Office
- 5.0 Hauling
- 6.0 Disposal
- 7.0 Public Communications
- 8.0 Point of Contact
- 9.0 Salvage Rights
- 10.0 Resource Recovery
- 11.0 Compliance With Laws
- 12.0 Nondiscrimination
- 13.0 Indemnity
- 14.0 Licenses and Taxes
- 15.0 Insurance
- 16.0 Performance Bonds
- 17.0 Interruption of Service
 - 17.1 Definitions
 - 17.2 Temporary Possession
 - 17.3 Payments During Interruption of Service
 - 17.4 Expiration of Temporary Possession/Written Notice
 - 17.5 Suspension of Payments to Franchisee
 - 17.6 Right to Contract With Others
- 18.0 Basis and Method of Payment
 - 18.1 Fees
 - 18.2 Modification to Fees
 - 18.3 Services Not Included Under Franchise Agreement
 - 18.4 City Shall Bill & Collect
 - 18.5 Delinquent and Closed Accounts
- 19.0 Ownership
- 20.0 Waiver
- 21.0 Independent Contractor
- 22.0 Adherence to Laws
- 23.0 Jurisdiction and Venue
- 24.0 Severability
- 25.0 Binding on Successors and Assigns

1.0 SCOPE OF WORK

The work required under the Franchise shall consist of the terms and conditions contained in the Franchise Documents and Exhibits thereto and the Solid Waste Ordinance, including all the supervision, materials, equipment, labor and all other items necessary to complete said work in accordance with the Franchise Documents and the Solid Waste Ordinance.

The scope of work shall not include collection services which are not specifically set forth in the franchise documents.

2.0 HOLIDAYS

The following shall be holidays for purposes of this Franchise Agreement:

New Year's Day
Memorial Day
Juneteenth
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Franchisee may decide to observe any or all of the above mentioned holidays by suspension of collection service on the holiday, but such decision in no manner relieves Franchisee of its obligation to provide collection service at least once per week.

3.0 COMPLAINTS

All formal complaints regarding performance shall be made through the City to the Franchisee. The Franchisee will be given a reasonable period of time in writing to respond to such formal complaints. Failure of the Franchisee to respond to formal complaints or to take action to remedy the condition creating the complaint shall be deemed to be a breach of this Franchise and shall be grounds for revocation of the Franchise. Complaints made directly to the Franchisee shall be given prompt and courteous attention. In the case of alleged missed scheduled collections, the Franchisee shall investigate and, if such allegations are verified, shall arrange for the collection of the solid waste not collected within one working day after the Franchisee is notified of the complaint. A log of all such complaints shall be filed with the City monthly.

4.0 OFFICE

The Franchisee shall maintain an office at 3299 Hwy. 8 East or at another location approved by the City. A responsible person shall be in charge of the office from

8:00 a.m. to 4:30 p.m. Monday through Friday to answer the telephone and receive inquiries, except holidays.

5.0 HAULING

All solid waste collected by the Franchisee shall be so contained, tied or enclosed that leaking, spilling or blowing are prevented.

6.0 DISPOSAL

The Franchisee shall be responsible for the processing of solid waste and disposal of inert/demolition waste after said wastes are delivered to the designated disposal site. The City, and not the Franchisee shall be responsible for the hauling of Transport Waste (as defined by the Franchise Documents) to the Ultimate Disposal Site and disposal at the Ultimate Disposal Site and the costs thereof. The City and not the Franchisee shall be responsible for the selection of the Ultimate Disposal Site.

7.0 PUBLIC COMMUNICATIONS

The Franchisee shall make a reasonable effort to communicate the following to the public: complaint procedures, regulations, day(s) for scheduled solid waste and recycling collection, roll carts, changes in the operation of the system, and any other relevant questions.

8.0 POINT OF CONTACT

All notices between the Franchisee and the City shall be directed by the Franchisee to the Director, P.O. Box 9203, Moscow, Idaho, 83843; and by the City to President, Latah Sanitation, Inc., P.O. Box 8036, Moscow, Idaho, 83843.

9.0 SALVAGE RIGHTS

The City shall have the full and exclusive right to all salvageable materials collected in connection with the collection of solid waste pursuant to this Agreement, and shall have the sole right to any and all funds received from the sale of said salvageable materials. Salvaging or scavenging by the Franchisee, or any of its employees, is prohibited, unless written consent of the Director is obtained, or as provided in the Franchise Documents.

10.0 RESOURCE RECOVERY

The Franchisee agrees to keep the Director advised as to any current developments in recycling programs, and to participate in such recycling programs when directed by the City, in conformance with Exhibit "D" and Exhibit "E". The Franchisee

agrees to cooperate on any reasonable basis with local civic organizations who desire to participate in a recycling program.

11.0 COMPLIANCE WITH LAWS

The Franchisee and the City shall conduct operations under this non-exclusive Franchise Agreement in compliance with all applicable laws; ~~provided, however, the Franchise Documents shall govern the obligations of the Franchisee where there is conflict with a general ordinance of the City on the subject.~~

12.0 NONDISCRIMINATION

The Franchisee shall not discriminate against any person because of physical or mental, disability, race, sex (including pregnancy), age, creed, color, gender, marital or familial status, sexual orientation, gender expression or identity, religion, or national origin. The Franchisee shall not discriminate against any employee or applicant for employment. The Franchisee's action under this Section shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. The Franchisee agrees to post in conspicuous places, available to employees and other applicants for employment, notices setting forth the provisions of this non-discrimination Section.

13.0 INDEMNITY

The Franchisee will indemnify, ~~hold~~save harmless, and exempt the City, its officers, agents, servants, and employees from and against any and all suits, actions, legal proceedings, claims, demands, damages, costs, expenses, and attorneys' fees incident to any work done in the performance of this Franchise ~~arising out of~~ ~~resulting from the sole~~ willfulness, recklessness, or ~~negligent act~~ negligence, or omission of the Franchisee, its officers, agents and employees ~~acting within the course and scope of their employment or agency~~; provided however, that the Franchisee shall not be liable for any suits, actions, legal proceedings, claims, demands, damages, costs, expenses and attorneys' fees arising out of a willful or negligent act or omission of the City, its officers, agents, servants and employees. ~~The City is a governmental entity subject to the statutory and constitutional restrictions concerning the acceptance of liability. The City's liabilities are further governed by the Idaho Tort Claims Act. The City will be responsible for its own acts and omissions and those of its officers, employees and agents acting within the course and scope of their employment. The Parties understand that the Idaho Tort Claims Act, Idaho Code § 6-903 (2)(ii), states that the City's liability is secondary to the obligation of an insurer or indemnitor of any automobile or other vehicle not owned or leased by the City.~~

14.0 LICENSES AND TAXES

The Franchisee shall obtain all necessary licenses and permits and promptly pay all required lawful taxes and fees required by the City or other governmental entity.

15.0 INSURANCE

The Franchisee shall at all times during the Franchise term maintain in full force and effect Employer's Liability, Worker's Compensation, Public Liability and Property Damage insurance, including contractual liability coverage. ~~The Franchisee shall obtain All insurance shall be~~ by insurers acceptable to the City and for policy limits mandated below. Before commencement of work hereunder the Franchisee agrees to furnish to the City certificates of insurance or other evidence satisfactory to the City to the effect that such insurance has been procured and is in force. -The certificates shall contain the following express obligations:

"This is to certify that the policies of insurance described herein have been issued to the insured for whom this certificate is executed and are in force at this time. -In the event of cancellation or material change in a policy affecting the certificate holder, thirty (30) days prior written notice will be given to the certificate holder."

For the purpose of the Franchise Agreement, the Franchisee shall carry the following types of insurance in at least the limits specified below:

Coverages	Required Limits of Liability
Worker's Compensation	Statutory
Employer's Liability	\$2,000,000 each Accident \$1,000,000 Disease, Each Employee \$1,000,000 Dosease policy limit
Commercial General Liability	\$1,000,000 each occurrence (bodily injury and property damage is combined, except automobile)
Bodily Injury Liability —(Except Automobile)	\$2,000,000 aggregate \$2,000,000 each occurrence \$2,000,000 aggregate
Property Damage Liability	\$500,000 each occurrence

—(Except Automobile) Pollution Liability	\$500,000 aggregate \$1,000,000 combine single limit each claim
Automobile Bodily Injury Liability	\$ 21,000,000 each person combine single limit
Umbrella Liability	\$2,000,000 each occurrence \$2,000,000 Aggregate

As an alternative to the above, Franchisee may, with the express written permission of the City, insure the above public liability and property coverages under a plan of self-insurance. Each insurance policy with respect to public liability insurance may provide for a self-insured retention of an amount of two hundred fifty thousand dollars (\$250,000) with the result that the Franchisee is its own insurer to that extent.

16.0 PERFORMANCE BONDS

The Franchisee shall furnish security for the faithful performance of the Franchise Agreement for the fiscal year 2013 and for each subsequent year thereafter. Such security shall cover all solid waste collection system services in Latah County and shall be in an amount of Two Hundred Thousand Dollars (\$200,000). Said security shall be furnished on return of the executed Franchise Agreement to the City and shall indemnify the City against any loss resulting from any failure of performance by the Franchisee, not exceeding, however, the total sum of the bond. It shall guarantee payment of wages to all employees and the cost of all supplies, materials, and insurance premiums required to fulfill this Franchise Agreement. It is agreed and understood that the surety's obligation is for the fiscal year set forth in the bond and that such obligation does not extend beyond the year so stated.

17.0 INTERRUPTION OF SERVICE

17.1 Definitions:

For the purposes of this paragraph the following definitions shall apply:

- (1) "Interruption of service" shall mean:
 - (a) Any time period during which solid waste collection services by the Franchisee are interrupted by a labor dispute or other action that results in scheduled collections being discontinued or substantially reduced for a period of seventy two (72) hours; or

- (b) Any time period after notice by the City of the termination of the Franchise by reason of breach or default by the Franchisee and until other suitable equipment can reasonably be purchased or otherwise acquired by the City for such purpose, or until such time as other arrangements can be made by the City for other collection and transport to the City-designated disposal site services.
- (2) "Equipment" shall mean any and all vehicles and equipment used by the Franchisee for the purpose of performing the services provided for in the Franchise at any time within ninety (90) days immediately prior to the commencement of the interruption of service.
- (3) "Payment for use" shall have the following meaning:
- (a) In the case of a piece of equipment subject to a contract, "payment for use" shall mean any installment payment coming due under a contract for such piece of equipment while the City is possessing and using such piece of equipment pursuant to this paragraph during an interruption of service. Payment for use shall not be deemed to include any payment coming due under such contract either prior to, or after the expiration of, such period. Payment for use shall be made by the City, from time to time, directly to the person or company to whom the payment is owed under the contract, and the making of such payment or payments shall constitute full compensation to all persons for the City's temporary use of such piece of equipment.
- (b) In the case of a piece of equipment not subject to a contract, "payment for use" shall mean the reasonable rental value of such piece of equipment for such period of time during which the City possesses said equipment during interruption of service. Such payment shall, at the expiration of the term of the interruption of such service, be applied against any sums then owed to the City by the Franchisee, or, if none, it shall be paid by the City to the Franchisee.
- (4) "Contract" shall mean any conditional sales contract, mortgage, encumbrance, lease, rental agreement or other agreement which provides for retention of title to said equipment or other agreement which provides for retention of title to said equipment or grants a security interest therein, that may exist at the commencement of the interruption of service with regard to a piece of equipment.

- (5) "Notice" shall mean written notification actually received by the person to be notified or mailed to him by registered or certified mail at the most recent address furnished by him to the Director of the City of Moscow. As to the holder of a contract, the City shall be required to give notice only if the holder's identity is known to the City and the holder has furnished his address to said Director.

17.2 Temporary Possession

In the event of an interruption of service, the City shall be entitled to have the temporary possession of the equipment used by Franchisee to provide the City's collection and transport to the City-designated disposal site services, on the condition that; the City shall, from time to time, make the payment for use as provided in subparagraph (3) above. Upon taking such temporary possession, City shall forthwith give notice thereof to the Franchisee and to the then holder of a contract on such equipment, if any. Such temporary use shall not be deemed to be a breach of the terms of any contract regarding said equipment, but it shall otherwise be subject to the terms of such contract which are not in conflict herewith, except that the City shall not be required to make any payment other than the payment for use prescribed in said subparagraph (3). The making by the City of the payment for use prescribed in subparagraph (3) hereof shall be deemed to be compensation only for the temporary use of such equipment and the City shall not thereby acquire any ownership interest in such equipment.

17.3 Payments During Interruption of Service

During an interruption of services, so long as the City continues to make the payment for use of a piece of equipment when due, or within ten (10) days thereafter, such equipment may be retained by the City and may not be repossessed from the City. In the event the City fails to make a payment for use when due, or within ten (10) days thereafter, the City's right to continued temporary use of such piece of equipment shall cease, and possession of such equipment may be retaken by the Franchisee or by the holder of any lien thereon.

17.4 Expiration of Possession/Written Notice

At the expiration of the City's temporary possession of such equipment the City shall give written notice of such expiration to the Franchisee and to the then holder of a contract on such equipment on which the City has made payments, if any. In the event the Franchisee shall fail to take possession of such equipment within thirty (30) days after such notice, the Franchisee shall be deemed to have abandoned such equipment and waived all interest therein, and the City shall be free to use and dispose of such equipment

without liability or compensation to the Franchisee, subject to the terms of any contract that may then exist with regard to such equipment.

17.5 Suspension of Payments to Franchisee

In the event of interruption of service, all payments to Franchisee shall be suspended. All costs associated with providing service during an interruption of services shall be borne by the Franchisee who shall relinquish all receipts from collection service during the period of interruption of service to the City together with such additional funds as are necessary to satisfy the obligation.

17.6 Right to Contract With Others

The City shall also have the right to contract with another organization to provide service in the event of an interruption of service by the Franchisee.

18.0 BASIS AND METHOD OF PAYMENT

18.1 Fees

Fees as set forth in Exhibit “G” for each type of service shall include all costs, fees and other expenses of Franchisee associated with delivering that service, except for those costs:

- a. Associated with tipping fees at the designated disposal site, if any, are charged to Franchisee.
- b. Associated with providing recycling services pursuant to the Moscow Recycling Center Operations Agreement (Exhibit “E” – Specifications for Recycling Center).
- c. Associated with transport and ultimate disposal of Transport Waste subsequent to delivery of such solid waste to the designated disposal site and processing thereof by Franchisee.

18.2 Modification to Fees

- a. The fees which may be charged by the Franchisee as approved by the City for the second and subsequent years of the term hereof shall be adjusted upward or downward to reflect changes in the cost of operations, as reflected by fluctuations in the Consumer Price Index, as published by the United States, Bureau of Labor Statistics, Index Series I.D. CWU0000SA0 Urban Wage Earners and Clerical Workers, U.S. All items, 1982-84=100. The statistics utilized shall be for a one year period and shall be the end adjusted figures for the Annual change for the calendar year, as published in January of each year. The fee modification date shall be October 1 of each year.

Every year the fees shall be increased or decreased for the coming year in a percentage amount equal to one hundred percent (100%) of the net percentage of change of the Consumer Price Index for the prior one year period.

City shall apply fuel cost adjustments related to the fees for services that require the use of fuel as a payment to Franchisee, or Franchisee will apply the fuel cost adjustment as a credit to the City when the index changes as further defined below. The index to be used when considering fuel price adjustments shall be the U.S. Energy Information Administration (EIA) https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pets&s=emd_epd2d_pte_r5xca_dpg&f=m, Monthly West Coast (PADD 5) Except California No 2 Diesel Retail Prices (Dollars per Gallon). The Current Fuel Index (CFI) shall be the current month's average price per gallon as reported by EIA as referenced herein. The monthly average CFI shall be used to compute fuel adjustments for the same month that services are performed for City. (i.e. October CFI used to compute fuel adjustments for October services). Fuel adjustments will be calculated by the 15th of the month for the prior month's services, and any payments or credits will be applied to the subsequent month's bill (i.e. September's adjustment will be calculated by October 15th and any payments or credits will be applied to October's billing).

Fuel adjustments provided by this Amendment shall be retroactively effective to January 1, 2022, and shall continue thereafter through the duration of the term of the Franchise Agreement. Effective January 1, 2022, the initial base fuel index (BFI) shall be Three Dollars and Forty-Six Cents (\$3.46) per gallon. The BFI shall thereafter be adjusted annually on October 1st of each year beginning October 1, 2022 to establish the Adjusted Base Fuel Index (ABFI) by an amount equal to fifty percent (50%) of the annual yearly change to the Consumer Price Index (CPI) as published in January of each year by the United States, Bureau of Labor Statistics (CWU0000SA0 Urban Wage Earners and Clerical Workers, U.S. All items, 1982-84=100). As described herein.

$$ABFI = BFI * (CPI \text{ annual adjustment} * 50\%)$$

Where:

BFI = Base Fuel Index

CPI Annual Adjustent = ((current year annual average CPI-
prior year annual average CPI)/prior year annual average
CPI)

ABFI = adjusted base fuel index

A fuel price adjustment will only be made when the CFI varies by
more than fifteen percent (15%) from the ABFI. Payments and
credits shall be computed as follows:

Franchisee payment if CFI is greater than 115% of ABFI:

$$FPA = (CFI-(ABFI*115\%))*Q$$

City credit if CFI is less than 85% of ABFI:

$$FPA = ((ABFI*85\%)-CFI)*Q$$

Where:

FPA = fual price adjustment

ABFI = adjusted base fuel index

CFI = current fuel index

Q = monthly gallons

- b. The City has discretion to accept or reject a petition for an adjustment to ~~adjust~~ Franchise fees in the following manner. The Franchisee may petition the City ~~at any time~~ once every twelve (12) months for additional fee adjustments above the CPI on the basis of unusual changes in its cost of operations such as, but not limited to, revised Federal and State of Idaho laws affecting this Franchise which require mandatory compliance by Franchisee resulting in increased operating costs to Franchisee (as proven by full documentation of such increased operating costs as requested by the Director) or radical changes in the quantities or volumes, through no fault of the Franchisee, as set out in these documents. All such requests shall be fully developed setting forth the changes requested, existing costs, summary of estimated change in costs and the amount of fee change requested. The City shall respond to such requests within thirty (30) days.
- c. The City has discretion to implement a fee adjustment in the following manner. The City shall notify the Franchisee of the nature and extent of changes in either the level or nature of the service, such as an increase or decrease in the volume of service or a revised method of collection. The notice shall include a request by the City for the type or nature of documentation, analysis or audit it will

require of Franchisee in developing Franchisee's supporting data for the increase or decrease in costs. Within thirty (30) days following receipt of such a request unless some other time period is mutually agreed by the parties, the Franchisee shall fully develop the total increase or decrease in cost supported by an analysis of existing costs and such other supporting documentation (including an audit of costs and expenses specifically related to the change in service) and shall submit the same to the City for consideration. The City shall pay the reasonable and necessary expenses incurred, in excess of normal operating expense, by Franchisee in obtaining such documentation, analysis or audits where the adjustment is not implemented. If the adjustment is implemented, the new fee shall be adequate to reimburse Franchisee for the (aforementioned) expenses incurred by Franchisee of the documentation, analysis and/or audits required by the City. The City shall either notify the Franchisee to implement the change setting forth the method of compensation, whether it is an addition or reduction with respect to existing fees, or withdraw the request.

- d. Arbitration of Disputes. In the event that the Franchisee and the City cannot agree upon the compensation for the work to be performed in a good and workmanlike manner to be charged pursuant to sections 18.2a, 18.2b, or 18.2c, the parties agree that such a dispute shall be subject to binding arbitration pursuant to the rules of the Uniform Arbitration Act. The parties shall mutually select a disinterested, non-local arbitrator. The decision of the arbitrator shall be binding on both parties. The non-prevailing party, as determined by the arbitrator, shall pay all costs of the arbitration and the prevailing party shall be awarded its reasonable costs and attorney's fees incurred in participating in such arbitration, which costs and attorney's fees shall be limited to ten thousand dollars (\$10,000).
- e. The fee adjustments contemplated in sections 18.2a and 18.2b and 18.2c shall become effective on the date that the changes in service commence.
- f. Should additional services be required in an emergency, above and beyond those contemplated in this Franchise Agreement, the Director may order reasonable delivery of services and the City shall pay direct costs of such services plus fifteen percent (15%) for overhead and profit.

18.3 Services Not Included Under Franchise Agreement

Certain services are not contemplated under the Franchise Agreement. It is intended that when and if such service is required by the City, that the Franchisee shall provide such service, provided that a reasonable fee is charged for the nature and level of services requested. However, in the event that the Franchisee fails to offer a reasonable fee to the City for providing such service, the City reserves the right to seek and contract for such services from other providers. In such event the procedure for such new services shall be:

- a. If the City desires that the new service be provided to the citizens of the City of Moscow, the City shall submit to the Franchisee a request for proposal which shall outline the level and nature of services sought.
- b. The Franchisee shall have thirty (30) days within which to provide the City a written response to this request for proposal, which response shall include a detailed account of how the requested services shall be provided and the fee to be charged therefore.
- c. The City shall carefully review Franchisee's response and shall accept the proposed fees if the fees are reasonable. However, if the City determines that the Franchisee's fees for providing the new service is unreasonably high, the City may reject such response and solicit responses from other providers including Franchisee, to provide such services.

18.4 City Shall Bill and Collect

- a. The City shall submit statements for, and collect for services provided by the Franchisee, **with the exception of roll-off container services**, pursuant to the Franchise Agreement, including those accounts that are delinquent. **Franchisee shall submit statements to producers directly and collect for roll off container services.**
- b. The Franchisee shall provide the City with all changes in service on a monthly basis on forms approved by the Director and Franchisee. The City shall calculate the amount to be billed and bill all residents pursuant to this Franchise Agreement. The Franchisee shall provide the City with information on starts, stops and other changes in service promptly. The City shall provide to Franchisee billing and collecting information on a monthly basis. The City shall remit all solid waste collection service fees based on the previous months collections to the Franchisee by the 15th of the following month.
- c. In the event that the City bills and collects tipping fees, it shall bill and collect such fees from the producers and not from Franchisee.

- d. City shall bill, collect and forward any State of Idaho sales taxes owed to the Franchisee by the 10th of the month following collection. Any changes in sales tax during the year shall be reflected in the billing.

18.5 Delinquent and Closed Accounts

The Franchisee shall discontinue solid waste collection service at any residential or business unit for delinquent and closed accounts as set forth in a written notice sent to it by the City. Upon further notification by the City, the Franchisee shall resume solid waste collection on the next regularly scheduled collection day. The City shall indemnify and hold the Franchisee harmless from any claims, suits, damages, liabilities or expenses (including but not limited to expenses of investigation and attorneys' fees) resulting from the Franchisee's discontinuing service at any location at the direction of the City.

19.0 OWNERSHIP

Title to all solid waste except hazardous waste and infectious waste shall pass to the City when placed in Franchisee's collection vehicle, removed by Franchisee from a container, or removed by Franchisee from the producer's premises, whichever last occurs. Title to hazardous waste and infectious waste remains with the producer or generator.

20.0 WAIVER

The failure of the City or Franchisee to insist on a strict performance of any of the terms and conditions hereof shall not be deemed a waiver of the rights or remedies that the City or Franchisee may have regarding that specific instance, and shall not be deemed a waiver of any subsequent breach or default in any terms and conditions. Making or receiving payments pursuant to this Agreement during the existence of a dispute shall not be deemed to and shall not constitute a waiver of any of the claims or defenses of the party making such payment. Further, this Agreement shall not be construed as a waiver of any rights or defenses that any party may have against the other, or third parties regarding any alleged contamination regarding the current landfill site.

21.0 INDEPENDENT CONTRACTOR

Franchisee and its employees, agents and/or representatives shall have the status of (an) independent contractor(s) and shall not be considered to be (an) employee(s) of the City.

22.0 ADHERENCE TO LAWS

The Franchisee shall at all times comply with and adhere to applicable laws for the operation of the site and shall provide to City:

- a. Within five (5) days after the receipt thereof, true, corrected, and complete copies of any written notice of noncompliance or true and accurate transcripts of any oral notice of noncompliance or true and accurate transcripts of any oral notice of noncompliance issued or given by any governmental agency; and
- b. Prompt written notice describing the occurrence of any event or the existence of any circumstances which does or may result in noncompliance or nonadherence, or of any action or proceeding of any nature alleging the same.

Noncompliance with applicable statutes, rules and regulations by Franchisee shall act as a breach of this Agreement and shall subject Franchisee to liability to the City therefore.

23.0 JURISDICTION AND VENUE

This Agreement shall be governed by and construed in accordance with the laws of the State of Idaho, and venue shall be in the District Court of Latah County.

24.0 SEVERABILITY

If any provisions of this Agreement shall for any reason be held to be invalid or unenforceable, the invalidity or unenforceability of such provision shall not affect any of the remaining provisions of this Agreement, and this Agreement shall be enforced as if such invalid and unenforceable provision had not been contained herein.

25.0 BINDING ON SUCCESSORS AND ASSIGNS

This Agreement shall be binding upon, and shall inure to the benefit of, the parties hereto and their respective successors and permitted assigns.

2023 AMENDMENT TO EXHIBIT “B”

**SPECIFICATIONS FOR SOLID WASTE COLLECTION
WITHIN CITY LIMITS**

This Exhibit “B” shall be subject to and governed by the Solid Waste Ordinance and the Solid Waste Franchise Agreement and General Specifications thereto.

- 1.0 Type of Service
 - 1.1 Residential Solid Waste Collection
 - 1.2 Commercial and Industrial Solid Waste Collection
 - 1.3 Schools, Institutions and Public Agency Solid Waste Collections
 - 1.4 Carry Out Services
 - ~~1.5~~1.4 Resource Recovery
 - ~~1.6~~1.5 Designated Disposal Site
 - ~~1.7~~1.6 Bulky Wastes
 - ~~1.8~~1.7 Hazardous Wastes
 - ~~1.9~~1.8 Composting of Yard and Garden Wastes
- 2.0 Operation
 - 2.1 Hours of Operation
 - 2.2 Days of Collections
 - 2.3 Collection Equipment
 - 2.4 Hauling
 - 2.5 Disposal

1.0 TYPE OF SERVICE

1.1 Residential Solid Waste Collection

The Franchisee shall collect household solid waste at least once each calendar week, on a Monday through Friday basis. Each roll cart shall be placed, with fully closed lid, at curbside or adjacent to an alley for collection. Roll carts shall be placed as close to the roadway as practicable without interfering with or endangering the movement of vehicles or pedestrians. The Director shall determine which locations are best suited for pickup based on considerations including, but not limited to, vehicle access, site configuration, operational efficiency and convenience. Roll carts shall be placed with a minimum of three (3) feet of clearance from any obstacle that could interfere with pickup. When construction work is being performed in the right-of-way, roll carts shall be placed as close as practicable to an access point for the collection vehicle. Fees for a producer using other than alley or curbside service shall be as described herein.

Upon the request of the City, the Franchisee shall supply roll carts to all producers who are not authorized to be served by a mechanical container,

and as indicated by the City Utility Billing Department data base that identifies producers, accounts, and the registration of a specific roll cart to such producer/account. Roll cart delivery by the Franchisee shall take place no later than twelve (12) weeks following adoption of this Franchise Agreement by City Council.

The City shall approve the number, type, sizes and other specific physical requirements of the roll carts selected. Roll carts generally shall be sturdy, water tight, equipped with heavy duty wheels and with permanently attached, closeable lids. The Franchisee shall repair or replace, at its own expense, any roll cart which is damaged by the Franchisee. The Franchisee shall repair or replace any roll cart which has become no longer serviceable (i.e., broken wheels, cracked lid, broken axle, cracked or leaking body, etc.), within two (2) business days of notification by the producer or the City. The Franchisee shall keep all roll carts in good repair, shall bear the costs of normal wear and tear, and shall replace roll carts as needed and as required herein. The Franchisee shall not be required to collect residential solid waste from any receptacles which have not been approved by the City (e.g., receptacles or containers other than the registered roll cart).

The Franchisee shall supply all roll carts required for the services provided under this Franchise Agreement. The Franchisee shall register all distributed and/or replaced roll carts to a specific producer's address using methods such as a serial number, bar code, or radio frequency identification (RFID). The method of registration shall include information on which individual roll carts are assigned and designated to a specific producer's address for the purpose of identifying extra service, billing and inventory controls, etc. The Franchisee shall maintain an accurate data base linking registered roll carts to a specific producer address and account. The Franchisee shall electronically forward roll cart registration data and related information regarding all deliveries, swap outs, repairs and other service requests to the City, no less frequently than once a week.

Roll carts shall be available in a variety of volume capacities, solely as determined by the City. Producers may choose the roll cart capacity that they believe best fits their current individual needs or they will be assigned a default size as close to their current service level as possible, as solely determined by the City.

A Producer may exchange the original roll cart registered to such producer free of charge, one time during the first sixty (60) days following delivery of the roll cart and/or the implementation of this Residential Solid Waste Collection Program, whichever is later in time. Roll cart size change requests that occur after the initial sixty (60) day registration period shall be assessed an exchange fee, as established by the City.

The Director may authorize a roll cart size change when the roll cart capacity is insufficient to contain the waste produced or does not adequately serve the premises (considering the nature and the quantity of waste generated).

A producer shall be allowed one (1) courtesy return service per calendar year (i.e., because of a blocked roll cart, a roll cart not set out on time or a roll cart that is otherwise not serviceable, through no fault of the Franchisee, etc.). Return service fees are established in Exhibit “G” of this Agreement.

Each property owner/producer shall be financially responsible for lost, stolen or otherwise missing roll carts. Each property owner/producer shall also be financially responsible for damage caused to a roll cart from abuse or misuse. Replacement or repair assessed to the owner/producer shall be for actual cost, as calculated at the time damage occurs.

A roll cart shall remain at the property/address to which such roll cart is registered until such time that it is exchanged or removed by Franchisee (due to tenant change, account change, sale of property or when the property becomes otherwise vacated, etc.) All roll carts shall remain the property of the Franchisee.

After emptying any roll cart, the Franchisee shall replace the roll cart in an upright position, lid closed, at the place where such roll cart was placed for collection unless such replacement is reasonably likely to be unsafe or such replacement is physically impossible.

Scheduled residential collection of household solid waste may be postponed due to inclement weather and/or unsafe conditions. Such postponement shall cause collection of waste to occur the following regularly scheduled day/week or sooner, without penalty to the producer. Any such postponement shall be approved by the Director.

1.2 Commercial and Industrial Solid Waste Collection

The Franchisee shall collect commercial and industrial solid waste on a Monday through Saturday basis as needed. Hotels, restaurants, grocery stores, hospitals, resident university living groups, boarding houses and other similar establishments shall have their solid waste removed daily except Sundays and legal holidays unless all solid waste is tightly secured in plastic bags and placed in compactors, roll carts or mechanical containers. All other producers shall have solid waste removed on a weekly basis or more frequently as needed. Roll carts shall be collected once per week.

Scheduled commercial and industrial collection of solid waste may be postponed due to inclement weather and/or unsafe conditions. Such

postponement shall cause collection of waste to occur the following regularly scheduled day/week or sooner, without penalty to the producer. Any such postponement shall be approved by the Director.

Containers with solid waste shall be placed at curbside or alley, or as close as practicable for collection. Containers must be readily accessible at street grade on a flat, uniform surface for collection by the Franchisee. If containers are not readily accessible, an additional charge may assessed to the producer.

Containers for commercial and industrial uses may be either roll carts, mechanical containers or compactors unless the producer has its own approved compactor. Upon request of producer, the Franchisee shall furnish and maintain approved roll carts, mechanical containers or compactors for apartments, commercial, business and industrial services.

The Franchisee shall be responsible for the general repair and upkeep of all roll carts and mechanical containers owned by the Franchisee. Mechanical containers and roll carts owned by the Franchisee shall be kept in serviceable condition at all times and shall be kept painted in an approved manner and shall be identified with the Franchisee's name, phone number and, where requested, the City Code pertaining to unauthorized use of the container.

Any compactor owned or leased by a producer must conform to standards for equipment used by the Franchisee as of the date of this Agreement, or must be approved by the Franchisee and the Director. Compactors must be kept in good repair and meet all safety requirements.

Compactors and mechanical containers shall be made of metal and shall be so constructed that no liquid can leak from said containers. Said metal containers may have plastic lids as approved by the Director. However, containers or container parts made of materials other than metal, except as described herein, may be proposed by the Franchisee for the approval of the Director. Mechanical containers shall not be altered without prior approval from the Director and the Franchisee.

1.3 Schools, Institutions and Public Agency Solid Waste Collection

The Franchisee shall make solid waste collection services available to units of government operating from multiple sites in the same manner as provided for commercial and industrial producers, adjusted for any unique characteristics. These entities include the University of Idaho, School Districts, Latah County and the City.

The Franchisee shall adjust the levels of collection service provided to the University of Idaho and the School District to fit changes in their needs due to vacations.

1.4 Carry Out Service

Producers subscribing to solid waste and/or recycling roll cart services who are unable to place roll carts within reasonable collection access, may request Carry Out Service as defined in Exhibit "F". Approval of such service shall be at the sole discretion of the Director or designee.

1.54 Resource Recovery

The Franchisee shall provide a program to aid, support, foster and otherwise encourage resource recovery (recycling) within the City. -Such program shall include the operation by the Franchisee of the City of Moscow Recycling Center in conformance with Exhibit "E". The operations of the City of Moscow Recycling Center shall be regulated by Exhibit "E".

Curbside collection of recyclables by the Franchisee shall be pursuant to Exhibit "D".

1.65 Designated Disposal Site

The City shall provide access to the Franchisee to a designated disposal site which may include transfer stations, composting facilities, inert/demolition landfills, sanitary landfills or incinerators. The Franchisee shall transport the collected solid waste to such designated disposal site as directed by the City. The City shall provide the Franchisee with access to such designated disposal site at such times and schedules as shall be mutually agreed upon, however, such access shall be sufficient to allow the Franchisee to discharge its obligations pursuant to this Agreement. The present designated disposal site shall be located at 3299 Hwy. 8 East, Moscow, Idaho, but shall not include the landfill operated prior to October 1, 1993.

1.76 Bulky Wastes

The Franchisee shall provide a method of collecting and disposing of bulky wastes.

1.87 Hazardous Wastes

The Franchisee shall develop a program for the handling of hazardous wastes, as defined herein, generated within the corporate limits of the City. This program will provide for the collection and temporary handling of hazardous wastes prior to transit, transfer and disposal of such materials in

a legally approved manner. Costs for such program shall be borne by generators of hazardous waste.

1.98 Composting of Yard and Garden Wastes

The Franchisee shall develop a program for handling yard and garden wastes generated within City limits. This program shall include a method whereby residents may deposit their materials in acceptable location(s) within the City and at the composting site to be provided by the City. The Franchisee shall work with the City to provide a service to collect yard and garden wastes from City operations. Costs for the program shall be a negotiated fee.

Such program does not include the collection by the Franchisee of compostable materials when such materials are separated by the producer from its solid waste. Any such program for the collection of compostable materials shall be subject to and governed by Section 18.3 of the General Specifications, Exhibit "A".

2.0 OPERATION

2.1 Hours of Operation

Collection of solid waste shall not start before 7:00 a.m. or continue after 10:00 p.m. local time. Exceptions to collection hours shall be permitted only upon the mutual agreement of the City and the Franchisee.

It is understood between the parties that there is a relationship between fees agreed upon in this Agreement and hours of operation and that changes in hours may require adjustments in consideration to the Franchisee.

2.2 Days of Collection

The Franchisee shall submit appropriate information regarding days of collection service. A map or other notification to the City shall be provided by the Franchisee designating collection day for once-a-week service. The map shall be of such size to clearly show all pertinent information. The City shall post a map furnished by the Franchisee at City Hall. The posted map shall be of such size to clearly show all pertinent information. The Franchisee may, from time to time, propose to City for approval changes in the days of collection service, which approval shall not be unreasonably withheld. Upon City's approval of the proposed changes, the Franchisee shall promptly furnish the City with a map and provide notice to City residents of such changes in a timely manner.

2.3 Collection Equipment

The Franchisee shall provide an adequate number of vehicles for regular collection services. All vehicles and other equipment regularly used in the collection of solid waste shall be kept in good repair and appearance at all times, and in a sanitary condition. Each vehicle so used shall have clearly visible on each side the identity and telephone number of the Franchisee and shall have a consistent color combination approved by the City.

2.4 Hauling

All solid waste collected by the Franchisee shall be so contained, tied or enclosed that leaking, spilling or blowing are prevented.

2.5 Disposal

All solid waste collected by the Franchisee shall be transported by the Franchisee to the designated disposal site. The City and not the Franchisee shall be responsible for processing, hauling and disposal and the costs thereof, of the solid waste after the Franchisee delivers the same to the designated disposal site. The City and not the Franchisee shall be responsible for choosing a legally permitted ultimate disposal site.

2023 AMENDMENT TO EXHIBIT “C”

SPECIFICATIONS FOR SOLID WASTE PROCESSING FACILITY (SWPF)

- 1.0 Operations
- 2.0 Compensation
 - A. Amount
 - B. Base Annual Tonnage
 - C. Miscellaneous
 - D. Direct Reimbursement Costs
- 3.0 Record Keeping And Accounting
- 4.0 Policies/Procedures/Changes in Service
- 5.0 Employees and Equipment
- 6.0 Indemnification
- 7.0 Assignment
- 8.0 **RenewalTerm**

1.0 OPERATIONS

Franchisee agrees to supply the site and improvements thereon, in addition to the equipment and personnel which has been deemed necessary by the City to operate the site in conformance with the Franchise Agreement and this Exhibit “C”, which shall include, but not be limited to, the following:

- A. Franchisee shall provide the site, including the financing and construction of all capital improvements to be made thereon, in conformance with the design and specifications provided by the City; and
- B. Franchisee shall conduct the day to day operations of the site, including maintenance of the roads and daily maintenance of the buildings located on the site, in accordance with this Agreement and the direction of the City; and
- C. Franchisee shall be responsible for the operations of the site, including the on-site inspection, sorting, acceptance or rejection of solid waste arriving at the transfer station, in accordance with the direction of the City and in conformance with all applicable statutes and regulations of all governmental regulatory agencies; and
- D. The City shall establish a program of operating and monitoring procedures for the transfer station reasonably calculated to prevent the loading of unacceptable waste into transport trailers. Transfer station operators shall be instructed and trained to implement and maintain said program.

- E. Franchisee shall cause the orderly unloading of solid waste transport vehicles, including those vehicles brought in by the public; and
- F. The Franchisee shall load and prepare for transport all solid waste that has been deemed acceptable for transport in accordance with the direction of the City and in conformance with the requirements of the Ultimate Disposal Site, (including the loading of such solid waste in order to obtain maximum legal loads without damaging transport trailers and vehicles excluding normal wear and tear) and all applicable statutes and regulations of all governmental regulatory agencies; and
- G. The Franchisee shall cause all acceptable inert/demolition wastes to be placed in the inert/demolition Non-Municipal Solid Waste landfill and Franchisee shall thereafter operate such landfill in accordance with the direction of the City and in conformance with all applicable statutes and regulations of all governmental regulatory agencies; and
- H. The Franchisee shall cause all acceptable compostable waste to be placed into the composting facility and shall thereafter operate such composting facility in accordance with the direction of the City and in conformance with all applicable statutes and regulations of all governmental regulatory agencies.
- I. The City shall have the exclusive right to all salvageable materials delivered to said site, and shall have the right to any and all funds received from the sale of said salvageable materials.

The City may, in writing, allow the Franchisee such right to salvage, subject to the City's sole and unqualified discretion. If the City grants such salvage rights to Franchisee, the Franchisee shall hold harmless and indemnify the City for any and all liability resulting from, and for any and all damages of any type or nature, resulting from salvaging or scavenging by the Franchisee, or any of its employees, of such materials. Further, such salvaging or scavenging activities by Franchisee shall in no way serve as a basis for increasing the compensation pursuant to this Agreement.

- J. Franchisee shall cause acceptable household hazardous waste, known by Franchisee to be such, to be placed at the household hazardous waste holding facility until transported to an ultimate disposal site. Franchisee shall operate such facility in accordance with the direction of the City and in conformance with all applicable statutes and regulations of all appropriate government regulatory agencies. The cost of transportation and disposal at an ultimate disposal shall be paid by City.

2.0 COMPENSATION

- A. **Amount:** The Franchisee shall be entitled to Franchisee's Annual Compensation for such operations per contract year, as provided in Exhibit "G", subject to such

increases or reductions made in conformance with subsections B and C of this section.

Such Franchisee's Annual Compensation (not including any additional compensation paid in conformance with subsection B of this section) shall be paid to Franchisee in twelve equal installments, to be paid on or before the 5th day of the following month. This sum and any adjustments made in conformance with Section 18.0 of the General Specifications, Exhibit "A" shall represent full annual compensation for personnel, equipment, improvements and any and all other expenses of operating said site.

- B. **Base Annual Tonnage:** Franchisee's Annual Compensation is based upon a base annual tonnage of acceptable solid waste received at said site, as provided in Exhibit "G". City and Franchisee specifically agree that no clean fill dirt accepted by Franchisee for processing at the SWPF/Non-MSW landfill pursuant to this Exhibit "C" shall be used or considered when calculating the Annual Tonnage Reimbursement in Section 7.2 of Exhibit "G" of the Franchise Agreement.

City and Franchisee specifically agree that no biosolids accepted from City by Franchisee for processing at the WBCF pursuant to Exhibit "J" shall be used or considered when calculating the Annual Tonnage Reimbursement in Section 7.2 of Exhibit "G" of the Franchise Agreement.

1. If the actual annual tonnage of acceptable solid waste received at the SWPF/Non-MSW landfill, based upon accurate scale receipts, exceeds the base annual tonnage of thirty two thousand two hundred (32,200) tons in a given contract year, then Franchisee shall be entitled to additional compensation at the adjusted rate per additional ton received over the base annual tonnage, as provided in Exhibit "G". If the actual annual tonnage received is less than the base annual tonnage, then the Franchisee shall be entitled to no additional compensation. The adjusted rate per ton shall be calculated as follows:

$$\text{Annual Solid Waste Processing Facility Operational Reimbursement} \div \text{Base Annual Tonnage (32,200 tons)} = \text{Adjusted Rate Per Ton}$$

2. If the actual annual tonnage of acceptable solid waste received at said site, based upon accurate scale receipts, is less than SEVENTY-FIVE PERCENT (75%) of the base annual tonnage, as provided in Exhibit G, Franchisee's Annual Compensation shall be reduced at the adjusted per ton rate for each reduced ton received less than seventy five percent (75%) of the base annual tonnage.

- C. **Miscellaneous Costs:** In addition to that compensation paid Franchisee pursuant to this Exhibit "C", subsections A and B, Franchisee shall receive compensation, as provided in Exhibit "G", for the following miscellaneous costs:

1. All utilities associated with the operation of the SWPF, including road maintenance; and
2. Building maintenance costs; and
3. Land use payments; and
4. Chlorofluorocarbon (CFC) removal; and
5. Appliance door removal; and
6. Asbestos disposal; and
7. Transfer Station and equipment maintenance and repairs; and
8. Non-MSW disposal; and
9. Roto-screening of compost.
10. The City shall develop a plan for the minimum level of closure of the inert/demolition (non-municipal solid waste) landfill and composting area. The closure plan shall further contain detailed cost estimates of closure costs, including labor costs, material costs and other costs associated with and relating to minimum closure requirements for the inert/demolition (non-municipal solid waste) landfill and composting area.
 - a. The City shall be responsible for the costs of the minimum closure requirements required by state and/or federal statute or regulations. Minimum closure shall further be defined as the smallest land area affected by such closure statutes and/or regulations as are required by state and/or federal regulators.
 - b. The City's responsibility for the costs of the minimum closure requirements identified in section 2.C.10.a above, shall include the purchase of soil for cover or final closure, limited to the amount of soil necessary for cover or final closure which is in excess of the amount of soil excavated from the inert/demolition (non-municipal solid waste) landfill site and the composting area.

Franchisee shall be required to maintain and keep the entire SWPF, including roadways, buildings, equipment and facilities in safe, good and serviceable condition. Director may provide for inspections by assistants or inspectors under his/her direction, as a condition of miscellaneous costs compensation. If the Director determines that such miscellaneous services are being performed inadequately, or are otherwise unsafe or not in a good and serviceable condition,

Director shall have the discretion to withhold portions of the miscellaneous compensation, until such time inadequate services are corrected.

All costs associated with maintenance, repairs and replacement at SWPF, transfer station and equipment shall become the sole legal and financial responsibility and asset of Franchisee. If, at no fault of Franchisee or primarily caused by an act of God, the SWPF becomes inoperable or destroyed, Franchisee may petition City to participate financially in reconstruction of the SWPF.

- D. **Direct Reimbursement Costs:** Franchisee shall submit to the City copies of actual paid invoices for Tire and HHW disposal with monthly billing. City shall reimburse the Franchisee for the amounts of these paid invoices for the disposal of Tires and HHW.

3.0 RECORD KEEPING AND ACCOUNTING

Franchisee shall be responsible for all record keeping of said site, including, but not limited to, weights of acceptable solid waste received, vehicles transporting acceptable solid waste to said site, type of load entering and leaving such site (i.e. compostable materials, demolition waste, transport waste, etc.) such record keeping shall be on forms provided by City. Franchisee shall be responsible to the City for the collection and faithful accounting of moneys collected at said site.

4.0 POLICIES/PROCEDURES/CHANGES IN SERVICE

All decisions as to the method, nature and extent of services provided, including but not limited to the operation of said site, hours of operation, days of operation, type of solid waste to be accepted by Franchisee at the site, from whom such solid waste shall be accepted, the amount of tipping fees or other fees to be charged at said site, etc., shall be the exclusive right and responsibility of the City. It is expressly understood and agreed that all acceptable solid waste produced within Latah County shall be accepted at said site, provided that fees associated with such acceptance, as set by the City, including but not limited to tipping fees, are paid. It is further agreed that the City has the right to accept solid waste at the site from outside Latah County, at the City's discretion. Franchisee shall provide input and suggestions to the City regarding the mode of operation of said site, but otherwise Franchisee shall have no authority regarding said operation. The City shall further provide such policies and procedures to Franchisee in written form.

- A. The hours of operation of the site, upon which the Franchisee's Annual Compensation is based, in part, shall be as follows: eight (8) hours per day, or any yearly average thereof, excluding Sundays and holidays.
- B. Tipping fees, either collected at the site by Franchisee, or otherwise, shall be paid over to the City in conformance with this Exhibit "C".

5.0 EMPLOYEES AND EQUIPMENT

Franchisee shall be obligated to provide safe and operable equipment in the discharge of its duties pursuant to this Franchise Agreement. –Franchisee and its employees shall discharge their duties in a competent and professional manner with due respect to the public.– Franchisee shall employ no intemperate or incompetent employees in its discharge of its duties pursuant to this Franchise.

6.0 INDEMNIFICATION

This Exhibit “C” shall be subject to the same indemnification and hold harmless provisions as set forth in Exhibit “A” to the Franchise Agreement.

~~A. The City shall hold Franchisee harmless and indemnify Franchisee for any liability or damages resulting from the intentional act, negligence, omission of the City, its employees, agents, representatives and/or subcontractors pursuant to this Exhibit C. In addition, the City shall hold harmless the Franchisee for policies and/or practices dictated to Franchisee by the City in the operation of said site including, but not limited to policies and/or practices that result in the death or injury to any person, damage or destruction of property, contamination or adverse effects on the environment, or of any violation of statutes, rules or regulations of any governmental agency. Such agreement shall not, however, act to reduce Franchisee's liability and responsibility for damages for the intentional act, negligence or omission of Franchisee or its employees, agents and/or representatives in carrying out such policies and/or practices.~~

~~B. The Franchisee shall hold harmless and indemnify the City for any liability and/or damages of any kind resulting from the intentional act, negligence or omission of Franchisee or its employees, agents or representatives, including, but not limited to, death or injury to any person, damage or destruction of property, contamination or adverse effects on the environment, or of any violation of statutes, rules or regulations of any governmental agency.~~

7.0 ASSIGNMENT

Franchisee specifically agrees that the City reserves the right to assign this Exhibit “C” of the Franchise Agreement relating to the operations of the site to a joint intergovernmental body charged with disposal of solid waste within Latah County, at any time during the term of this Agreement with or without the consent of Franchisee. Such assignment shall be in writing and Franchisee shall be given thirty (30) days written notice before such assignment is effective. Assignment will only be made with written acceptance of all terms and conditions of this Agreement by the successor in interest.

8.0 RENEWAL TERM

The non-exclusive Franchise shall expire on September 30, 2035.

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2023 AMENDMENT TO EXHIBIT “D”

CURBSIDE COLLECTION OF RECYCLABLES

1. SCOPE OF WORK

The Scope Of Work by FRANCHISEE shall consist of the following:-

- A. **Curbside Collection of Recyclable Materials.** FRANCHISEE shall provide curbside collection of recyclable materials and delivery of such recyclable materials to the Moscow Recycling Center in conformance with this Franchise Agreement. All decisions as to the method, nature and extent of services provided shall be the exclusive right and responsibility of CITY. Collection of recyclable materials in excess of those specified herein shall be at CITY's discretion with any additional compensation to FRANCHISEE to be negotiated between the ~~P~~parties based upon the actual, verifiable increase in costs associated with the additional materials to be collected. FRANCHISEE shall have the burden of justifying increased costs incurred as a result of collection of each additional recyclable material in excess of those specified herein.
- B. **Contamination Notices.** FRANCHISEE shall notify producers of contamination problems by tagging contaminated roll carts with printed notices indicating the source(s) of the contamination. FRANCHISEE shall notify CITY of producers that receive contamination notices, source(s) of contamination, and failures to comply with contamination regulations after being notified of the contamination. Upon request by the City, the Franchisee shall provide to the City the costs for printing such contamination notices. Printing costs for contamination notices must be approved, in writing, by the Director or designee, prior to printing such notices. The City reserves the sole right to determine content printed on such contamination notices and selection of printing contractor for said notices. Should the Franchisee provide such printing of notices, as requested by the City, the Franchisee shall be entitled to compensation for those actual costs in an amount to be agreed upon in writing.

2. TYPE OF SERVICE

Single Stream Curbside Recycling Collection

FRANCHISEE shall collect single stream curbside recycling at least once every other calendar week, on a Monday through Friday basis. Roll carts shall be placed at curbside or adjacent to an alley for single family collection. Roll carts serving single family households shall be placed as close to the roadway as practicable without interfering with or endangering the movement of vehicles or pedestrians. Roll carts serving apartment

units or commercial customers shall be placed in a non-public parking area, adjacent to mechanical containers or other locations, as determined by the Director, which allow an adequate access point for collection vehicles to service such roll carts. The Director shall determine which locations are best suited for pickup based on individual circumstances including, but not limited to, vehicle access, site configuration, operational efficiency and convenience. Roll carts shall be placed with a minimum of three feet (3') of clearance from any obstacle that could interfere with pickup. When construction work is being performed in the right-of-way, roll carts shall be placed as close as practicable to an access point for the collection vehicle.

Producers shall place all recyclable materials to be collected fully within roll carts. FRANCHISEE shall not be required to collect curbside recycling materials from any receptacles which have not been approved by CITY (e.g., receptacles or containers other than the registered roll carts). Excess recyclable material or large corrugated cardboard, not fitting into roll carts, may be delivered to Moscow Recycling Center by the producer. Glass shall not be collected curbside by FRANCHISEE. Glass will be accepted at Moscow Recycling Center and other established site(s) designated for glass collection by the Director.

Roll carts shall be sturdy, water tight, equipped with heavy duty wheels and with permanently attached, closeable lids. CITY shall approve the number, type, sizes and other specific physical requirements of the roll carts. Within two (2) business days of notification by the producer or CITY, FRANCHISEE shall repair or replace any roll carts which have become no longer serviceable (i.e., broken wheels, cracked lid, broken axle, cracked or leaking body, etc.). FRANCHISEE shall keep all roll carts in good repair and shall replace roll carts as needed and as required herein. FRANCHISEE shall bear the costs of normal wear and tear.

A producer shall be allowed one (1) courtesy return service per calendar year (i.e., because of blocked roll cart, a roll cart not being set out on time or a roll cart that is otherwise not serviceable, through no fault of FRANCHISEE, etc.). Return service fees are established in Exhibit "G" of this Agreement.

Each property owner/producer shall be financially responsible for lost, stolen or otherwise missing roll carts. Each property owner/producer shall also be financially responsible for damage caused to a roll cart from abuse or misuse. Replacement or repair costs assessed to the property owner/producer shall be for actual cost of replacement or repair, as determined at the time damage occurs.

A roll cart shall remain at the property/address to which such roll cart is registered until such time that it is exchanged or removed by FRANCHISEE (due to tenant change, account change, sale of property or when the property becomes otherwise vacated, etc.). All roll carts shall remain the property of FRANCHISEE.

After emptying any roll cart, FRANCHISEE shall replace the roll cart in an upright position, lid closed, at the place where such roll cart was placed for collection unless such

replacement is reasonably likely to be unsafe or such replacement is physically impossible.

Scheduled collection of curbside recycling may be postponed due to inclement weather and/or unsafe conditions. Such postponement shall cause collection of curbside recycling to occur the following regularly scheduled day/week or sooner, without penalty to the producer. Any such postponement shall be approved by the Director.

Producers subscribing to recycling roll cart services who are unable to place roll carts within reasonable collection access, may request Carry Out Service as defined in Exhibit "F". Approval of such service shall be at the sole discretion of the Director or designee.

3. EQUIPMENT

FRANCHISEE shall supply all approved roll carts required for the services provided under this Franchise Agreement. FRANCHISEE shall register all distributed and/or replaced roll carts to a specific producer's address using methods such as a serial number, bar code, or radio frequency identification (RFID). The method of registration shall include information on individual roll carts which are assigned and designated to a specific producer's address for the purpose of inventory control. FRANCHISEE shall maintain an accurate data base linking registered roll carts to a specific producer's address and account. FRANCHISEE shall electronically forward roll cart registration data and related information regarding all deliveries, swap outs, repairs and other service requests to CITY, no less frequently than once a week.

A producer may exchange the original roll cart registered to such producer free of charge, one (1) time during the first thirty (30) days following delivery of the roll cart and/or the implementation of this Single Stream Curbside Recycling Program, whichever is later in time.

FRANCHISEE agrees to furnish during the term of this Franchise Agreement, adequate equipment as specified in Exhibit "A", "C" and "E" and personnel sufficient to collect recyclable materials at curbside and to transport all recyclable materials identified elsewhere in this Franchise Agreement to a site designated by CITY. FRANCHISEE shall furnish vehicles specifically designed for or modified to safely accommodate the activities of collection at curbside and transport of recyclable materials.

All equipment utilized by FRANCHISEE in the curbside collection program shall be maintained and operated in a clean and sanitary manner at the sole expense of FRANCHISEE. The equipment shall be clean, uniformly painted, marked and identified. It shall be licensed, lighted, equipped with warning devices, and safety inspected for highway operations, all subject to review and approval by CITY.

4. SALVAGE RIGHTS

FRANCHISEE shall have no salvage rights to recyclable materials collected at curbside pursuant to this Franchise Agreement, except as provided in the Franchise Agreement Documents.

5. SELECTION OF MATERIALS RECOVERY FACILITY (MRF)

CITY shall have the sole right of selection of material recovery facilities (MRFs) to serve as the destination for single stream materials.

6. PAYMENT

FRANCHISEE shall be responsible for billing CITY monthly for the services set forth herein based upon the price per single family household per month base rate, apartment unit per month base rate, monthly roll cart rate, operations and maintenance rate and single stream per ton processing rate as set forth in Exhibit "G" to this Franchise Agreement. CITY agrees to reimburse FRANCHISEE for actual processing costs incurred at CITY designated and approved MRFs necessary to separate single stream recycling material, as documented by processing manifests, and any other fees assessed by the MRFs, including disposal of contaminants. FRANCHISEE will make reasonable attempts to limit contamination. -CITY shall remit payment to FRANCHISEE by the twentieth (20th) day of each month following receipt of FRANCHISEE's billing. In the event that CITY fails to remit payment to FRANCHISEE by the twentieth (20th) day of each month for such billing, CITY shall pay to FRANCHISEE, in addition to the amount of the billing, a late fee in the amount of one percent (1%) of the amount of the billing per day beyond the due date, provided, that if CITY makes a good-faith challenge to the billing, such late fees shall not be assessed until such challenge is resolved. In addition to this late fee, in the event that CITY fails to remit payment to FRANCHISEE within fourteen (14) days from the due date, FRANCHISEE may, in its discretion, without penalty or determination that FRANCHISEE is in breach of this Franchise Agreement, suspend its obligations and services to be provided hereunder until such charges are paid.

7. TITLE TO RECYCLABLE MATERIALS

Title to all recyclable materials accepted at CITY's Moscow Recycling Center, shall pass to the operator of the Moscow Recycling Center when so accepted.- Title to Hazardous Wastes, potentially harmful wastes, Infectious Wastes or other Unacceptable Waste shall not vest with the operator of the Moscow Recycling Center, but shall remain in the producer. FRANCHISEE further agrees that it shall identify the producer of such wastes and disclose such information to CITY through CITY's point of contact.

8. RECORDS

FRANCHISEE shall maintain such records as may be specified herein or may be necessary to document the quantity of recyclable materials collected and delivered in the performance of this Franchise Agreement separately from those recyclable materials received by the operator of the Moscow Recycling Center. FRANCHISEE shall make

all documents relating to the performance of work hereunder, including scale records, if applicable, available to CITY within fourteen (14) working days of receiving written notice detailing the documents requested.

9. DELAYS IN CARRYING OUT WORK

FRANCHISEE shall not be held responsible by reason of any delay in the performance of this Franchise Agreement when such delay is primarily caused by some act of God, provided that in the case of delay caused by an act of God, FRANCHISEE shall give notice to CITY (in writing, at the earliest possible time) of the causes of such delay. Such a delay shall not be considered to be an interruption of service as designated elsewhere in this Franchise Agreement; provided, that if such delay due to an act of God continues for a period of twenty (20) consecutive days, either party may terminate this Franchise Agreement without liability to the other party. Such termination shall be effective upon written notice provided to the other party.

10. COMMODITIES TO BE COLLECTED

CITY shall identify commodities to be collected by FRANCHISEE. Each year CITY and FRANCHISEE shall review the list of commodities to be collected.

11. REIMBURSEMENT

CITY agrees to pay FRANCHISEE the amount shown in Exhibit “G” for curbside collection of recyclable materials performed pursuant to this Franchise Agreement, as may hereafter be adjusted in accordance with Exhibit “A”.

2023 AMENDMENT TO EXHIBIT "E"

SPECIFICATIONS FOR RECYCLING CENTER

This Exhibit "E" shall be subject to and governed by the Franchise Documents thereto, unless modified herein.

- 1.0 Statement of Purpose
- 2.0 Operations
- 3.0 Ownership
- 4.0 Compensation
- 5.0 Record Keeping And Accounting
- 6.0 Policies/Procedures/Changes in Service
- 7.0 Employees and Equipment
- 8.0 Indemnification
- 9.0 Assignment
- 10.0 Dispute Resolution
- 11.0 Term/~~Renewal~~
- 12.0 Public Information, Special Events and Promotion

1.0 STATEMENT OF PURPOSE

The purpose of this Exhibit "E" to the Solid Waste Franchise Agreement is to contract with and encourage the Franchisee to optimize the amount of recyclables, compostables and energy recovery materials recovered or separated from solid waste.

2.0 OPERATIONS

Franchisee agrees to supply the equipment and personnel which has been deemed necessary by the City to operate the Recycling Center in conformance with the Franchise Agreement and this Exhibit "E", which shall include, but not be limited to, the following:

- A. Franchisee shall conduct the day to day operations of the Recycling Center, including maintenance of the parking lot and landscaping, ~~including~~ cleaning, ~~repairing~~ damage from activity, litter control, janitorial services and snow removal, in accordance with this Exhibit "E" and the direction of the City; and
- B. Franchisee shall be responsible for the operations of the Recycling Center, including the on site inspection, sorting, acceptance or rejection of materials arriving at the Recycling Center, in accordance with the direction, policies and procedures set by the City and in conformance with all applicable statutes and regulations of all governmental regulatory agencies; and

- C. Franchisee shall be responsible for the collection and faithful accounting of Tipping Fees authorized by the City. Franchisee shall pay over all Tipping Fees to the City.
- D. Franchisee shall not be required to charge a tipping fee for Acceptable Materials deposited at the Recycling Center by Collection Franchisees which are generated within Latah County, but not within Moscow city limits, until such time as the City, ~~ats~~ its sole discretion and with thirty (30) days prior written notice to Franchisee, shall require such to be charged. Franchisee shall pay over all Tipping Fees to the City; and
- E. Acceptable Materials deposited at the Recycling Center by Collection Franchisees which are generated within Latah County, but not within Moscow city limits, shall not be considered in the calculation of compensation under this Agreement unless the City, at its sole discretion, directs ~~franchisee~~ Franchisee to charge a tipping fee on such volume of Acceptable Materials pursuant to this Exhibit "E".
- F. Franchisee shall provide for the orderly unloading of acceptable materials from transport vehicles, including those vehicles brought in by the public; and
- G. Franchisee shall provide for all materials arriving at said Recycling Center to be weighed, utilizing a scale that has been certified by the State of Idaho for use in commercial trade; and
- H. The Franchisee shall load and prepare for transport all Acceptable Materials that have been deemed acceptable for transport in accordance with the direction of the City and in conformance with all applicable statutes and regulations of all governmental regulatory agencies; and
- I. The Franchisee shall provide for all acceptable compostable waste to be placed into a bin or receptacle for transport and delivery to a composting facility designated by the City.
- J. The Franchisee shall have the exclusive right to all salvageable materials delivered to the Recycling Center; and, in accordance with Exhibit "E" and other relevant sections of the Franchise Agreement and its Exhibits, shall share with the City; the risks and rewards of fluctuating recycling commodity material prices for cardboard, mixed paper, single stream, newsprint, aluminum, tin, hdpe, pet and mixed plastics, and all funds received from the sale of said salvageable materials. The Franchisee shall hold harmless and indemnify the City for any and all liability resulting from, and for any and all damages of any type or nature, resulting from salvaging or scavenging by the Franchisee, or any of its employees, of such materials. Further, such salvaging or scavenging activities by Franchisee shall in no way serve as a basis for increasing the compensation pursuant to this Agreement.

- K. The Franchisee shall share with the City, revenues received from the sale of cardboard, mixed paper, single stream, newsprint, aluminum, tin, hdpe, pet and mixed plastics pursuant to the following formula. Using data from the Secondary Materials and Secondary Fiber Pricing Index for the Pacific Northwest region, the most recent fiscal ten (10) year average commodity pricing will be established for the aforementioned commodities. The most recent material characterization on record will be used to calculate the percentage of each commodity that makes up the single stream mix. Using the same data and index, the current fiscal year average commodity pricing will be established for the same aforementioned commodities. The current fiscal year average commodity pricing will be compared to the ten (10) year average commodity pricing. When the current fiscal year average commodity pricing falls below the ten (10) year average commodity pricing, the City shall compensate the Franchisee for fifty (50%) percent of the reduction in revenue. When the current fiscal year average commodity pricing exceeds the ten (10) year average commodity pricing, the Franchisee shall compensate the City for fifty (50%) percent of the increase in revenue. This ~~formula~~ **ten (10) year average** will be updated and recalculated at the end of each fiscal year.

3.0 OWNERSHIP

- A. Ownership of all materials accepted at the Recycling Center, except compostable waste, shall pass to the Franchisee upon acceptance.
- B. Ownership of the facilities, fixtures and grounds shall remain in the City and the Franchisee shall acquire no ownership or possessory rights therein, provided that equipment and/or fixtures purchased by Franchisee shall remain the property of the Franchisee, and shall be removed by the Franchisee upon termination of this Agreement.
- C. Franchisee shall be responsible for the repair of any damage to the facilities, fixtures and grounds of the Recycling Center occasioned by such removal. However, Franchisee shall not be responsible for reasonable wear and tear at the Recycling Center.

4.0 COMPENSATION

- A. The Franchisee shall be entitled to compensation for such operations, based on volume as provided in Exhibit "G".
- B. The Franchisee shall be entitled to reimbursement for actual staff time and cost of materials expended pursuant to the City's written request to provide public outreach, special events participation and promotion. Costs for these activities

shall be approved, in writing, by the Director or designee, prior to commencement of these activities by the Franchisee.

- C. ~~CSuch~~ compensation shall be paid for every ton of Acceptable Materials accepted at said Recycling Center; provided that non-Acceptable Materials deposited at the Recycling Center by producers shall also be included in Franchisee's compensation provided that Franchisee has exercised all reasonable efforts, in accordance with the direction of the City, to prevent the deposit of non-Acceptable Materials; provided further that said compensation shall not include tonnage of compostable materials received at said Recycling Center.
- D. ~~Such~~ Compensation shall be paid to Franchisee in monthly installments, to be paid on or before the fifth (5th) day of the following month.
- E. The amounts of such monthly installments shall be calculated based upon the weight receipts for the preceding month as tabulated and provided by Franchisee to the City. Such tabulations shall be presented on a form approved by the Director.
- F. These sums and any adjustments made in conformance with section 18.0 of the General Specifications, Exhibit "A" shall represent full compensation for personnel, equipment and any and all other expenses of operating said Recycling Center.
- G. Franchisee shall not be responsible for the disposal cost, including tipping fees, long haul transport cost and ultimate disposal cost of non-Acceptable Materials deposited at the Recycling Center, provided that Franchisee shall exercise all reasonable efforts in preventing non-Acceptable Materials to be deposited at said Recycling Center, in accordance with the direction of the City.
- H. The Franchisee shall transport non-Acceptable Materials deposited at the Moscow Recycling Center to the Latah Sanitation Transfer Station at no cost.

5.0 RECORD KEEPING AND ACCOUNTING

- A. Franchisee shall be responsible for all record keeping of said Recycling Center, including, but not limited to, weights and types of Acceptable Materials or non-Acceptable Materials received, current market prices paid for recyclable materials and tonnages of compostable materials received at the Recycling Center.
- B. Such record keeping shall be on forms approved by the Director.
- C. Franchisee shall be responsible to account to the City for the collection and faithful accounting of moneys collected at said site.

- D. The Franchisee shall weigh such Acceptable Materials on a scale certified for commercial sales.
- E. Franchisee shall provide to the City monthly recycling volume reports that include weights of each accepted subsidized/nonsubsidized commodity by current month, prior month, current ~~month-year~~, previous year, calendar year-to-date and contract year-to-date.

6.0 POLICIES/PROCEDURES/CHANGES IN SERVICE

- A. All decisions as to the method, nature and extent of services provided, including but not limited to the operation of said Recycling Center, hours of operation, days of operation, type of materials to be accepted by Franchisee at the Recycling Center, from whom such materials are to be accepted by Franchisee at the Recycling Center, the amount of Tipping Fees to be charged at said Recycling Center, etc., shall be the exclusive right and responsibility of the City.
- B. It is expressly understood and agreed that all Acceptable Materials shall be accepted at said Recycling Center, except as otherwise provided herein, provided that Tipping Fees associated with such acceptance, as set by the City, are paid.
- C. In the event that the City directs the Franchisee to reject Acceptable Materials from certain producers, the City shall compensate the Franchisee for the costs of implementing and operating such program, in accordance with Section 18.2c. of Exhibit “A”, General Specifications.
- D. Franchisee shall provide input and suggestions to the City regarding the mode of operation of said Recycling Center, but otherwise Franchisee shall have no authority regarding said operation.
- E. The Franchisee shall submit a proposal for policies and procedures to the Director for the City's approval.
- F. The City shall further provide such final policies and procedures to Franchisee in written form.
- G. The hours of operation of the Recycling Center for redemption shall be an average of forty (40) hours per week, as approved by the Director.
- H. Tipping Fees paid by producers, as set by the City, either collected at the Recycling Center or elsewhere by Franchisee, shall be paid over to the City in conformance with this Exhibit “E”.

7.0 EMPLOYEES AND EQUIPMENT

- A. Franchisee shall be obligated to provide safe and operable equipment in the discharge of its duties pursuant to this Franchise Agreement.
- B. Franchisee and its employees shall discharge their duties in a competent and professional manner with due respect to the public.
- C. Franchisee shall employ no intemperate or incompetent employees in its discharge of its duties pursuant to this Franchise.

8.0 INDEMNIFICATION

This Exhibit "E" shall be subject to the same indemnification and hold harmless provisions as set forth in Exhibit "A" to the Franchise Agreement.

- ~~A. The City shall hold Franchisee harmless and indemnify Franchisee for any liability or damages resulting from the intentional act, negligence, omission of the City, its employees, agents, representatives and/or subcontractors pursuant to this Exhibit E. In addition, the City shall hold harmless the Franchisee for policies and/or practices dictated to Franchisee by the City in the operation of said Recycling Center including, but not limited to policies and/or practices that result in the death or injury to any person, damage or destruction of property, contamination or adverse effects on the environment, or of any violation of statutes, rules or regulations of any governmental agency. Such agreement shall not, however, act to reduce Franchisee's liability and responsibility for damages for the intentional act, negligence or omission of Franchisee or its employees, agents and/or representatives in carrying out such policies and/or practices.~~
- ~~B. The Franchisee shall hold harmless and indemnify the City for any liability and/or damages of any kind resulting from the intentional act, negligence or omission of Franchisee or its employees, agents or representatives, including, but not limited to, death or injury to any person, damage or destruction of property, contamination or adverse effects on the environment, or of any violation of statutes, rules or regulations of any governmental agency.~~

9.0 ASSIGNMENT

- A. Franchisee specifically agrees that the City reserves the right to assign the City's rights pursuant to this Exhibit "E" of the Franchise Agreement relating to the operations of the Recycling Center at any time during the term of this Agreement with or without the consent of Franchisee. Such assignment shall be in writing and Franchisee shall be given thirty (30) days written notice before such assignment is effective. Assignment will only be made with written acceptance of all terms and conditions of this Agreement by the City's successor in interest.
- B. The terms and conditions of the Solid Waste Franchise Agreement regarding the sale, assignment or ownership change of Franchisee's firm shall control the

specifications for the Recycling Center. Said terms and conditions are incorporated herein by reference as if though fully set forth at length.

10.0 DISPUTE RESOLUTION

All other disputes arising as to the terms of this Exhibit "E" (other than assignment as described in Section 9.B. of this Exhibit "E") shall be governed by Section 15 of the Franchise Agreement.

11.0 TERM/~~RENEWAL~~

The non-exclusive Franchise shall expire on September 30, 2035.

12.0 PUBLIC INFORMATION, SPECIAL EVENTS AND PROMOTION

- A. As directed by the City, the Franchisee shall participate and collaborate in special events and public outreach campaigns relating to recycling. These special events and public outreach efforts shall aim to maximize citizen participation in the use of the Recycling Center. Activities shall be designed to maintain continued citizen use of existing recycling facilities and maximize participation in such facilities. The Franchisee shall keep the public informed of all programs and encourage participation therein.
- B. When directed by the City to participate in special events and public outreach efforts, the Franchisee shall prepare and submit detailed cost estimates for such activities to the City. Such activities and costs thereof, shall be approved by the City in writing, prior to Franchisee commencing such activities.

Attachment 6

2023 AMENDMENT TO EXHIBIT “F”

DEFINITIONS

1. Agreement/Contract Year
2. Bags: See Containers
3. Business
4. Business Unit
- 4.5. Carry Out Service
- 5.6. City
- 6.7. Commercial or Industrial Solid Waste Producers
- 7.8. Containers
 - A. Approved Containers
 - A.B. Bag/Bags
 - B.C. Compactor Container
 - C.D. Mechanical Container Roll Cart (Garbage Can)
 - E. Roll Cart (Garbage Can) Mechanical Container
- 8.9. Containment Structures
- 9.10. Council
- 10.11. Curblin/Curbide
- 11.12. Designated Disposal Site
- 12.13. Director
- 13.14. Disposal
- 14.15. Equipment
16. Franchise Documents
- 15.17. Franchisee
- 16.18. Franchisee’s Annual Compensation
- 17.19. Garbage Can: See Containers
- 18.20. Generator
- 19.21. Haul or Hauling
- 20.22. Hazardous Waste Generator
- 21.23. Household Hazardous Waste Facility
- 22.24. Inspector
- 23.25. Non-Municipal Solid Waste Landfill (N-MSWLF)
- 24.26. Premises
- 25.27. Producer
- 26.28. Recycling Center
- 27.29. Resident
- 28.30. Residential Solid Waste Producers
- 29.31. Residential Unit
- 30.32. Resource Recovery
- 31.33. Security for Performance
- 32.34. Service
- 33.35. Site (SWPF)
- 34.36. Solid Waste

- A. Acceptable Material
- B. Acceptable Waste
- C. Ashes
- D. Bulky Waste
- E. Bundle
- F. Compostable Waste
- G. Hazardous Waste
- H. Household Waste
- I. Infectious Waste
- J. Mixed Paper Waste
- K. Non-Municipal Solid Waste (N-MSW): (heavy/inert/demolition)
- L. Putrescible Waste
- M. Recyclables
- N. Scrap Metals
- O. Transport Waste
- P. Unacceptable Waste
- P.Q. White Goods
- 35-37. Solid Waste Processing Facility (SWPF)
- 36-38. Tipping Fees
 - A. Recycling Center
 - B. Solid Waste Processing Facility (SWPF)
- 37-39. Tonnage
 - A. Actual Annual Tonnage
 - B. Base Annual Tonnage
- 38-40. Transfer Station
- 39-41. Ultimate Disposal Site
- 40-42. University of Idaho

For purposes of interpretation of the Franchise Documents, the following terms, phrases, and derivations shall have the following meanings given herein unless inconsistent with the Solid Waste Ordinance, or statute, rules, and regulations currently in effect. When not inconsistent with the context, words used in the present include the future, words in the plural form include the singular form, and words in the singular form include the plural form. The term ‘shall’ is always mandatory and not merely directory.

1. AGREEMENT/CONTRACT YEAR

Shall be defined as October 1 through September 30.

2. BAGS

See Containers

3. BUSINESS

An individual, partnership, association, corporation, company, trust, firm, estate, joint venture, unit, agent, public agency, industry, or other legal entity operating as a self-contained independent enterprise, such as a beauty shop, retail shop, professional office, etc.

4. BUSINESS UNIT

Each space occupied by an individual business. A business unit shall be deemed occupied when either occupied or producing solid waste.

5. CARRY OUT SERVICE

The regular retrieving, servicing, and return of solid waste and/or recycling roll carts, or other approved containers, from residential and commercial solid waste producers, by the Franchisee from a location other than the vehicle-based solid waste and/or recycling roll cart collection location, as described in Exhibit "B" and Exhibit "D", for a Producer who has requested such service and that has been approved by the Director or designee. Carry Out Service shall not include the act of opening trash enclosure gates, positioning or maneuvering of mechanical containers for vehicle collection, or occasional minor positioning of roll carts or other approved containers as necessary to perform the services under this Agreement.

6. CITY

City of Moscow, Idaho

7. COMMERCIAL OR INDUSTRIAL SOLID WASTE PRODUCERS

Producers of solid waste from commercial or industrial uses or establishments. Does not include residential producers.

8. CONTAINERS

- A. Approved Container: Any other container approved by the City to be used in accordance with this Franchise Agreement.
- B. **Bag/Bags:** Plastic sacks designed to store solid waste with sufficient wall strength to maintain physical integrity when lifted by top. Total weight of a bag and its contents shall not exceed thirty five pounds (35 lbs.) for collection services.
- BC. **Compactor Container:** A receptacle designed to compact solid waste and to be moved by mechanical means so that its contents can be emptied.
- GD. Mechanical Container: A receptacle designed for loose solid waste to be lifted by mechanical means so that its contents can be emptied.

E. Roll Cart: A receptacle of various sizes, shapes, and/or colors, as approved by the City and provided by ~~franchisee~~Franchisee, generally utilized for residential solid waste collection. Roll carts have wheels and permanently attached, closeable lids. Roll carts are serviced using semi-automated or fully automated mechanical lifting devices.

~~**D. Mechanical Container:** A receptacle designed for loose solid waste to be lifted by mechanical means so that its contents can be emptied.~~

~~**E. Approved Container:** Any other container approved by the City to be used in accordance with this Franchise Agreement.~~

9. CONTAINMENT STRUCTURES

Any structure, framework, or fence constructed or erected for the purpose of housing or retaining any containers as defined herein.

10. COUNCIL

City Council of the City of Moscow, Idaho.

11. CURBLINE/CURBSIDE

That portion of right-of-way or private property adjacent to the traveled portion of the City right-of-ways used for the placement of all solid waste and recycling containers on collection days. Containers shall be placed as close as is reasonably possible to the traveled right-of-way without obstructing parking lanes or public sidewalks.

12. DESIGNATED DISPOSAL SITE

A waste facility or site where solid waste is transferred, composted, disposed of, reduced, or recovered such as landfills, transfer stations, incinerators, and resource recovery facilities, which are licensed or approved to receive **solid waste** for processing or final disposal ~~of solid waste~~ by all governmental bodies and agencies having jurisdiction, and which has been designated by the City.

13. DIRECTOR

The Moscow City Supervisor or such other person or persons designated by the City Supervisor.

14. DISPOSAL

Transporting and disposal of solid waste ~~at in~~ a designated disposal site; disposal of solid waste for resource recovery or transportation to an ultimate disposal site or facility.

15. EQUIPMENT

Equipment used by a Franchisee within the City for the collection or disposal of solid waste.

16. FRANCHISE DOCUMENTS

The Solid Waste Franchise Agreement, as amended, along with the following Exhibits, as amended:

- Exhibit A – General Specifications
- Exhibit B – Specifications for Collection
- Exhibit C – Specifications for Solid Waste Processing Facility (SWPF)
- Exhibit D – Curbside Collection of Recyclables
- Exhibit E – Specifications for Recycling Center
- Exhibit F – Definitions
- Exhibit G – Fee Schedule
- Exhibit H – Insurance Certificates and Performance Bonds
- Exhibit I – Map of Collection Routes
- Exhibit J – Specifications for Wastewater Biosolids Composting Facility

16.17. FRANCHISEE

The person, persons, or corporation(s) holding a non-exclusive contract and/or non-exclusive franchise issued or granted by the City authorizing such person, persons or corporation(s) to operate, conduct, or maintain a municipal solid waste collection and disposal system upon, or over any streets, alleys, and public rights-of-ways of the City.

17.18. FRANCHISEE'S ANNUAL COMPENSATION

That amount of compensation paid to the Franchisee pursuant to the Franchise Documents, and as provided in Exhibit "G".

18.19. GARBAGE CAN

See Containers.

19.20. GENERATOR

Any residential or business unit which creates or produces hazardous waste.

20.21. HAUL OR HAULING

An individual trip transporting solid waste from a producer, or any other point within the City to a designated disposal site.

21.22. HAZARDOUS WASTE GENERATOR

Any person, business, or other entity which generates Hazardous Waste within the City of Moscow.

22.23. HOUSEHOLD HAZARDOUS WASTE FACILITY

A facility which accepts household hazardous waste from residential units. City shall make appropriate arrangements to transport this waste to an appropriate ultimate disposal site.

23.24. INSPECTOR

The authorized employee or agent of the City designated by the Director as having the duty of enforcement of this Franchise Agreement.

24.25. NON-MUNICIPAL SOLID WASTE LANDFILL (N-MSWLF)

A landfill that accepts non-municipal solid waste. Said landfill shall conform to all statutes, rules, and regulations of any governmental regulatory agency which pertains to non-municipal solid waste in the form described herein.

25.26. PREMISES

Land and all buildings and structures thereon including but not excluding by terms of enumeration, single or multi-family dwellings, rooming houses, apartment houses, hospitals, convalescent and nursing homes, hotels and motels, restaurants, drive-in establishments, schools (kindergarten, academic, trade or industrial), and any other place of habitation, office, shop, or establishment or place of conducting a business, trade or occupation.

26.27. PRODUCER

Any person, business, or other entity which produces solid waste within the City of Moscow.

27.28. RECYCLING CENTER

The facility owned by the City of Moscow, which shall be operated by the Franchisee in conformance with the Franchise Documents, for the purpose of conducting recycling operations, certain compost handling, energy recovery, education, and other solid waste reduction activities.

28.29. RESIDENT

Every person in possession, charge, custody, or control of any premises where solid waste is produced or accumulated.

29.30. RESIDENTIAL SOLID WASTE PRODUCERS

Producers of solid waste from households.

30.31. RESIDENTIAL UNIT

A dwelling within the corporate limits of the City occupied by a person or group of persons. A residential unit shall be deemed occupied when either occupied or producing solid waste. Each unit within an apartment or condominium dwelling shall be treated as an individual dwelling unit, unless served by a mechanical container or compactor.

31.32. RESOURCE RECOVERY

The process, including recycling, of obtaining useful material or energy resources from solid waste.

32.33. SECURITY (FOR PERFORMANCE) – shall mean any of the following:

- A. Cash or certified check
- B. Performance Bond executed by a surety company licensed to do business within the State of Idaho
- C. Letter of Credit from any federally insured financial institution doing business within the State of Idaho
- D. Assignment of a savings account or certificate of deposit or other federally backed financial instrument to the City

The Moscow City Attorney shall be the final judge of adequacy of such security

33.34. SERVICE

Solid waste collection and transfer and disposal of, or resource recovery from solid waste, as further defined by agreement.

34.35. SITE

See Solid Waste Processing Facility.

35.36. SOLID WASTE

All solid waste or semi-solid waste including without limitation: bulky, household, hazardous, infectious, garbage, rubbish, refuse, trash, ashes, swill, newsprint, waste paper, corrugated paper, cardboard, grass clippings, compost, discarded appliances, equipment, furniture, vehicle parts, tires, vegetable or animal wastes, wire, cement, concrete, demolition, inert waste or other wastes resulting from commercial, industrial, agricultural,

institutional or residential activities. Includes material that is no longer directly usable by the producer, owner, resident, or processor of the material, but may be recovered by another person. Solid waste may include materials that may have value and thus be recovered. Solid waste includes waste presently in liquid form. Notwithstanding the foregoing, solid waste shall not include compostable materials or commercially recyclable materials (i.e., aluminum, glass, newspapers, tin, recyclable plastics, etc.), when such material is separated by the producer from its solid waste. No material shall be considered solid waste until it is placed for collection.

- A. **Acceptable Material:** That material defined herein as recyclables, compostable waste, mixed paper waste, scrap metals, or other material deemed Acceptable Material by the City.
- B. **Acceptable Waste:** That portion of solid waste that is normally disposed of and originating from residential dwellings, businesses, and industrial, and commercial establishments which consists of household waste from private residences; commercial waste which originates in wholesale, retail or service establishments such as restaurants, stores, markets, theaters, hotels, and warehouses; and institutional waste material originating in schools, hospitals, research institutions, and public buildings. Such acceptable waste shall include tires, metals, and white goods. In no event shall acceptable waste include any Hazardous Waste or any Unacceptable Waste.
- C. **Ashes:** The residue from the burning of wood, coal, coke, or other combustible materials.
- D. **Bulky Waste:** ~~Stoves, refrigerators, water tanks, washing machines, furniture~~Furniture, appliances, springs, mattresses, carpets, demolition, commercial, industrial, tree stumps, tree trunks, logs, vehicle bodies and parts, wire, large dead animals (over ten pounds), cement, concrete, sheetrock, sod, dirt, tires, rock, loose branches, any item weighing over sixty (60) pounds, and any materials over four (4) feet in length. May also include heavy wastes, inert wastes, or demolition wastes.
- E. **Bundle:** Small trees, branches, shrub, and brush trimmings or newspapers and magazines securely tied together forming an easily handled package not exceeding four (4) feet in length or thirty-five (35) pounds in weight.
- F. **Compostable Waste:** That Acceptable Solid Waste that has been accepted at the SWPF or recycling center for composting. Such Compostable Waste shall conform to all statutes, rules, and regulations of any governmental regulatory agency which pertains to composting.
- G. **Hazardous Waste:** Any chemical, compound, mixture, substance, or article which is designated by federal law or regulation, Idaho law or regulation or the law or regulation of any other state when applicable (such as in the case of solid waste

exported to or through another state for ultimate disposal) to be ‘hazardous’, ‘dangerous’, or ‘extremely dangerous’.

1. Toxic or hazardous waste as defined in either the Solid Waste Disposal Act, 42 U.S.C. Section 6901 *et seq.* as replaced, amended, expanded, or supplemented, or any laws of similar purpose of effect, and such policies or regulations thereunder, or under relevant state law as replaced, amended, expanded, or supplemented, or any laws of similar purpose or effect, and any rules, regulations, or policies thereunder, or
 2. Special nuclear or by-products material within the meaning of the Atomic Energy Act of 1954, or
 3. Other material which any governmental agency or unit having appropriate jurisdiction shall determine from time to time is harmful, toxic, or dangerous or otherwise ineligible for transfer through, transportation by, or disposal from the site, or
 4. Any material which would result in residue being designated as hazardous under the above.
- H. **Household Waste:** That waste produced by an ordinary residential unit fitting into a bag, manual container, or bundle less than four (4) feet in length. Does not include bulky, infectious, or hazardous wastes or any type of solid waste that is not normally collected by the Franchisee at residential or business units, on the regular collection days.
- I. **Infectious Waste:** Any material, chemical, compound, mixture, substance, or article known to be infectious by the generator, ~~and/or~~ producer or which is designated by the United States Environmental Protection Agency or other appropriate agency of the Federal Government or the State of Idaho to be “infectious” as that term is commonly defined or defined by or pursuant to law.
- J. **Mixed Paper Waste:** Magazines, “junk” mail, telephone directories, bond or ledger grade paper, paper board packaging and other fiber-based materials meeting industry standards. Food or liquid contaminated waste paper shall be excluded from such mixed paper waste.
- K. **Non-Municipal Solid Waste (N-MSW):** Includes heavy/inert/demolition solid waste, building materials resulting from excavations, construction, remodeling, repair, or demolition operations. Examples include rocks, tree trunks, logs, cement, concrete, and sod. Such definition of materials may be altered by regulations of the governmental bodies or agencies having jurisdiction. Said waste shall conform to all statutes, rules, and regulations of any governmental regulatory agency which pertains to non-municipal solid waste in the form as described herein.

- L. **Putrescible Waste:** Solid waste which has capacity to become rotten or foul.
- M. **Recyclables:** Includes, but is not limited to, aluminum containers/scrap, corrugated cardboard, glass containers, mixed paper, gable-topped milk cartons, aseptic packages, used motor oil (uncontaminated), newspaper, “PET” (#1) plastic beverage containers, HDPE (#2) plastic milk jugs, scrap metals, steel or tin cans, and such other materials that the City and Franchisee agree to be recyclable under the terms of the Franchise Documents. Recyclables to not include hazardous waste, biological or infectious waste or **other waste defined** by applicable federal, state, or local law or regulation.
- N. **Scrap Metals:** Scrap Metals acceptable at the Recycling Center are ferrous and nonferrous metals not to exceed two feet in dimension in any direction nor exceed thirty five (35) pounds in weight per piece. Scrap metals acceptable at the SWPF include large metal items that are not accepted at the recycling center. There may be some metals that are not accepted, which shall be regulated by applicable Federal **and/or**; State of Idaho laws, and/or regulations.
- O. **Transport Waste:** That Acceptable Solid Waste that has been accepted at the SWPF for loading into transport vehicles for transport to an Ultimate Disposal Site. Such Transport Waste shall conform to the rules of, and be acceptable to, the Ultimate Disposal Site.
- P. **Unacceptable Waste:** That portion of the solid waste, exclusive of Hazardous Waste, such as, but not limited to: –explosives, pathological and biological waste, radioactive materials, foundry sand, cesspool waste, human remains, industrial process wastes, motor vehicles (including major motor vehicle parts such as transmissions, rear ends, springs, and fenders), agricultural and farm machinery and equipment, marine vessels, and major parts thereof or any other large type of machinery or equipment, or that which in the reasonable judgment of Franchisee or the Director may present a substantial endangerment to health or safety, or has a reasonable possibility of adversely affecting the operation of the Transfer Station or the acceptance of Transport Waste by the Ultimate Disposal Site.
- Q. **White Goods:** Appliances such as refrigerators, ranges, water heaters, freezers, unit air conditioners, washing machines, dishwashers, clothes dryers and other similar domestic and commercial large appliances.

36.37. SOLID WASTE PROCESSING FACILITY (SWPF)

The SWPF is located in the area of 3299 Highway 8 East. Includes a legally permitted and constructed transfer station; non-municipal solid waste landfill; metals, tires, and other recycling; composting facility and household hazardous waste facility, which has been designated by the City as the site.

37.38. TIPPING FEES

- A. **Tipping Fees – Recycling Center:** Shall be the fees authorized by the City to be charged to producers by Franchisee for acceptance and processing of Acceptable Materials, including recyclables, compostables, mixed paper, and scrap metals at the Recycling Center. The authority to charge such Tipping Fees and the amount of such Tipping Fees shall be set at the sole discretion of the City. Such Tipping Fees shall be ~~set~~ the property of the City and shall be accounted for by Franchisee.
- B. **Tipping Fees – Solid Waste Processing Facility (SWPF):** Shall be the fees charged for acceptance and processing and/or disposal for acceptable solid waste to the site. Said Tipping Fees shall be set at the sole discretion of the City.

38.39. TONNAGE

- A. **Actual Annual Tonnage:** That weight of acceptable solid waste that is actually delivered to the SWPF site during the contract year.
- B. **Base Annual Tonnage:** That weight of acceptable solid waste that shall be agreed upon by the ~~P~~parties to be the annual average of acceptable solid waste being delivered to the site. The base annual tonnage at the commencement of this Franchise Agreement shall be as provided in Exhibit “G”.

39.40. TRANSFER STATION

The transfer, processing, and transportation facility for the purpose of transferring, processing, or transporting Acceptable Solid Waste, inclusive of adjacent property located at the site designated by the City, utilized by the Franchisee for the operation thereof, exclusive of any portion of the premises excluded by the City.

40.41. ULTIMATE DISPOSAL SITE

Any disposal site chosen by the City which may ultimately receive solid waste from the Designated Disposal Site. The City shall obtain from the Ultimate Disposal Site all policies and directives which define the types of Transport Waste acceptable to the Ultimate Disposal Site, and shall provide such policies and directives to the Franchisee. The Franchisee shall follow such policies and directives, unless otherwise directed in writing by the City.

41.42. UNIVERSITY OF IDAHO

The corporate body known as the University of Idaho and shall include all land owned and managed by the University in Latah County inside or outside of the limits of the City of Moscow.

Attachment 7

2023 AMENDMENT TO EXHIBIT "G" FEE SCHEDULE EFFECTIVE DATE - October 1, 2023

SECTION 1.0 ADJUSTMENTS INCLUDED IN 2023 AMENDMENT TO EXHIBIT "G")

- 1.1 Reimbursement: City agrees to pay the Franchisee the amounts shown herein for Solid Waste Services performed, pursuant to this Agreement.
- 1.2 Fees: Exhibit G does not include billing or other City fees. Such billing and City fees are included in the actual rates charged to the producer.
- ~~1.3 Franchise Fee: A five percent (5%) franchise fee is included in Exhibit G, except where indicated.~~

SECTION 2.0 RATES FOR EACH RESIDENTIAL UNIT

2.1	Individual Residential Units Includes mobile homes, duplexes, and apartment units. This fee also includes fees for curbside recycling collection services.	Per Month	Each unit	\$9.51
2.2	Apartment Curbside Recycling	Per Month	Each unit	\$3.6252
2.3	Individual Residential SW Service Level	Per Month		
	35 gallon cart		Each unit	\$0.631
	65 gallon cart		Each unit	\$1.240
	95 gallon cart		Each unit	\$1.8479
	On Demand 35 gallon cart		Each service	\$0.3029
Note: Annual Modification to fees in Section 18.2 of Exhibit A shall not apply to any fee in Section 2.4, 2.6 or 2.8 of this Exhibit G.				
2.4	Individual SW Roll Cart	Per Month	Each unit	\$0.930
2.5	SW Roll Cart Operation & Maintenance		Per month	\$3,916.10800.67
2.6	Individual Recycling Roll Cart	Per Month	Each unit	\$0.941

2.7	Recycling Roll Cart Operation & Maintenance	Per month	
			\$11,874.53 12,235.16
	Includes roll cart exchanges & repairs, roll cart cleaning, inventory storage and extra rear load helper route.		
2.8	Material Recovery Facility (MRF) Processing	Per Ton	Actual
	Includes actual single stream material processing costs passed on to City.		
2.9	Cart size exchange	First 30 days	\$0.00
		After 30 days	\$17.98 18.52
2.10	Return Service: (e.g., blocked roll cart, roll cart not set out on time, roll cart not able to be serviced)	First time	\$0.00
		Second time	\$12.00 12.36
		Third time (and following times)	\$23.97 24.70
2.11	Roll Cart Replacement (lost, stolen, damage from abuse)	Each unit	
			\$57.89 59.65
2.12	Carry - Out Service Per Month		
	A. Outside of Building:		
	Two (2) bags or (1 roll cart)	Each unit	\$12.58 12.96
	B. Inside of Building:		
	Two (2) bags or (1 roll cart)	Each unit	\$14.30 14.73
	Each carryout service producer shall provide reasonably safe access to solid waste container(s).		
2.13	Over Service Level: Per bag or equivalent	Each unit	\$4.75 4.89
	Business Rate for Residential: Residential Units utilizing mechanical or compactor containers shall be billed at the business rate for such containers.		

SECTION 3.0 RATES FOR BUSINESS UNITS USING MANUAL CONTAINERS

3.1	Loose Yardage on Ground (not fault of Franchisee)	Per cu. yard	\$8.48 8.74
3.2	Commercial Roll Carts Per month	35 gal	\$10.12

(served one [1] time weekly) _____

~~65 gal~~ ~~\$9.82~~ ~~10.12~~

~~95 gal~~ ~~\$14.71~~ ~~15.16~~

~~35 gal~~ ~~\$9.82~~

~~65 gal~~ ~~\$9.82~~

~~95 gal~~ ~~\$14.71~~

3.3 Commercial Curbside Recycling Per Month Each unit ~~\$3.52~~ ~~3.63~~

3.4 Individual Recycling Roll Cart Per Month Each unit ~~\$0.93~~ ~~0~~

3.5 Recycling Roll Cart Operations & Maintenance Per month
~~\$440.57~~ ~~27.59~~

SECTION 4.0 RATES FOR RECYCLING MOBILE CONTAINERS (RMC)

4.1 Rental Rates:

6 Yard Container Rental Per month ~~\$56.34~~ ~~58.05~~
Sales Tax on Rental \$ ~~3.38~~ ~~3.48~~

10.5 Yard Container Rental Per month ~~\$86.06~~ ~~88.67~~
Sales Tax on Rental \$ ~~5.16~~ ~~5.32~~

12 Yard Container Rental Per month ~~\$100.56~~ ~~103.61~~
Sales Tax on Rental \$ ~~6.03~~ ~~6.21~~

4.2 Types of Services:

A. Franchisee Services/Value of Recycled Materials
Retained by Franchisee:

- 1) RMC hauled, emptied and exchanged by Franchisee
- 2) No Reimbursement for recyclable materials to customer
- 3) On-call service with twenty four (24)-hour notice
- 4) Rate per haul and exchange ~~\$45.82~~ ~~47.21~~

B. Franchisee Services/Value of Recycled Materials
Retained by Customer:

- 1) RMC hauled, emptied and exchanged by Franchisee
- 2) Reimbursement at the current rate for recyclable materials to customer, providing there is no contamination from unacceptable items.
- 3) On-call service with twenty four (24)-hour notice
- 4) Rate per haul and exchange ~~\$55.06~~ ~~56.73~~

C. Customer Service/Value of Recycled Materials

Retained by Customer:

- 1) RMC hauled, emptied and exchanged by customer
- 2) Reimbursement at the current rate for recyclable materials to customer
- 3) Rate per haul and exchange \$ 0.00

SECTION 5.0 RATES FOR MECHANICAL CONTAINERS

5.1 Mechanical Container Rates Per Month:

Cont.	Sales	Times Per Week					
Size	Rental	Tax	1	2	3	4	5
1 yd	\$13.40	\$0.80	\$26.94	\$53.82	\$80.64	\$106.68	\$134.29
2 yds	\$16.59	\$1.00	\$45.06	\$90.04	\$135.06	\$180.08	\$225.02
3 yds	\$23.73	\$1.42	\$62.39	\$123.90	\$187.17	\$249.55	\$311.90
4 yds	\$26.23	\$1.57	\$80.43	\$160.80	\$241.22	\$321.60	\$402.04
6 yds	\$36.88	\$2.21	\$114.29	\$229.18	\$342.76	\$456.94	\$571.15
8 yds	\$45.14	\$2.71	\$148.38	\$296.57	\$444.42	\$592.63	\$739.79

Cont.	Rental	Sales Tax	Times Per Week				
Size			1	2	3	4	5
1 yd	\$13.40	\$0.80	\$26.94	\$53.82	\$80.64	\$106.68	\$134.29
2 yds	\$16.59	\$1.00	\$45.06	\$90.04	\$135.06	\$180.08	\$225.02
3 yds	\$23.73	\$1.42	\$62.39	\$123.90	\$187.17	\$249.55	\$311.90
4 yds	\$26.23	\$1.57	\$80.43	\$160.80	\$241.22	\$321.60	\$402.04
6 yds	\$36.88	\$2.21	\$114.29	\$229.18	\$342.76	\$456.94	\$571.15
8 yds	\$45.14	\$2.71	\$148.38	\$296.57	\$444.42	\$592.63	\$739.79

5.2 Locking Mechanism Mechanical Container Per month ~~\$3.34~~ \$3.44

5.3 Extra Service for Mechanical Containers
With twenty four (24) hour notice: Each dump ~~\$31.45~~ \$32.40

5.4 Temporary (less than two [2] months) Placement or Removal of a Mechanical Container: Each move ~~\$43.31~~44.62

SECTION 6.0 RATES FOR SPECIAL SERVICES

6.1 Special hauls with pickup truck:

On day of service – zero to fifteen (0-15) minutes ~~\$34.16~~35.20
 From Landfill to City – sixty (60) minutes ~~\$68.36~~70.44
 Each fifteen (15) min. after first sixty (60) min. ~~\$17.07~~17.59

6.2 Special hauls with packer truck:

On day of service – zero to fifteen (0-15) minutes ~~\$60.42~~62.25
 From Landfill to City – zero to sixty (0-60) minutes ~~\$120.83~~124.50
 Each fifteen (15) min. after first sixty (60) min. ~~\$30.27~~31.19

6.3 Special Services with roll-off truck:

Large Container Service:

~~Rental rate for one (1) time exchange service and
 rental rate per day after first five (5) working days~~

Cont. Size	Per Day Rental	Sales Tax	Delivery	Exchange	Pickup
8 yd	\$5.26	\$ 0.32	\$118.09	\$118.09	\$118.09
11 yd	\$6.32	\$0.38	\$118.09	\$118.09	\$118.09
15 yd	\$ 7.38	\$ 0.44	\$118.09	\$118.09	\$118.09
22 yd	\$8.42	\$0.51	\$118.09	\$118.09	\$118.09
30 yd	\$10.53	\$0.63	\$118.09	\$118.09	\$118.09
45 yd	\$14.74	\$0.88	\$118.09	\$118.09	\$118.09

Cont. Size	Per Day Rental	Sales Tax	Delivery/Exchange/Pickup
8 yd	\$5.42	\$0.32	\$121.68
11 yd	\$6.51	\$0.39	\$121.68
15 yd	\$7.60	\$0.46	\$121.68
22 yd	\$8.67	\$0.52	\$121.68
30 yd	\$10.85	\$0.65	\$121.68
45 yd	\$15.19	\$0.91	\$121.68

Latah Sanitation, Inc. (dba Inland Northwaste)

Long term rental agreements available through approval by Latah Sanitation, Inc. representative. No Rental Fees for Holidays.

Damage Deposit (based on container size and intended use)-	\$ 114.15 100.00 to
\$ 570.77 500.00	
<i>Applied toward tonnage and hauling charges if no damage occurs</i>	
Sorting Fee (unacceptable items)	\$ 100 103.04
<i>Hazardous waste, tires or large appliances</i>	
Removal Delay Fee	\$ 118.09 122.71
<i>Applied to each occasion that roll-off container is kept beyond original scheduled removal date, without prior approval from Latah Sanitation, Inc. representative.</i>	

Additional Large Container Service for City Facilities:

Note: Includes City special services such as yard waste program at Moscow Recycling Center.

Compactor Service:

Service	Per haul	\$ 188.43 194.15
Loose Yardage	Per yard	\$ 8.44 8.70
Compacted Yardage (small compactor)	Per yard	— \$ 45.12 46.49

- 6.4 Dead Animals: Special Haul rates shall be charged for collection and disposal of dead animals.
- 6.5 Service: Arrangements for Special Hauls shall be made with Franchisee.
- 6.6 Special Waste: The rates for hazardous waste and infectious and potentially harmful waste will include time, equipment, materials, franchise billing fee and disposal fees.

SECTION 7.0 FRANCHISE REIMBURSEMENT FOR OPERATION OF SOLID WASTE PROCESSING FACILITY

FRANCHISE FEE OF FIVE PERCENT (5%) DOES NOT APPLY TO FEES IN SECTION 7

- 7.1 Solid Waste Processing Facility Operational Franchise Reimbursement

Per year	\$ 573,892.19 29,210.94
Per month	\$ 47,831.85 4,100.91
- 7.2 Annual Tonnage Reimbursement
 - A. If annual tonnage exceeds the base annual tonnage of thirty-two thousand two hundred (32,200) tons in a contract year, Franchisee shall receive additional compensation.

Per additional ton (Adjusted per ton)	\$ 17.83 6.44
---------------------------------------	--------------------------

B. If the annual tonnage is less than the base annual tonnage, then no additional compensation to Franchisee.

C. If the annual tonnage is less than seventy five percent (75%) of the base annual tonnage, then refer to Section 2.B.2. of Exhibit C.

7.3 Rate Reimbursement for Miscellaneous Costs. See 2.0.C. of Exhibit C as therein provided in sub-paragraphs 1 through 11.

Miscellaneous Rate	Per year	\$ 260,954.72 40,599.96
	Per month	\$ 21,746.23 0,050.00

7.4 Direct Reimbursement Cost
Tire disposal
Household Hazardous Waste disposal

Actual
Actual

SECTION 8.0 FRANCHISE REIMBURSEMENT FOR OPERATION OF MOSCOW RECYCLING CENTER

~~Note: Franchise fee of five percent (5%) shall not apply to any fees in Section 8 of this Exhibit C.~~

8.1 Compensation	Per ton	\$ 47.75 4.03
8.2 Public Information, Special Events and Promotion Time and Materials		
8.3 Revenue Sharing From Sales of Recycling Commodities Compensation or Payment Formula as stated in Exhibit E, 2.0, K. Calculated at the end of each fiscal year		

SECTION 9.0 FRANCHISE REIMBURSEMENT FOR OPERATION OF BIOSOLIDS COMPOSTING FACILITY

9.1 Biosolids Composting Facility Operational Franchise Reimbursement
(Annual processing of up to seven thousand [7,000] wet tons of City of Moscow produced biosolids)

Per year	\$ 248,372.61 28,999.27
Per month	\$ 20,697.72 19,083.27

9.2 Franchisee Reimbursement for processing materials

from outside sources between four thousand five hundred
(4,500) and seven thousand (7,000) wet tons not produced
from City of Moscow WWTP

Per ton

\$117.676.29

DRAFT

Attachment 8



2023 Amendment to Exhibit "H" Insurance Certificates and Performance Bonds

IRREVOCABLE STANDBY
LETTER OF CREDIT NO. 26199
DATE: SEPTEMBER 30, 2022
AMOUNT: \$200,000.00

City of Moscow
Attn: Finance Director
206 E. Thrid Street
Moscow, ID 83843

Ladies and Gentlemen:

We hereby establish our Irrevocable Standby Letter of Credit No. 26199 in your favor for the account of Latah Sanitation Inc., PO Box 8036 Moscow ID 83843, up to the aggregate amount of Two Hundred Thousand and No/100 Dollars (\$200,000) U.S. currency, available by your draft(s) drawn at sight on us and presented to Washington Trust Bank on or before September 30, 2023, or any extended date, covering the Performance Letter of the City of Moscow and accompanied by the following:

1. A signed statement from the beneficiary reading exactly as follows:

"I, the undersigned duly authorized representative of the City of Moscow hereby certifies that the draft drawn under this Letter of Credit represents the amount of money required to cover the Performance Letter for the City of Moscow."

2. The original of this Letter of Credit and any amendments thereto.

It is a condition of this Letter of Credit that it shall be considered automatically extended without amendment for one year from the present or any future expiration date unless we notify you in writing at least thirty (30) days prior to any such expiration date that this Letter of Credit will not be renewed. All written notification shall be sent via Certified Mail or courier.

All drafts presented under the credit must contain the clause "Drawn under Washington Trust Bank Letter of Credit No. 26199". Any and all banking charges, other than those of the issuing bank, are for the account of the beneficiary.

We hereby engage with the drawers and bona fide holders of drafts drawn under and in compliance with the terms of this Letter of Credit that the drafts will be duly honored upon presentation and delivery of documents, as specified, to Washington Trust Bank, Attn: International Banking Department, 717 W. Sprague Ave., Spokane, Washington 99201, on or before September 30, 2023, or any extended date.

All drawings under this credit will be governed by the Uniform Customs & Practice for Documentary Credits (Latest Revision) International Chamber of Commerce Publication No. 600.

Sincerely,

Perry Magers
Letters of Credit
Washington Trust Bank

Privately owned.
Built in the Northwest.

watrust.com





CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

4/14/2023

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 Hub International Northwest LLC PO Box 3144 Spokane, WA 99220	CONTACT NAME: Shannon Ulrich	
	PHONE (A/C, No, Ext): E-MAIL ADDRESS: shannon.ulrich@hubinternational.com	
INSURED Latah Sanitation Inc. P.O. Box 8036 Moscow, ID	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A: Pioneer Specialty Insurance Company	40312
	INSURER B: Western National Assurance Company	24465
	INSURER C: Idaho State Insurance Fund	36129
	INSURER D:	
	INSURER E:	
INSURER F:		

COVERAGES

CERTIFICATE NUMBER:

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:			CPP 1076500	7/1/2022	7/1/2023	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
B	AUTOMOBILE LIABILITY ☐ ANY AUTO OWNED AUTOS ONLY ☒ SCHEDULED AUTOS ☒ HIRED AUTOS ONLY ☒ NON-OWNED AUTOS ONLY			CPP 1075735	7/1/2022	7/1/2023	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
A	☒ UMBRELLA LIAB ☒ EXCESS LIAB DED ☒ RETENTION \$ 10,000			UMB 1012648	7/1/2022	7/1/2023	EACH OCCURRENCE \$ 2,000,000 AGGREGATE \$ 2,000,000
C	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	N/A	538305	4/1/2023	4/1/2024	☒ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

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

CERTIFICATE HOLDER

CANCELLATION

City of Moscow
PO Box 9203
Moscow, ID 83843

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

Attachment 9
2023 Amendment to Exhibit "I"
Map of Collection Routes

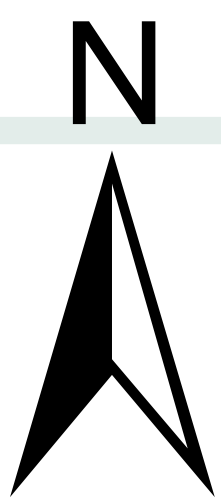
City Of Moscow
GARBAGE PICK UP DAY

FRIDAY
MONDAY
THURSDAY
TUESDAY
WEDNESDAY
City Limit

STREET DIRECTORY

A STREET	G-16 LATHEN STREET	F-22
ADAMS STREET	G-19 LAUDER AVENUE	F-21
ALAN STREET	H-22 LEBANON DRIVE (private)	F-21
ALMON STREET	F-18 LETH STREET	F-14
ALPOWA AVENUE	D-22 LEMHI DRIVE	J-26
ALTURA DRIVE	I-22 LEXTER STREET	F-21
ALTRUS PARKWAY	J-22 LEXVILLE ROAD	N-23
AMY COURT	K-18 LEVICK STREET	F-21
ANDERSON PLACE	E-23 LEWIS STREET	G-19
ANNA AVENUE	J-21 LEXINGTON AVENUE	N-13
ANNA STREET	H-18 LIEUALLEN STREET	E-16
APON PLACE	I-23 LILLY STREET	F-17
APPLAHOA ROAD	E-23 LINCOLN STREET	F-17
APPROPRIATE ROAD	F-19 LINDA LANE	E-21
ARBORCREST ROAD	J-18 LINDSEY STREET	E-14
ARROW STREET	H-22 LINDSEY STREET	F-18
ARROYO STREET	F-17 LONAN STREET	H-20
ASH STREET	E-19 LORAIN LANE	I-22
ATSKIR STREET	H-22 LUND LANE	K-14
AT STREET	G-16 LUNDQUIST LANE	N-24
BADGER COURT	M-19 LYNANDRA DRIVE	I-15
BARKER STREET	G-16 LYNN AVENUE	H-20
BARTHOLOMEW STREET	J-13 MABELLA STREET	H-20
BLAKE STREET	I-17 MAIN STREET	F-17
BLAKE AVENUE	E-20 Mainway Lane (private)	L-20
BON WHITE PLACE	G-11 MALLARD COURT	G-12
BONNIE COURT	G-12 MCKINLEY STREET	G-14
BORAH AVENUE	D-22 MEADOW STREET	L-19
BOYLE AVENUE	E-21 MEADOWLARK LANE	L-16
BREAST DRIVE	F-13 MELBONDRIDGE STREET	D-14
BRIDGE STREET	K-16 MERCER AVENUE	J-21
BRISTOL DRIVE	L-21 MILLER COURT	D-15
BRISTOL LOOP	L-21 MIX ROAD	H-24
BRITTON LANE	H-12 MOLLY COURT	J-17
B STREET	G-15 MONROE STREET	H-18
CAMAS STREET	J-20 MONROE STREET	G-14
CAMBRIDGE COURT	L-20 MORTON STREET	G-14
CAMPUS DRIVE	L-20 MOSER STREET	K-16
CANBRIAL ROAD	M-23 MYRTLE STREET	G-24
CARLETON STREET	L-21 NADY COURT	L-17
CAYUSE DRIVE	D-23 NANCY COURT	G-15
CHESLA COURT	M-20 NARBON STREET	F-19
CHERRY BLOSSOM LANE	I-13 NELSON AVENUE	G-24
CHERRY STREET	E-16 NEE PERCE DRIVE	D-20
CHINDOK STREET	E-22 NEE PERCE ST	H-24
CHRISTOPHER LANE	I-11 NORTHWEST COURT	D-15
CIRCLE DRIVE	D-16 NORTHWOOD DRIVE	H-21
CLAY COURT	M-19 NOTTING HILL DRIVE	H-20
CLEARVIEW STREET	L-19 NURSERY STREET	G-24
CLEVELAND STREET	J-14 NYLOR STREET	H-22
Clockwork Lane (private)	L-20 OLD PULLMAN ROAD	H-20
COLLEGE STREET	F-19 ORCHARD AVENUE	F-13
COLT ROAD	D-22 PALOUSE COURT	I-17
CONCORD AVENUE	K-13 PALOUSE RIVER DRIVE	E-23
CONSTITUTION DRIVE	E-22 PANORAMA DRIVE	F-18
CONSTITUTION STREET	D-23 PARADISE CREEK STREET	D-17
COURTNEY STREET	L-19 PARADISE DRIVE	F-22
COWY LANE	G-11 PARADISE RIDGE ROAD	H-24
Crookside Lane (private)	K-17 PARK DRIVE	J-19
CRISTVIEW DRIVE	K-17 PEACHTREE DRIVE	I-13
C STREET	E-15 Pearl Creek (private)	E-23
DAMEN STREET	K-16 Pendulum Lane (private)	L-20
DAVIS AVENUE	K-13 PERIMETER DRIVE	C-20
DART ROAD	M-19 PETERSON DRIVE	D-17
DAWKIN AVENUE	F-18 PHEASANT RUN LANE	F-10
Deakin Avenue (private)	F-18 PICABU STREET	J-12
DEER MEADOW COURT	H-21 PINE CONE ROAD	L-22
DISCOVERY DRIVE	A-22 PINE STREET	F-19
DOGWOOD COURT	J-17 PINTAIL LANE	G-12
DOLLY DRIVE	G-13 PINTO DRIVE	D-22
D STREET	E-15 PLASANT PLACE	G-11
EASTWOOD AVENUE	H-21 PLUM COURT	F-13
EDINBOROUGH COURT	L-21 POLK STREET	H-18
EIGHTH STREET	G-19 PONDOSA COURT	F-17
EISENHOWER STREET	L-15 PONDOSA DRIVE	J-12
ELKS ROAD	E-22 POWERS AVENUE	G-23
EL CAJON AVENUE	K-20 PULASKI AVENUE	F-13
ELM STREET	E-19 PULLMAN ROAD	C-17
EMPIRE LANE	H-11 QUAIL RUN DRIVE	G-11
ESTERRE	I-14 Quail Road (private)	E-21
FAIRVIEW DRIVE	M-19 RAILROAD STREET	F-19
FARM ROAD	C-17 RAYBURN STREET	D-19
FIFTH STREET	G-17 RESIDENCE STREET	E-15
FIRST STREET	G-16 RIDGE ROAD	E-24
FLETCHER PLACE	E-23 RIDGEVIEW DRIVE	L-21
FLINT STREET	G-22 ROBINSON PARK ROAD	M-19
FLORIAN LANE	A-21 ROAD STREET	H-19
FLORENCE AVENUE	K-19 ROLLING HILLS DRIVE	K-17
FORD STREET	L-14 ROOSEVELT STREET	J-16
FORT STEVEN STREET	E-19 ROWE STREET	L-16
FOURTH STREET	G-17 ROWE STREET	H-21
FRANKLIN ROAD	G-11 ROXBURY DRIVE	E-21
GAMBLE LANE	G-11 Ruby Court (private)	M-21
GARFIELD STREET	E-16 RYAN LANE	L-17
Garrett Court (private)	E-23 Sarnarian Lane (private)	M-18
GATWAY COURT	L-19 SECOND STREET	G-17
GRANT COURT	J-18 SENA STREET	D-17
GRANT STREET	J-14 SEVENTH STREET	E-18
GRANVILLE STREET	M-20 SHERLY LANE	L-20
Grasslands Hill Place (private)	G-12 SHERWOOD STREET	L-19
GUSKE ROAD	I-24 SHETLAND COURT	E-21
HAMPTON COURT	M-21 SHORT STREET	C-17
HANSEN AVENUE	L-20 SHOSHONE STREET	M-19
HARDING STREET	K-20 SIXTH STREET	J-18
HARDEN ROAD	D-11 SLONAKER DRIVE	J-12
HARDY STREET	L-20 South Hill Terrace (private)	F-20
HARSHORN STREET	H-20 SOUTHVIEW AVENUE	G-22
HARVEST DRIVE	K-17 SPOTSWOOD STREET	G-20
HATHAWAY STREET	L-19 SPIGUE CIRCLE	J-12
HATLEY WAY	A-17 STADIUM DRIVE	D-18
HAWTHORNE DRIVE	G-21 STEFANY LANE	M-19
HAYES STREET	I-18 STYNGE AVENUE	G-21
HENLEY STREET	C-16 SUNSHINE DRIVE	K-17
HENRY COURT	K-16 Sundial Lane (private)	L-20
HIDDEN LANE	H-20 SUNNYSIDE AVENUE	F-22
HIGHLAND DRIVE	F-12 SUNSHINE DRIVE	E-22
HIGHWAY 95	F-16 SUNSET DRIVE	E-15
HIGHWAY 8	A-17 SUSAN DRIVE	G-13
HILLCREST DRIVE	K-16 SUTTON STREET	M-20
HILLSIDE PLACE	F-19 SWIFT AVENUE	F-20
HISCHER ROAD	I-11 TAMARACK DRIVE	J-12
HISHER ROAD	I-11 TAYLOR AVENUE	E-21
Hogme Court (private)	M-18 THATUNA AVENUE	J-13
HOLIDAY STREET	L-20 THIRD STREET	E-17
HOMER STREET	F-16 Thompson Drive (private)	L-20
HOMESTEAD STREET	H-14 TORNSDA DRIVE	F-14
Hoogland Lane (private)	L-20 TOMER ROAD	M-22
HOWARD STREET	H-14 TRACY COURT	G-14
HUNTER STREET	H-20 TRAIL ROAD	J-9
HOPE AVENUE	E-19 TRAVEL WAY	F-21
HUENE DRIVE	K-14 TROY ROAD	L-22
INDIAN HILLS DRIVE	G-22 TRUMAN STREET	L-14
IRVING DRIVE	K-17 UNIVERSITY AVENUE	E-18
JACKSON STREET	F-18 URQUHART AVENUE	E-18
JANSON STREET	K-16 VALLEY VIEW DRIVE	K-14
JASON DRIVE	M-18 VAN RUIJN STREET	G-17
JEFFERSON COURT	G-12 VANDAL DRIVE	F-11
JEFFERSON STREET	G-19 VEAUCH STREET	G-20
JILLIE COURT	G-12 VIEW STREET	E-22
JILLIE DRIVE	G-13 VIRGINIA AVENUE	F-12
JUNIPER DRIVE	J-12 VISTA STREET	L-19
KAMAKIA STREET	J-19 WALENTA DRIVE	D-21
KATY AVENUE	L-18 WANDURA COURT	D-13
KENNEY STREET	L-14 WAR BONNET DRIVE	A-16
KENNETH STREET	H-20 WASHINGTON STREET	G-19
KING ROAD	E-21 WEST VIEW DRIVE	L-18
KIRK DRIVE	F-12 WYOMOUTH STREET	L-19
KISMET COURT	N-20 WHITE AVENUE	L-21
KOJA COURT	L-20 WHITE PLACE	H-21
KOOSIMITY STREET	D-15 WILDBROSE DRIVE	M-21
KOURE STREET	J-20 WILLOW VIEW PLACE	E-23
LAND LANE	I-11 WILSHIRE DRIVE	L-20
LANNY DRIVE	J-11 WYOMANS LANE	K-12

This map is provided for reference purposes only and is not intended to depict the exact locations of property lines or other features shown. Please do not make business decisions based on this product before independently validating the data.



Created & Maintained by the
ENGINEERING DIVISION
Updated September, 2022

2023 AMENDMENT TO EXHIBIT “J”

SPECIFICATIONS FOR WASTEWATER BIOSOLIDS COMPOSTING FACILITY (WBCF)

- 1.0 Operations
- 2.0 Complaints
- 3.0 Compensation
- 4.0 Record Keeping and Reporting
- 5.0 Policies/Procedures/Service
- 6.0 Interruption of Service
- 7.0 Employees and Equipment
- 8.0 Liquidated Damages
- 9.0 Indemnification
- 10.0 ~~Renewal~~Term
- 11.0 Franchisee to Follow City J1 (SOP)

INTENT TO INCORPORATE EXHIBIT “J” INTO THE SOLID WASTE FRANCHISE AGREEMENT

Franchisee and City agree that the Solid Waste Franchise Agreement and its Exhibits “A”, “F”, and “G” shall apply to this Exhibit “J”. Where there are terms and conditions not defined in the Solid Waste Franchise Agreement and/or its Exhibits “A”, “F”, and “G”, or where terms and conditions differ from the Solid Waste Franchise Agreement and/or its Exhibits “A”, “F”, and “G”, the agreement between Franchisee and City for wastewater biosolids composting shall be governed by this Exhibit “J” and its Attachment 1, WBCF Compliance Inspections Standard Operating Procedure (hereinafter “J1 (SOP)”).

1.0 OPERATIONS

Franchisee agrees to derive a compost material from City biosolids that meets the Class A designation for pathogen reduction and also meets the vector attraction reduction requirements in accordance with Title 40 CFR 503 regulations. Franchisee agrees to supply the WBCF site and improvements thereon, in addition to the equipment and personnel which has been deemed necessary by City to operate the WBCF in conformance with the Franchise Agreement and this Exhibit “J”, which shall include, but not be limited to, the following:

- A. Franchisee shall provide the WBCF site, including the financing and construction of all capital improvements to be made thereon, in conformance with Franchisee’s Operation Plan dated March 2007; and

- B. Franchisee shall conduct the day to day operations of the WBCF, including maintenance of the roads and daily maintenance of the buildings located on the site, in accordance with this Exhibit “J” and Franchisee’s Operation Plan; and
- C. Franchisee shall be responsible for the operations of the WBCF, including the on site inspection, sorting, acceptance or rejection of biosolids arriving at the WBCF, in accordance with all applicable statutes and regulations of all governmental regulatory agencies and Franchisee’s Operation Plan; and
- D. Franchisee shall cause the orderly unloading of City vehicles delivering City biosolids; and
- E. Franchisee shall cause all acceptable compostable waste to be placed into the WBCF and shall thereafter operate such WBCF in accordance with Franchisee’s Operation Plan and in conformance with all applicable statutes and regulations of all governmental regulatory agencies in order to derive a compost material from City biosolids that meets the Class A designation for pathogen reduction and also meets the vector attraction reduction requirements in accordance with Title 40 CFR 503 regulations; and
- F. Although City and Franchisee understand and agree that Franchisee is responsible for the day-to-day operations of the WBCF, Franchisee specifically agrees to comply with J1 (SOP) requirements.
- G. Franchisee agrees to process up to seven thousand (7,000) wet tons annually of dewatered biosolids (twelve to sixteen percent (12 – 16%) solids content) from City. At its sole discretion, City may arrange for other ~~producers~~~~generators~~ of biosolids to deliver to Franchisee, provided such other ~~producers~~~~generators~~ must comply with the terms and conditions of this Franchise. City must provide at least three (3) months prior written notice to Franchisee before delivery of biosolids from sources other than City. Due to the nature of Franchisee’s WBCF, this additional material will necessarily be mixed with City biosolids and yard waste.
- H. Franchisee shall not comingle food waste, biosolids, or other waste products generated from other sources with City biosolids without prior written approval from City. City may approve other sources, subject to appropriate additional sampling, if the WBCF has the capacity to process the additional sources of food waste or biosolids and to continue to provide City with its annual total seven thousand (7,000) wet tons annual capacity.
- I. Each comingled finished compost pile shall be identified by a numbering system and tracked until used or disposed. A comingled pile, once sampled, shall not have additional static or curing piles added unless sampling is repeated. A comingled pile, once sampled and shown to be in compliance, may have material removed from it.

No finished compost shall be stored more than two (2) years and each shall be land applied or used before the two (2) year period expires.

- J. Prior to distribution or use of the finished compost, Franchisee shall monitor the finished compost for suspected substances that could kill or hinder landscape or garden plants and shall report such results to City. If such suspected substances are present in the finished compost, Franchisee shall prevent the distribution and use of ~~the~~ such compost until specifically authorized by City to distribute and/or use such compost. Franchisee shall monitor for clopyralid, picloram and triclopyr and, if detected, such shall be managed as agreed to by City and Franchisee.
- K. City shall have the full and exclusive right to and ownership of all finished compost material produced pursuant to this Franchise Program, and shall have the sole right to monetary and other value, if any, received from the sale or distribution of said finished compost material. City shall have sole discretion of any and all uses of finished compost. Franchisee shall have access to twenty (20) percent, by volume, of finished compost needed for WBCF operations and WBCF on site use. City shall notify Franchisee at least seven (7) days prior to the date City needs finished compost and City shall thereafter be solely responsible for removing the finished compost from the WBCF within a ninety (90) day period to avoid additional bacterial regrowth testing. City and Franchisee agree that, according to 40 CFR 503 Rules, there are no labeling requirements for compost products designated as Class A Exceptional Quality products, and, therefore, such labeling shall not be required of Franchisee.

2.0 COMPLAINTS

All formal complaints regarding performance from any source shall be made through City to Franchisee. Franchisee will be given a reasonable period of time in writing to respond to such formal complaints. Failure of Franchisee to respond to formal complaints or to take action to remedy the condition creating the complaint shall be deemed to be a breach of this Franchise and shall be grounds for revocation of Exhibit "J" of this Franchise. All complaints made directly or indirectly to Franchisee shall be given prompt and courteous attention, including, but not limited to, those forwarded to Franchisee from City. A log of all such complaints shall be filed with City quarterly.

3.0 COMPENSATION

Franchisee shall be entitled to Franchisee's Annual Compensation for WBCF operations per contract year, as provided in Exhibit "G" and services shall be subject to Annual Modification to Fees, as provided in General Specifications, Section 18.2 of Exhibit "A".

City and Franchisee specifically agree that no biosolids accepted from City by Franchisee for processing at the WBCF pursuant to this Exhibit "J" shall be used or considered when calculating the Annual Tonnage Reimbursement in Section 7.4 of Exhibit "G" of the Franchise Agreement.

Franchisee's Annual Compensation is based upon Franchisee's obligation to process up to seven thousand (7,000) wet tons annually of dewatered biosolids from City or other ~~producers~~~~generators~~ arranged by City. —Franchisee's Annual WBCF Base Fee Compensation shall be paid to Franchisee in twelve (12) equal installments, to be paid on or before the tenth (10th) day of the following month. Franchisee's Annual WBCF Base Fee Compensation shall be paid as provided in Exhibit "G" as amended from time to time. Compensation for annual tonnage in excess of seven thousand (7000) wet tons shall be based on fees in Exhibit "G" on a per ton basis. Franchisee's Annual WBCF Compensation is also based on the assumption that City will not unreasonably restrict Franchisee's ability to obtain yard waste or other amendment necessary to process biosolids, as specified in Franchisee's Operation Plan. -If for any reason yard waste or other amendment necessary to process biosolids is restricted by City, Franchisee and City agree to renegotiate the Annual Compensation to account for the actual cost of obtaining an alternative supply of yard waste or similar materials necessary to process biosolids. No re-negotiation shall occur where yard waste or other amendment necessary to process biosolids is restricted for reasons other than at City's direction (e.g., act of God, unavailability, expense, regulation, rule change, etc.).

4.0 RECORD KEEPING AND REPORTING

- A. Franchisee shall be responsible for all record keeping of the WBCF, including, but not limited to, records related to operation of the WBCF and compliance with the terms of this Franchise, including Exhibit J1 (SOP). City shall be responsible for record keeping at City's wastewater treatment facility including, but not limited to, solids content and weight of each shipment of City biosolids delivered to the WBCF.
- B. City is required to submit an Annual Biosolids Report to the EPA by February 19th each year. Franchisee shall submit all records needed by City to complete City's report on or before January 15 following each year of the term of this Exhibit "J". Such annual report shall cover WBCF activities during the previous year and shall include the following information:
 - 1. —Name and address of the facility;
 - 2. —Calendar year covered by the report;
 - 3. —Annual quantities of municipal wastewater biosolids and bulking agent processed and composted biosolids product produced;
 - 4. —Results of required monitoring; and
 - 5. Summary of quarterly inspections done by City of the WBCF.
- C. All records created by, utilized by, or in the possession of Franchisee, shall be available for inspection by City and shall be subject to the Idaho Public Records Law, as amended. Franchisee shall make all documents (except financial) relating to biosolids composting available to City within two (2) working days of receiving written notice detailing the documents requested. Franchisee shall make available to

City financial documents limited to the capitalization of costs of improvements to the WBCF, including tax information and maintenance thereof within two (2) working days of receiving written notice detailing the request. This time period may be extended where extenuating circumstances exist.

- D. Franchisee agrees to supply to City all information and documentation contained in J1 (SOP) during the term of this Exhibit “J”. Failure to supply such information shall constitute a material breach of this Exhibit “J”.

5.0 POLICIES/PROCEDURES/SERVICE

- A. No decision made as to the method, nature, and extent of services provided shall be in conflict with 40 CFR Part 503 Rules, City’s NPDES permit, or J1 (SOP).
- B. Inspections.
 - 1. Franchisee shall allow City access to the WBCF during normal business hours.
 - 2. Quarterly compliance inspections shall occur as set out in J1 (SOP).
 - 3. City may provide for inspection by assistants or inspectors under its direction, of any and all work to be performed pursuant to this Exhibit “J”. Franchisee shall furnish City with all requested information relating to such work. City shall have the authority to suspend any work under this Exhibit “J” which is being improperly done.
 - 4. City reserves the right, at the sole cost of City, to arrange for third party, independent sampling and testing of biosolids material being processed at the WBCF. Franchisee shall allow reasonable access to WBCF by said third party to conduct sampling and testing at the request of City.
- C. It is expressly understood and agreed that all biosolids produced at City’s Wastewater Treatment facility shall be accepted at said WBCF, provided that fees associated with such acceptance are paid pursuant to this Exhibit “J”.
- D. Following the effective date of this Exhibit “J”, Franchisee agrees to comply with any and all changes to regulations to which it is subject. Compensation for such compliance, due only to changes in regulations, if any, shall be pursuant to General Specifications, Section 18.2.b. of Franchise Agreement Exhibit “A”.

6.0 INTERRUPTION OF SERVICE

City and Franchisee agree that the following terms and conditions shall apply to this Exhibit “J” and that this language shall replace terms and conditions of this Franchise Exhibit “A”: General Specifications, Section 17.0 for this Exhibit “J” only. Such change is not intended to and shall not alter this Franchise other than for purposes limited to this Exhibit “J”.

- A. Definitions: For the purposes of Section 6.0 of this Exhibit “J”, the following definitions shall apply:

"Interruption of service" shall mean: Any time period during which services by Franchisee are interrupted by a labor dispute, natural disaster, fire, or other action that results in WBCF services being discontinued or substantially reduced for a period of seven (7) consecutive days; or

Any time period after notice by City of the termination of Franchise by reason of breach or default by Franchisee and until other suitable services can be acquired by City.

- B. Back-Up Capacity Provided by Franchisee

Franchisee shall utilize its legally authorized capacity as a back-up facility in the event the main WBCF structure is not available, so as to avoid an interruption of service. In the event the entire WBCF is not available to avoid an interruption of service, Franchisee shall arrange for disposal of biosolids on a temporary basis at a landfill approved by state and local authorities to accept biosolids, and approved by City in writing, so as to avoid an interruption of service.

- C. Suspension of Payments to Franchisee

In the event of interruption of service, all payments to Franchisee for biosolids processing shall be suspended. All costs in excess of contractual fees associated with providing service during an interruption of services shall be borne by Franchisee, who shall relinquish all receipts from collection service during the period of interruption of service to City together with such additional funds as are necessary to satisfy Franchisee's obligation.

- D. Right to Contract With Others

City shall also have the right to contract with another organization to provide service in the event of an interruption of service by Franchisee.

7.0 EMPLOYEES AND EQUIPMENT

Franchisee shall be obligated to provide safe and operable equipment in the discharge of its duties pursuant to this Franchise. Franchisee and its employees shall discharge their duties in a competent and professional manner with due respect to the public. Franchisee shall employ no intemperate or incompetent employees in its discharge of its duties pursuant to this Franchise.

8.0 LIQUIDATED DAMAGES

Because City and Franchisee agree that actual damages that result from Franchisee's failure to continue services under this Exhibit "J" are difficult to determine, City and Franchisee agree that Franchisee shall pay a liquidated damage amount of two hundred thousand dollars (\$200,000) upon failure of Franchisee to provide services under this Exhibit "J" for any period of fifteen (15) days or more (unless otherwise allowed by the Franchise Agreement or this Exhibit "J").

9.0 INDEMNIFICATION

City and Franchisee agree that the following terms and conditions shall apply to this Exhibit "J" and that this language shall replace terms and conditions of Franchise Exhibit "A": General Specification, Section 4713.0 for this Exhibit "J" only. Such change is not intended to and shall not alter this Franchise other than for purposes limited to this Exhibit "J".

- A. ~~City shall hold Franchisee harmless and indemnify Franchisee for any liability or damages resulting from the intentional act, negligence, omission of City, its employees, agents, representatives and/or subcontractors pursuant to this Exhibit J. In addition, City shall hold harmless Franchisee for practices dictated to Franchisee by City in the operation of said WBCF including, but not limited to practices that result in the death or injury to any person, damage or destruction of property, contamination or adverse effects on the environment, or of any violation of statutes, rules or regulations of any governmental agency. Such agreement shall not, however, act to reduce Franchisee's liability and responsibility for damages for the intentional act, negligence or omission of Franchisee or its employees, agents and/or representatives in carrying out such practices. The City is a governmental entity subject to the statutory and constitutional restrictions concerning the acceptance of liability. The City's liabilities are further governed by the Idaho Tort Claims Act The City will be responsible for its own acts and omissions and those of its officers, employees and agents acting with the course and scope of their employment. The Parties understand that the Idaho Tort Claims Act, Idaho Code § 6-903 (2)(ii), states that the City's liability is secondary to the obligation of an insurer or indemnitor of any automobile or other vehicle not owned or leased by the City.~~
- B. Franchisee shall hold harmless and indemnify City for any liability and/or damages of any kind resulting from the intentional act, negligence or omission of Franchisee or its employees, agents or representatives, including, but not limited to, death or injury to any person, damage or destruction of property, contamination or adverse effects on the environment, or of any violation of statutes, rules or regulations of any governmental agency. Franchisee shall hold harmless and indemnify City for any and all liability resulting from, and for any and all damages of any type or nature, resulting from use by Franchisee, or any of its employees, of finished compost.
- C. If City is fined, penalized or otherwise punished by a State or Federal regulatory agency as a result of any intentional act, negligence, or omission of Franchisee or its

employees, agents, or representatives, including, but not limited to, death or injury to any person, damage or destruction of property, contamination or adverse effects on the environment, or any violations of statutes, rules or regulations of any governmental agency, Franchisee shall reimburse City for any such fine, penalty, or other punishment. Such failure to reimburse shall constitute a breach of this Exhibit “J”.

10.0 RENEWAL TERM

This Exhibit “J” shall expire on September 30, 2035.

~~City may, as provided in the Franchise Agreement, renew this Exhibit J for one (1) additional term of ten (10) years following the current ten (10) year term in accordance with the following:~~

~~A. At the end of the current ten (10) year term, City, if it exercises its rights to renew this Exhibit J, Franchisee's Annual Compensation and Franchisee's Additional Tonnage Compensation shall be adjusted and calculated on the basis of actual biosolids delivered in the tenth (10th) and final year of the current term; and the base fee will be assessed and re-evaluated on a per ton cost at the end of the ten (10) year term multiplied by the seven thousand (7000) tons or actual tons processed in the tenth (10th) year to reflect the actual service being provided.~~

~~B. If, after such renewal, in the event that City and Franchisee cannot come to an agreement as to Franchisee's Annual Compensation taking the foregoing into account, the Parties agree that such a dispute shall be subject to binding arbitration pursuant to the rules of the Uniform Arbitration Act. The Parties shall mutually select a disinterested, non-local arbitrator. The decision of the arbitrator shall be binding on both Parties. The non-prevailing Party, as determined by the arbitrator, shall pay all costs of the arbitration and the prevailing Party shall be awarded its reasonable costs and attorney's fees incurred in participating in such arbitration, which costs and attorney's fees shall be limited to ten thousand dollars (\$10,000).~~

11.0 FRANCHISEE TO FOLLOW CITY J1 (SOP)

In addition to any reporting, record keeping, operations plan, or other activities performed by Franchisee relative to the WBCF and processing of biosolids into compost, Franchisee shall perform all activities contained within J1 (SOP) or as further updated and revised throughout the term of this Exhibit “J”. City will notify Franchisee, in writing, not less than thirty (30) days prior of any changes made to J1 (SOP).

**FRANCHISE AGREEMENT EXHIBIT “J”
ATTACHMENT 1
WBCF COMPLIANCE INSPECTIONS
STANDARD OPERATING PROCEDURE
J1 (SOP)**

Purpose

The purpose of this Standard Operating Procedure (hereinafter “J1 (SOP)”) is to assist City of Moscow (CITY) staff with conducting and reporting quarterly compliance inspections at the LSI Wastewater Biosolids Composting Facility (WBCF). This SOP identifies the necessary information that must be documented by the WBCF and provided to the CITY to evaluate and determine compliance with Title 40 CFR Part 503 Rules, and to provide an opportunity for CITY and Franchisee to discuss issues regarding operations and compliance.

WBCF Inspection Procedures

A. Standard Compliance Inspection and Analysis

CITY staff will conduct standard compliance inspections on a quarterly basis, in accordance with the CITY Wastewater Biosolids Composting Facility (WBCF), to ensure compliance with Title 40 CFR Part 503 Rules as required by CITY’s NPDES permit. CITY shall evaluate, at a minimum, each of the following:

1. Daily Operation Records
 - a. Review Franchisee daily operation records for the dates and times for temperature and initial oxygen percentage measurements for each static pile, with a certification statement from appropriate authority, for further review.
 - b. Obtain from Franchisee weights and volume records of sewage sludge received.
2. Temperature and initial oxygen percentage Monitoring Locations
 - a. Evaluate whether representative measurements for temperature and initial oxygen percentage are being gathered and analyzed in accordance with 40 CFR 503 Rules. Where are measurements being taken, how many, and are they representative of the nature of the static piles?
 - b. Discuss and observe the consistency of collecting analytical data. Are there inconsistencies in the way data is collected?
3. Quality Assurance and Quality Control (QA/QC)
 - a. Review all QA/QC data from Franchisee for the prior three (3) month period including:

- (1) Calibration documentation for equipment used to determine compliance with temperature and initial oxygen percentage standards.
 - (2) Franchisee shall monitor multiple temperature probes at separate locations within each static pile and keep temperature records. Temperatures shall be recorded twice daily when variances occur.
 - (3) Chain of Custody forms.
 - (4) Laboratory information, including analytical techniques used for bacteria and metals analyses.
 - b. Discuss how Franchisee has dealt with piles that fail and documentation related to such failure(s).
4. Metals sampling analyses and results
 - a. Obtain metals sampling results.
 - b. Discuss if representative sampling of curing/finished piles (grab sampling vs. composite sampling) is occurring in accordance with 40 CFR 503 Rules. How are those sampling locations identified?
5. Bacteria re-growth sampling analyses and results
 - a. Obtain bacteriological (salmonella sp. or fecal coliform) sampling results.
 - b. Discuss if representative sampling of curing/finished piles is occurring (grab sampling vs. composite sampling) in accordance with 40 CFR 503 Rules. How are those sampling locations identified?
6. Evaluate how static and curing/finished piles are kept separate

Review Franchise records and observe how static piles and curing/finished piles are kept separate.
7. Evaluate Curing/Finished piles
 - a. Observe how curing/finished piles are labeled and documented to evaluate disposal within two (2) years from the creation of the static pile.
 - b. Specify final disposal of material derived from the process must be land applied within two years from the creation of the static pile.

B. Additional Inspection and Analysis

It will be at the professional discretion of the CITY staff to determine which conditions, in addition to the aforementioned conditions, are reviewed as part of the compliance inspection to ensure compliance with all applicable regulations.

Additionally, CITY staff may “spot check” the necessary equipment, logs, records, etc. in order to determine compliance with the 40 CFR 503 Rules. If the CITY’s spot check(s) reveal an

apparent inconsistency of an applicable requirement, CITY staff will conduct a more thorough review of Franchisee's WBCF information.

C. Inspection Reporting

CITY staff will record the findings and compliance determinations of their compliance inspection in a follow-up inspection report. The Inspection Report package, transmitted to appropriate CITY staff and Franchisee staff, shall include the following:

1. Inspection Report cover letter;
2. Complete Inspection Findings Report; and
3. Supporting documentation, as necessary.

In the event that CITY staff identifies pending and/or apparent inconsistencies/violations during the course of a compliance inspection and/or during the review of information provided by Franchisee, and/or identify operational issues, CITY staff will: 1) identify the pending/apparent inconsistencies/violations and/or issues in the Inspection Report Cover letter; 2) address the pending/apparent inconsistencies/violations and/or issues in an Inspection Findings Report; and 3) ensure that the issues identified in the report are addressed by Franchisee WBCF in a timely manner.

D. Non-compliance is a Material Breach

Failure of Franchisee to resolve inconsistencies in record keeping, reporting, or compliance with this SOP or 40 CFR Part 503 Rules shall be a material breach of Exhibit J.

/SW112612non

COMMITTEE / CITY COUNCIL STAFF REPORT

DATE: Monday, October 16, 2023



AGENDA ITEM TITLE

Moscow Police Department – Annual Small Grant Requests and Awards – Alisa Anderson

RESPONSIBLE STAFF

Alisa Anderson, Grants Manager

ADDITIONAL PRESENTER(S)

DESCRIPTION

The City of Moscow Police Department (MPD) applies for several small grants on an annual basis which assist the department with the purchase of equipment to include bullet proof vests, to host various traffic enforcement mobilizations and other prevention and safety activities. The grants awarded to MPD provide funding and resources to protect our youngest citizens, operational and personal safety equipment, and program support to implement and host multiple safety programs. These resources assist MPD in their mission of community-oriented policing to improve the quality of life for Moscow residents through community partnerships and problem-solving approaches, while also making sure the officers are outfitted and equipped with everything they need to safely do their jobs. These programs are described as follows:

The Bulletproof Vest Partnership (BVP), created by the BVP Grant Act of 1998 is a unique U.S. Department of Justice initiative designed to provide a critical resource to state and local law enforcement. Program recipients are provided an armor vest that is uniquely fitted for each officer to provide the best possible fit and coverage. Through this program, the MPD is awarded 50% reimbursement of up to 3 vests per year.

The Traffic Enforcement Grant through the Idaho Transportation Department (ITD) Office of Highway Safety (OHS) enables MPD to participate in local and statewide traffic enforcement mobilizations. The MPD can select from various High Visibility Enforcement (HVE) mobilizations focused on seatbelt compliance, impaired, aggressive or distracted driving which are held throughout the year, or apply for a mini-grant to host a specific mobilization during a local event to emphasize safety enforcement. The City is reimbursed for officer overtime plus a percent of benefits (regular time is not eligible) during the events. See attached Agreement and Risk Assessment required for execution in order to participate in these events.

The MPD also participates in a program hosted by the Idaho Office of Drug Policy through a Partnership for Success Law Enforcement grant aimed at preventing underaged drinking and drug use through compliance checks, interdiction activities, party patrols and shoulder tap operations. The MPD also works with the University of Idaho to provide educational presentations on topics related to the effects of marijuana, methamphetamine, and underage drinking. The MPD is reimbursed for staff time plus benefits for hours spent while performing a specific duty or educational presentation.

In conjunction with other state and law enforcement organizations and working with Latah County social service organizations, the MPD applies through the Walmart Foundation to receive funding to host an

annual event called “Shop with a Cop” in which officers provide a gift card purchased with grant funding to shop at Walmart with the selected children. An officer is matched with a child and gives them a Walmart gift card ranging from \$50 to \$75 to purchase gifts for their family and themselves for Christmas. Through other donations, the children are provided breakfast, then they shop with an officer and then gift wrap their presents with Walmart staff and other volunteers. The annual event hosts 12 to 20 children and families each December.

This item was reviewed by the Public Works/Finance Committee on October 9, 2023, and recommended for approval.

REVIEWED BY

Public Works/Finance Committee

PROPOSED ACTIONS

ACTION: Approve funding requests and awards for small grants applied for by the Moscow Police Department not to exceed a combined total of \$50,000 for the FY2024 fiscal year.

STAFF RECOMMENDATION

Approve funding requests and awards for small grants applied for by the Moscow Police Department not to exceed a combined total of \$50,000 for the FY2024 fiscal year.

OTHER RESOURCES

Not applicable.

FISCAL IMPACT

BVP program is 50% match and all others are in-kind or no match.

PERSONNEL IMPACT

Police, Grants and Finance Departments.

ATTACHMENTS

1. TEGPA FY24 and Attachments



IDAHO TRANSPORTATION DEPARTMENT OFFICE OF HIGHWAY SAFETY FFY 2024 Traffic Enforcement Grant Project Agreement (TEGPA)

This agreement for FFY 2024 is made and enter into by and between: (Agency Name)
_____, hereinafter referred to as “Contractor” and the Idaho Transportation
Department Office of Highway Safety, hereinafter referred to as “OHS” on the ____ day of _____,
20__.

IT IS THE PURPOSE OF THIS AGREEMENT to provide National Highway Traffic Safety Administration (NHTSA), funded assistance to the Contractor for participation in local and statewide traffic projects as specified in the Triennial Highway Safety Plan (3HSP) target focus areas for the following safety related activities:

- High visibility traffic enforcement (HVE) mobilization
- Mini-grants that support special emphasis traffic enforcement
- Mini-grants that support traffic enforcement equipment projects
- Mini-grants that support public participation and engagement (PP&E)
- Mini-grants that support traffic safety related training

THE GOAL OF THIS AGREEMENT is to establish project requirements and a funding process to support the efforts of the contractor to reduce deaths, serious injuries, and economic loss as established in the 3HSP.

It is, therefore, mutually agreed that:

1. Contractor will conduct traffic enforcement mobilizations and/or mini-grants in accordance with the criteria established by OHS, for each mobilization and/or traffic mini grant.
2. Contractor will provide a commissioned police officer (active or paid reserve) with appropriate equipment (vehicle, radar, etc.) under conditions identified under Part 5 of this agreement to enforce impaired driving, alcohol beverage control, distracted driving, aggressive driving, safety restraint, school zone violations, bicycle, pedestrian, motorcycle laws with emphasis as designated by OHS and/or crash problem identification.
3. Contractor and/or partnering enforcement agencies will publicize the enforcement effort to increase effectiveness by.
 - a. Working with the media to increase the awareness of enforcement efforts; and
 - b. Provide pre and post public outreach such as press releases, social media posts, or other messaging efforts. Make note of efforts on the Performance Report.
4. Contractor will take a zero tolerance for unbuckled passengers and children during all OHS funded mobilizations and mini grants.
5. Based on the availability of funding and by signing this agreement, Contractor agrees to support statewide highway safety public awareness campaigns and will accept the benefits of having the earned and paid media run in their local communities.
6. OHS will reimburse Contractor for traffic enforcement grant activities at the rate of up to 1.5 times the officer’s regular hourly rate plus Contractor’s contribution to employee benefits,

which are FICA/Medicare, unemployment, worker's compensation and PERSI. Agencies that use reservists may pay up to 1.5 times their documented established hourly rate for traffic enforcement grant activities.

- a. For this agreement, regular-on-duty personnel hours are not eligible for reimbursement (unless a pre-arranged agreement is made, or it is otherwise state in the Contractor policy.)
 - b. For this agreement, salaried positions are ineligible for reimbursement unless overtime is allowed and documented through Contractor policies.
 - c. Necessary additional dispatch service overtime may be reimbursed if requested prior to the grant activity.
7. Participation in future mobilizations and mini grants is contingent on at least satisfactory performance during the prior mobilization, as determined by OHS. MNTSA has published a guide that outlines specific strategies and countermeasures relevant to the focus areas.
8. Contractor must submit the following forms in accordance with OHS requirements:
 - a. Performance Reports – required to be completed and submitted via WebCars
 - i. Only the grant funded citations, warnings and contacts are required to be reported.
 - ii. Agencies are encouraged to conduct public participation and engagement along with outreach and report it in the Performance Reports.
 - b. Overtime Reimbursement Claim Form – complete and submit via WebCars.
 - i. The claim must be signed by an authorizing official whose signature can be verified through their individual login.
 - ii. The overtime claim must not be signed by anyone who worked the mobilization.
 - c. Payroll Register – Must be available for review upon request from OHS for the period claimed in the reimbursement claim.
 - i. Payroll verification may be computer generated payroll registers or copies of payroll warrants.
 - ii. Timesheets must be provided and are not considered payroll verification.
 - iii. When possible, payroll verification should be coded to differentiate between OHS grant funded overtime and other sources.
 - d. Contractor will submit reimbursement claim and performance reports withing 30 days of completion of the mobilization or grant activity. **Note:** Claims received after October 15th may not be eligible for reimbursement.
 - e. No documentation, reports or claims submitted to OHS may contain Contractor or its employees', agents or subcontractors' protected personally identifiable information (Protected PIII).
9. Assurances and other grant requirement require by NHTSA for all organizations receiving federal grant funds:
 - a. Attachment 1 - Agency Certification and Assurances FFY24
 - b. Attachment 2 – Risk Assessment (information provided by the Contractor's financial contact.)

10. Other Grant Requirements:

- a. Unique Entity Identifier (UEI)
 - i. The General Services Administration (GSA) requires federal funding recipients to have a UEI which is generated by SAM.gov, therefore recipients are to keep their registration current to ensure they receive their UEO.
 - ii. The Contractor agrees it shall maintain current registration in the System for Award Management, SAM.gov, at all times during which it has active federal awards.
 - iii. If the Contractor or its principals or affiliates is disbarred, suspended or ineligible from federal contracting, the Agreement may be terminated immediately.
- b. Personal Identifiable Information (PII) - as noted under 2 CFR Chapter 1, Chapter II, Part 200.79, 200.82, 200.303.
- c. Procurement of equipment and materials – equipment purchases shall be subject to requirements governing this agreement, including those for procurement of materials and leasing of equipment.
- d. Code of Conduct – No employee, officer or agent of the Contractor shall participate in the selection, award or administration of a contract supported by grant funds if a conflict of interest, real or apparent, would be involved. Such a conflict may arise when any of the following have a financial or other interest in the firm selected for award:
 - i. The employee, officer, or agent.
 - ii. Any member of his or her immediate family.
 - iii. His or her partner.
 - iv. An organization which employs or is about to employ any of the above listed.The contractor guarantees it has not entered into any form of collusion with anyone involving any form of payment, dependent upon or resulting from the award of this contract or subcontract(s).
- e. Conferences, inspection of work, grant monitoring – conferences may be held at the request of either party to this agreement. Conferences may be held in person or by virtual meeting. A representative of OHS and/or the US Department of Transportation (DOT) can conduct an onsite visit for the purpose of inspection and/or assessment of work being performed at any time.
- f. Travel – Grant related local vicinity travel, travel to other parts of the state, and travel outside the state must conform to state policies and procedures. Allowable reimbursements cannot be greater than those authorized for state employees and reimbursements will be made to the Contractor for grant project travel. State policy requires economical and practical modes of travel, as well as moderate dining and lodging.
- g. Tax and compensation liability – OHS will not incur any liability for workers compensation, FICA, withholding tax, unemployment compensation, or any other payment which is not a part of the grant agreement.
- h. Policy inclusion – to receive highway safety grant funds, OHS requires that the Contractor have a Seat Belt Use policy in effect or implement one prior to completion of the agreement. If requested OHS, Contractor will submit their policy to OPH prior to execution of the agreement.
- i. Responsibility for claims and liability – Contractor shall be required to save and hold harmless OHS, ITD, NHTSA, FHWA and US DOT from all claims and/or liability due to the

negligent acts of the Contractor or the Contractor's subcontractor(s), agents or employee(s).

- j. Failure to comply - with any terms of this agreement may jeopardize Contractor in receiving future funding from OHS.
- k. Eligible organizations – agree to indemnify, defend, and hold harmless ITD, its officers, agents, employees' from and against any and all claims, suits, losses, damages or costs, including reasonable attorney's fees arising from or by the use of grants.
- l. Any dispute, disagreement, or question of fact – concerning this agreement shall be decided by the OHS Highway Safety manager, OHS HSM. The decision shall be in writing and shall be distributed to the parties concerned. If the Contractor disagrees with the decision by the OHS Highway Safety Manager, the decision may be appealed to the Director of ITD. The appeal must be made in writing within 30 days of the OHS HSM decision and served by certified mail.
- m. Agreement including attachment – constitutes the entire agreement between the parties on the subject matter hereof. There are no understanding, agreements, or representations (oral or written), not specified herein regarding this agreement, shall bind either party unless in writing and signed by both parties and all necessary approvals have been obtained.
- n. Nothing in this agreement – shall be construed as limiting or expanding the statutory or regulatory responsibilities of any involved agency or individual in performing functions granted to them by law; or as requiring either entity to expend any sum in excess of its respective appropriation. Each provision to this agreement is subject to the laws and regulations of the State of Idaho and the United States.
- o. Either party may terminate – this agreement upon 30 days written notice to the other party. In the event of termination of this agreement, the terminating party shall be liable for the performance rendered prior to the effective date of termination.
- p. The parent entity for this contractor – certifies that it conducts an annual audit in accordance to, 2CFR part 200 Subpart F, which is available for review upon request. In addition, this contractor has no financial or compliance issues.

Agency Primary Contact (Required) *(Individual with signing authority for the Contractor)*

Name	
Title	
WebCar Account: Yes/No	
Phone	
Email Address	
Contractor Physical Address	
Warrant Mailing Address	
UEI (Unique Entity Identifier)	
*Benefit Percentage Rate for Overtime	
Parent Entity Name (if applicable)	

**Benefit includes FICA/Medicare, unemployment, worker's compensation, and PERSI – is usually not more than 24%*

Contractor Grant Manager Contact (Required) *(Individual who manages day-to-day grant activities)*

Name	
Title	
WebCar Account: Yes/No	
Phone	
Email Address	

Additional Agency Contact (Optional) *(Individual who will act as a backup for day-to-day grant activities.)*

Name	
Title	
WebCar Account: Yes/No	
Phone	
Email Address	

Financial Contact (Required) *(individual who is the financial is responsible for claims and finances.)*

Name	
Title	
WebCar Account: Yes/No	
Organization	
Phone	
Email Address	

Contractor's Agent

Contractor Authorizing Signature: *(Individual with legal authorization to enter into agreement with the ITD on behalf of the contractor.)*

Print Name:

Title: Date:

State's Agent, OHS

Josephine Middleton, Highway Safety Manager

Date:

Appendix A to Part 1300--Certifications and Assurances for Highway Safety Grants

GENERAL REQUIREMENTS

The State will comply with applicable statutes and regulations, including but not limited to:

- 23 U.S.C. Chapter 4-Highway Safety Act of 1966, as amended.
- Sec. 1906, Public Law 109-59, as amended by Sec. 25024, Public Law 117-58.
- 23 CFR part 1300-Uniform Procedures for State Highway Safety Grant Programs.
- 2 CFR part 200-Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.
- 2 CFR part 1201-Department of Transportation, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

INTERGOVERNMENTAL REVIEW OF FEDERAL PROGRAMS

The State has submitted appropriate documentation for review to the single point of contact designated by the Governor to review Federal programs, as required by Executive Order 12372 (Intergovernmental Review of Federal Programs).

FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY ACT (FFATA)

The State will comply with FFATA guidance, *OMB Guidance on FFATA Subaward and Executive Compensation Reporting*, August 27, 2010, (https://www.fsrs.gov/documents/OMB_Guidance_on_FFATA_Subaward_and_Executive_Compensation_Reporting_08272010.pdf) by reporting to FSRS.gov for each sub-grant awarded:

- Name of the entity receiving the award.
- Amount of the award.
- Information on the award including transaction type, funding agency, the North American Industry Classification System code or Catalog of Federal Domestic Assistance number (where applicable), program source.
- Location of the entity receiving the award and the primary location of performance under the award, including the city, State, congressional district, and country; and an award title descriptive of the purpose of each funding action.
 - o Unique entity identifier (generated by **SAM.gov**).
- The names and total compensation of the five most highly compensated officers of the entity if:
 - (i) the entity in the preceding fiscal year received-
 - (I) 80 percent or more of its annual gross revenues in Federal awards.
 - (II) \$25,000,000 or more in annual gross revenues from Federal awards; and
 - (ii) the public does not have access to information about the compensation of the senior executives of the entity through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the

- Internal Revenue Code of 1986;
- Other relevant information specified by OMB guidance.

NONDISCRIMINATION

(applies to subrecipients as well as States)

The State highway safety agency [and its subrecipients] will comply with all Federal statutes and implementing regulations relating to nondiscrimination ("Federal Nondiscrimination Authorities"). These include but are not limited to:

- Title VI of the Civil Rights Act of 1964 ([42 U.S.C. 2000d](#) et seq., 78 stat. 252), (prohibits ++discrimination on the basis of race, color, national origin).
- [49 CFR part 21](#) (entitled Non-discrimination in Federally-Assisted Programs o f the Department of Transportation Education of Title VI of the Civil Rights Act of 1964);
- [28 CFR 50.3](#) (U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964);
- the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. ([42 U.S.C. 4601](#)), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 USC 324 et seq.). and Title IX of the Education Amendments of 1972, as amended ([20 U.S.C. 1681-1683](#) and [1685-1686](#)) (prohibit discrimination on the basis of sex).
- Section 504 of the Rehabilitation Act of 1973. ([29 U.S.C. 794](#) el seq.), as amended, (prohibits discrimination on the basis of disability) and [49 CFR part 27](#).
- The Age Discrimination Act of 1975. as amended, ([42 U.S.C. 6101](#) et seq.), (prohibits discrimination on the basis of age).
- The Civil Rights Restoration Act of 1987, (Pub. L. 100-209), (broadens scope, coverage, and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal aid recipients, subrecipients and contractors, whether such programs or activities are Federally-funded or not);
- Titles II and III c (the Americans with Disabilities Act ([42 U.S.C. 12131-12189](#)) (prohibits discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing) and [49 CFR parts 37](#) and [38](#).
- [Executive Order 12898](#), Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (preventing discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations).

- [Executive Order 13166](#), Improving Access to services for Persons with Limited English Proficiency (requiring that recipients of Federal financial assistance provide meaningful access for applicants and beneficiaries who have limited English proficiency (LEP)).
- [Executive Order 13985](#), Advancing Racial Equity and Support for Underserved Communities through the Federal Government (advancing equity across the Federal Government); and
- [Executive Order J3988](#), Preventing and Combating Discrimination on the Basis of Gender Identity or Sexual Orientation (clarifying that sex discrimination includes discrimination on the grounds of gender identity or sexual orientation).

The preceding statutory and regulatory cites hereinafter are referred to as the "Acts" and "Regulations," respectively.

GENERAL ASSURANCES

In accordance with the Acts, the Regulations, and other pertinent directives, circulars, policy, memoranda, and/or guidance, the Recipient hereby gives assurance that it will promptly take any measures necessary to ensure that:

"No person in the United States shall, on the grounds of race, color, or national origin, be excluded, from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity, for which the Recipient receives Federal financial assistance, from DOT including NHISA"

The Civil Rights Restoration Act of 1987 clarified the original intent of Congress, with respect to Title VI of the Civil Rights Act of 1964 and other non-discrimination requirements (the Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973), by restoring the broad, institutional-wide scope and coverage of these nondiscrimination statutes and requirements to include all programs and activities of the Recipient, so long as any portion of the program is Federally assisted.

SPECIFIC ASSURANCES

More specifically, and without limiting the above general Assurance, the Recipient agrees with and gives the following Assurances with respect to its Federally assisted Highway Safety Grant Program:

1. The Recipient agrees that each "activity," "facility," or "program," as defined in § 21.23(b) and (e) of [49 CFR part 21](#) will be (with regard to an "activity") facilitated, or will be (with regard to a "facility") operated, or will be (with regard to a "program") conducted in compliance with all requirements imposed by, or pursuant to the Acts and the Regulations.

2. The Recipient will insert the following notification in all solicitations for bids, Requests For Proposals for work, or material subject to the Acts and the Regulations made in connection with all Highway Safety Grant Programs and, in adapted form, in all proposals for negotiated agreements regardless of funding source:
“The [name of Recipient, in accordance with the provisions of Title V 1 of the Civil Rights Act 1964 (78 Stat. 252. 42 USC 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantage business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.”
3. The Recipient will insert the clauses of appendix A and E of this Assurance (also referred to as DOT Order 1050.2A) Win every contract or agreement subject to the Acts and the Regulations.
4. The Recipient will insert the clauses of appendix B of DOT Order 1050.2A, as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a Recipient.
5. That where the Recipient receives Federal financial assistance to construct a facility, or part of a facility, the Assurance will extend to the entire facility and facilities operated in connection therewith.
6. That where the Recipient receives Federal financial assistance in the form of, or for the acquisition of, real property or an interest in real property, the Assurance will extend to rights to space on, over, or under such property.
7. That the Recipient will include the clauses set forth in appendix C and appendix D of this DOT Order 1050.2A, as a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the Recipient with other parties:
 - a. for the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
 - b. for the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.
8. That this Assurance obligates the Recipient for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the Assurance obligates the Recipient, or any transferee for the longer of the following periods:
 - a. the period during which the property is used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits; or
 - b. the period during which the Recipient retains ownership or possession of the property.

9. The Recipient will provide for such methods of administration for the program as are found by the Secretary of Transportation or the official to whom he/she delegates specific authority to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the Acts, the Regulations, and this Assurance.
10. The Recipient agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the Acts, the Regulations, and this Assurance.

By signing this ASSURANCE, the State highway safety agency also agrees to comply (and require any sub-recipients, sub-grantees, contractors, successors, transferees, and/or assignees to comply) with all applicable provisions governing NHTSA's access to records, accounts, documents, information, facilities, and staff. You also recognize that you must comply with any program or compliance reviews, and/or complaint investigations conducted by NHTSA. You must keep records, reports, and submit the material for review upon request to NHTSA, or its designee in a timely, complete, and accurate way. Additionally, you must comply with all other reporting, data collection, and evaluation requirements, as prescribed by law or detailed in program guidance.

The State highway safety agency gives this ASSURANCE in consideration of and for obtaining any Federal grants, loans, contracts, agreements, property, and/or discounts, or other Federal-aid and Federal financial assistance extended after the date hereof to the recipients by the U.S. Department of Transportation under the Highway Safety Grant Program. This ASSURANCE is binding on the State highway safety agency, other recipients, sub-recipients, sub-grantees, contractors, subcontractors and their subcontractors', transferees, successors in interest, and any other participants in the Highway Safety Grant Program. The person(s) signing below is/are authorized to sign this ASSURANCE on behalf of the Recipient.

THE DRUG-FREE WORKPLACE ACT OF 1988 (41 U.S.C. 8103)

The State will provide a drug-free workplace by:

- a. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition.
- b. Establishing a drug-free awareness program to inform employees about:
 1. The dangers of drug abuse in the workplace.
 2. The grantee's policy of maintaining a drug-free workplace; Any available drug counseling, rehabilitation, and employee assistance programs.
 3. The penalties that may be imposed upon employees for drug violations occurring in the workplace.
 4. Making it a requirement that each employee engaged in the performance of

- the grant be given a copy of the statement required by paragraph (a).
- c. Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will-
 1. Abide by the terms of the statement.
 2. Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction.
 - d. Notifying the agency within ten days after receiving notice under subparagraph (c)(2) from an employee or otherwise receiving actual notice of such conviction.
 - e. Taking one of the following actions, within 30 days of receiving notice under subparagraph (c)(2), with respect to any employee who is so convicted-
 1. Taking appropriate personnel action against such an employee, up to and including termination.
 2. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.
 - f. Making a good faith effort to continue to maintain a drug-free workplace through implementation of all the paragraphs above.

POLITICAL ACTIVITY (HATCH ACT)

(applies to subrecipients as well as States)

The State will comply with provisions of the Hatch Act ([5 U.S.C. 1501-1508](#)), which limits the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

CERTIFICATION REGARDING FEDERAL LOBBYING

(applies to subrecipients as well as States)

CERTIFICATION FOR CONTRACTS, GRANTS, LOANS, AND COOPERATIVE AGREEMENTS

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement;
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a

Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions;

3. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grant, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31,

U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

RESTRICTION ON STATE LOBBYING

(applies to subrecipients as well as States)

None of the funds under this program will be used for any activity specifically designed to urge or influence a State or local legislator to favor or oppose the adoption of any specific legislative proposal pending before any State or local legislative body. Such activities include both direct and indirect (*e.g.*, "grassroots") lobbying activities, with one exception. This does not preclude a State official whose salary is supported with NHTSA funds from engaging in direct communications with State or local legislative officials, in accordance with customary State practice, even if such communications urge legislative officials to favor or oppose the adoption of a specific pending legislative proposal.

CERTIFICATION REGARDING DEBARMENT AND SUSPENSION

(applies to subrecipients as well as States)

INSTRUCTIONS FOR PRIMARY TIER PARTICIPANT CERTIFICATION (STATES)

1. By signing and submitting this proposal, the prospective primary tier participant is providing the certification set out below and agrees to comply with the requirements of / [CFR parts 180](#) and [1200](#).
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective primary tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary tier participant to furnish a certification or an explanation shall disqualify such person from

participation in this transaction.

3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default or may pursue suspension or debarment.
4. The prospective primary tier participant shall provide immediate written notice to the department or agency to which this proposal is submitted if at any time the prospective primary tier participant learns its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms **covered transaction, civil judgment, debarment, suspension, ineligible, participant, person, principal, and voluntarily excluded**, as used in this clause, are defined in [2 CFR parts 180](#) and [1200](#). You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
6. The prospective primary tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under [48 CFR part 9. subpart 9.4](#), debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
7. The prospective primary tier participant further agrees by submitting this proposal that it will include the clause titled "Instructions for Lower Tier Participant Certification" including the "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions and will require lower tier participants to comply with [2 CFR parts 180](#) and [1200](#).
8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under [48 CFR part 9. subpart 9.4](#), debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any prospective lower tier participants, each participant may, but is not required to, check the System for Award Management Exclusions website (<https://1.11www.sam.gov/>).
9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this

clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a participant **in** a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under [48 CFR part 9, subpart 9.4](#), suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate the transaction for cause or default.

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY

INSTRUCTIONS FOR LOWER TIER PARTICIPANT CERTIFICATION

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below and agrees to comply with the requirements of [2 CFR parts 180](#) and [1200](#).
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, **in** addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms **covered transaction, civil judgment, debarment, suspension, ineligible, participant, person, principal, and voluntarily excluded**, as used in this clause, are defined in [2 CFR parts 180](#) and [1200](#). You may contact the person to whom this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under [48 CFR part 9, subpart 9.4](#), debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this proposal that it will include the clause titled "Instructions for Lower Tier Participant Certification" including the "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all

lower tier covered transactions and in all solicitations for lower tier covered transactions and will require lower tier participants to comply with [2 CFR parts 180 and 1200](#).

7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under [48 CFR part 9, subpart 9.4](#), debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any prospective lower tier participants, each participant may, but is not required to, check the System for Award Management Exclusions website <https://www.sam.gov> (
(
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under [48 CFR part 9, subpart 9.4](#), suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension or debarment.

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION-LOWER TIER COVERED TRANSACTIONS

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

BUY AMERICA

(applies to subrecipients as well as States)

The State and each subrecipient will comply with the Buy America requirement ([23 U.S.C. 313](#)) when purchasing items using Federal funds. Buy America requires a State, or subrecipient, to purchase with Federal funds only steel, iron and manufactured products produced in the

United States, unless the Secretary of Transportation determines that such domestically produced items would be inconsistent with the public interest, that such materials are not reasonably available and of a satisfactory quality, or that inclusion of domestic materials will increase the cost of the overall project contract by more than 25 percent. In order to use Federal funds to purchase foreign produced items, the State must submit a waiver request that provides an adequate basis and justification for approval by the Secretary of Transportation.

CERTIFICATION ON CONFLICT OF INTEREST

(applies to subrecipients as well as States)

GENERAL REQUIREMENTS

No employee, officer, or agent of a State or its subrecipient who is authorized in an official capacity to negotiate, make, accept, or approve, or to take part in negotiating, making, accepting, or approving any subaward, including contracts or subcontracts, in connection with this grant shall have, directly or indirectly, any financial or personal interest in any such subaward. Such a financial or personal interest would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or personal interest in or a tangible personal benefit from an entity considered for a subaward. Based on this policy:

1. The recipient shall maintain a written code or standards of conduct that provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents.
 - a. The code or standards shall provide that the recipient's officers, employees, or agents may neither solicit nor accept gratuities, favors, or anything of monetary value from present or potential sub awardees, including contractors or parties to subcontracts.
 - b. The code or standards shall establish penalties, sanctions, or other disciplinary actions for violations, as permitted by State or local law or regulations.
2. The recipient shall maintain responsibility to enforce the requirements of the written code or standards of conduct.

DISCLOSURE REQUIREMENTS

No State or its subrecipient, including its officers, employees, or agents, shall perform or continue to perform under a grant or cooperative agreement, whose objectivity may be impaired because of any related past, present, or currently planned interest, financial or otherwise, in organizations regulated by **NHTSA** or in organizations whose interests may be substantially affected by NHTSA activities. Based on this policy:

1. The recipient shall disclose any conflict of interest identified as soon as reasonably possible, making an immediate and full disclosure in writing to NHTSA. The disclosure

shall include a description of the action which the recipient has taken or proposes to take to avoid or mitigate such conflict.

2. NHTSA will review the disclosure and may require additional relevant information from the recipient. If a conflict of interest is found to exist, NHTSA may (a) terminate the award, or (b) determine that it is otherwise in the best interest of NHTSA to continue the award and include appropriate provisions to mitigate or avoid such conflict.
3. Conflicts of interest that require disclosure include all past, present, or currently planned organizational, financial, contractual, or other interest(s) with an organization regulated by NHTSA or with an organization whose interests may be substantially affected by NHTSA activities, and which are related to this award. The interest(s) that require disclosure include those of any recipient, affiliate, proposed consultant, proposed subcontractor, and key personnel of any of the above. Past interest shall be limited to within one year of the date of award. Key personnel shall include any person owning more than a 20 percent interest in a recipient, and the officers, employees or agents of a recipient who are responsible for making a decision or taking an action under an award where the decision or action can have an economic or other impact on the interests of a regulated or affected organization.

PROHIBITION ON USING GRANT FUNDS TO CHECK FOR HELMET USAGE

(applies to subrecipients as well as States)

The State and each subrecipient will not use 23 U.S.C. Chapter 4 grant funds for programs to check helmet usage or to create checkpoints that specifically target motorcyclists.

POLICY ON SEAT BELT USE

In accordance with [Executive Order 13043](#), Increasing Seat Belt Use in the United States, dated April 16, 1997, the Grantee is encouraged to adopt and enforce on-the-job seat belt use policies and programs for its employees when operating company-owned, rented, or personally-owned vehicles. The National Highway Traffic Safety Administration (NHTSA) is responsible for providing leadership and guidance in support of this Presidential initiative. For information and resources on traffic safety programs and policies for employers, please contact the Network of Employers for Traffic Safety (NETS), a public-private partnership dedicated to improving the traffic safety practices of employers and employees. You can download information on seat belt programs, costs of motor vehicle crashes to employers, and other traffic safety initiatives at www.trafficsafety.org. The NHTSA website (www.nhtsa.gov) also provides information on statistics, campaigns, and program evaluations and references.

POLICY ON BANNING TEXT MESSAGING WHILE DRIVING

In accordance with [Executive Order 13513](#), Federal Leadership On Reducing Text Messaging While Driving, and DOT Order 3902.10, Text Messaging While Driving, States are encouraged to adopt and enforce workplace safety policies to decrease crashes caused by distracted

driving, including policies to ban text messaging while driving company-owned or rented vehicles, Government-owned, leased or rented vehicles, or privately-owned vehicles when on official Government business or when performing any work on or behalf of the Government. States are also encouraged to conduct workplace safety initiatives in a manner commensurate with the size of the business, such as establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving, and education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

SECTION 402 REQUIREMENTS

1. To the best of my personal knowledge, the information submitted in the Highway Safety Plan in support of the State's application for a grant under 23 U.S.C. 402 is accurate and complete.
2. The Governor is the responsible official for the administration of the State highway safety program, by appointing a Governor's Representative for Highway Safety who shall be responsible for a State highway safety agency that has adequate powers and is suitably equipped and organized (as evidenced by appropriate oversight procedures governing such areas as procurement, financial administration, and the use, management, and disposition of equipment) to carry out the program. (23 U.S.C. 402(b)(1)(A))
3. The political subdivisions of this State are authorized, as part of the State highway safety program, to carry out within their jurisdictions local highway safety programs which have been approved by the Governor and are in accordance with the uniform guidelines promulgated by the Secretary of Transportation. (23 U.S.C. 402(b)(1)(B))
4. At least 40 percent of all Federal funds apportioned to this State under 23 U.S.C. 402 for this fiscal year will be expended by or for the benefit of political subdivisions of the State in carrying out local highway safety programs (23 U.S.C. 402(b)(1)(C)) or 95 percent by and for the benefit of Indian tribes (23 U.S.C. 402(h)(2)), unless this requirement is waived in writing. (This provision is not applicable to the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.)
5. The State's highway safety program provides adequate and reasonable access for the safe and convenient movement of physically handicapped persons, including those in wheelchairs, across curbs constructed or replaced on or after July 1, 1976, at all pedestrian crosswalks. (23 U.S.C. 402(b)(1)(D))
6. The State will provide for an evidenced-based traffic safety enforcement program to prevent traffic violations, crashes, and crash fatalities and injuries in areas most at risk for such incidents. (23 U.S.C. 402(b)(1)(E))
7. The State will implement activities in support of national highway safety goals to reduce motor vehicle related fatalities that also reflect the primary data-related crash factors within the State, as identified by the State highway safety planning process, including:
 - a. Participation in the National high-visibility law enforcement mobilizations as identified

annually in the NHTSA Communications Calendar, including not less than 3 mobilization campaigns in each fiscal year to –

- i. Reduce alcohol-impaired or drug-impaired operation of motor vehicles; and
 - ii. Increase use of seat belts by occupants of motor vehicles.
 - b. Sustained enforcement of statutes addressing impaired driving, occupant 10 protection, and driving more than posted speed limits.
 - c. An annual Statewide seat belt use survey in accordance with 23 CFR part 1340 for the measurement of State seat belt use rates, except for the Secretary of Interior on behalf of Indian tribes.
 - d. Development of Statewide data systems to provide timely and effective data analysis to support allocation of highway safety resources.
 - e. Coordination of Highway Safety Plan, data collection, and information systems with the State strategic highway safety plan, as defined in 23 U.S.C. 148(a). (23 U.S.C. 402(b)(1)(F))
8. The State will actively encourage all relevant law enforcement agencies in the State to follow the guidelines established for vehicular pursuits issued by the International Association of Chiefs of Police that are currently in effect. (23 U.S.C. 402(j))
9. The State will not expend Section 402 funds to carry out a program to purchase, operate, or maintain an automated traffic enforcement system. (23 U.S.C. 402(c)(4))

I understand that my statements in support of the State's application for Federal grant funds. I sign these Certifications and Assurances based on personal knowledge, and after appropriate inquiry.

Signature, Contractor Representative _____ **Date:** _____

Printed name of Contractor Representative: _____

Subrecipient Financial Risk Assessment FY24

Instructions: Subrecipient must provide information for areas in blue only.

Subrecipient Name:		Project:			
		Award Period:			
	Topic	Yes	No	NA	Comments
A.	Financial Information (Information under Section A must be provided by the Financial Contact for the Subrecipient)				
1	Did the Subrecipient's Parent Entity (City or County) expend more than \$750,000 in federal funding during the previous fiscal year ? If yes , please complete Comments section to indicate whether a single audit through the Federal Audit Clearinghouse (FAC) was conducted in accordance with 2 CFR 200.514. <i>Attach audit summary pages (if applicable).</i>				Amount of Federal Funding Expended \$ _____ Year 20 _____ Audit submitted to FAC? Yes / No Year Audit Completed : _____
2	If the Subrecipient's prior year financial audit did not have any material finding(s) that will affect ITD, check Yes. (If the answer is No, the subrecipient must indicate if when they were resolved.) <i>Attach a copy of pages showing results and correction plan (if applicable).</i>				Findings: Yes / No Page# _____ Summary pages attached: _____ Findings Resolved: Yes/ No Date: _____
3	Subrecipient shall provide an active Unique Entity Identifier* (UEI) .				UEI # _____ Expiration Date _____
4	Subrecipient agrees to provide timesheets and payroll verification showing overtime was paid on grant-funded activity upon request by OHS.				
5	The Subrecipient agrees to retain documentation records for grant funded activities for up to three years for monitoring by OHS.				
B.	Organization & Grant Management				
1	Has the subrecipient's organization remained unchanged during the previous year ? (i.e. Chief, Sheriff, management staff)				
2	Is the subrecipient's grant management and accounting system the same as the previous year? If not, please explain.				
3	Subrecipient agrees to provide contact/citation activity and mileage logs upon request by OHS.				
4	Subrecipient is aware that equipment purchased through OHS grant funds must be made available for up to three years for inspection.				
Signature on original required by the Parent Entity Financial Contact					
The information above is accurate to the best of my knowledge.		*Unique Entity Identifier (UEI) is now required instead of the DUNS or CAGE numbers, the UEI is available from www.SAM.gov			
Signature:		Date:		Print Name:	
To be completed by The Office of Highway Safety		Yes	No	NA	
C.	Experience				
1	Does the recipient have experience with the same or similar grants?				
2	Has the subrecipient had at least three years of experience with federal grants?				
3	Did the subrecipient consistently and accurately submit their claims and reports on time?				
4	Was payroll and timesheet documentation provided upon request the previous FY? Were there any issues identified?				
TOTALS					
Risk Score:					
Rating Scale (Based on the number of No's)					
0 - 2	Subrecipient is considered low risk.	Low Risk		Provide standard monitoring	
3 - 6	Subrecipient is considered medium risk.	Medium Risk		Provide additional monitoring including training is warranted.	
7 - 10	Subrecipient is considered high risk.	High Risk		Provide close monitoring, training and action if required.	
General overview of Subrecipient performance:					
Commendations, problems or concerns:					
Corrective action necessary:					
OHS Reviewer:		Date:			

COMMITTEE / CITY COUNCIL STAFF REPORT

DATE: Monday, October 16, 2023



AGENDA ITEM TITLE

Moscow Police Department – Office of Highway Safety Grant Award – Alisa Anderson

RESPONSIBLE STAFF

Alisa Anderson, Grants Manager

ADDITIONAL PRESENTER(S)

DESCRIPTION

The Moscow Police Department (MPD) has been awarded a grant from the Idaho Traffic Safety Commission (ITSC) for the Federal Fiscal Year (FFY) 2024 Highway Safety Grant. This grant award was previously referred to as the Selective Traffic Enforcement Program (STEP). The MPD submitted the grant request in February 2023 to the Office of Highway Safety (OHS). The grant was included in the Idaho Annual Grant Application to the National Highway Traffic Safety Administration (NHTSA) and approved by the Idaho Transportation Department (ITD) in June 2023. A copy of the award letter is included with this report.

The MPD has participated in this program since October 2021 receiving three prior awards. The program addresses specific behaviors related to traffic safety priority areas and safety deficiencies within local law enforcement jurisdictions and is focused on combatting traffic crashes resulting in fatal and serious injuries. The grant reimburses for law enforcement officer's time dedicated to traffic enforcement to include problem identification, a project plan including objectives, performance measures and safety focused targets. The MPD employs a dedicated traffic enforcement officer; however, the department has formed a "Traffic Enforcement Team" to fulfill the grant requirements for this program. The grant award period is from October 1, 2023 through September 30, 2024. The funding will reimburse for wages and fringe benefits for regular patrol officer wages, and/or overtime, travel, contractual services, training, equipment and consumables. Patrol officer wages can also include hours spent providing public education, distribution of educational materials, and outreach efforts to create a general deterrence toward crash-causing behavior. The MPD has been awarded \$75,000 grant funding with an in-kind match of \$18,750. This item was reviewed by the Public Works/Finance Committee on October 9, 2023, and recommended for approval.

REVIEWED BY

Public Works/Finance Committee

PROPOSED ACTIONS

ACTION: Approve the Moscow Police Department to accept an award for the Office of Highway Safety Grant FFY 2024 for \$75,000 with an in-kind match of \$18,750.

STAFF RECOMMENDATION

Approve the Moscow Police Department to accept an award for the Office of Highway Safety Grant FFY 2024 for \$75,000 with an in-kind match of \$18,750.

OTHER RESOURCES

Not applicable.

FISCAL IMPACT

In-kind match of \$18,750 which can include mileage, hard costs, and overtime (not included in other grant programs) allocated to traffic patrols for special events held in Moscow to address program specific safety goals.

PERSONNEL IMPACT

Police, Grants and Finance Departments

ATTACHMENTS

1. 1. Moscow PD OHS Enforcement Award Letter
2. 2. ITD 667A Agreement
3. 3. Attachment 1 - Certification and Assurances



**Your Safety • Your Mobility
Your Economic Opportunity**

IDAHO TRANSPORTATION DEPARTMENT

P.O. Box 7129 • Boise, ID 83707-1129

(208) 334-8000 • itd.idaho.gov

September 20, 2023

Lt. Roger Lanier
Moscow Police Department
155 Southview Ave
Moscow, ID 83843

RE: OFFICE of HIGHWAY SAFETY GRANT FFY 2024

Dear Lt Lanier,

In February 2023 the Office of Highway Safety (OHS) received your grant application for the Federal Fiscal Year (FFY) 2024 highway safety grant. The application has been reviewed and was recommended for approval by the Idaho Traffic Safety Commission (ITSC). The grant was included in the Idaho Annual Grant Application to NHTSA (National Highway Traffic Safety Administration) and approved by the Idaho Transportation Board June 2023.

This agreement is funded under the NHTSA Bipartisan Infrastructure Law (BIL) grant program. Funding of this agreement is dependent upon the availability of federal funds as appropriated and obligated by the US Department of Transportation for FFY 2024.

The Federal Fiscal Year 2024 is October 1, 2023 through September 30, 2024. You will receive a formal grant agreement for your signature along with the associated documents. Once the documents are fully executed, and a pre-grant conference has been held, you will receive a Notice to Proceed at which time funds from the awarded grant may be expended.

The Office of Highway Safety appreciates your request and all that the Moscow Police Department does to keep Idaho's roads safe.

Sincerely,

Denise Dinnauer
Grants/Contracts Officer

cc:
Alisa J. Anderson
Eric Warren

Project Name: Moscow Police Department - Enforcement

State Project: SPT2403

Funding: \$75,000

Match: \$18,750

CFDA (Catalog Federal Domestic Assistance): 20.600

**FAIN (Federal Award Identification Number):
69A375243000040201D0**

OFFICE OF HIGHWAY SAFETYMoscow Police Department – Selective Traffic Enforcement Program (STEP)

NHTSA Federal Project ID: 20.600

State Program Number: SPT2403

PROBLEM STATEMENT

The Idaho Transportation Department, Office of Highway Safety (OHS) is committed to the elimination of deaths and serious injuries on Idaho's roads. To make progress toward the goal of "Toward Zero Deaths" OHS will provide federal funding to state, county and local law enforcement agencies and use funds directly based on the following identified highway safety problems.

Program Area: Traffic Enforcement Services

Countermeasure Strategies: Per the "Countermeasures that work...for State Highway Safety Offices" high-visibility enforcement campaigns for speeding and aggressive driving produce safety-related benefits. Effective countermeasures include: Outreach and Education, CH 3-4.1***, Officer Training and Traffic Law Enforcement: Uniform Guidelines No. 15, III

Performance Target: Maintain the 5-year average number of traffic crash fatalities at 238 or fewer and the number of speed fatalities to 42 or fewer.

2022 Population (in 1,000's)	Number of Crashes			Number of Persons		Fatal and Injury Crash Rate per 1,000 population
	Total	Fatal	Injury	Killed	Injured	
26.2	206	0	54	0	64	2.1

(Source: Idaho 2022 Crash Report)

2018-2022

- 80% of all Fatal Crashes are Impaired Driver Involved; people killed, 5
- 43% of all Suspected Serious Injury Crashes are Distracted Driver Involved

(Source: Numetric Attributes for Lewiston ID)

OBJECTIVE

Reduce traffic crash deaths and serious injuries in Moscow by increasing law enforcement presence and implementing high visibility enforcement traffic patrols to reduce impaired, aggressive and distracted driving crashes and to increase the use of occupant protection.

GRANT TASKS AND DELIVERABLES

1. The Moscow Police Department will conduct impaired driving, aggressive driving, occupant protection, and distracted driving high visibility enforcement patrols in locations where needed and during mobilization dates.

FFY 2024 Mobilization Dates	
Description	Dates
Seat Belt - Thanksgiving	Nov 17-30, 2023
Impaired Driving - Holidays	Dec 13, 2023-Jan 1, 2024
Impaired Driving - St. Patrick's Day	Mar 14-18, 2024
Aggressive Driving - Spring	Mar 19-30, 2024
Distracted Driving - National Awareness Week*	Apr 3 - 10, 2024
Impaired Driving - Cinco de Mayo	May 4-6, 2024
Seat Belt - National Click it or Ticket*	May 20 - June 2
Impaired Driving - July 4th Holiday Weekend	Jul 3-10, 2024
Aggressive Driving - Summer	Jul 19-Aug 11, 2024
Impaired Driving - Labor Day Weekend*	Aug 16-Sep 2, 2024

- A. Crash data, in conjunction with historical records of large community events, concerts, holidays, etc. may be used to determine locations where increased enforcement is likely needed to make the greatest difference and where grant-funded patrols would be the most effective to reduce impaired, aggressive, and distracted driving.
- B. Take a zero-tolerance enforcement stance toward seat belt violations and cite those not wearing safety restraints during the term of the grant.
2. Participate in public education and information outreach efforts to create a general deterrence toward crash-causing behavior. ***Grantee is encouraged to engage and work collaboratively with the public to promote and educate safe driving behaviors.***
 - A. Obtain traffic safety promotional materials from OHS and distribute the materials during traffic stops and other appropriate times.
 - B. Use stops as an opportunity to educate the public regarding occupant protection.
 - C. Encourage youthful drivers to participate in the Alive at 25 Defensive Driving Course.

GRANT TASKS AND DELIVERABLES -GRANTEE SPECIFIC

1. Increase the yearly number of traffic stops through high visibility patrols by 10% compared to the last three-year average.

2. Decreased the number of fatal and serious injury crashes by 3%.
3. Increase law enforcement contacts with pedestrians and bicyclists with the opportunity to educate their responsibilities while interacting with vehicle traffic in and around the universities and during seasonal events.
4. Attend community events as an outreach opportunity to educate citizens on the importance of safe driving behaviors.

GRANT TASKS AND DELIVERABLES -GENERAL

3. Submit quarterly reports (Attachment 4) to OHS as provided by the terms outlined in the OHS Highway Safety Grant Procedure Manual. Submit Claims and Reports to the OHS Program Manager.
 - A. Reimbursement claims may be submitted monthly but no less than quarterly using form ITD-669 OHS Reimbursement Claim (Attachment 6). Proper supporting documents must be included with each claim. The agency will be reimbursed for regular STEP hours, overtime hours, travel, and training as established in the grant budget.
 - a. Travel incurred on behalf of the grant will follow the ITD OHS travel policy. (Attachment 2).
 - b. The "Grant Travel Reimbursement" form (Attachment 3) must be completed and submitted with the claim. Be sure to include all travel receipts and proof of travel.
 - c. Provide timesheet and payroll documents for STEP regular duty and overtime hours. Documentation must easily verify the officers'/deputies' overtime hours on the claim. If benefits are paid by the agency and included in the hours claimed, include verification. The grant does not include reimbursement for vacation, sick leave, holidays or comp time incurred.
 - B. Traffic Patrol conducted during grant funding is to be submitted on the Performance Reports and submitted monthly or with the quarterly reports (Attachment 4). Use the report to compile and submit the total number of reportable crashes, traffic contacts and citations issued during grant funded activity.
 - C. The grant requires a 25% agency match. Examples of match include: mileage incurred during enforcement activity, salary for personnel conducting outreach related to the grant activity, percentage of salary of officers working the grant (if not

already claimed for reimbursement, patrol hours by officers not on grant time. Record the match on the grant reimbursement claim. (Attachment 6)

- D. The federal fiscal year ends on September 30, 2024. Grantee must ensure that all funded activities are completed by the end of the federal fiscal year.
- E. Submit the FINAL Report by October 15, 2024. All claims and reports must be submitted before final reimbursement will be made to the grantee.

OTHER GRANT REQUIREMENTS

- 1. Grantee agrees to the CERTIFICATIONS AND ASSURANCES (Attachment 1) and will comply as applicable. **PAGE 14 MUST BE SIGNED AND SUBMITTED** with the Highway Safety Grant document.
- 2. System for Award Management (SAM) is required when receiving federal awards or federal funds. This may be accessed at <http://www.sam.gov>.
 - A. The Grantee agrees it shall maintain current registrations in the System for Award Management (SAM) at all times during which it has active federal awards.
 - B. If OHS discovers the Grantee, or its principals or affiliates, is disbarred, suspended, or ineligible from federal contracting, grant may be terminated immediately.
- 3. Personally Identifiable Information (PII). As noted under 2 CFR Chapter I, Chapter II, Part 200:
 - A. §200.79 Personally Identifiable Information (PII). PII means information that can be used to distinguish or trace an individual's identity, either alone or when combined with other personal or identifying information that is linked or linkable to a specific individual.
 - B. §200.82 Protected Personally Identifiable Information (Protected PII). Protected PII means an individual's first name or first initial and last name in combination with any one or more of types of information, including, but not limited to, social security number, passport number, credit card numbers, clearances, bank numbers, biometrics, date and place of birth, mother's maiden name, and criminal, medical and financial records, educational transcripts. This does not include PII that is required by law to be disclosed.
 - C. §200.303 Internal Controls. The non-Federal entity must take reasonable measures to safeguard protected personally identifiable information and other information the Federal awarding agency or pass-through entity designates as sensitive or the

non-Federal entity considers sensitive consistent with applicable Federal, state, local, and tribal laws regarding privacy and obligations of confidentiality.

Pursuant to this grant, the Grantee may collect or the State may disclose to the Grantee, Personally Identifiable Information (PII), which the State in conformance with Title 49, Chapter 2 Idaho Code and the Federal Driver Privacy Protection Act, regards as confidential. PII is information that identifies an individual, including, but not limited to, an individual's photograph, social security number, driver identification number, name, address, telephone number, and any medical or disability information. PII shall belong solely to the State, and the Grantee shall use such information only in the performance of its services under this grant.

The Grantee shall not disclose PII to any third party except with the State's prior written consent, or under a valid order of a court or governmental agency of competent jurisdiction, and then only upon timely notice to the State. The State may require that the Grantee's officers, employees, agents or sub-Grantees agree in writing to the obligations contained in this section. All PII shall be returned to the State within twenty (20) working days of termination of this grant. The confidentiality obligation contained in this section shall survive termination of this grant. The Grantee shall notify the State within 24 hours of any loss, theft or inadvertent disclosure of PII.

ADMINISTRATIVE EVALUATION

Evaluation activities will be conducted on a routine basis to ensure that grant objectives are being met. The following information will be provided as part of the OHS Quarterly report and close out evaluations:

1. Provide the number of grant-funded overtime saturation patrols conducted and statewide saturation patrols (mobilizations) in which the Grantee participated. Other than the pre-scheduled traffic enforcement mobilizations periods set by OHS, when and where did the Grantee conduct the traffic enforcement saturation patrols?
2. Did the Grantee take a zero tolerance for unrestrained vehicle occupants (including children)?
3. Did the Grantee conduct public education and awareness activities? Please describe.
4. Were claims and reports submitted in a timely manner?

IMPACT EVALUATION

Using WEBCARS, Numetric, and/or the Grantee agency data, the Grantee will assess the change in incidence of impaired driving, aggressive driving, distracted driving, and increased occupant protection use in fatal and serious injury crashes during the grant period.

1. Did the agency succeed in reducing the number of fatal and injury crashes?
2. Did the agency succeed in increasing public awareness regarding traffic safety? If yes, what methods were used to increase awareness?

AUDIT

Grant will be audited during the annual audit conducted by the City. Company that conducts the yearly audit of the City of Lewiston:

Agency _____
Contact Name _____
Contact Phone # _____
Email: _____

MOSCOW POLICE DEPARTMENT FINANCIAL CONTACT

Financial claims will be processed by:

Contact Name: Alisa Anderson
Contact Phone: 208-883-7600
Email: aanderson@ci.moscow.id.us

EEO/HUMAN RESOURCES LIAISON

Agency _____
Contact Name & Contact Title _____
Contact Phone # _____
Email: _____

ITD OFFICE OF HIGHWAY SAFETY CONTACT

OHS Manager Josephine Middleton, Office of Hwy Safety Manager
 Josephine.middleton@itd.idaho.gov
 208-334-8112

Agency Representative: Denise Dinnauer, Grant Contracts Officer
 Denise.dinnauer@itd.idaho.gov
 (208) 334-4460

Physical Address: 3293 Jordan St. Boise, ID 83703
Mailing Address: P.O. Box 7129, Boise, Idaho 83707-1129

ITD FINANCIAL CONTACT

Nancy Farnsworth
Financial Specialist Sr.
Financial Services
Idaho Transportation Department
Phone (208) 334-8732
Email: nancy.farnsworth@itd.idaho.gov

FUNDING SOURCE(S)

Fiscal Year	Funding Source CFDA	FAIN	Funding Amount	Match Amount
FFY 2024	BIL 402 20.600	69A375243000040201D0	\$ 75,000	\$18,750

AUDIT

This project will be audited by the State Legislative Audit Program on a biennial basis. This audit process is the mechanism employed by the state of Idaho in accordance with Idaho Code 67-449, which is congruent with OMB Circular A-128.

Appendix A to Part 1300--Certifications and Assurances for Highway Safety Grants

GENERAL REQUIREMENTS

The State will comply with applicable statutes and regulations, including but not limited to:

- 23 U.S.C. Chapter 4-Highway Safety Act of 1966, as amended.
- Sec. 1906, Public Law 109-59, as amended by Sec. 25024, Public Law 117-58.
- 23 CFR part 1300-Uniform Procedures for State Highway Safety Grant Programs.
- 2 CFR part 200-Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.
- 2 CFR part 1201-Department of Transportation, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

INTERGOVERNMENTAL REVIEW OF FEDERAL PROGRAMS

The State has submitted appropriate documentation for review to the single point of contact designated by the Governor to review Federal programs, as required by Executive Order 12372 (Intergovernmental Review of Federal Programs).

FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY ACT (FFATA)

The State will comply with FFATA guidance, *OMB Guidance on FFATA Subaward and Executive Compensation Reporting*, August 27, 2010, ([https://www.frs.gov/documents/OMB Guidance on FFATA Subaward and Executive Compensation Reporting 08272010.pdf](https://www.frs.gov/documents/OMB%20Guidance%20on%20FFATA%20Subaward%20and%20Executive%20Compensation%20Reporting%2008272010.pdf)) by reporting to FRS.gov for each sub-grant awarded:

- Name of the entity receiving the award.
- Amount of the award.
- Information on the award including transaction type, funding agency, the North American Industry Classification System code or Catalog of Federal Domestic Assistance number (where applicable), program source.
- Location of the entity receiving the award and the primary location of performance under the award, including the city, State, congressional district, and country; and an award title descriptive of the purpose of each funding action.
 - Unique entity identifier (generated by **SAM.gov**).
- The names and total compensation of the five most highly compensated officers of the entity if:
 - (i) the entity in the preceding fiscal year received-
 - (I) 80 percent or more of its annual gross revenues in Federal awards.
 - (II) \$25,000,000 or more in annual gross revenues from Federal awards; and
 - (ii) the public does not have access to information about the compensation of the senior executives of the entity through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986;

- Other relevant information specified by OMB guidance.

NONDISCRIMINATION

(applies to subrecipients as well as States)

The State highway safety agency [and its subrecipients] will comply with all Federal statutes and implementing regulations relating to nondiscrimination ("Federal Nondiscrimination Authorities"). These include but are not limited to:

- Title VI of the Civil Rights Act of 1964 ([42 U.S.C. 2000d](#) et seq., 78 stat. 252), (prohibits ++discrimination on the basis of race, color, national origin).
- [49 CFR part 21](#) (entitled Non-discrimination in Federally-Assisted Programs of the Department of Transportation Education of Title VI of the Civil Rights Act of 1964);
- [28 CFR 50.3](#) (U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964);
- the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. ([42 U.S.C. 4601](#)), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 USC 324 et seq.). and Title IX of the Education Amendments of 1972, as amended ([20 U.S.C. 1681-1683](#) and [1685-1686](#)) (prohibit discrimination on the basis of sex).
- Section 504 of the Rehabilitation Act of 1973. ([29 U.S.C. 794](#) et seq.), as amended, (prohibits discrimination on the basis of disability) and [49 CFR part 27](#).
- The Age Discrimination Act of 1975. as amended, ([42 U.S.C. 6101](#) et seq.), (prohibits discrimination on the basis of age).
- The Civil Rights Restoration Act of 1987, (Pub. L. 100-209), (broadens scope, coverage, and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal aid recipients, subrecipients and contractors, whether such programs or activities are Federally-funded or not);
- Titles II and III c (the Americans with Disabilities Act ([42 U.S.C. 12131-12189](#)) (prohibits discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing) and [49 CFR parts 37](#) and [38](#).
- [Executive Order 12898](#), Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (preventing discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations).
- [Executive Order 13166](#), Improving Access to services for Persons with Limited English

Proficiency (requiring that recipients of Federal financial assistance provide meaningful access for applicants and beneficiaries who have limited English proficiency (LEP)).

- [Executive Order 13985](#). Advancing Racial Equity and Support for Underserved Communities through the Federal Government (advancing equity across the Federal Government); and
- [Executive Order J3988](#). Preventing and Combating Discrimination on the Basis of Gender Identity or Sexual Orientation (clarifying that sex discrimination includes discrimination on the grounds of gender identity or sexual orientation).

The preceding statutory and regulatory cites hereinafter are referred to as the "Acts" and "Regulations," respectively.

GENERAL ASSURANCES

In accordance with the Acts, the Regulations, and other pertinent directives, circulars, policy, memoranda, and/or guidance, the Recipient hereby gives assurance that it will promptly take any measures necessary to ensure that:

"No person in the United States shall, on the grounds of race, color, or national origin, be excluded, from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Recipient receives Federal financial assistance, from DOT including NHISA"

The Civil Rights Restoration Act of 1987 clarified the original intent of Congress, with respect to Title VI of the Civil Rights Act of 1964 and other non-discrimination requirements (the Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973), by restoring the broad, institutional-wide scope and coverage of these nondiscrimination statutes and requirements to include all programs and activities of the Recipient, so long as any portion of the program is Federally assisted.

SPECIFIC ASSURANCES

More specifically, and without limiting the above general Assurance, the Recipient agrees with and gives the following Assurances with respect to its Federally assisted Highway Safety Grant Program:

1. The Recipient agrees that each "activity," "facility," or "program," as defined in § 21.23(b) and (e) of [49 CFR part 21](#) will be (with regard to an "activity") facilitated, or will be (with regard to a "facility") operated, or will be (with regard to a "program") conducted in compliance with all requirements imposed by, or pursuant to the Acts and the Regulations.
2. The Recipient will insert the following notification in all solicitations for bids, Requests

For Proposals for work, or material subject to the Acts and the Regulations made in connection with all Highway Safety Grant Programs and, in adapted form, in all proposals for negotiated agreements regardless of funding source:

“The [name of Recipient, in accordance with the provisions of Title V 1 of the Civil Rights Act 1964 (78 Stat. 252. 42 USC 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantage business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.”

3. The Recipient will insert the clauses of appendix A and E of this Assurance (also referred to as DOT Order 1050.2A) Win every contract or agreement subject to the Acts and the Regulations.
4. The Recipient will insert the clauses of appendix B of DOT Order 1050.2A, as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a Recipient.
5. That where the Recipient receives Federal financial assistance to construct a facility, or part of a facility, the Assurance will extend to the entire facility and facilities operated in connection therewith.
6. That where the Recipient receives Federal financial assistance in the form of, or for the acquisition of, real property or an interest in real property, the Assurance will extend to rights to space on, over, or under such property.
7. That the Recipient will include the clauses set forth in appendix C and appendix D of this DOT Order 1050.2A, as a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the Recipient with other parties:
 - a. for the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
 - b. for the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.
8. That this Assurance obligates the Recipient for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the Assurance obligates the Recipient, or any transferee for the longer of the following periods:
 - a. the period during which the property is used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits; or
 - b. the period during which the Recipient retains ownership or possession of the property.
9. The Recipient will provide for such methods of administration for the program as are

found by the Secretary of Transportation or the official to whom he/she delegates specific authority to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the Acts, the Regulations, and this Assurance.

10. The Recipient agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the Acts, the Regulations, and this Assurance.

By signing this ASSURANCE, the State highway safety agency also agrees to comply (and require any sub-recipients, sub-grantees, contractors, successors, transferees, and/or assignees to comply) with all applicable provisions governing NHTSA's access to records, accounts, documents, information, facilities, and staff. You also recognize that you must comply with any program or compliance reviews, and/or complaint investigations conducted by NHTSA. You must keep records, reports, and submit the material for review upon request to NHTSA, or its designee in a timely, complete, and accurate way. Additionally, you must comply with all other reporting, data collection, and evaluation requirements, as prescribed by law or detailed in program guidance.

The State highway safety agency gives this ASSURANCE in consideration of and for obtaining any Federal grants, loans, contracts, agreements, property, and/or discounts, or other Federal-aid and Federal financial assistance extended after the date hereof to the recipients by the U.S. Department of Transportation under the Highway Safety Grant Program. This ASSURANCE is binding on the State highway safety agency, other recipients, sub-recipients, sub-grantees, contractors, subcontractors and their subcontractors', transferees, successors in interest, and any other participants in the Highway Safety Grant Program. The person(s) signing below is/are authorized to sign this ASSURANCE on behalf of the Recipient.

THE DRUG-FREE WORKPLACE ACT OF 1988 (41 U.S.C. 8103)

The State will provide a drug-free workplace by:

- a. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition.
- b. Establishing a drug-free awareness program to inform employees about:
 - I. The dangers of drug abuse in the workplace.
 2. The grantee's policy of maintaining a drug-free workplace; Any available drug counseling, rehabilitation, and employee assistance programs.
 3. The penalties that may be imposed upon employees for drug violations occurring in the workplace.
 4. Making it a requirement that each employee engaged in the performance of the grant be given a copy of the statement required by paragraph (a).

- c. Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will-
 - 1. Abide by the terms of the statement.
 - 2. Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction.
- d. Notifying the agency within ten days after receiving notice under subparagraph (c)(2) from an employee or otherwise receiving actual notice of such conviction.
- e. Taking one of the following actions, within 30 days of receiving notice under subparagraph (c)(2), with respect to any employee who is so convicted-
 - 1. Taking appropriate personnel action against such an employee, up to and including termination.
 - 2. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.
- f. Making a good faith effort to continue to maintain a drug-free workplace through implementation of all the paragraphs above.

POLITICAL ACTIVITY (HATCH ACT)

(applies to subrecipients as well as States)

The State will comply with provisions of the Hatch Act ([5 U.S.C. 1501-1508](#)), which limits the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

CERTIFICATION REGARDING FEDERAL LOBBYING

(applies to subrecipients as well as States)

CERTIFICATION FOR CONTRACTS, GRANTS, LOANS, AND COOPERATIVE AGREEMENTS

The undersigned certifies, to the best of his or her knowledge and belief, that:

- 1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement;
- 2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

- cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions;
3. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grant, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31,

U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

RESTRICTION ON STATE LOBBYING

(applies to subrecipients as well as States)

None of the funds under this program will be used for any activity specifically designed to urge or influence a State or local legislator to favor or oppose the adoption of any specific legislative proposal pending before any State or local legislative body. Such activities include both direct and indirect (*e.g.*, "grassroots") lobbying activities, with one exception. This does not preclude a State official whose salary is supported with NHTSA funds from engaging in direct communications with State or local legislative officials, in accordance with customary State practice, even if such communications urge legislative officials to favor or oppose the adoption of a specific pending legislative proposal.

CERTIFICATION REGARDING DEBARMENT AND SUSPENSION

(applies to subrecipients as well as States)

INSTRUCTIONS FOR PRIMARY TIER PARTICIPANT CERTIFICATION (STATES)

1. By signing and submitting this proposal, the prospective primary tier participant is providing the certification set out below and agrees to comply with the requirements of [CFR parts 180](#) and [1200](#).
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective primary tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary tier participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.

3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default or may pursue suspension or debarment.
4. The prospective primary tier participant shall provide immediate written notice to the department or agency to which this proposal is submitted if at any time the prospective primary tier participant learns its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms **covered transaction, civil judgment, debarment, suspension, ineligible, participant, person, principal, and voluntarily excluded**, as used in this clause, are defined in 2 CFR parts 180 and 1200. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
6. The prospective primary tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
7. The prospective primary tier participant further agrees by submitting this proposal that it will include the clause titled "Instructions for Lower Tier Participant Certification" including the "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions and will require lower tier participants to comply with 2 CFR parts 180 and 1200.
8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any prospective lower tier participants, each participant may, but is not required to, check the System for Award Management Exclusions website (<https://www.sam.gov>).
9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this

clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a participant **in** a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under [48 CFR part 9, subpart 9.4](#), suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate the transaction for cause or default.

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY

INSTRUCTIONS FOR LOWER TIER PARTICIPANT CERTIFICATION

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below and agrees to comply with the requirements of [2 CFR parts 180](#) and [1200](#).
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, **in** addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms **covered transaction, civil judgment, debarment, suspension, ineligible, participant, person, principal, and voluntarily excluded**, as used in this clause, are defined in [2 CFR parts 180](#) and [1200](#). You may contact the person to whom this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under [48 CFR part 9, subpart 9.4](#), debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this proposal that it will include the clause titled "Instructions for Lower Tier Participant Certification" including the "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all

lower tier covered transactions and in all solicitations for lower tier covered transactions and will require lower tier participants to comply with [2 CFR parts 180 and 1200](#).

7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under [48 CFR part 9, subpart 9.4](#), debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any prospective lower tier participants, each participant may, but is not required to, check the System for Award Management Exclusions website <https://www.sam.gov> (
(
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under [48 CFR part 9, subpart 9.4](#), suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension or debarment.

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION-LOWER TIER COVERED TRANSACTIONS

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

BUY AMERICA

(applies to subrecipients as well as States)

The State and each subrecipient will comply with the Buy America requirement ([23 U.S.C. 313](#)) when purchasing items using Federal funds. Buy America requires a State, or subrecipient, to purchase with Federal funds only steel, iron and manufactured products produced in the

United States, unless the Secretary of Transportation determines that such domestically produced items would be inconsistent with the public interest, that such materials are not reasonably available and of a satisfactory quality, or that inclusion of domestic materials will increase the cost of the overall project contract by more than 25 percent. In order to use Federal funds to purchase foreign produced items, the State must submit a waiver request that provides an adequate basis and justification for approval by the Secretary of Transportation.

CERTIFICATION ON CONFLICT OF INTEREST
(applies to subrecipients as well as States)

GENERAL REQUIREMENTS

No employee, officer, or agent of a State or its subrecipient who is authorized in an official capacity to negotiate, make, accept, or approve, or to take part in negotiating, making, accepting, or approving any subaward, including contracts or subcontracts, in connection with this grant shall have, directly or indirectly, any financial or personal interest in any such subaward. Such a financial or personal interest would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or personal interest in or a tangible personal benefit from an entity considered for a subaward. Based on this policy:

1. The recipient shall maintain a written code or standards of conduct that provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents.
 - a. The code or standards shall provide that the recipient's officers, employees, or agents may neither solicit nor accept gratuities, favors, or anything of monetary value from present or potential sub awardees, including contractors or parties to subcontracts.
 - b. The code or standards shall establish penalties, sanctions, or other disciplinary actions for violations, as permitted by State or local law or regulations.
2. The recipient shall maintain responsibility to enforce the requirements of the written code or standards of conduct.

DISCLOSURE REQUIREMENTS

No State or its subrecipient, including its officers, employees, or agents, shall perform or continue to perform under a grant or cooperative agreement, whose objectivity may be impaired because of any related past, present, or currently planned interest, financial or otherwise, in organizations regulated by **NHTSA** or in organizations whose interests may be substantially affected by NHTSA activities. Based on this policy:

1. The recipient shall disclose any conflict of interest identified as soon as reasonably possible, making an immediate and full disclosure in writing to NHTSA. The disclosure

shall include a description of the action which the recipient has taken or proposes to take to avoid or mitigate such conflict.

2. NHTSA will review the disclosure and may require additional relevant information from the recipient. If a conflict of interest is found to exist, NHTSA may (a) terminate the award, or (b) determine that it is otherwise in the best interest of NHTSA to continue the award and include appropriate provisions to mitigate or avoid such conflict.
3. Conflicts of interest that require disclosure include all past, present, or currently planned organizational, financial, contractual, or other interest(s) with an organization regulated by NHTSA or with an organization whose interests may be substantially affected by NHTSA activities, and which are related to this award. The interest(s) that require disclosure include those of any recipient, affiliate, proposed consultant, proposed subcontractor, and key personnel of any of the above. Past interest shall be limited to within one year of the date of award. Key personnel shall include any person owning more than a 20 percent interest in a recipient, and the officers, employees or agents of a recipient who are responsible for making a decision or taking an action under an award where the decision or action can have an economic or other impact on the interests of a regulated or affected organization.

PROHIBITION ON USING GRANT FUNDS TO CHECK FOR HELMET USAGE

(applies to subrecipients as well as States)

The State and each subrecipient will not use 23 U.S.C. Chapter 4 grant funds for programs to check helmet usage or to create checkpoints that specifically target motorcyclists.

POLICY ON SEAT BELT USE

In accordance with [Executive Order 13043](#), Increasing Seat Belt Use in the United States, dated April 16, 1997, the Grantee is encouraged to adopt and enforce on-the-job seat belt use policies and programs for its employees when operating company-owned, rented, or personally-owned vehicles. The National Highway Traffic Safety Administration (NHTSA) is responsible for providing leadership and guidance in support of this Presidential initiative. For information and resources on traffic safety programs and policies for employers, please contact the Network of Employers for Traffic Safety (NETS), a public-private partnership dedicated to improving the traffic safety practices of employers and employees. You can download information on seat belt programs, costs of motor vehicle crashes to employers, and other traffic safety initiatives at www.trafficsafety.org. The NHTSA website (www.nhtsa.gov) also provides information on statistics, campaigns, and program evaluations and references.

POLICY ON BANNING TEXT MESSAGING WHILE DRIVING

In accordance with [Executive Order 13513](#), Federal Leadership On Reducing Text Messaging While Driving, and DOT Order 3902.10, Text Messaging While Driving, States are encouraged to adopt and enforce workplace safety policies to decrease crashes caused by distracted

driving, including policies to ban text messaging while driving company-owned or rented vehicles, Government-owned, leased or rented vehicles, or privately-owned vehicles when on official Government business or when performing any work on or behalf of the Government. States are also encouraged to conduct workplace safety initiatives in a manner commensurate with the size of the business, such as establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving, and education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

SECTION 402 REQUIREMENTS

1. To the best of my personal knowledge, the information submitted in the Highway Safety Plan in support of the State's application for a grant under 23 U.S.C. 402 is accurate and complete.
2. The Governor is the responsible official for the administration of the State highway safety program, by appointing a Governor's Representative for Highway Safety who shall be responsible for a State highway safety agency that has adequate powers and is suitably equipped and organized (as evidenced by appropriate oversight procedures governing such areas as procurement, financial administration, and the use, management, and disposition of equipment) to carry out the program. (23 U.S.C. 402(b)(1)(A))
3. The political subdivisions of this State are authorized, as part of the State highway safety program, to carry out within their jurisdictions local highway safety programs which have been approved by the Governor and are in accordance with the uniform guidelines promulgated by the Secretary of Transportation. (23 U.S.C. 402(b)(1)(B))
4. At least 40 percent of all Federal funds apportioned to this State under 23 U.S.C. 402 for this fiscal year will be expended by or for the benefit of political subdivisions of the State in carrying out local highway safety programs (23 U.S.C. 402(b)(1)(C)) or 95 percent by and for the benefit of Indian tribes (23 U.S.C. 402(h)(2)), unless this requirement is waived in writing. (This provision is not applicable to the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.)
5. The State's highway safety program provides adequate and reasonable access for the safe and convenient movement of physically handicapped persons, including those in wheelchairs, across curbs constructed or replaced on or after July 1, 1976, at all pedestrian crosswalks. (23 U.S.C. 402(b)(1)(D))
6. The State will provide for an evidenced-based traffic safety enforcement program to prevent traffic violations, crashes, and crash fatalities and injuries in areas most at risk for such incidents. (23 U.S.C. 402(b)(1)(E))
7. The State will implement activities in support of national highway safety goals to reduce motor vehicle related fatalities that also reflect the primary data-related crash factors within the State, as identified by the State highway safety planning process, including:
 - a. Participation in the National high-visibility law enforcement mobilizations as identified

annually in the NHTSA Communications Calendar, including not less than 3 mobilization campaigns in each fiscal year to –

- i. Reduce alcohol-impaired or drug-impaired operation of motor vehicles; and
 - ii. Increase use of seat belts by occupants of motor vehicles.
 - b. Sustained enforcement of statutes addressing impaired driving, occupant 10 protection, and driving more than posted speed limits.
 - c. An annual Statewide seat belt use survey in accordance with 23 CFR part 1340 for the measurement of State seat belt use rates, except for the Secretary of Interior on behalf of Indian tribes.
 - d. Development of Statewide data systems to provide timely and effective data analysis to support allocation of highway safety resources.
 - e. Coordination of Highway Safety Plan, data collection, and information systems with the State strategic highway safety plan, as defined in 23 U.S.C. 148(a). (23 U.S.C. 402(b)(1)(F))
8. The State will actively encourage all relevant law enforcement agencies in the State to follow the guidelines established for vehicular pursuits issued by the International Association of Chiefs of Police that are currently in effect. (23 U.S.C. 402(j))
9. The State will not expend Section 402 funds to carry out a program to purchase, operate, or maintain an automated traffic enforcement system. (23 U.S.C. 402(c)(4))

I understand that my statements in support of the State's application for Federal grant funds. I sign these Certifications and Assurances based on personal knowledge, and after appropriate inquiry.

Signature, Contractor Representative _____ **Date:** _____

Printed name of Contractor Representative: _____

COMMITTEE / CITY COUNCIL STAFF REPORT

DATE: Monday, October 16, 2023



AGENDA ITEM TITLE

Proposed City of Moscow Procurement and Purchasing Policy (ACTION ITEM) - Bill Belknap

RESPONSIBLE STAFF

Bill Belknap, City Supervisor

ADDITIONAL PRESENTER(S)

DESCRIPTION

The City of Moscow currently does not have established policies and procedures for purchasing supplies, materials, and services on behalf of the City. The lack of an established policy has resulted in confusion at times regarding employee purchasing authority as well as the ability for employees to sign contracts and agreements on behalf of the City. Staff have prepared a draft Procurement and Purchasing Policy to provide guidance on legal obligations and requirements, establish employee purchase authority limits, establish employee contract signatory authority limits, as well as establish standards related to City vendor charge accounts and appropriate use of credit cards. Staff will present the policy for the Council's review and consideration.

REVIEWED BY

Legal Department; This was reviewed by the Public Works/Finance Committee on October 9, 2023 and recommended for approval and that it be placed on the regular agenda.

PROPOSED ACTIONS

PROPOSED ACTIONS: Approve the proposed Resolution adopting the proposed Procurement and Purchasing Policy; or take other action deemed appropriate.

STAFF RECOMMENDATION

Approve the proposed Resolution adopting the proposed Procurement and Purchasing Policy.

OTHER RESOURCES

FISCAL IMPACT

PERSONNEL IMPACT

ATTACHMENTS

1. Resolution 2023-Procurement and Purchasing Policy Adoption_final_mb

RESOLUTION NO. 2023-__

A RESOLUTION OF THE CITY OF MOSCOW, IDAHO, A MUNICIPAL CORPORATION OF THE STATE OF IDAHO, ADOPTING A PROCUREMENT AND PURCHASING POLICY FOR THE CITY OF MOSCOW ESTABLISHING POLICIES REGARDING EXPENDITURE AND CONTRACT APPROVALS, CHARGE ACCOUNT MANAGEMENT, AND CREDIT CARD MANAGEMENT AND UTILIZATION; AND PROVIDING THIS RESOLUTION SHALL BE EFFECTIVE UPON ITS PASSAGE AND APPROVAL.

WHEREAS, the use of public funds shall be guided by strong ethical standards, individual and organizational accountability, and public transparency; and

WHEREAS, the City deems that it is necessary and appropriate to ensure public confidence by way of a publicly accountable purchasing process and prevent fraud and theft through internal controls; and

WHEREAS, the City deems that it is necessary and appropriate to establish policies and procedures for purchasing supplies, materials, and services by City of Moscow employees in conformance with State and Federal law; and

WHEREAS, the City strives to ensure that purchasing decisions are based on high ethical standards, guard against favoritism, and promote the fair and equitable treatment of all persons who deal with the City; and

WHEREAS, the City desires to delegate limited contract approval and signatory authority for budgeted and planned expenses as described within the attached Policy; and

WHEREAS, the City desires to establish policies for the establishment and use of credit cards and vendor charge accounts;

NOW, THEREFORE, BE IT RESOLVED by the Mayor and City Council of the City of Moscow that all matters stated above are true and correct and are incorporated herein by reference as if copied in their entirety and shall be adopted with the following:

1. That the City Council hereby approves and adopts the City of Moscow Procurement and Purchasing Policy attached hereto as Exhibit 'A'.
2. Any City of Moscow Resolutions not consistent with the policy adopted herein shall be and are hereby superseded by the policy attached hereto as Exhibit 'A'.
3. That this Resolution shall be effective upon its passage and approval.

PASSED on Motion by the Following Vote:

	Aye	Nay	Abstain	Absent
Drew Davis	_____	_____	_____	_____

Sandra Kelly
Maureen Laflin

Hailey Lewis

Julia Parker

Gina Taruscio

ADOPTED by the City Council of the City of Moscow, Idaho, and **APPROVED** by the Mayor of the City of Moscow, this _____ day of _____, 2023.

Arthur D. Bettge, Mayor

CERTIFICATION and ATTESTATION. I hereby certify that the above is a true copy of the Resolution passed at a regular meeting of the City Council, City of Moscow, held on _____, 2023 and attest to the Mayor's signature.

Laurie M. Hopkins, City Clerk

Exhibit A



City of Moscow
Procurement and Purchasing Policy
Adopted _____

I. Introduction

1. Policy Purpose

Every purchase that City employees make is subject to public scrutiny. The use of public funds shall be guided by strong ethical standards, individual and organizational accountability, and public transparency. The purpose of this document is to establish policies and clarify the procedures for purchasing supplies, materials, and services by City of Moscow employees. This document does not create any enforceable rights or causes of actions in third parties. The provisions of this document are subordinate to the purchasing requirements of any grant requirements or federal, state, or city laws governing purchasing. City staff is at risk of disciplinary action and in some instances civil and criminal penalties for any unauthorized departure from these guidelines.

2. Policy Goals:

The City's purchasing and contracting goals are to:

- A. Guarantee City purchases comply with State and Federal law.
- B. Clarify purchasing procedures and ensure requirements are consistently followed by all City departments and employees.
- C. Save money by encouraging competition for good value.
- D. Enhance public confidence by way of a publicly accountable purchasing process and prevent fraud and theft through internal controls.
- E. Promote local business by providing equal opportunities for businesses located within the City to compete and to endeavor to purchase goods and services from vendors with a significant Idaho presence.
- F. Ensure purchasing decisions are based on high ethical standards, guard against

favoritism, and promote the fair and equitable treatment of all persons who deal with the City.

3. Purchasing Ethics

All City of Moscow employees and elected officials responsible for purchasing goods or services shall:

- A. Follow the rules and regulations of the City of Moscow and the laws and constitution of the State of Idaho.
- B. Avoid activities that would compromise or give the perception of compromising the best interest of the City.
- C. Reduce the potential for any appearance of preferential treatment by obtaining multiple quotes from qualified providers to meet the intent of providing a publicly accountable process as well as meeting the dual goals of quality and economy.
- D. Act as responsible custodians of public money by obtaining maximum benefit for funds spent.
- E. Never solicit or accept money, loans, credits, discounts, gifts, entertainment, favors, or services from present or potential suppliers that might influence or appear to influence purchasing decisions. This does not apply to trivial benefits not to exceed a value of \$50 incidental to personal, professional, or business contacts and involving no substantial risk of undermining official impartiality.

4. All City of Moscow elected officials and employees responsible for obtaining goods or services are reminded of the following state laws regarding ethics in purchasing:

- A. *Except as provided in this chapter, no officer or employee shall influence or attempt to influence the award of a contract to a particular vendor, or to deprive or attempt to deprive any vendor of a contract. (Idaho Code § 67-9230(3))*
- B. *No officer or employee shall conspire with a vendor or its agent, and no vendor or its agent shall conspire with an officer or employee, to influence or attempt to influence the award of a contract, or to deprive or attempt to deprive a vendor of a contract. (Idaho Code § 67- 9230(4))*
- C. *No public servant having any discretionary function to perform in connection with contracts, purchases, payments, claims or other pecuniary transactions of the government shall solicit, accept or agree to accept any pecuniary benefit from any person known to be interested in or likely to become interested in any such contract, purchase, payment, claim or transaction. (Idaho Code § 18-1356(2))*
- D. *A public servant commits a misdemeanor if he solicits, accepts or agrees to accept*

- compensation for advice or other assistance in preparing or promoting a bill, contract, claim, or other transaction or proposal as to which he knows that he has or is likely to have an official discretion to exercise. (Idaho Code § 18-1357(1))*
- E. *No public servant shall without the specific authorization of the governmental entity for which he serves, use public funds or property to obtain a pecuniary benefit for himself. (Idaho Code § 18-1359(1)(a))*
- F. *No public servant shall use or disclose confidential information gained in the course of or by reason of his official position or activities in any manner with the intent to obtain a pecuniary benefit for himself or any other person or entity in whose welfare he is interested or with the intent to harm the governmental entity for which he serves. (Idaho Code § 18-1359(1)(c))*
- G. *No public servant shall be interested in any contract made by him in his official capacity, or by any body or board of which he is a member, except as provided in section 18-1361, Idaho Code. (Idaho Code § 18-1359(d))*

II. Purchase Management

1. Vendor Relationships

Developing and maintaining good relationships with suppliers is important. To the highest extent possible, business ethics, professional courtesy, timeliness, and competence should be practiced in all transactions. Adhere to and protect the supplier's business and legal rights to confidentiality for trade secrets, purchase quotes and bids, and other proprietary information where permissible under Idaho Law.

2. Tax Exempt Status

The City of Moscow is exempt from Federal, State, and Local taxes, and employees shall make every effort to avoid paying sales taxes on purchases of goods and services when possible. An exemption statement is available on the City's intranet and from the City Treasurer/Finance Director and can be furnished to any of the City's suppliers upon request.

3. Budget Requirements

Any purchase or expenditure must be included within the current year's budget and appropriation ordinance, except as approved by the City Supervisor or Mayor and Council as provided herein.

4. Local Vendors

When possible and where costs are comparable, local vendors are to be used for services and supplies. When quality, cost, and service are comparable, Department Supervisors

should strive to rotate business between local vendors.

5. Vendor Charge Accounts

Charge accounts shall only be established with the proper procedure and authorization as detailed herein. Only City employees are permitted to charge on vendor accounts in the name of the City of Moscow. Employees are not permitted to charge items for their personal use with the intent of reimbursing the City for the purchase. Contractors of the City are not allowed to charge purchases on City accounts. After a purchase is made, employees shall promptly provide the receipt and/or invoice to their supervisor.

6. Department Supervisor Responsibility

The Department Supervisor should be familiar with the purchases made by their employees before they are made. The Department Supervisor should closely review invoices before signing and approving the expenditure. If a Department Supervisor questions an employee's expenditure, steps should be taken to immediately resolve the problem to the Department Supervisor's satisfaction because primary responsibility for the correctness of the expenditure rests with the Department Supervisor who signs the invoice. Department Supervisors are not to "rubber stamp" invoices without knowledge and authorization of the purchase.

7. Responsibilities of Department Managers, Deputy City Supervisors and Appointed Officials

In accordance with this Policy, Department Managers, Deputy City Supervisors and Appointed Officials shall:

- A. Make no attempt to split projects or equipment purchases to avoid formal or informal bid requirements. This is a violation of State Law subject to a fine of up to \$5,000.
- B. Provide accurate and complete information on items requested and prepare purchase orders and invoices promptly.
- C. Manage expenditures to prevent a negative fund balance in their department(s).
- D. Guarantee that all expenditures above comply with Idaho Code Title 67, Chapter 28.
- E. Furnish the City Treasurer/Finance Director with complete information regarding the full cost of equipment and projects over \$5,000, including architectural or engineering costs required.
- F. Recommend to the City Supervisor for their approval acceptance of any gift of land, equipment, or other property and furnish the City Treasurer/Finance Director with details for asset management purposes.

- G. Notify the City Treasurer/Finance Director of purchases of \$5,000 or more for renewals or parts replacement of equipment when it equals 33% or more of the original cost of the equipment.
- H. Inspect or supervise the inspection of delivered supplies, services, equipment, and construction, determining the acceptableness of their quality, quantity, and conformance with specifications.
- I. Every department manager will review, understand, and take measures to comply with the Capitalization of Fixed Assets Policy.

III. Purchasing and Acquisition Guidelines

Each Department Manager or designee within the City will have the authority to purchase or acquire property or services in accordance with the following guidelines:

1. Donations.

The City Supervisor must provide approval before acceptance of all donations, which includes donations of money, land, equipment, or services. Upon receipt of the City Supervisor's approval to move forward with acceptance of the donation, the Department Manager or designee is responsible for contacting the City Attorney to prepare a "Donor Agreement" before the donation is made. Once the Donor Agreement is completed, the Department Manager is responsible for getting the proposed donation on the City Council agenda for Council consideration of acceptance of the donation. The Department Manager or designee will notify the City Supervisor in the month in which the donation is provided, and provide the information to the City Clerk and City Treasurer/Finance Director within one month of the receipt of the donation for possible addition to the City's insurance list and asset management program. The City Clerk will provide a copy of the receipt to the donor for tax purposes as all donations to the City are tax deductible.

2. Negative Fund Balance.

It is the Department Manager's responsibility to monitor their department's expenses on no less than a monthly basis to ensure that expenditures are within the budgeted appropriation. Except for reimbursable grant funds, negative department fund balances are to be prevented through management and timing of expenditures. Assigning expenses to the following fiscal year to avoid negative fund balances is not permitted unless funds are appropriated through the formal budget process. All negative fund balances must be immediately reported to the City Supervisor and City Treasurer/Finance Director for determination on the appropriate course of action.

3. Department Manager Spending Authority.

Purchases up to \$10,000 can be made at the discretion of the Department Manager if: 1) the expenditure is within the appropriated budget; 2) actual revenues are being received as

projected; and/or, 3) the budget is not showing a negative fund balance. This dollar limitation shall apply to a single expenditure or several purchases appearing on a single invoice. Employees shall not attempt to split projects or equipment purchases to avoid their spending authority.

4. Deputy City Supervisor/Appointed Official Spending Authority

Purchases up to \$25,000 can be made at the discretion of the Deputy City Supervisor/Appointed Official if: 1) the expenditure is within the appropriated budget; 2) actual revenues are being received as projected; and/or, 3) the budget is not showing a negative fund balance. This dollar limitation shall apply to a single expenditure or several purchases appearing on a single invoice. Deputy City Supervisors/Appointed Official shall not attempt to split projects or equipment purchases to avoid their spending authority.

5. City Supervisor Spending Authority

Purchases up to \$75,000 can be made at the discretion of the City Supervisor if: 1) the expenditure is within the appropriated budget; 2) actual revenues are being received as projected; and/or, 3) the budget is not showing a negative fund balance. This dollar limitation shall apply to a single expenditure or several purchases appearing on a single invoice. The City Supervisor shall not attempt to split projects or equipment purchases to avoid their spending authority.

6. Mayor Spending Authority

Purchases up to \$150,000 can be made at the discretion of the Mayor if: 1) the expenditure is within the appropriated budget; 2) actual revenues are being received as projected; and/or, 3) the budget is not showing a negative fund balance. This dollar limitation shall apply to a single expenditure or several purchases appearing on a single invoice. The Mayor shall not attempt to split projects or equipment purchases to avoid their spending authority.

7. Purchases over \$150,000.

All purchases in this category require the approval of the Mayor and City Council and also must comply with Idaho Code Title 67, Chapter 28. It is the requesting party's responsibility to review the appropriate code sections before requesting a purchase of this amount. Details regarding these purchases shall be provided to the City Treasurer/Finance Director for addition to the City's asset management system.

IV. Contracts for Services

1. Contracts and Agreements

Contracts and agreements are documents that specifically bind the City and the contracting party to provide goods and/or services under specific identified terms and conditions. Contracts and agreements can range from construction or consultant professional service agreements to the creation of credit accounts which include terms and conditions such as interest penalties for late payments. Generally, invoices for payment of goods or services to be purchased are not formal contracts unless the invoice includes specific legal terms and conditions related to late payments, interest penalties, and other conditions of the sale.

Where it is uncertain whether a document or agreement would constitute a legally binding contract employees are encouraged to consult with the City Supervisor or City Attorney for guidance and direction.

In agreements where a vendor is performing a specific service defined by the City that will exceed \$20,000, a written contract is required. All contracts and agreements must be reviewed and approved by the City Attorney before execution. The original signed contract will be retained by the City Clerk and kept in the City's official records repository. Copies of all signed contracts will be available upon request from the City Clerk. The City Attorney must approve any decision to terminate a contract due to failure to perform. After notification of the City Council, the City Attorney will perform the steps necessary to legally terminate the contract.

2. Contract Approval and Execution Authority

The table below establishes the required approval and authorized signatory for all contracts and agreements based on the contract amount and whether the expense was planned and included in the City's adopted budget. Once a contract has been approved by the appropriate party, payments in accordance with the terms and conditions of the contract shall not be subject to the expenditure authority limits.

City Contract/Agreement Authorization and Execution Matrix				
Contract/Agreement Value	Budgeted and Planned Expense	Authorized Signatory	Additional Approval	Notes
Under \$25,000	Yes	Deputy City Supervisor/Appointed Official	None	
	No	City Supervisor	Mayor	Funding Must be Identified Prior to Authorization
\$25,000 - \$75,000	Yes	City Supervisor	None	
	No	Mayor	Council	Funding Must be Identified Prior to Authorization
\$75,001 - \$150,000	Yes	Mayor	None	
	No	Mayor	Council	Funding Must be Identified Prior to Authorization
Over \$150,000	Yes	Mayor	Council	
	No	Mayor	Council	Funding Must be Identified Prior to Authorization

3. Procurement Requirements

Idaho Code provides thresholds for the procurement process that must be followed in securing goods and services, public works construction, and professional engineering, architectural, landscape architecture, construction management, and professional land surveying services (Idaho Code § 67-2805 et seq.). Professional engineering, architectural, landscape architecture, construction management, and professional land surveying services over \$50,000 must be secured through a qualifications-based selection process, or selected from the City's prequalified engineering services roster program as described in Section 4.D of this policy (Idaho Code § 67-2320).

Professional Engineering, Architectural, Landscape Architecture, Construction Management, and Professional Land Surveying Services		
Purchase Amount	Selection Process	Notes
Under \$50,000	May use guidelines set forth in Idaho Code § 67-2320(2) or by established guidelines for selection based on demonstrated competence and qualifications to perform the type of services required at a price determined to be fair and reasonable. <i>Idaho Code § 67-2320(2)&(3)</i>	Must Comply with Purchase and Contract Guidelines Authorization Levels
Over \$50,000	Qualifications-based selection process. <i>Idaho Code § 67-2320(2)</i>	

Services or Personal Property		
Purchase Amount	Selection Process	Notes
Under \$75,000	Best interests of the political subdivision procuring the goods and services as determined by the City Council. <i>Idaho Code § 67-2803(2)</i>	Must Comply with Purchase and Contract Guidelines Authorization Levels
\$75,000- \$150,000	Solicitation of bids from three vendors by written or electronic means. <i>Idaho Code § 67-2806(1)</i>	
Over \$150,000	Formal bidding process using open competitive sealed bid process. <i>Idaho Code § 67-2806(2)</i>	

Public Works Construction		
Purchase Amount	Selection Process	Notes
Under \$50,000	Best interests of the political subdivision procuring the goods and services as determined by the City Council. <i>Idaho Code § 67-2803(2)</i>	Must Comply with Purchase and Contract Guidelines Authorization Levels
\$50,000- \$200,000	Solicitation of bids from three licensed public works contractors by written or electronic means. <i>Idaho Code § 67-2805(1)</i>	
Over \$200,000	Formal bidding process using a competitive sealed bid process. <i>Idaho Code § 67-2805(2)</i>	

4. Professional Services Prequalification Roster

- A. The City shall publish notice, in accordance with the publication and advertising requirements for the bidding of public works construction projects, requesting Statements of Qualifications from qualified professional service providers. Within such publication, the City shall specify the specific knowledge, skills, and abilities the City seeks to secure and provide the basis upon which respondents will be evaluated.
- B. The review of Statements of Qualifications shall be based upon the criteria as contained within the Request for Qualifications and shall be intended to select the respondents with the best qualifications and demonstrated competence of the provider of the required services. All respondents deemed to be qualified to provide the requested services published within the Request for Qualifications shall be placed upon the City's Roster and may enter into a Master Services Agreement with the City, as approved by the City Council, specifying the terms and conditions of the provision of professional services on an on-demand task order basis to the City.
- C. When the City requires professional services, the City at its sole discretion shall select a consultant from the City's Roster and request the consultant to provide a professional services proposal that shall detail the scope of services to be provided and the fee and basis of payment of said services. The City and the selected consultant shall negotiate the scope and cost of the required services and enter into a task order for the requested services as provided for under the Master Services Agreement. Should the City and selected consultant be unable to successfully negotiate the scope and fee for the requested services, the City may select another consultant from the City's Roster and follow the same negotiation process as detailed herein. Agreement approval and signatory authority shall be in accordance with the table contained in Section IV.2 herein.

- D. The City may advertise the Request for Qualifications every three (3) years at which time all firms on the City's Roster, and any new firms wishing to be entered onto the City's Roster, shall be required to resubmit current Statements of Qualifications to be reevaluated in accordance with the evaluation process contained herein. In addition, the City may publish annually a supplemental Request for Qualifications to allow the opportunity for any firms who did not previously respond to a prior Request for Qualifications to submit their Statement of Qualifications for evaluation by the City. Nothing herein shall prohibit the continuation and completion of any professional services agreement that is executed prior to the publication of the Request for Qualifications.
- E. The City may publish a Request for Qualifications for professional services for any project, or to secure other professional services in accordance with Idaho Code if the City determines that it is in the City's best interest.

5. Leases

The City may enter into lease agreements. Regardless of the financing method, the City must use the applicable competitive bidding process based on the cost of the item being leased.

- A. The City Attorney must review all lease agreements for legal adequacy.
- B. The City Supervisor must approve all lease agreements.
- C. The lease agreement authorization level will be determined based on the annual financial obligation to the City including any lease early termination fees and expenses.
- D. The Mayor must sign all lease agreements and the City Clerk shall sign attesting to the Mayor's signature.
- E. All lease agreements must contain a non-appropriations clause indicating the City Council cannot obligate funds beyond the current fiscal year.
- F. No leased equipment should be in the City's possession until the lease agreement has been approved and signed by the Mayor.
- G. A signed copy of every lease agreement shall be retained by the City Clerk and kept in a central location. Copies of all signed lease agreements will be available upon request to the City Clerk. The City Clerk will forward a signed copy to accounts payable for payment verification.
- H. Equipment purchased through a lease agreement is added to the City's inventory during the budget year in which it is received, regardless of when the first lease

payment is made and the City Treasurer/Finance Director is to be advised of such purchases.

6. Risk Management and Insurance Requirements

The City Supervisor serves as the City's Risk Manager. Departments shall ensure that all insurance, bonding, and licensing requirements are met for their projects. This includes Public Works licensing for all Public Works contractors. Providers of services to the City are required to file a certificate of Workers' Compensation Insurance. Each department is responsible for ensuring a copy of the certificate is filed with the contract if appropriate. Contractors with the City are required to have liability insurance coverage and may be required to be bonded.

V. Credit Accounts and Credit Cards

1. Vendor Credit Accounts

- A. To improve efficiency and offer convenience within a controlled environment, purchasing via an authorized City Credit Account is allowed. These accounts are tax-exempt and are to be used for City purchases ONLY. Contractors are not allowed to use a City credit account for materials or other purposes. City employees are not allowed to charge items for their personal use with the intent of reimbursing the City for the purchase or open lines of credit, or apply for and receive charge cards as individuals. Such accounts will be canceled and any unauthorized use of City credit accounts will be considered cause for disciplinary action up to and including termination and/or prosecution.
- B. Only regular full-time City employees are permitted to use credit accounts, and then only with the authorization of the Department Manager. The Department Manager shall provide the City Treasurer/Finance Director with a list of employees who are authorized to charge purchases on the City's Credit Account and shall immediately notify the City Treasurer/Finance Director when an authorized employee leaves the City's employment.
- C. Charge accounts with vendors with whom the City regularly conducts business may be established with the approval of the City Supervisor. All departments will use "City of Moscow" for an account name, rather than an individual department name. No more than one City account may be established with the vendor. All vendors should be directed to use ONLY the City Hall address for billing. The shipping address should be the department's physical address.

2. Credit Cards

- A. The City will maintain a limited number of credit cards that will be issued to the Mayor and authorized regular full-time employees upon demonstration of need and the approval of the City Supervisor. The City Supervisor will establish credit limits and any adjustments thereto for each credit card issued.

- B. Unless otherwise approved by the City Supervisor, credit cards shall be issued to specific individuals (cardholders) and not a department to ensure greater accountability and financial controls.
- C. Cardholders are responsible for safeguarding the card's security at all times and shall employ reasonable measures to prevent the theft or loss of the credit card. Credit cards and credit card numbers shall not be loaned to other employees or individuals. If a cardholder does not take enough care to retain physical control of the card and card information, disciplinary actions may be taken including potentially revoking card privileges.
- D. When using credit cards, receipts showing the detailed nature of the purchase shall be retained by the employee and uploaded into the City credit card system which will then be approved by the Department Supervisor. Each cardholder shall directly review the purchases made using their card and reconcile the charges within the billing period.
- E. Employees who fail to turn in receipts for credit card charges may be responsible for the charges.
- F. If the City identifies expenses on a City-issued credit card that are not allowed by the City's purchasing, personnel, or travel policies, the responsible employee will be required to provide a timely repayment of the disallowed charges and provide an explanation of how the charge occurred and steps that will be taken to ensure it will not occur in the future.
- G. Cardholders are encouraged to utilize per diem reimbursements or advanced payment for meal expenses while traveling instead of utilizing their credit card. When that is not possible, cardholders may use the credit card to purchase meals while traveling in lieu of per diem reimbursement, but all meals charged to the credit card must comply with the established per diem rates for the geographic area where the meals are purchased.
- H. All meal charges must have the original detailed receipt showing what was specifically purchased. Receipts that only have the total paid for the meals are not acceptable. If the receipt does not show the details, or if the meal is over the per diem rate, the cardholder will be responsible for reimbursing the City for the purchase.
- I. Where the meal is required to be paid in association with a conference or event that the employee is required to attend, and where the meal cost exceeds the per diem rate for the geographic area, the conference or event meal cost will take place of the applicable per diem rate for that meal.
- J. It is the responsibility of the cardholder to immediately report a lost or stolen City credit card to the City's credit card provider. The City of Moscow may be liable for all transactions until the card is reported lost or stolen. A cardholder must immediately report a lost or stolen credit card to the City Treasurer/Finance Director

or their designee.

K. Disallowed charges shall include:

- a. Cash advances;
- b. Items or services for personal use;
- c. Expenses incurred by a spouse, family member, or other person not authorized under the agency's policies;
- d. Alcoholic beverages;
- e. Fuel for privately owned vehicles;
- f. Charges made outside an employee's approval authority;
- g. "Split transactions" in which a cardholder arranges for a vendor to split a large transaction into multiple smaller transactions (for instance, to get around the per-transaction credit limit);
- h. Purchases that might violate any portion of this procurement policy and ethical obligations (such as purchases from vendors who might pose a conflict of interest for the purchasing employee or official); and
- i. Purchases restricted by any other laws, policies, or guidelines.

VI. **Definitions**

For the purpose of this policy, the following terms shall be ascribed the following meanings, and all other terms shall be given their plain meaning or the specific statutory meaning provided:

1. The word "shall" is always mandatory and the word "may" is discretionary.
2. **Appointed Official.** Appointed Official shall mean all positions appointed by the Mayor in accordance with Moscow City Code Title 2, Chapter 3, Section 3-1.
3. **Appropriation.** Appropriation means a provision of legal authority given by the City Council through the approval of the City's annual budget, that permits a City department to draw money from the City's treasury for an object or demand against the City that is specified by amount, program, account category, fund, and period. See Idaho Code§ 67-3501B(2).
4. **Department Manager.** Department Managers shall include all employees designated as a Manager in their official position title and description and all Police Department Captains and Fire Department Division Chiefs.

5. **Department Supervisor.** Department Supervisors shall include all employees designated as a Supervisor in their official position title and description.
6. **Fiscal Year.** The fiscal year of the City shall commence on the first day of October. See Idaho Code § 50-1001.
7. **Fund.** Fund means a category of moneys in the treasury from which appropriations are made. See Idaho Code § 67-3501B(5).
8. **Pecuniary Benefit.** Pecuniary benefit is any benefit to a public official or member of their household in the form of money, property, or commercial interests, the primary significance of which is economic gain. See Idaho Code § 18-1351(7).
9. **Procure.** Procure means to obtain property for City use in a manner other than by gift, including, but not limited to, purchase, lease, or rent. See Idaho Code § 67-9203(12).
10. **Procurement.** Procurement is the process of purchasing goods and services that includes the purchasing decision, the selection of the goods and services, and the payment made to purchase the goods from a vendor or contractor.
11. **Vendor.** Vendor means a person or entity capable of supplying property to the City. See Idaho Code § 67-9203(18).

COMMITTEE / CITY COUNCIL STAFF REPORT

DATE: Monday, October 16, 2023



AGENDA ITEM TITLE

Ladder Truck Fire Engine Purchase Approval (ACTION ITEM) - Bill Belknap

RESPONSIBLE STAFF

Bill Belknap, City Supervisor

ADDITIONAL PRESENTER(S)

DESCRIPTION

The City's existing Fire Department ladder truck engine is reaching the end of its serviceable life and needs replacement. In accordance with Section 1.3.8 of the Master Services Agreement between the University and the City dated January 13, 2021, the University has agreed to participate in one-half of the cost of the purchase of the replacement ladder truck engine. The City has obtained a quote for the replacement ladder truck engine from Hughes Fire Equipment through the Houston-Galveston Area Council Cooperative Purchasing Program, which totals \$1,549,896, after \$162,564 in pre-payment discounts (see attached quote). The quoted pricing is valid until October 27, 2023, with full payment due by the end of October 2024 in order to secure the pre-payment discounts. Currently, the estimated delivery time for the ladder truck engine is 44-49 months from the date of order. Staff has provided the University of Idaho with the required 12-month advance notice of the intent to purchase the replacement ladder truck engine. Staff wishes to accept the quote prior to October 27th in order to avoid additional price escalation, and to provide the full payment by the end of October 2024 and is seeking Council approval at this time. The City has accumulated the City's portion of the purchase price within the City's Fleet Fund. This item was reviewed and recommended for approval by the Public Works and Finance Committee at their October 9, 2023 meeting.

REVIEWED BY

PROPOSED ACTIONS

PROPOSED ACTIONS: Approve placing the order for the replacement ladder truck fire engine; or take other action deemed appropriate.

STAFF RECOMMENDATION

Approve placing the order for the replacement ladder truck fire engine.

OTHER RESOURCES

FISCAL IMPACT

PERSONNEL IMPACT

ATTACHMENTS

1. Ladder Fire Engine Purchase Agreement

PURCHASE AGREEMENT

This Purchase Agreement (together with all attachments referenced herein, the "Agreement"), made and entered into by and between Hughes Fire Equipment Inc. ("Company"), and City of Moscow, a Municipality ("Customer") is effective as of the date specified in Section 3 hereof.

1. Definitions.

- a. **"Product"** means the fire apparatus and any associated equipment manufactured or furnished for the Customer by Company pursuant to the Specifications.
- b. **"Specifications"** means the general specifications, technical specifications, training, and testing requirements for the Product contained in the Company Proposal for the Product prepared in response to the Customer's request for proposal.
- c. **"Company Proposal"** means the proposal provided by Company attached as Exhibit C prepared in response to the Customer's request for proposal.
- d. **"Delivery"** means the date Company is prepared to make physical possession of the Product available to the Customer.
- e. **"Acceptance"** The Customer shall have the opportunity, as described in Section 8(b) below, to inspect the Product for substantial conformance with the material Specifications; unless Company receives a Notice of Defect within the time frame described in Section 8(b), the Product will be deemed to be in conformance with the Specifications and accepted by the Customer.

2. Purpose. This Agreement sets forth the terms and conditions of Company's sale of the Product to the Customer.

3. Term of Agreement. This Agreement will become effective on the date it is signed and approved by both Customer and Company ("Effective Date") and, unless earlier terminated pursuant to the terms of this Agreement, it will terminate upon the Customer's Acceptance and payment in full of the Purchase Price.

4. Purchase and Payment. The Customer agrees to purchase the Product specified on Exhibit A for the total purchase price of \$1,549,896.00 ("Purchase Price"). Prices are in U.S. funds. A credit card convenience fee will be added to the purchase price if the Customer elects to make purchase of the Product in whole, or in part, using a credit card. The cost of the convenience fee will be determined prior to processing credit card.

5. Future Changes. Various state or federal regulatory agencies (e.g. NFPA, DOT, EPA) may require changes to the Specifications and/or the Product and in any such event any resulting cost increases incurred to comply therewith will be added to the Purchase Price to be paid by the Customer. In addition, any future drive train upgrades (engine, transmission, axles, etc.), or any other specification changes have not been calculated into our annual increases and will be provided at additional cost. To the extent practicable, Company will document and itemize any such price increases for the Customer.

6. Agreement Changes. The Customer may request that Company incorporate a change to the Products or the Specifications for the Products by delivering a change order to Company; provided, however, that any such change order must be in writing and include a description of the proposed change sufficient to permit Company to evaluate the feasibility of such change ("Change Order"). Within [seven (7) business days] of receipt of a Change Order, Company will inform the Customer in writing of the feasibility of the Change Order, the earliest possible implementation date for the Change Order, of any increase or decrease in the Purchase Price resulting from such Change Order, and of any effect on production scheduling or Delivery resulting from such Change Order. Company shall not be liable to the Customer for any delay in performance or Delivery arising from any such Change Order. A Change Order is only effective when counter-signed by Company's authorized representative.

7. Cancellation/Termination. In the event this Agreement is cancelled or terminated by a party before completion, Company may charge a cancellation fee. The following charge schedule based on costs incurred may be applied: (a) 10% of the Purchase Price after order is accepted and entered by Company; (b) 20% of the Purchase Price after completion of approval drawings, and; (c) 30% of the Purchase Price upon any material requisition. The cancellation fee will increase accordingly as costs are incurred as the order progresses through engineering and into manufacturing. Company endeavors to mitigate any such costs through the sale of such Product to another purchaser; however, Customer shall remain liable for the difference between the Purchase Price and, if applicable, the sale price obtained by Company upon sale of the Product to another purchaser, plus any costs incurred by Company to conduct any such sale.

8. Delivery, Inspection and Acceptance. (a) Delivery. Delivery of the Product is scheduled to be within 44 to 49 months of the Effective Date of this Agreement, F.O.B. Customer's facility in Moscow, Idaho. Risk of loss shall pass to Customer upon Delivery. Delivery of Product is subject to change pending manufacture's delivery schedule at time of order placement. Notification of change will be sent to Customer's address specified in Section 9 hereof. (b) Inspection and Acceptance. 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.

9. Notice. Any required or permitted notices hereunder must be given in writing at the address of each party set forth below, or to such other address as either party may substitute by written notice to the other in the manner contemplated herein, by one of the following methods: hand delivery; registered, express, or certified mail, return receipt requested, postage prepaid; or nationally-recognized private express courier:

Company

Hughes Fire Equipment Inc.

910 Shelley Street

Springfield, Oregon 97477

Customer

City of Moscow

206 E. 3rd St.

Moscow, ID 83843

10. Standard Warranty. Any applicable manufacturer warranties are attached hereto as Exhibit B and made a part hereof. Any additional warranties must be expressly approved in writing by Company's authorized representative.

a. Disclaimer. OTHER THAN AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER COMPANY, ITS PARENT COMPANY, AFFILIATES, SUBSIDIARIES, LICENSORS OR SUPPLIERS, THEIR RESPECTIVE OFFICERS, DIRECTORS, EMPLOYEES, SHAREHOLDERS, AGENTS OR REPRESENTATIVES, MAKE ANY EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE PRODUCTS PROVIDED HEREUNDER OR OTHERWISE REGARDING THIS AGREEMENT, WHETHER ORAL OR WRITTEN, EXPRESS, IMPLIED OR STATUTORY. WITHOUT LIMITING THE FOREGOING, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, THE IMPLIED WARRANTY AGAINST INFRINGEMENT, AND THE IMPLIED WARRANTY OR CONDITION OF FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED AND DISCLAIMED. STATEMENTS MADE BY SALES REPRESENTATIVES OR IN PROMOTIONAL MATERIALS DO NOT CONSTITUTE WARRANTIES.

b. Exclusions of Incidental and Consequential Damages. In no event shall Company be liable for consequential, incidental or punitive damages incurred by Customer or any third party in connection with any matter arising out of or relating to this Agreement, or the breach thereof, regardless of whether such damages arise out of breach of warranty, tort, contract, strict liability, statutory liability, indemnity, whether resulting from non-delivery or from Company's own negligence, or otherwise.

11. Persistent Inflationary Environment. If the Producer Price Index of Components for Manufacturing [www.bls.gov Series ID: WPUID6112] ("PPI") has increased at a compounded annual growth rate of 5.0% or more between the month Pierce accepts our order ("Order Month") and a month 14 months prior to the then predicted Ready For Pickup date ("Evaluation Month"), then pricing may be updated in an amount equal to the increase in PPI over 5.0% for each year or fractional year between the Order Month and the Evaluation Month. The seller will document any such updated price for the customer's approval before proceeding and provide an option to cancel the order.

12. Force Majeure. Company shall not be responsible nor deemed to be in default on account of delays in performance due to causes which are beyond Company's control which make Company's performance impracticable, including but not limited to civil wars, insurrections, strikes, riots, fires, storms, floods, other acts of nature, explosions, earthquakes, accidents, any act of government, delays in transportation, inability to obtain necessary labor supplies or manufacturing facilities, allocation regulations or orders affecting materials, equipment, facilities or completed products, failure to obtain any required license or certificates, acts of God or the public enemy or terrorism, failure of transportation, epidemics, pandemics, quarantine restrictions, failure of vendors (due to causes similar to those within the scope of this clause) to perform their contracts or labor troubles causing cessation, slowdown, or interruption of work.

13. Default. The occurrence of one or more of the following shall constitute a default under this Agreement: (a) the Customer fails to pay when due any amounts under this Agreement or to perform any of its obligations under this Agreement; (b) Company fails to perform any of its obligations under this Agreement; (c) either party becomes insolvent or become subject to a bankruptcy

or insolvency proceedings; (d) any representation made by either party to induce the other to enter into this Agreement is false in any material respect; (e) the Customer dissolves, merges, consolidates or transfers a substantial portion of its property to another entity; or (f) the Customer is in default or has breached any other contract or agreement with Company.

14. Manufacturer's Statement of Origin. It is agreed that the manufacturer's statement of origin ("MSO") for the Product covered by this Agreement shall remain in the possession of Company until the entire Purchase Price has been paid. If more than one Product is covered by this Agreement, then the MSO for each individual Product shall remain in the possession of Company until the Purchase Price for that Product has been paid in full. In case of any default in payment, Company may take full possession of the Product, and any payments that have been made shall be applied as payment for the use of the Product up to the date of taking possession.

15. Independent Contractors. The relationship of the parties established under this Agreement is that of independent contractors and neither party is a partner, employee, agent, or joint venture of or with the other.

16. Assignment. Neither party may assign its rights and obligations under this Agreement unless it has obtained the prior written approval of the other party.

17. Governing Law; Jurisdiction. Without regard to any conflict of laws provisions, this Agreement is to be governed by and under the laws of the state of ~~Oregon~~ Idaho.

18. Facsimile Signatures. The delivery of signatures to this Agreement by facsimile transmission shall be binding as original signatures.

19. Federally Funded Purchases. Company is registered with SAM.gov, is in good standing for purchases utilizing federal funds, and has no past, pending, or threatened ligation that would impact its ability to fulfill the obligations committed herein.

20. Entire Agreement. This Agreement shall be the exclusive agreement between the parties for the Product. Additional or different terms proposed by the Customer shall not be applicable, unless accepted in writing by Company's authorized representative. No change in, modification of, or revision of this Agreement shall be valid unless in writing and signed by Company's authorized representative.

21. Conflict. In the event of a conflict between the Customer Specifications and the Company Proposal, the Company Proposal shall control. In the event there is a conflict between the Company Proposal and this Agreement, the Company Proposal shall control.

Accepted and agreed to:

COMPANY: Hughes Fire Equipment Inc.

CUSTOMER: City of Moscow

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

Signature: _____

Signature: _____

EXHIBIT A

PURCHASE DETAIL FORM
Hughes Fire Equipment Inc.

Date: _____

Customer Name: City of Moscow

Quantity	Chassis / Body Type – Description	Price per Unit
One (1)	Pierce Enforcer 107' Ascendant Aerial AS931	\$1,712,460.00
Less	Chassis progress payment discount	(18,120.00)
Less	Aerial device progress payment discount	(6,704.00)
Less	Payment upon completion at factory discount	(17,186.00)
Less	100% prepayment by October 31, 2024	(120,554.00)
	TOTAL	\$1,549,896.00

Warranty Period: Standard per HFE Proposal AS931 submitted on September 5, 2023

Training Requirements: Standard per HFE Proposal AS931 submitted on September 5, 2023

Other Matters: (a) A performance bond will be provided after order placement. (b) Due to global supply chain constraints, any delivery date contained herein is a good faith estimate as of the date of this order/contract, and merely an approximation based on current information. Delivery updates will be made available, and a final firm delivery date will be provided as soon as possible.

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

Payment Terms: A 100% prepayment in the amount of \$1,549,896.00 is due by October 31, 2024. An invoice will be provided thirty (30) days prior to the due date. If payment is not made at this time \$162,564.00, or a portion thereof, will be added to the final invoice. Final payment, including any changes made during the manufacturing process, is due upon completion of the apparatus at the factory and prior to the apparatus leaving the factory for delivery.

[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 AGREEMENT TERMS AND CONDITIONS DATED AS OF _____, 2023 BETWEEN COMPANY AND CITY OF MOSCOW 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

WARRANTY

STANDARD PER HFE PROPOSAL AS931 SUBMITTED ON SEPTEMBER 5, 2023

EXHIBIT C

COMPANY PROPOSAL

STANDARD PER HFE PROPOSAL AS931 SUBMITTED ON SEPTEMBER 5, 2023

Proposal for **Moscow FD, City of**

Prepared by **Hughes Fire Equipment, Inc**

09/05/2023



PERFORM. LIKE NO OTHER.™

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Pierce Manufacturing is pleased to submit a proposal to Moscow Fire Department for a **Pierce® 107' Heavy Duty Aerial Ladder** 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 75 years of experience in the fire apparatus market. Pierce Manufacturing has built and put into service more than 62,500 apparatus, including more than 33,900 on Pierce custom chassis designed and built specifically for fire and emergency applications. Our Appleton, Wisconsin facility has over 870,000 total square feet of floor space situated on approximately 105 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 applicable NFPA 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.

To demonstrate the quality of our products and services, a list of at least five (5) fire departments/municipalities that have purchased vehicles for a second time is provided.

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 shall deliver the apparatus.

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 the current edition of applicable NFPA standards acceleration and braking requirements.

SERVICE AND WARRANTY SUPPORT

Pierce dealership support will be provided by Hughes Fire Equipment by operating in conjunction with a 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 one hundred fifty (150) 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 operators 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.

LIABILITY

The successful bidder will defend any and all suits and assume all liability for the use of any patented process including any device or article forming a part of the apparatus or any appliance furnished under the contract.

INSURANCE PROVIDED BY BIDDER

COMMERCIAL GENERAL LIABILITY INSURANCE

The successful bidder will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of commercial general liability insurance:

Each Occurrence\$1,000,000

Products/Completed Operations Aggregate\$1,000,000

Personal and Advertising Injury\$1,000,000

General Aggregate\$2,000,000

Coverage will be written on a Commercial General Liability form. The policy will be written on an occurrence form and will include Contractual Liability coverage for bodily injury and property damage subject to the terms and conditions of the policy. The policy will include Owner as an additional insured when required by written contract.

COMMERCIAL AUTOMOBILE LIABILITY INSURANCE

The successful bidder will, during the performance of the contract, keep in force at least the following minimum limits of commercial automobile liability insurance and coverage will be written on a Commercial Automobile liability form:

Each Accident Combined Single Limit:\$1,000,000

UMBRELLA/EXCESS LIABILITY INSURANCE

The successful bidder will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:

Aggregate:\$3,000,000

Each Occurrence:\$3,000,000

The umbrella policy will be written on an occurrence basis and at a minimum provide excess to the bidder's General Liability and Automobile Liability policies.

The required limits can be provided by one (1) or more policies provided all other insurance requirements are met.

Coverage will be provided by a carrier(s) rated A- or better by A.M. Best.

All policies will provide a 30-day notice of cancellation to the named insured. The Certificate of Insurance will provide the following cancellation clause: Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

Bidder agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with the bid. The certificate will show the purchaser as certificate holder.

INSURANCE PROVIDED BY MANUFACTURER

PRODUCT LIABILITY INSURANCE

The manufacturer will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of Product Liability insurance:

Each Occurrence\$1,000,000

Products/Completed Operations Aggregate\$1,000,000

Coverage will be written on a Commercial General Liability form. The policy will be written on an occurrence form. The manufacturer's policy will include the owner as additional insured when required by written contract between the Owner and a Pierce authorized dealer.

UMBRELLA/EXCESS LIABILITY INSURANCE

The manufacturer will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:

Each Occurrence:\$25,000,000

Aggregate:\$25,000,000

The umbrella policy will be written on an occurrence basis and provide excess to the manufacturer's General Liability/Products policies.

The required limits can be provided by one (1) or more policies provided all other insurance requirements are met.

Coverage will be provided by a carrier(s) rated A- or better by A.M. Best.

All policies will provide a 30-day notice of cancellation to the named insured. The Certificate of Insurance will provide the following cancellation clause: Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

Manufacturer agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with the bid. The certificate will show the purchaser as the certificate holder.

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(s) will be determined based on materials used and actual 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".

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*.

VEHICLE INSPECTION PROGRAM CERTIFICATION

To assure the vehicle is built to current NFPA 1901 standards, the apparatus, in its entirety, will be third-party, independent, audit-certified through Underwriters Laboratory (UL) that it is built and complies to all applicable standards in the current edition. The certification includes: 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.

BID BOND

A bid bond as security for the bid in the form of a 10% bid bond will be provided with the proposal. 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.

Due to global supply chain constraints, any delivery date contained herein is a good faith estimate as of the date of this order/contract, and merely an approximation based on current information. Delivery updates will be made available, and a final firm delivery date will be provided as soon as possible.

If the Producer Price Index of Components for Manufacturing [www.bls.gov Series ID: WPUID6112] ("PPI") has increased at a compounded annual growth rate of 5.0% or more between the month Pierce accepts the order ("Order Month") and a month 14 months prior to the then predicted Ready For Pickup date ("Evaluation Month"), then pricing may be updated in an amount equal to the increase in PPI over 5.0% for each year or fractional year between the Order Month and the Evaluation Month.

The seller will document any such updated price for the customer's approval before proceeding and provide an option to cancel the order.

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.

ENFORCER CHASSIS

The Pierce Enforcer™ 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, 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.

MAXIMUM OVERALL HEIGHT

The maximum overall height of the apparatus will be Max of 11' - 10".

WHEELBASE

The wheelbase of the vehicle will be 248.50.

GVW RATING

The gross vehicle weight rating will be 66,800.

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 internal liner will be provided. The liner will be an internal "C" design that steps to an internal "L" design over the rear axle. It will be heat-treated steel measuring 12.50" x 3.00" x 0.25" through the front portion of the liner, stepping to 9.38" x 3.00" x 0.25" through the rear portion of the liner. Each liner will have a section modulus of 13.58 cubic inches, yield strength of 110,000 psi, and rbm of 1,494,042 in-lb. Total rbm at wheelbase center will be 4,391,869 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 zero 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 turning angle of up to 45 degrees.

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 Goodyear 425/65R22.50 radials, 20 ply Armor Max MSA, rated for 22,800 lb maximum axle load and 68 mph maximum speed.

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

REAR AXLE

The rear axle will be a Meritor™, Model RT-46-160, tandem axle assembly with a capacity of 44,000 lb.

An inter-axle differential, which divides torque evenly between axles, will be provided on the rear axle 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/96KPH.

REAR SUSPENSION

Rear suspension will be a Hendrickson, Model FMX 482 EX, air ride with a ground rating of 48,000 lb. The suspension will have the following features:

- Outboard vertical mounted heavy-duty shock absorbers
- Utilizes track bars and torque rods to restrict lateral axle movement and maintain constant pinion angles
- Super heavy-duty transverse beam to help reduce axle stress while increasing roll stability or resistance to lean
- Low spring rate air springs for excellent ride quality
- Dual height control valves to maintain level vehicle from side to side

REAR OIL SEALS

Oil seals will be provided on the rear axle(s).

DRIVER CONTROL DIFFERENTIAL LOCK (DCDL)

Both rear tandem axles will be equipped with driver controlled differential locks (DCDL). The control will be located within easy reach of the driver.

REAR TIRES

Rear tires will be eight (8) Goodyear 12R22.50 radials, load range H, Armor Max MSD, rated for 54,240 lb maximum axle load and 68 mph maximum speed.

The tires will be mounted on Accuride® 22.50" x 8.25" steel disc type 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.

CHROME LUG NUT COVERS

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

FRONT HUB COVERS

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

REAR HUB COVERS

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

MUD FLAPS

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

WHEEL COVERS (FRONT)

Stainless steel wheel covers will be furnished on the front wheels.

WHEEL LINERS

Two (2) pair of Real Wheels, stainless steel wheel liners will be provided on the rear wheels including a full hub cover and chromed lug nut covers.

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.

WHEEL CHOCKS

There will be one (1) pair of folding Ziamatic, Model SAC-44-E, aluminum alloy, Quick-Choc wheel blocks, with easy-grip handle provided.

Wheel Chock Brackets

There will be one (1) pair 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.

ANTI-LOCK BRAKE SYSTEM

The vehicle will be equipped with a Wabco 4S4M, anti-lock braking system. The ABS will provide a four (4) channel anti-lock braking control on both the front and rear wheels (rear tandem 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 particular wheel begins to lockup, a signal will be sent to the control unit. This control unit then will 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.

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:

- Brake treadle valve
- Heated automatic moisture ejector on air dryer
- Total air system capacity of 6,408 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 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 valves 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 a 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.

AIR OUTLET

One (1) air outlet will be installed with a female coupling and shut off valve, located on the driver side pump panel. This system will tie into the "wet" tank of the brake system and include an 85-psi pressure protection valve in the outlet line to prevent the brake system from losing all air.

Female coupling and male fitting will be .25" thread.

A mating male fitting will 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:	X10
Power:	450 hp at 2100 rpm
Torque:	1650 lb-ft at 1400 rpm
Governed Speed:	2200 rpm
Emissions Level:	EPA 2027
Fuel:	Diesel
Cylinders:	Six (6)
Displacement:	606 cubic inches (9.9L)
Starter:	Delco 39MT™
Fuel Filters:	Spin-on style primary filter with water separator and water-in-fuel sensor. Secondary spin-on style filter.

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

ENGINE AIR INTAKE

The engine air intake will be located above the engine cooling package. It will draw fresh air from the front of the apparatus through the radiator grille.

The ember separator is designed to prevent road dirt and recirculating hot air from entering the engine.

The ember separator will be easily accessible by tilting the cab.

EXHAUST SYSTEM

The exhaust system will be stainless steel from the turbo to the engine's aftertreatment device. The exhaust system will include an aftertreatment device to meet current EPA standards. An insulation wrap will be provided on all exhaust pipe between the turbo and the aftertreatment device to minimize the transfer of heat to the cab.

The exhaust will terminate horizontally ahead of the right side rear wheels and will be flush with the body rub rail. The exhaust pipes will be aluminized steel.

There will be an aluminized steel exhaust diffuser with a diameter of 6.00" with a standard straight tip on the end 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.

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 radiator core will consist of aluminum fins, having a serpentine design, brazed to aluminum tubes.

The radiator core will have a minimum front area of 1060 square inches.

Supply tank will be made of heavy duty glass-reinforced nylon and the return tank will be made of aluminum. Both tanks will be crimped onto the core assembly using header tabs and a compression

gasket to complete the radiator core assembly. There will be a full steel frame around the inserts to enhance cooling system durability and reliability.

The radiator will be compatible with commercial antifreeze solutions.

The radiator assembly will be isolated from the chassis frame rails with rubber isolators to prevent the development of leaks caused by twisting or straining when the apparatus operates over uneven terrain.

The radiator will include a de-aeration/expansion 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.

Shields or baffles will be provided to prevent recirculation of hot air to the inlet side of the radiator.

COOLANT LINES

Gates, or Goodyear, rubber hose will be used for all engine coolant lines installed by Pierce Manufacturing.

Hose clamps will be stainless steel constant torque type to prevent coolant leakage. They will expand and contract according to coolant system temperature thereby keeping a constant clamping pressure on the hose.

FUEL TANK

A 65 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 0.75" 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 0.50" 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 4.5 gallon diesel exhaust fluid (DEF) tank will be provided and mounted in the driver's side body forward of the rear axle.

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 below the air bottle storage behind a common door 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.

FUEL PRIMING PUMP

A Cummins automatic electronic fuel priming pump will be integrated as part of the engine.

TRANSMISSION

An Allison 6th 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 amber 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.

TRANSMISSION FLUID LABEL

A label located on the transmission fluid fill access door will be provided. The label will read "Trans Fluid TRANSynd Only".

TRANSMISSION FLUID

The transmission will be provided with TranSynd heavy duty synthetic transmission fluid.

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 four (4)-spoke design.

There will be a switch pod provided on the left side of the steering wheel between the spokes. The switch pods will be an integral part of the steering wheel. The following switches will be provided:

- Windshield wash
- Wiper intermittent speed increase
- Wiper intermittent speed decrease
- Hi/Lo wiper speed
- Wiper off

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: Moscow

The second row of text will be: Volunteer

The third row of text will be: Fire Dept.

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.

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 125' 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 Restraint

There will be one (1) pair of hose tray restraint straps located over the center mounted tray.

The restraints will be a pair of 2.00" wide black nylon straps with Velcro® fasteners provided. The strap(s) will be used to secure the hose in the tray.

TOW EYES

Two (2) chrome tow eyes will be mounted through the front face of the bumper.

The inner and outer edges of the tow eyes will have a .25" radius.

Tow eyes will be mounted directly to the bumper frame.

Cutouts will be provided in the front face of stainless steel bumper to allow tow eyes to extend out the front.

The tow eyes will be designed and positioned to allow up to a 9,000 lb straight horizontal pull in line with the centerline of the vehicle. The tow eyes will not be used for lifting of the apparatus.

FRONT BUMPER UL-LX COATING

Protective black UL-LX® coating will be provided on the outside exterior of the top front bumper flange. It will not be sprayed on the underside of the flange.

The lining will be properly installed by an authorized UL-LX dealer.

CAB

The Enforcer cab will be designed specifically for the fire service and manufactured by the chassis builder.

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 a 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 solid A356-T5 aluminum castings. The B-pillar and C-pillar will be constructed from 0.13" wall extrusions. The rear wall will be constructed of two (2) 2.00" x 2.00" outer aluminum extrusions and two (2) 2.00" x 1.00" inner aluminum extrusions. All main vertical structural members will run from the floor to 4.625" x 3.864" x 0.090" thick roof extrusions to provide a cage-like structure with the A-pillar and roof extrusions being welded into a 0.25" thick corner casting at each of the front corners of the roof assembly.

The front of the cab will be constructed of a 0.13" firewall plate, covered with a 0.090" front skin (for a total thickness of 0.22"), and reinforced with a full width x 0.50" thick cross-cab support located just below the windshield and fully welded to the engine tunnel. The cross-cab support will run the full width of the cab and weld to each A-pillar, the 0.13" firewall plate, and the front skin.

The cab floors will be constructed of 0.125" thick aluminum plate and reinforced at the firewall with an additional 0.25" thick cross-floor support providing a total thickness of 0.375" of structural material at the front floor area. The front floor area will also be supported with two (2) triangular 0.30" wall extrusions that also provides the mounting point for the cab lift. This tubing will run from the floor wireway of the cab to the engine tunnel side plates, creating the structure to support the forces created when lifting the cab.

The cab will be 96.00" wide (outside door skin to outside door skin) to maintain maximum maneuverability.

The forward cab section will have an overall height (from the cab roof to the ground) of approximately 99.00". The crew cab section will have a 10.00" raised roof, with an overall cab height of approximately 109.00". The overall height listed will be calculated based on a truck configuration with the lowest suspension weight rating, 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 raised roof section of the crew cab will have a 58.00" wide x 10.00" high square notch in the center section of the roof. This will allow the aerial device to be bedded in the same location as a non-raised roof.

The floor to ceiling height inside the crew cab will be 54.50" in the center position and 64.50" in the outboard positions.

The crew cab floor will measure 46.00" from the rear wall to the back side of the rear facing seat risers.

The medium block engine tunnel, at the rearward highest point (knee level), will measure 61.50" to the rear wall. The big block engine tunnel will measure 51.50" to the rear wall.

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 cab will be a full tilt cab style.

A 3-point cab mount system with rubber isolators will improve ride quality by isolating chassis vibrations from the cab.

CAB ROOF DRIP RAIL

For enhanced protection from inclement weather, a drip rail will be furnished on the sides of the cab. The drip rail will be painted to match the cab roof, and bonded to the sides of the cab. The drip rail will extend the full length of the cab roof.

INTERIOR CAB INSULATION

The cab will include 1.00" insulation in the ceiling, 1.50" insulation in the side walls, and 2.00" insulation in the rear wall to maximize acoustic absorption and thermal insulation.

FENDER LINERS

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

PANORAMIC WINDSHIELD

A one (1)-piece safety glass windshield will be provided with over 2,775 square inches of clear viewing area. The windshield will be full width and will provide the occupants with a panoramic view. The windshield will consist of three (3) layers: outer light, middle safety laminate, and inner light. The 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 washer will be provided that meet FMVSS and SAE requirements.



The washer reservoir will be able to be filled without raising the cab.



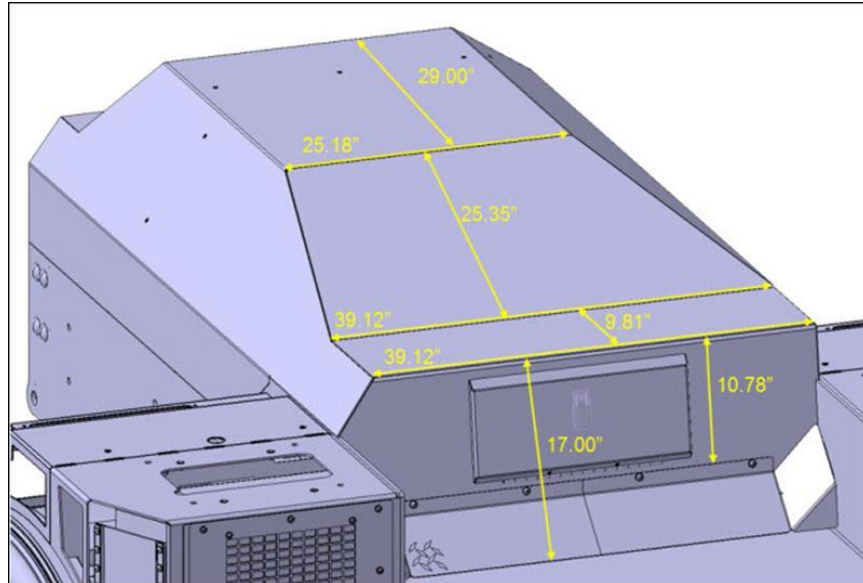
[Washer Reservoir Location]

ENGINE TUNNEL

Engine hood side walls will be constructed of 0.375" aluminum. The top will be constructed of 0.125" aluminum and will be tapered at the top to allow for more driver and passenger elbow room.

The engine hood will be insulated for protection from heat and sound. The noise insulation keeps the dBA level within the limits stated in the current NFPA 1901 standards.

The engine tunnel will be no higher than 17.00" off the crew cab floor.



INTERIOR CREW CAB REAR WALL ADJUSTABLE SEATING (PATENT PENDING)

The interior rear wall of the crew cab will have mounting holes every 2.75" to allow for adjustability of the forward facing crew cab seating along the rear wall. Seats will be adjustable with use of simple hand tools allowing departments flexibility of their seating arrangement should their department needs change.



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, dual lift cylinders, and necessary hoses and valves.

Hydraulic pump will have a manual override for backup in the event of electrical failure.

Lift controls will be located driver side pump panel.

The cab will be capable of tilting 43 degrees to accommodate engine maintenance and removal.

The cab will be locked down by a 2-point normally closed spring loaded hook type latch that fully engages after the cab has been lowered. The system will be hydraulically actuated to release the normally closed locks when the cab lift control is in the raised position and cab lift system is under pressure. When the cab is completely lowered and system pressure has been relieved, the spring loaded latch mechanisms will return to the normally closed and locked position.

The hydraulic cylinders will be equipped with a velocity fuse that protects the cab from accidentally descending when the control is located in the tilt position.

For increased safety, a redundant mechanical stay arm will be provided that must be manually put in place on the left side between the chassis and cab frame when the 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 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 bright finished grille surround, will be provided on the front center of the cab.

DOOR JAMB SCUFFPLATES

All cab door jambs will be furnished with a 1.00" polished stainless steel scuffplate, mounted on the striker side of the jamb.

SIDE OF CAB MOLDING

Chrome molding will be provided on both sides of cab.

MIRRORS

A Retrac, Model 613423, dual vision, motorized, west coast style mirror, with chrome finish, will be mounted on each side of the front cab door with spring loaded retractable arms. The flat glass and convex glass will be heated and adjustable with remote control within reach of the driver.

DOORS

To enhance entry and egress to the cab, the forward cab door openings will be a minimum of 37.50" wide x 63.37" high. The crew cab doors will be located on the sides of the cab and will be constructed in the same manner as the forward cab doors. The crew cab door openings will be a minimum of 34.30" wide x 73.25" high.

The forward cab and crew cab doors will be constructed of extruded aluminum with a nominal material thickness of 0.093". The exterior door skins will be constructed from 0.090" aluminum.

A customized, vertical, pull-down type door handle will be provided on the exterior of each cab door. The finish of the door handle will be chrome/black. 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.



[Exterior Door Handle]

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.



[Interior Door Handle]

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 door for ease of entry.

A red webbed grab handle will be installed on the crew cab door stop strap. The grab handles will be securely mounted.

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

Door Panels

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

ELECTRIC OPERATED CAB DOOR WINDOWS

All four (4) cab doors will be equipped with electric operated windows with one (1) flush mounted automotive style switch on each door. The driver's door will have four (4) switches, one (1) to control each door window.

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.

CAB STEPS

The forward cab and crew cab access steps will be a full size two (2) step design to provide largest possible stepping surfaces for safe ingress and egress. The bottom steps will be designed with a grip pattern punched into bright aluminum treadplate material to provide support, slip resistance, and drainage. The bottom steps will be a bolt-in design to minimize repair costs should they need to be replaced. The forward cab steps will be a minimum 25.00" wide, and the crew cab steps will be 21.65" wide with a 10.00" minimum depth. The inside cab steps will not exceed 16.50" in height.

The vertical surfaces of the step well will be aluminum treadplate.

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

There will be six (6) white LED step lights with chrome housing installed for cab and crew cab access steps.

- One (1) light for the left access steps.
- Two (2) lights for the left side crew cab access steps.
- Two (2) lights for the right side crew cab access steps.
- One (1) light for the right side access step.

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 activated when the battery switch is on and 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 18.70" wide x 23.75" high.



CAB DASH

The driver side dash, switch panel located to the right of the driver, and center console will be an easily removable high impact resistant polymer cover.

The instrument gauge cluster will be surrounded with a high impact ABS plastic contoured to the same shape of the instrument gauge cluster.

The officer side dash will be a flat top design with an upper beveled edge to provide easy maintenance and will be constructed out of aluminum and painted to match the cab interior.

MOUNTING PLATE ON ENGINE TUNNEL

Equipment installation provisions will be installed on the engine tunnel.

A 0.188" smooth aluminum plate will be bolted to the top surface of the engine tunnel. The plate 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 .75" to allow for wire routing below the plate.

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

CAB INTERIOR

The cab interior will be constructed of primarily metal (painted aluminum) to withstand the severe duty cycles of the fire service.

The engine tunnel will be padded and covered, on the top and sides, with dark silver gray 36 ounce leather grain vinyl resistant to oil, grease, and mildew.

For durability and ease of maintenance, the cab interior side walls will be painted aluminum. The rear wall will be painted aluminum.

The headliner will be installed in both forward and rear cab sections. Headliner material will be vinyl. A sound barrier will be part of its composition. Material will be installed on an aluminum sheet and securely fastened to interior cab ceiling.

The forward portion of the cab headliner will permit easy access for service of electrical wiring or other maintenance needs.

All wiring will be placed in metal raceways.

CAB INTERIOR UPHOLSTERY

The cab interior upholstery will be 36 oz dark silver gray vinyl.

CAB INTERIOR PAINT

The cab interior metal surfaces, excluding the rear heater panels, will be painted fire smoke gray, vinyl texture paint.

The rear heater panels will be painted black, vinyl textured 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.

DEFROST/AIR CONDITIONING SYSTEM

A ceiling mounted combination heater, defroster and air conditioning system will be installed in the cab above the engine tunnel area.

Cab Defroster

A 54,000 BTU heater-defroster unit with 690 SCFM of air flow will be provided inside the cab. The heater-defrost will be installed in the forward portion of the cab ceiling. Air outlets will be strategically located in the cab header extrusion per the following:

- One (1) adjustable will be directed towards the left side cab window
- One (1) adjustable will be directed towards the right side cab window
- Six (6) fixed outlets will be directed at the windshield

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 Auxiliary Heater

There will be one (1) 31,000 BTU auxiliary heater with 560 SCFM of air flow provided in each outboard rear facing seat risers with a dual scroll blower. An aluminum plenum incorporated into the cab structure used to transfer heat to the forward positions.

Air Conditioning

A condenser will be a 59,644 BTU output that meets and exceeds the performance specification will be mounted on the radiator.

The air conditioning system will be capable of cooling the average cab temperature from 100 degrees Fahrenheit to 75 degrees Fahrenheit at 50 percent relative humidity within 30 minutes. The cooling performance test will be run only after the cab has been heat soaked at 100 degrees Fahrenheit for a minimum of 4 hours.

The evaporator unit will be installed in the rear portion of the cab ceiling over the engine tunnel. The evaporator will include one (1) high performance heating core, one (1) high performance cooling core with (1) plenum directed to the front and one (1) plenum directed to the rear of the cab. The rear plenum will be covered with a formed plastic cover.

The evaporator unit will have a 52,000 BTU at 690 SCFM rating that meets and exceeds the performance specifications.

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

- Four (4) will be directed towards the seating position on the left side of the cab
- Four (4) will be directed towards the seating position on the right side of the cab

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

- Minimum of five (5) will be directed towards crew cab area

A high efficiency particulate air (HEPA) filter will be included for the system. Access to the filter cover will be secured with four (4) screws.

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

Climate Control

An automotive style controller will be provided to control the heat and air conditioning system within the cab. The controller will have three (3) functional knobs for fan speed, temperature, and air flow distribution (front to rear) control.



The system will control the temperature of the cab and crew cab automatically by pushing the center of the fan speed control knob. Rotate the center temperature control knob to set the cab and crew cab temperature.

The AC system will be manually activated by pushing the center of the temperature control knob. Pushing the center of the air flow distribution knob will engage the AC for max defrost, setting the fan speeds to 100 percent and directing all air flow to the overhead forward position.

The system controller will be located within panel position #12.

Gravity Drain Tubes

Two (2) condensate drain tubes will be provided for the air conditioning evaporator. The drip pan will have two (2) drain tubes plumbed separately to allow for the condensate to exit the drip pan. No pumps will be provided.

SUN VISORS

Two (2) smoked Lexan™ sun visors will be 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 HANDLES

A black rubber covered grab handle will be mounted on the door post of the driver and officer's side cab door to assist in entering the cab. The grab handles 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(s) with Whelen, Model 3FLANGE, chrome flange kit(s) installed under the cab to be used as engine compartment illumination.

These light(s) 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 engine oil dipstick will allow for checking only. The transmission dipstick will allow for both checking and filling.

The door will have a rubber seal for thermal and acoustic insulation. One (1) flush lift and turn 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 of the vehicle (including tiller cab and belted seat positions in the rescue body) will be six (6).

DRIVER SEAT

A 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 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. To provide flexibility for multiple driver configurations, the seat will have an adjustable reclining back. The seat back will be a high back style with side bolster pads for maximum support. For optimal comfort, the seat will be provided with 17.00" deep 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.

OFFICER SEAT

A seat will be provided in the cab for the passenger. The seat will be a fixed type, with no suspension. For optimal comfort, the seat will be provided with 17.00" deep foam cushions designed with EVC (elastomeric vibration control).

The seat back will be an SCBA back style with 5 degree fixed recline angle. 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.

The seat will be furnished with a 3-point, shoulder type seat belt.

RADIO COMPARTMENT

A radio compartment will be provided under the officer's seat.

The inside compartment dimensions will be 16.00" wide x 7.50" high x 15.00" deep, with the back of the compartment angled up to match the cab structure.

A drop-down door with one (1) flush lift and turn latch will be provided for access.

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

REAR FACING DRIVER SIDE OUTBOARD SEAT

There will be one (1) rear facing seat provided at the driver side outboard position in the crew cab. For optimal comfort, the seat will be provided with 15.00" deep foam cushions designed with EVC (elastomeric vibration control).

The seat back will be an SCBA back style with 5 degree fixed recline angle. 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.

The seat will be furnished with a 3-point, shoulder type seat belt.

REAR FACING PASSENGER SIDE OUTBOARD SEAT

There will be one (1) rear facing seat provided at the passenger side outboard position in the crew cab. For optimal comfort, the seat will be provided with 15.00" deep foam cushions designed with EVC (elastomeric vibration control).

The seat back will be an SCBA back style with 5 degree fixed recline angle. 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.

The seat will be furnished with a 3-point, shoulder type seat belt.

FORWARD FACING CENTER SEATS

There will be two (2) forward facing seats provided at the center position in the crew cab. For optimal comfort, the seats will be provided with 17.00" deep foam cushions designed with EVC (elastomeric vibration control).

The seat backs will be an SCBA style with 90 degree back. 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:

- A seat safety system will be included. When activated, this system will pretension the seat belt.

The seats will be furnished with a 3-point, shoulder type seat belt.

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 five (5) SCBA brackets.

SEAT BELTS

All cab and tiller cab (if applicable) seating positions 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 include height adjustment. This adjustment will optimize the belts effectiveness and comfort for the seated firefighter. The 3-point shoulder type seat belts will be furnished with dual automatic retractors that will provide ease of operation in the normal seating position.

The 3-point shoulder type 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.

Any flip up seats will include a 3-point shoulder type belts only.

To ensure safe operation, the seats 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.

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.

ENHANCED SOFTWARE FOR CAB AND CREW CAB DOME LIGHTS

The cab and crew cab dome lights will remain on for 10 seconds for improved visibility after the doors are closed.

The dome lights will dim after 10 seconds or immediately if the vehicle's transmission is put into gear.

PORTABLE HAND LIGHTS, PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 9.9.4 requires two portable hand lights mounted in brackets fastened to the apparatus.

The hand lights are not on the apparatus as manufactured. The fire department will provide and mount these hand lights.

CAB INSTRUMENTATION

The cab instrument panel include gauges, an LCD display, telltale indicator lamps, control switches, alarms, and a diagnostic panel. The function of the instrument panel controls and switches will be 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, forward of the driver. The gauge assembly and switch panels are designed to be removable for ease of service and low cost of ownership.

Gauges

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

- Voltmeter gauge (volts):
 - Low volts (11.8 VDC)
 - Amber caution indicator on the information center with intermittent alarm
 - Amber caution light on gauge assembly

- High volts (15.5 VDC)
 - Amber caution indicator on the information center with intermittent alarm
 - Amber caution light on gauge assembly
- Very low volts (11.3 VDC)
 - Red warning indicator on the information center with a steady alarm
 - Amber caution light on gauge assembly
- Very high volts (16.0 VDC)
 - Red warning indicator on the information center with a steady alarm
 - Amber caution light on gauge assembly
- Engine Tachometer (RPM)
- Speedometer MPH (Major Scale), KM/H (Minor Scale)
- Fuel level gauge (Empty - Full in fractions):
 - Low fuel (1/8 full)
 - Amber caution indicator on the information center with intermittent alarm
 - Amber caution light on gauge assembly
 - Very low fuel (1/32 full)
 - Red caution indicator on the information center with steady alarm
 - Amber caution light on gauge assembly
- Engine Oil pressure Gauge (PSI):
 - Low oil pressure to activate engine warning lights and alarms
 - Red caution indicator on the information center with steady alarm
 - Amber caution light on gauge assembly
- Front Air Pressure Gauges (PSI):
 - Low air pressure to activate warning lights and alarm
 - Red warning indicator on the information center with a steady alarm
 - Amber caution light on gauge assembly
- Rear Air Pressure Gauges (PSI):
 - Low air pressure to activate warning lights and alarm
 - Red warning indicator on the information center with a steady alarm
 - Amber caution light on gauge assembly
- Transmission Oil Temperature Gauge (Fahrenheit):
 - High transmission oil temperature activates warning lights and alarm
 - Amber caution indicator on the information center with intermittent alarm
 - Amber caution light on gauge assembly
- Engine Coolant Temperature Gauge (Fahrenheit):
 - High engine temperature activates an engine warning light and alarms
 - Amber caution indicator on the information center with intermittent alarm
 - Amber caution light on gauge assembly
- Diesel Exhaust Fluid Level Gauge (Empty - Full in fractions):
 - Low fluid (1/8 full)
 - Amber indicator light in gauge dial

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

Indicator Lamps

To promote safety, the following telltale indicator lamps will be located on the instrument panel in clear view of the driver. 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)
- Side roll fault (where applicable)
- Front air bag fault (where applicable)

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

A system will be provided which automatically tests telltale indicator lights and alarms located on the cab instrument panel. 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. All switches will have backlit labels for low light applications.

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

Panel back lighting intensity control switch: A three (3)-position momentary rocker switch will be provided. Pressing the top half of the switch, "Panel Up" increases the panel back lighting intensity and pressing the bottom half of the switch, "Panel Down" decreases the panel back lighting intensity. Pressing the half or bottom half of the switch several times will allow back lighting intensity to be gradually varied from minimum to maximum intensity level for ease of use.

Ignition switch: A three (3)-position maintained/momentary rocker switch will be provided. The first switch position will turn off and deactivate vehicle ignition. The second switch position will activate vehicle ignition and will perform prove-out on the telltale indicators and alarms for 3 to 5 seconds after the switch is turned on. A green indicator lamp is activated with vehicle ignition. The third momentary position will temporarily silence all active cab alarms. An alarm "chirp" may continue as long as alarm condition exists. Switching ignition to off position will terminate the alarm silence feature and reset function of cab alarm system.

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.

Hazard switch will be provided on the instrument panel or on the steering column.

Heater, defroster, and air conditioning control panel.

Turn signal arm: A self-canceling turn signal with high beam headlight controls will be provided.

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.

High idle engagement switch: A momentary rocker switch with integral indicator lamp will be provided. The switch will activate and deactivate the high idle function. 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.

Emergency switching will be controlled by multiple individual warning light switches for various groups or areas of emergency warning lights. An Emergency Master switch provided on the instrument panel that enables or disables all individual warning light switches is included.

An additional "Emergency Master" button will be provided on the lower left hand corner of the gauge panel to allow convenient control of the "Emergency Master" system from inside the driver's door when standing on the ground.

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 lower instrument console and up to six (6) switch panels in the overhead visor console. All switches have backlit labels for low light conditions.



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
- Roll sensor diagnostic port
- 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 the following, 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. The built-in switch panels will be located in the lower console or overhead console of the cab.

Additional switch panel(s) will be located in the overhead position(s) 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

Wiper control will consist of a two (2)-speed windshield wiper control with intermittent feature and windshield washer controls. The control will be located in the left hand pod of the steering wheel.

HOURLY METER - AERIAL DEVICE

The following aerial hour meter messages will be included in the information centers:

- Aerial Hours, that keeps track of the time the aerial device is in motion.
- Aerial PTO Hours, that keeps track of the time the aerial master switch is on and the aerial PTO is engaged.

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 one (1) 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 under the engine tunnel plate forward towards the dash.. 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 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 next to the power points on the officer side dash, see instrument panel layouts..
- Termination will be a Blue Sea Systems part number 1016 dual USB charger socket.
- Wires will be sized to 125 percent of the protection.

This circuit(s) may be load managed when the parking brake is applied.

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 15 amps at 12 volts DC
- Power and ground will terminate in the center console
- Termination will be a 15 amp power point plug with a rubber cover
- Wires will be sized to 125 percent of the protection

There will be a 48W 2-Port USB-C 3.0 Fast Charger Adapter provided.

The circuit(s) 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 20 amps at 12 volts DC.

Power and ground will terminate RS4 mid height of compartment with a 4' pigtail, front wall towards the rear..

Termination will be with heat shrinkable butt splicing.

Wires will be sized to 125% of the protection.

This circuit(s) 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 20 amps at 12 volts DC.
- Power and ground will terminate LS1 upper rear right side wall with a 4' pigtail & RS1 upper left side wall with a 4' pigtail..
- Termination will be with heat shrinkable butt splicing.

Wires will be sized to 125 percent of the protection.

This circuit(s) 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 20 amps at 12 volts DC
- Power and ground will terminate on the rear wall of the crew cab, centered

- Termination will be with heat shrinkable butt splicing
- Wires will be sized to 125% of the protection

This circuit(s) 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 15 amps at 12 volts DC
- Power and ground will terminate officer side dash area
- Termination will be with heat shrinkable butt splicing
- Wires will be sized to 125 percent of the protection

The circuit(s) 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 20 amps at 12 volts DC.
- Power and ground will terminate Center dash area under the engine tunnel plate.
- Termination will be with heat shrinkable butt splicing.

Wires will be sized to 125 percent of the protection.

This circuit(s) may be load managed when the parking brake is set.

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 158 degrees Fahrenheit
- LCD optically bonded to hardened AR glass 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(s) causing the audible alarm to sound. If more than one (1) text message occurs, the messages will cycle every second until the problem(s) 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 the water level system includes compatible communications to the information center)
- Foam Level (if the foam level system includes compatible communications to the information center)
- 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
 - Faults
 - Listed by order of occurrence
 - Allows to sort by system
 - Interlock
 - Throttle Interlocks
 - Pump Interlocks (if equipped)
 - Aerial Interlocks (if equipped)
 - PTO Interlocks (if equipped)
 - 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.
 - 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)
 - Live Data
 - General Truck Data
- Maintenance

- Engine oil and filter
 - Transmission oil and filter
 - Pump oil (if equipped)
 - Foam (if equipped)
 - Aerial (if equipped)
- Setup
 - Clock Setup
 - Date & Time
 - 12 or 24 hour format
 - Set time and date
 - Backlight
 - Daytime
 - Night time
 - Sensitivity
 - Unit Selection
 - Home Screen
 - Virtual Button Setup
 - On Scene Screen Setup
 - Configure Video Mode
 - Set Video Contrast
 - Set Video Color
 - Set Video Tint
- Do Not Move
 - 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 be indicated
 - 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 Door(s)
 - Ladder Rack (if applicable)
 - Deck Gun (if applicable)
 - Light Tower (if applicable)
 - Hatch Door (if applicable)
 - Stabilizers (if applicable)
 - Steps (if applicable)
- Notifications
 - 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.

COLLISION MITIGATION

There will be a HAAS Alert®, Model HA7 Responder-to-Vehicle (R2V) collision avoidance system provided on the apparatus. The HA7 cellular transponder module will be installed behind the cab windshield, as high and near to the center as practical, to allow clear visibility to the sky. The module dimensions are 5.40" long x 2.70" wide x 1.30" high, and operating temperature range is -40 degree C to 85 degree C.

The transponder will be connected to the vehicle's emergency master circuit and battery direct power and ground.

While responding with emergency lights on, the HA7 transponder sends alert messages via cellular network to motorists in the vicinity of the responding truck that are equipped with the WAZE app.

While on scene with emergency lights on, the HA7 transponder sends road hazard alerts to motorists in the vicinity of the truck that are equipped with the WAZE app.

The HA7 Responder-to-Vehicle (R2V) collision avoidance system will include the transponder and a 5 year cellular plan subscription.

Activation of the HAAS Alert system requires a representative of the customer to accept the End User License Agreement (EULA) via an on-line portal.

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:
 - and there is any occupant seated but not buckled or any belt buckled with an occupant.
 - 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

There will be digital, single radio interface, intercom located behind the officer seat in the cab. The front panel will have master volume, and squelch controls with illuminated indicators, allowing for independent level setting of radio and auxiliary audio devices.

There will be one (1) radio listen only / transmit control with select, monitor, receive, and transmit indicators. There will be one (1) auxiliary audio input with select, and receive indicators.

Headset jacks will be provided for the driver, officer, four (4) crew positions located at two (2) forward facing seats and two (2) rearward facing seats , and the pump operator.

The following Firecom components will be provided:

- One (1) 5100D Intercom
- Six (6) HM-10 Interior headset jacks
- One (1) HM-30 Exterior headset jack
- All necessary power and station cabling

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:

- Motorola High Power , Model number APX-6500 full head radio.

UNDER THE HELMET HEADSET, INTERCOM ONLY

There will be four (4) Firecom™, Model UH-52, under helmet, intercom only headset(s) provided driver's side outboard rear facing seat, driver's side inboard forward facing seat, passenger's side inboard forward facing seat and passenger's side outboard rear facing seat.

Each headset will feature:

- Coiled cord with rugged angled plug
- Noise cancelling electric microphone
- Flex boom for left or right dress
- Adjustable volume control
- ComLeather ear seals with 24 dB noise reduction
- Intercom Push To Talk button



UNDER THE HELMET HEADSET, RADIO TRANSMIT

There will be two (2) Firecom™, Model UH-51, under helmet, radio transmit headset(s) provided driver's seat and officer seat.

Each headset will feature:

- Coiled cord with rugged angled plug
- Noise cancelling electric microphone
- Flex boom rotates for left or right dress
- Adjustable volume control
- ComLeather ear seals with 24 dB noise reduction
- Radio Push To Transmit button. Mic is always live for intercom communication



HEADSET HANGERS

There will be six (6) headset hanger(s) shipped with loose equipment. The hanger(s) will meet NFPA 1901, Section 14.1.11, requirement for equipment mounting.

HEADSET HANGERS

There will be six (6) headset hanger(s) installed driver's seat, officer's seat, driver's side inboard forward facing seat, driver's side outboard rear facing seat, passenger's side inboard forward facing seat and passenger's side outboard rear facing seat. The hanger(s) will meet NFPA 1901, Section 14.1.11, requirement for equipment mounting.

INTERFACE EXTENSION CABLE

There will be one (1) Firecom, 108-0086-00, radio interface extension cable(s) routed to overhead switch panel up to 19.00' from the intercom.

RADIO ANTENNA MOUNT

There will be one (1) standard 1.125", 18 thread antenna-mounting base(s) installed on the right side on the cab roof with high efficiency, low loss, coaxial cable(s) routed to the instrument panel area. A weatherproof cap will be installed on the mount.



VEHICLE CAMERA SYSTEM

There will be a color vehicle camera system provided with the following:

- One (1) Standard Definition (SD) camera located at the rear of the apparatus, pointing rearward, displayed automatically with the vehicle in reverse.

The camera images will be displayed on the left side vehicle information center display. Audio from the microphone on the rear camera will be emitted by an amplified speaker with volume control located on the instrument panel.

The following components will be included:

- One (1) SV-CW134639CAI Camera
- All necessary cables

CAMERA SWITCHER

A camera switcher is not required.

VEHICLE CAMERA GUARD

There will be one (1) aluminum treadplate guard(s) fastened over the vehicle camera(s) located for the rear back up camera .

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, electronic control modules to include black housings, a power indicator and status indicator 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 programmable to accommodate changes to the vehicle's operating parameters

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 32 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 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

Advanced diagnostic feature will be provided in this control system. From the Command Zone display or connected wireless device, these features allow the user to monitor the real-time status of every input or output on the vehicle. It also allows users logged in as an administrator to force on inputs or outputs to assist the troubleshooting process.

TCU 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 communicate through a black WiFi antenna 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 TCU 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 TCU will provide up to 2 Gigabytes of data storage.

The TCU will provide a means to download the TCU information and update software in the device.

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.

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. Component and partial (incomplete) vehicle testing is not adequate as overall vehicle design can impact test results and thus is not acceptable by itself.

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 SYSTEM PROGNOSTICS

There will be a software based vehicle tool provided to predict remaining life of the vehicles critical fluid and events.

The system will send automatic indications to the Command Zone™ information center and/or wireless enabled devices to proactively alert of upcoming service intervals.

Prognostics will include the following:

- Engine oil and filter
- Transmission oil and filter

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 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 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 Stryten/Exide®, Model 31S950X5W, 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

Batteries will be placed on non-corrosive mats and be stored in well ventilated compartments located under the cab and bolted directly to the chassis frame. The battery boxes will have reinforced sides. The battery compartments will be constructed of 0.188" steel plate and be designed to accommodate a maximum of three (3) group 31 batteries in each compartment. The battery hold-downs will be of a non-corrosive material. All bolts and nuts will be stainless steel.

Heavy-duty, 2/0 gauge, color coded battery cables will be provided. Battery terminal connections will be coated with anti-corrosion compound.

Battery solenoid terminal connections will be encapsulated with semi-permanent rubberized compound.

JUMPER STUDS

One (1) set of battery jumper studs with plastic color-coded covers will be included on the battery compartments.

The battery charger will be located in the left side crew cab rear facing seat riser located TBD.

BATTERY CHARGER

There will be a Kussmaul™, Chief Series Smart Charger 4012, product code 091-266-12-40, 40 amp battery charger with build-in touch screen display provided.

The battery charger will be wired to the AC shoreline inlet through a junction box located near the battery charger.

The battery charger indicator will be located on the driver's seat riser.

REMOTE CONTROL PANEL - BATTERY CHARGER

There will be a Kussmaul™, Chief Series Smart Charger remote control panel, product code 091-266-RCP included.

AUTO EJECT FOR SHORELINE

There will be one (1) Kussmaul™, Model 091-55-20-120, 20 amp 120 volt AC shoreline inlet(s) provided to operate the dedicated 120 volt AC circuits on the apparatus.

The shoreline inlet(s) will include red weatherproof flip up cover(s).

There will be a release solenoid wired to the vehicle's starter to eject the AC connector when the engine is starting.

The shoreline(s) will be connected to Battery charger and the interior cab and body 120V receptacles.

There will be a mating connector body supplied with the loose equipment.

There will be a label installed near the inlet(s) 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.

GENERATOR TO SHORELINE TRANSFER SWITCH

There will be an automatic transfer switch between the onboard generator and the shoreline inlet. The loads connected to the transfer switch will be power from the onboard generator when the generator is running.

ALTERNATOR

There will be a Leece-Neville, Model BLP4003, alternator provided. It will have a rated output current of 420 amp as measured by SAE method J56. The alternator will feature an integral, self diagnostic regulator and rectifier. The alternator will be connected to the power and ground distribution system with heavy-duty cables sized to carry the full rated alternator output.

BATTERY BOX BUTT SPLICE AND RING TERMINAL SEALING

Butt Splice: A butt splice is defined as an insulated crimped connection used to join wires.

All butt splices installed in the left and right chassis battery box areas will be heat shrinkable type and shrunk at each splice. If a butt splice is not used it will be shrunk to prevent moisture from reaching the wire.

Ring Terminal: A ring terminal is defined as a crimped wire termination with an eyelet intended to be secured on a stud.

All ring terminals installed in the left and right chassis battery box areas will have the crimp sealed front and back with heat shrinkable material to prevent moisture from reaching the wire. The exposed ring of the terminal will be covered in a corrosion preventative coating after it has been installed on a stud.

BODY BUTT SPLICE AND RING TERMINAL SEALING

Butt Splice: A butt splice is defined as an insulated crimped connection used to join wires.

All butt splices installed in the body structure will be heat shrinkable type and shrunk at each splice. If a butt splice is not used it will be shrunk to prevent moisture from reaching the wire.

Ring Terminal: A ring terminal is defined as a crimped wire termination with an eyelet intended to be secured on a stud.

All ring terminals installed in the body structure will have the crimp sealed front and back with heat shrinkable material to prevent moisture from reaching the wire. The exposed ring of the terminal will be covered in Dow Corning 1890 "GORP" after it has been installed on a stud.

CHASSIS FRAME & REAR SUBSTRUCTURE SPLICE AND RING TERMINAL SEALING

Butt Splice: A butt splice is defined as an insulated crimped connection used to join wires.

All butt splices installed in the chassis frame and rear substructure will be heat shrinkable type and shrunk at each splice. If a butt splice is not used it will be shrunk to prevent moisture from reaching the wire.

Ring Terminal: A ring terminal is defined as a crimped wire termination with an eyelet intended to be secured on a stud.

All ring terminals installed in the chassis frame and rear substructure will have the crimp sealed front and back with heat shrinkable material to prevent moisture from reaching the wire. The exposed ring of the terminal will be covered in Dow Corning 1890 "GORP" after it has been installed on a stud.

PUMP COMPARTMENT BUTT SPLICE AND RING TERMINAL SEALING

Butt Splice: A butt splice is defined as an insulated crimped connection used to join wires.

All butt splices installed in the pump compartment will be heat shrinkable type and shrunk at each splice. If a butt splice is not used it will be shrunk to prevent moisture from reaching the wire.

Ring Terminal: A ring terminal is defined as a crimped wire termination with an eyelet intended to be secured on a stud.

All ring terminals installed in the pump compartment will have the crimp sealed front and back with heat shrinkable material to prevent moisture from reaching the wire. The exposed ring of the terminal will be covered in Dow Corning GORP after it has been installed on a stud.

TURNTABLE & AERIAL CONTROL CONSOLE SPLICE AND RING TERMINAL SEALING

Butt Splice: A butt splice is defined as an insulated crimped connection used to join wires.

All butt splices installed in the aerial turntable and control console will be heat shrinkable type and shrunk at each splice. If a butt splice is not used it will be shrunk to prevent moisture from reaching the wire.

Ring Terminal: A ring terminal is defined as a crimped wire termination with an eyelet intended to be secured on a stud.

All ring terminals installed in the aerial turntable and control console will have the crimp sealed front and back with heat shrinkable material to prevent moisture from reaching the wire. The exposed ring of

the terminal will be covered in Dow Corning 1890 "GORP" after it has been installed on a stud.

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.
 - 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:
 - ON = not shed
 - 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®, Model 8800, 4" x 6" 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 headlights 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 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 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.

FRONT CAB SIDE DIRECTIONAL/MARKER LIGHTS

There will be two (2) Weldon, Model 9186-8580-29, amber LED lights installed front of the cab door, one (1) on each side of the cab.

The lights will activate as marker lights with the headlight switch and directional lights with the corresponding directional circuit.

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 lighting included in the rear tail light housing will include the following:

- Two (2) Whelen®, Model M62BTT, 4.30" high x 6.70" wide x 1.40" deep brake/tail lights with red LEDs
- Two (2) Whelen, Model M62T, 4.30" high x 6.70" wide x 1.40" deep directional lights with amber LEDs. The directional lights will be set to Steady On (Arrow) flash pattern.
- The lens color(s) to be clear.

There will be two (2) Whelen Model M62BU, LED backup lights provided in the tail light housing.

LICENSE PLATE BRACKET

One (1) license plate bracket constructed of stainless steel will be provided at the rear of the apparatus.

One (1) white LED light with chrome housing will be provided to illuminate the license plate. A 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.

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-12HW020, 350 lumens, 20.00" LED weatherproof strip light with bracket provided under the passenger's side pump panel running board.

If the combination of options in the vehicle does not permit clearance for a 20.00" light, a 12.00" version of the Amdor light will be installed.

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 one (1) Amdor®, Model AY-LB-12HW020, 20.00" 12 volt DC LED strip light provided under the side turntable access steps.

The perimeter scene lights will be activated when the parking brake is applied.

ENHANCED SOFTWARE FOR PERIMETER LIGHTS

All perimeter lights will be deactivated when the parking brake is released unless alternate control is selected.

The cab and crew cab perimeter lights will remain on for ten (10) seconds for improved visibility after the doors closed.

12 VOLT LIGHTING

There will be two (2) Whelen® Model P*H1*, 8,875 lumens 12 volt DC LED light(s) with a combination of flood and spot optics provided on the front visor, one (1) on the driver's side and one (1) on the passenger's side with 8 degree outward bracket.

The housing(s) painted parts of this light assembly to be white.

The light(s) will be controlled by a switch at the driver's side switch panel and by a switch at the passenger's side switch panel.

These light(s) may be load managed when the parking brake is applied.

12 VOLT LIGHTING

There will one (1) HiViz Model FT-MB-2.15-*-*-CPREC, 11,100 lumens 6.13" high x 17.50" long x 3.05" deep 12 volt DC light(s) with recessed aluminum trim, white LEDs and a combination of flood and spot optics installed on the apparatus located, Cab for side scene lighting on the driver side.

The painted parts of the light housing and brackets to be white.

The light(s) will be controlled by a switch at the driver's side switch panel, by a switch at the left side pump panel and by a switch at the passenger's side switch panel.

The light(s) may be load managed when the parking brake is applied.

12 VOLT LIGHTING

There will one (1) HiViz Model FT-MB-2.15-*-*-CPREC, 11,100 lumens 6.13" high x 17.50" long x 3.05" deep 12 volt DC light(s) with recessed aluminum trim, white LEDs and a combination of flood and spot optics installed on the apparatus located, Cab for side scene lighting on the passenger side.

The painted parts of the light housing and brackets to be white.

The light(s) will be controlled by a switch at the driver's side switch panel, by a switch at the left side pump panel and by a switch at the passenger's side switch panel.

The light(s) may be load managed when the parking brake is applied.

12 VOLT LIGHTING

There will one (1) HiViz Model FT-B-46-*-*-*, 13,306 lumens 2.56" high x 46.00" long x 2.45" deep 12 volt DC light(s) with white LEDs and with a combination of spot, and flood optics installed on the apparatus located, above RS4/RS5.

The painted parts of the light housing and brackets to be white.

The light(s) will be controlled by a switch at the driver's side switch panel, by a switch at the left side pump panel and by a switch at the passenger's side switch panel.

The light(s) may be load managed when the parking brake is applied.

12 VOLT LIGHTING

There will one (1) HiViz Model FT-B-65-*, 18,849.6 effective lumens 2.06" high x 65.23" long x 2.45" deep 12 volt DC light(s) with white LEDs and a combination of spot, and flood optics installed on the apparatus located, above RS1/RS2.

The painted parts of the light housing and brackets to be white.

The light(s) will be controlled by a switch at the driver's side switch panel, by a switch at the left side pump panel and by a switch at the passenger's side switch panel.

The light(s) may be load managed when the parking brake is applied.

12 VOLT LIGHTING

There will one (1) HiViz Model FT-B-65-*, 18,849.6 effective lumens 2.06" high x 65.23" long x 2.45" deep 12 volt DC light(s) with white LEDs and a combination of spot, and flood optics installed on the apparatus located, above LS1/LS2.

The painted parts of the light housing and brackets to be white.

The light(s) will be controlled by a switch at the driver's side switch panel, by a switch at the left side pump panel and by a switch at the passenger's side switch panel.

The light(s) may be load managed when the parking brake is applied.

12 VOLT LIGHTING

There will one (1) HiViz Model FT-B-46-*, 13,306 lumens 2.56" high x 46.00" long x 2.45" deep 12 volt DC light(s) with white LEDs and with a combination of spot, and flood optics installed on the apparatus located, above LS4/LS5.

The painted parts of the light housing and brackets to be white.

The light(s) will be controlled by a switch at the driver's side switch panel, by a switch at the left side pump panel and by a switch at the passenger's side switch panel.

The light(s) may be load managed when the parking brake is applied.

HOSE BED LIGHTS

There will be two (2) sets of 12 volt DC light strips with white LEDs, provided to illuminate the hose bed and under the turntable per the following:

- One (1) set of lights installed on the left side of the hose bed.
- One (1) set of lights installed on the right side of the hose bed.

There will be a 16 gauge bright stainless steel overhead cover with 45 degreed ends provided over the lights to protect the lights from the hose and the hose from damaging snags.

The lights will be activated by a stainless steel cup switch located at the rear no more than 72.00" from the ground.

REAR SCENE LIGHT(S)

There will be two (2) surface mounted HiViz, Model FT-GESM, 20,500 equivalent lumens 8.65" high x 10.61" wide x 2.75" deep light(s) with white LEDs installed at the rear of the apparatus, one each side high as possible on the rear bulkheads.

The light(s) to include chrome bezel.

The light(s) will be controlled by a switch at the driver's side switch panel and by a switch in a stainless steel cup located at the rear of the apparatus no more than 72.00" from the ground.

The light(s) may be load managed when the parking brake is applied.

WALKING SURFACE LIGHT

There will be Model FRP, 4" round black 12 volt DC LED floodlight(s) with bolt mount provided to illuminate the entire designated walking surface on top of the body.

The light(s) will be activated when the body step lights are on.

WATER TANK

It will have a capacity of 500 gallons and will be constructed of polypropylene plastic in a rectangular shape.

The joints and seams will be nitrogen welded inside and out.

The tank will be baffled in accordance with NFPA Bulletin 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 chsnnel 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 bed will be fabricated of 0.125" thick 5052-H32 aluminum with a tensile strength of 31,000.

The sides of the hose bed will not form any portion of the fender compartments.

The hose bed will be located ahead of the ladder turntable between the tank and side body compartments.

Hose removal will be at the rear of the body via "chutes" under the turntable on the right side. Each chute will be enclosed with a full height smooth aluminum door. There will be a lift and turn latch and a pneumatic cylinder at the top of the door (if applicable).

The hose bed flooring will consist of removable aluminum grating with a top surface that is corrugated to aid in hose aeration.

The grating slats will be 0.50" wide x 4.50" long with spacing between the slats for hose ventilation.

The hose bed/cargo area interior will be painted to match the lower body color.

Hose capacity will be a minimum of 1000' of 5.00" large diameter hose.

AERIAL HOSE BED HOSE RESTRAINT

The hose in the hose bed will be restrained by one (1) black nylon Velcro® strap at the top of the hose bed. The strap will be installed to the top of the hose bed side sheets.

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 13.00" 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 left side will be provided just behind the compartmentation.

There shall be no bottom flip step provided. The bottom step will have a step height not exceeding 24.00" from the ground to the top surface of the step at any time. All steps will have a height no greater than 14.00" from top surface to top surface.

The steps will be a swing-down design, with the stepping area made of Morton Tread-Grip® channel.

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 knurled aluminum 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 side of the access steps.

STEP LIGHTS

There will be three (3) white P25 LED step lights provided for the 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 activated by when the parking brake is applied.

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. Each tow eye will be rated for 9000lb and painted to match the lower job color.

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.

LEFT SIDE COMPARTMENTATION

A full height roll-up door compartment ahead of the rear wheels will be 41.75" wide x 64.00" high x 24.25" deep inside with an clear door opening of 38.75" wide x 56.38" high.

One (1) roll-up door compartment above the fender compartments and over the rear axles will be provided. 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 polished stainless steel door will be located above the front stabilizer. The door will be hinged on the rear body side with a flush lift and turn latch. The compartment will be approximately 18.00" wide x 23.00" high x 24.25" deep with a door opening of approximately 12.00" wide x 15.75" 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. The clear door opening will be 40.75" wide x 41.62" high.

One (1) lift-up door compartment below the turntable will be provided. The compartment will be 39.38" wide x 18.38" high x 21.25" deep inside with a door opening of 35.00" wide x 14.88" high.

RIGHT SIDE COMPARTMENTATION

A full height roll-up door compartment ahead of the rear wheels will be 41.75" wide x 64.00" 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 55.38" high.

One (1) roll-up door compartment will be provided 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 24.50" high.

A compartment with a single pan polished stainless steel door will be located above the front stabilizer. The door will be hinged on the rear body side with a flush lift and turn latch. The compartment will be 18.00" wide x 23.00" high x 12.00" deep with a door opening of 12.00" wide x 15.75" high.

A full height roll-up door compartment behind the rear wheels will be 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.

One (1) compartment below the turntable with a lift-up door will be approximately 39.38" wide x 18.38" high x 12.00" deep inside with a door opening of approximately 35.00" wide x 14.88" high.

RIGHT SIDE COMPARTMENT IN PLACE OF TURNTABLE STEPS

A roll-up door compartment in place of turntable stairs 12.00" deep x 20.88" wide x 39.50" high inside with a minimum clear door opening of approximately 15.25" wide x 39.50" high will be provided.

SIDE COMPARTMENT ROLLUP DOORS

There will be seven (7) compartment doors installed on the side compartments. The Gortite doors will be double faced aluminum construction and painted one (1) color to match the lower portion of the body.

Lath sections will be an interlocking rib design and will be individually replaceable without complete disassembly of door.

Between each slat at the pivoting joint will be a PVC inner seal to prevent metal to metal contact and prevent dirt or moisture from entering the compartments. Seals will allow door to operate in extreme temperatures ranging from plus 180 to minus 40 degrees Fahrenheit. Side, top and bottom seals will be provided to resist ingress of dirt and weather and be made of Santoprene.

All hinges, barrel clips and end pieces will be nylon 66. All nylon components will withstand temperatures from plus 300 to minus 40 degrees Fahrenheit.

A polished stainless steel lift bar to be provided for each roll-up door. Lift bar will be located at the bottom of door and have latches on the outer extrusion of the doors frame. A ledge will be supplied over lift bar for additional area to aid in closing the door.

Doors will be constructed from an aluminum box section. The exterior surface of each slat will be flat. The interior surfaces will be concave to provide strength and prevent loose equipment from jamming the door from inside.

To conserve space in the compartments, the spring roller assembly will not exceed 3.00" in diameter.

The header for the rollup door assembly will not exceed 4.00".

A heavy-duty magnetic switch will be used for control of open compartment door warning lights.

SIDE COMPARTMENT LAP DOORS

All hinged compartment doors will be lap style with double panel construction and fabricated of 0.09" 5052H32 aluminum. Doors will be a minimum of 1.50" thick. To provide additional door strength, a "C" section reinforcement will be installed between the outer and interior panels.

Doors will be provided with a closed cell rubber gasket around the surface that laps onto the body. A second heavy-duty automotive rubber molding with a hollow core will be installed on the door framing that seals onto the interior panel, to ensure a weather resisting compartment.

All compartment doors will have polished stainless steel continuous hinge with a pin diameter of 0.25", that is bolted or screwed on with stainless steel fasteners. A dielectric substance will be applied to each hinge fastener.

All door lock mechanisms will be fully enclosed within the door panels to prevent fouling of the lock in the event equipment inside shifts into the lock area.

Doors will be latched with recessed, polished stainless steel D-ring handles and Eberhard 106 locks.

To prevent corrosion caused by dissimilar metals, compartment door handles will not be attached to outer door panel with screws. A rubber gasket will be provided between the D-ring handle and the door.

BODY MODIFICATION FROM STANDARD

The compartment above the stabilizers (if applicable) will be decreased due to deeper stabilizer depth. The height of the compartment will decrease 4.00" and the compartment door will move up 4.00" higher. The stabilizer frame opening as well as the stabilizer pan will be increased in height by 6.00".

COMPARTMENT BLISTER

A blister in the compartment ahead of the rear wheels will be provided to clear the front bracket of the Firemaax suspension. This blister will take away some of the interior area of the compartment.

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.

DOOR GUARD

There will be seven (7) compartment doors that will include a guard/drip pan designed to protect the rollup door from damage when in the retracted position and contain any water spray. The guard will be fabricated from stainless steel and installed on the left side rearward compartment, left side forward over the wheel compartment, left side forward compartment, right side rearward compartment, right side forward over the wheel compartment, right side forward compartment and rear compartment.

COMPARTMENT LIGHTING

There will be ten (10) compartment(s) 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 compartment(s).

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 nine (9) sets of tracks for mounting shelf(s) in LS1, LS2, LS3, LS4, RS1, RS2, RS3, RS4 and RS5. These tracks will be installed vertically to support the adjustable shelf(s), and will be full height of the compartment. The tracks will be painted to match the compartment interior.

ADJUSTABLE SHELVES

There will be 13 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 location(s) will be determined at a later date.

SLIDE-OUT/TILT-DOWN TRAY

There will be two (2) slide-out trays 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 location(s) will be determined at a later date.

SLIDE-OUT FLOOR MOUNTED TRAY

There will be four (4) floor mounted slide-out tray(s) 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 location(s) will be RS1, RS4, LS1 and LS4.

SWING OUT TOOLBOARD

A swing out aluminum toolboard will be provided.

It will be a minimum of .188" thick with .203" 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 have a D-ring handle to secure it in the stowed position.

The board will be mounted mounted on adjustable tracks from front to back within the compartment.

There will be One (1) toolboard(s) provided, will be spatter gray painted, and installed RS3 full height and width.

SWING OUT TOOLBOARD

A swing out aluminum toolboard will be provided.

It will be a minimum of .188" thick with .203" 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 have a D-ring handle to secure it in the stowed position.

The board will be mounted on adjustable tracks from front to back within the compartment.

There will be Two (2) toolboard(s) provided. The toolboard(s) will be spatter gray painted and installed LS3 full height and width.

SCBA HOLDER

There will be three (3) Zico SCBA bracket, model KD-UH-6-SF, mounted TBD: RS1 mounted to the horizontal shelf track on the rear wall. Pack is 24" tall..

MOUNTING TRACKS

There will be one (1) set of tracks for mounting equipment. These tracks will be installed horizontally on the back wall of the compartment(s).

The compartment(s) with mounting tracks will be TBD: RS1 upper rear wall for the mounting of the three scba pack holders.

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

Polished stainless steel fender crowns will be provided around the rear wheel openings with a dielectric barrier will be provided between the fender crown fasteners (screws) and the fender sheet metal to prevent corrosion.

The fender crowns will be held in place with stainless steel screws that thread directly into a composite nut and not directly into the parent body sheet metal to eliminate dissimilar metals contact and greatly reduce the chance for corrosion. Rubber welting will be provided between the body and crown.

BODY FENDER LINER

A painted to match the lower body color fender liner will be provided. The liners will be removable to aid in the maintenance of rear suspension components.

HARD SUCTION HOSE

Hard suction hose will not be required.

HANDRAILS

The handrails will be 1.25" diameter knurled aluminum 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.

A step shall be provided below the right side runningboard.

FOUR AIR BOTTLE STORAGE COMPARTMENT

A total of two (2) air bottle compartments will be provided and located on the left side and the right 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.

A drop down door with support cables with pair of flush lift & turn latches will be provided for each compartment. The door will be painted to match the lower body stainless steel. A dielectric barrier will be provided between the door hinge, hinge fasteners and the body sheet metal.

Inside the compartment there will be a drain hole and black rubber matting.

AIR BOTTLE COMPARTMENT STRAP

Straps will be provided in the air bottle compartment(s) to help contain the top three (3) 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 one (1) air bottle compartment, approximately 7.75" in diameter x 26.00" deep, will be provided on the left side rearward of the rear wheels. The triangular door shall cover the air bottle opening and the fuel tank access.. A painted to match the lower body 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.

SINGLE AIR BOTTLE STORAGE COMPARTMENT

A quantity of one (1) air bottle compartment, 7.75" in diameter x 26.00" deep, will be provided on the left side forward of the rear wheels. The triangular door shall cover the air bottle opening and the DEF tank access.. A painted to match the lower body 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.

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 right side forward of the rear wheels and on the right side rearward of the rear wheels. A painted to match the lower body triangular shaped, 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(s) provided.

AERIAL EXTENSION LADDER

There will be one (1) 24' two (2) section aluminum Series 900-A extension ladder(s) 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) aluminum, 14' Duo Safety 875-DR roof ladder provided behind the boom panel on the passenger side(right).

AERIAL ATTIC EXTENSION LADDER

There will be one (1) 14' Fresno aluminum Duo-Safety Series 701 attic extension ladder(s) provided.

AERIAL FOLDING LADDER

There will be one (1) 10' aluminum Duo-Safety Series 585-A folding ladder(s) 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.

A Gortite rollup door will be provided at the rear, double faced, aluminum construction, and painted one (1) color to match the lower portion of the body. A polished stainless steel lift bar to be provided for the rear roll-up door. 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 2-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 rollup door can not close, which will activate the "Open Door Indicator Light" within the cab. The rollup 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 rollup door.

LADDER STORAGE LIGHTING

There will be one (1) Truck Lite Model 40227C, 4.00" white incandescent light with Model 40700, grommet used to illuminate the torque box ladder storage compartment. One (1) light will be provided in the ceiling of the torque box near the ladder storage entry area.

The light will be activated when the ladder storage compartment door is opened.

PIKE POLES

There will be two (2) 12' Duo Safety pike pole(s) with fiberglass handles provided. The pike pole(s) 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 pole(s) with fiberglass handle provided. The pike pole(s) will be stored in tubular holders located in the ground ladder storage compartment.

6' PIKE POLE

There will be one (1) 6' Duo Safety pike pole(s) with fiberglass handle provided. The pike pole(s) 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 pole(s) with fiberglass shaft and "D" handles shipped loose.

PIKE POLE STORAGE IN TORQUE BOX/LADDER STORAGE

There will be aluminum 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 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.

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 will be equipped with a self-adjusting, maintenance-free, mechanical shaft seal.

The mechanical seal will consist of a flat, highly polished, spring fed carbon ring that rotates with the impeller shaft. The carbon ring will press against a highly polished stainless steel stationary ring that is sealed within the pump body.

In addition, a throttling ring will be pressed into the steel chamber cover, providing a very small clearance around the rotating shaft in the event of a mechanical seal failure. The pump performance will not deteriorate, nor will the pump lose prime, while drafting if the seal fails during pump operation.

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".

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 a separate unit. It

will be installed in the pump or engine compartment with the control located on the pump operator's control panel. The exchanger will be plumbed to the master drain valve.

INTAKE RELIEF VALVE - PUMP

There will be One (1) Waterous Model #83827 relief valve(s) installed on the suction side of the pump preset at 125 psig.

The relief valve(s) will have a working range of 50 psi to 250 psi.

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.

PRESSURE CONTROLLER

A Fire Research, TOTAL CONTROL Model TCA100 series of pressure governor will be provided.

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.

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.

FOAM SYSTEM PLUMBING

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.

SHORT SUCTION TUBE(S)

The suction tube(s) on the water pump will have short suction tube(s) installed to allow for installation of adapters, elbows or intake valves without excessive overhang.

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.



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.

The location of the valve for the one (1) inlet will be recessed behind the pump panel.

INLET CONTROL

The side auxiliary inlet(s) 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.

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.

RIGHT SIDE INLET

There will be one (1) auxiliary inlet with a 2.50" valve at the right 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 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 "T" 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 stainless steel 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.

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.

Any 3.00 inch or larger discharge valve will be a slow-operating valve in accordance with NFPA 16.7.5.3.

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.

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 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.

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 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.

LARGE DIAMETER OUTLET ELBOWS

The 4.00" outlet(s) will be furnished with one (1) 4.00" (F) National Standard hose thread x 5.00" Storz elbow adapter with Storz cap.

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/ INLET PLUGS

Chrome plated, rocker lug, caps with chain will be furnished for all discharge outlets 1.00" thru 3.00" in size, besides the pre-connected hose outlets.

Chrome plated, rocker lug, plugs with chain will be furnished for all auxiliary inlets 1.00" thru 3.00" in size.

The caps and plugs will incorporate a 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 T 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 T 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.

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 valve. The handwheel 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' of 1.75" double jacketed hose 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 fabricated of 0.25" aluminum and will provide adjustment from side to side. The divider will be unpainted with a brushed finish.

Vertical scuffplates constructed of stainless steel will be provided at the front and rear ends of the bed on each side of vehicle.

Crosslay bed flooring will consist of removable perforated brushed aluminum.

2.50" CROSSLAY HOSE BED

One (1) crosslay with 2.50" outlets will be provided. 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.

When used in conjunction with other crosslay/speedlay/deadlay configurations, a center crosslay divider, when needed, will be fabricated of .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/DEADLAY HOSE RESTRAINT

Elastic netting will be provided across the top and ends of two (2) crosslay/deadlay opening(s) to secure the hose during travel. The netting will be permanently attached at the top center of the crosslay/deadlay bed and removable on each end.

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 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
- 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) 0.75" male connection GHT (garden hose thread) with a cap.

Pick-Up Hose

A 0.75" flexible hose with an end for insertion into foam containers will be provided. The hose will be supplied with a 0.75" 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.

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(s), then a red LED will illuminate to indicate the improper valve position(s). 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 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 stepping surface will be 35.00" wide. The platform will lock in the retracted and the extended position.

The sides, bottom and rear portions of the support assembly will be painted to match lower job color.

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.

PUMP ACCESS

Right Side Panel

The right side upper pump panel will be removable.

Panel Fastener

The removable panels will be secured with black swell latch .

The left side pump panels will be attached with screws.

The right side lower pump panel (drain bank) will be attached with screws.

PUMP COMPARTMENT LIGHT

There will be one (1) Whelen®, Model 3SC0CDCR, 3.00" white 12 volt DC LED light(s) with Whelen, Model 3FLANGEC, flange(s) installed in the pump compartment.

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

THROTTLE READY GREEN INDICATOR LIGHT

There will be a green indicator light integrated with the pressure governor and/or engine throttle installed on the pump operators panel that is activated when the pump is in throttle ready mode.

OK TO PUMP INDICATOR LIGHT

There will be a green indicator light installed on the pump operators panel that is activated when the pump is in Ok To Pump mode.

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.

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.

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.

There will be a Hale part number 106877, 4-light driver module included with this installation to power additional water level gauges.

The system(s) will be energized when parking brake is applied.

WATER LEVEL GAUGE

There will be two (2) additional water level indicator(s), Whelen®, Model PSTANK2, LED module with chrome trim, installed one (1) each side rearward of crew cab doors.

This light module(s) will include four (4) colored levels, and function similar to the water level indicator located at the operators 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
 - Above 1/4 this light will be steady burning
 - At empty this light will be flashing

The flash rate will be determined by the main water level tank sensor.

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.

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.

AIR HORN SYSTEM

Two (2) Hadley®, eTone, chrome air horns will be recessed in the front bumper. The air horn system will be piped to the air brake system wet tank utilizing 0.38" tubing. A pressure protection valve will be installed to prevent the loss of air in the 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 horn(s) will be activated by the following:

- Right side chrome push button switch
- Steering wheel horn ring with electric/air horn selector switch

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.

ELECTRONIC SIREN CONTROL

The electronic siren will be activated by the following:

- The steering wheel horn ring with siren/horn selector switch.
- The control is not interlocked.
- The right side push button.

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 right side of the front bumper, just outside of the frame rail.

AUXILIARY MECHANICAL SIREN

There will be a Federal Signal Model Q2B mechanical siren furnished and installed in the front of the apparatus.

The Q2B will be chrome finish.

The siren will have a 2-gauge cable connected to a power solenoid that is connected by a 2-gauge cable ran battery direct to the primary chassis batteries and will be labeled Q2B+ at the battery. The power solenoid will only be enabled when the emergency master switch is on.

The siren will have a 2-gauge ground wire connected to the chassis battery stud. The cable will be labeled Q2B- at the battery.

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.

MECHANICAL SIREN CONTROL

The mechanical siren will be activated by the following:

- Right side foot switch.
- Left side foot switch.

A momentary red switch will be included in the left side overhead switch panel to activate the siren brake.

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 LOWER LIGHTS

There will be four (4) Whelen®, lights installed on the cab face above the headlights in a common bezel matching the headlamps.

- One (1) Model 6RB**, 4.18" high x 6.56" long x 3.43" deep LED flashing light installed in the driver's side outside position. The driver's side front outside warning light to be red.
- One (1) Model M6**, 4.31" high x 6.75" long x 1.37" deep LED flashing light installed in the driver's side inside position. The driver's side front inside warning light to be red.
- One (1) Model M6**, 4.31" high x 6.75" long x 1.37" deep LED flashing light installed in the passenger's side inside position. The passenger's side front inside warning light to be red.
- One (1) Model 6RB**, 4.18" high x 6.56" long x 3.43" deep LED flashing light installed in the passenger's side outside position. The passenger's side front outside warning light to be red.

The lights will include lenses that are clear.

There will be a switch in the cab on the switch panel to control the lights.

The inside lights may be load managed if colored or disabled if white when the parking brake is applied.

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 six (6) 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 of cab rearward of crew cab doors. The side middle lights to be red.
- Two (2) lights, one (1) each side located between the tandems. The side rear lights to be red.
- The lights will include clear lenses.

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.

TRAFFIC DIRECTING LIGHT

There will be one (1) Whelen®, Model TAL65, 36.00" long x 2.87" high x 2.25" deep, amber LED traffic directing light installed at the rear of the apparatus.

The Whelen, Model TACTL5, control head will be included with this installation.

The controller will be energized when the battery switch is on.

The auxiliary flash to be activated when the emergency master switch is on.

This traffic directing light will be mounted on top of the body below the turntable with a treadplate box at the rear of the apparatus.

The traffic directing light control head will be located in the driver side overhead switch panel in the right panel position.

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 ampere 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(s) 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(s) 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 an alternating current (AC) electrical power system. The generator will be a Harrison, 6,000 watt (120/240 volts AC, 50/25 amps), Stinger, hydraulic driven unit. The generator will be driven by a transmission power take off unit, through a hydraulic pump and motor.

The hydraulic engagement supply will be operational at any time (no interlocks).

To properly monitor the generator performance, a digital voltage, frequency, hour meter will be provided.

GENERATOR LOCATION

The generator will be mounted in the in the area over the pump on the right 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 in the compartment above the left side front stabilizer.

120 VOLT RECEPTACLE

There will be one (1), 15/20 amp 120 volt AC three (3) wire straight blade duplex receptacle(s) with interior stainless steel wall plate(s), installed behind the officer seat. The NEMA configuration for the receptacle(s) will be 5-20R.

The receptacle(s) will be powered from the onboard generator to shoreline power transfer switch.

There will be a label installed near the receptacle(s) that state the following:

- Line Voltage
- Current Rating (amps)
- Phase
- Frequency

120 VOLT RECEPTACLE

There will be three (3), 15/20 amp 120 volt AC three (3) wire straight blade duplex receptacle(s) with interior stainless steel wall plate(s), installed TBD: RS4, front wall above transition shelf; one in LS1 up high on the right wall; one in RS1 up high on the left wall;. The NEMA configuration for the receptacle(s) will be 5-20R.

The receptacle(s) will be powered from the onboard generator to shoreline power transfer switch.

There will be a label installed near the receptacle(s) that state the following:

- Line Voltage
- Current Rating (amps)
- Phase
- Frequency

120 VOLT RECEPTACLE

There will be two (2), 15/20 amp 120 volt AC three (3) wire straight blade duplex receptacle(s) with exterior flip up cover(s), installed TBD: One each side in the rear fender panels and one at the rear of the truck(as shown on AD print). The NEMA configuration for the receptacle(s) will be 5-20R.

The receptacle(s) will be powered from the onboard generator to shoreline power transfer switch.

There will be a label installed near the receptacle(s) that state the following:

- Line Voltage
- Current Rating (amps)
- Phase
- Frequency

FOUR (4)-SECTION 107 FOOT AERIAL LADDER

CONSTRUCTION STANDARDS

The ladder will be constructed to meet all of the requirements as described in the current edition of applicable NFPA standards.

The aerial device will be a true ladder type device; therefore ladders attached to booms will not be considered.

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 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 standard.

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 core for increased flexibility. The wire rope will be galvanized to reduce corrosion.

The aerial base pivot bearings will be maintenance free type bearings and require no external lubrication.

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 and 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 of aerial components, including the aerial ladder sections, turntable, pedestal, and outriggers, will be in compliance with the American Welding Society standards. All welding personnel will be certified, as qualified under AWS welding codes.

The aerial device will be capable of operating in conditions of wind up to 50 mph and icing conditions of up to a .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
- All welded structural components for the ladder will be traceable to their mill lots.

LADDER CONSTRUCTION

The ladder is comprised of four (4) sections.

The ladder will have the capability to support a minimum of 750 pounds at the tip in the unsupported configuration, based upon 360 degree rotation, up to full extension and from -10 degrees to +77 degrees.

The ladder (handrails, baserails, trusses, K-braces and rungs) will be constructed of high strength low alloy steel, minimum 100,000 pounds per square inch yield, with full traceability on all structural members.

Each section will be trussed diagonally, vertically and horizontally using welded steel tubing.

All ladder rungs are round and welded to each section utilizing "K" bracing for lateral and torsional rigidity.

The inside width dimensions of the ladder will be:

- Base Section 41.87"
- Lower Mid Section 34.88"
- Upper Mid Section 27.87"
- Fly Section 21.63"

The height of the handrails above the centerline of the rungs will be:

- Base Section 26.28"
- Lower Mid Section 22.68"
- Upper Mid Section 20.06"
- Fly Section 17.32"

The ladder will be designed to provide continuous egress for firefighters and civilians from an elevated position to the ground.

The egress section will be designed to maintain the rated load of the aerial device. It will be bolted on for easy replacement. There will be a lift eye welded on to each side of the egress.

VERTICAL HEIGHT

The ladder will extend to a minimum height of 107' above the ground at full extension and elevation. The measurement of height will be consistent with NFPA standards.

HORIZONTAL REACH

The rated horizontal reach will be 100'. The measurement of horizontal reach will be consistent with NFPA standards.

TURNTABLE

The upper turntable assembly will connect the aerial ladder to the turntable bearing. The steel structure will have a mounting position for the aerial elevation cylinders, ladder connecting pins, and upper turntable operator's position.

The turntable will be 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 standard.

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. The turntable vertical handrail spacing will be designed with a 44.00" wide x 27.00" high opening to

allow for equipment to pass through from the ground to the aerial ladder. The opening will be located at the center, rear of the turntable.

ELEVATION SYSTEM

Dual 5.50" diameter elevating cylinders will be mounted on the underside of the base section of the ladder, one (1) on each side. One (1) 2.25" diameter stainless steel pin will fasten each cylinder to the ladder and one (1) 2.50" diameter stainless steel pin will fasten each cylinder to the turntable. The pins will have 125,000 psi minimum yield strength and will be secured with 0.50" Grade 8 bolts with castle nut and cotter pin. The bolts are to ensure that the pins do not walk out of the mounting brackets on the turntable and base section.

The elevating cylinders will be mounted utilizing maintenance-free spherical bearings on both ends of the cylinders. The aerial base pivot bearings will be maintenance-free type bearings with no external lubrication required. The cylinders will function only to elevate the ladder and not as a structural member to stabilize the ladder side movement. The elevating cylinders will be provided with pilot-operated check valves on the barrel and rod side of the piston to prevent movement of the ladder in case of a loss of hydraulic pressure.

The operation envelope will be 10 degrees below horizontal to 77 degrees above horizontal.

The elevation system will be designed following NFPA standards. The elevation hydraulic cylinders will incorporate cushions on the upper limit of travel.

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. Linear transducers will measure the extension of the elevation cylinder. 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 at the limits of travel.

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. Linear transducers will measure the ladder extension. The microprocessor will provide the following features:

- Automatic deceleration at the end of stroke, in maximum extend and retract positions

All sheaves will require lubrication. They will have bronze bushings and grease zerks.

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 be used to control side play between the ladder sections.

ROTATION SYSTEM

The aerial will be supplied with a powered rotation system as outlined in NFPA standards. The hydraulic rotation motor will provide continuous rotation under all rated conditions and be supplied with a brake to prevent unintentional rotation. One (1) hydraulically driven, planetary gear box with drive speed reducers will be used to provide infinite and minute rotation control throughout the entire rotational travel. One (1) spring applied, hydraulically released disc type swing brake 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 gearbox will have a minimum continuous torque rating of 80,000 in. lbs. and a minimum intermittent rating of 160,000 in. lbs. The turntable bearing, ring gear teeth, pinion gear, planetary gearbox, and output shaft will be certified by the manufacturer of the components for the application.

The rotation system will be controlled by the microprocessor. The microprocessor will provide the following features:

- Collision avoidance to prevent accidental body damage
- Prevent the aerial from being rotated into an unstable condition.

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 side(s) where the stabilizers have been fully deployed. The system will also have a manual override to comply with the current edition of

applicable NFPA standards. SYSTEMS THAT PERMIT THE AERIAL TO ROTATE TO THE "SHORT JACK" SIDE, WITHOUT AUTOMATICALLY STOPPING THE ROTATION AND/OR WITHOUT ACTUATION OF THE "MANUAL OVERRIDE", will NOT BE ACCEPTED. SYSTEMS THAT ONLY INCLUDE AN ALARM ARE NOT CONSIDERED AN INTERLOCK AND will NOT BE ACCEPTED.

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..

AERIAL TORQUE BOX/PEDESTAL

The pedestal assembly will be a welded assembly made of high strength 0.25" plate. The vertical member will be a 0.375" reinforced wall cylinder with a 28.00" outside diameter and will connect the rotation bearing mounting plate to the lower substructure.

The pedestal assembly will be bolted to the chassis frame with 0.88" diameter Grade 8 bolts, and will be utilized to mount the outrigger jacks and reservoir for the aerial hydraulic system.

There will be a 5/8" gap between the torque box and the frame rails to promote drying of the surfaces and reduce the effect of corrosion.

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.

50 MPH WIND CONDITIONS/WATERWAY DRY

Degrees of Elevation	-10 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 77
Egress	750	750	750	750	750	750	750	750
Fly	-	-	-	-	-	250	500	750
Upper Mid	-	-	-	-	250	500	1000	1000
Lower Mid	-	-	-	-	500	750	1000	1000
Base	-	-	-	500	500	1000	1000	1000

50 MPH WIND CONDITIONS/WATERWAY CHARGED

Degrees of Elevation	-10 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 77
Egress	500	500	500	500	500	500	500	500

Fly	-	-	-	-	-	250	500	500
Upper Mid	-	-	-	-	250	500	750	1000
Lower Mid	-	-	-	250	500	750	1000	1000
Base	-	-	250	500	750	1000	1000	1000

Reduced loads at the tip can be redistributed in 250 lb. increments to the fly, mid, or base sections as needed.

The tip capacity will be reduced to zero when flowing water with the nozzle above the waterway centerline.

Side to side monitor travel will be reduced with a 50MPH wind rating on the device.

BOOM SUPPORT

A heavy-duty boom support will be provided for support of the ladder in the travel position. 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 AY-LB-12HW012, 190 lumen, 12" long, white LED strip light mounted on the boom support cradle. This light will be activated when the aerial master switch is activated.

BOOM SUPPORT COMPARTMENT DIRECTLY BEHIND THE CAB

A compartment will be provided on each side of the apparatus directly behind the cab.

Compartment will be made of aluminum treadplate. The interior dimensions of each compartment will be approximately 8.00" wide x 22.75" deep. The height of the compartment will be determined by the height of the cab (to the raised roof if applicable).

A single pan aluminum treadplate door will be provided for each compartment. Each door will be hinged along the rearward edge.

There will be a pair of flush lift and turn latches provided on each door. Latches will be spaced as evenly as possible, yet both latches will remain accessible from the ground.

AERIAL BOOM PANEL

There will be one boom panel provided on each side of the aerial ladder base section. The boom panel will be painted #10 white.

The boom panels will be designed so no mounting bolts are in the face of the panel. This will keep the lettering surface free of holes.

FOLDING STEPS

One (1) set of folding steps will be provided at the tip of the ladder. An additional set of folding steps will be provided at the base of the fly section. The steps will be bright finished with a black tread coating on the stepping surface. Each step will have no integrated light.

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.

STABILITY TEST

An aerial stability test will be run on this apparatus using the maximum weight allowance for tip options.

STOKES AND MISCELLANEOUS STORAGE BOX

There will be an aluminum storage box painted job color and 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 located in place of the aerial boom panel. The box will have a hinged cover with pair of rubber draw latches to secure the equipment. The cover will have the same finish as the box. The cover will be tied in to the open door indicator circuitry when in the open position. A divider will be provided to separate the stokes basket from the other equipment. The box will have no louvers.

There will be a white LED strip light installed on the inside edge of the box in the miscellaneous storage area.

The size of the stokes basket will be 88.00" long x 26.00" wide x 9.00" high. The outside dimensions of the box will be 120.00" long x 26.50" high x 15.50" wide.

The maximum capacity of this box will be 75 lb.

PIKE POLE MOUNTING BRACKETS

Mounting will be provided near the end of the fly section of the aerial ladder for one (1) pike pole(s).

The bracket will be sized to hold a Fire Hooks Unlimited 8' roof hook RH-8.

LIMITED RETRACTION

The aerial device will have limited retraction.

LADDER STORAGE MOUNTING BRACKETS

Mounting brackets for a single roof ladder will be provided on the right side of the aerial device while viewed from the turntable. A total of one (1) roof ladder(s) will be stored on the aerial base section.

The bracket(s) will be located inboard of the boom panel at the base section and include straps to secure the ladder(s).

The mounting brackets will accommodate a 14' Duo-Safety 875-A-DR roof ladder(s) to be stored individually as determined by the type of aerial device and the available space.

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.

ROTATION BEARING COVER

A cover will be fitted over the aerial rotation bearing and drive pinion gear(s). The cover will be aluminum treadplate and attached to the underside of the turntable deck.

SAW STORAGE BOX AT TURNTABLE

There will be a storage box constructed of aluminum treadplate provided at the aerial turntable. The box will have a hinged cover with a gas shock and rubber draw latch to secure the saw.

The interior dimensions of the saw box will be To be determined.

INFORMATION CENTER

There will be an information center provided. The information center will operate in temperatures from -40 to 158 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 1000nits rated, color display. The LCD will be sunlight readable. The LCD display will be encased in an ABS, gray plastic housing with a Pierce 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 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.
 - 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 it's 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

TURNTABLE CONTROL STATION

There will be one (1) device control station located on the left side of the turntable so the operator may easily observe the ladder tip while operating the controls. All elevation, extension and rotation controls

will operate from this location. 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. 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 tip controls, if equipped, even if the ladder is being operated by the tip controls.

The following items will also be provided at the turntable control station, clearly identified, lighted for nighttime operation and conveniently located for ease of operation and viewing:

- Intercom controls
- Tip tracking light switch
- Emergency stop switch
- Emergency power unit switch
- Operator's load chart
- Two (2) position switch for selecting aerial operational speed

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.

REMOTE AERIAL CONTROL

A remote control will be provided whereby all ladder movements can be controlled at the ladder tip, in addition to the control console.

The three (3) ladder functions (extension, rotation, elevation) will be controlled individually by means of spring loaded, return to center 12-volt proportional controls.

A momentary switch at the turntable control station will enable the controls at the ladder tip.

The turntable control console ladder controls will override the ladder tip controls.

The remote control aerial speed will be set in accordance with the current edition of applicable NFPA standards.

STABILIZERS

The vehicle will come equipped with a stabilization system consisting of four (4) hydraulically operated stabilizers. The front two (2) will be out and down style, the rear two (2) will be down only. This system will meet or exceed all requirements of the NFPA specifications related to stabilization and setup on sloped surfaces.

The stabilizer/leveling jacks will have a maximum spread of 16' measured from the centerline of the jack footpads when the beams are fully extended. The beams will be 6.88" wide x 9.00" high with 3/4" thick top and bottom plates and 1/2" thick sides of 100,000-PSI minimum yield strength steel. The cylinders will have pilot-operated check valves with thermal relief designed to insure that the beams will not drift out of the stowed position during travel. Wear pads will guide the stabilizers.

The horizontal extension cylinders will be totally enclosed within the beams and will incorporate telescoping hydraulic tubing to supply the jack cylinder hydraulic power. Stabilizer hydraulic hoses will remain stationary during operation of the stabilizers to prevent hose wear and potential failure. The cylinders will be equipped with decelerators to reduce the speed of extension and retraction when the beams are near the fully retracted and extended positions. The stabilizer extension hydraulic cylinders will have the following dimensions: 2.25" bore, 1.38" rod, and 39.25" stroke.

The vertical jack cylinders will be capable of 18.00" ground penetration. The cylinders will be supplied with pilot operated check valves on each jack cylinder to hold the cylinder in the stowed or working position, should a charged line be severed at any point in the hydraulic system. For safety, the integral holding valves will be located in the cylinder base, NOT in the transfer tube. Vertical jack cylinder rods will be fully enclosed by a telescoping inner box to protect the cylinder rods from damage. The stabilizer jack hydraulic cylinders will have the following dimensions: 4.25" bore, 3.00" rod, and 28.88" stroke.

Each stabilizer jack will have a pan that will be a maximum of 14.00" wide so as to allow the extension of the stabilizer between parked cars or other obstacles. This pan will serve as a protective guard and a mounting surface for warning lights. The top, forward, and rear edges will be flanged back 90 degrees for added strength.

STABILIZER PADS

The stabilizer footpad will be 12.00" in diameter. The footpad will be attached to the jack cylinder rod by means of a machined ball at the end of the jack cylinder rod which mates to a socket machined into the footpad. The footpad will have the ability to pivot 20 degrees from horizontal in any direction to allow setup on uneven terrain.

AUXILIARY STABILIZER PADS

An auxiliary ground pad will be supplied for each stabilizer to provide additional load distribution on soft surfaces. The pads will be 31" x 26" and made from lightweight composite material. The ground pressure will not exceed 75 pounds per square inch when the ground pads are used and the apparatus is fully loaded and the aerial device is carrying its rated capacity in any position. The pads will be stored in a double stacked configuration, two (2) behind each rear tandem axle in a single bracket.

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 (front only) 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.
- Two (2) 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 stabilizer deployment audible warning alarm will be provided and activated by the stabilizer movement.

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.

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 PAN AND TRIM MATERIAL

The aerial stabilizer pans will be smooth aluminum, painted to match the lower body color and the aerial stabilizer trim will be painted to match lower body color .

STABILIZER CONTROL BOX DOOR

A vertically hinged smooth aluminum door will be provided over the stabilizer control box. The door will be hinged along the outboard edge and be provided with a Southco C2 chrome raised trigger lever latch.

STABILIZER PLACEMENT

There will be two (2) cameras provided and installed on the body, one (1) directly above each stabilizer. The cameras will be activated with a switch in the cab and will provide a picture to specify the fully extended stabilizer position allowing the driver the ability to position the vehicle with the proper clearance for stabilizer deployment.

HYDRAULIC SYSTEM

All hose assemblies will be assembled and crimped by the hose manufacturers certified technician.

All manufacturing employees responsible for the installation of hydraulic components will be properly trained. Training will include: proper handling, installation, torque requirements, cleanliness and quality control procedures for hydraulic components.

Hoses used in the aerial hydraulic system will be of a premium quality hose with a high abrasion resistant cover. All pressure hoses will have a working pressure of 4000 psi and a burst pressure rating of 16,000 psi.

All hydraulic fittings and tubing will be plated to minimize corrosion.

The fitting will use an O-ring seal where possible to minimize hydraulic leaks.

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 the current NFPA 1901 standard.

The system will meet the performance requirement of the current NFPA 1901 standard, which requires adequate cooling less than 2.5 hours of operations.

All hydraulic components that are non-sealing whose failure could result in the movement of the aerial will comply with current NFPA 1901 standards and have burst strength of 4:1.

Dynamic sealing components whose failure could cause aerial movement will have a margin of 2:1 on maximum operating pressure per the current NFPA 1901 standard.

All hydraulic hoses, tubes, and connections will have a minimum burst strength of 4:1 per the current NFPA 1901 standard.

A chassis mounted positive displacement piston pump for consistent pressure and rapid responses will supply hydraulic power for all aerial operations. The positive displacement pump will provide 3,150psi. The hydraulic pump will be solely dedicated to aerial operations.

Each aerial will be evaluated as to the region and climate where it will be used to determine the optimum viscosity and proper oil grade. Oil viscosity will be based on an optimum range of 80 to 1000

SUS during normal aerial use. Before shipment of the unit, an oil sample will be taken and analyzed to confirm the oil is within the allowable ISO grade tolerance.

The aerial hydraulic system will have a minimum oil cleanliness level of ISO 18/15/13 based on the ISO 4406:1999 cleanliness standard. Each customer will receive a certificate of actual cleanliness test results and an explanation of the rating system.

Each aerial will include an oil sample port, identified with a yellow dust cap and a label, for subsequent customer testing.

Ball valves will be provided in the hydraulic suction lines to permit component servicing without draining the oil reservoir.

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.

The system hydraulic pressure will be displayed on the turntable display.

The hydraulic system will be additionally protected from excessive pressure by a secondary pressure relief valve set at 3,150 psi. In the event the main hydraulic pump compensator malfunctions, the secondary relief will prevent system damage.

HYDRAULIC CYLINDERS

All cylinders used on the aerial device will be produced by a manufacturer that specializes in the manufacture of hydraulic cylinders.

Each cylinder will include integral safety holding cartridges.

Each cylinder will be designed to a minimum safety factor of 4:1 to failure.

All safety holding cartridges will be installed at the cylinder manufacturer, in a controlled clean environment to avoid possible contamination and or failure.

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.

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 aerial power 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.

The hydraulic system will be supplied by a variable displacement load and pressure compensating piston pump. The pump will meet the demands of all three simultaneous aerial functions. The pump

will provide proper flow for single aerial function with the engine at idle speed. A switch will be provided on the control console to increase the engine speed for multiple function operation.

EMERGENCY PUMP

The hydraulic system will be designed with an auxiliary power unit meeting the guidelines of the current NFPA 1901 standard.

The aerial will be equipped with an emergency hydraulic pump, electrically driven from the truck batteries. The pump will be capable of running for 30 minutes for limited aerial functions to stow the unit in case of a main pump or truck system failure. A momentary switch will be located at the stabilizer and aerial control locations to activate the emergency pump.

AERIAL CONTROL VALVE

The aerial hydraulic control valve will be designed with special spool flows, limiting the oil flow for the designed function speed. The valve will be electrically controlled and be located in the control console with the handles oriented downward for manual operation. The activation handles will be spaced a minimum of 3.50" for ease of operation. The valve spools will be designed to bleed off downstream pressure, in the neutral position and allow proper sealing of any cylinder holding cartridge.

OIL RESERVOIR

The oil reservoir will have a minimum capacity of 38 gallons. The oil fill location will be easily accessible and be labeled "Hydraulic Oil Only" and also indicate the grade of oil that is installed in the reservoir. The fill will have a desiccant breather filter with a water capacity of 4 fluid ounces and a 5 micron rating. A drain hose will be included and will terminate with a quarter turn ball valve.

Two suction ports will be provided, one for the main hydraulic pump and one for the emergency pump. The main suction will be slightly elevated off the bottom of the reservoir and include a 100 mesh suction strainer. The emergency suction port will be closer to the bottom of the reservoir to provide some reserve oil for emergency operation.

A six (6) disc type magnetic drain will also be provided to collect any ferrous contaminants.

A float type sending unit in the reservoir will provide an indication of oil level on an electronic display. A temperature sending unit in the reservoir will provide indication of the oil temperature on an electronic display.

The hydraulic oil reservoir will be labeled per the current edition of NFPA 1901 standard.

RETURN FILTER

The low pressure oil return filter will be integrated with the hydraulic manifold and designed to prevent oil loss during filter change. A 50 psi bypass will be included to protect the element and hydraulic system during lower than normal operating temperatures. The system will incorporate the following filter to provide dependable service:

- return filter: beta 200 at 6 micron

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 28 collector rings will be provided that are capable of supplying 30 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.

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 standard 8 conductor cable to the tip contains 10 AWG conductors.

The 107' heavy duty ladder 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 14' 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 (front only)
 - Raise/lower function
- One (1) green "stabilizer fully extended" indicator light for each front 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 light
 - 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
- USB connection allows for computer diagnostics

Power Module

- Built-in fault sensing
- Eight (8) digital outputs
- Pulse width modulating (PWM) capable
- 10A continuous per output
- Circuit protection based on actual current draw (not affected by heat)

Constant Current Module

- Built-in fault sensing
- Three (3) analog inputs
- Eight (8) digital outputs
- Pulse width modulating (PWM) capable
- 3A continuous per output
- Circuit protection based on actual current draw (not affected by heat)
- Closed Loop System

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

TIP LIGHT

There will be two (2) Whelen® Model MP**, 5,695 lumens 12 volt DC LED lights installed at the tip of the aerial device.

One (1) will be located on the left side with left side tip light to include spot optics.

One (1) will be located on the right side with right side tip light to include narrow flood optics.

- The light(s) to be installed on adjustable bail bracket(s).
- The painted parts of this light assembly to be white

The lights will be controlled with the tracking lights.

TRACKING LIGHTS

There will be two (2) Whelen® MP**, 5,695 lumens 12 volt DC LED lights installed on the base section of the aerial device below the hand rails per the following:

- One (1) will be located on the left side with left side tracking light to include spot optics.
- One (1) will be located on the right side with right side tracking light to include flood optics.
- The light(s) to be installed on adjustable bail bracket(s).
- The painted parts of this light assembly to be white.

The tracking lights will be controlled by a switch located at the platform/tip and turntable.

LIGHTING ON AERIAL LADDER

There will be TecNiq, Model D02, LED rung lighting provided on both sides of the aerial ladder base, lower and upper 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 aerial device when the device is at full extension will be:

- Top one-third to be red
- Middle one-third to be white
- Bottom one-third to be blue

The LED rung lighting will be activated when a switch at the turntable operator's panel is activated through the master battery switch.

The lights may be load managed when the parking brake is applied.

STABILIZER WARNING LIGHTS

There will be four (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®, Model AY-LB-12HW012, 190 lumen, 12" long, white 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.

120-VOLT RECEPTACLE AT TIP

A 120-volt, 20 amp, three (3)-prong straight blade receptacle with weatherproof cover will be provided at the tip of the aerial device.

2-WAY AERIAL COMMUNICATION SYSTEM

There will be a Fire Research model ICA910 two-way intercom system provided. The control module with an LED volume display and push-button volume control will be located on the turntable operator console.

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.

RAISED AERIAL PEDESTAL

The aerial pedestal will be raised to accommodate the height of the cab.

LIFTING EYE ASSEMBLY - ROPE RESCUE ATTACHMENT

A lifting eye assembly will be provided that is designed to evenly distribute load at the tip of the aerial. The lift eye assembly is retained by two (2) locking pins, one (1) at each end outboard side of the egress. Leveling is maintained by the lifting eye assembly rotating within the egress mounting. The lifting eye assembly rating will match the capacity rating of the aerial device.

AERIAL TURNTABLE MANSAVER™ BARS

ManSaver™ bars will be installed at the aerial turntable.

WATER SYSTEM

A waterway system will be provided consisting of the following components and features:

A 5.00" pipe will be connected to the water supply on one end and to a 5.00" internal diameter water swivel at the rotation point of the turntable. The water swivel will permit 360 degree continuous rotation of the aerial device.

The 5.00" waterway swivel is to be routed through the rotation point up to the heel pin swivel. The heel pin swivel will allow the water to flow to the ladder pipe while elevating the aerial ladder from -10 degrees to 77 degrees. The heel pivot pin is not integral with the waterway swivel at any point. The design of the waterway will allow complete servicing of the waterway swivel without disturbing the heel pivot pin.

The integral telescopic water system will consist of a 4.50" diameter tube in the base section, a 4.00" diameter tube in the inner mid-section, a 3.50" diameter tube in the outer mid-section, and a 3.00" diameter tube in the fly section. The telescopic waterway will be constructed of anodized aluminum pipe.

The aerial will be capable of discharging up to 1000 gpm at 100 psi parallel to the ladder and 90 degrees to each side of center while maintaining the rated tip load.

The aerial will be capable of discharging between 1001 and up to 1500 gallons per minute at 100 psi parallel to the ladder and 40 degrees to each side of center while maintaining the rated tip load.

The master stream will be capable of flow up to 30 degrees above horizontal.

An adjustable pressure relief valve will be furnished to protect the aerial waterway from a pressure surge.

A 1.50" drain valve will be located at the lowest point of the waterway system.



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.

AERIAL MONITOR

An Akron Model 3486 monitor with stow and deploy will be provided at the tip with a Akron 1500 gpm Model 5178. This monitor will allow for an additional 30 degrees of travel above horizontal at the aerial tip.

The monitor's functions will be controlled electrically from two (2) separate locations. One (1) control will be located at the control console and the other at the ladder tip.

There will be a courtesy light at the tip of the aerial to illuminate the controls.

If the aerial has a quick-lock waterway, a limit switch will be provided to disable the extended vertical travel when the monitor is locked to the lower ladder section.

AERIAL VALVE MANIFOLD UNDER MONITOR

An Akron Aerial Valve Manifold (AVM) valve and manifold will be provided at the aerial waterway monitor inlet. This configuration provides a valve to control flow through the monitor and an additional valve as a discharge connection for hose.

The AVM monitor flow control valve will be manually operated at the tip of the ladder with a slow close gear valve. The valve will have an integral automatic drain valve.

The Akron S2 left side discharge valve will have a 90 degree, 1/4 turn ball valve with 2.50" NH outlet threads. A 2.50" NH cap with chain will be provided.

A pressure relief valve will be installed to prevent incidental damage to the waterway system when both valves are closed.

AERIAL WATERWAY FLOW METER

Waterway flow, including total water flowed, will be monitored by the microprocessor. An LCD display will be located at the turntable control station.

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.

WATERWAY LOCKING SYSTEM

The aerial ladder waterway monitor will be capable of being positioned at either the fly section or at the next lower section of the ladder.

The monitor location will be changeable by the use of a single handle, located at the side of the ladder.

The handle, attached to a cam bracket, will simply be moved forward to lock the monitor at the fly section and back to lock it to the previous section.

There will be no pins to remove and reinstall.

The monitor will be operational at all times, regardless of its position, without connecting or disconnecting electrical lines.

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

Two (2) operator maintenance manuals and two (2) wiring diagrams pertaining to the aerial device will be provided with the apparatus at time of pick-up.

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) consecutive 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 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(s).
- 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(s) 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

There will be a 15' length of 6.00" soft suction hose provided with a 6.00" long handle swivel coupling on one (1) end and a 4.50" long handle swivel coupling on the other.

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 PROCESS

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.
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 manufacturer.

After the cab and body are painted, the color will be verified to make sure that it matches the color standard. Electronic color measuring equipment will be used to compare the color sample to the color standard entered into the computer. Color specifications will be used to determine the color match. A Delta E reading will be 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 painted 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.

The paint finish quality levels for critical areas of the apparatus (cab front and sides, body sides and doors, and boom lettering panels) are to meet or exceed Cadillac/General Motors GMW15777 global paint requirements. Orange peel levels are to meet or exceed the #6 A.C.T. standard in critical areas. The manufacture's written paint standards will be available upon request.

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 percent 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 percent. Water wash systems will be 99.97 percent 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 recycled 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.

TWO-TONE CAB PAINT

The cab will be painted two-tone with the upper section painted #505 gray metallic and the lower section painted #90 red. There will be a standard two-tone cab paint break provided.

There will be a standard cab shield provided.

BODY PAINT

The body will be painted to match the lower section of the cab.

PAINT CHASSIS FRAME ASSEMBLY

The chassis frame assembly will be finished with Pierce Gray #269 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
- Steel fuel tank
- Castings
- Individual piece parts used in chassis and body assembly

FILM TECHNICAL PROPERTIES		
PROPERTY	TEST METHOD	PERFORMANCE
Color	—	Black
Film Thickness	—	0.5 - 1.5 Mills
Gloss - 60 Degree	ASTM D523	65 - 85
Pencil Hardness	ASTM D3363	2H Minimum
Direct Impact	ASTM D2794	100 in. - lbs. Minimum
Reverse Impact	ASTM D2794	60 in. - lbs. Minimum
Crosshatch Adhesion	ASTM D3359	4B - 5B
Humidity	ASTM D1735	1000 Hours Minimum
Water Immersion	ASTM D870	250 Hours Minimum
Gravelometer	GM9508P	6 Minimum
Throwpower	GM9535P	12 - 15 in.
Cold rolled steel lab panels, Zinc Phosphate pretreatment, 0.6 mils average film thickness, cured 20 minutes @ 350°F.		
PROPERTY	SUBSTRATE PRETREATMENT	SALT SPRAY* 1000 HOURS
Corrosion Resistance	CRS / Zinc Phos / Non-Chrome	1 - 2 mm
*Salt Spray - ASTM B117, cold rolled steel lab panels cured 20 minutes @ 350°F. (Average Total Scribe Creep)		

Components treated with epoxy E-coat protection prior to paint:

- Two (2) C-channel frame rails
- Two (2) frame liners

The E-coat process will meet the technical properties shown.

PAINT, FRONT WHEELS

All wheel surfaces, inside and outside, will be provided with powder coat paint #101 black.

PAINT, REAR WHEELS

All wheel surfaces, inside and outside, will be provided with powder coat paint #101 black.



[Powder Coat Aluminum Paint Color]

AXLE HUB PAINT

All axle hubs will be painted to match lower job color.

COMPARTMENT INTERIOR PAINT

The interior of all compartments 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 device ladder sections and extension cylinders: gray metallic 505
- Aerial egress: #50 red (will be contrasting to the aerial device color)
- Aerial turntable: gray metallic 505
- Aerial control console: gray metallic 505
- Aerial lift cylinders: gray metallic 505
- Aerial torque box, support structure and components below the rotation point: gloss black primer
- Aerial stabilizers: gray metallic 505
- Aerial boom support: gloss black primer

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" gold stripe at the top with a 1.00" gap then a 6.00" black stripe with a 1.00" gap and a 1.00" gold stripe on the bottom.

The reflective band provided on the cab face will be at the headlight level.

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(S) IN REFLECTIVE BAND

The reflective band located on each side of the apparatus body will contain two (2) jog(s) 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

The lettering will be totally encapsulated between two (2) layers of clear vinyl.

LETTERING

Forty-one (41) to sixty (60) genuine gold leaf lettering, 3.00" high, with outline and shade will be provided.

LETTERING

There will be genuine gold leaf lettering, 8.00" high, with outline and shade provided. There will be 30 letters provided.

LETTERING

Twenty-one (21) to forty (40) reflective lettering, 5.00" high, with outline and shade will be provided.

LETTERING

Twenty-one (21) to forty (40) genuine gold leaf lettering, 6.00" high, with outline and shade will be provided.

LETTERING

There will be non-reflective vinyl lettering, 18.00" high, with no outline or shade provided. There will be three (3) letters provided.

LETTERING

Twenty-one (21) to forty (40) reflective lettering, 4.00" high, with outline and shade will be provided.

LETTERING

There will be reflective lettering, 10.00" high, with outline and shade provided. There will be three (3) letters provided.

MALTESE CROSS INSTALLATION

There will be one (1) pair of Maltese crosses, comprised of genuine gold leaf material, provided and installed LOCATE ON FRONT CAB DOORS CENTERED ON STRIPE WITH .5" RELIEF AROUND.

CAB GRILLE DESIGN

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

FIRE APPARATUS PARTS MANUAL

There will be one (1) custom parts manual(s) in USB flash drive format for the complete fire apparatus provided.

The manual(s) 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.

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 limited warranty certificate, WA0013, 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.

TDM REAR AXLE FIVE (5) YEAR MATERIAL AND WORKMANSHIP WARRANTY

A Meritor™ Axle 5 year limited warranty will be provided.

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

A Gortite roll-up door limited warranty will be provided. The mechanical components of the roll-up door will be warranted against defects in material and workmanship for the lifetime of the vehicle. A **six (6) year** limited warranty will be provided on painted and satin roll up doors.

The limited warranty certificate, WA0190, is included with this proposal.

PUMP WARRANTY

The Waterous pump will be provided with a Seven (7) year material and workmanship limited warranty.

A copy of the warranty certificate will be submitted with the bid package (no exception).

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.

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.

TWO (2) YEAR GENERATOR MATERIAL AND WORKMANSHIP WARRANTY

A Harrison Hydra-Gen generator two (2) year limited warranty will be provided.

TEN (10) YEAR PRO-RATED PAINT AND CORROSION

A Pierce body limited pro-rated paint warranty certificate, WA0057, is included with this proposal.

THREE (3) YEAR MATERIAL AND WORKMANSHIP

The Pierce Goldstar gold leaf lamination limited warranty limited warranty certificate, WA0018, 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 delivery.

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 crash test certification with this proposal. The certification will state that a specimen representing the substantial structural configuration of 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:

- 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 cab will be subjected to dynamic preload where a 14,320-lb moving barrier is slammed into the side of the cab at 5.50 mph, striking with an impact of 13,000 ft-lb of force. 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-lb of force using a moving barrier in accordance with SAE J2420.

Additional Frontal Impact

The same cab will withstand a frontal impact of 65,098 ft-lb of force using a moving barrier. (Twice the force required by SAE J2420)

Roof Crush

The cab will be subjected to a roof crush force of 22,500 lb. This value meets the ECE 29 criteria, and is equivalent to the front axle rating up to a maximum of ten (10) metric tons.

Additional Roof Crush

The same cab will be subjected to a roof crush force of 110,000 lbs. (Four and a half times the load criteria of ECE 29)

The same cab will withstand all tests without any measurable intrusion into the survival space of the occupant area.

There will be no exception to any portion of the cab integrity certification. Nonconformance will lead to immediate rejection of bid.

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, at time of delivery, that each seat mount and cab structure design was pull tested to the required force and met the appropriate criteria.

PERFORMANCE CERTIFICATIONS

Cab Air Conditioning

Good cab air conditioning temperature and air flow performance keeps occupants comfortable, reduces humidity, and provides a climate for recuperation while at the scene. The cab air conditioning system will cool the cab from a heat-soaked condition at 100 degrees Fahrenheit to an average of 78 degrees Fahrenheit in 30 minutes. The bidder will certify that a substantially similar cab has been tested and has met these criteria.

Cab Defroster

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 Auxiliary Heater

Good cab heat performance and regulation provides a more effective working environment for personnel, whether in-transit, or at a scene. An auxiliary cab heater will warm the cab 77 degrees Fahrenheit from a cold-soak, within 30 minutes when tested using the coolant supply methods found in SAE J381. The bidder will certify, at time of delivery, 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:
 - The nameplate rating of the alternator.
 - The alternator rating under the conditions specified per:
 - Applicable NFPA 1901 or 1906 (Current Edition).
 - The minimum continuous load of each component that is specified per:
 - Applicable NFPA 1901 or 1906 (Current Edition).
 - Additional loads that, when added to the minimum continuous load, determine the total connected load.
 - 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).



Option List

9/5/2023

Customer:	Moscow FD, City of	Bid Number:	931
Representative	Siebers, Andrew	Job Number:	
Organization:	Hughes Fire Equipment, Inc	Number of Units:	1
Requirements Manager:		Bid Date:	09/06/2024
Description:	Moscow Fire, tandem axle 107 Ascendant	Stock Number:	
Body:	Aerial, HD Ladder 107' ASL Tandem, Alum Body	Price Level:	46 (Current: 46)
Chassis:	Enforcer Chassis, Aerials, Tandem Axle, Ascendant/LSL	Lane:	

Line	Option	Type	Option Description	Qty
1	0766640		Boiler Plates, Aerial 107' ASL	1
			Fire Department/Customer - Moscow Fire Department	
			Operating/In conjunction W-Service Center - In Conjunction	
			Miles - 150 Miles	
			Number of Fire Dept/Municipalities - 5	
			Bidder/Sales Organization - Pierce Manufacturing	
			Delivery - A qualified delivery representative shall deliver the apparatus.	
			Dealership/Sales Organization, Service - Hughes Fire Equipment	
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	0891947		Certification, Vehicle Inspection Program, NFPA 1901	1
11	0620362		Consortium, HGAC	1
12	0537375		Unit of Measure, US Gallons	1
13	0529326		Bid Bond, 10%, Pierce Built Chassis	1
14	0816571		Performance Bond, 100% with 25% Warranty Bond, 1 Yr, and Payment Bond, PPI Terms	1
15	0000007		Approval Drawing	1
16	0002928		Electrical Diagrams	1
17	0786875		Enforcer Chassis, Aerials, Tandem Axle, Ascendant/LSL	1
18	0021007		Maximum Overall Height	1
			Size - Max of 11' - 10"	
19	0000110		Wheelbase	1
			Wheelbase - 248.50	
20	0000070		GVW Rating	1
			GVW rating - 66,800	
21	0729280		Frame Rails, 13.38 x 3.50 x .375, Enforcer	1
22	0889469		Frame Liner, "C/Inv L" 12.50" x 3.00" x .25", AXT/Vel/Imp/Enf, 56" QVal	1
23	0629940		Axle, Front, Oshkosh TAK-4, Non Drive, 22,800 lb, Enforcer	1
24	0010427		Suspension, Front TAK-4, 22,800 lb, Qtm/AXT/Imp/Vel/Enf/SFR	1
25	0087572		Shock Absorbers, KONI, TAK-4, Qtm/AXT/Imp/Vel/DCF/Enf	1
26	0000322		Oil Seals, Front Axle	1
27	0899438		Tires, Front, Goodyear, Armor MAX MSA, 425/65R22.50, 20 ply	1
28	0725046		Wheels, Front, 22.50" x 12.25", Steel, Hub Pilot, 24k	1
29	0785454		Axle, Rear, Meritor RT46-160, 44,000 lb, Saber FR/Enforcer	1
30	0544244		Top Speed of Vehicle, 60 MPH/96 KPH	1
31	0555353		Suspen, Rear, Hendrickson FMX 482 EX, Air Ride, 48,000 lb	1
32	0000485		Oil Seals, Rear Axle	1
33	0663333		Driver Controlled Differential Locks, Both Axles, Tandem	1
34	0811055		Tires, Rear, Goodyear, Armor Max MSD, 12R22.50, LRH, Tandem	1
35	0654805		Wheels, Rear, Accuride, 22.50" x 8.25", Steel, Hub Pilot, Tandem	1
36	0568081		Tire Balancing, Counteract Beads	1
37	0620569		Tire Pressure Monitoring, RealWheels, AirSecure, Valve Cap, Tandem Axle	1
			Qty, Tire Pressure Ind - 10	
38	0801909		Lug Nut, Covers, Chrome	1
39	0003245		Axle Hub Covers w/center hole, S/S, Front Axle	1

Line	Option	Type	Option Description	Qty
40	0013241		Axle Hub Covers, Rear, S/S High Hat (Tandem)	1
41	0002045		Mud Flap, Front and Rear, Pierce Logo	1
42	0001953		Wheel cover, S/S, 12.25" & 13.00" (front pair)	1
43	0011955		Wheel Liners, S/S, 8.25/9.00", Rear, Tandem	1
44	0760675		Chains, Onspot, Automatic Tire, Custom	1
45	0601010		Chocks, Wheel, SAC-44-E, Folding, Aerials	1
			Qty, Pair - 01	
46	0601009		Mounting Brackets, Chocks, SAC-44-E, Folding, Horizontal, Aerials	1
			Qty, Pair - 01	
			Location, Wheel Chocks - Left Side Rear Tire, Forward	
47	0010673		ABS Wabco Brake System, Tandem Rear Axle	1
48	0030185		Brakes, Knorr/Bendix 17", Disc, Front, TAK-4	1
49	0000730		Brakes, Meritor, Cam, Rear, 16.50 x 7.00"	1
50	0020784		Air Compressor, Brake, Cummins/Wabco 18.7 CFM	1
51	0637583		Brake Reservoirs, 6,408 Cubic Inch Minimum Capacity, Saber FR/Enforcer	1
52	0617092		Air Dryer, Wabco System Saver 1200, With Wet Tank, Heated, Saber FR/Enforcer	1
53	0000790		Brake Lines, Nylon	1
54	0000854		Air Inlet, w/Disconnect Coupling	1
			Location, Air Coupling(s) - a) DS Step Well, Forward	
			Qty, Air Coupling (s) - 1	
55	0000860		Outlet, Air, with shut off valve	1
			Location, Air Coupling(s) - h) DS Pump Panel	
			Qty, Air Coupling (s) - 1	
56	0070810		All Wheel Lockup (Aerial/Tanker Chassis)	1
57	0810947		Engine, Cummins X10, 450 hp, 1650 lb-ft, W/OBD, EPA 2027, Saber FR/Enforcer	1
58	0811409		Not Required, Engine Contingency Adjustment	1
59	0001244		High Idle w/Electronic Engine, Custom	1
60	0687994		Engine Brake, Jacobs Compression Brake, Cummins Engine	1
			Switch, Engine Brake - e) ISC/ISM/ISL9/ISX Hi Med Lo	
61	0644227		Clutch, Fan, Air Actuated, Saber FR/Enforcer	1
62	0644573		Air Intake, Water & Ember Screen, Saber FR/Enforcer	1
63	0814375		Exhaust System, Horizontal, Right Side	1
			Exhaust, Diffuser - 6.00"	
			Exhaust, Material/Finish - Aluminized Steel (Standard)	
			Location, Diffuser Termination - Flush With Rub Rail	
			Tip, Exhaust - Straight Tip (Standard)	
64	0788765		Radiator, Saber FR/Enforcer	1
65	0001090		Cooling Hoses, Rubber	1
66	0001125		Fuel Tank, 65 Gallon, Left Side Fill	1
67	0001129		Lines, Fuel	1
68	0618791		DEF Tank, 4.5 Gallon, DS Fill, Forward of Axle, Common Air Bottle Door	1
69	0723716		Fuel Priming Pump, Electronic, Automatic, Cummins, No Swt Req'd	1
70	0552712		Not Required, Shutoff Valve, Fuel Line	1
71	0699437		Cooler, Chassis Fuel, Not Req'd.	1
72	0690880		No Selection Required From This Category	1
73	0801890		Trans, Allison 6th Gen, 4500 EVS P, w/Prognostics, Imp/Vel/Enf	1
74	0512762		Transmission, Shifter, 6-Spd, Push Button, 4500, Imp/Vel/Qtm/DCF/Enf	1
			Trans, ratio - 4500 EVS, 6Spd	
75	0684459		Transmission Oil Cooler, Modine, External	1
76	0539711		Label, TRANSynd Transmission Fluid Only	1
77	0565656		Fluid, 4000/4500 Series Transmission, TranSynd synthetic, IPOS, Custom	1
78	0001375		Driveline, Spicer 1810	1
79	0669988		Steering, Sheppard M110 w/Tilt, TAK-4, Eaton Pump, w/Cooler	1
80	0802950		Steering Wheel, 4 Spoke w/Wiper Control, Saber FR/Enforcer	1
81	0690274		Logo/Emblem, on Dash	1
			Text, Row (1) One - Moscow	
			Text, Row (2) Two - Volunteer	
			Text, Row (3) Three - Fire Dept.	
82	0012245		Bumper, 19" Extended, Saber FR/Enforcer	1
83	0640197		Tray, Hose, Center, 19" Bumper, Outside Air Horns	1
			Grating, Bumper extension - Grating, Rubber	
			Capacity, Bumper Tray - 20) 125' of 1.75"	

Line	Option	Type	Option Description	Qty
84	0633479		Hose Restraint, Bumper Tray, Velcro Straps, Pair Qty, Pair - 01	1
85	0614646		No Lift & Tow Package, Imp/Vel, AXT, SFR/Enf	1
86	0072306		Tow Eyes, Chrome, Extended Out Front of Bumper	1
87	0698960		Coating, Top Flange, Front Bumper, Outside Exterior, UL-LX Coating, Black	1
88	0789736		Cab, Enforcer, 7010 w/Notch	1
89	0647919		Engine Tunnel, ISL, Saber FR/Enforcer	1
90	0633594		Rear Wall, Interior, Adjustable Seating	1
91	0632103		Rear Wall, Exterior, Cab, Saber FR/Enforcer Material, Exterior Rear Wall - Aluminum Treadplate	1
92	0622582		Cab Lift, Elec/Hyd, Manual Override, Control Loc Feature, Sab FR/Enf Location - driver side pump panel	1
93	0695930		Grille, Bright Finished, Front of Cab, Enforcer	1
94	0002224		Scuffplates, S/S At Cab Door Jambs, 4-Door Cab Material Trim/Scuffplate - c) S/S, Polished	1
95	0647932		Not Required, Trim, S/S Band, Across Cab Face, AXT/Saber/Enforcer	1
96	0087357		Molding, Chrome on Side of Cab	1
97	0521669		Mirrors, Retractable, West Coast Style, Htd/Rmt, w/Htd/Rmt Convex	1
98	0648170		Door, Half-Height, Saber FR/Enforcer 4-Door Cab, Raised Roof Key Model, Cab Doors - 751	1
99	0655543		Cab, Exterior Door Handle, Finish - 4-Door, Chrome/Black	1
100	0630636		Door Panel, Brushed Stainless Steel, Saber/Enforcer 4-Door Cab	1
101	0638310		Controls, Electric Roll-Up Windows, 4dr, 4 Driver Controls, Saber FR/Enforcer Steps, 4-Door Cab, Saber FR/Enforcer	1
102	0770194		Step Well Material - Aluminum Treadplate	1
103	0892638		Handrail, Exterior, Knurled, Alum, 4-Door Cab Lights, Cab & Crw Cab Acs Stps, P25, LED w/Bezel, 6lts	1
104	0583698		Color, Trim - Chrome Housing	1
105	0637984		Fenders, S/S on cab, Extra Wide, Saber/Enf	1
106	0779033		Window, Side of C/C, Fixed, Saber FR/Enforcer	1
107	0722796		Not Required, Windows Rear of Crew Cab, Saber FR/Enforcer	1
108	0607217		Dash, Poly, Saber FR/Enforcer Mounting Provisions, 3/16" Alum, Full Engine Tunnel, Saber FR/Enforcer	1
109	0750824		Mounting Provision Spacing - .75" Material Finish, Cab Interior - Painted Cab Interior, Vinyl Headliner, Saber FR/Enforcer, CARE	1
110	0753903		Color, Cab Interior Vinyl/Fabric - Endure Vinyl - Silver/Gray Engine Tunnel Cover - Dark Silver Gray Endure Vinyl Cab Interior Rear Wall Material - Painted Aluminum Cab Interior, Paint Color, Saber FR/Enforcer	1
111	0052100		Color, Cab Interior Paint - i) fire smoke gray	1
112	0722696		Floor, Rubber Padded, Cab & Crew Cab, Saber/Enforcer HVAC, Enforcer, CARE	1
113	0639675		HVAC System, Filter Access - Removable Panel Auxiliary Cab Heater - Both HVAC System, Control Loc. - Panel Position #12 Plenum Cover Material - Formed Plastic Sun Visor, Smoked Lexan, AXT, Imp/Vel, Saber FR/Enforcer	1
114	0634328		Sun Visor Retention - No Retention	1
115	0583938		Grab Handles, Driver and Officer Door Posts, Saber FR/Enforcer Lights, Engine Compt, Custom, Auto Sw, WIn 3SC0CDCR, 3" LED, Trim	1
116	0631830		Qty, - 01 Fluid Check Access, Saber FR/Enforcer, Arrow XT Latch, Door, Storage - Lift and Turn Latch, Flush	1
117	0583042		Side Roll and Frontal Impact Protection	1
118	0622617		Seating Capacity, 6 Seats	1
119	0636955		Seat, Driver, Pierce PSV, Air Ride, High Back, Safety, Saber FR/Enforcer	1
120	0636942		Seat, Officer, Pierce PSV, Fixed, SCBA, Safety, Saber FR/Enforcer	1
121	0620420		Radio Compartment, Below Non-Air Ride Seat, Saber FR/Enforcer Latch, Door, Storage - Lift and Turn Latch, Flush	1
122	0635973		Seat, Rear Facing C/C, DS Outboard, Pierce PSV, SCBA, Safety, Saber FR/Enforcer	1
123	0102783		Not Required, Seat, Rr Facing C/C, Center	1

Line	Option	Type	Option Description	Qty
124	0635969		Seat, Rear Facing C/C, PS Outboard, Pierce PSV, SCBA, Safety, Saber FR/Enforcer	1
125	0108189		Not Required, Seat, Forward Facing C/C, DS Outboard	1
126	0604650		Seat, Forward Facing C/C, Center, (2) Pierce PSV, SCBA, 17" Btm, Safety, SFR/Enf	1
127	0108190		Not Required, Seat, Forward Facing C/C, PS Outboard	1
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	5
			Qty, - 05	
130	0603866		Seat Belt, Dual Retractor, ReadyReach, Saber FR/Enforcer	1
			Seat Belt Color - Red	
131	0602464		Helmet Storage, Provided by Fire Department, NFPA 2016	1
132	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	
133	0896451		Enhanced Software for Cab and Crew Cab Dome Lts	1
134	0602622		Portable Hand Light, Provided by Fire Department, Quint NFPA 2016 Classification	1
135	0622803		Cab Instruments, Black Gauges, Black Bezels, Enforcer MUX	1
			Emergency Switching - Individual Switches	
136	0509511		Air Restriction Indicator, Imp/Vel, AXT, Dash CF, Enf MUX	1
137	0543751		Light, Do Not Move Apparatus	1
			Alarm, Do Not Move Truck - Pulsing Alarm	
138	0509042		Messages, Open Dr/DNMT, Color Dsply,	1
139	0611683		Switching, Cab Instrument Lower Console & Overhead, Membrane, Enforcer WiFi MUX	1
140	0802946		Wiper Control, 2-Speed w/Intermittent, Steering Wheel, Left Pod, SFR/Enf	1
141	0731813		Hour Meter, Aerial, Included in Information Centers, ASL, AAT, ASP	1
142	0002615		Switch, Aerial 12V Master	1
143	0002617		PTO switch, w/light - aerial	1
144	0548014		Wiring, Spare, 20 A 12V DC 3rd	2
			Qty, - 02	
			12vdc power from - Battery direct	
			Wire termination - Butt Splice	
			Location - LS1 upper rear right side wall with a 4' pigtail & RS1 upper left side wall with a 4' pigtail.	
145	0548009		Wiring, Spare, 20 A 12V DC 1st	1
			Qty, - 01	
			12vdc power from - Battery direct	
			Wire termination - Butt Splice	
			Location, Spare Wiring - Rear Wall, Crew Cab - Centered	
146	0548012		Wiring, Spare, 20 A 12V DC 4th	1
			Qty, - 01	
			12vdc power from - Battery direct	
			Wire termination - Butt Splice	
			Location - RS4 mid height of compartment with a 4' pigtail, front wall towards the rear.	
147	0636439		Wiring, Spare, 37.5 A 12V DC, Cust Install Radio, 30A Bat Dir, 7.5A Ign & Grnd	1
			Qty, - 01	
			Location - under the engine tunnel plate forward towards the dash.	
148	0732954		Wiring, Spare, 15 A 12VDC Power Point, Dual USB-C	1
			Qty, - 01	
			12vdc power from - Battery direct	
			Location, Spare Wiring - Center Console	
149	0610968		Wiring, Spare, 2.0 A 12V DC, USB Termination Blue Sea 1016 1st	1
			Qty, - 01	
			12vdc power from - Battery direct	
			Location - next to the power points on the officer side dash, see instrument panel layouts.	
150	0548004		Wiring, Spare, 15 A 12V DC 1st	2
			Qty, - 02	
			12vdc power from - Battery direct	
			Wire termination - Butt Splice	

Line	Option	Type	Option Description	Qty
150			Location, Spare Wiring - Officer Dash	
151	0548013		Wiring, Spare, 20 A 12V DC 2nd	1
			Qty, - 01	
			12vdc power from - Battery direct	
			Wire termination - Butt Splice	
152	0814201		Location - Center dash area under the engine tunnel plate	
			Vehicle Information Center, 7" Color Display, Touchscreen, MUX, CL714	1
			System Of Measurement - US Customary	
153	0816633		Collision Mitigation, HAAS Alert (R2V), HA7	1
			Subscription, HAAS R2V - R2V - 5 Year Data Plan Subscription	
154	0606249		Vehicle Data Recorder w/CZ and Overhead Display Seat Belt Monitor	1
155	0722793		Intercom, Firecom 5100D Single Radio, 7-Pos, D, O, 4C, P, HM-30	1
			Location - behind the officer seat	
			Location, Intercom, C Cab - 4) 2 forward & 2 rearward facing seats	
156	0006240		Cable, Radio to Intercom Interface, Firecom, 1 Radio	1
			Radio, First Two-Way Make - Motorola High Power	
			Radio, First, Two-Way Model - APX-6500 full head radio	
157	0681389		Headset, Firecom, UH-51 Under Helmet, Radio Transmit	2
			Qty, - 02	
			Location, Headset - Driver Seat and Officer Seat	
158	0681384		Headset, Firecom, UH-52 Under Helmet, Intercom Only	4
			Qty, - 04	
			Location, Headset - DS Outbrd, Rear Fcng Seat, DS Inbrd, Fwrd Fcng	
			Seat, PS Inbrd, Fwrd Fcng Seat and PS Outbrd, Rear Fcng Seat	
159	0681408		Hangers For Headsets, NFPA, Each	6
			Qty, - 06	
			Location, Headset Hangers - Driver Seat, Officer Seat, DS Inbrd, Fwrd	
			Fcng Seat, DS Outbrd, Rear Fcng Seat, PS Inbrd, Fwrd Fcng Seat and PS	
			Outbrd, Rear Fcng Seat	
160	0661616		Hangers For Headsets, NFPA, Each, Shipped Loose	6
			Qty, - 06	
161	0640653		Cable, Firecom Radio Interface Extension, 15'	1
			Location - overhead switch panel	
			Qty, - 1	
162	0696439		Antenna Mount, Custom Chassis, Cable Routed to Instrument Panel Area	1
			Qty, - 01	
			Location, Antenna Mount - Right Side	
163	0817058		Camera, Pierce, LS Mux, R Camera, SD, CL714	1
			Camera System Audio - Speaker on Instrument Panel	
164	0814831		Not Required, Camera Switcher	1
165	0511071		Guard, 4-Way, Rear Vision Camera	1
			Qty, - 01	
			Location - for the rear back up camera	
166	0890416		Pierce Command Zone, Advanced Electronics & Control System, Enforcer, WiFi	1
			CZT	
			Color, Antenna - Black Antenna	
			Module Housings - Black Housing with Power and Status Ind	
167	0896456		Prognostics, Electrical System	1
168	0624253		Electrical System, Enforcer MUX	1
169	0079166		Batteries, (4) Stryten/Exide Grp 31, 950 CCA ea, Threaded Stud	1
170	0008621		Battery System, Single Start, All Custom Chassis	1
171	0002698		Battery Compartment, Saber/Enforcer	1
172	0815826		Location, Crew Cab, Charger, Rear Facing Seat Riser, Left Position, Loc	1
			Location - TBD	
173	0812383		Charger, Sngl Sys, Kussmaul, Chief 091-266-12-40	1
174	0814939		Location, Cab, Ind/Remote, Driver's Seat Riser	1
175	0811943		Panel, Remote Control, Kussmaul, Chief 091-266-RCP	1
176	0016857		Shoreline, 20A 120V, Kussmaul Auto Eject, 091-55-20-120, Super	1
			Qty, - 01	
			Color, Kussmaul Cover - b) red	
			Shoreline Connection - Battery charger and the interior cab and body	
			120V receptacles	
177	0026800		Shoreline Location	1
			Location, Shoreline(s) - DS Cab Side	

Line	Option	Type	Option Description	Qty
178	0783395		Transfer Switch, Generator to Shoreline 30 Amp and Under	1
179	0764491		Alternator, 420 amp, Leece-Neville BLP4003	1
180	0750851		Sealed Butt Splices and Sealed Ring Terminals, Aerial TT & Control Console	1
181	0750861		Sealed Butt Splices and Sealed Ring Terminals, Body	1
182	0750853		Sealed Butt Splices and Sealed Ring Terminals, Battery Boxes	1
183	0750857		Sealed Butt Splices and Sealed Ring Terminals, Pump Compartment	1
184	0750852		Sealed Butt Splices and Sealed Ring Terminals, Chassis Frame & Rear Substructure	1
185	0092582		Load Manager/Sequencer, MUX	1
			Enable/Disable Hi-Idle - e)High Idle enable	
186	0783153		Headlights, Rect LED, JW Spkr Evo 2, AXT/DCF/Enf/Imp/Sab/Vel	1
			Color, Headlight Bez - Chrome Bezel	
187	0625953		Light, Directional, Wln 600 Cmb, Cab Crn, Wrp Bzl Out HD Lts, Enf, Sab FR	1
			Color, Lens, LED's - m)match LED's	
188	0620054		Light, Directional/Marker, Intermediate, Weldon 9186-8580-29 LED 2lts	1
189	0647802		Lights, Clearance/Marker/ID, Front, P25 LED 5 Lts, Saber FR/Enforcer	1
190	0647899		Lights, Directional/Marker, Cab Front Side, Weldon 9186-8580-29 LED, Sab/Enf	1
191	0511569		Lights, Clearance/Marker/ID, Rear, P25 LED 7Lts	1
			Light Guard - Without Guard	
192	0602938		Light, Marker End Outline, Rubber Arm, LED Marker Lamp, Rear Body	1
			Qty, Lights, Pair - 1	
193	0804514		Lights, Tail, Wln M62BTT* Red Stop/Tail & M62T* Amber Dir Arw For Hsg	1
			Color, Lens, LED's - Clear	
			Flash Pattern, Directional Lts - Steady On (Arrow)	
194	0806466		Lights, Backup, Wln M62BU, LED, For Tail Lt Housing	1
195	0889577		Bracket, License Plate & Light, P25 LED, Stainless Brkt	1
			Color, Trim - Chrome Housing	
196	0556842		Bezels, Wln, (2) M6 Chrome Pierce, For mtg (4) Wln M6 lights	1
197	0589905		Alarm, Back-up Warning, PRECO 1040	1
198	0769420		Lights, Perimeter Cab, Amdor AY-LB-12HW020 LED 4Dr	1
199	0769564		Lights, Perimeter Pump House, Amdor AY-LB-12HW020 LED 1lt	1
200	0768498		Lights, Perimeter Body, Amdor AY-LB-12HW020 LED 1lt, Turntable Access	1
			Control, Perimeter Lts - Parking Brake Applied	
201	0896454		Enhanced Software for Perimeter Lts	1
202	0776075		Light, Visor, Wln, 12V P*H1* Pioneer LED 1st	2
			Qty, - 02	
			Location, driver's/passenger's/center - 1DS & 1PS 8 Deg Out	
			Color, Wln Lt Housing - White Paint	
			Control, Scene Lts - Cab Sw Panel DS and Cab Sw Panel PS	
			Scene Light Optics - Flood/Spot	
203	0771795		Lights, HiViz FT-MB-2.15-*-*CPREC 17.5" LED, 1st, Recessed	1
			Location - Cab for side scene lighting on the driver side	
			Qty, - 01	
			Control, Scene Lts - Cab Sw Panel DS, Pump Panel Sw LS and Cab Sw Panel PS	
			Color, Lt Housing HiViz - White	
			Scene Light Optics - combination	
204	0771794		Lights, HiViz FT-MB-2.15-*-*CPREC 17.5" LED, 2nd, Recessed	1
			Location - Cab for side scene lighting on the passenger side	
			Qty, - 01	
			Control, Scene Lts - Cab Sw Panel DS, Pump Panel Sw LS and Cab Sw Panel PS	
			Color, Lt Housing HiViz - White	
			Scene Light Optics - combination	
205	0757717		Lights, HiViz FT-B-65-* LED, 2nd	1
			Location - above RS1/RS2	
			Qty, - 01	
			Control, Scene Lts - Cab Sw Panel DS, Pump Panel Sw LS and Cab Sw Panel PS	
			Color, Lt Housing HiViz - White	
206	0773358		Lights, HiViz FT-B-46-*-* LED, 2nd	1
			Location - above RS4/RS5	
			Qty, - 01	

Line	Option	Type	Option Description	Qty
206			Control, Scene Lts - Cab Sw Panel DS, Pump Panel Sw LS and Cab Sw Panel PS	
207	0773362		Color, Lt Housing HiViz - White Lights, HiViz FT-B-46-*. LED, 1st	1
			Location - above LS4/LS5 Qty, - 01	
208	0757722		Control, Scene Lts - Cab Sw Panel DS, Pump Panel Sw LS and Cab Sw Panel PS Color, Lt Housing HiViz - White Lights, HiViz FT-B-65-*. LED, 1st	1
			Location - above LS1/LS2 Qty, - 01	
209	0898617		Control, Scene Lts - Cab Sw Panel DS, Pump Panel Sw LS and Cab Sw Panel PS Color, Lt Housing HiViz - White Lights, Hose Bed, Sides, Dual Strips, 45 Ends	1
210	0733247		Control, Hose Bed Lts - Cup Switch At Rear SS Lights, Rear Scene, HiViz FT-GESM*, Surface Mt	2
			Location, Lights - one each side high as possible on the rear bulkheads Qty, - 02	
			Control, Rear Scene Lts - Cab Switch Panel DS and Cup Switch At Rear SS	
211	0709438		Color, Lt Housing HiViz - Chrome Bezel Lights, Walk Surf, FRP Flood, LED	1
212	0793399		Aerial, HD Ladder 107' ASL Tandem, Alum Body	1
213	0554269		Body Skirt Height, 18"	1
214	0601006		Tank, Water, 500 Gallon, Poly, Ascendant Tandem Axle, PAL, Notched	1
215	0003405		Overflow, 4.00" Water Tank, Poly	1
216	0028104		Foam Cell Required	1
217	0003429		Not Required, Direct Tank Fill	1
218	0751577		Hose Bed, Aluminum, Trough Style, 2G Aerial	1
			Location, driver's/passenger's/center - Right Side Door, Material & Finish, Access - smooth aluminum Latch, Door, Access - lift and turn latch	
219	0723547		Painted Hose Bed/Cargo Area	1
			Paint Color, Hose Bed Interior - Match Lower Body	
220	0003491		Hose Bed Capacity 1000' of 5.00", Ascendant, PAP, PAL	1
221	0591017		Hose Restraint, Hose Bed, Aerial, Front Velcro Strap, Top	1
222	0003512		Running Boards, Ascendant, PAL	1
223	0735594		Turntable Steps-Morton Cass, Swing Down, LS only, Ascend TA, PAL, PAP, Handhld Cut Out	1
224	0889980		Step, Flip - No Flip Step Lights, Step (3), P25 LED, One Side	1
			Control, Scene Lts - Park Brake	
225	0690023		Wall, Rear, Smooth Aluminum	1
226	0029503		Tow Eyes (2), Painted Lower Job Color, Aerial	1
227	0013641		Construction, Compt, Alum, Ascendant Tandem, PAL	1
228	0063695		Compt, LS F/H F/D, Roll Drs, w/o Chute, Ascendant Tandem, 105', 100 HAL	1
			Hinge Location - Rear of Body Door, Material & Finish, Stabilizer - Polished Stainless Steel Latch, Door, Access - lift and turn latch, flush	
229	0063727		Compt, LS Turntable, F/H F/D, Roll Dr & Lift Dr, Ascendant Tandem, 105'	1
230	0023672		Compt, IPO Stairs, Not Required, LS	1
231	0063733		Compt, RS F/H, Roll Drs, Ascendant Tandem, 105 HDL, 100 HAL	1
			Hinge Location - Rear of Body Door, Material & Finish, Stabilizer - Polished Stainless Steel Latch, Door, Access - lift and turn latch, flush	
232	0035382		Compt, RS Turntable, F/H, Roll Dr & Lift Dr, Ascendant Tandem, 105 HDL	1
233	0023680		Compt, IPO Stairs RS, Roll-up Door	1
234	0601969		Doors, Gortite Rollup/Lap, Aluminum, Side Compartments, 105'HDL/Ascendant Tandem	7
			Qty, Door Accessory - 07 Color, Roll-up Door, Gortite - Painted to Match Lower Body Latch, Roll-up Door, Gortite - Non-Locking Liftbar	

Line	Option	Type	Option Description	Qty
235	0540787		Stabilizer Compartment, Modified for 18" Stabilizer Penetration	1
236	0552955		Blister, Compts in Front of Rear Axle, To Clear Firemaax Suspension	1
237	0018820		Bumper, Rear, 5" w/Treadplate Cover, Ascendant Tandem, PAP, PAL, RMAP	1
238	0603711		Guard, Drip Pan, S/S, Rollup Door, Aerial	7
			Qty, Door Accessory - 07	
			Location, Door Guard/Drip Pan - LS1, LS3 Over Wheel, LS4, RS1, RS3 Over Wheel, RS4 and B1	
239	0603083		Lights, Compt,Pierce LED,Dual Light Strips,Each Side Dr,Ascend TA,75'HAL,PAP,HDL	10
			Qty, - 10	
			Location, Compartment Lights - All Body Compts	
240	0603420		Shelf Tracks, Painted, Aerial	9
			Qty, Shelf Track - 09	
			Location, Shelf Track - LS1, LS2, LS3, LS4, RS1, RS2, RS3, RS4 and RS5	
241	0600289		Shelves, Adj, 500 lb Capacity, Full Width/Depth, Predefined Locations, Aerial	13
			Qty, Shelf - 13	
			Material Finish, Shelf - Painted - Spatter Gray	
			Location, Shelves/Trays, Predefined - * Locations To Be Determined At A Later Date	
242	0709692		Tray, 215 lb, Tilt/Slide-Out, 30 Deg, Adj, Predefined Locations	2
			Qty, Tray (slide-out) - 02	
			Location, Shelves/Trays, Predefined - * Locations To Be Determined At A Later Date	
			Material Finish, Tray - Painted - Spatter Gray	
243	0603763		Tray, Floor Mounted, Slide-Out, 500lb, 2.00" Sides, 2G Aerial	4
			Qty, - 04	
			Location, Tray Slide-Out, Floor Mounted - RS1, RS4, LS1 and LS4	
			Material Finish, Tray - Painted - Spatter Gray	
244	0540317		Toolboard, Swing-out, Alum, .188", Peg Board	2
			Qty - 2	
			Location, Pivot - Front	
			Mounting, Toolboard - Adjustable Frt-back	
			Hole Diameter, Pegboard/Toolboard - .203" diameter	
			Finish, Pegboard/Toolboard - Painted - Spatter Gray	
			Location, Toolboard - LS3 - Full Height/Width	
245	0673867		Toolboard, Swing-out, Alum, .188", Peg Board, 3G, Add'l	1
			Qty - 1	
			Location, Pivot - Front	
			Mounting, Toolboard - Adjustable Frt-back	
			Hole Diameter, Pegboard/Toolboard - .203" diameter	
			Finish, Pegboard/Toolboard - Painted - Spatter Gray	
			Location, Toolboard - RS3 - Full Height/Width	
246	0685317		Bracket, SCBA, Zico, KD-UH-6-SF, Mounted	3
			Location - TBD: RS1 mounted to the horizontal shelf track on the rear wall. Pack is 24" tall.	
			Qty, Comp. Accessory - 03	
247	0027090		Tracks, Equipment Mounting, Horizontal	1
			Location - TBD: RS1 upper rear wall for the mounting of the three scba pack holders	
			Qty, Shelf Track - 01	
248	0004016		Rub Rail, Aluminum Extruded, Side of Body	1
249	0802978		Fender Crowns, Rear, S/S, w/Removable Fender Liner, Aerial, 2G, Two Pair	1
			Material Finish, Fender Liner - Painted Lower Body	
250	0519849		Not Required, Hose, Hard Suction	1
251	0893756		Handrails, Side Pump Panels, Per Print, Aerial	1
			Step, Runningboard - step	
252	0802986		Compt, Air Bottle, Between Tandems, Four (4) Bottles, w/ Straps, Bolt-In, Aerial	2
			Qty, Air Bottle Comp - 2	
			Door Finish, Fender Compt - painted to match lower body	
			Location, Fender Compt - LS and RS	
			Latch, Air Bottle Compt - Flush Lift & Turn, Pair	
			Insert, Air Bottle Compt - Rubber Matting	
			Door Type - drop down with support cable	

Line	Option	Type	Option Description	Qty
253	0804429		Compt, Air Bottle, Single, Round, Fender, Tri Door, Bolt-In, Tandem Aerials Qty, Air Bottle Comp - 2 Door Finish, Fender Compt - painted to match lower body Location, Fender Compt - Single - RS Fwd and Single - RS Rear Latch, Air Bottle Compt - Flush Lift & Turn Insert, Air Bottle Compt - Rubber Matting	2
254	0806235		Compt, Air Bottle, Single, Round, Fender, Tri Door w/DEF, Bolt-In,Tandem Aerials Qty, Air Bottle Comp - 1 Door Finish, Fender Compt - painted to match lower body Location, Fender Compt - Single - LS Fwd - DEF Combo - Triangular Dr Latch, Air Bottle Compt - Flush Lift & Turn Insert, Air Bottle Compt - Rubber Matting	1
255	0805714		Compt, Air Bottle, Single, Round, Fender, Tri Door w/Fuel,Bolt-In,Tandem Aerials Qty, Air Bottle Comp - 1 Door Finish, Fender Compt - painted to match lower body Location, Fender Compt - Single - LS Rear - Fuel Fill Combo - Triangular Dr Latch, Air Bottle Compt - Flush Lift & Turn Insert, Air Bottle Compt - Rubber Matting	1
256	0004218		Ladder, 35' Duo-Safety 1200A 2-Sect Qty, - 1	1
257	0004222		Ladder, 24' Duo-Safety 900A 2-Section Qty, - 01 Location, Extension Ladder - torque box	1
258	0004232		Ladder, (2) 16' Duo-Safety 875A Roof	1
259	0648681		Ladder, 14' Duo-Safety 875-DR Roof Qty, - 01 Location - behind the boom panel on the passenger side(right)	1
260	0004233		Ladder, 14' Duo-Safety Fresno 701 Qty, - 1	1
261	0004246		Ladder, 10' Duo-Safety Folding, 585A Qty, - 01 Location, Folding Ladder Aerial - torque box	1
262	0042207		Ladders Stored in Torque Box, Gortite Roll, Ascendant TA, PAL, PAP Color, Roll-up Door, Gortite - Painted to Match Lower Body Latch, Roll-up Door, Gortite - Non-Locking, Rear	1
263	0789440		Lights, Torque Box Ladder Storage, Truck-Lite 40227C 1lt, Incd, Round 4"	1
264	0775907		Pike Pole, 12' DUO Safety, Fiberglass Qty, - 02	2
265	0789564		Pike Pole, 8' DUO Safety, Fiberglass, Aerial Qty, - 02	2
266	0789566		Pike Pole, 6' DUO Safety, Fiberglass, Aerial Qty, - 01	1
267	0789586		Pike Pole, 3' DUO Safety, Fiberglass, w/D Handle Qty, - 02	2
268	0770577		Pike Pole Tubes, in Torque Box/Ladder Storage, Aluminum Qty, - 06	6
269	0024388		No Steps Required, Front Of Body	1
270	0620530		Pump House, Side Control, 52", Control Zone, Aerial	1
271	0035501		Pump House Structure, Std Height	1
272	0004435		Pump, Waterous, CSU, 2000 GPM, Single Stage	1
273	0004482		Seal, Mechanical, Waterous	1
274	0816447		Trans, Pump, Waterous C22 Series	1
275	0635600		Pumping Mode, Stationary Only	1
276	0605126		Pump Shift, Air Mnl Override, Split Shaft, Interlocked, Waterous	1
277	0003148		Transmission Lock-up, EVS	1
278	0004547		Auxiliary Cooling System	1
279	0014486		Not Required, Transfer Valve, Single Stage Pump	1
280	0737989		Valve, Relief Intake, Waterous Qty - 1 Pressure Setting - 125 psig	1
281	0681968		Controller, Pressure, FRC, TOTAL CONTROL, Control Buttons	1
282	0072153		Primer, Trident, Air Prime, Air Operated	1

Line	Option	Type	Option Description	Qty
283	0780364		Manuals, Pump, (2) Total, Electronic Copies	1
284	0602512		Plumbing, Stainless Steel and Hose, Single Stage Pump, Control Zone	1
285	0795135		Plumbing, Stainless Steel, w/Foam System	1
286	0004645		Inlets, 6.00" - 1250 GPM or Larger Pump	1
287	0014650		Pump Suction Tube(s), Short, All	1
288	0004646		Cap, Main Pump Inlet, Long Handle, NST, VLH	1
289	0084610		Valves, Akron 8000 series- All	1
290	0016158		Valve, Inlet(s) Recessed, Side Cntrl, "Control Zone"	1
			Qty, Inlets - 1	
291	0004700		Control, Inlet, at Valve	1
292	0004660		Inlet (1), Left Side, 2.50"	1
293	0723551		Inlet (1), Right Side, 2.50"	1
294	0092569		No Rear Inlet (Large Dia) Requested	1
295	0064116		No Rear Inlet Actuation Required	1
296	0092696		Not Required, Cap, Rear Inlet	1
297	0009648		No Rear Intake Relief Valve Required on Rear Inlet	1
298	0092568		No Rear Auxiliary Inlet Requested	1
299	0723049		Valve, .75" Bleeder, Aux. Side Inlet, "T" Swing Handle	1
300	0029043		Tank to Pump, (1) 3.00" Valve, 3.00" Plumbing	1
301	0004905		Outlet, Tank Fill, 1.50"	1
302	0062133		Control, Outlets, Manual, Pierce HW if applicable	1
303	0004940		Outlet, Left Side, 2.50"	2
			Qty, Discharges - 02	
304	0005091		Elbow, Left Side Outlets, 45 Degree, 2.50" FNST x 2.50" MNST, VLH	1
305	0092570		Not Required, Outlets, Left Side Additional	1
306	0035094		Not Required, Elbow, Left Side Outlets, Additional	1
307	0004945		Outlet, Right Side, 2.50"	1
			Qty, Discharges - 01	
308	0025091		Elbow, Right Side Outlets, 45 Degree, 2.50" FNST x 2.50" MNST, VLH	1
309	0092571		Not Required, Outlets, Right Side Additional	1
310	0089584		Not Required, Elbow, Right Side Outlets, Additional	1
311	0005047		Outlet, 4" w/4" Right, Handwheel	1
			Valve, Brand - Akron	
312	0005097		Elbow, Large Dia Outlet, 30 Deg, 4.00" FNST x 5.00" Storz	1
			Qty, - 01	
313	0649939		Outlet, Front, 1.50" w/2" Plumbing	1
			Fitting, Outlet - 1.50" NST with 90 degree swivel	
			Drain, Front Outlet - Automatic	
			Location, Front, Single - in center bumper tray	
314	0092575		Not Required, Outlet, Rear	1
315	0045099		Not Required, Elbow, Rear Outlets	1
316	0092574		Not Required, Outlet, Rear, Additional	1
317	0085695		Not Required, Elbow, Rear Outlets, Large, Additional	1
318	0092573		Not Required, Outlet, Hose Bed/Running Board Tray	1
319	0752097		Caps/Plugs for 1.00" to 3.00" Discharges/Inlets, Chain	1
320	0723042		Valve, 0.75" Bleeder, Discharges, "T" Swing Handle	1
321	0029106		Not Required, Deluge Outlet	1
322	0029302		No Monitor Requested	1
323	0029304		No Nozzle Req'd	1
324	0029107		No Deluge Mount	1
325	0047583		Waterway Outlet & Control, 4" Akron, Handwheel	1
326	0029167		Crosslays Sngl Sheet Unpainted, (2+) 1.50", Std. Cap	2
			Qty, Crosslays - 2	
327	0090442		Crosslays Sngl Sheet Unpainted, (1) 2.50" Std Cap	1
328	0591145		Hose Restraint, Crosslay/Deadlay, Top/Ends, Elastic Netting	2
			Qty, - 02	
329	0029260		Not Required, Speedlays	1
330	0750536		Hose Restr, Spdly, Not Required, No Spdly	1
331	0624939		Foam Sys, Husky 3, Single Agent, Multi Select Feature	1
			Discharge, Foam Locations - Front Bumper Center, Crosslay Front, Crosslay Center and Crosslay Rear	
332	0012126		Not Required, CAF Compressor	1

Line	Option	Type	Option Description	Qty
333	0592527		Refill, Foam Tank, Integral, Husky 3	1
334	0031894		Demonstration, Foam System, At Pierce Vehicle, Qty, Training, P - 1 vehicle	1
335	0022539		Foam Cell, 20 Gallon, Reduce Water Type of Foam - Class "A"	1
336	0697589		Drain, 1.00", Foam Tank #1, Husky 3 Foam System, Quarter Turn	1
337	0091079		Not Required, Foam Tank #2	1
338	0091112		Not Required, Foam Tank #2 Drain	1
339	0738072		Approval Dwg, Pump Panel(s), Not Required	1
340	0032479		Pump Panel Configuration, Control Zone	1
341	0562698		Step, Slide-Out/Fold-Out, Pump Operator Platform, Aerial	1
342	0667186		Light, Slide-Out Pump Operator Step, On Scene Solutions Access LED, Short Step	1
343	0635355		Material, Pump Panels, Side Control Painted FormCoat Black Material Finish, Pump Panel, Side Control - Painted FormCoat Black	1
344	0721765		Material, Pump Panel, Side Control - Aluminum Panel, Pump Access - Right Side Only, Side Control	1
345	0583824		Latch, Pump Panel Access, Side Mount - Swell Latch, Black Light, Pump Compt, Wln 3SC0CDCR LED White	1
346	0586382		Qty, - 01 Gauges, Engine, Included With Pressure Controller	1
347	0005601		Throttle, Engine, Incl'd w/Press Controller	1
348	0739224		Indicator Light @ Pump Panel, Throttle Ready, Incl w/Pressure Gov/Throttle,Green	1
349	0549333		Indicators, Engine, Included with Pressure Controller	1
350	0745568		Indicator Light, Pump Panel, Ok To Pump, Green	1
351	0511078		Gauges, 4.00" Master, Class 1, 30"-0-600psi	1
352	0511100		Gauge, 2.00" Pressure, Class 1, 30"-0-400psi	1
353	0757359		Gauge, Water Level, Class 1, Remote Module Driver	1
354	0750438		Activation, Water Level G - pb) parking brake is applied Water Level Gauge, Wln PSTANK2, LED 1-Light, 4-Level	2
355	0062992		Qty, - 02 Activation, Water Level G - pb) parking brake is applied	1
356	0593161		Location, Water Level Gauge, Multi-Select - Each Side Custom Cab Color, Trim - Chrome Trim	1
357	0606694		Gauge, Foam Level, (1) Tank, Class 1, GAAAR 5lt	1
358	0606835		Light Shield, S/S LED	1
359	0757092		Air Horns, (2) Hadley, 6" Round, eTone, In Bumper	1
360	0723391		Location, Air Horns, Bumper, Each Side, Outside Frame, Outboard (Pos #1 & #7)	1
361	0757084		Control, Air Horn, Multi Select	1
362	0525667		Control, Air Horn, Chrome Push Button Sw, RS	1
363	0510206		Control, Air Horn, Horn Ring	1
364	0748306		Siren, Wln 295SLSA1, 100 or 200 Watt	1
365	0805709		Location, Elec Siren, Recessed Overhead In Console	1
366	0748292		Location, Elec Siren - Overhead, DS Inside Sw Pnl	1
367	0601306		Control, Elec Siren, Multi Select	1
368	0601552		Control, Elec Siren, Horn Ring, Interlock	1
369	0895310		Control, Interlocks - No Interlocks	1
370	0006095		Control, Elec Siren, Push Button Sw, RS	1
371	0748305		Speaker, (1) Wln, SA315P, w/Pierce Polished Stainless Steel Grille, 100 watt	1
372	0748282		Connection, Speaker - siren head	1
373	0748281		Location, Speaker, Frt Bumper, Recessed, Right Side, Outside Frame,Inbrd (Pos 2)	1
374	0740834		Siren, Federal Q2B	1
375	0746353		Finish, Q2B Siren - Chrome	1
376	0606715		Siren, Mechanical, Mounted Above Deckplate	1
377	0016380		Location, Siren, Mech - a) Left	1
			Control, Mech Siren, Multi Select	1
			Control Mech Siren, Ft Sw LS	1
			Control Mech Siren, Ft Sw RS	1
			Sw, Siren Brake, Momentary Red, LS Overhead Sw Pnl	1
			Not Required, Warning Lights Intensity	1
			Lightbar, Wln, Freedom IV-Q, 2-21.5", RRRRR RRRRR	1
			Filter, Whl Freedom Ltbrs - No Filters	1
			No Additional Lights Req'd, Side Zone Upper	1

Line	Option	Type	Option Description	Qty
378	0602583		Lights, Front Zone, Wln 6RB* M6** M6** 6RB* LED, 4lts Q Bezel Color, Lens, LED's - c)clear 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	1
379	0653937		Flasher, Headlight Alternating Headlt flash deactivation - a)w/high beam	1
380	0540692		Lights, Side Zone Lower, Wln M6*C LED, Clear Lens, 3pr, Ovr 25 Location, Lights Front Side - b)each side bumper Color, Lt Side Front - Red Color, Lt Side Middle - Red Color, Lt Side Rear - Red Location, Lights Mid Side - Rearward of Crew Cab Doors Location, Lights Rear Side - Between Tandem	1
381	0564655		Lights, Rear Zn Lwr, Wln M6*C LED, Clear Lens, For Tail Lt Housing Color, Lt DS Rear - r) DS Rear Lt Red Color, Lt PS Rear - r) PS Rear Lt Red	1
382	0088745		Light, Rear Zone Up, Wln L31HRFN LED Beacon, Red LED Color, Dome, Rear Warning - j) both domes clear	1
383	0006551		Not Required, Lights, Rear Upper Zone Blocking	1
384	0791501		Light, Traffic Directing, Wln TAL65, 36" Long LED, Aerials Activation, Traffic Dir L - Aux Flash with Emergency Master	1
385	0530074		Location, Traf Dir Lt, On Top of Body Below Turntable w/Trdplt Box	1
386	0530282		Location, Traf Dir Lt Controller, Overhead Switch Panel DS Right End	1
387	0006646		Electrical System, 120/240VAC, General Design	1
388	0729601		Generator, Harrison 6kW MSV 120/240V, Hydraulic, Digital Volt, Hz, Hour, Meter Generator Interlocks - No Interlocks	1
389	0006645		Location, Hydraulic Generator Above Pump Location, Generator(s) - Over Pump, Right Side	1
390	0016752		Starting Sw, Truck Engine Powered Gen, Cab Sw Pnl	1
391	0016757		Not Required, Remote Start, Generator	1
392	0016740		Not Required, Fuel System	1
393	0016767		Not Required, Oil Drain Extension, Generator	1
394	0036738		Circuit Breaker Panel, Included With PTO Generator Location, Circuit Breaker Panel - Compartement Above LS Front Stabilizer	1
395	0016771		Not Required, Routing Exhaust, Generator	1
396	0781579		Receptacle, 15/20A 120V 3-Pr 3-Wr, NEMA 5-20R SB Dup, 1st, Interior Cab Qty, - 01 Location 1 - behind the officer seat AC Power Source - Gen to Shoreline Transfer Switch Cover, Receptacle - Interior SS Wall Plate(s)	1
397	0779722		Receptacle, 15/20A 120V 3-Pr 3-Wr, NEMA 5-20R SB Dup, 1st, Interior Body Qty, - 03 Location 1 - TBD: RS4, front wall above transition shelf; one in LS1 up high on the right wall; one in RS1 up high on the left wall; AC Power Source - Gen to Shoreline Transfer Switch Cover, Receptacle - Interior SS Wall Plate(s)	3
398	0783678		Receptacle, 15/20A 120V 3-Pr 3-Wr, NEMA 5-20R SB Dup, 1st Location, Receptacles - TBD: One each side in the rear fender panels and one at the rear of the truck(as shown on AD print) Qty, - 02 AC Power Source - Gen to Shoreline Transfer Switch Cover, Receptacle - Exterior Flip Up Duplex Cover(s)	2
399	0519934		Not Required, Brand, Hydraulic Tool System	1
400	0649753		Not Required, PTO Driven Hydraulic Tool System	1
401	0755095		Aerial, 107' ASL Tandem, 750/500 Tip, 50 MPH	1
402	0000042		Boom Support, Rear of the Chassis Cab	1
403	0762413		Light, Boom Support, Amdor AY-LB-12HW012, 12" LED	1
404	0799569		Boom Support Compartment, Rear of Cab, Cab Height, Full Depth Latch, Door, Storage - Lift and Turn Latch, Flush, Pair Hinge Location - Rearward	1

Line	Option	Type	Option Description	Qty
405	0680821		Boom Panel, Pair	1
			Paint Color, Predefined - #10 white	
406	0526890		Not Required, Indicator, Extension	1
407	0723719		Steps, Folding, Four, Aerial Device, Trident	1
			Coating, Step - black	
			Light, Aerial Device Folding Step - no integrated light	
			Finish, Aerial Device Folding Step - bright finish	
408	0688232		Rung Covers, Aerial Device	1
			Rung Cover Color - Safety Yellow	
409	0784202		Brackets Only, Roof Ladder, Base Section, Inboard of Boom Panel, Ascendant	1
			Qty, - 01	
			Location, Aerial Device - right side	
			Roof Ladder, Make/Model, Multi-Select - 14' Duo-Safety 875-A-DR	
410	0680785		Limited Retraction, Aerial	1
411	0678641		Brackets Only, Pike Pole, Aerial Fly Section	1
			Qty, - 01	
			Pike Pole Make/Model - Fire Hooks Unlimited 8' Roof Hook	
412	0623645		Aerial Stability Test, Max Tip Options	1
413	0728978		Box, Stokes/Misc Storage, w/Cover, Base Section, In Place of Boom Panel, w/Door Sw	1
			Finish - Painted, Job Color	
			Latch, Door, Storage - Rubber Draw Latch, Pair	
			Location, Aerial Device - right side	
			Louvers - no louvers	
			Size, Stokes Basket, Predefined - 88"L x 26"W x 9"H	
			Size, Stokes Box - 120.00"L x 26.50"H x 15.50"W	
414	0601972		Lights, Turntable Walkway, P25, LED	1
415	0601949		Light, Turntable Console, TecNiq T-10, LED Strip Light	1
416	0675062		Box, Saw Storage, Turntable	1
			Size - To be determined	
			Latch, Door, Storage - Rubber Draw Latch	
417	0682164		Cover, Around Aerial Rotation Bearing	1
			Material - treadplate	
418	0814217		Control Stations, ASL Tandem Axle, MUX, Color Display, CL714	1
419	0743299		Remote Tip Controls, ASL/105' MUX	1
420	0792976		Stabilizers, Ascendant Tandem, Rear Mount Steel, 16' Spread, 18" Pen, MUX	1
			Material, Stabilizer Pad - Composite	
421	0729051		Stabilizer Pan and Trim Material	1
			Stabilizer Panels - smooth aluminum, painted to match lower body color	
			Stabilizer Trim - painted to match lower body color	
422	0809974		Door, Stabilizer Control Box, MUX Aerials	1
			Latch, Door, Storage - Southco C2 Chrome Raised	
			Hinge Location - Outboard	
			Door, Material & Finish, Stabilizer - Smooth aluminum	
423	0615058		Stabilizer Placement, Cameras w/Command Zone Color Display, 1 Set	1
424	0793039		Hydraulic System, Ascendant Tandem Axle	1
425	0793037		Swivels, D-Series w/Encoder, ASL-Tandem/Tiller, MUX (28 Collector Rings)	1
426	0805186		Electrical System, ASL Tandem Axle, MUX, 10/8 Cable	1
427	0804781		Aerial Scene Lts Separated into Aerial Tip Category and Aerial Tracking Category	1
428	0803462		Lights, Tip, WIn MP** LED, 2lts	1
			Color, WIn Lt Housing - White Paint	
			Scene Lt Optics LH Fly - Spot Left	
			Scene Lt Optics RH Fly - Narrow Flood	
			Mount, WIn II - Universal Bail MP**	
429	0802753		Lights, Tracking, WIn MP** LED, 2lts	1
			Location, Sw, Arl DC Lts - m) 2 locations	
			Color, WIn Lt Housing - White Paint	
			Scene Lt Optics LH Base - Left Spot	
			Scene Lt Optics RH Base - Right Flood	
			Mount, WIn II - Universal Bail MP**	
430	0618906		Lighting, Rung, LED, TecNiq, 4 Section, Base, Lower/Upper Mid, Fly, 3 Colors RWB	1
			Control, Aerial Rung Lighting - Turntable Sw w/Master Batt Sw	
431	0540743		Lights, Stabilizer Warn (2) Sets, WIn M6*C LED, Clear Lens	1
			Color, Lt Rr Stabilzr Pan - r) Pan Light Red	

Line	Option	Type	Option Description	Qty
431			Color, Lt Fr Stabilzr Pan - r) Pan Light Red	
432	0068703		Lights, Grote Supernova LED, Stabilizer Beam, (1) Set	1
433	0762388		Lights, Stabilizer Scene, (2) sets, Amdor AY-LB-12HW012, LED	1
434	0091927		AC Power To Aerial Tip, 20 Amp Household (PAL)	1
435	0737181		Intercom, 2-Way Fire Research ICA910 Hands Free	1
436	0540895		Not Required, Breathing Air to Tip, Aerial Ladder	1
437	0024742		Not Required, Mask, Breathing Air To Tip	1
438	0126600		Raised Pedestal, 3.00", Rear Mount Aerials, AXT, Velocity, Impel, Enf	1
439	0604457		Lifting Eye Assembly, Rope Rescue Attachment, ASL, LSL	1
440	0530826		Turntable Access, ManSaver Bars, Yellow	1
441	0624672		Waterway, High Flow, 1500 GPM, ASL	1
442	0729475		Monitor,Akron 3486 StreamMaster II Electric,Extended Vertical Travel,w/ManualAVM	1
			Nozzle, Monitor 1 PAL - Akron 5178 Electric 1500 gpm	
			Location, Valve - Akron S2 left side discharge	
443	0010758		Flow Meter, Waterway, PAL, 110' Ascendant, MUX	1
444	0004836		Inlet, 5.00" at Rear w/ Pump, Ascendant Tandem, PAP, PAL	1
445	0673128		Quick-Lock Waterway Locking System, 100' HDL, 105' HDL, ASL	1
446	0047897		Tools, Aerial	1
447	0559494		Manuals and Training, 3 Consecutive Days, Ascendant Ladder, PAL	1
448	0007150		Bag of Nuts and Bolts	1
			Qty, Bag Nuts and Bolts - 1	
449	0602497		NFPA Required Loose Equipment, Quint, NFPA 2016, Provided by Fire Department	1
450	0067022		Hose, 6.00" Soft Suction - 15 Ft. Long	1
451	0027023		No Strainer Required	1
452	0602534		Extinguisher, Dry Chemical, Quint NFPA 2016, Provided by Fire Department	1
453	0602352		Extinguisher, 2.5 Gal. Pressurized Water, Quint, NFPA 2016,Provided by Fire Dept	1
454	0007482		Not Required, Crowbars	1
455	0007484		Not Required, Claw Tools	1
456	0602883		Axe, Flathead, Quint NFPA 2016, Provided by Fire Department	1
457	0602670		Axe, Pickhead, Quint NFPA 2016, Provided by Fire Department	1
458	0007494		Not Required, Sledgehammers	1
459	0741569		Paint Process / Environmental Requirements, Appleton	1
460	0709566		Paint, Two-Tone Color, Enforcer	1
			Paint Color, Upper Area, Predefined - #505 Gray Metallic	
			Shield, Cab - Standard Shield	
			Paint Color, Lower Area, Predefined - #90 Red	
			Paint Break, Cab - Standard Two-Tone Cab Break	
461	0709845		Paint, Single Color, Body	1
			Paint, Body - Match Lower Cab	
462	0646901		Paint Chassis Frame Assy, With Liner, E-Coat, Standard	1
			Paint Color, Frame Assembly, Predefined - Pierce Gray #269	
463	0693798		Paint, Front Wheels	1
			Paint, Wheels - Black #101	
464	0693795		Paint, Rear Wheels, Tandem Axle	1
			Paint, Wheels - Black #101	
465	0733739		Paint, Axle Hubs	1
			Paint, Axle Hub - Lower Job Color	
466	0007230		Compartment, Painted, Spatter Gray	1
467	0782202		Aerial Ladder Paint, ASL-Tandem, LSL	1
			Paint Color, Aerial Device - Gray Metallic 505	
			Paint Color, Egress - #50 Red	
			Paint Color, Turntable - gray metallic 505	
			Paint Color, Boom Support - gloss black primer	
			Paint Color, Cylinders - gray metallic 505	
			Paint Color, Aerial Torque Box - gloss black primer	
			Paint Color, Aerial Stabilizers - gray metallic 505	
			Paint Color, Aerial Control Console - gray metallic 505	
468	0544129		Reflective Band, 1"-6"-1"	1
			Color, Reflect Band - A - i) gold	
			Color, Reflect Band - B - p) black	
			Color, Reflect Band - C - ze) gold	
469	0007356		Reflective across Cab Face	1

Line	Option	Type	Option Description	Qty
470	0583454		Stripe, Chevron, Rear, Diamond Grade, Aerial	1
			Color, Rear Chevron DG - fluorescent yellow green	
471	0598754		Stripe, Reflective/Diamond Grade, 4.00" on Stabilizers	1
			Color, Reflect Band - A - p) fluorescent yellow green diamond grade	
472	0027341		Jog, In Reflective Stripe, Single or Multiple	2
			Qty, - 02	
473	0065687		Stripe, Reflective, Cab Doors Interior	1
			Color, Reflective - e) black	
474	0027372		Lettering Specifications, (GOLD STAR Process)	1
475	0686428		Lettering, Gold Leaf, 3.00", (41-60)	1
			Outline, Lettering - Outline and Shade	
476	0686215		Lettering, Gold Leaf, 8.00", Each	30
			Qty, Lettering - 30	
			Outline, Lettering - Outline and Shade	
477	0686225		Lettering, Gold Leaf, 6.00", (21-40)	1
			Outline, Lettering - Outline and Shade	
478	0686016		Lettering, Reflective, 5.00", (21-40)	1
			Outline, Lettering - Outline and Shade	
479	0685993		Lettering, Reflective, 10.00", Each	3
			Qty, Lettering - 03	
			Outline, Lettering - Outline and Shade	
480	0686027		Lettering, Reflective, 4.00", (21-40)	1
			Outline, Lettering - Outline and Shade	
481	0683997		Lettering, Vinyl, 18.00", Each	3
			Qty, Lettering - 03	
			Outline, Lettering - No Outline or Shade	
482	0017273		Emblem, Maltese Cross, Gold Leaf, 12"-14", Pair	1
			Qty, - 01	
			Location, Emblem - LOCATE ON FRONT CAB DOORS CENTERED ON STRIPE WITH .5" RELIEF AROUND	
483	0769753		Emblem, American Flag Painted on Cab Grille, All Custom Chassis	1
484	0772003		Manual, Fire Apparatus Parts, USB Flash Drive, Custom	1
			Qty, - 01	
485	0772037		Manual, Chassis Service, USB Flash Drive, Custom	1
			Qty, - 01	
486	0773381		Manual, Chassis Operation, (1) USB Flash Drive, Custom	1
487	0030008		Warranty, Basic, 1 Year, Apparatus, WA0008	1
488	0696698		Warranty, Engine, Cummins, 5 Year, WA0181	1
489	0684953		Warranty, Steering Gear, Sheppard M110, 3 Year WA0201	1
490	0596017		Warranty, Frame, 50 Year, Custom Chassis, WA0013	1
491	0595698		Warranty, Axle, 3 Year, TAK-4, WA0050	1
492	0733305		Warranty, Tandem Axle, 5 Year, Meritor, General Service, WA0384	1
493	0652758		Warranty, ABS Brake System, 3 Year, Meritor Wabco, WA0232	1
494	0019914		Warranty, Structure, 10 Year, Custom Cab, WA0012	1
495	0744240		Warranty, Paint, 10 Year, Cab, Pro-Rate, WA0055	1
496	0524627		Warranty, Electronics, 5 Year, MUX, WA0014	1
497	0695416		Warranty, Pierce Camera System, WA0188	1
498	0647720		Warranty, Pierce LED Strip Lights, WA0203	1
499	0046369		Warranty, 5-year EVS Transmission, Standard Custom, WA0187	1
500	0685945		Warranty, Transmission Cooler, WA0216	1
501	0688798		Warranty, Water Tank, Lifetime, UPF, Poly Tank, WA0195	1
502	0596025		Warranty, Structure, 10 Year, Body, WA0009	1
503	0693127		Warranty, Gortite, Roll-up Door, 6 Year, WA0190	1
504	0734463		Warranty, Pump, Waterous, 7 Year Parts, WA0382	1
505	0648675		Warranty, 10 Year S/S Pumping, WA0035	1
506	0657990		Warranty, Foam System, Husky 3, WA0231	1
507	0006999		Warranty, Structure, 20 Year, Aerial Device, WA0052	1
508	0687388		Warranty, Swivels, 5 Year, Aerial Device, WA0197	1
509	0685727		Warranty, Hydraulic System and Components, 3 Year/5 Year, WA0200	1
510	0687327		Warranty, Waterway, 10 Year, Aerial Device, WA0198	1
511	0595860		Warranty, Paint, 4 Year, Aerial Device, Pro-Rated, WA0047	1
512	0725636		Warranty, Harrison Generator, 2 Year	1

Line	Option	Type	Option Description	Qty
513	0595820		Warranty, Paint, 10 Year, Body, Pro-Rate, WA0057	1
514	0595421		Warranty, Goldstar, 3 Year, Apparatus, WA0018	1
515	0683627		Certification, Vehicle Stability, CD0156	1
516	0808582		Certification, Engine Installation, Saber FR/Enf, Cummins X10, 2027	1
517	0686786		Certification, Power Steering, CD0098	1
518	0892691		Certification, Cab Integrity, Saber FR/Enforcer, CD0189	1
519	0631973		Certification, Cab Door Durability, Saber FR/Enforcer, CD0137	1
520	0631978		Certification, Windshield Wiper Durability, Saber FR/Enforcer, CD0132	1
521	0631974		Certification, Electric Window Durability, Saber FR/Enforcer, CD0133	1
522	0631977		Certification, Seat Belt Anchors and Mounting, Saber FR/Enforcer, CD0134	1
523	0735949		Certification, Cab HVAC System Performance, SFR/Enf, CD0165/CD0167/CD0174/CD0175	1
524	0545073		Amp Draw Report, NFPA Current Edition	1
525	0002758		Amp Draw, NFPA/ULC Radio Allowance	1
526	0799248		Appleton/Florida BTO	1
527	0000049		Ascendant BODY	1
528	0000012		PIERCE CHASSIS	1
529	0004713		ENGINE, OTHER	1
530	0046396		EVS 4000 Series TRANSMISSION	1
531	0020011		WATEROUS PUMP	1
532	0020009		POLY TANK	1
533	0028048		FOAM SYSTEM	1
534	0020006		SIDE CONTROL	1
535	0020007		AKRON VALVES	1
536	0020015		ABS SYSTEM	1
537	0755453		AERIAL BASE	1



September 5, 2023

Moscow Fire Department, ID
One (1) Enforcer 107' Ascendant Aerial AS931
Build Location: Appleton, WI

Proposal Price	\$1,712,460.00
Less chassis progress payment discount	(18,120.00)
Less aerial device progress payment discount	(6,704.00)
Less payment upon completion @ factory discount	(17,186.00)
Less 100% prepayment by October 2024 discount	(120,554.00)
Total including all pre-pay discounts	\$1,549,896.00

Terms:

Price Expiration: The above pricing is valid until October 27, 2023.

Future Changes: Various state or federal regulatory agencies (e.g. NFPA, DOT, EPA) may require changes to the Specifications and in any such event any resulting cost increases incurred to comply will be added to the Purchase Price to be paid by the Customer and documented on a Change Order.

Component Price Volatility: Company shall not be responsible for any unforeseen price increase enacted by the suppliers of major components of the Product (including but not limited to engine, transmission, and fire pump) after the execution of contract or purchase order. Any price increase major components of the product will be passed through to the Customer and will be documented on a Change Order.

Delivery: Based on Pierce's current delivery schedule the apparatus would be ready for delivery from factory within 42 to 47 months after contract execution or purchase order. Delivery is subject to change pending Pierce's delivery schedule at time of order. This time does not include any possible delays that may be caused by national disasters or pandemic.

Payment Terms:

a. If pre-payment discount options are elected, the following terms will apply:

i. **Chassis Progress Payment Discount:** The chassis progress payment in the amount of **\$604,009.00** will be due three (3) months prior to the ready for pick up from the factory date. If elected, an invoice will be provided 30 days prior to the chassis payment due date. If payment is not made when due the discount total will be added back to the final invoice.

ii. **Aerial Device Progress Payment Discount:** The aerial device payment in the amount of **\$335,213.00** will be due two (2) months prior to the ready for pick up from the factory date. If elected, an invoice will be provided 30 days prior to the aerial device due date. If payment is not made when due the discount total will be added back to the final invoice.

iii. **Payment Upon Completion at Factory Discount:** If elected, final payment is due prior to apparatus leaving the factory for delivery. If payment is not processed upon receipt of invoice the discount total will be required in addition to the invoice amount.

iv. **100% Pre-Payment by October 2024 Discount:** If elected, 100% pre-payment is due by October, 2024. An invoice will be provided thirty (30) days prior to the due date. If this option is elected, the discount is in addition to the chassis progress payment discount, aerial device progress payment discount, and the payment upon completion at the factory discount. If payment is not made when due, the above mentioned pre-payment discounts or a portion thereof, will be added back to the final invoice. Final payment, including any changes made during manufacturing, is due upon completion of the Product at the factory and prior to delivery from the factory. The pre-payment discount is valid for 90 days from quote unless interest rates change; at which time a notification of change will be given and a new quote will be issued.

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

c. Payments made for apparatus using a credit card will be applicable to a credit card convenience fee.

Consortium Purchase: The proposal is based on the unit being purchased through H-GACBuy (Houston-Galveston-Area-Council Cooperative Purchasing Program) utilizing contract FS12-19 valid until 11/30/2023 with a registered End User member Interlocal Contract. It is the purchaser's responsibility to determine if the use of consortiums meets their purchasing requirements. More information can be found at hgacbuy.org.

Performance Bond: A performance bond is included in the above price and will be provided after order placement. If customer elects to remove the performance bond **\$4,687.00** may be deducted from the purchase price. All purchase orders must include the following verbiage if a performance bond is elected, **"Due to global supply chain constraints, any delivery date contained herein is a good faith estimate as of the date of this order/contract, and merely an approximation based on current information. Delivery updates will be made available, and a final firm delivery date will be provided as soon as possible."**

Transportation: Transportation of the apparatus to be driven from the factory to the customers location is included in the above pricing. However, if permits are not obtainable, due to the weight of the apparatus, and the apparatus must be transported on a flat bed, additional Transportation charges will be the responsibility of the customer. We will provide pricing at that time if necessary. If customer elects to drive the apparatus from the factory, **\$6,300.00** may be deducted from the purchase price. If this option is elected payment in full and proof of insurance must be provided prior to leaving the factory and the customer is responsible for compliance with all state, local and federal DOT requirements including the driver possessing a valid CDL license.

Inspection Trips: Two (2) factory inspection trips for four (4) 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, during the window provided by the manufacturer. Airfare, lodging and meals while at the factory are included. In the event the customer is unable to travel to the factory or the factory is unable to accept customers due to the restrictions caused by a national disaster or pandemic then the Dealership reserves the right to use forms of electronic media to accomplish the intention of the inspection trips. Every effort will be made to make the digital media as thorough as possible to satisfy the expectations of the of the customer. If the customer elects to forgo an inspection trip \$2,400.00 per traveler (per trip) will be deducted from the final invoice.

Persistent Inflationary Environment: Effective September 1, 2023, verbiage concerning the Persistent Inflationary Environment must be present on customer purchase document. Please speak with your sales representative for the specific terms that are a requisite for acceptance of order.

Acceptance of Proposal: If the customer wishes to purchase the proposed apparatus Hughes Fire Equipment will provide the Customer its form of Purchase Agreement for the Customer's review and signature. If the Customer desires to use its standard form of purchase order as the Purchase Agreement, the purchase order is subject to review for any required revisions prior to acceptance. **All purchase orders shall be made out to Hughes Fire Equipment Inc., reference proposal AS931 printed PPR dated 9-5-2023, and must be signed and dated.**