



**WORK SESSION
ACTION AGENDA
KANNAPOLIS CITY HALL
401 LAUREATE WAY, KANNAPOLIS NC
JUNE 10, 2024
6:00 PM**

Please Turn off Cell Phones or Place on Silent Mode.

CALL TO ORDER AND WELCOME

MOMENT OF SILENT PRAYER AND PLEDGE OF ALLEGIANCE

COMMUNITY ORGANIZATION AND CITY DEPARTMENT SPOTLIGHT

- A. Rowan County Tourism Development Authority (James Meacham, Executive Director)
- B. Fire Department (Tracy Winecoff, Fire Chief)

ADOPTION OF AGENDA - Motion to Adopt Agenda or make revisions

PROCLAMATIONS

- A. Juneteenth Recognition (Darrell Hinnant, Mayor)

CONSENT AGENDA - Motion to Adopt Consent Agenda or make revisions

- A. **FIRST READING: TA-2024-02** - Text amendments to Article 4, Table 4.3.B(d): Accessory Use/Structure Table; Section 4.3.D(4): Standards Specific to Accessory Uses & Structures; and to Article 10: Definitions, regarding Apiaries; and to Article 4, Table 4.2.B(5): Principal Use Table and to Section 4.2D.(5)f.4(b): Standards Specific to Principal Uses regarding Self-service storage. **Motion to continue to June 24, 2024, for second reading and Public Hearing for TA-2024-02. CONTINUED TO JUNE 24, 2024** (Richard Smith, Planning Director)
- B. April 22, 2024 Business Meeting Minutes (Bridgette Bell, City Clerk)
- C. May 09, 2024 Work Session Minutes (Bridgette Bell, City Clerk)
- D. May 13, 2024 Work Session Minutes (Bridgette Bell, City Clerk)
- E. May 20, 2024 Business Meeting Minutes (Bridgette Bell, City Clerk)
- F. April 22, 2024 Closed Session Minutes (Bridgette Bell, City Clerk)
- G. May 09, 2024 Closed Session Minutes (Bridgette Bell, City Clerk)

H. May 13, 2024 Closed Session Minutes (Bridgette Bell, City Clerk)

BUSINESS AGENDA

- A. **PUBLIC HEARING** - Request to consider withdrawal from dedication a portion of Chestnut Avenue located from the intersections of Laureate Way to Wellness Way and consideration to approve an Order to close a portion of said portion of Chestnut Avenue. (Richard Smith, Planning Director, Walter Safrit, City Attorney)
- B. **PUBLIC HEARING** - Proposed Budget for FY 2024-2025 (Mike Legg, City Manager, Kristen Jones, Assistant to the City Manager)
- C. **APPOINTMENT** - Appoint alternate Staff Liaison to the Technical Coordinating Committee (TCC) of the Cabarrus-Rowan Urban Metropolitan Planning Organization for the remainder of year 2024. (Richard Smith, Planning Director, Wilmer Melton, Assistant City Manager)
- D. **BUDGET AMENDMENT** - Appropriating cash reserves for the purchase of a fire engine and authorize the City Manager to execute the contract. (Eddie Smith, Deputy City Manager, Tracy Winecoff, Fire Chief, Kristin Jones, Assistant to the City Manager)

MOTION TO ADJOURN

ADA Notice and Hearing Impaired Provisions

In accordance with requirements of Title II of the Americans w/ Disabilities Act of 1990 ("ADA"), if you require auxiliary aid/service for communication, or a modification of policies/procedures to participate in a program, service/activity of the City, contact Heather James Human Resource Director at 704-920-4233 or email hjames@kannapolisnc.gov as soon as possible, but no later than 48 hours before.



Kannapolis
Agenda Staff Report
June 10, 2024

To: Mayor and City Council
From: James Meacham, Executive Director
Subject: Rowan County Tourism Development Authority

Action Requested by City Council

Presentation Only. No action is requested

Required Votes to Pass Required Action

Presentation Only. No Action Required

Background

Presentation Only. No action is requested

Fiscal Implications

None

Policy Issues

None

Legal Issues

None

Recommendations and Alternate Courses of Action

Presentation Only. No action is requested

Attachments

None



Kannapolis
Agenda Staff Report
June 10, 2024

To: Mayor and City Council
From: Tracy Winecoff, Fire Chief
Subject: Fire Department

Action Requested by City Council

Presentation Only. No action is requested

Required Votes to Pass Required Action

Presentation Only. No Action Required

Background

Presentation Only. No action is requested

Fiscal Implications

None

Policy Issues

None

Legal Issues

None

Recommendations and Alternate Courses of Action

Presentation Only. No action is requested

Attachments

None



Office of the Mayor
KANNAPOLIS, NORTH CAROLINA
P R O C L A M A T I O N
Juneteenth 2024

WHEREAS, the Emancipation Proclamation was issued on January 1, 1863, by President Abraham Lincoln setting in motion the end of slavery in the United States. Juneteenth also known as Emancipation Day, Freedom Day, Jubilee Day, and Black Independence Day, and

WHEREAS, news about signing the Emancipation Proclamation was delayed some two and one-half years after it was initially issued, ending the sanctioned institute of slavery, and

WHEREAS, slavery was not officially abolished until the ratification of the Thirteenth Amendment to the United States Constitution in December 1865, which abolished slavery nationwide, and

WHEREAS, Juneteenth (June 19) became nationally recognized as National Freedom Day and has been celebrated by communities across the country for more than a century, and

WHEREAS, Juneteenth became a federally recognized holiday on June 17, 2021, and is observed in 24 states and D.C. on June 19th of each year.

NOW THEREFORE BE IT RESOLVED that I, Milton D. Hinnant, Mayor of the City of Kannapolis on behalf of the Kannapolis City Council encourage all citizens to become aware of the significance of this celebration in African American History and in the heritage of our nation and City.



IN WITNESS THEREFORE, I have set my hand and caused the Great Seal of the City of Kannapolis be affixed this 10th day of June 2024.

Milton D. Hinnant



Kannapolis
Agenda Staff Report
June 10, 2024

To: Mayor and City Council

From: Richard Smith, Planning Director

Subject: **FIRST READING: TA-2024-02** - Text amendments to Article 4, Table 4.3.B(d): Accessory Use/Structure Table; Section 4.3.D(4): Standards Specific to Accessory Uses & Structures; and to Article 10: Definitions, regarding Apiaries; and to Article 4, Table 4.2.B(5): Principal Use Table and to Section 4.2D.(5)f.4(b): Standards Specific to Principal Uses regarding Self-service storage. **Motion to continue to June 24, 2024, for second reading and Public Hearing for TA-2024-02.**
CONTINUED TO JUNE 24, 2024

Action Requested by City Council

Motion to continue to June 24, 2024 for Second Reading and public hearing of TA-2024-02

Required Votes to Pass Required Action

Majority Present at Meeting

Background

On March 19, 2024, the Planning and Zoning Commission recommended approval of multiple text amendments to City Council (TA-2024-01). Subsequently, on April 8, 2024, City Council approved several of the text amendments except for three of them. City Council requested that the Planning and Zoning Commission further deliberate details regarding two of the text amendments that were not approved.

Presently, there are no standards for Apiaries in the Kannapolis Development Ordinance (KDO). The proposed amendments to Article 4, Table 4.3.B(3): Accessory Use/Structure Table; Section 4.3.D(4): Use Specific Standards; and Article 10: Definitions; will add requirements for hives that follow General Statute 106-645 to allow Apiary as a permitted accessory use by right in all zoning districts; add a link for the use specific standards for Apiaries; add specific standards for Apiaries; and add a definition for Apiary. Staff discussed the proposed amendments with a couple of apiarists, who agreed that the proposed amendments are consistent with statutes and sufficient provisions to include in the KDO.

Further, the proposed amendments to standards specific to self-service storage (Section 4.2.D(5)f.4) will help to better incorporate self-service storage among other uses in both the General Commercial (GC) and Light Industrial (LI) zoning districts. The amendments include enhanced building appearance, increased setbacks and limiting outdoor storage.

The Planning and Zoning Commission recommended approval of TA-2024-02 to City Council at their May 21, 2024 Commission meeting.

Fiscal Implications

None

Policy Issues

The Planning and Zoning Commission recommended approval of TA-2024-02 to City Council at their May 21, 2024 Commission meeting. Pursuant to Section 2.3.A(1)d. of the KDO, City council has final authority to review and make decisions on Zoning Text Amendments.

The proposed text amendments to the KDO is included and shown per staff recommended edits.

Legal Issues

None

Recommendations and Alternate Courses of Action

1. **Motion to continue to June 24, 2024 for second reading and public hearing for TA-2024-02 (Recommended)**
2. Defer action to a future meeting

Attachments

1. TA-2024-02 Statement of Consistency
2. TA-2024-02 Proposed Text Amendments



**RESOLUTION TO ADOPT A STATEMENT OF CONSISTENCY WITH REGARD TO
TEXT AMENDMENT TA-2024-02**

WHEREAS, Section 160A-383 (2013), of the North Carolina General Statutes, modified in Section 160D-605, specifies that the governing board shall also approve a statement describing whether its action is consistent with an adopted comprehensive and any other officially adopted plan that is applicable; and

WHEREAS, the text amendments to **Article 4, Table 4.3.B(3): Accessory Use/Structure Table; Section 4.3.D.: Standards Specific to Accessory Uses and Structures; Article 10: Definitions; and Article 4, Section 4.2.D: Standards Specific to Principal Uses**, is consistent with the *Move Kannapolis Forward 2030 Comprehensive Plan*; and

WHEREAS, the Planning and Zoning Commission conducted a Public Hearing on May 21, 2024 for consideration of text amendment Case# TA-2024-02 as submitted by the Planning Department staff and shown on Exhibit A (attached);

NOW, THEREFORE BE IT RESOLVED that the Planning and Zoning Commission finds the text amendment as represented in Case TA-2024-01 is consistent with the *Move Kannapolis Forward 2030 Comprehensive Plan*, as well as state statutes, reasonable, and in the public interest, and is recommended for approval by the City Council based on consideration of the application materials, information presented at the Public Hearing, and the recommendation provided by Staff.

Adopted this the 21st Day of May 2024:

Chris Puckett, Chairman
Planning and Zoning Commission

Attest

Pam Scaggs, Recording Secretary
Planning and Zoning Commission

PROPOSED TEXT AMENDMENTS – APPENDIX A

TA-2024-02

1. Beehives – Amend Accessory Use/Structure Table to add *apiary*. Add definition and use-specific standards for apiaries.

Table 4.3.B(3): Accessory Use/Structure Table

P = Permitted by right, or, in planned development district, if specified in PD Plan; S = Special use; – = Prohibited

ACCESSORY USE/STRUCTURE	AG	RESIDENTIAL							MIXED-USE						NONRESIDENTIAL				PD			LEGACY			USE-SPECIFIC STANDARDS
	AG	R1	R2	R4	R6	R7	R8	R18	MU-ND	MU-SC	MU-UC	MU-AC	TOD	CC	OI	GC	LI	HI	PD	PD-TND	PD-C	CD	CD-R	C-1	
Animal boarding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.3.D(3)
Apiary	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	4.3.D(4)
Automated teller machine (ATM)	-	-	-	-	-	-	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	P	4.3.D(45)

Section 4.3.D. STANDARDS SPECIFIC TO ACCESSORY USES AND STRUCTURES

(4) ~~AUTOMATED TELLER MACHINE (ATM)~~ APIARY

Five (5) or fewer hives shall be allowed in any zoning district.

- The hives shall be placed at ground level or securely attached to an anchor or stand. The hive may also be permanently attached to a roof surface if secured to an anchor or stand.
- The hive shall be removed if the owner no longer maintains the hive or if necessary to protect the health, safety, and welfare of the public. (Source NCGS § 106-645). City staff will consult a trained or knowledgeable beekeeper if it is determined that a hive may need to be removed.
- More than five (5) hives shall be considered agriculture for the purpose of this ordinance.

(5) AUTOMATED TELLER MACHINE (ATM)

ARTICLE 10. DEFINITIONS

Apiary

Bees, comb, hives, appliances, or colonies, wherever they are kept, located, or found.

(Source: NCGS § 106-635)

2. Self-service Storage Uses – Add standards specific to self-service storage.

Section 4.2.D(5)f.

4. Self-Service Storage

- The maximum lot size is three acres.
- Notwithstanding the building height standards in the district where the self-service storage is located, except in the GC District, buildings where storage units are accessed directly from the building's exterior shall have a maximum height of one story. For purposes of this section, one story shall mean and refer to a maximum interior ceiling height of ten feet, which may include a maximum of eight feet with an additional two feet to accommodate a garage-type sliding or roll up door.
- The required setback shall be twenty-five (25) feet when adjacent to areas that are zoned residential.**
- A Type B perimeter buffer yard shall be provided in accordance with Section 5.3.G, Perimeter Buffer Yards, around the perimeter of the self-service storage facility.
- Signs and other advertising mediums are prohibited within the buffer yard.
- The establishment shall have an on-site manager or an electronic security system.

- (g) The sale of personal property and the conduct any type of commercial activity of any kind whatsoever other than leasing of the storage units and incidental sales of storage-related materials (boxes, tape, labels, etc.) is prohibited.
- (h) No portion of any self-service storage shall be used, on a temporary or permanent basis, as a dwelling, except a single dwelling unit for use by an on-site manager or caretaker is allowed as an accessory use.
- (i) The repair, construction, or reconstruction of any boat, engine, motor vehicle on-site is prohibited.
- (j) On-site storage of a propane or gasoline engine or a propane or gasoline storage tank is prohibited. All rental contracts for storage units shall include clauses prohibiting (a) the storage of flammable liquids, highly combustible or explosive materials, or hazardous chemicals, and (b) the use of the property for purposes other than dead storage.
- (k) All outdoor lights must be shielded to direct light and glare only onto the lot which the self-service storage is located.
- (l) Building renderings are required to demonstrate that street facing facades present the appearance of an office or retail commercial use.**
- (m) No outdoor storage within the General Commercial (GC) zoning district.**

**CITY OF KANNAPOLIS
CITY COUNCIL MEETING
BUSINESS MEETING MINUTES
April 22, 2024**

A regular business meeting of the City Council of the City of Kannapolis was held on Monday, April 22, 2024, at 6:00 PM at the Kannapolis City Hall located at 401 Laureate Way, Kannapolis, NC.

CITY COUNCIL MEMBERS PRESENT:

Mayor: Milton D. Hinnant

Council Members: Jeanne Dixon
Dianne Berry
Darrell Jackson
Ryan Dayvault
Tom Kincaid
Doug Wilson

Council Members Absent: None

City Manager: Mike Legg

Deputy City Manager: Eddie Smith

Assistant to the City Manager: Kristin Jones

Assistant City Manager: Tina Cline

City Clerk: Bridgette Bell

City Attorney: Walter M. Safrit

Staff Present:	David Jordan	Tony Eury
	Terry Spry	Gary Mills
	Michael Rattler	Kirk Beard
	Richard Smith	Sherry Gordon
	Leo Pope	Oscar Hopkins
	Elizabeth McCarty	Alberto Reyes-Martinez
	Alex Anderson	Irene Wong

Others Present:	Bob Doty	Jeremy Smith
	Phil Goodman	Jeremy Horton
	Joe Hatley	Sandra Craft
	Christian Kennedy	Queen Reid
	Katie Bradley	Tonda Childers
	Scott Boggs	Stephanie Moler
	Ed Moler	Terri Stancil
	T.S. Cook	Linda Moore
	Johnna Randall	Everette Lipscomb

Megan Hollaway	Jeremy Hollaway
Zach Evans	Brandon Kerley
Lottie Fortney	Pam Smith
Naomi Hatchell	Yolanda Cooke
Emily Watkins	Lillian Watkins
Tempest Propst	Melanie Ortiz
Edison McCrea	Chris Mitchell
Jay Blanton	Bernard Randolph
Derek Moore	Sophia Wilkerson
Eric Thomas	Rory Darling
Maurice Jones	Ashely Angeles
Stan Tice	Donald Propst

CALL TO ORDER AND WELCOME:

Mayor Hinnant called the meeting to order and welcomed all in attendance. Mayor Hinnant led a moment of silent prayer and Council Member Berry offered the Pledge of Allegiance.

CITY DEPARTMENT SPOTLIGHT

City Department Spotlight: Transportation & Environmental Services Department (Michael Rattler, Director of Transportation & Environmental Services)

Mr. Rattler provided a power point presentation. The Transportation and Environmental Services Department consists of three divisions: Transportation, Stormwater, Solid Waste/Rapid Response Crews. Transportation Division oversees the City's sign design, sign maintenance/repair, traffic studies sign construction, visible trimming, NCRC street light repair and temporary traffic control. Streets are responsible for utility cut repairs, potholes, street resurfacing and patching, curb repairs, crack sealing and contracted resurfacing. Mowing of the right-of-way, sidewalk maintenance, edging and repairs, street shoulder repairs, Vida Parking deck maintenance and NCRC brick paver repairs.

Mr. Rattler explained there are 1055 City of Kannapolis streets maintained with 347 that are privately maintained. 5000 potholes were repaired, and 245 miles of asphalt were laid down. Additionally, 5000 miles were mowed, 142 miles of sidewalk edged, and 74 miles of sidewalks inspected/maintained.

Stormwater crews respond to calls for service. Infrastructure repairs, sinkholes, and flooding. Accurate records must be kept in compliance with NCDENR. Stormwater maintenance conveyances 500 miles, 721 culverts and crossing pipes. The street sweeper cleans 1100 miles of streets annually along with jet vac'd and shoulder road maintenance.

The Solid Waste/Rapid Response Crews oversee the contracted collection of garbage, recycling,

1 bulk, white goods, and E-waste. There are over 20,240 households and year to date, the crew has
2 picked up 3,439 tons of leaves or 649 truckloads, 4,219 tons of limbs or 796 truckloads.

3
4 There being no questions or comments, Mayor Hinnant thanked Mr. Rattler for his presentation.

5
6 **ADOPTION OF AGENDA - Motion to Adopt Agenda or make revisions.**

7 Council Member Jackson made a motion to adopt the agenda. Motion was seconded by Council
8 Member Dixon and approved by unanimous vote.

9
10 **PROCLAMATIONS:**

11 Mayor Hinnant proclaimed May 2, 2024, as National Day of Prayer and April as Fair Housing
12 month.

13
14 **CONSENT AGENDA – Motion to approve Consent Agenda or make revisions.**

15 Council Member Berry made a motion to approve the Consent Agenda. Motion was seconded by
16 Council Member Dayvault and approved by unanimous vote.

17
18 Business Meeting Minutes - March 25, 2024 (Bridgette Bell, City Clerk)

19
20 Revised Meeting Schedule - Motion to adopt a revised schedule for City Council meetings. (Mike
21 Legg, City Manager) (Copy included as Exhibit A)

22
23 **BUSINESS AGENDA**

24 **PUBLIC HEARING - Conditional Zoning Map Amendment - CZ-2024-02 - Irish Glen Dr.,**
25 **W. "C" St. and Glenn Ave. (Elizabeth McCarty, Assistant Planning Director and Richard**
26 **Smith, Planning Director) (Copy included as Exhibit B)**

27 Mrs. McCarty gave some background information on CZ-2024-02. The applicant and property
28 owner are M/I Homes of Charlotte., LLC, is proposing to rezone approximately 47.96 +/-
29 combined acres of property from City of Kannapolis Office-Institutional (O-I) zoning district to
30 City of Kannapolis Residential 8 – Conditional Zoning (R8-CZ) zoning district. The subject
31 properties are located at 304, 308, 312, 316, and 320 Irish Glen Drive, as well as three unaddressed
32 parcels on W C Street and one unaddressed parcel on Glenn Avenue. The properties are further
33 identified as Rowan County Parcel Identification Numbers (PIN) 142 174, 142 175, 142 176, 142
34 177, 142 178, 142 180, 142 179, 142 173, and 142 186, respectively.

35
36 The applicant is proposing to construct a 233-unit townhome development. The existing
37 greenhouses along Glenn Avenue, a portion of PIN 142 186, are proposed to be subdivided and
38 retained by the existing property owner. The zoning on the greenhouse parcel is proposed to remain
39 Office- Institutional (O-I). It is not included in this conditional rezoning request.

1 The required neighborhood meeting for a conditional rezoning application was held on January
2 4, 2024, at 6 p.m. at Memorial United Methodist Church. The information from that meeting is
3 included with Council's packet information.
4

5 MI Homes has managed the commissions worries by increasing the buffer to 20 from 6 feet,
6 increasing the number of parking spaces from 42 to 90 having 15.4 acres of open space instead of
7 9.33, having an arborist review the area for tree preservation and not construction more than 233
8 housing units M/I Homes representative, said during the public hearing as a way to minimize
9 traffic a proposed deceleration lane for access point on West C Street is being considered. When
10 asked about the entrance and exit on Glenn Avenue, Smith said it is mandated that there be a
11 second one for the development. There was consideration about having the other entrance on West
12 C Street, but it was not practical.
13

14 Although the Planning and Zoning Commission approved the rezoning request at their March
15 19, 2024, meeting, the approval was by less than the three-fourths majority required for Planning
16 Commission approval of zoning map amendments. Some concerns discussed at the Planning
17 Commission review of the request included: visitor and on-street parking, traffic impacts, green
18 space, an increased buffer (applicant agreed to a 20-foot buffer), potential Glenn Avenue
19 improvements, the speed limit on West C Street, total number of units, tree preservation, and
20 overall fit within the existing community. Staff and the applicant are prepared to discuss these
21 items at City Council's hearing on the matter.
22

23 If Council finds that the proposed rezoning is consistent with the "Urban Residential" Character
24 Area as designated in the Move Kannapolis Forward 2030 Comprehensive Plan, a Statement of
25 Consistency is required with the following conditions:

- 26 1. The permitted uses allowed by this rezoning shall be limited to those uses and accessory
27 uses allowed by-right in the Residential 8 (R8) zoning district. The intent of this
28 rezoning submittal is to provide for a residential community.
- 29 2. The number of single-family detached units shall not exceed 233.
- 30 3. The six-foot (6') Type B landscape buffer shall extend along the entire length of the
31 eastern perimeter property line from the most southern point to the proposed internal
32 access street.
- 33 4. A pedestrian connection from the proposed townhome development to the greenway
34 shall be incorporated into the development's design and shown at time of site plan
35 submittal.
- 36 5. The development depicted on the Rezoning Plan are schematic in nature and are
37 intended to depict the general arrangement of such uses and improvements on the site.
38 Accordingly, the ultimate layout, locations and sizes of the development and site

- elements depicted on the Rezoning Plan are graphic representations, and they may be altered or modified in accordance with the City of Kannapolis Development Ordinance.
6. A North Carolina Department of Transportation (NCDOT) driveway permit shall be obtained for site access points. Access points shall be located as generally depicted on the Rezoning Plan. The placement and configuration of the access points are subject to any minor modifications required to accommodate final site and construction plans and designs and any adjustments required for approval by the City of Kannapolis and/or NCDOT.
 7. A westbound deceleration lane for the access point on W C Street shall be determined and designed in coordination with City staff at time of site plan submittal.
 8. The alignments of the internal streets, driveways, and vehicular circulation areas may be modified by the applicant to accommodate changes in traffic patterns, parking layouts, and any adjustments required for approval by the City of Kannapolis and/or NCDOT.
 9. A final site plan, in compliance with the applicable Kannapolis Development Ordinance standards, shall be submitted to and approved by City Staff prior to issuance of a Zoning Clearance Permit.
 10. The final site plan shall comply with the current Kannapolis Land Development Standards Manual.

Approve with no conditions and deem consistent: City Council finds that the proposed rezoning is consistent with the "Urban Residential" Character Area as designated in the Move Kannapolis Forward 2030 Comprehensive Plan. (A separate Statement of Consistency is provided as an attachment.)

Motion 1 - Move to adopt the Statement of Consistency

Motion 2 - Move to adopt a Resolution to Zone for Case #CZ-2024-02 with no conditions.

The idea was brought up of decreasing the speed limits for West C Street and Glenn Avenue. Since West C Street is state controlled, the City will need to request the NCDOT to complete this action.

There being no further questions or comments, Mayor Hinnant opened the public hearing to those in attendance for an opportunity to speak.

Megan Holloway of 315 Glen Avenue spoke her concerns of traffic on Glen Avenue. 233 townhomes mean 233 more cars and most homes have two cars which means 466 more cars in this area. Glen Avenue is a popular road, and you can't pass without pulling over. If it is a trash or recycling day, you are definitely not getting out. She and her family walk to the YMCA and feels by having access to Glen is not a good idea.

1 Scott Boggs of 1300 West C Street lives directly in front of West C Street. There are rear collisions
2 at West C Street and Pump Station Road almost daily. With the increased traffic, will only get
3 worse. He would like to see the speed limit reduced on West C Street.

4
5 Jay Blanton of Insite Properties introduced himself and spoke in support of the project.

6
7 Jeremy Smith of 1537 Cedar Park Drive Pineville gave some background information on his
8 company, M/I Homes.

9
10 Katie Bradley, Civil Engineer of 610 E. Woodlawn Road, Charlotte spoke in favor of the project.

11
12 There being no further speakers, Mayor Hinnant closed the public hearing.

13
14 Mayor Pro tem Wilson asked what issues the Planning and Zoning Commission did have. Mr.
15 Smith stated one was the parking, density, and traffic on West C Street.

16
17 Council Member Jackson asked if the project would be built all at one time. Mr. Blanton responded
18 it will be done in phases.

19
20 Council Member Kincaid asked if there were amenities or open spaces. Mr. Blanton responded
21 yes, 15 acres of total open space and around the perimeter are preserved nature and a few green
22 spaces.

23
24 Council Member Berry stated that since the Planning and Zoning Commission could not come
25 approve this project, can he again state what were the concerns of the Commission and what
26 changes were proposed to make it better.

27 Mr. Smith responded, disturbances to trees on the site, disturbances of buffer areas, traffic on West
28 C Street. Other than the traffic issues, M/I Homes address these other issues.

29
30 Council Member Dayvault asked about the entrance and exit off Glen Avenue, would it be open
31 all the time. Mr. Smith said it would be required to be open at all times. They looked at another
32 entrance off West C Street but would be an increase of traffic on that side of West C Street. In
33 light of what Mr. Boggs said regarding traffic on West C Street, it would appear that the City needs
34 to ask the DOT to reduce the speed limit.

35
36 Council Member Jackson asked what the traffic count on West C Street is. Mr. Legg currently
37 responded the traffic count is 7500 per day.

38
39 Council Member Dayvault asked under the current zoning, what uses can go on that site. Mr. Smith
40 responded Office and Institution.

1 Council Member Kincaid made a motion to adopt the Statement of Consistency. Motion was
2 seconded by Council Member Jackson.

3
4 The Mayor asked all in favor of adopting a Statement of Consistency, raise your hands. Council
5 Members Kincaid Jackson, Dayvault and Mayor Hinnant voted yes. Council Members Berry,
6 Dixon, and Wilson voted no. The motion was approved by a 4-3 vote. **(Motion to approve
7 Statement of Consistency)**

8
9 Council Member Kincaid made a motion to adopt the Resolution to Zone. Mayor Hinnant asked
10 for a second. Council Member Dayvault asked Mr. Kincaid to amend his motion to formally make
11 a request to the NCDOT to reduce the speed limit on West C Street as part of the conditions. As a
12 second condition, add pool and amenities. **(No Second Motion was made)**

13
14 Mayor Hinnant restated the motion to adopt a Resolution to Zone **(Motion to approve Resolution
15 to Zone)**. City Attorney Safrit stated that a second to the motion needed to be made. Council
16 Member Dayvault seconded the motion. Council Member Dayvault then offered an amendment
17 for the additions of a pool and amenities and lower the speed limit on West C. **(Motion to amend
18 to require lower speed limits and addition of pool and amenities)**

19
20 City Attorney stated what is required is the consent of the developer to the conditions to make it a
21 valid condition. Mr. Dayvault stated he is basing his motion on the developer's intent for this
22 neighborhood and if they are to build here, that is what they are going to do. Mayor Hinnant said
23 so you are making it a requirement not an intent. Mr. Dayvault said correct.

24 Mayor Pro tem Wilson asked if he could add one condition.

25
26 Mayor Hinnant asked Mr. Safrit if he was alright with the motion. Mr. Safrit stated the best way to
27 do it is to stop the action and get the consent signed. But the developer needs to be willing to put
28 on record they would consent to the conditions.

29
30 Mr. Safrit stated there can be one last amendment added. Mr. Wilson asked that if the speed limit
31 is to be lowered on West C, it needs to be lowered on Glen Avenue. Mayor Hinnant asked if this
32 would have to be a separate motion. Mr. Safrit said yes. **No motion was made.**

33
34 Mr. Legg noted there are three things: (1) a request to the DOT for a reduction in the speed limit;
35 (2) the developer would have to agree to do the pool and (3) and would be a separate action in the
36 future to change the speed limit on Glen Avenue. Mr. Legg said it can be added as a condition or
37 do it at a future date.

38
39 Mr. Dayvault asked that a request for the NCDOT to consider reducing the speed limit on Glen
40 Avenue be added to the next agenda. Mr. Legg said that would be a reasonable request.

1 Mr. Safrit restated the motion to approve the rezoning and there was an amendment. Mayor
2 Hinnant clarified that his second was to his first motion and he created an amendment. Mr. Safrit
3 asked which amendments. Mr. Dayvault added the pool and amenities and the speed limit on West
4 C. Mr. Safrit asked so the pool would be the first amendment. Mr. Dayvault stated yes.

5
6 Mr. Safrit noted that the motion to consider a reduction in the speed limit and request the DOT to
7 change the speed limit on West C Street was an amendment to the original motion. Mayor Hinnant
8 asked if there needed to be a second on his amendment. Mr. Safrit said yes.

9
10 Mr. Wilson asked if he is making an amendment to Tom's first motion, have we not voted on it
11 already? Mr. Safrit stated the motion has not been voted on, just a motion and a second.

12
13 Mayor Hinnant said that Council needs to vote on the amendment. Mr. Safrit asked if there were
14 a second. Mr. Kincaid seconded his amendment. Mr. Safrit said you will first vote on the
15 amendment.

16
17 Mr. Legg said as he understands, the amendment to the motion to related to just the pool. Mr. Safrit
18 responded yes. Mr. Legg asked Mr. Safrit if the developer needed to concur before or after the
19 vote. Mr. Safrit stated either way as long as we have it on the record.

20
21 Mr. Dayvault asked if Mr. Kincaid could second the amendment that he made to his own motion.
22 Mr. Safrit said someone else needed to make the second. Mr. Jackson seconded the motion.
23 **(Second to Motion to amend with speed limit reduction and pool and amenities)**

24
25 Mayor Hinnant noted they have a motion on the amendment and seconded, but the developer needs
26 to come to the podium and clarify if he will consent to this condition.

27
28 Jerney Smith of 1537 Cedar Park Drive, Pineville representing M/I Homes stated they do intend
29 and consent to installing an adequately sized pool and amenities wherever needed. He added that
30 M/I Homes offer neighborhoods beside from the pool and clubhouse, will be adequate open space
31 for children, and walking trails that connect to Glen Avenue to serve all 233 homes.

32
33 Mr. Safrit asked Mr. Jeremy Smith if he would consent to adding a pool and amenities to the list
34 of conditions that already exist. Mr. Smith stated Yes. Mr. Safrit asked if Mr. Smith would have
35 the authority to sign the conditions. Mr. Smith stated Yes.

36
37 Mayor Hinnant called for the question and if you are in favor of approving the Resolution to Zone
38 with the amended conditions of adding a pool and amenities and acceptance from M/I Homes,
39 please raise your hands. **(Vote on amendment adding a speed limit reduction and pool with**
40 **amenities).** The vote was 5-2 with Mrs. Berry and Mr. Wilson voting no.

1 The Resolution to Rezone with the amended conditions to reduce the speed limit and add a pool
2 with amenities was adopted.

3
4 Mr. Legg suggested a motion to direct staff to bring back at the next meeting, speed limit changes
5 for Glen Avenue and request that the DOT speed limit changes on West C.

6
7 Mayor Pro tem Wilson made a motion to ask Staff to bring back at the next meeting a Resolution
8 requesting a speed limit reduction on Glenn Avenue and requesting the NCDOT to reduce the
9 speed limit on West C Street. The motion was seconded by Council Member Dayvault and
10 approved by unanimous vote.

11
12 Mr. Safrit asked if the main motion to adopt a Statement of Consistency had been voted upon. Mr.
13 Legg responded yes; the motion was by a 4-3 vote.

14
15 Mayor Hinnant said yes, a 4-3 vote. Mr. Legg clarified that the amendment was to approve the
16 Statement of Consistency 4-3. Mr. Safrit asked what the main motion vote was. Mayor Hinnant
17 responded to adopt the Statement of Consistency.

18
19 **(City Clerk Comment for Minutes)**

20 It was determined there was an approval of the amendment to the principal motion, however, the
21 principal motion was not voted upon. The Mayor without objection, called for a vote of the
22 principal motion to approve the rezoning. **(Approval of Resolution to rezone)**. The principal
23 motion as amended was approved by a vote of 5-2 to rezone CZ-2024-02. Council Member Berry
24 and Mayor Pro tem Wilsom voting no.

25
26 Council Member Berry asked if the matter could be postponed being sure that the speed limit
27 changes will be approved by DOT, before moving forward. Mr. Legg stated that will happen since
28 Council unanimous voted to approve the speed limit reduction and staff will bring back to Council
29 the Glen Avenue speed limit change at the next meeting for a formal request to DOT. Mr. Legg
30 noted there is no assurance that DOT will concur with Council's request to reduce the speed limit.

31
32 **PUBLIC HEARING AND RESOLUTION- Request to rename Southern Avenue to**
33 **Kannapolis Veterans Way (Richard Smith, Planning Director) (Copy included as Exhibit C)**

34 Mr. Smith explained that the City received a request from Ted Sandford, President of Cabarrus
35 County-based Vietnam Veterans of America Chapter 909 to rename a street in Kannapolis to honor
36 our veterans. There are already streets named for Veterans in Concord and Harrisburg, but not in
37 Kannapolis. After conversations with Mr. Sandford, it was agreed that renaming "Southern
38 Avenue" to "Kannapolis Veterans Way" was an appropriate change with positive visibility being
39 in close proximity to Veterans Park, the Train Station and downtown. There are no business or
40 residence addresses on Southern Avenue which eliminates the address change impacts.

As per the City's Addressing Ordinance, the Planning Department is authorized to determine the need for road name changes and to recommend such changes to City Council. City Council may want to consider unveiling the new street name at (or possible before) the Memorial Day events being coordinated by the American Legion. The cost of the street sign replacement will be paid by the City.

There being no questions or comments, Mayor Hinnant opened the public hearing to those in attendance for an opportunity to speak. There being no speakers, Mayor Hinnant closed the public hearing.

Mayor Pro tem Wilson made a motion to approve a Resolution request to rename Southern Avenue to Kannapolis Veterans Way. Motion was seconded by Council Member Dixon and approved by unanimous vote.

PUBLIC HEARING AND APPROVE THE ANNUAL ACTION PLAN- CDBG & HOME program funds for FY 2024-25 (Sherry Gordon, Community Development Program Administrator) (Copy included as Exhibit D)

Mrs. Gordon explained this public hearing allows the City to receive citizens' comments or questions on the use of Fiscal Year 2024-2025 Community Development Block Grant (CDBG) and Home Investment Partnership (HOME) funds. The Community Development Commission reviewed the draft Annual Action Plan at its April 16th meeting.

Each year the City must present within its Annual Action Plan submittal to HUD a defined work program for the funding level being sought. The City will submit its action plan to HUD by May 15. The plan was made available to the public for a 30-day period which will end on April 30, 2024. The City is a member of the Cabarrus/Rowan/Iredell HOME Consortium and is required to submit an Annual Action Plan to the City of Concord, the Consortium Lead Entity. The City anticipates receiving \$397,437 in CDBG funds and \$188,593 in HOME funds for 2024-2025.

The City expects to receive \$322,384 in CDBG funds and \$112,262 in HOME funds from the Cabarrus/Iredell/Rowan HOME Consortium in Fiscal Year 2024-25 (July 1, 2024 – June 30, 2025)

It is recommended that the following activities be undertaken with the FY 2024-25 funds:

CDBG Proposed Expenditures

Urgent Repair	\$159,950
Infrastructure	\$100,000

Non-profit Partnerships	\$58,000
General Administration/Fair Housing	\$79,487
Totals	\$397.437

HOME Proposed Expenditures

Homeowner Rehab	\$159,022
New construction (Habitat)	\$ 20,000
General Administration	\$ 9,571
Totals	\$188,593

There being no questions or comments, Mayor Hinnant opened the public hearing to those in attendance for an opportunity to speak.

Lottie Forney of 1668 Barbara Ann Circle asked if applications were still being taken to request urgent repairs. Mrs. Gordon responded yes; applications were still being accepted.

There being no further speakers, Mayor Hinnant closed the public hearing.

Council Member Berry made a motion to approve the annual action plan as presented and submit to HUD. Council Member Dixon and approved by unanimous vote.

PUBLIC HEARING AND RESOLUTION - Authorizing the Sale of City owned property at 6106 Old Macedonia Ct (Irene Wong, Economic & Community Development Director)
(Copy included as Exhibit E)

Ms. Wong explained that the City owns a 1.5-acre parcel on the west side of Kannapolis Pkwy at Hwy 73; it is the last remaining parcel from the Gateway Business Park that the City developed more than 20 years ago. The City received an offer to purchase the property for \$535,000. The buyer has not proposed a use at this time. Since the business park was funded with a CDBG Section 108 loan, 81.4% of the proceeds from the sale will need to go back to the City's CDBG account as program income, which can then be used for CDBG eligible projects. The remaining 18.6% of the proceeds will go back to the City's General Fund. This pro-rata amount is based on the original investment into the business park of CDBG funds and General Funds. The property is part of the Gateway Business Park and falls under GS 158-7.1 which allows it to be sold at private sale for fair market value rather than going through the upset bid process.

There being no further questions or comments, Mayor Hinnant opened the public hearing to those in attendance for an opportunity to speak. There being no speakers, Mayor Hinnant closed the public hearing.

Mayor Pro tem Wilson made a motion to approve a Resolution Authorizing the Sale of City owned

property at 6106 Old Macedonia Court. Motion was seconded by Council Member Dayvault and approved by unanimous vote.

ORDINANCE- Street Acceptance Policy Text Changes (Michael Rattler, Director of Transportation & Environmental Services) (Copy included as Exhibit F)

Mr. Rattler explained There are a number of needed updates to the 2020 version of the Street Acceptance Policy:

- Two changes are grammatical corrections and do not alter the meaning of the policy.
- The term "Petitioners" is changed to "property owner", which makes the wording more accurate.
- Is Section 2, #3, remove the wording "If property is assessed, the percentage may increase up to fifty percent (50%)". This changes the perimeters of the policy.
- Removal of the sentence "Unpaid amounts will be collected by placing assessment on the involved property. " This sentence is not needed.
- Four additions are included in the updates:
- The first addition clarifies the intent of the policy further and is in line with the NC General Statutes.
- The second and third additions are the words "property owners" to make the wording more accurate.
- The fourth addition is used to identify the "service fee and or interest fee", to be charged if the assessment payback period is opted by the property owner.

These changes provide that an assessment will occur to all property owners directly affected by the acceptance of the street. The assessed amount is equal to twenty-five (25) percent of the estimate of upgrades to the street divided by the number of linear feet of road frontage of a parcel. The assessment may be paid at the time of receipt, or the payment may be spread over 10 years. A service fee and/or interest rate may be associated with the 10-year period. It is recommended that Council adopt an Ordinance making these text changes.

Council Member Dayvault made a motion to adopt an Ordinance revising the Street Acceptance Policy Text. Motion was seconded by Council Member Dixon and approved by unanimous vote.

RESOLUTION - Set the date for a Public Hearing for Acceptance of Opal Street for City Maintenance and Assessment of Cost Sharing of Street Improvements. (Michael Rattler, Director of Transportation & Environmental Services) (Copy included as Exhibit G)

Mr. Rattler explained that A petition has been received from affected property owners of the portion of Opal Street that is currently privately maintained. The petition is within the requirements of the City's Street Acceptance Policy to be reviewed.

Opal Street exists between Bernard Avenue and Concord Lake Road. It is located near the major intersection of Little Texas Road and Dale Earnhardt Boulevard and is parallel to Dale Earnhardt. The acceptance and upgrade of Opal Street affects 6 property owners. There is a community-oriented component as the majority of the property is owned and used by Bethel Baptist Church.

To summarize the improvements, the project includes ribbon pavement installation with a combination of full depth reclamation and resurfacing. The existing manholes and meter and valve boxes would be reset to the new elevation. The width of asphalt would be 18 ft. (2 lanes). Slightly more than 800 feet in length. There is no addition of curbing. The project scope would include an attempt to leave the curb in place that exists now (that curb is the minimum).

The estimated cost of upgrades is equal to \$180,000. In accordance with the City's Street Acceptance Policy, 25% percent of the estimated cost of upgrades will be assessed to the property owners with road footage along the portion of Opal Street.

In accordance with the City's Street Acceptance Policy, 25% percent of the estimated cost of upgrades will be assessed to the property owners with road footage along the portion of Opal Street. The process of assessment is a legal proceeding in accordance with the NC General Statutes.

City Attorney Safrit stated that the Resolution as contained in the agenda pack was in error. The Resolution states that fifty percent (50%) of the total cost of said improvement, exclusive of so much of the total cost as is incurred in improving street intersections, be hereafter assessed upon the property receiving the improvements according to the assessment basis set out in the petition. Mr. Safrit stated that in accordance with the City's Special Assessment and Street states that property owners will be assessed twenty-five (25%) percent of the estimated total cost divided by the linear foot of adjacent road frontage per the deed of each property owner.

Following general discussion, Council Member Dixon made a motion to approve a Resolution setting a public hearing date for the acceptance of Opal Street for City maintenance and assessment of cost sharing of street improvements. Motion was seconded by Council Member Dayvault and approved by unanimous vote.

CITY MANAGER COMMENTS:

Mr. Legg informed Council that the City of Kannapolis has been upgraded to a Moody AA2 rating. Mr. Legg noted a revised meeting schedule for Council.

CITY COUNCIL COMMENTS:

Council Member Dayvault asked about the speed limits on Main Street and indicated the length of the speed needs to be looked at.

1
2 Mayor Hinnant asked Police Chief Spry to give an update on the metal detectors. Chief Spry told
3 Council he has received quotes from Point Security, Incorporated, a Lexington based security
4 equipment company for “non-permanent” fixture described as two poles for people to walk
5 through. The frequency can be adjusted and if it goes off, handheld wands can be used to ensure
6 everyone’s safety. Anyone with a bag is subject to a search if the metal detectors go off. The price
7 of metal detectors is \$21,300 and the personnel cost of having two Police officers manage security
8 if \$16,000 in salaries, bringing the total for the first year of implementation \$37,900. Chief Spry
9 indicated whenever the order is placed, would be delivered in less than a week. The units are
10 mobile and can be set up in 10 minutes or less. The subject of “Ghost Guns” was mentioned. Chief
11 Spry said the detectors would most likely locate them. There was general discussion of giving
12 ample notice to visitors.
13

14 Council Member Berry asked Chief Spry to contact the Concord Police Chief as he would have
15 some suggestions on how to notify the public.
16

17 Mayor Pro tem Wilson noted that Cabarrus County Board of Commissioners allow four (4)
18 minutes for Speakers and asked if the three (3) minutes can be expanded to four (4) minutes.
19

20 **SPEAKERS FROM THE FLOOR:**

21 Phil Goodman of 1005 Central Drive told Council he has requested on three different occasions to
22 televise the Council meetings and has not gotten an answer. He feels that broadcasting of the
23 meetings is a must. He has been told the money is available and the process is to simply hire a
24 company to record the meetings. He is confident that if the meeting has been live or recorded on
25 January 8, the reinstatement of Tom Kincaid would not have happened. If funding for the
26 broadcasting is an issue, he has three solutions. Stop buying the City Manager and City Council
27 dinner. Stop wasting money on trips to DC. He would like to know what the purpose of that trip
28 is. Use discretionary funds as you did tonight for the metal detectors. His questions from the March
29 25 Council meeting have not been answered. He has a list to give to the Clerk and would like an
30 answer as soon as possible, as a tax paying citizen approaching Council with questions, deserve
31 an answer. (For the record, the Clerk adds that Mr. Goodman never supplied her with a list of
32 questions). Mr. Goodman proceeded to read a prepared statement repeating the reinstatement of
33 Mr. Kincaid to Council. Mr. Goodman went on to say that Council cannot fairly, truthfully, and
34 justifiably represent the citizens of Kannapolis because they have sacrificed the public’s trust,
35 confidence, and belief due to self-fulfilling schemes. Council cannot function in its present
36 condition all because of unethical and inappropriate behavior and actions. He believes that two
37 things need to take place immediately to restore the character and ethical behavior of Council.
38 Tom Kincaid and Darrell Hinnant need to resign and never serve on City Council or any part of
39 city government again.
40

1 Lottie Fortney asked that she defer to her Pastor, Reverend Maurice Jones of the Rose Hill
2 Missionary Baptist Church.

3
4 Pastor, Reverend Maurice Jones of 216 Rice Street told Council that the church is in the process
5 of relocation and would like to know what next steps needs to be done.

6
7 Bob Doty of 6325 Stirewalt Road expressed concerns on the conceal carry and noted when he took
8 the conceal carry class, it was common knowledge that no firearms were allowed in a governmental
9 building. Council needs to act and stop dragging their feet on the issue. Stop arguing about
10 disarming people and move forward.

11
12 Zac Erwin of 903 Applewood stated that this is a public meeting space and since it is a government
13 building, there is a common understanding that no guns or weapons are allowed in governmental
14 buildings. With regards to the technology that was described by Chief Spry, he said that is the
15 same equipment used at A.L. Brown and would be happy to demonstrate to Council.

16
17 Mr. Erwin said regarding Business Agenda A- Conditional Zoning Map Amendment - CZ-2024-
18 02 - Irish Glen Dr., W. "C" St. and Glenn Avenue indicated that four (4) motions were made and
19 only three (3) were resolved. The first motion was to approve consideration that was approved by
20 a 4-3 vote. The second motion was made by Mr. Kincaid to adopt Resolution A, as listed. Then
21 there was a raising of an amendment from Mr. Dayvault with the condition of having the pool or
22 some kind of amenity and was approved by a 5-2 vote. The motion to request the NCDOT to
23 change the speed limit on West C and consider speed limit on Glen Avenue was voted on and
24 raised by Mr. Wilson and was voted on by a 7-0 vote. But the original resolution was not voted
25 on. He asked Mr. Safrit to confirm to be sure we are in proper order and to be sure there is no legal
26 loophole or something that was missed in the authorization of this resolution, Council needs to
27 reconsider resolution A.

28
29 **CLOSED SESSION - NCGS 143.318.11 (a) (3) to consult with an Attorney in order to**
30 **preserve the attorney client privilege; G.S. 143.318.11 (a) (4) for discussing matters relating**
31 **to the location or expansion of industries or businesses in the area and G.S. 143.318.11 (a)(6)**
32 **for the purpose of discussing personnel matters. (Mayor Pro tem Wilson)**

33 Mayor Pro tem Wilson made a motion that Council go into Closed Session pursuant to NCGS
34 143.318.11 (a) (3) to consult with an Attorney in order to preserve the attorney client privilege;
35 G.S. 143.318.11 (a) (4) for discussing matters relating to the location or expansion of industries or
36 businesses in the area and G.S. 143.318.11 (a)(6) for the purpose of discussing personnel matters.
37 Council Member Dayvault seconded the motion, and it was approved by unanimous vote.

38
39 City Council went into closed session at 8:25 PM.

1 There being no further business, Mayor Pro tem Wilson made a motion to come out of closed
2 session. Motion was seconded by Council Member Dayvault and was approved by unanimous
3 vote.

4 There being no further business, Mayor Pro tem Wilson made a motion to adjourn. Council
5 Member Dayvault seconded the motion, and it was approved by unanimous vote.

6
7 The meeting adjourned at 10:20 PM on Monday, April 22, 2024.
8
9
10
11

12
13 _____
14 Milton D. Hinnant, Mayor
15

16 _____
17 Bridgette Bell, MMC, NCCMC
City Clerk

**CITY OF KANNAPOLIS
CITY COUNCIL MEETING
WORK SESSION MINUTES
May 09, 2024**

A regular work session meeting of the City Council of the City of Kannapolis was held on Thursday, May 09, 2024, at 4:30 PM at the Kannapolis City Hall located at 401 Laureate Way, Kannapolis, NC.

CITY COUNCIL MEMBERS PRESENT:

Mayor: Milton D. Hinnant

Council Members: Jeanne Dixon
Darrell Jackson
Dianne Berry
Doug Wilson
Tom Kincaid

Council Members Absent: Ryan Dayvault

City Manager: Mike Legg

Assistant to the City Manager: Kristin Jones

Assistant City Manager: Wilmer Melton

City Clerk: Bridgette Bell

City Attorney: Walter M. Safrit

Staff Present:	Irene Wong	Annette Privette Keller
	Terry Spry	Tracy Winecoff
	Michael Rattler	Greg Summitt
	Gerald Faulkner	David Jordan
	Tony Eury	Alex Anderson
	Richard Smith	Daniel Wallace
	Kirk Beard	TJ Cook

Others Present:	Phil Goodman	Robbie Ferris
	Mark Spitzer	

CALL TO ORDER AND WELCOME:

Mayor Hinnant called the meeting to order and welcomed all in attendance. Mayor Hinnant led a moment of silent prayer and offered the Pledge of Allegiance.

1 **ADOPTION OF AGENDA - Motion to Adopt Agenda or make revisions**

2 Council Member Jackson made a motion to adopt the agenda. Motion was seconded by Council
3 Member Dixon and approved by unanimous vote.
4

5 **CONSENT AGENDA:**

6 Council Member Kincaid made a motion to approve the Consent Agenda. Motion was seconded
7 by Council Member Dixon and approved by unanimous vote.
8

9 Adoption of Schedule 8 (Speed Limits) and Reduction of Speed to 25 MPH on Glenn Avenue
10 (Michael Rattler, Director of Transportation & Environmental Services) (Copy included as Exhibit
11 A)
12

13 Resolution of Support requesting the North Carolina Department of Transportation to consider
14 a speed limit reduction on a portion of West C Street within the City of Kannapolis and the City's
15 Extra Territorial Jurisdiction (ETJ) (Michael Rattler, Director of Transportation & Environmental
16 Services) (Copy included as Exhibit B)
17

18 Oak Avenue Parking Lot Construction (Wilmer Melton, Assistant City Manager) (Copy included
19 as Exhibit C)
20

21 Budget Amendment awarding grant funding for the Safe Streets for All Grant (Kristin Jones, Asst.
22 to the City Manager) (Copy included as Exhibit D)
23

24 **BUSINESS AGENDA:**

25 **Imagine Kannapolis Strategic Plan Projects and Initiatives & FY 25 Budget Preparation**
26 **(Mike Legg, City Manager, Kristin Jones, Asst. to the City Manager) (Copy included as**
27 **Exhibit E)**

28 Mr. Legg stated that the FY 24-25 Budget is in the final stages of development in preparation for
29 its presentation to City Council at the scheduled May 20th City Council meeting. There are a
30 number of complex issues with this year's preparation that need City Council input prior to the
31 final completion of the recommended budget. The two key issues are 1) the impact of the Cabarrus
32 County revaluation on the budget decisions, and 2) the implementation of more than 40 potential
33 new projects and initiatives currently under consideration for the final Imagine Kannapolis
34 Strategic Plan.
35

36 The projects were presented to City Council at the April 8 meeting and initial discussion was held.
37 Staff has requested that City Council review the Projects and Initiatives document that was
38 distributed at the meeting and to suggest any changes to the plan as presented.

1 While no final decisions are requested of City Council at this meeting, it is requested that City
2 Council informally determine if a consensus exists for the various projects and initiatives. Staff
3 will present these initiatives and projects and answer any questions City Council may have.

4
5 Mr. Legg reviewed the Funded FY24 Projects & Initiatives. Regarding the downtown parking lot,
6 Mr. Legg stated he spoke with the church and are agreeable to a joint agreement to use their
7 parking lot beside the church.

8
9 Funded FY24 Projects & Initiatives

ID	Function	Project/Initiative	Pg #
A-1	Economic Development	Ballpark PDL Improvements- Estimated Total Cost \$648,998 (FY24)	3
A-2	Transportation	Bethpage Road Sidewalk- Estimated Total Cost \$2,742,000 (FY24)	4
A-3	Parks	Downtown Shuttle Program- Estimated Total Cost \$122,150 (FY24)	6
A-4	Public Safety	Fire Station #1 and #4 Renovations – Estimated Total Cost \$3,440,503 (FY24) \$3,079,753 Construction. \$360,750 FF&E	8
A-5	Parks	Existing Park Improvements Phase I- Estimated Total Cost #2,405,000 (FY24)	9
A-6	Parks	Gem Theatre Renovations Phase II – Estimated Total Cost \$1,3600,000 (FY24)	10
A-7	Transportation	Little Texas Road Sidewalk- Estimated Total Cost (8,175,000 (F24-FY26)	12
A-8	Economic Development	Main Street Parklets – Estimated Total Cost \$350,000 FY24)	14
A-9	Transportation	MLK Bridge Replacement Enhancements – Estimated Total Cost \$158,000 (FY25) for enhancements. Other bridge replacement costs & maintenance by NCDOT	16
A-10	Environment	Solid Waste Collection Enhancements- Estimated Total Cost \$1,193,000 (Part began in F24, Park beginning in FY25)	17
A-11	Parks	Summer Concert Series Enhancements – Estimated Total Cost \$235,00	18

A-12	Parks	Swanee Theatre Renovations Phase I – Estimated Total Cost \$2,304,749	20
A-13	Community Development	Transitional Housing Contribution- Estimated Total Cost \$3,000,000 (FY24)	22

Included in the FY 25-FY29 Projects & Initiatives

ID	Function	Project/Initiative	Pg #
B-1	Public Safety	Cabarrus Joint Public Safety Training Facility- \$43,000,000 (FY27-29) Phase I	25
B-2	Operational Need	Capital Outlay Replacement Program FY 25 \$15,000,000 (FY25-29)	27
B-3	Operational Need	Capital Outlay Replacement Program FY 26 \$15,000,000 total FY 25 through FY 29	27
B-4	Operational Need	Capital Outlay Replacement Program FY 27	27
B-5	Operational Need	Capital Outlay Replacement Program FY 28	27
B-6	Operational Need	Capital Outlay Replacement Program FY 29	27
B-7	Operational Need	Capital Reserve Fund \$4,446,780 total FY 25 through FY 29	28
B-8	Operational Need	City Hall Upfits \$2,850,000 (FY 25)	29
B-9	Parks	Cultural Arts and Historic Preservation Program \$425,000 (FY 24 and FY 25). \$245,000 in FY 25. An additional \$180,000 was already appropriated in FY 24 (which will be carried over into FY 25).	31
B-10	Parks	Downtown Block 10 Hotel Park \$1,200,000 (FY 25 – FY 26)	33
B-11	Parks	Downtown Dog Park \$450,000 (FY 25 – FY 26)	35
B-12	Economic Development	Downtown Parking Lot Improvements- \$1,107,500 (FY 25), \$742,500 for Main Street Lot and \$365,000 for Oak Avenue South Lot.	37
B-13	Economic Development	Downtown Parking Management Program Phase I \$80,900 (FY 25)	39

B-14	Parks	Eastside Park \$5,200,000 (FY 25)	41
B-15	Economic Development	Economic Development Promotion Program \$160,000 (FY 25), one-time costs.	43
B-16	Operational Need	Employee Compensation Study Implementation \$800,000 beginning in FY 26	44
B-17	Environment	Environmental Stewardship Program \$50,000 (FY 25)	45
B-18	Parks	Existing Park Improvements Phase II \$2,250,000 (FY 28)	46
B-19	Public Safety	Fire Department Logistics Building \$500,000 (FY 25)	48
B-20	Public Safety	Fire Department Training Tower \$1,500,000 (FY 25)	49
B-21	Economic Development	I-85 Monument Signage Phase I \$600,000 (FY 25 – FY 26), Concord will be responsible for a similar amount.	51
B-22	Parks	Irish Buffalo Creek Greenway Phase II \$2,470,000 (FY 25 – FY 26) (\$2.2 million construction; \$270,000 design)	53
B-23	Transportation	Kann. Pkwy-Hwy 3 Aesthetic Improvements Phase I \$200,000 (FY 25)	55
B-24	Transportation	Midlake Road Sidewalk \$4,400,000 (FY 26)	56
B-25	Economic Development	Midway Revitalization Phase I \$10,000,000 (FY 26 - FY 28)	58
B-26	Community Development	Neighborhood Improvement Program \$0	60
B-27	Public Safety	Police Community Response Team Pilot Program \$100,000 (FY 26) for capital to support program	61
B-28	Operational Need	Public Works Operations Center Improvements Phase I \$2,500,000 (FY 25 - FY 26)	62
B-29	Public Safety	Reserve Police Officer Program Growth Plan \$60,000 (FY 25 and FY 26), equipment for new officers (\$20,000 per officer)	63
B-30	Parks	School Athletic Site Improvements Phase I \$1,200,000 (FY 25)	64

B-31	Operational Need	Staffing Study Implementation FY 25 \$3,500,000 total recurring cost by FY 29	66
B-32	Operational Need	Staffing Study Implementation FY 26 \$3,500,000 total recurring cost by FY 29	67
B-33	Operational Need	Staffing Study Implementation FY 27 \$3,500,000 total recurring cost by FY 29	67
B-34	Operational Need	Staffing Study Implementation FY 28 \$3,500,000 total recurring cost by FY 29	67
B-35	Operational Need	Staffing Study Implementation FY 29 \$3,500,000 total recurring cost by FY 29	67
B-36	Transportation	Transit Operating Enhancements \$1,186,034 (beginning in FY 25)	68
B-37	Transportation	Transit System Capital/One-Time Improvements \$22,861,196 (FY 25 through FY 29)	69
B-38	Public Safety	Western Cabarrus Transmission Tower 3333333 (FY 25 – FY 26)	70
B-39	Parks	Westside Park Phase I – \$10,500,000 (FY 29)	71

Tentative FY25-FY29 Projects & Initiatives include:

C-1	Transportation	Enhanced Street Paving and Sidewalk Repair	74
C-2	Environment	Glenn Avenue Property Restoration Phase I	75
C-3	Parks	School Athletic Site Improvements Phase II	76
C-4	Operational Need	Second City Warehouse	77

Mr. Legg briefly reviewed the exclude projects & initiatives. (Post FY29)

Excluded Projects & Initiatives (Post FY 29)

ID	Function	Project/Initiative	Pg#
D-1	Parks	Campus Lawn Improvements Phase I	80
D-2	Parks	Campus Lawn Improvements Phase II	81
D-3	Community Development	Capital Reserve - Affordable Housing Program	82
D-4	Economic Development	Capital Reserve - Economic Development	83
D-5	Transportation	Capital Reserve - Intersection Improvements	84
D-6	Community Development	Capital Reserve - Neighborhood Improvement Prgm.	85
D-7	Transportation	Capital Reserve - Sidewalk Improvement Projects	86
D-8	Environment	Capital Reserve - Stormwater Improvement Program	87
D-9	Parks	Community-Rec. Center Phase I - Core Amenities	88
D-10	Parks	Community-Rec. Center Phase II - Aquatics	89
D-11	Parks	Cultural Arts Facility and History Museum	90
D-12	Economic Development	Downtown Farmers Market	91
D-13	Economic Development	Downtown Parking Management Program Phase II	92
D-14	Public Safety	Eastside Fire Station	94
D-15	Public Safety	Expanded Park Ranger Program	95
D-16	Public Safety	Fire Adaptive Response Vehicle Program	96
D-17	Operational Need	Fleet Management Facility	97
D-18	Parks	Gem Theatre Renovations Phase III	98
D-19	Economic Development	I-85 Monument Signage Phase II	99
D-20	Parks	Irish Buffalo Creek Greenway Phase III	100
D-21	Parks	Irish Creek Golf Course and Nature Park	102
D-22	Transportation	Kann. Pkwy-Hwy 3 Aesthetic Improvements Phase II	103
D-22	Environment	Litter Cleanup Program	104
D-23	Economic Development	Midway Revitalization Phase II	105

D-24	Economic Development	NCRC-Downtown Parking Deck	106
D-25	Parks	North Bakers Branch Greenway	107
D-26	Economic Development	North Kannapolis Revitalization	108
D-27	Operational Need	Public Works Op. Center Improvements Phase II	109
D-28	Operational Need	Public Works Op. Center Improvements Phase III	110
D-29	Parks	Rocky River Greenway Phase II	111
D-30	Parks	Skatepark	112
D-31	Transportation	Street Paving Enhancement	113
D-32	Public Safety	Support for KCS Alternative Learning Center	114
D-33	Parks	Swanee Theatre Renovations Phase II	115
D-34	Parks	Vietnam Veterans Park Improvements	116
D-35	Public Safety	Westside Fire Station	117
D-36	Parks	Westside Park Phase II	118

Included in the Initiates were the revised list (4-11-24) Funded FY24 Projects & Initiatives and the revised list of FY 25-FY29 Projects & Initiatives. (A,B,C,D).

Mr. Legg noted at the May 13th meeting, Staff will have a summary of tonight's discussion. The budget will be presented at the May 20th meeting with a public hearing on June 10th with the adoption of the budget on June 24th.

NCGS 143.318.11 (a) (3) to consult with an Attorney in order to preserve the attorney client privilege; G.S. 143.318.11 (a) (4) for discussing matters relating to the location or expansion of industries or businesses in the area and G.S. 143.318.11 (a)(6) for the purpose of discussing personnel matters. (Mayor Pro tem Wilson)

Mayor Pro tem Wilson made a motion to go into closed session. Motion was seconded by Council Member Dixon and approved by unanimous vote.

Council went into closed session at 7:00 PM.

Council Member Kincaid made a motion to come out of closed session. Motion was seconded by Mayor Pro tem Wilson and approved by unanimous vote.

1 Council Member Dixon made a motion to adjourn. Motion was seconded by Council Member
2 Jackson and approved by unanimous vote.

3
4 The meeting adjourned at 8:35 on Thursday, May 9, 2024.
5
6
7

8 Milton D. Hinnant, Mayor
9

10 Bridgette Bell, MMC, NCCMC
11 City Clerk
12
13

**CITY OF KANNAPOLIS
CITY COUNCIL MEETING
WORK SESSION MINUTES
May 13, 2024**

A regular work session meeting of the City Council of the City of Kannapolis was held on Monday, May 13, 2024, at 4:30 PM at the Kannapolis City Hall located at 401 Laureate Way, Kannapolis, NC.

CITY COUNCIL MEMBERS PRESENT:

Mayor: Milton D. Hinnant

Council Members: Jeanne Dixon
Darrell Jackson
Dianne Berry
Doug Wilson
Tom Kincaid

Council Members Absent: Ryan Dayvault

City Manager: Mike Legg

Assistant to the City Manager: Kristin Jones

Assistant City Manager: Wilmer Melton

Assistant City Manager: Tina Cline

City Clerk: Bridgette Bell

City Attorney: Walter M. Safrit

Staff Present:	Irene Wong	Annette Privette Keller
	Terry Spry	Tracy Winecoff
	Michael Rattler	Greg Summitt
	Gerald Faulkner	David Jordan
	Tony Eury	Alex Anderson
	Richard Smith	Daniel Wallace
	Kirk Beard	TJ Cook
	Gary Mills	Brian Roberts

Others Present:	Phil Goodman	Sophia Wilkerson
	Mark Spitzer	Kevin Randall
	Johnna Randall	Joe Hatley

1 **CALL TO ORDER AND WELCOME:**

2 Mayor Hinnant called the meeting to order and welcomed all in attendance. Mayor Hinnant led a
3 moment of silent prayer and Mayor Pro tem Wilson offered the Pledge of Allegiance.
4

5 **ADOPTION OF AGENDA - Motion to Adopt Agenda or make revisions.**

6 Mayor Pro tem Wilson made a motion to adopt the agenda. Motion was seconded by Council
7 Member Berry and approved by unanimous vote.
8

9 **PROCLAMATIONS:**

10 Mayor Hinnant proclaimed the following Proclamations: Apraxia Awareness Day, National Police
11 Week and Fire Fighter Appreciation Week.
12

13 **COMMUNITY ORGANIZATION AND CITY DEPARTMENT SPOTLIGHT:**

14 **Community Organization Spotlight: Cabarrus County Schools (CCS) (Tim Lowder,**
15 **Executive Dir of Operations and Dr. Jonathan Bowers, CEO). (Copy included as Exhibit A)**

16 Mr. Lowder and Dr. Bowers presented a power point presentation with an overview of facts and
17 figures, Strategic Plan, Academic Profile and Long-Range Facilities Plan.
18

19 CCS by the numbers: Student Diversity: 41.4% White; 19.4% Hispanic; 23.0% Black; 10.7%
20 Asian and 5.3% multi-racial with 0.4% other. Breakfasts served: 1,459,975, Free and reduced-
21 price lunches 44.0%, lunches served 2,801,735. CCS has 3,701 full-time employees.
22

23 45 Schools include:

24	21	Elementary Schools
25	9	Middle Schools
26	8	High Schools
27	1	K-8
28	1	Virtual
29	3	Early College and
30	2	Alternative

31
32 Per the US Census, Cabarrus County has grown from 178,011 residents in 2010 to 224,804 in
33 2022. The estimate of population in 2023 is 240,141 with a growth rate of 2.03% in the past year.
34 Cabarrus County Schools' enrollment has grown 17% in the last decade, eclipsing 35,000 for the
35 first time. Presented were the school performance grade distribution comparing the State of NC
36 2022-2023 to Cabarrus County Schools 2022-2023. Capacity and enrollment have increased
37 roughly 5,000 over the past 5 years. Depicted was a chart outlining the top 12 priority
38 projects/facility's range from \$7 million to \$150 Million. (Chart included as Exhibit A)

1 Following general discussion Mayor Hinnant thanked Mr. Lowder and Dr. Bowers for their
2 presentation.

3
4 **City Department Spotlight: Human Resources Department (Heather James, Human**
5 **Resources Director) (Copy included as Exhibit B)**

6 Mrs. James presented a power point presentation showing the number of total employees
7 (including P/T, F/T and temporary) 571. Total number of Full Time Employees (401). The Human
8 Resources Department manages: Compensation Plan - Salary Study - Staffing Analysis -
9 Recruitment & Retention - Benefits - Self-funded health insurance - On-site clinic - Onboarding,
10 Offboarding and Orientation - Separation and Retirement - Employee Training & Development -
11 Employee Relations - Employee Engagement - Maintenance of Personnel Policy.

12
13 Additionally: City-Wide Risk Management - Workers Compensation Program - Property and
14 Liability Program - OSHA - Safety and accident review - Safety training.

15
16 Two Employee Engagement Surveys were provided to employees with an 88% response rate.
17 December 7, 2023, with 358 responses and in February 3, 2024, there were 342 responses.
18 Questions asked related to how they feel about working for the City and the primary reason you
19 choose to work for the City.

20
21 Mrs. James compared the benefits from the year 2022-2023 to upcoming/proposed benefits for
22 full-time employees. Part-time employees' makeup approximately one-third of our workforce.
23 Upcoming/proposed benefits for those part-time employees include the enrollment of a 457b
24 deferred compensation plan, reserve tickets for the Cannon Ballers, membership in the YMCA,
25 ability to use the on-site gym, use of the employee portal and inclusion in employee events. Mrs.
26 James highlighted other employee engagement activities including Employee Kannapolis 101,
27 S.E.E.K (Support, Engage, Excel in Kannapolis) and Mid-level Managers. New initiatives include
28 increasing process efficiencies, ticketing and workflow systems, electronic personnel files and
29 updating personnel policies.

30
31 There being no questions or comments, Mayor Hinnant thanked Mrs. James for her presentation.

32
33 **BUSINESS AGENDA:**

34 **Imagine Kannapolis Strategic Plan Projects and Initiatives & FY 25 Budget Preparation (Mike Legg,**
35 **City Manager, Kristin Jones, Asst. to the City Manager) (Copy included as Exhibit C)**

36 The FY 24-25 Budget is in the final stages of development in preparation for its presentation to
37 City Council at the scheduled May 20th City Council meeting. There are a number of complex
38 issues with this year's preparation that need City Council input prior to the final completion of the

recommended budget. The two key issues are 1) the impact of the Cabarrus County revaluation on the budget decisions, and 2) the implementation of more than 40 potential new projects and initiatives currently under consideration for the final Imagine Kannapolis Strategic Plan. The projects were presented to City Council at the April 8 meeting and initial discussion was held. Staff has requested that City Council review the Projects and Initiatives document that was distributed at the meeting and to suggest any changes to the plan as presented.

This is a continued discussion from the May 9 City Council meeting at which staff presented several topics that have been suggested by members of City Council since the April 8 meeting. While no final decisions are requested of City Council at this meeting, it is requested that City Council informally determine if a consensus exists for the various projects and initiatives.

Mr. Legg stated these are the projects that will be in this year's budget that will be presented on May 20th. Once the budget is presented, Council may make any changes prior to the adoption of the budget on June 24.

Recap:

Current Property Tax Rate = 63.00 cents

Revenue Neutral Rate = 46.95 cents

- Essentially the same budget as FY 24. Would probably involve some cuts.

Base Level Tax Rate = 49.50 cents

- Includes both cost-of-living adjustment and merit pay for employees.
- Includes FY 26 salary study implementation.
- Includes continuation costs related to contractual increases and inflation.
- No new projects/initiatives, no new capital outlay, no new positions in FY 25.
- FY 26-FY 29 tax rate increases for new projects/initiatives, capital, positions.

Proposed Tax Rate = 57.11 cents (revised 5-13-24)

- Includes employee enhancements (COLA and Merit, salary study).
- Includes numerous new strategic plan projects/initiatives.
- Includes capital outlay and new positions.

Capital Reserve Fund Establishment (Modified)

- Year 1: Increase street paving by \$900,000 – one year only.
- Year 2: Complete Oakwood Ave/Rogers Lake Road intersection improvements. \$250,000 match. \$650,000 held in reserve.
- Year 3: Increase street paving by \$400,000 – one year only. \$500,000 held in reserve.
- Year 4: Complete sidewalk projects at Pine Street (Fred L. Wilson Elementary). \$400,000

- City match. \$500,000 held in reserve.
- Year 5: Complete one or more to-be-determined larger capital projects (stormwater, paving, intersection improvements, sidewalks). \$2.45 million total (\$900,000 from this year's funding plus \$1,550,000 in reserve funds from previous years).
- Year 6: Complete sidewalk projects in the North Kannapolis Elementary Area. \$1.0 million City match.

Downtown Dog Park (Modified)

- Relocate the Dog Park from the Main Street property (across from Pennant Square Townhomes) to the property at Dale Earnhardt Blvd@Vance Street.
- Sell the Main Street property which should result in a one-time new revenue of between \$400,000 and \$600,000.
- These funds would pay for the relocated park on (resulting in essentially \$0 of existing cash needed).
- Add \$100,000 to the project for a 20-space parking lot (design contingent).

Glenn Avenue Property Restoration Phase I (New addition to the Plan).

Explore Feasibility of Micro Transit (New Addition to the Plan)

- Concerns about current transit services = large, expensive buses with limited riders.
- Micro-transit would be publicly operated, technology-enabled transit service that typically uses.
- multi-passenger/pooled shuttles or vans to provide on-demand or fixed-schedule services with either dynamic or fixed routing.
- City of Wilson abandoned its fixed route system in favor of the "uber-style" Micro-transit. The City of Gastonia has made the decision to transition to this new transit service this year.
- Micro-transit service may be viewed as more cost-effective than the fixed route system, but it would NOT be a major cost savings.
- A third-party study of Micro-transit for Cabarrus/Concord/Kannapolis is currently underway.
- Decisions about the future of transit service will be made in FY 25.

Westside Fire Station/Fire service – Joint Transition with Odell (New Addition to the Plan) Cash \$200,000 to \$400,000. Cent on the Tax Rate (0.75) (-0.09 to 1.45). FY 25.

- This initiative commits the City to providing full-time fire protection and life safety services in northwestern Cabarrus County BUT through negotiating an orderly transition plan with the Odell VFD.
- Joint service delivery for some of the 5-year period is the goal.
- City/Odell will negotiate the acquisition of Odell's Station 2 and certain existing fire apparatus.
- Alternatively, the City would construct a new Community Fire House and purchase its own apparatus.
- Range of costs are essentially break even to \$1.43 million.
- annually.
- Cash would be for Odell Station 2 renovations (if an agreement is reached) and start-up costs for the new service.

Cultural Arts Facility/History Museum (New addition to the Plan) .084 Cent on the Tax Rate.
City's five-year cost (\$5,100,000)

- Reduced the original budget from \$7,500,000 to \$6,500,000.
- Reduced the funded Midway Revitalization Phase I from
- \$10,000,000 to \$9,000,000. Reallocated \$1,000,000 to this project.
- Assumes a minimum \$1,000,000 in funding from the Cannon Foundation and/or the Cannon Family. Result is a \$4.5 million budget. Until a specific location and renovation plan is developed this is nothing more than a budget capacity placeholder.
- Would house City programming, Kannapolis History Associates, and Kannapolis African American Museum and Cultural Center.
- Includes \$300,000 in annual recurring costs.

Midway Revitalization Phase I (Modified) 1.02 cents on the tax rate (was 1.13). City's 5-year Cost reduced from \$10,500,000 to \$9,500,000.

Removed from the Post FY29 Plan is the Downtown Parking Management Phase I & Phase II. Mr. Legg noted that the next steps:

- May 13 to May 20 - Staff completes final recommended budget.
- May 20 City Council Meeting - FY 25 Budget presentation.
- June 10 City Council Meeting - Budget Public Hearing.
- June 24 City Council Meeting - Budget Adoption (no later than June 30).
- November 25 (tentative) - Adoption of Imagine Kannapolis Strategic Plan.

1 Following general discussion, Mr. Legg requested that City Council review the Projects and
2 initiatives document that was distributed at the meeting and to suggest any changes to the plan as
3 presented.

4
5 **NCGS 143.318.11 (a) (3) to consult with an Attorney in order to preserve the attorney client**
6 **privilege; G.S. 143.318.11 (a) (4) for discussing matters relating to the location or expansion**
7 **of industries or businesses in the area and G.S. 143.318.11 (a)(6) for the purpose of discussing**
8 **personnel matters. (Mayor Pro tem Wilson)**

9 Mayor Pro tem Wilson made a motion to go into closed session. Motion was seconded by Council
10 Member Kincaid and approved by unanimous vote.

11
12 Council went into closed session at 6:10PM.

13
14 There being no further business, Mayor Pro tem Wilson made a motion to come out of closed
15 session. Motion was seconded by Council Member Dixon and approved by unanimous vote of
16 those present.

17
18 Mayor Pro tem Wilson made a motion to adjourn. Motion was seconded by Council Member
19 Dixon and approved by unanimous vote of those present.

20
21 The meeting adjourned at 8:50 on Monday, May 13, 2024.

22
23
24
25 _____
Milton D. Hinnant, Mayor

26
27 _____
Bridgette Bell, MMC, NCCMC
28 City Clerk
29
30

**CITY OF KANNAPOLIS
CITY COUNCIL MEETING
BUSINESS MEETING MINUTES
May 20, 2024**

A regular business meeting of the City Council of the City of Kannapolis was held on Monday, May 20, 2024, at 6:00 PM at the Kannapolis City Hall located at 401 Laureate Way, Kannapolis, NC.

CITY COUNCIL MEMBERS PRESENT:

Mayor: Milton D. Hinnant

Council Members: Jeanne Dixon
Dianne Berry
Darrell Jackson
Doug Wilson

Council Members Absent: Ryan Dayvault
Tom Kincaid

City Manager: Mike Legg

Deputy City Manager: Eddie Smith

Assistant to the City Manager: Kristin Jones

Assistant City Manager: Tina Cline

City Clerk: Bridgette Bell

City Attorney: Walter M. Safrit

Staff Present:	Michael Rattler	Terry Spry
	Tracy Winecoff	Kirk Beard
	Tony Eury	David Jordon
	Greg Summitt	Annette Privette Keller
	Michael Dodge	Brian Roberts
	Leo Pope	TJ Cook
	Irene Wong	Alex Anderson
	Oscar Hopkins	Travis Barnhardt

Others Present:	Joe Hatley	Elaine Violet Mitchell
	Zach Erwin	Rob Harkey
	Vicky Harkey	M. Young
	G. Rodriguez	Malourdes Rodriguez
	Gwendolyn Lundy	Phil Goodman
	Bernard Randolph	Yolanda Cooke
	Sophia Wilkerson	Wilfred Bailey

Emily Jones	Garland Jones
Edison McCrea	Ramakrishna Mokkarala
Riley Burgess	Sandip Kanani
Shabeer	Nasim Molfammad
Arpit Gupta	Ashely Chauhan
Jared Shaik	Sumeet Kumar Singih
Zammey Shaik	Kyra Roberts
Rahul Chennai	Kumar Sarin Rethesh
Shabeerahamed	Gupta Arpit
Asheesh Chauhan	Singh Sumeet Kumar
Shaik Zameer	Shaik Javid Basha
Adidala Sunil Babu	Rahul Chennai
German Ronquillo	Sreedhar Somishetty
Sandeep Kolikapudi	Sarin Ratheeshkumar
German Ronquillo	Mathias Young

CALL TO ORDER AND WELCOME:

Mayor Hinnant called the meeting to order and welcomed all in attendance. Mayor Hinnant led a moment of silent prayer and Council Member Jackson offered the Pledge of Allegiance.

ADOPTION OF THE AGENDA- Motion to adopt agenda or make revisions.

Council Member Jackson made a motion to approve the Consent Agenda. Motion was seconded by Council Member Dixon and approved by unanimous vote.

PROCLAMATIONS:

Mayor Hinnant presented the following Proclamations:

1. Professional Municipal Clerk Week (Darrell Hinnant, Mayor)
2. National Public Works Week (Darrell Hinnant, Mayor)
3. Mental Health Awareness Month (Darrell Hinnant, Mayor)
4. MS Awareness Week (Darrell Hinnant, Mayor)

CONSENT AGENDA:

Council Member Jackson made a motion to approve the Consent Agenda. Motion was seconded by Mayor Pro tem Wilson and approved by unanimous vote.

Budget Amendment#24-42 - For reimbursable repair work at Fire Stations #2 and #3 (Kristin Jones, Assistant to the City Manager) (Copy included as Exhibit A)

1 Resolution of Intent to consider withdrawal from dedication a portion of ROW known as Chestnut
2 Avenue from the intersections of Laureate Way to Wellness Way. (Richard Smith, Planning
3 Director, Walter Safrit, City Attorney) (Copy included as Exhibit B)

4
5 City Council Work Session Minutes from April 08, 2024 (Bridgette Bell, City Clerk)

6
7 **BUSINESS AGENDA**

8 **PUBLIC HEARING - Conditional Zoning Map Amendment - CZ-2024-01 - 9700 Davidson**
9 **Hwy (Richard Smith, Planning Director, Elizabeth McCarty, Assistant Planning Director)**
10 **(Copy included as Exhibit C)**

11 Mr. Smith provided details for Case CZ-2024-01. The applicant and property owner are Big Green
12 Tree Lawn Care Service, Inc, located at 9700 Davidson Highway. The area consists of
13 approximately 10.22 +/- acres. The request is to amend the conditions of approval to allow a
14 contractor's yard. The applicant and property owner, German Ronquillo, is proposing an
15 amendment to the conditions and conceptual plan previously approved under Case #Z-12-02 on
16 approximately 10.22 +/- acres of property located at 9700 Davidson Highway. The property is
17 further identified as Cabarrus County Parcel Identification Number 46821065980000. The
18 property currently has approval for a mixed-use, nonresidential project with an associated site plan
19 and specific conditions under Case #Z-12-02. This previous rezoning was administered under the
20 Unified Development Ordinance (UDO). The current request to rezone or amend is being reviewed
21 under the Kannapolis Development Ordinance (KDO). This amendment request is to modify the
22 Conditions of approval and conceptual plan to allow for a Contractor's Yard. The applicant intends
23 to construct a 1,512 square foot building on the site. Four (4) existing storage trailers are proposed
24 to remain. Five (5) parking spaces are provided including one (1) handicapped space.

25
26 On February 20, 2024, the Planning and Zoning Commission heard this rezoning request and
27 conducted the public hearing. The Commission determined that the proposed rezoning was
28 inconsistent with the Comprehensive Plan, and the Planning and Zoning Commission denied the
29 rezoning request citing that the proposed use is inconsistent with the Comprehensive Plan due to
30 environmental impacts; lack of appropriate buffer area due to the future widening of Davidson
31 Highway; and lack of buildable space due to the conservation easement.

32
33 Other concerns of the Planning and Zoning Commission were:

- 34 • Environmental impacts.
35 • Lack of buildable space due to conservation easement; and
36 • Impacts to the buffer requirements due to future widening of NC
37 • Highway 73

38
39 The applicant has appealed the Commission's decision to City Council.

1 City Council is required to adopt a Statement of Consistency and a Resolution to Zone with the
2 following conditions:

3
4 The conditions and conceptual site plan applicable to the previous conditional rezoning
5 approval, Case #Z-12-02, are removed and replaced with conditions 2-10, below.

6 1. The intent of this rezoning is to amend the site plan for Contractor's Yard use. Prior to the
7 development of the property over and beyond its use as a Contractor's Yard, a conditional
8 rezoning application shall be made for the City of Kannapolis to further review and reconsider
9 the conditions imposed by approval of this amendment.

10 2. The site is subject to and will in the future be developed in accordance with the
11 development restrictions set forth in the Assignment of Deed of Conservation Easement which
12 among other restrictions limits the developable area of the site within a defined two (2) acre
13 envelope generally located in the center of the site.

14 3. The site will be developed in accordance with the Coddle Creek Subdistrict Thoroughfare
15 Protection Overlay District of the KDO.

16 4. The development shall be limited to one (1) vehicular access point on Davidson Highway
17 and shall be subject to NCDOT approval. A driveway permit is required.

18 5. The site will be developed consistent with the buffer and landscaping requirements of the
19 KDO for a Type D, Opaque Buffer.

20 6. No site lighting will be directed toward adjacent properties assuring no glare of lighting
21 on adjacent residential lots.

22 7. Development of the site will adhere to all applicable NCDEQ soil and erosion control
23 requirements.

24 8. The following improvements shall be completed prior to the issuance of the first
25 certificate of occupancy for the site: removal of the existing single-wide manufactured home
26 from the site; acquisition of a NCDOT driveway permit; paving of the driveway entrance and
27 parking area; installation of required landscaping and fencing; and installation of the gravel
28 parking area.

29 9. The exact location and design of the proposed buildings and parking spaces will be
30 determined during the site plan review process by the City of Kannapolis.

31
32 City Council may take one of the following actions:

33
34 Deem request consistent and approve with conditions: City Council finds that the proposed GC-
35 CZ zoning district is consistent with the "Suburban Activity 1" Character Area as designated in
36 the Move Kannapolis Forward 2030 Comprehensive Plan, however, may approve the plan.

37
38 Deem request inconsistent and deny request: City Council finds that the proposed rezoning district,
39

1 as requested, to be amended, is not consistent with the Comprehensive Plan and does not consider
2 the action to be reasonable and in the public interest.

3
4 There being no further questions or comments, Mayor Hinnant opened the public hearing to those
5 in attendance for an opportunity to speak.

6
7 Mathias Young of 1065 E. Moorehead Street, Charlotte spoke on behalf of Big Green Tree Lawn
8 Care Service, presented a power point describing the property in question. The land was purchased
9 in 2020 to use the property as a contractor's yard. The owner had discussed with the previous
10 planning staff as if the use would all right under the existing zoning and was told that use would
11 be allowed. As Mr. Smith has noted, there has been some confusion as to what the uses are allowed
12 on the property, contractor's yard is excluded, but not specifically included. The currently
13 approved site plan was amended match the existing use on the property as well as to update the
14 development conditions for the property to reflect the change in use as well as the shift from the
15 old UDO to the KDO. Mr. Young stated that the property was purchased from the Davidson Lands
16 Conservancy and does hold a conservation easement and does impose several development
17 restrictions.

- 18
19 • Limits development of 10-acre site to a 2-acre envelope
20 • One principal structure with associated outbuildings
21 • Allows no more than 60% impervious area in envelope, including driveway and gravel
22 parking
23 • No advertising signage
24 • One driveway
25

26 There have been several Grant of Conservation Easement amendments since 2014. The 2021
27 second amendment is shifted development envelope and accounts for widening of Davidson
28 Highway. Mr. Young pointed out a new 2014 site plan is proposing one new building,
29 approximately 1500 sf. Mr. Young pointed out the landscaping, buffers, and erosion control
30 measures. The applicant has also planted in excess of 100 trees on the property since the operations
31 had begun on site. The applicant has reinforced the existing visual separation between the frontage
32 and the shifted development use with additional plantings. As shown on the slide, the property has
33 opaque buffer from the ground to a height of at least six feet.

34
35 Mr. Young further stated that site is in a suburban activity 1 character area which calls for primary
36 non-residential uses. It is important to note that given the unique development challenges posed
37 by the conservation easement, is difficult to find a use that conforms both with the future land use
38 plan while still being able be viable given the development descriptions on the site. Most
39 commercial developments would not be viable inside of a two acre and certainly not without the

1 ability to add advertising signs. That is what makes this site well suited for the unique challenges
2 that the combination of the conservation easement and Suburban Activity 1 Character area.

3
4 Mr. Young explained at the Planning & Zoning Commission meeting held on February 20, 2024,
5 Staff supported the rezoning. The Planning Commission denied the request based on 1.
6 Environmental Impacts, 2. Impact of the Davidson Highway widening and 3. Lack of buildable
7 space. He proceeds to give reasons of why this should not be of any concerns.

8
9 Mr. Safrit stated at some time, there was mention of the removal of the mobile home. What is the
10 time frame for the structure to be removed. Mr. Young responded that the plan is as soon as the
11 zoning is approved and the site plan approved, will go under construction at that time. Mr. Safrit
12 recalls that Mr. Smith noted the removal of the mobile home. Mr. Smith responded that when they
13 talked with the Planning & Zoning Commission, 6 months is what was placed as a reasonable
14 amount of time. Since then, they have asked to be given more time, which was added as a
15 condition.

16
17 Council Member Berry asked to review the steps taken to address the complaints of the neighbors
18 who filed the complaint, specifically water run off onto their property. How will that be resolved.

19
20 Mr. Young explained they voluntarily invited the NC Department of Environmental Quality to
21 inspect the site on May 3, 2024. As noted during the inspection, no violations were found. There
22 was no evidence of erosion or off-site sediment. The inspection found that all erosion control
23 measures on the site were properly installed and all vegetated ground cover on the site has been
24 maintained. NCDEQ had no record of any complaints made against the property.

25
26 Council Member Jackson asked if the alternate course of action, was that presented back to the
27 Planning Commission or is it something that has been worked out.

28
29 Mr. Smith responded that all conditions were presented to the Planning Commission, Staff just
30 tweaked #9 regarding the time period.

31
32 Mayor Pro tem Wilson state that these types of things were discussed 6 or 8 months ago when
33 dealing with a certain individual. He wondered what kind of message is being sent to the Planning
34 & Zoning Commission, if they are seeing the same thing we see, and they say No and we say Yes,
35 when he is asking the question, why do we need them. We just saw a very nice presentation, they
36 said no, and he knows it is due process, but is having a hard time understanding. He wonders why
37 Council hearing is this. The fact that you can appeal and appeal, but we have to answer these
38 people. They seem legitimate and straight up. I don't know what we are telling our own people if
39 we tell them going to approve this. It does not make sense.

1 Rob Harkey of 9745 Davidson Highway, own property across from 9700 Davidson Highway. He
2 presented a handout of several pictures. He explained that Mr. Wilson purchased the property in
3 2012 and was paying over \$19,000 in property taxes for 10 acres. Right now, the man that owns
4 Big Green pays less than \$1800 in taxes. He provided a handout showing what the property looked
5 like when Big Green bought it in 2020. Page 2, he asked if you could see the mess on the property
6 and all of the grass is gone. Two years after they purchased the area noted in red should be grass.
7 When they widen Highway 73, you can see all of the trees that will be removed shown by the Xs
8 on the map. Somewhere between 80 and 100 trees will be removed. Page 3 and 4 shows the DOT's
9 plans to widen Highway 73. Page 5 shows plan already approved for 54 townhomes and potential
10 for more townhomes. He does not know how you can approve this when the Planning Board turned
11 it down. Page 7 shows view from Highway 73 when the trees are removed. Page 8 shows large
12 stumps from trees that were cut down. Other pictures show several commercial trucks, a pontoon
13 boat, stacks of trees that were cut down. One picture showed a fire, back in October, when outdoor
14 burning was banned. One picture dated March 9, 2024, shows water run off coming off the site.

15
16 Sandra Jones of 9730 Davidson Highway said her property is to the right of the site. She stated
17 that everyone one the trees going down her property line is dead. If she were to hire a landscaper
18 and they could not keep a tree alive, doesn't think she would do business with them. She noticed
19 they have taken wood shavings and push off to the backside of the property and is killing the trees.
20 Also, has been spread over 3 to 4 feet onto her property. In regard to the fires, when she has family
21 dinners, and you could not breathe. She was told that it was not wood they were burning, but wire
22 and rubber. Her property value has tumbled and when they start up their trucks in the morning, her
23 whole house shakes. They are bulldozing constantly. She is about to move off the property.

24
25 Sandeep Kolikapudi of 9642 White Chapel Drive, Concord spoke in opposition to the rezoning
26 request. His concern is regarding the noise of the trucks in and out and the burning.

27
28 There being no further speakers, Mayor Hinnant closed the public hearing.

29
30 Council Member Berry asked Mr. Smith during the Planning & Zoning meeting, was there
31 opposition. Mr. Smith stated there was.

32
33 Mayor Hinnant asked for a motion to adopt a Statement of Consistency. No motion was made,
34 therefore, the action failed.

35
36 City Attorney Safrit stated that Robert's Rules of Order supports never having a negative motion
37 only a positive motion. The statute related to the Statement of Consistency nevertheless requires
38 that the Council adopt a statement clarifying why it is not consistent. A Resolution stating why the
39 rezoning request is inconsistent has been provided to Council. He suggested that Mayor Hinnant

1 to have a motion to reconsider Business Agenda Item A. **(Conditional Zoning Map Amendment)**

2
3 Mayor Hinnant called for a motion to reconsider. Mayor Pro tem Wilson made a motion to
4 reconsider Business Agenda Item A (Conditional Zoning Map Amendment CA-2024-01) Motion
5 was seconded by Council Member Jackson and approved by unanimous vote.

6
7 Mr. Safrit noted that Council would need to adopt the Statement of Consistency as presented by
8 Staff.

9
10 Mayor Pro tem Wilson made a motion to approve the Resolution adopting a Statement of
11 Consistency finding that the rezoning is inconsistent with the goals and policies of the *Move*
12 *Kannapolis Forward 2030 Comprehensive Plan (2030 Plan)* Motion was seconded by Council
13 Member Berry and approved by unanimous vote.

14
15 **PUBLIC HEARING - Opal Street Special Assessment and Acceptance to the Powell Bill**
16 **Street Maintenance Schedule (Michael Rattler, Director of Transportation & Environmental**
17 **Services)(Copy included as Exhibit D)**

18 Mr. Rattler presented a power point with information on the Opal Street special assessment and
19 acceptance to the Powell Bill street maintenance schedule. Opal Street exists between Bernard
20 Avenue and Garnett Street. It is located near the major intersection of Little Texas Road and Dale
21 Earnhardt Boulevard and is parallel to Dale Earnhardt and intersects with Concord Lake Road.
22 Actions include to conduct a public hearing, approve a Resolution accepting Opal Street as a
23 publicly maintained street and add it to the Powell Bill maintained schedule provided there is no
24 reason presented to deny the request. 2. Approve Resolution directing that the Opal Street
25 road improvement be undertaken and 3. Approve Budget Ordinance in the amount of \$180,000
26 for repairs and paving of Opal Street.

27
28 Mayor Pro tem Wilson asked how many property owners and the average cost to citizens. Mr.
29 Rattler explained there are 6 properties effected. Cost ranges from \$2000 to \$30,000 and have 10
30 years to pay. Mr. Wilson asked what happens if within 10 years, a citizen sells their property. Mr.
31 Rattler said the debt would be attached as a lien on the property.

32
33 Council Member Jackson asked what happens if two property owners do not sign. Will the others
34 have to cover for them. Mr. Rattler said in accordance with the City's policy, they do have to have
35 over 51% of the property owners and linear footage. If they meet the criteria, the two property
36 owners would still be a part of the assessment.

37
38 Mayor Hinnant asked Mr. Safrit if Council chooses to pay the \$180,000 and not require an
39 assessment and accepts the street to maintain, is there a need for a public hearing. Or is the need

1 for a public hearing generate because participants have to put up money. What purpose is of the
2 public hearing.

3
4 City Attorney Safrit stated that a public hearing is required when an assessment is being done. City
5 Attorney Safrit stated there would need to be a petition for the City to take over the street. The
6 City does not own the property now, so it is necessary for the City to own the right-of-way.

7
8 Mayor Hinnant asked for a motion to adopt a Resolution accepting the privately maintained portion
9 of Opal Street and publicly maintained street and add to the Powell bill maintenance schedule.
10 This resolution says nothing about the assessment other than we are accepting the privately portion
11 of the street. The second Resolution would be that the City would pay \$180,000 with no
12 assessment.

13
14 Mrs. Berry stated that a public hearing was advertised and maybe there is no reason for not asking
15 them to pay a portion but asked if there were anyone in the audience in opposition. Maybe there
16 was other reasons people want to speak.

17
18 Mayor Hinnant stated if a public hearing is a requirement when there is an assessment and if
19 Council decides on no assessment, what difference would it make if one was opposed or not
20 opposed.

21
22 Mr. Safrit stated that now since he has a better understanding of where Council is headed, would
23 feel more comfortable to have a petition for the City to accept the street. Mr. Rattler explained that
24 a public hearing is required to accept the street.

25
26 Mayor Pro tem Wilson made a motion to table this action to the June 24th meeting. Motion was
27 seconded by Council Member Jackson and approved by unanimous vote.

28
29 Mayor Hinnant noted he had three cards of persons wishing to speak on the Opal Street issue and
30 asked if they would like to still come and speak. All three declined at this time.

31
32 **Budget Amendment #24-41 - Appropriating Cash Reserves for Watermain Replacement**
33 **Associated With Opal Street Acceptance (Alex Anderson, Director of Water Resources,**
34 **Kristin Jones, Assistant to the City Manager) (Copy included as Exhibit E)**

35 Mayor Pro tem Wilson made a motion to table this action to the June 24th meeting. Motion was
36 seconded by Council Member Dixon and approved by unanimous vote.

37
38 **Motion to award the 2024 City of Kannapolis Resurfacing Project Contract (Wilmer Melton,**
39 **Assistant City Manager) (Copy included as Exhibit F)**

1 The project consists of resurfacing of 15 named streets (or part thereof) totaling 5.24 miles of
2 pavement. The project includes repaving N. Loop Road between N. Main Street and S. Juniper
3 Street. The project includes the implementation of a road diet to include bike lanes on both sides
4 of N. Loop Road between N. Main Street and S. Juniper Street. Bids were obtained from 6
5 contractors and publicly opened on May 7, 2024, at 2:00 PM. Bid results Bids were as follows:
6

<u>Contractor</u>	<u>Bid Amount</u>
Ferebee Corporation	\$2,659,230.32
Blythe Construction	\$2,866,892.05
Blythe Brothers Asphalt	\$2,987,144.22
NJR Group	\$3,032,843.14
Red Clay Industries	\$3,709,103.20
JT Russell & Sons, Inc.	\$3,768,124.80

7 The Contractor is awaiting notice to proceed on the project to begin work. The contract time for
8 completion of the work is 180 days from the notice to proceed.
9

10 Council Member Jackson made a motion to approve ward of the 2024 City of Kannapolis
11 Resurfacing project to the low bidder, Ferebee Corporation, in the amount of \$2,659,230.32
12 excluding the road diet modification along N. Loop Rd and have the City Manager execute the
13 contract. This alternative will include repaving of N. Loop Road and restriping of the roadway
14 back to existing conditions without bike lanes. Motion was seconded by Council Member Berry
15 and approved by unanimous vote.
16

17 **Presentation of the Recommended Budget for FY 2024-2025 (Mike Legg, City Manager,**
18 **Kristin Jones, Assistant to the City Manager) (Copy included as Exhibit G)**

19 Kannapolis City Manager Mike Legg presented the recommended Fiscal Year 2024-25 budget.
20 The total recommended budget is \$124,838,649 which includes all seven operating funds of the
21 City.
22

23 The budget includes a 5.08 cent decrease in the property tax rate. If the budget is approved in June,
24 the tax rate would drop from 63 cents to 57.92 cents. This decrease in the property tax rate is due
25 to the Cabarrus County property tax revaluation and positive projections in expected revenues.
26

27 The proposed budget concentrates on several strategies:
28

- 29 • The implementation of the Imagine Kannapolis Strategic Plan which includes mapping out
30 the next five years of initiatives and projects for the City and subsequently, a five-year

1 Financial Plan in order to achieve the strategic plan.

- 2 • Ensuring a high quality of services to residents is maintained such as a new garbage and
- 3 recycling contractor, and that employees have the equipment and vehicles they need to do
- 4 their jobs.
- 5 • Retaining existing employees and recruiting new people to work for the City.
- 6 • Continuing to leverage the City's robust financial forecast to improve the quality of life for
- 7 residents and the delivery of services to residents.

8
9 In 2022 the City launched the Imagine Kannapolis Strategic Plan. The goal was to imagine the
10 future of Kannapolis, especially what objectives the City would like to achieve in the next decade.
11 Thirteen focus groups were formed, and dozens of residents participated in developing the strategic
12 plan. Priorities were balanced with the needs the City will have during the next ten years and items
13 Kannapolis would like to have to be a healthy quality of life and economically strong City.

14
15 In this year's proposed budget, many Imagine Kannapolis priorities are funded, and a plan is
16 outlined to fund additional Imagine Kannapolis priorities over the next five years. These will be
17 subject to City Council ultimately adopting the final version of the Strategic Plan later this year.

18
19 Imagine Kannapolis FY 24-25 Proposed Projects and Initiatives include:

- 20
21 • \$1,500,000 - Construction of a Fire Training Tower at Fire Station 1
- 22 • \$500,000 – Construction of a Downtown Dog Park at Dale Earnhardt Boulevard /Vance St
- 23 • \$145,000 – Cultural Arts & Historic Preservation Work Program
- 24 • \$50,000 – Open Space and Tree Preservation (Environmental Sustainability Plan)
- 25 • \$855,361 – Addition of 190 Downtown Parking Spaces and Parking Lot Improvements
- 26 • \$1,340,000 – Little Texas Road Sidewalk (City's portion to the NCDOT funding)
- 27 • \$2,850,000 – City Hall Upfits including new Customer Service accessibility parking
- 28 • \$600,000 – I-85 Monument Signage Phase I (Joint Project with the City of Concord – Exits
- 29 58, 60, 63)
- 30 • \$1,200,000 – Upgrades to School Athletic Fields Phase I (turf field at Kannapolis Middle
- 31 School)
- 32 • \$1,200,000 – Western Cabarrus Emergency Communications Tower
- 33 • \$600,000 – Chestnut Avenue Park Construction
- 34 • \$200,000 – Kannapolis Parkway/NC 3 Street Lighting
- 35 • \$160,000 – Economic Development Promotion Program
- 36 • \$60,000 – Reserve Police Officer Program Expansion
- 37 • \$100,000 – Police Community Response Team, including Clinical Social Worker Positions
- 38 • \$155,000 – Fire Department Logistics Building

Imagine Kannapolis Proposed Projects and Initiatives for the Next Five Years:

- Eastside Park Construction
- Revitalization of Midway Area
- Midlake Avenue Sidewalk
- Baker's Creek Park Building Replacement
- Irish Buffalo Creek Greenway Phase II (Rogers Lake Road to Safrit Park)
- Public Works Operations Center Improvements
- Westside Park Construction
- Cabarrus Joint Public Safety Training Facility
- School Athletic Field Improvements
- Enhanced Street Paving and Sidewalk Repair

Other highlights of the budget include:

Recruitment and retention of employees continues to be a high priority for the City. The budget includes cost of living and merit increases for employees, enhancements to health insurance and retirement programs, and a pilot employee daycare subsidy. 14 total new staff positions in the Police, Fire, General Services, City Manager's Office, Finance, Water, Transportation, and Information Technology Departments.

Capital Items such as vehicles and equipment for the General Services, Parks and Recreation, Fire, Police, Planning and Transportation Departments.

The sewer base rate will increase \$1.44 per month and the sewer volume rate will increase 75 cents per 1,000 gallons. The water volume rate will increase 51 cents per 1,000 gallons. These are the first increases in five years and are to primarily cover costs associated with the expansion of the Rocky River Regional Wastewater Treatment Plant and improvements to the Kannapolis Water Treatment Plant.

A public hearing on the budget is scheduled for 6 p.m., June 10th, at Kannapolis City Hall with adoption of the budget on June 24th, 6:00 PM.

Council highly praised Staff on the excellent presentation of the budget. There were no further comments or questions.

Resolution directing the filing with the City Clerk of the recommended budget for FY 2024-2025. (Mike Legg, City Manager) (Copy included as Exhibit H)

A copy of the recommended budget was presented to City Council on May 20, 2024 and is available for public inspection at the City of Kannapolis administration offices as well as the City

1 of Kannapolis website www.kannapolisnc.gov. Notice of the public hearing is scheduled to be
2 published in the Independent Tribune on Sunday, May 26, 2024. A public hearing on the
3 recommended budget for Fiscal Year beginning July 1, 2024, and ending June 30, 2025, has been
4 scheduled for 6:00 PM on June 10, 2024. State law requires that ***"before adopting the Budget***
5 ***Ordinance, the Board shall hold a public hearing at which time any persons wishing to be heard***
6 ***on the budget may appear"*** (NCGS159-12) (b).
7

8 Mayor Pro tem Wilson made a motion to approve the Resolution and set a public hearing for June
9 10. Motion was seconded by Council Member Berry and approved by unanimous vote.
10

11 **Appointment of WSACC Board of Directors (Mike Legg, City Manager)**

12 The appointment of Mr. Mike Legg to the Board of Directors of the Water and Sewer Authority
13 of Cabarrus County (WSACC) will expire at WSACC's Annual Meeting on June 20, 2024. The
14 City of Kannapolis will need to make a new appointment or may re-appoint Mr. Legg to WSACC's
15 Board of Directors.
16

17 Mayor Pro tem Wilson made a motion to reappoint Mr. Legg to the WSACC Board of Directors.
18 Motion was seconded by Council Member Jackson and approved by unanimous vote.
19

20 **CITY MANAGER REPORT:** None.
21

22 **CITY COUNCIL COMMENTS:**

23 Mayor Pro tem Wilson noted that Council Member Dayvault's Dad was home from the hospital.
24 Mr. Wilson asked when Southern Avenue would be changed to Veterans Way. Mr. Legg stated
25 the plan is to have the Mayor Hinnant make a comment at the memorial day celebration on
26 Monday. The signs should be changed out before Memorial Day saying, "Kannapolis Veterans
27 Way".
28

29 **SPEAKERS FROM THE FLOOR:**

30 Elaine Violet Mitchell of 415 London Street spoke on Little Texas Road sidewalk project. She
31 noted that she has spoken with officials at the NCDOT and was told that the construction would
32 be in 2025 and was 50% completed. She was told that the only reason that the DOT was involved
33 was because of federal money and that the buck is mainly with the Kannapolis City Council. She
34 has brought this issue up many times and feels that Council has not pushed the project like it
35 should have been. She also spoke with the Director of Engineering and was told the City is still
36 getting ROW acquisitions and there are acquiring easements for the project and still have 85
37 parcels to get the easements and NCDOT has been approved. She recalls the sidewalk would go
38 up Little Texas Road and turning onto Ruth Avenue. She felt it would be more feasible to go
39 straight up Little Texas Road and come out at Brantley.

1 Mr. Legg responded that the City has finally gotten approval from NCDOT to start acquiring
2 ROW. She is correct since it is state and federal money, NCDOT has to approve everything the
3 City does. 2025 is when the project will start construction.

4
5 Phil Goodman of 1005 Central Drive stated he had sent an email to Council Members requesting
6 a response to the questions he submitted back in March. Why are we not televising the Council
7 meeting? I have been assured money is available. Other cities are doing it. He said that he is so
8 passionate about this, is ready to go to the citizens of Kannapolis and say let your voice be
9 heard. We need to be able to hear instead of everybody having to come to a Council meeting.

10
11 Mr. Mayor, what has changed that caused you to suddenly take a new position on a history
12 museum. You have on multiple occasions told me that the City has no building, no money, no
13 intent on providing a home for KHA let alone KAA-MaCC. You have said there is no need for
14 building because what KHA has digitized or have on display in other buildings. There have been
15 no other communications about this issue to my knowledge. We do appreciate the fact that the
16 wooden loom is on display at city hall. KHA and KAA-MaCC were assured that we would have
17 an opportunity to meet with the focus groups to review and make comments or suggestions on the
18 recommendations. This never happened. I understand the hiring process has begun for a director
19 or manager for an arts and historic preservation for Kannapolis. It was initially told the person
20 would have arts and history background, that possibly has changed. I'd just like to know where
21 that requires a manager. I can show you 37 years of history that has been collected and displayed
22 and saved within the City of Kannapolis. But apparently our opinion does not matter. Now
23 suddenly Mr. Mayor you want to purchase North Kannapolis Methodist Church for KHA and
24 KAA-MaCC for a center and with great haste. I would love to have a home for the History
25 Associates, but here is the problem I have.

26
27 First of all, I want to correct a recent statement you made, we are not in any rush to get out of the
28 school right now. You have a habit of dropping and throwing names when there is someone selling
29 personal things for financial simplicity benefit. I find it interesting that you are totally against the
30 purchase of a Kannapolis civic center that will surely fail.

31 Now you spend much of your time talking about all that you have done and changes in Kannapolis.
32 It appears that I am a threat to you, and I don't know why. I've lost a lot of respect, trust and belief
33 in you, Mr. Mayor, because of your deceitfulness, lies and misrepresentation of the citizens of
34 Kannapolis. Again, I think you are incapable and unfit to serve the citizens of Kannapolis. As a
35 reminder I am not against management and I don't jump every time someone tells me to jump,
36 and no one tells me how to vote.

37
38 Sophia Wilkerson of 314 Ester Circle stated that the Little Texas Road community watch group

1 wanted when work would begin on the sidewalk so they can have a safe place to walk. They are
2 looking forward to it.

3
4 Elaine Violet Mitchell of 415 London Street noted about three weeks ago, she witnessed a lady
5 and her family walking up Little Texas Road. The lady had a walker going up the Quik Trip and
6 she felt it was pitiful the lady had to walk all the way up Little Texas Road until she got to the
7 sidewalk at the cemetery.

8
9 There being no further business, Mayor Pro tem Wilson made a motion to adjourn. Council
10 Member Jackson seconded the motion, and it was approved by unanimous vote.

11
12 The meeting adjourned at 8:45PM on Monday, May 20, 2024.

13
14
15
16
17 _____
18 Milton D. Hinnant, Mayor

19 _____
20 Bridgette Bell, MMC, NCCMC
City Clerk



Kannapolis
Agenda Staff Report
June 10, 2024

To: Mayor and City Council

From: Richard Smith, Planning Director, Walter Safrit, City Attorney

Subject: **PUBLIC HEARING** - Request to consider withdrawal from dedication a portion of Chestnut Avenue located from the intersections of Laureate Way to Wellness Way and consideration to approve an Order to close a portion of said portion of Chestnut Avenue.

Action Requested by City Council

1. Conduct a Public Hearing to consider withdrawal from dedication a portion of right-of-way known as Chestnut Avenue from the intersection with Laureate Way to the intersection with Wellness Way.
2. Motion to approve an Order to close a portion of said portion of Chestnut Avenue.

Required Votes to Pass Required Action

Majority Present at Meeting

Background

At the May 20, 2024 meeting of City Council, a Resolution of Intent was approved to withdraw from dedication a portion of Chestnut Avenue from the intersection with Laureate Way to the intersection with Wellness Way. This closure will allow the City to facilitate a linear park in the existing right-of-way area in conjunction with a proposed development adjacent to the stadium.

Provided there is no evidence given at the Public Hearing that withdrawing from this dedication is not contrary to the public interest, it is recommended that City Council approve the Order to Close.

Fiscal Implications

None

Policy Issues

The approval of this request will allow the construction of a future linear park adjacent to the baseball stadium.

Legal Issues

None.

Recommendations and Alternate Courses of Action

1. Motion to approve an Order to Close thereby withdrawing from dedication a portion of right-of-way known as Chestnut Avenue from the intersection with Laureate Way to the intersection with Wellness Way and approve an Order to close a portion of said portion of Chestnut Avenue (Recommended)

2. Motion to table item to a future meeting
3. Take no action.

Attachments

1. Chestnut-Plat_2024-05-13
2. Letter to Adjacent Chestnut Street
3. Order to Close Chestnut Ave. R-O-W
4. Public Notice Ad
5. Public Notice Signs

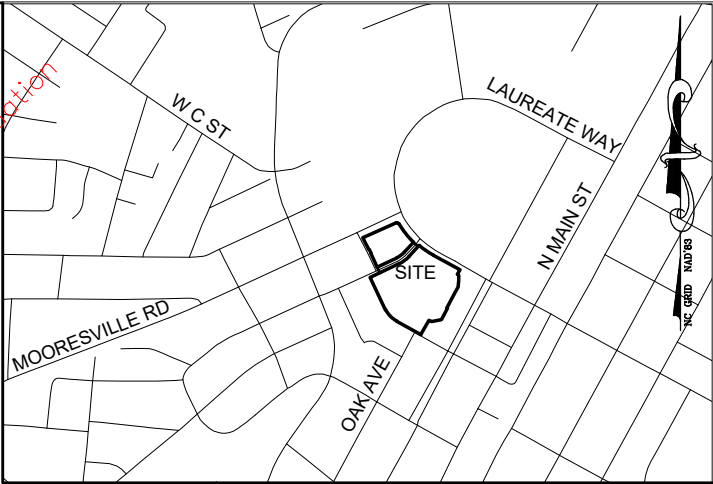
I, Jason D. Boyles, certify that this map was prepared under my supervision and that the map was prepared for the sole purpose of right-of-way abandonment only and is not intended to be a boundary survey of the property shown hereon.

This 13th day of May, 2024

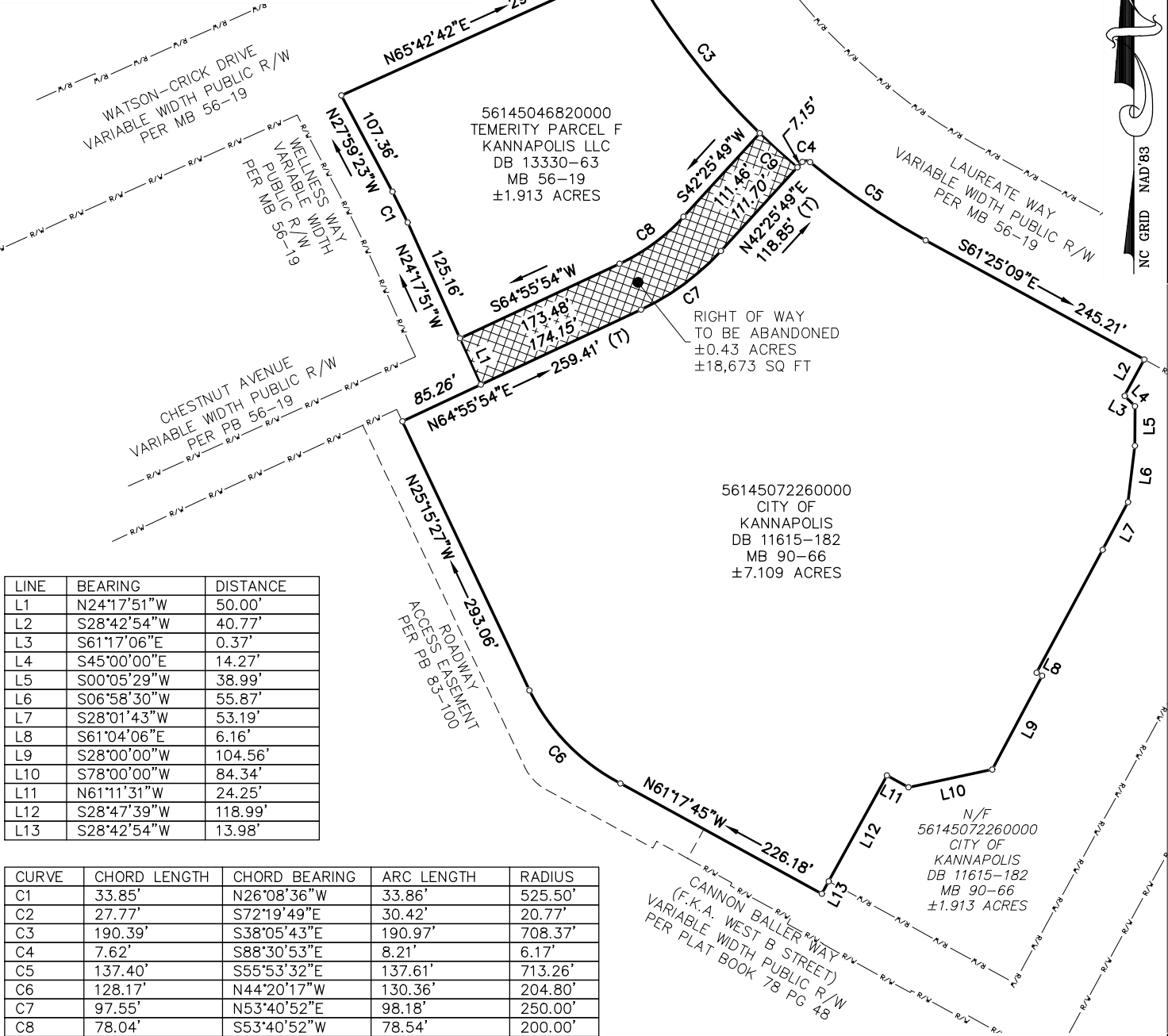
NC Professional Land Surveyor L-5485

Notes:

1. Tax Parcel ID - 56145072260000 & 56145046820000
2. Bearing base is referenced to NC NAD83 (2011)
Grid derived by Real Time Kinematic GPS observations using Trimble R8 Receivers and the NC VRS Network.
3. All distances are shown horizontal.
4. This property may be subject to additional easements, right of ways, utilities, covenants and restrictions that may be of record.
5. This plat has not been reviewed by a local government agency for compliance with any applicable land development regulations.

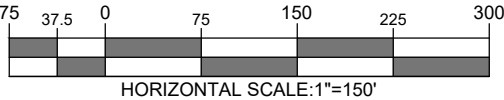


VICINITY MAP



LINE	BEARING	DISTANCE
L1	N24°17'51"W	50.00'
L2	S28°42'54"W	40.77'
L3	S61°17'06"E	0.37'
L4	S45°00'00"E	14.27'
L5	S00°05'29"W	38.99'
L6	S06°58'30"W	55.87'
L7	S28°01'43"W	53.19'
L8	S61°04'06"E	6.16'
L9	S28°00'00"W	104.56'
L10	S78°00'00"W	84.34'
L11	N61°11'31"W	24.25'
L12	S28°47'39"W	118.99'
L13	S28°42'54"W	13.98'

CURVE	CHORD LENGTH	CHORD BEARING	ARC LENGTH	RADIUS
C1	33.85'	N26°08'36"W	33.86'	525.50'
C2	27.77'	S72°19'49"E	30.42'	20.77'
C3	190.39'	S38°05'43"E	190.97'	708.37'
C4	7.62'	S88°30'53"E	8.21'	6.17'
C5	137.40'	S55°53'32"E	137.61'	713.26'
C6	128.17'	N44°20'17"W	130.36'	204.80'
C7	97.55'	N53°40'52"E	98.18'	250.00'
C8	78.04'	S53°40'52"W	78.54'	200.00'
C9	50.00'	S47°50'27"E	50.01'	708.37'



LEGEND

- IPS - IRON PIN SET
- EXISTING PROPERTY LINE
- R/W EXISTING RIGHT-OF-WAY
- ▨ RIGHT-OF-WAY ABANDONMENT AREA



201 West 29th Street
Charlotte, NC 28206
Phone: (704) 337-8329
Fax: (704) 308-3153
License No.: F-1388
www.gpinet.com

GEOMATICS | LIDAR | PHOTOGRAMMETRY

Chestnut Avenue Right of Way Abandonment Map For: The City of Kannapolis

(City of Kannapolis, Cabarrus County, North Carolina)
Current Owner: The City of Kannapolis; Temerity Parcel F Kannapolis, LLC
Address: 375 Laureate Way & 1 Cannon Baller Way Kannapolis NC 28081
Deed Reference: DB 11615-182; DB 13330-63



May 22, 2024

Re: Street Closure –Portion of Chestnut Avenue

Dear Property Owner:

In accordance with General Statute 160A-299 - *Procedure for Permanently Closing Streets and Alleys*, which states that after Council adopts a Resolution of Intent declaring its intent to close a street or alley and sets a date for a public hearing on the intent to close, a certified copy of the Resolution of Intent must be mailed to owners of property adjoining the street or alley.

The City of Kannapolis is proposing to withdraw from dedication a portion of right-of-way known as Chestnut Avenue from the intersections of Laurate Way to Wellness Way. You have been identified as a property owner holding interest in property nearby the street as described to be closed (see reverse side of this letter for a map showing the portion described).

Please find enclosed a certified copy of the Resolution stating the City's intent to consider this withdrawal. The Public Hearing has been scheduled for Monday, June 10, 2024, 401 Laureate Way, Kannapolis, NC at 6:00 PM.

If you need additional information, you may contact the Planning Department at (704) 920-4350.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard Smith".

Richard Smith
Planning Director

Enclosure

Chestnut Ave Street

Closing

Street To Close



0 310 620 Feet



**A RESOLUTION STATING THE INTENT OF THE
CITY OF KANNAPOLIS TO CONSIDER CLOSING
A PORTION OF CHESTNUT AVENUE AS DESCRIBED HEREIN
AND FIXING THE DATE OF PUBLIC HEARING ON THE QUESTION
OF SUCH CLOSING**

BE IT RESOLVED by the City Council of the City of Kannapolis:

Section 1. That it is the intent of City Council of the City of Kannapolis to consider closing of a portion of the following described Public Street or alley pursuant to Section 160A-299 of the General Statutes of North Carolina.

Being a portion of Chestnut Avenue, lying in the City of Kannapolis, County of Cabarrus, State of North Carolina, said parcels having Parcel Identification Numbers of 56145072260000 and 56145046820000 and being more particularly described as follows:

BEGINNING at a calculated point marking the southernmost corner of Temerity Parcel F Kannapolis LLC (now or formerly) as described in Deed Book 13330, Page 63 of the Cabarrus County Registry and being along the right of way Wellness Way, a variable width as shown on Map Book 56, Page 19; THENCE with the southerly line of Temerity Parcel F Kannapolis LLC the following three (3) courses and distances; 1) North 64 degrees 55 minutes 54 seconds East a distance of 173.48 feet to a calculated point; 2) THENCE along a curve to the left having an arc length of 78.54 feet, and a radius of 200.00 feet, being subtended by a chord bearing of North 53 degrees 40 minutes 52 seconds East, a distance of 78.04 feet to a calculated point; 3) THENCE North 42 degrees 25 minutes 49 seconds East a distance of 111.46 feet to a calculated point along the southerly right of way of Laureate Way, a variable width right of way as shown on Map Book 56, Page 19; THENCE with a new line along the right of way of Laureate Way; South 47 degrees 50 minutes 27 seconds East a distance of 50.00 feet to a calculated point along the northwesterly line of City of Kannapolis (now or formerly) as described in Deed Book 11615, Page 182; THENCE with the line of the City of Kannapolis the following three (3) courses and distances; 1) South 42 degrees 25 minutes 49 seconds West a distance of 111.69 feet to a calculated point; 2) THENCE along a curve to the right having an arc length of 98.18 feet, and a radius of 250.00 feet, being subtended by a chord bearing of South 53 degrees 40 minutes 52 seconds West, a distance of 97.55 feet to a calculated point; 3) THENCE South 64 degrees 55 minutes 54 seconds West a distance of 174.15 feet to a calculated point along the southerly margin of Chestnut Avenue, a variable width right of way as shown on Map Book 56, Page 19; THENCE with a new line with Chestnut Avenue, North 24 degrees 17 minutes 51 seconds West a distance of 50.00 feet to the POINT OF BEGINNING, and having an area of 0.429 acres, more or less.

Containing 0.43 Acres as shown on a map prepared by GPI Geospatial, Inc. and designated as Project #2200401.

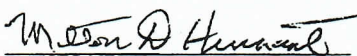
Section 2. That a public hearing on the question of such closing the above described right-of- way will be held at 401 Laureate Way, Kannapolis, North Carolina, at 6:00 o'clock p.m., on the 10th day of June, 2024 at which time plans for such closing will be explained and all persons will be given an opportunity to be heard.

Section 3. That notice of said closing and public hearing shall be given by publication, mailing and posting as required by law.

Adopted this 20th day of May 2024.

ATTEST:


Bridgette Bell, MMC, NCCMC
City Clerk


Milton D. Hinnant, Mayor

**CITY COUNCIL
CITY OF KANNAPOLIS
ORDER TO CLOSE**

WHEREAS, pursuant to North Carolina General Statute 160A-299, City Council of the City of Kannapolis has proposed to permanently close a portion of Chestnut Avenue located at the intersections of Laureate Way and Wellness Way described as a Public Street or alley pursuant to Section 160A-299 of the General Statutes of North Carolina which is more particularly described as:

LEGAL DESCRIPTION

Being a portion of Chestnut Avenue, lying in the City of Kannapolis, County of Cabarrus, State of North Carolina, said parcels having Parcel Identification Numbers of 56145072260000 and 56145046820000 and being more particularly described as follows:

BEGINNING at a calculated point marking the southernmost corner of Temerity Parcel F Kannapolis LLC (now or formerly) as described in Deed Book 13330, Page 63 of the Cabarrus County Registry and being along the right of way Wellness Way, a variable width as shown on Map Book 56, Page 19; THENCE with the southerly line of Temerity Parcel F Kannapolis LLC the following three (3) courses and distances; 1) North 64 degrees 55 minutes 54 seconds East a distance of 173.48 feet to a calculated point; 2) THENCE along a curve to the left having an arc length of 78.54 feet, and a radius of 200.00 feet, being subtended by a chord bearing of North 53 degrees 40 minutes 52 seconds East, a distance of 78.04 feet to a calculated point; 3) THENCE North 42 degrees 25 minutes 49 seconds East a distance of 111.46 feet to a calculated point along the southerly right of way of Laureate Way, a variable width right of way as shown on Map Book 56, Page 19; THENCE with a new line along the right of way of Laureate Way; South 47 degrees 50 minutes 27 seconds East a distance of 50.00 feet to a calculated point along the northwesterly line of City of Kannapolis (now or formerly) as described in Deed Book 11615, Page 182; THENCE with the line of the City of Kannapolis the following three (3) courses and distances; 1) South 42 degrees 25 minutes 49 seconds West a distance of 111.69 feet to a calculated point; 2) THENCE along a curve to the right having an arc length of 98.18 feet, and a radius of 250.00 feet, being subtended by a chord bearing of South 53 degrees 40 minutes 52 seconds West, a distance of 97.55 feet to a calculated point; 3) THENCE South 64 degrees 55 minutes 54 seconds West a distance of 174.15 feet to a calculated point along the southerly margin of Chestnut Avenue, a variable width right of way as shown on Map Book 56, Page 19; THENCE with a new line with Chestnut Avenue, North 24 degrees 17 minutes 51 seconds West a distance of 50.00 feet to the POINT OF BEGINNING, and having an area of 0.429 acres, more or less; and

WHEREAS, a Public Hearing on the question of such closing was held on June 10, 2024, at which time the plans for such closing were explained and all persons given an opportunity to be heard; and

WHEREAS, notice of said closing was given in accordance with the requirements of law; and

WHEREAS, it has been found to the satisfaction of the City Council after the Public Hearing that closing of the street or public roadway is not contrary to the public interest and that no individual owning property in the vicinity of the street or public roadway or in the subdivision in which it is located would be deprived of reasonable means of ingress or egress to their property.

NOW, THEREFORE, IT IS HEREBY ORDERED by the City Council of the City of Kannapolis as follows:

1. That the portion of Chestnut Avenue located at the intersections of Laureate Way and Wellness Way as described above, is hereby closed effective immediately.
2. That the City of Kannapolis reserves any and all right, title and interest in and to any utility improvements or easements within any portion of the above described street closed pursuant to this Order.
3. That a certified copy of this Order be filed in the office of the Register of Deeds for Cabarrus County, North Carolina.

Adopted this 10th day of June 2024.

Milton D. Hinnant
Mayor

Attest:

Bridgette Bell, MMC, NCCMC
City Clerk



NOTICE OF PUBLIC HEARING
401 Laureate Way, Kannapolis, NC

City Council Meeting
Monday, June 10, 2024, at 6:00 pm

A RESOLUTION STATING THE INTENT OF THE CITY OF KANNAPOLIS TO CONSIDER CLOSING A PORTION OF CHESTNUT AVENUE AS DESCRIBED HEREIN AND FIXING THE DATE OF PUBLIC HEARING ON THE QUESTION OF SUCH CLOSING

BE IT RESOLVED by City Council of the City of Kannapolis:

Section 1. That it is the intent of City Council of the City of Kannapolis to consider closing a portion of the following described public street or alley pursuant to Section 160A-299 of the General Statutes of North Carolina.

LEGAL DESCRIPTION

Being a portion of Chestnut Avenue, lying in the City of Kannapolis, County of Cabarrus, State of North Carolina, said parcels having Parcel Identification Numbers of 56145072260000 and 56145046820000 and being more particularly described as follows:

BEGINNING at a calculated point marking the southernmost corner of Temerity Parcel F Kannapolis LLC (now or formerly) as described in Deed Book 13330, Page 63 of the Cabarrus County Registry and being along the right of way Wellness Way, a variable width as shown on Map Book 56, Page 19; THENCE with the southerly line of Temerity Parcel F Kannapolis LLC the following three (3) courses and distances; 1) North 64 degrees 55 minutes 54 seconds East a distance of 173.48 feet to a calculated point; 2) THENCE along a curve to the left having an arc length of 78.54 feet, and a radius of 200.00 feet, being subtended by a chord bearing of North 53 degrees 40 minutes 52 seconds East, a distance of 78.04 feet to a calculated point; 3) THENCE North 42 degrees 25 minutes 49 seconds East a distance of 111.46 feet to a calculated point along the southerly right of way of Laureate Way, a variable width right of way as shown on Map Book 56, Page 19; THENCE with a new line along the right of way of Laureate Way; South 47 degrees 50 minutes 27 seconds East a distance of 50.00 feet to a calculated point along the northwesterly line of City of Kannapolis (now or formerly) as described in Deed Book 11615, Page 182; THENCE with the line of the City of Kannapolis the following three (3) courses and distances; 1) South 42 degrees 25 minutes 49 seconds West a distance of 111.69 feet to a calculated point; 2) THENCE along a curve to the right having an arc length of 98.18 feet, and a radius of 250.00 feet, being subtended by a chord bearing of South 53 degrees 40 minutes 52 seconds West, a distance of 97.55 feet to a calculated point; 3) THENCE South 64 degrees 55 minutes 54 seconds West a distance of 174.15 feet to a calculated point along the southerly margin of Chestnut Avenue, a variable width right of way as shown on Map Book 56, Page 19; THENCE with a new line with Chestnut Avenue, North 24 degrees 17 minutes 51 seconds West a distance of 50.00 feet to the POINT OF BEGINNING, and having an area of 0.429 acres, more or less.

Containing 0.429 Acres as shown on a map prepared by GPI Geospatial, Inc. and designated as Project #2200401.

Section 2. That a Public Hearing on the question of such closing of the above described right-of-way will be held at 401 Laureate Way, Kannapolis, North Carolina at 6:00 PM, or as soon thereafter as the matter may be heard, on the 10th of June, 2024 at which time plans for such closing will be explained and all persons will be given an opportunity to be heard.

Section 3. That notice of said closing and Public Hearing shall be given by publication, mailing, and posting as required by law.

Adopted this 20th day of May 2024.

Milton D. Hinnant
Mayor

Anyone who requires an auxiliary aid or service for effective communication, or a modification of policies or procedures to participate in a program, service, or activity of the City of Kannapolis, should contact the office of Heather James, Human Resource Director, by phone at 704-920-4322 or by email at hjames@kannapolisnc.gov as soon as possible but no later than 48 hours before the scheduled event.



PROPOSED STREET CLOSING

NOTICE OF PUBLIC HEARING

Resolution 2024-12

**A RESOLUTION STATING THE INTENT OF THE
CITY OF KANNAPOLIS TO CONSIDER CLOSING
A PORTION OF CHESTNUT AVENUE AS DESCRIBED HEREIN
AND FIXING THE DATE OF PUBLIC HEARING ON THE QUESTION
OF SUCH CLOSING.**

BE IT RESOLVED by the City Council of the City of Kannapolis:

Section 1. That it is the intent of City Council of the City of Kannapolis to consider closing of a portion of the following described Public Street or alley pursuant to Section 160A-299 of the General Statutes of North Carolina:

Being a portion of Chestnut Avenue, lying in the City of Kannapolis, County of Cabarrus, State of North Carolina, and parcels having Parcel Identification Numbers of 5614507220000 and 5614504620000 and being more particularly described as follows:

BEGINNING at a calculated point marking the westermost corner of Timothy Perini F Kannapolis LLC (now or formerly as described in Deed Book 13110, Page 61 of the Cabarrus County Registry and being along the right-of-way Williams Way, a variable width as shown on Map Book 56, Page 19; **THENCE** with the southerly line of Timothy Perini F Kannapolis LLC the following three (3) courses and distances: 1) North 64 degrees 15 minutes 44 seconds East a distance of 171.48 feet to a calculated point; 2) **THENCE** along a curve to the left having an arc length of 78.54 feet, and a radius of 200.00 feet, being subtended by a chord bearing of North 73 degrees 49 minutes 52 seconds East, a distance of 78.60 feet to a calculated point; 3) **THENCE** North 42 degrees 25 minutes 49 seconds East a distance of 111.46 feet to a calculated point along the southerly right-of-way of Laureate Way, a variable width right-of-way as shown on Map Book 56, Page 19; **THENCE** with a new line along the right-of-way of Laureate Way, South 47 degrees 30 minutes 27 seconds East a distance of 60.00 feet to a calculated point along the southerly line of City of Kannapolis (now or formerly as described in Deed Book 11615, Page 182; **THENCE** with the line of the City of Kannapolis the following three (3) courses and distances: 1) South 42 degrees 25 minutes 49 seconds West a distance of 111.49 feet to a calculated point; 2) **THENCE** along a curve to the right having an arc length of 78.61 feet, and a radius of 200.00 feet, being subtended by a chord bearing of South 23 degrees 49 minutes 52 seconds West, a distance of 97.25 feet to a calculated point; 3) **THENCE** South 64 degrees 15 minutes 44 seconds West a distance of 171.53 feet to a calculated point along the southerly margin of Chestnut Avenue, a variable width right-of-way as shown on Map Book 56, Page 19; **THENCE** with a new line with Chestnut Avenue, North 24 degrees 17 minutes 51 seconds West a distance of 50.00 feet to the **POINT OF BEGINNING**, and having an area of 0.429 acres, more or less.

Containing 0.43 Acres as shown on a map prepared by GFI Geospatial, Inc. and designated as Project #22-06481.

Section 2. That a public hearing on the question of such closing the above described right-of-way will be held at 401 Laureate Way, Kannapolis, North Carolina, at 6:00 o'clock p.m., on the 19th day of June, 2024 at which time plans for such closing will be explained and all persons will be given an opportunity to be heard.

Section 3. That notice of said closing and public hearing shall be given by publication, mailing and posting as required by law.

Adopted this 20th day of May 2024.

ATTEST:

Charlotte Bell
Charlotte Bell
City Clerk

William D. Hancock
William D. Hancock
Mayor



Kannapolis
Agenda Staff Report
June 10, 2024

To: Mayor and City Council
From: Mike Legg, City Manager, Kristen Jones, Assistant to the City Manager
Subject: **PUBLIC HEARING** - Proposed Budget for FY 2024-2025

Action Requested by City Council

Conduct a Public Hearing. No Action Required.

Required Votes to Pass Required Action

Presentation Only. No Action Required

Background

A copy of the recommended budget was presented to City Council on May 20, 2024 and was made available for public inspection at the City of Kannapolis Administration Offices. A Public Hearing on the recommended budget for Fiscal Year 2024-2025 has been scheduled for 6:00 P.M. on June 10, 2024. State law requires that "before adopting the Budget Ordinance, the Board shall hold a Public Hearing at which time any persons who wish to be heard on the budget may appear" (G.S. 159-12) (b). City Council may elect to discuss the budget at this meeting and may set additional budget work sessions. City Council will be asked to adopt the budget at the June 24, 2024 City Council meeting.

Fiscal Implications

Click here to view the entire [Proposed Budget for Fiscal Year 2024-2025](#). A brief presentation will precede the public hearing.

Policy Issues

N/A

Legal Issues

State law requires that "before adopting the Budget Ordinance, the Board shall hold a public hearing at which time any persons who wish to be heard on the budget may appear" (G.S. 159-12)(b).

Recommendations and Alternate Courses of Action

Conduct a Public Hearing. No action at this time. The adoption of the Budget Ordinance for FY 2024-2025 will be presented at the June 24, 2024 City Council meeting for City Council's consideration.

Attachments

1. Notice_PH_Budget FY24-25



**CITY OF KANNAPOLIS AVAILABILITY OF
THE RECOMMENDED BUDGET FOR THE FISCAL YEAR
BEGINNING JULY 1, 2024 AND ENDING JUNE 30, 2025 AND
NOTICE OF A PUBLIC HEARING THEREON**

SECTION 1. The recommended budget of the City of Kannapolis for the fiscal year beginning July 1, 2024 was this day, May 20, 2024 submitted by the City Manager to the City Council, and filed with the City Clerk where it shall remain for public inspection for at least ten days from this date.

SECTION 2. A copy of said budget shall be made available to the news media in the county.

SECTION 3. This Notice shall be published in at least one newspaper published in the county and shall serve as notice that the recommended budget has been presented to the City Council, that a copy of same is on file for public inspection at the Kannapolis City Hall Administration Offices located at 401 Laureate Way, Kannapolis, North Carolina, as well as the City of Kannapolis website www.kannapolisnc.gov. Notice of the time and place of the public hearing as set forth below.

SECTION 4. A public hearing shall be held by the City Council at the Kannapolis City Hall Council Chambers located at 401 Laureate Way, Kannapolis, North Carolina, on Monday, June 10, 2024, at 6:00 P.M., or as soon thereafter as the matter may be heard, at which time any persons who wish to be heard on the budget may appear.

SECTION 5. Anyone who requires an auxiliary aid or service for effective communication, or a modification of policies or procedures to participate in a program, service, or activity of the City of Kannapolis, should contact the office of Heather James, Human Resource Director, by phone at 704-920-4322 or by email at hjames@kannapolisnc.gov as soon as possible but no later than 48 hours before the scheduled event

Bridgette Bell, MMC, NCCMC
City Clerk

Publication Instructions:

Publish Sunday, May 26, 2024

Block Ad

Contact Bridgette Bell at 704-920-4303 or bbell@kannapolisnc.gov



Kannapolis
Agenda Staff Report
June 10, 2024

To: Mayor and City Council

From: Richard Smith, Planning Director, Wilmer Melton, Assistant City Manager

Subject: **APPOINTMENT** - Appoint alternate Staff Liaison to the Technical Coordinating Committee (TCC) of the Cabarrus-Rowan Urban Metropolitan Planning Organization for the remainder of year 2024.

Action Requested by City Council

Appoint Elizabeth Hassenfritz to serve as alternate on the TCC.

Required Votes to Pass Required Action

Majority Present at Meeting

Background

Each year, the North Carolina Department of Transportation (NCDOT) requires that the Metropolitan Planning Organization (MPO) supply a list of current Technical Advisory Committee (TAC) and Transportation Coordinating Committee (TCC) representatives along with their alternates. The TAC and TCC appointees must be available to attend regular monthly meetings and also participate on regional transportation planning committees.

At present, Richard Smith, Planning Director, is serving as the TCC representative and Scott Kaufhold, was appointed to serve as the TCC alternate. With Mr. Kaufhold's retirement, and the promotion of Elizabeth Hassenfritz to Director of Engineering, it is recommended to appoint Ms. Hassenfritz to serve as the TCC alternate.

Fiscal Implications

None

Policy Issues

None

Legal Issues

None

Recommendations and Alternate Courses of Action

1. Motion to appoint Elizabeth Hassenfritz to serve as alternate on the TCC (Recommended).
2. Appoint another Staff Liaison to serve as an alternate to the TCC.
3. Defer action to a future meeting.

Attachments

None



Kannapolis

Agenda Staff Report
June 10, 2024

To: Mayor and City Council

From: Eddie Smith, Deputy City Manager, Tracy Winecoff, Fire Chief, Kristin Jones, Assistant to the City Manager

Subject: **BUDGET AMENDMENT** - Appropriating cash reserves for the purchase of a fire engine and authorize the City Manager to execute the contract.

Action Requested by City Council

Approve the budget amendment that appropriates cash reserves for the purchase of a fire engine and authorize the City Manager to execute the contract.

Required Votes to Pass Required Action

Majority Present at Meeting

Background

The Fire Department has requested the need for an engine replacement. This has been identified as a crucial apparatus replacement since the next apparatus to be replaced is currently 27 years old. The problem with this type of purchase is the extraordinarily long lead time. In most cases, the lead time is around 3–4 years. It appears that this is industry-wide issue.

Over the weekend, the Fire Department was made aware of an apparatus that is currently being built by one of the leading manufacturers, Seagrave, which meets the specifications needed by Kannapolis Fire Department. The build-out time for this apparatus is approximately 500 days since it is already in production. In order to secure this apparatus, staff is requesting a contract and budget amendment to take place to secure the funding/purchase order. There are other entities interested in the purchase as well and Seagrave representatives have indicated that the first one that executes the contract will secure the apparatus.

An engine and a ladder have been identified as a need in the City's 5- year financial plan. It was expected that these apparatuses would take up to 3–4 years for delivery, so financing options would be considered at the time of delivery. It is assumed short term financing would be most appropriate for future capital outlay needs as identified in the five-year plan. There is currently a placeholder of \$3 million for each fiscal year from FY 26-FY 29 to finance short term (estimated debt services ~\$450,000).

Staff is proposing to go ahead and enter into the contract with Seagraves based on the necessary budget amendment. This will secure the build-out of this apparatus with a short-term funding option via fund balance. Actual payment for the apparatus won't take effect until delivery (i.e. 500 days), so at that time, the City will review funding mechanisms to pay for this. Either funding can be absorbed into the operating budget (as what is anticipated for FY 25 capital outlay, cash reserves or short term financing as planned).

Fiscal Implications

An appropriation of fund balance is needed in the interim to fund this apparatus purchase. At the time of delivery (approximately 500 days), staff will determine the appropriate means for funding (either short term financing or cash reserves).

Policy Issues

None.

Legal Issues

In order to comply with pre-audits on contracts, a budget amendment to identify funding is necessary.

Recommendations and Alternate Courses of Action

- 1. Motion to approve the budget amendment which appropriates cash reserves for the purchase of a fire engine and authorize the City Manager to execute a purchase contract with Seagrave (Recommended).**
2. Take no action.

Attachments

1. PE78L46 (R9-SOCK,SOCL) (APR-DWG) Model (1)
2. Marauder Pumper Specifications - 6-7-24
3. Fire Apparatus

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
00-03-230A

Payment Terms - "P" Progress Payments, 25%, 25%, 25%, 20%, 5%

PAYMENT TERMS

Progress payments shall be made as follows: The first payment shall be 25% of the Contract price, made at arrival at the Factory of the major components. The second payment shall be 25% of the Contract price, made at chassis laydown. The third payment shall be 25% of the Contract price, made at completion of the chassis. The fourth payment shall be 20% of the Contract price, made upon completion of the Final Inspection at the Factory, prior to shipment. The fifth and final payment shall be 5% of the Contract price and shall be made upon delivery to and acceptance by the Purchaser.

One (1)
00-04-0015

Federal & State Regulations, NFPA Standards & Import Tariffs

FEDERAL & STATE REGULATIONS, NFPA STANDARDS & IMPORT TARIFFS

In the event that any applicable Federal or State Regulations (DOT, FMVSS, EPA, etc.), National Fire Protection Association Standards or import tariffs which are enacted during the course of this contract, and which requires a change in the contract specifications and purchase price in order for the Apparatus and Equipment to comply with such regulation, the parties will execute a change order describing the change in the specifications and increasing the purchase price by an amount equal to the increase in the costs of producing the Apparatus and Equipment.

One (1)
00-04-0120

Intent of Specifications

INTENT OF SPECIFICATIONS

It is the intent of these specifications to cover the design, manufacture and delivery to the purchaser of a complete fire apparatus equipped as specified herein. These specifications include the general requirements of design, material content and construction as well as certain equipment that shall be provided by the contractor. Not all details of the design, material content and construction of the fire apparatus are herein specified. Any such design, material content and construction not specified herein are left to the sole discretion of the seller contractor.

One (1)
00-04-01A0

Compliance with NFPA 1901

COMPLIANCE WITH NFPA 1901

The National Fire Protection Association Standard "NFPA 1901 - Standard for Automotive Fire Apparatus - Current Edition" (hereinafter referred to as NFPA 1901) in effect at the time of the purchase shall be used as a reference and its requirements shall be met by the apparatus manufacturer. The apparatus shall be constructed in accordance with federal and state laws at the time of bid. Any federal, state or NFPA amended changes that shall affect the cost of producing said apparatus shall be charged to the purchaser. Mandatory minor apparatus equipment as stated in the applicable paragraphs of the NFPA standard shall not be provided unless specifically stated and listed in purchaser's written specifications.

Any and all references to "NFPA 1901" within this document shall refer to the current edition of NFPA 1901 in effect at the time of the purchase.

One (1)

Purchaser's NFPA 1901 Responsibilities

10139-0008

06/07/24

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

00-04-01B0

PURCHASER'S NFPA 1901 RESPONSIBILITIES

In accordance with NFPA 1901, current edition, it shall be the responsibility of the purchaser to specify the following details of the apparatus:

- Its required performance, including where operations at or above elevations of 2000 ft. or on grades greater than 6 percent are required.
- The maximum number of firefighters to ride within the apparatus.
- Specific electrical loads that are to be part of the minimum continuous electrical load as defined in current edition of NFPA 1901 at the time of bid.
- Any hose, ground ladders, or equipment to be carried by the apparatus that exceed the minimum requirements of the NFPA 1901 standard in effect at the time of the bid. Equipment weight and location on the apparatus are the responsibility of the purchaser as a prerequisite of defining the loaded vehicle's vertical center of gravity for rollover stability calculations, when required.

One (1)

00-04-023E

Acquaintance with Specifications - meets Requirements

ACQUAINTANCE WITH SPECIFICATIONS

Seagrave Fire Apparatus LLC and its Sales Representatives have reviewed your bid specifications. It is our opinion that the fire apparatus as depicted in this proposal meets or exceeds the requirements of the bid specifications. The purchaser is required to review our Contractor's Specifications contained herein. Because of the intricacies in fire apparatus design, engineering and manufacturing, the Contractor's Specifications, along with any mutually approved changes, shall prevail in the event of a discrepancy between the purchaser's original bid specifications and the contractor's specifications.

One (1)

00-04-0430

Single Source Manufacturer - SFA Custom Chassis

SINGLE SOURCE MANUFACTURER

Seagrave is a single source fire apparatus manufacturer. A single source manufacturer is defined as a manufacturer who designs, engineers and manufactures the entire apparatus in the factory of the bidder. The use of commonly incorporated components such as the diesel engine, the transmission, the pump, lighting fixtures, etc. is acceptable. However, calling the cab/chassis/drivetrain or the outriggers/torque box/aerial device a "component" shall not be acceptable. Single source warranty and service provision from Seagrave Fire Apparatus, LLC and its distributors, sales representatives and service network shall be provided to insure parts availability and undivided warranty responsibility. There shall be no exceptions to these conditions.

One (1)

00-04-1100

Third Party Manufactured Products - Discontinuance Policy

DISCONTINUANCE POLICY

The apparatus manufacturer furnishes and installs components which are manufactured by 3rd Party Vendors. From time to time, these products are either changed or discontinued by the manufacturer. The apparatus manufacturer reserves the right to replace a discontinued 3rd Party Vendor manufactured component with an equivalent model.

One (1)

Standard Placement of Components

10139-0008

06/07/24

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

00-04-1110

STANDARD PLACEMENT OF COMPONENTS

Any deviation from the apparatus manufacturer's standard placement shall incur additional charges.

Five Hundred (500)

00-04-5710

Completion Date

COMPLETION DATE

Barring any significant change in our current backlog of orders, and delays due to strikes, war or international conflict, failures to obtain materials, or other causes beyond our control not preventing, the apparatus and equipment detailed in the attached specification shall be delivered to you within approximately **Five Hundred (500) Calendar Days** after receiving the complete order and signed approval drawing. It shall be understood and agreed that changes requested after the order placement and the resulting signed change orders and approval drawings, if approved, after the order has been released to Engineering, shall constitute a valid cause for production delay and without penalty to the contractor.

One (1)

00-04-6400

No Performance Bond Required

One (1)

00-04-7000

Approval Drawings

APPROVAL DRAWINGS

Following the acceptance of a complete and approved order, three (3) sets of engineering, blueprint type drawings, specifically for this apparatus, shall be provided by the manufacturer and shall be approved by the Fire Department before construction begins. Both the Fire Department and the manufacturer's representative shall have a copy of this drawing. It shall become part of the total contract. These drawings shall be drawn to scale on a CAD system to assure an accurate and professional drawing. The drawing shall show five (5) views of the vehicle (front, rear, both sides and top). The drawings shall show the wheelbase and overall dimensions of the apparatus, final compartment sizes and features, booster tank position, the location of all emergency warning equipment, work and scene lights.

One (1)

00-04-7100

Change Orders

CHANGE ORDERS

To ensure the proper engineering and construction of the purchaser's custom fire apparatus in a timely manner, the contractor shall consider the order final and complete at placement of the order. Change orders requested after the order placement are discouraged. It shall be understood and agreed that any changes, if approved, after the order has been released to Engineering, shall constitute a valid cause for production delay and without penalty to the contractor.

One (1)

00-04-811C

Pre-Construction Conference, Travel Included

PRE-CONSTRUCTION CONFERENCE

One (1) "Pre-Construction" conference trip for representatives of the purchaser shall be included in the

10139-0008

06/07/24

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

bid. The conference shall be held at a company facility or an authorized representative's facility during normal business hours, Monday - Friday. All cost of transportation, meals and lodging shall be included. A distributor or sales representative shall accompany the purchaser on the trip. The conference shall be held prior to the commencement of any work being done on the apparatus. Factory sales and engineering personnel shall participate in the conference as needed to ensure that the apparatus fulfills all the requirements of the accepted bid. Authorized representatives from both the purchaser and manufacturer shall approve and sign any changes made during these meetings prior to the commencement of any work being done on the apparatus.

It is understood and agreed that delays beyond thirty (30) days of contract approval for Pre-Construction conference changes in specifications shall be cause for delay in delivery.

Seven (7)
00-04-813Z

Number of Fire Depart Representatives Attending Pre-Construction Conference (Ea)

Seven (7) fire department representatives shall attend the Pre-Construction Conference.

One (1)
00-04-8240

In-Process Digital Pictures

DIGITAL PICTURES

In-process digital pictures shall be taken of the apparatus during the manufacturing process. Depending upon the type of apparatus, the pictures may include any or all of the following: cab interior and exterior, pump operators stand, body and aerial device.

One (1)
00-04-831C

Final Inspection, Travel Included

FINAL INSPECTION TRIP

One (1) "Final" inspection trip for representatives of the purchaser shall be included in the bid. The inspection shall take place at a Company facility or an authorized representative's facility of the Company's during normal business hours, Monday - Friday. The selection of the inspection location shall be done at the sole discretion of the Company. The reasonable and customary cost of transportation, meals and lodging shall be included. An authorized distributor or manufacturer's sales representative may accompany the Purchaser on the inspection trip.

Four (4)
00-04-834Z

Number of Fire Department Representatives Attending Final Inspection (Ea)

Four (4) fire department representatives shall attend the Final Inspection.

One (1)
00-04-8400

Pre-Delivery Road Trip and Final Factory Checklist

PRE-DELIVERY ROAD TRIP AND FINAL FACTORY CHECKLIST

Prior to delivery, the completed apparatus shall be thoroughly inspected by the factory. This inspection shall include a road test of the apparatus. During the factory inspections and road testing, a checklist shall be utilized by factory personnel to document the inspection and road test results. The checklist shall include:

- Documentation of the make, model and serial numbers of all major components such as the engine, transmission, pump, axles, etc.
- Complete, comprehensive operational check of all chassis/drive train components and fluid levels.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

- A comprehensive review of the entire exterior and interior of the apparatus for fit and finish, checked against the customer's order specifications, and any ensuing change orders.
- A thorough test of all driving systems under actual highway and city driving conditions.

One (1)
00-04-8464

Final Delivery - Zone 4

DELIVERY

The fire apparatus shall be delivered over the road and under its own power to insure proper break-in of all driving components while still under warranty. Rail or truck freight shipment of the apparatus is not acceptable.

One (1)
00-04-8510

Delivery shall be to an area located in Zone 4.

Familiarization - Pumpers/Rescues

FAMILIARIZATION

An experienced and qualified distributor or sales representative shall familiarize Fire Department personnel (as designated by the authority in charge) in the proper operation, care and maintenance of the apparatus delivered.

The representative must be a qualified, trained agent of the local authorized distributor or sales representative, or a direct employee of the manufacturer of the apparatus.

The familiarization period shall consist of three (3) sessions over a period of three (3) consecutive days, during the normal work week (Monday - Friday). The schedule of the instruction sessions shall be arranged by mutual agreement of the Fire Department and the delivering authority. The number, length and time of the sessions may vary due to the nature of the apparatus and availability of attendees and must be approved in advance. The balance of any time remaining in a session may be devoted to minor adjustments or corrections to the apparatus for items which may have developed while in transit from the factory.

One (1)
00-05-013A

General Design Requirements - S/S Custom Cab, S/S Body

GENERAL DESIGN REQUIREMENTS

The specified apparatus shall be a custom cab type; designed, engineered and manufactured specifically for the fire service in North America. The apparatus meets or exceeds the requirements of the NFPA 1901, current edition, in all respects.

Seagrave's deluxe custom cab chassis shall be provided. It incorporates an all steel cab for strength, durability and safety. The cab and body sheet metal shall be constructed of stainless steel, no exception. The Seagrave cab incorporates a protective safety-cage design that totally surrounds and protects the seat belted driver, officer and crew. The safety-cage, composed of heavy gauge stainless steel, makes the Seagrave deluxe cab an extremely strong cab.

One (1)

Gross Vehicle Weight - with Certificate at Delivery

10139-0008

06/07/24

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

00-05-0210

GROSS VEHICLE WEIGHT

The manufacturer shall be responsible for proper weight distribution upon the chassis and axles. The apparatus when loaded, shall have not less than 25% nor more than 45% of the weight on the front axle and not less than 55% nor more than 75% on the rear axle. A certified weight certificate showing weights on the front axle, rear axle and total weight for the completed apparatus with the water and fuel tanks full, but without personnel, equipment and hose shall be provided at the time of delivery.

In accordance with NFPA 1901, it shall be the responsibility of the purchaser to notify the manufacturer in the purchaser's specification of any hose, ground ladders, or equipment to be carried by the apparatus that exceeds the minimum requirements of the NFPA 1901 standard in effect at the time of the bid.

One (1)

00-05-032W

Customer Declared Equipment Weight - 1251 To 2000 LB Evenly Distributed

CUSTOMER DECLARED EQUIPMENT WEIGHT

The customer declared equipment weight shall be from 1251 to 2000 pounds. This weight shall be evenly distributed.

One (1)

00-05-0420

Vehicle Performance Analysis Report

VEHICLE PERFORMANCE ANALYSIS

A performance analysis report shall be run on the vehicle, as ordered, using computer software to determine top speed, gradeability, optimum shift points and acceleration on various grades. The report shall be delivered with the completed vehicle, but shall be available prior to engineering of the vehicle.

One (1)

00-05-2000

Vehicle Performance Analysis Report shall be handled through the EDR and sales change progress. General Construction, Quality and Workmanship

GENERAL CONSTRUCTION, QUALITY AND WORKMANSHIP

The design and construction of the apparatus shall embody standard automotive heavy vehicle engineering practices. The apparatus shall be designed, engineered and constructed with due consideration for the severe service nature of the fire service. All parts of the apparatus shall be installed in accordance with the OEM specifications.

Distribution of load between the front and rear axles shall be engineered so that all specified equipment, including a filled water tank, full complement of personnel and fire hose shall be carried without damage to the apparatus. Weight balance and distribution shall be in accordance with the recommendations of the National Fire Protection Association and current standard automotive practices.

All welding personnel that shall be utilized in the fabrication and construction of structural components of the apparatus chassis, body and aerial device shall hold a valid certificate from the AWS - American Welding Society.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

The apparatus shall be designed to conform to applicable ANSI and NFPA 1901 standards. The following design criteria shall be applicable to this specification to the extent specified herein:

- American Society for Testing Materials (ASTM) - A-36, Specification for Structural Steel
- Society of Automotive Engineers, Inc. (SAE) - SAE Handbook
- American Welding Society (AWS) - AWS014.4-77 Classification and Application of Welded Joints for Machinery and Equipment
- American Society for Non-Destructive Testing (ASNT)

All sensitive components shall be protected against adverse weather conditions. Any exposed metal surface which is not painted or otherwise coated shall have a bright finish. Corrosion protection shall be provided between any dissimilar metals joined in the construction of this apparatus.

One (1)
00-05-2110

NFPA 1901 Stepping Surface Certification

STEPPING SURFACE CERTIFICATION

A certification that all materials used for exterior surfaces designated as stepping, standing and walking areas, all interior steps and all interior floors meet the slip resistance requirements of the applicable edition and section of NFPA 1901 shall be provided with the delivery documentation.

One (1)
00-05-300S

Pump Test and Certification - Third Party

PUMP TEST AND CERTIFICATION

The fire pump shall be third party tested at the apparatus manufacturer's facility and shall conform to NFPA requirements and standards. Copies of all tests and the manufacturer's record of pump construction details shall be provided with the delivery documentation.

One (1)
00-05-4000

Performance Requirements and Test - NFPA

PERFORMANCE REQUIREMENTS AND TEST - NFPA

A road test shall be conducted with the apparatus loaded per NFPA recommendations (unless otherwise specified) and a continuous run of ten (10) miles or more shall be made during which time the apparatus shall show no loss of power or overheating. The transmission drive shaft or shafts and rear axles shall run quietly and be free from abnormal vibration or noise throughout the operating range of the apparatus.

The apparatus must be capable of accelerating to 35 mph from a standing start within 25 seconds on a level highway without exceeding the maximum governed rpm of the engine.

The fully loaded vehicle shall be capable of obtaining a minimum top speed of 50 mph on a level highway with the engine not exceeding its governed rpm (full load).

The apparatus shall be able to maintain a speed of 20 mph on any grade up to and including 6%.

The service brakes shall be capable of stopping the fully loaded vehicle in 35 feet at 20 mph on a level highway.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
10-00-0010 The apparatus shall be tested and approved in accordance with NFPA standard practices.

Marauder S/S Tilting Cab - Side Mt. Pumper

GENERAL

Chassis shall be a new, heavy-duty, custom fire apparatus design built expressly for the fire service. All standard components that have not been specified shall be provided.

Chassis shall be designed, engineered and built by the bidder and be the manufacturer's first line custom chassis.

The chassis shall be suitable for heavy duty service with all components having adequate strength and capacity for the intended load to be sustained and the type of service required.

One (1)
10-00-9910 **Wheelbase 182.50"**

WHEELBASE

The wheelbase shall be: **182.50 inches**

Five (5)
10-00-9920 **Seating Capacity**

SEATING CAPACITY

The safe seating capacity of the cab for properly belted passengers shall be: Five (5)

One (1)
10-00-9935 **Approach - Departure Angles**

APPROACH - DEPARTURE ANGLES

An angle of approach and an angle of departure of at least 8 degrees shall be maintained at the front and the rear of the vehicle when it is loaded to the estimated in-service weight, as defined by NFPA 1901 current edition.

One (1)
10-00-9940 **Gross Vehicle Weight Ratings 47,000#**

GROSS VEHICLE WEIGHT RATINGS

Front Vehicle Weight Rating shall be: [**20,000**]

Rear Vehicle Weight Rating shall be: [**27,000**]

Gross Vehicle Weight Rating shall be: [**47,000**]

One (1)
10-10-1200 **Frame - 10.25"/12.5" Vari Sect. Rail, 2.6016m RBM (180-219" Wheel Base)**

FRAME

The chassis frame shall be built with two variable section steel channels with a minimum of six (6) cross

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

members. Pump shall not be counted as a cross member. The side rails shall be of heat treated steel with tapering measurements. Each rail shall have a section modulus of 21.7, a minimum elastic limit of 120,000 PSI and a minimum resisting bending moment of 2,601,600 inch pounds. The cross members shall be of heavy duty, fabricated, all-welded design, made out of a minimum of 50,000 psi material. The frame and cross members shall be a bolted assembly utilizing 5/8" flange head grade eight bolts and Spiralock® flange nuts. Spiralock® nuts shall be used exclusively in the frame assembly for mounting spring hangers, steering gear, engine, transmission, etc. because of their ability to maintain a constant torque tension and prevent vibration loosening. Their design shall provide for an even thread load distribution over the bolt, increased fatigue strength and life, and clamping torque. All holes made must be used and any holes in the frame for options not required on this chassis are not acceptable.

Frame rails less than or equal to 480" in length shall receive a duo-coat primer: an E-coat followed by a powder coating. This duo-coat process meets 1000 hours of salt spray testing per ASTM B117 test procedure. Frame rails greater than 480" in length shall be powder coated only. The inside of the rails shall be hand re-sprayed to insure coverage. This process meets 240 hours of salt spray testing per ASTM B117 test procedure.

One (1)
10-10-5010

Bumper - 10.25" High (NYC Style) Mitered Corners, LINE-X/Paint

BUMPER

A heavy duty 10-1/4" high x 1/4" thick steel bumper shall be mounted to the front of the chassis and be fabricated in the factory of the bidder. The bumper shall be channel shaped with 2" flanges and its ends shall be angled 45 degrees for a distance of 5".

As part of the bumper extension, a second formed channel with 2" flanges shall be provided directly behind the full width of the flat portion of the bumper. The bumper extension support shall be of channel (minimum 9-7/16" x 3" x 3/8") construction, bolted to the chassis frame stub. A 3/16" aluminum tread plate gravel pan (deck) contoured to fit just below the front face of the cab and just below the upper bumper flange shall be provided, **coated in Black Linex**. The gravel pan shall not be fastened to the top flange of the bumper.

A black LINE-X finish shall be applied to the exterior face of the bumper. The interior face shall be painted to match the lower cab color.

(Please reference the picture and for concept.)



Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
10-12-0024

Bumper Extension - 24"

24" BUMPER EXTENSION

A bumper extension shall be installed at the front of the cab. The front of the bumper shall be approximately 24" from the front face of the cab. A gravel pan made of 3/16" aluminum tread plate shall be installed between the front bumper and the cab. The bumper extension shall be designed and constructed so that the apparatus can be pulled by the extension.

One (1)
10-12-00A0

Bumper Extension shall be Lifiable & Towable

LIFTABLE AND TOWABLE BUMPER EXTENSION

The bumper extension shall be designed and constructed so that the apparatus can be lifted and towed by the extension.

One (1)
10-12-0140

Front Bumper Trough - Center, 24" Extension w/ 2 Centered Air Horns

FRONT BUMPER TROUGH - CENTER

A bumper trough shall be installed in the center of the bumper extension. It shall have interior dimensions of 17.75" wide x 20.00" long x 13" deep. It shall be constructed of smooth aluminum and be easily removable from the gravel pan. Drain holes shall be provided.

One (1)
10-12-5400

Dri-Dek® - Front Bumper Compartment (Ea)

Black Dri-Dek® shall be provided in the bottom of one (1) front bumper compartment(s). Ramped edging shall not be included.

One (1)
10-12-5990

Retaining Strap - Seat Belt Paddle Latch Buckle f/ Front Bumper Trough

RETAINING STRAP

A black polypropylene strap with a seat belt paddle latch buckle shall be provided for the hose well. It shall be permanently attached to the gravel pan on the front and rear of the trough and shall secure in the center. Looped ends of the strap shall be secured to the apparatus with footman's loops.

One (1)
10-12-033A

Front Bumper Trough - Right, 24" Extension w/ Suction Swivel

FRONT BUMPER TROUGH - RIGHT

A bumper trough shall be installed on the right side of the bumper extension inboard of the front suction. It shall have interior dimensions of 15.25" wide x 16.25" long x 13" deep. It shall be constructed of smooth aluminum and be easily removable from the gravel pan. Drain holes shall be provided.

One (1)
10-12-5400

Dri-Dek® - Front Bumper Compartment (Ea)

Black Dri-Dek® shall be provided in the bottom of one (1) front bumper compartment(s). Ramped edging shall not be included.

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1) **Retaining Strap - Seat Belt Paddle Latch Buckle f/ Front Bumper Trough**

10-12-5990

RETAINING STRAP

A black polypropylene strap with a seat belt paddle latch buckle shall be provided for the hose well. It shall be permanently attached to the gravel pan on the front and rear of the trough and shall secure in the center. Looped ends of the strap shall be secured to the apparatus with footman's loops.

One (1) **Recessed Notch in Front Bumper - LS, Full, for Q2B**

10-12-152F

RECESSED NOTCH IN FRONT BUMPER FOR LEFT SIDE Q2B SIREN

A recessed notch shall be cut into the left side of the front bumper and gravel pan for a Q2B siren. **The notch shall be painted job color red.**

One (1) **Bumper Extension Not a Step - Sign, FAMA26 No-Step**

10-12-8010

FAMA26 NO-STEP SIGN

In accordance with NFPA 1901 chapter 15.7.1.6, a FAMA26 "No-Step" sign shall be attached to the top of the gravel pan. The sign reads: "Fall Hazard-Railings NOT provided. Surface may be slippery - Not intended for stepping, standing or walking. Fall will injure or kill".

One (1) **Front Tow Hooks - (2) Painted, Below Bumper**

10-20-0100

FRONT TOW HOOKS

Two (2) painted tow hooks shall be furnished below the bumper securely attached to the bumper support. They shall be painted to match the frame/undercarriage.

One (1) **Rear Tow Loops - (2) Painted, Under Step**

10-22-0100

REAR TOW LOOPS

Two (2) painted rear tow loops shall be provided, welded to the underside of the rear step subframe. The loops shall be rated at 9000 pounds straight pull. They shall be painted to match the frame/undercarriage.

One (1) **Power Steering Installation**

10-25-0100

STEERING

A heavy duty power steering system shall be provided. The hydraulic pump shall be engine gear driven. The steering gear "box", or fixture that the gear is mounted to, shall be fabricated in the factory of the bidder. It shall be a welded assembly constructed of 3/8" formed steel with a 3/4" face plate. Vertical gussets shall be provided between the face plate and the frame mounting plate to insure against frame flex while the vehicle is stationary.

One (1) **Auxiliary Cylinder - Power Steering**

10-25-1300

AUXILIARY CYLINDER FOR POWER STEERING

10139-0008

06/07/24

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
10-25-2000

An auxiliary power assist cylinder shall be provided in the power steering system.

Chassis Alignment

CHASSIS ALIGNMENT

The chassis frame rails shall be cross checked for length and square. Front and rear axles shall be laser aligned. The front axle shall be aligned at the manufacturer's facility.

One (1)
10-28-0100

Air System - Chassis, Two Axle

AIR PIPING

The service brake system shall be full air type. The system is to meet or exceed current FMVSS-121 requirements. Other components or accessories shall be as follows:

- Pressure protection valve
- Quick build up system
- Engine mounted, gear driven air compressor
- Bendix Model E-6 dual circuit brake treadle valve
- Two (2) air pressure gauges on cab dash with indicator light and buzzer
- Air reservoirs with capacity to meet FMVSS-121

The Bendix SR-7 valve, in conjunction with the double check valve, shall enable modulation of the spring brakes in the event of a service brake air system failure to allow the vehicle to be stopped. Brake piping shall consist of SAE approved, DOT rated "Synflex" reinforced colored nylon tubing. The lines shall be wrapped in a heat protective loom where necessary in the chassis. Braided hoses shall provide flexibility between axle and frame connections. Brake air lines shall be color-coded. Air inlet to air brake compressor shall be from the engine intake manifold, i.e. after transition through the engine air cleaner. A flexible stainless steel braided Teflon hose and/or copper tubing shall be provided from the compressor to the air dryer. Fittings shall be brass.

The parking brake system is to be the spring set type operated by control valve on driver's console. A brake indicator light shall also be provided.

Two (2)
10-28-0410

Main Air System Drain Valve(s) - Cable Controlled

MAIN AIR SYSTEM DRAIN VALVE(S)

The drain valve(s) on the main air system reservoirs shall be cable controlled. The pull cable shall be extended to the side of the truck with a loop provided at its end. It shall be labeled: Drain Daily.

One (1)
10-28-0600

Wet Tank

WET TANK

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

A 1250 cubic inch wet air tank shall be provided with the air system.

One (1)
10-28-0610

Wet Tank Drain Valve - Cable Controlled

WET AIR RESERVOIR DRAIN CONTROL

A cable controlled drain valve shall be provided on the wet tank. The pull cable shall be extended to the side of the truck with a loop provided at its end. It shall be labeled: Drain Daily.

One (1)
10-28-3020

Emergency Spring Brake Release

EMERGENCY SPRING BRAKE RELEASE

An emergency spring brake release valve shall be provided. It shall be designed to release the spring set parking brake when the normal air brake system is disabled and allow movement of the vehicle in an emergency or for towing. The switch to release the brake shall be installed on the cab dash. A guard shall be installed over the switch to prevent accidental activation.

One (1)
10-28-2810

Isolated Air Reservoir - 1250 Cubic Inch, for Emergency Spring Brake Release

ADDITIONAL AIR RESERVOIR

One additional 1250 cubic inch air reservoir shall be provided and installed. This extra reservoir shall be isolated and be plumbed with an 85 PSI pressure protection valve on the reservoir supply side.

One (1)
10-28-290Q

Isolated Air Tank Drain Valve(s) - Cable Controlled (Ea)

One (1) drain valve(s) on the isolated air reservoirs shall be cable controlled. The pull cable(s) shall be extended to the side of the truck with a loop provided at its end. They shall be labeled: Drain Daily.

One (1)
10-28-3120

Emergency Brake - Officer

OFFICER'S EMERGENCY BRAKE CONTROL

An additional emergency brake control shall be provided on the right hand side of the cab dash in easy reach of the officer. Control shall actuate the rear axle spring brakes only. In addition, the control shall disable the driver's accelerator pedal and shift the transmission into neutral. Brake control shall be a heavy duty toggle type electrical switch equipped with a spring loaded safety cover to prevent accidental brake engagement. Cover shall be red in color. Control switch shall have an identification label and a warning that it is "For Emergency Use Only". A red LED light shall illuminate when the brake is activated,

One (1)
10-28-3820

Air Dryer - Meritor WABCO System Saver 1200

AIR DRYER

A Meritor WABCO 1200 System Saver air dryer shall be installed in the air brake system. It shall have a minimum capacity of 30 cfm air flow. Dryer shall be equipped with an integral, automatic, 12 volt heated moisture ejector which is thermostatically controlled. System shall include a pressure controlled check valve installed between the wet tank and the secondary air reservoir.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
10-28-48PP

Aux Air Outlet - Shutoff Valve, DS Pump Panel

AUXILIARY AIR OUTLET

There shall be a 1/4" female air outlet with NPT plug mounted on the driver's side pump panel. A 1/4 turn shutoff valve shall be located adjacent to the outlet. The outlet shall be connected to the apparatus air reservoir tank.

One (1)
11-00-360A

Front Axle - MFS, 20.0K with Disc Brakes & 4" Spring Suspension

FRONT AXLE

A Meritor MFS front axle with a 20,000 pound rating shall be provided. It shall include composite low-friction bushings with diagonal grooves to better distribute lube, camber settings of +1/4 degree for both left and right sides to help improve tire life and a large diameter, heat treated kingpin with a lube retaining seal.

DISC BRAKES

The front axle shall be provided with Meritor #EX225H air disc brakes with internal automatic adjustment, sealed synchronized twin pistons and robust sealing of slide pins for environmental protection. The #EX225H air disc brakes shall have 17" rotors and a fully sealed lever mechanism with variable mechanical ratio. A visual indicator of brake wear shall also be provided.

FRONT SEMI-ELLIPTICAL SPRING SUSPENSION, 4" X 52"

The front suspension shall be semi-elliptical 4" x 52" constant rate type springs with a military wrapped eye. The correct material, spring length, width, thickness and number shall be provided to match the leaf spring rating with that of the gross axle weight rating of the vehicle.

SHOCK ABSORBERS

Gabriel heavy-duty telescoping shock absorbers shall also be provided on the front axle.

One (1)
91-75-0015

Warranty - Meritor Front Axle, 2 Yr, P&L

WARRANTY

Meritor Corporation provides a two (2) year parts and labor warranty on the front axle.

One (1)
91-75-0020

Warranty - Meritor Disc Brakes, 3 Yr, P&L

WARRANTY

Meritor Corporation provides a three (3) year parts and labor warranty on the EX225H disc brakes.

One (1)
11-10-0900

Rear Axle - RS-25-160, with EX225H Disc Brakes, 27,000#

REAR AXLE

10139-0008

06/07/24

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

The rear axle shall be a Meritor model RS-25-160 with a capacity of 27,000 pounds at the hub. The rear axle shall be provided with Meritor #EX225H air disc brakes with internal automatic adjustment, sealed synchronized twin pistons and robust sealing of slide pins for environmental protection. The #EX225H air disc brakes shall have 17" rotors and a fully sealed lever mechanism with variable mechanical seal. A visual indicator of brake wear shall also be provided.

All axles shall be purchased complete from and certified by the axle manufacturer for the specific application. Brake chamber brand and size shall be determined by the axle manufacturer.

One (1)
11-10-9900

Axle Application Certification

All axle applications must be certified by the axle manufacturer.

One (1)
11-10-9920

Rear Axle Ratio (Complete Once Ratio Determined)

REAR AXLE RATIO

The rear axle ratio is:

Rear Axle Ratio shall be handled through the EDR and sales change progress.

One (1)
11-10-9999

Top Road Speed 68 MPH (Not avail Aerials)

ROAD SPEED

The top road speed of the vehicle shall be 68 MPH.

One (1)
11-20-2600

Anti-Lock Brakes (ABS) - 4-Channel (Not Available on TDA)

ANTI-LOCK BRAKING SYSTEM (ABS)

The vehicle shall be equipped with a WABCO 4S4M anti-lock braking system (ABS). The ABS shall provide four (4) channel anti-lock-up braking control on the (2) front and (2) rear wheels. The system shall employ a digital electronics system with microprocessor controls divided into two (2) diagonal circuits. In the event of one circuit malfunction the second circuit shall operate unaffected. Each wheel shall be constantly monitored by the system when the vehicle is in motion. When any wheel begins to lock-up during braking, a signal shall be transmitted to the processor from the wheel sensor. The control unit shall instantly reduce the braking force applied to the wheel and immediately re-apply braking force so that the wheel rapidly slows without locking. The system shall control all wheels simultaneously to provide maximum vehicle braking in a relatively straight line.

An ABS warning light shall be installed in the warning light panel of the driver's dash.

The ABS system shall automatically disengage the auxiliary braking system whenever the anti-lock braking mode is active.

One (1)
91-75-003A

Warranty - Meritor Anti-Lock Braking System, (ABS), 3 Years/300,000 Miles

WARRANTY

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

A three (3) year or 300,000 miles parts and labor warranty shall be provided by Meritor WABCO Vehicle Control Systems for the Anti-Lock Braking System (ABS).

One (1)
91-75-0020
Warranty - Meritor Disc Brakes, 3 Yr, P&L

WARRANTY

Meritor Corporation provides a three (3) year parts and labor warranty on the EX225H disc brakes.

One (1)
91-75-0025
Warranty - Meritor Rear Axle, 2 Yr, P&L

WARRANTY

Meritor Corporation provides a two (2) year parts and labor warranty on the rear axle.

One (1)
11-20-2755
Electronic Roll Stability (ESC) - for Single Axle

VEHICLE STABILITY COMPLIANCE – ELECTRONIC CONTROL

In compliance with NFPA 1901, current edition standard 4.13.1, the vehicle, as specified, shall be equipped with a Meritor-WABCO electronic Roll Stability Control system that shall utilize a centrally mounted pitch and yaw sensor and steering shaft position sensor interacting with the chassis' ABS traction control, auxiliary braking system and the engine ECM to minimize the vehicle's potential for rollover in a turning at speed maneuver.

One (1)
11-20-2795
Automatic Traction Control w/ Deep Mud & Snow Switch

AUTOMATIC TRACTION CONTROL WITH DEEP SNOW AND MUD SWITCH

Automatic Traction Control, working in concert with the ABS system, shall be provided which shall reduce wheel slip on acceleration on wet or slippery road conditions. A light shall illuminate on the driver's dash when the drive wheels slip during acceleration.

A deep snow and mud option switch shall be provided in addition to the ATC option. This function increases available traction on extra soft surfaces like snow, mud or gravel by slightly increasing the permissible wheel spin.

One (1)
11-30-3200
Rear Suspension - Semi-Elliptical Spring, 3"x52", Single, 27,000#

REAR SEMI-ELLIPTICAL SPRING SUSPENSION, 3" X 52", SINGLE - 27,000#

The rear suspension shall be semi-elliptical 3" x 52" constant rate type springs with a military wrapped eye. The correct material, spring length, width, thickness and number shall be provided to match the leaf spring rating with that of the gross axle weight rating of the vehicle.

Three (3)
12-15-1200
Front Tires - MI/315/80R22.5/XZUS2/On/Off 10,000/10,000# (Ea)

FRONT TIRES

The three (3) front tires shall be Michelin 315/80R22.5, XZUS2, load range "L" with on/off road tread

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

(heavy loads and slower speeds, operating on a mixture of improved secondary and aggressive road surface). This tire has a nominal rating of 10,000 pounds with a top speed of 65 mph and an intermittent fire service rating of 10,000 pounds at a top speed of 75 mph.

Five (5)
12-16-1200

Rear Tires - MI/12R22.5/XDN2/Neige 6,780/7,255# (Ea)

REAR TIRES

The five (5) rear tires shall be Michelin 12R22.5, XDN2, load range "H", neige tread (all-weather premium drive tire optimized for exceptional traction and mileage). This tire has a nominal rating of 6,780 pounds with a top speed of 75 mph and an intermittent fire service rating of 7,255 pounds at a top speed of 75 mph.

One (1)
12-50-0500

Wheels - Aluminum Disc, Polished, on Single Rear Axle

WHEELS

Wheels shall be Alcoa polished aluminum disc type and hub piloted. Chrome plated nut covers shall be furnished. For ease of maintenance and protection, outer dual valves stems shall be turned inboard, inner dual valve stems shall be turned outboard and extensions shall be installed.

One (1)
12-80-0100

Hub Caps - (2) S/S, "Baby Moon", Front Axle

FRONT AXLE "BABY MOON" HUB CAPS

Stainless steel "Baby Moon" type hub caps shall be provided on the front axle.

One (1)
12-90-0200

Hub Caps - (2) S/S, "High Hat", Rear Axle

REAR AXLE "HIGH HAT" HUB CAPS

Stainless steel "High Hat" type hub caps shall be provided on the rear axle(s).

One (1)
12-90-1010

Tire Pressure Indicators - Accu-Pressure H.D. Safety Caps, Single Axle

TIRE PRESSURE INDICATORS

Tires shall have non-pressure indicators installed for shipment.

Accu-Pressure Heavy Duty Safety Caps shall be provided and shipped loose. This valve stem inflation pressure sensitive monitor shall provide a visual color indication of when the tire pressure is below the manufacturers recommended level. The chrome safety cap shall show green when the tire is properly inflated and red once the tire becomes under inflated.

All inner wheels shall be equipped with a valve stem extension that shall allow the inner wheel to be filled without removing the outer wheel.

One (1)
12-90-1210

Tire Balance - Equal, Front Tires Only

10139-0008

06/07/24

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

TIRE BALANCE

EQUAL Tire Performance Balancing Compound shall be inserted into the front tires to balance and maintain a vibration-free rotation.

One (1)
13-00-5210

Engine - Cummins L9, 450 HP, for Single Axle, EPA21/OBD21 Certified

ENGINE

The chassis shall be powered by an **EPA21/OBD21** certified and compliant Cummins L9-450 diesel engine as described below:

Model	L9
Number of Cylinders	Six
Bore and Stroke	4.49 x 5.69
Displacement Liter (Cu. In.)	8.9 (543)
Rated BHP	450 @ 2100 RPM
Torque	1250 lb-ft @ 1400 RPM
Governed RPM	2200
Oil Capacity / Type	6.5 gallons / SAE CK-4
Fuel Requirement	Ultra low sulfur diesel (15 ppm max.)

Standard equipment on the engine shall include the following:

Selective Catalytic Reduction (SCR) after treatment
Cooled Exhaust Gas Recirculation system
Fan – 29”, 11 blade
Charge air cooling
High pressure, common rail fuel system
Fuel filter with check valve and water separator
Fuel strainer
Governor – electronic, interact system
Injectors – electronically controlled full authority injection
Lube oil cooler – integral
Lube oil filter – full flow
Turbocharger – variable geometry type
Air compressor – Wabco 18.7 CFM

The engine exhaust system shall be a horizontal design constructed from heavy-duty truck components. Flexible couplings shall be utilized to absorb the torque and vibration of the engine. The outlet shall be directed to the forward side of the rear wheels, exiting the right side, with a straight tip. A heat-absorbing sleeve shall be used on the exhaust pipe in the engine compartment area to reduce stored heat, providing protection for the alternator, and also to protect hands when checking or adding oil in the engine compartment.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

ENGINE AND CHARGED AIR COOLING SYSTEMS

A serpentine core type radiator with continuous louvered copper fin design shall be provided. The radiator shall be fitted with formed steel side frames. The top tank shall have a built-in de-aeration system. A drain shall be located at the lowest point.

The engine charged air heat exchanger shall be located directly in front of the radiator and be bolted to its side rails. It shall be all aluminum-brazed construction. Air cooler shall be the cross flow design with cast aluminum side tanks, horizontal inlet and outlet at top and louvered serpentine design, aluminum external air fins. Plastic tanks shall not be acceptable, no exceptions. Cooler tubes shall also be constructed of aluminum and shall have internal fins that eliminate laminar air flow.

The charge air cooler and the radiator shall be produced by the same manufacturer as a single assembly to provide continuity throughout the cooling system. This shall ensure a certified "balanced" package for the chassis engine air and fluid cooling systems.

The radiator charge cooler shall be mounted to the chassis front frame stub and the fabricated mounting brackets for the fan ring shall be attached to the front of the engine in a manner so that it "floats" with the engine and increases the fan's efficiency by minimizing the fan tip clearance while preventing torque contact between fan and ring. This mounting design eliminates engine fan and radiator shroud contact due to engine torque movement and promotes more efficient airflow. The radiator / charge air cooler package shall be held in place at the bottom by two (2) large bolts equipped with anti-stress rubber biscuits. The top of the radiator shall be supported by two (2), 3/4" tubular braces, bolted to the front frame stub. Anti-vibration rubber biscuits shall be installed at the top threaded end of the braces where they attach to the radiator.

One (1)
13-00-7000

Engine Cooling Certification

ENGINE COOLING CERTIFICATION

"EPQ" (End Product Questionnaire) certification shall be provided by the chassis manufacturer. Certification shall be documented with reference to each specific chassis model by the chassis manufacturer.

One (1)
13-00-7500

Fan Clutch for L9 Engine

FAN CLUTCH

A viscous style thermostatically controlled, clutch shall be provided for the engine cooling fan. The clutch shall be of a failsafe design, in that it shall fail in the "on" mode and thus prevent overheating. Manufacturer shall also wire the clutch so that it remains "on" in the pumping mode to prevent water pressure fluctuations.

One (1)
13-03-0400

Transmission - Allison, 3000-EVS

TRANSMISSION

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

An Allison, Model 3000 - EVS, electronically controlled automatic transmission with integral fluid filter shall be provided. A transmission cooler shall be installed in the radiator bottom tank. A warning light and buzzer shall be provided on the cab dash to alert the driver should the transmission overheat.

The transmission shall include the following: an oil life monitor, a filter life monitor, and a transmission health monitor. The oil life monitor determines fluid life remaining by monitoring various operating parameters. The filter life monitor determines when fluid filter(s) need to be replaced. The transmission health monitor determines when clutch system inspection is required. The monitors send a message via a blink code to a special prognostic light on the shift pad. Also on the shift pad shall be installed a digital, double-digit display that identifies the level of transmission oil. The display shall identify the oil level as "Ok", "Lo" or "Hi", also indicating the number of quarts lo or hi.

The transmission shall include the following emergency vehicle specifications:

Maximum gross input power:	450 hp
Maximum gross input torque:	1250 ft.lb.
Input speed range:	2000 to 2800 rpm
Direct gear lock-up:	4 th @ 1.00 to 1.00
Overdrive gear and ratio:	5 th @ 0.75 to 1.00

Gear ratios shall be as follows:

1 st	3.49 to 1
2 nd	1.86 to 1
3 rd	1.41 to 1
4 th	1.00 to 1
5 th	0.75 to 1
6 th	0.65 to 1
Rev	-5.03 to 1

The transmission shall automatically shift into neutral whenever the chassis parking brake is applied.

Transmission Fluid - Synthetic SAE Standard Delvac for 3000-EVS

One (1)
13-03-2011

TRANSMISSION FLUID

The Allison 3000-EVS transmission shall be delivered from the factory with a synthetic SAE standard ATF, Delvac.

Transmission Programming - 5th On Mode

One (1)
13-03-3000

TRANSMISSION PROGRAMMING

The transmission shall be programmed as a 5-speed with 5th gear (overdrive) selected by mode button

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

only.

One (1) **Transmission Shift Control - Allison Touch Pad**

13-03-4000

TOUCH PAD TRANSMISSION SHIFT CONTROL

Touch pad control shift module shall be mounted to the right of the driver on the console and be indirect lighted for after dark operation.

One (1) **Warranty - Allison Transmission, 5 Yr, P & L**

91-75-0065

WARRANTY

Allison provides a 5 year warranty on the EVS transmissions. See warranty certificate for complete details.

One (1) **Driveline - Spicer 1710, for Single Axle, Wheelbase < 190.5"**

13-05-0110

DRIVELINE

Drivelines shall be built with heavy-duty metal tubes and utilize Spicer 1710 series or "Equal" mechanics type universal joints with "half round" end yokes. This quick disconnect strap and bolt design type end joint shall allow the driveline to be easily disassembled and dropped straight down for ease of service and maintenance. They also shall be dynamically balanced by the truck manufacturer before installation in the chassis. A splined slip joint shall be provided in each shaft assembly. A grease zerk shall be provided for lubrication of the slip joint.

One (1) **Fuel Water Separator with Alarm - Fleetguard FS90134, L9 Engine Only**

13-08-5620

FUEL WATER SEPARATOR WITH ALARM

A Fleetguard FS90134 8 micron filter with fuel water separator and water sensor alarm shall be mounted in a serviceable and accessible location, that the cab may need to be tilted for.

One (1) **Engine Starter - Denso, 12 Volt**

13-09-0010

ENGINE STARTER

A Denso, 12 volt, 5.0 kW gear reduction starter shall be installed.

One (1) **Air Compressor - Wabco 18.7 cfm**

13-11-0400

AIR COMPRESSOR

A Wabco 18.7 cfm air compressor shall be furnished. The air compressor shall be gear driven off the engine.

One (1) **Exhaust - Single Module, DPF/SCR, Outboard of Frame Rail, L9 Engine Only**

13-13-0005

EXHAUST

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

A single exhaust module containing an SCR chamber and a DPF chamber shall be installed on the right side of the vehicle, immediately behind the cab. The exhaust module shall ingest urea from a remote storage tank to remove NOx from the exhaust. The exhaust assembly shall be mounted outboard of the frame rail.

One (1)
13-13-0900

Tailpipe - Plymovent, Extended for Exhaust Evacuation System

TAILPIPE EXTENSION

The tailpipe shall be provided to accommodate a Plymovent exhaust evacuation system. The tailpipe shall be mounted perpendicular to the side of the truck and be flush with the body. 12" of clearance between the pipe and the tire will be provided. The tailpipe mounting shall be straight out from the body.

It is understood that the engine exhausts can not be connected to exhaust evacuation systems when the Diesel Oxidation Catalyst and Diesel Particulate Filter on the engine are regenerating.

One (1)
13-15-0600

Engine Brake - Jacobs, Cummins L9 Engine

ENGINE BRAKE

A Jacobs engine brake shall be installed with controls within easy reach of the driver. The brake shall automatically be actuated when the accelerator pedal is released and shall be wired in conjunction with the rear brake lights so that they are activated when the engine brake is engaged. It shall have a two-position switch; "Low" and "High" in addition to a manual "On/Off" switch.

One (1)
91-75-004D

Warranty - Cummins L9 Engine, 5 Year/100,000 Mile

WARRANTY

Cummins provides a 5 year or 100,000 mile warranty on the L9 engine. See Cummins Warranty Certificate for complete details of terms, conditions and deductibles.

One (1)
13-00-760F

Coolant Overflow Reservoir - 6 QT, Marauder 131/141"

COOLANT OVERFLOW RESERVOIR

A six (6) quart coolant overflow reservoir shall be provided. It shall be located in the engine compartment.

One (1)
13-01-2100

Silicone Hoses - Coolant/Heater

SILICONE HOSES

All hoses in the cooling system shall be silicone type with stainless steel constant torque Oetiker clamps.

One (1)
13-08-2700

Fuel Tank - 65 Gallon, S/S, Rear Mount, with S/S Straps

FUEL SYSTEM

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

The vehicle shall be furnished with a 65 gallon fuel tank mounted behind the rear axle and just below the frame rails using a stainless steel strap. The tank shall be constructed of stainless steel and equipped with a swash partition and vent. The fuel tank shall meet all FHWA requirements including a fill capacity of 95% of tank volume and all DOT and FMVSS regulations for rollover protection. A 2" diameter fill inlet shall be provided. Fuel cap shall be of brass or bronze construction, non-vented and have lead safety fuses. It shall be chained to inlet tube or to the body sheet metal to prevent loss. Braided hoses shall be provided for the fuel lines. A 1/2" NPT drain plug shall be located at the bottom of the tank. The tank shall be installed using stainless steel straps and hardware, separated from the tank by a rubber insulating strip to prevent against chaffing. On trucks without torque boxes, the fuel tank pickup tube and sending unit shall be accessible without having to remove the tank.

The stainless steel fuel fill inlet shall be located on the left (drivers) side of the apparatus. It shall be concealed behind a door. The inside of the door shall be marked "ULTRA LOW SULFUR DIESEL FUEL ONLY". The fuel inlet area, recessed behind the door, shall be completely enclosed to prevent dirt and debris from entering. Provision shall be provided inside the fill recess for drainage of any spilled fuel within the cavity.

One (1)
13-08-307P

Fuel Fill Door - S/S, Painted Job Color, Side Hinged (NA TDA)

The fuel door shall be constructed of stainless steel and shall be painted job color. It shall be hinged along the vertical side towards the front. A magnet shall hold the door in the closed position. The door shall be kinked along 3 edges with the fourth side being used as a finger grab for opening and closing it. A stainless steel trim ring shall encircle the opening to prevent the fuel nozzle from damaging the surrounding surface when it is opened. The fuel shelf shall be made from a high impact polyethylene material.

One (1)
13-08-5400

Fuel Cooler - Engine, Water Pump Present

ENGINE FUEL COOLER

An engine fuel cooler shall be provided on the apparatus. The engine fuel cooler shall cool the returning fuel from the engine using the water from the water pump.

One (1)
13-10-2500

Alternator - Delco, 430 Amp, Model 55SI

ALTERNATOR

A 430 amp Delco alternator, model 55SI, shall be provided.

One (1)
13-12-0500

Air Cleaner - Donaldson® PowerCore®, Marauder

AIR CLEANER

A Donaldson® PowerCore® dry type engine air cleaner shall be provided. It shall be installed in a location so that the filter element can be easily serviced.

One (1)
13-12-5500

Air Restrict Indicator - Information Display Center

AIR RESTRICTION INDICATOR IN INFORMATION DISPLAY CENTER

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

An electrical engine air restriction indicator shall be provided and installed in the cab information display center.

One (1)
13-13-0030

DPF Regeneration Process

DPF REGENERATION PROCESS

NFPA 12.2.6.7.1 The regeneration process shall be activated by two methods:

- 1) Automatically by the engine system but only when the transmission is in gear and the speedometer indicates a speed above 5 mph (8km/hr) whether the apparatus is in motion or is operating in stationary pump mode with an engine rpm sufficient to register 5 mph (8 km/hr) on the speedometer.
- 2) Manually when initiated by activation of a switch located in the driver's area of the driving compartment.

There shall also be an inhibit switch placed near the driver to inhibit an automatic return.

One (1)
13-13-0050

Diesel Exhaust Fluid (DEF), Marauder

DEF

The urea mixture, a solution of 2/3 water and 1/3 urea which reacts with NOx to create nitrogen and water, shall be stored in a 10 gallon tank equipped with a level sensor and alarm to prevent run-out.

One (1)
13-13-0053

DEF Access - Door in Driver's Side Crew Cab Step Area, Marauder

DEF ACCESS

The DEF shall be filled via a vertically hinged **black line-x ATP** door with a 1/4 turn latch. The door shall be located over the intermediate step in the driver's side crew cab step area.

A viewing slot shall be provided in the vertical surface of the left crew cab step riser below the intermediate step. The slot shall be marked with a black line to indicate the maximum DEF fill level.



Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
13-13-1130

Exhaust Heat Shielding

EXHAUST HEAT SHIELDS

Heat shields shall be provided as needed to prevent damage to body and wiring from excessive exhaust temperatures. The exhaust pipe shall be wrapped in multi-layered insulation blankets, from just aft of the turbo down to inlet side of the DPF. Each blanket shall have a fiberglass inner layer and a silicone impregnated fiberglass cloth outer layer

The cab shall receive 1.25" thick foil back insulation blanket under the crew floor to reduce floor temperatures.

One (1)
13-15-4100

All harnesses and cables, in proximity to exhaust system components, shall be protected with insulation.

Fast Idle - Switched on Dash

FAST IDLE SWITCH

A fast idle switch shall activate an engine high idle. The circuit shall be wired through the neutral safety/parking brake interlock to prevent activation when the transmission is in the road mode. Fast idle shall be set at 1000 RPM's. A switch located inside the cab convenient to the driver shall be provided for this system.

One (1)
13-15-5010

Nameplate- Lubrication Capacity, On Driver's Door, Interior Face

LUBRICATION NAMEPLATE

A nameplate shall be installed that specifies the quantity and type of the following fluids used in the vehicle and tire information:

- Engine oil
- Engine coolant
- Chassis transmission fluid
- Pump transmission lubrication fluid
- Pump priming system fluid, if applicable
- Drive axle(s) lubrication fluid
- Air condition refrigerant
- Air conditioning lubrication fluid
- Power steering fluid
- Cab tilt mechanism fluid
- Transfer case fluid
- Fuel
- Diesel Exhaust Fluid
- Windshield Washer Fluid
- Auto Lubrication System lubricant, if applicable
- Equipment rack fluid, if applicable
- Foam system lubricant, if applicable

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

- Generator system lubricant, if applicable
- Aerial Hydraulic Fluid, if applicable
- Front tire size and cold pressure
- Inter tire size and cold pressure, if applicable
- Rear tire size and cold pressure
- Trailer tire size and cold pressure, if applicable
- Maximum tire speed ratings
- Ambient operating temperature
- Paint colors and codes

A layer of Velvet Polycarbonate shall overlay the lettering to protect it. The lubrication nameplate shall be installed on the interior face of the driver's door, near the hinge and below the window controls.

One (1)
20-00-670A

Cab - S/S, Full Tilting, 141" Marauder

STAINLESS STEEL FULL TILTING MARAUDER CAB

The cab shall be designed specifically for the fire service and shall provide roll cage strength and safety. The stainless steel cab shall be made in the factory of the bidder and must utilize the bidder's top-of-the-line technology and manufacturing techniques. The entire cab shall tilt forward 45 degrees for engine access. No plastic, fiberglass, or aluminum shall be used in the construction of the cab sub-frame, floor assembly, front assembly, side assemblies, back wall assemblies or roof assembly.

CAB DIMENSIONS

The back wall of the 141" cab shall measure 72" from the center of the front axle. The cab shall have an inside width of 91" and outside width of 96".

CAB MOUNTING

A four point mounting system shall be provided. The cab mounting system shall consist of two (2) front pivot mounts fabricated of steel and two (2) rear cab mounts that are isolated from the chassis frame by center bonded rubber isolators. Each front pivot mount shall consist of a greaseless pin and a multi-layered, self-lubricating, composite bearing. The outer layer of the bearing shall be high-durometer rubber to isolate road vibrations and shock.

CUSTOM CAB DESIGN AND CONSTRUCTION

SUB-FRAME

The sub-frame shall be stainless steel plate and tube welded to 3" x 4" rectangular structural steel tubes, with the 4" stainless steel tubing used in a vertical orientation. All joints shall have continuous welds; stitch welding shall not be acceptable. The sub-frame shall be designed as a continuous structure from the front to the back of the cab. It shall be used to support the cab while tilting, join front pivots to the cab locks, and to join the cab to the chassis. Pocketing of the sub-frame shall not be acceptable.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

FRONT ASSEMBLY

The safety cage section at the front of the cab shall be constructed of 1.25" stainless steel tubing and shall join the front door posts together with the main sub-frame. There shall be a 2.50" x 1.50" x .25" heavy wall lower cross tube that joins the cab sills together to prevent cab twisting when tilting the cab. The front fire walls shall be set back from the front assembly structure to provide added protection in a frontal crash. The outer cab skin shall not be an integral structural member, although it shall help stiffen the cab front face.

CAB FLOORS

All floor components shall be welded directly to the sub-frame. The floor shall be constructed of 50,000 psi stainless steel.

SIDE WALL ASSEMBLIES AND DOORS

The safety cage on the sides shall be constructed of 1.25" stainless steel tubing. Both side wall assemblies shall be joined to the sub-frame via thick tubular structures, using heavy fillet welds. This shall strengthen the walls to withstand high roof loading. The side wall outer skins shall be integral with the cab structure as well as additional formed components to help stiffen side wall assemblies. There shall be 1.25" of insulating foam between the exterior and interior side walls. The structure shall be reinforced for cab entry grab handle mountings.

The front door hinge mount (aka "A" pillar) shall be a 2" x 3" tube with a .19" thick wall. The rear door hinge mount (aka "C" pillar) shall be equivalent to a 12 gauge formed channel with .19" thick tapping bar.

BACK WALL ASSEMBLY

The safety cage on the back wall shall be constructed of 1.25" stainless steel tubing. It shall join the roof to the floor assembly. Construction of the back wall assembly shall utilize a minimum of 12 gauge stainless steel material and the design shall provide crush protection in the event of a rollover. The back wall structure shall be uniform, regardless of the seating choices. All seat mounts and seat belt mounts shall use weld nuts to eliminate pull outs and stripped threads. The outer skin shall not be an integral structural member, although it shall stiffen the back wall. 1.25" of insulating foam shall be located between the exterior and interior back walls.

ROOF ASSEMBLY

The perimeter structure of the safety cage roof assembly shall be tied by repeating 1.25" stainless steel tubing to maximize loading potential across the whole roof. The fabricated and welded roof sills and front header shall be made of 50,000 psi stainless steel material. The corner caps shall utilize spun metal technology thus retaining the metal's strength while producing a very rigid corner joint. The side roof covering (rolled edges) shall be constructed of stainless steel formed in a quarter round. It shall form a hollow double wall, angle reinforced roof edge with an integral drip rail. There shall be 1.25" of

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

insulating foam between the exterior roof and interior ceiling.

One (1)
20-00-8210 **Cab Entrance Doors - (4) Barrier Style, Marauder**

CAB DOOR CONSTRUCTION - BARRIER CLEARING

The four (4) cab doors shall be barrier clearing and fabricated from stainless steel (No exceptions). The cab doors shall be 34.75" wide. The interior and exterior door handles to be flush mounted paddle style with a Trimark TM202 keyed lock incorporated in the exterior handle and lever control lock incorporated in the interior handle. One (1) key per door shall be provided. Six (6) inch wide strap style door checks shall be provided. The door check's straps shall have a tensile strength of 120 lbs/in of width. The door's latch locking mechanism shall make it impossible to lock oneself out of the cab unless locked with the supplied key. Doors shall be hung on stainless steel full length hinges attached to cab and door with .25" bolts. The hinges for each door shall be of one-piece 304-2B stainless steel construction with 1/4 stainless steel pins and 0.090 gauge leaves with 2" joints and a 3" width opening. Doors shall meet Federal Motor Vehicle Safety Standard #206. The doors shall be designed so as to allow the windows to roll completely down.

Entrance step wells to the driver's and officer's positions shall be a minimum of 26" wide and the rear crew step wells shall be 26" wide. They shall be "spaced" from the step well walls at front, rear and side to prevent trapping of dirt and other residue. Entrance steps shall be made of expanded grating.

One (1)
20-00-8410 **Front Door Opening - Approximately 90 Degrees with Additional Handles**

The front cab doors shall open approximately 90 degrees. An additional 6" chrome handle on the inner cab door panel in the upper front corner shall be installed on each front door to assist in closing.

One (1)
20-00-8450 **Rear Crew Door Opening - Approximately 90 Degrees**

The rear crew cab doors shall open approximately 90 degrees.

One (1)
20-50-501B **Inner Cab Door Panels - Black LINE-X (4)**

INNER DOOR PANELS – BLACK LINE-X (4)

The upper inside bolt-on panel on each cab door shall be removable and shall be constructed of aluminum covered with black LINE-X.

One (1)
20-50-6000 **Reflective Chevron on (4) Inner Cab Door Panels**

All four (4) cab passenger compartment doors shall have at least 96 square inches of reflective material affixed to the inside of each door to alert traffic when the door is open. The reflective material shall be a chevron design that complies with NFPA requirements.

One (1)
20-00-8500 **Cab Tilt Mechanism - S/S, Full Tilt, Marauder**

CAB TILT

The cab shall tilt a minimum of 45 degrees for normal servicing of the engine and other equipment. The tilt cab locking system shall be a two-point type that locks automatically when the cab is lowered into its nested position. The cab tilt package is custom designed for safety and ease of vehicle maintenance. The

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

hydraulic tilting system consists of two (2) heavy-duty single acting cylinders equipped with velocity fuses at the cylinder base in case of any failure in the operating mode. The power supply is a high efficiency electric over hydraulic system with an integral mechanical override in case of battery failure. All components and parts are designed for installation with a minimum of 3 to 1 safety factor based on current S.A.E. standards.

In addition to the velocity fuses, a secondary safety system shall be provided to hold cab in the fully raised position in the event of a failure in the primary lift mechanism. It shall consist of a metal channel device, which automatically drops over the extended rod of the left side hydraulic lift cylinder thereby preventing its retraction. The safety channel can only be released through an overt action made by the operator such as pulling a lever or cable. Automatic release of the safety system shall not be acceptable.

The cab tilt system shall be remotely controlled utilizing a twelve foot cable with a hand held push button device which is to plug into a receptacle in the bumper area on the left-hand side of the cab. The receptacle shall have a spring-loaded weatherproof cover.

One (1)
20-25-4500

Cab Floor - Entire Cab, Pebble Finish Matting, Marauder

ENTIRE CAB FLOOR

The entire cab floor shall be covered with a black mat that functions as a sound dampening barrier. The mat shall have a pebble textured heavy-duty wear surface and be laminated to a foam underlay. The mat shall be composed of a vinyl-nitrile blend, which is the base material used in IV tubes and blood bags; it is not affected by blood or other body fluids.

One (1)
20-25-4520

Cab Floor - Forward Cab, LINE-X ATP Overlay, Marauder

FORWARD CAB FLOOR

Aluminum tread plate flooring shall be installed over the insulated forward cab floor matting. The ATP shall be covered with LINE-X. Flooring shall be removable in sections and may be notched around floor mounted components.

One (1)
20-25-48YB

Cab Floor Overlay LINE-X Color - Black

The cab floor overlay LINE-X shall be black.

One (1)
20-25-4620

Cab Floor - Crew Cab, LINE-X ATP Overlay, Marauder

CREW CAB FLOOR

Aluminum tread plate flooring shall be installed over the insulated crew cab floor matting. The ATP shall be covered with LINE-X. Flooring shall be removable in sections and may be notched around floor mounted components.

One (1)
20-25-48YB

Cab Floor Overlay LINE-X Color - Black

The cab floor overlay LINE-X shall be black.

One (1)
20-00-68B1

Rear Cab Wall Exterior Finish - Full ATP

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

ATP OVERLAY ON BACK OF CAB

An aluminum tread plate overlay shall be provided over the entire exterior rear wall of the cab.

One (1)
20-00-6900

Cab Grille - Front, Raised Bezel Surround, Vertical Bars

CAB GRILLE - VERTICAL BARS AND RAISED BEZEL SURROUND

The cab front opening shall be covered with a custom made stainless steel grille that shall be fabricated in the bidder's factory. The grille shall have formed vertical bars spaced apart on 2" centers. The upper stainless steel grille shall have a matching lower counterpart to further facilitate engine cooling. The two (2) stainless grilles shall be housed in a custom, raised bezel.

One (1)
20-00-698A

Upper Raised Bezel Surrounds, with Panels, (2)

UPPER RAISED BEZEL SURROUNDS, WITH PANELS

A custom raised bezel shall be installed on the front face of the cab, on each side of the front grille. Housed within each bezel shall be a removable panel, painted job color. The removable panel shall provide service access to the forward side, firewall mounted electrical connections and wiring harness.

One (1)
20-00-SR10

Front Grille Script Nameplate - Mirror Finish, for Grille w/Raised Bezel Surround

FRONT GRILLE SCRIPT NAMEPLATE

A "Seagrave" nameplate, fabricated from AISI 304 stainless steel, with mirror finish, shall be located on the lower front engine cooling intake grille of the cab.

One (1)
20-00-69MV

Engine Air Inlet Grille & Ember Separator, Marauder

ENGINE AIR INTAKE GRILLE WITH WATER/EMBER SEPARATOR

The air intake shall be concealed behind the cab grille. The water and ember separator shall set behind the cab grille on the officer's side. This may be cleaned or replaced by tilting the cab.

One (1)
20-00-7410

Cab Roof - S/S, Flat, Marauder

FLAT ROOF

A flat roof shall be provided with an interior floor to ceiling height of 57".

One (1)
20-00-78A1

Exterior Cab Roof Finish - Paint

PAINTED CAB ROOF

The exterior surface of the cab roof shall be painted in compliance with the cab paint specifications detailed elsewhere in this specification document.

One (1)
20-00-911A

Cab Steps - Front, Intermediate in Cab Step Wells, Partial, Marauder Only

FRONT INTERMEDIATE CAB STEPS

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Two (2) stationary steps shall be provided, one at each front cab door. The steps shall be approximately 12.0" long, have a 9.0" radius, and be located to the front of each cab step well. The steps shall be constructed of aluminum grating.

One (1)
20-00-911D

Cab Steps - Rear Crew, Intermediate in Cab Step Wells, Partial, Marauder Only

REAR CREW INTERMEDIATE CAB STEPS

Two (2) stationary steps shall be provided, one at each rear crew cab door. The steps shall be approximately 12.0" long, have a 9.0" radius, and be located to the front of each cab step well. The steps shall be constructed of aluminum grating.

One (1)
20-00-9510

Doors - (2) Cab, Side Access, 25" High, Marauder

CAB SIDE ACCESS DOOR

Two (2) stainless steel cab side access doors shall be provided on the cab, one each side between the front doors and front crew cab windows. Door openings shall be approximately 13.00" wide x 25.00" high. The doors shall open a minimum of 90 degrees.

One (1)
20-00-960A

Cab Side Access Doors Hinged at Front Edge

The cab side access doors shall be vertically hinged at the front edge.

One (1)
20-00-960G

Cab Side Access Door Stays - (2) Strap Style

The doors shall each have a strap style door stay.

One (1)
20-00-960Q

Cab Side Access Door Latch Position - Upper Part of Door

The "D" handle type latches shall be provided on the upper part of the door.

One (1)
20-00-961L

Keyed Locks for (2) Cab Side Access Doors (#1250 Keys)

KEYED LOCKS

There shall be keyed locks for both the cab side access doors. The driver's side and officer's side access doors shall be keyed alike with #1250 keys.

One (1)
20-00-989C

Cab Access Area Trays - (2) AL, Both Sides, Marauder

CAB ACCESS AREA TRAYS-BOTH SIDES

An aluminum tray, approximately 16.5" wide x 21.5" deep with a 2" lip, shall be provided and mounted to the floor area aft of the driver's seat and aft of the officer's seat. The trays shall be spaced up from the floor by 1/2".

Two (2)
20-00-989M

Cab Access Area Tray(s) Finish - LINE-X to Match Engine Tunnel

The cab access area tray(s) shall have a LINE-X finish that matches the finish on the engine tunnel.

One (1)
20-00-9910

Cab Driver's Exterior Access SCBA Bracket - Zico ULLH with CRS Strap (Marauder)

CAB ACCESS SCBA BRACKET

10139-0008

06/07/24

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

A metal bracket, painted gloss black, shall be secured to the side of the engine tunnel just aft of the driver's seat. Attached to this bracket shall be a Zico ULLH SCBA bracket with a CRS strap.



One (1)
20-05-2020

Inner Liners - Front, Aluminum

FRONT ALUMINUM INNER LINERS

Semi-circular inner liners shall be provided in each front wheel housing. They shall be constructed of aluminum and shall be bolted in place so they may be removed if damaged. Self-tapping sheet metal screws are not acceptable. The outside edge of the inner liner shall be bolted along its entire length. The bottom edge of liner shall not have a formed reinforcement flange to avoid trapping dirt and debris.

One (1)
20-05-2120

Fenderettes - Front, Rubber

FRONT FENDERETTE

Black rubber fenderettes shall be installed in the front wheel openings. They shall be sufficiently wide to completely cover the outside rear tire and reduce wheel splash along the sides of the cab. They shall be installed with 1/4" hex head bolts (self-tapping sheet metal screws are not acceptable). There shall be a stainless steel backing strip between the rubber and the mounting flange to add support. Fenderette shall incorporate a vertical flange to cover the area where the cab side and wheel opening mounting surface

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

meet. The fenderettes shall be a minimum of 1/4" thick, have a mold formed outer radius and a rounded bead at the wheel opening edge.

One (1)
20-07-010R

Mud Flaps - Front, Rubber

FRONT MUD FLAPS

Heavy duty mud flaps with the manufacturer's "script and flame logos" placed on the rear face shall be provided and installed to the rear of the front wheels. Flaps shall be 14" wide and be made of 0.38" heavy duty rubber material to prevent "sailing".

One (1)
20-07-020R

Mud Flaps - Rear, Rubber

REAR MUD FLAPS

Heavy duty rear mud flaps with the manufacturer's "script and flame logo" placed on the rear face shall be provided and installed to the rear of the rear dual wheels. Flaps shall be 24" wide and be made of 0.38" heavy duty rubber material to prevent "sailing".

One (1)
20-10-2000

Mirror - Crossover, Black, Approx 8" Dia

CROSSOVER MIRRORS

An approximately 8" diameter mirror with black housing shall be provided on the right front of the cab above the windshield. The main adjustment bar shall be mounted to the cab roof.

One (1)
20-10-2050

Crossover Mirror Style - Convex

The crossover mirror shall be convex.

One (1)
20-10-2075

Crossover Mirror Bracket Location - Outboard

The crossover mirror bracket shall have an outboard location.

One (1)
20-10-1500

Mirrors - (2) Rosco Accustyle, Heated/Remote w/Convex, Black Finish

MIRRORS

Two (2) Rosco Accustyle heated mirrors with remote shall be installed on the cab doors, one on each side of the cab. The flat upper mirror shall measure 7" x 14" and the lower convex section shall measure 6.5" x 6". The mirrors shall have a black finish.

One (1)
20-10-4900

Mirror Wiring - through Ignition

The mirrors shall be wired through the ignition.

One (1)
20-12-0300

Windshield - Tinted

WINDSHIELD

The windshield shall be of tinted automotive laminated safety plate glass with a curved two-piece design. The windshield shall have approximately 2900 square inches of visual area. Right and left hand

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

windshield glass shall be symmetrical and interchangeable from side to side to minimize spare parts stock and expense. Windshield shall be installed and held in place by an extruded rubber molding with a bright finish, decorative, locking bead. Cab shall be finish painted prior to windshield glass being installed.

One (1)
20-12-0305

Windshield Wipers & Washers, Marauder

WINDSHIELD WIPERS AND WASHERS

One (1) wet arm operated windshield wiper shall be provided for each plate of windshield glass for accessibility and optimum windshield wiping surface areas. Wipers shall be two speed type with intermittent wiping feature. One (1) control switch shall be provided and located on the self-canceling directional switch for both wiper arms. The switch shall combine the on/off (automatic park position), two speed, intermittent and washer functions in one control. The turning switch shall activate the wipers and control speed, and pushing it shall operate the washers.

One (1)
20-12-031F

Windshield Washer Fluid Reservoir - 4 QT, Marauder

WINDSHIELD WASHER RESERVOIR

A four (4) quart windshield washer fluid reservoir shall be provided. It shall be accessed in the driver's step well with a remote fill. A visual inspection shall be possible without tilting the cab (NO EXCEPTIONS).

One (1)
20-12-2710

Door Glass - Electric Power Windows, Tinted, Marauder

DOOR WINDOWS

A retractable window with automotive type tempered safety glass shall be provided in all four (4) cab doors. All glass shall be tinted. Glass shall slide in stainless steel side channels with cloth/fiber liners. Rubberized fiber seals shall be located at the bottom of the window opening to prevent water and debris from entering the interior of the door when the glass is up (or down). A seal shall be placed on both sides (interior and exterior) of the glass. The front door glass shall be 23.75" high x 25.75" wide upper and 27.50" wide lower. The rear door glass shall be 23.75" high x 30" wide. The door window openings shall be trimmed on the exterior side with a smooth, black, poly vinyl chloride (PVC) molding

Electric power window regulator shall be manufactured by the Muncy Corporation and shall be the enclosed, sliding flexible shaft, gear type for ease of operation and reliability. The shaft shall enter a vinyl plastic protective sheath whenever it is exposed. A 12 volt electric motor with gear reduction box to slow driven gear rpm and increase power transmission shall be provided.

One (1)
20-12-2792

Driver's Door Glass Switch - on Driver's Dash

DRIVER'S DOOR GLASS SWITCH

An individual switch for the driver's electric door window shall be provided on the driver's dash, wired to the ignition.

Aftermarket add-on type electric power window conversion devices like the type that replaces the crank arm will not be acceptable.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
20-12-2796 **Officer's Door Glass Switch - on Officer's Dash**

OFFICER'S DOOR GLASS SWITCH

An individual switch for the officer's electric door window shall be provided on the officer's dash, wired to the ignition.

Aftermarket add-on type electric power window conversion devices like the type that replaces the crank arm will not be acceptable.

One (1)
20-12-2798 **Crew Door Glass Switches - on Crew's Doors**

CREW DOOR GLASS SWITCHES

An individual switch for the crew electric door windows shall be provided on the crew doors, wired to the ignition.

Aftermarket add-on type electric power window conversion devices like the type that replaces the crank arm will not be acceptable.

One (1)
20-12-3000 **Additional Switches - (3) to Allow Driver to Operate all Power Windows**

ADDITIONAL SWITCHES

Three (3) additional switches, wired to the ignition, shall be provided to allow the driver to operate all power cab door windows.

One (1)
20-14-1110 **Glass - Side Crew Cab, Fixed, Tinted, Marauder**

CREW CAB SIDE GLASS

There shall be a side window on each side of the cab between the doors. They shall be tinted and be manufactured of automotive tempered safety glass. Each window shall be 23" high x 17" wide to provide maximum vision. They shall be installed and held in place by an extruded rubber molding with a chrome plated, decorative, locking bead. Cab shall be finish painted prior to window glass being installed.

One (1)
20-14-2900 **Crew Cab Windows Tint - Blue Green (MAR)**

CREW CAB WINDOWS TINT

The crew cab windows shall have a blue-green tint.

One (1)
20-14-4900 **No Rear of Cab Windows Required**

One (1)
20-16-9010 **Cab Door Hinges - Mill Finish**

CAB DOOR HINGES

All piano hinges on the exterior cab doors shall be mill finished.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Two (2)
20-16-9130

Cab Rear Wall Pike Pole Mount - Head Down (Ea)

CAB REAR PIKE POLE MOUNT

Two (2) pike pole mounts shall be installed on the back of the cab. The mounts shall consist of a **black line-x** ATP sleeve on the bottom to hold the hook, and a PAC TRAC 1004 Holder with a black handle, to secure the handle. The mount shall be designed to hold a 6' NY Roof Hook with a steel handle, mounted approximately 48" from the bottom of the cab upward, and T-handle shall go from outboard to inboard on the apparatus.

The ATP body mount shall have drain holes.

Two (2)
20-16-9154

The mounts shall be installed inboard of the telescoping lights, if provided.

Pike Pole Mount Cab Locations - Both Sides

The pike pole mount shall be located on both sides of the cab.

Two (2)
90-05-5000

Roof Hook - 6', Fire Hooks "NY" #RH-6 with Steel Handle (Ea)

ROOF HOOK(s)

Two (2) 6 ft. Fire Hooks "NY" fire hook(s) model RH-6 with handle(s) shall be provided.

One (1)
20-18-0100

Cab Handrails & Grab Handles - Aluminum, Knurled, Marauder

CAB HANDRAILS AND GRAB HANDLES

Handrails shall be 1-1/4" diameter extruded aluminum, knurled, with a bright anodized finish.

All handrail stanchions shall be chrome plated. They shall be bolted to the body with 1/4" stainless steel hex head bolts. Stanchions shall have a rubberized gasket placed between them and the body surface they are mounted on. A drain hole shall be provided in each bottom stanchion.

Handrails and handles shall be installed as follows:

Four (4) 24" handrails shall be installed on the side of the cab, one just to the rear of each cab door.

Four (4) 6" chrome grab handles shall be provided, one on the inside of each cab door:

Two (2) 12" rubber covered grab handles shall be provided, one on the driver's side and officer's side front A-pillar, above the door hinge, to assist in entry to the cab.

Two (2) 12" rubber covered grab handles shall be provided, one on each rear crew door hinged-pillar, on the hinged side of the door, to assist in entry to the cab.

One (1)
20-18-021Z

Black Line-X'd Hand Rails

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Black Line-X'd Hand Rails

The four (4) 24" exterior side mounted handrails to be sprayed in black Line-X'd. Stanchions are left standard finish. --ref attached picture for concept



One (1)
20-20-0100

Marauder Crash Test Report - Chassis and Cab

MARAUDER CRASH TEST

The cab shall be certified for the following tests:

SAE J2420: Cab Over Engine (COE) Front Strength Evaluation - Dynamic Loading - Heavy Trucks

SAE J2422: Cab Roof Strength Evaluation - Quasi Static Loading - Heavy Trucks

ECE Regulation 29: Protection of Occupants of Cab in Commercial Vehicle

Performance Measure:

1. After undergoing each test, the cab of the vehicle shall exhibit a survival space accommodating a 50th percentile male ATD in the median position without contact between the manikin and non-resilient parts for all seating positions.
2. None of the doors shall open during the tests.
3. The cab attachments may be distorted or fractured, however, the cab shall remain attached to the vehicle frame in at least one attachment location.

One (1)
20-20-4015

Helmet Holder - Body

HELMET HOLDER - BODY

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

The helmets shall be stored in the body in accordance with NFPA 1901 current regulations:

NFPA 14.1.8.4.1 A location for helmet storage shall be provided.

NFPA 14.1.8.4.2 If helmets are to be stored in the driving or crew compartment, the helmets shall be secured in compliance with 14.1.11.2.

One (1)
20-20-4024

Helmet Caution Labels (for 4 door cabs)

CAUTION LABELS

Caution labels shall be posted in the cab so that they shall be visible from each seat position. The labels shall read: "Do Not Wear Helmets While Seated".

One (1)
20-20-6010

Collision Avoidance System - HAAS Alert R2V™, 2-Year Safety Cloud®

COLLISION AVOIDANCE SYSTEM

A HAAS Alert Responder-to-Vehicle (R2V) collision prevention solution shall be installed to provide real-time digital alerts to increase safety by notifying drivers in advance when crews are on-scene and responding. The digital alerts shall be delivered to navigation apps on smart phones and in-vehicle navigation systems.

The system shall include the HA-5 Transponder, R2V Safety Cloud® subscription, and Situational Awareness Dashboard. The transponder shall include cellular data service. The customizable Dashboard enables real-time operational status of the entire fleet on any device. The HA-5 Transponder shall be installed on the lower center dash to the driver's side, with a clear view of the sky for optimal GPS signal strength.

HAAS Alert shall provide a two-year warranty on the HA-5 Transponder.

A two-year subscription to the HAAS Alert R2V Safety Cloud® shall be provided. The subscription service shall be administered and serviced by HAAS Alert.

One (1)
20-25-080B

Headliner - Padded, Acoustical, Black

HEADLINER

The cab shall be provided with a removable black headliner for ease of servicing the electrical wiring placed in the cab roof. The headliner shall consist of 3 layers of material. Next to the roof shall be a layer of acoustical insulation made of polyester and polypropylene fibers. The next layer is 1/4" thick Luann. Finally, there is a 1/4" thick layer of foam/perforated acoustical vinyl.

The headliner shall be the multi-piece type (minimum of three (3) sections) so that the entire liner does not have to be removed for localized maintenance.

One (1)
20-25-093B

Back Liner - Smooth Aluminum with Black LINE-X

BACK LINER

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

The cab shall be provided with a .125" smooth aluminum removable back liner that shall be covered with black LINE-X. The back liner shall be the multi-piece type (minimum of three (3) sections) so that the entire liner does not have to be removed for localized maintenance.

One (1)
20-25-094B

Crew Door Head Bumpers - (2) Vinyl, Padded, Black

HEAD BUMPERS

Two (2) padded black vinyl head bumpers shall be provided each side on the interior of the cab above the crew doors in the header area.

One (1)
20-25-095D

Pac Trac - (2) #7000, Driver's & Officer's Side Inboard, Cab Back Wall

PAC TRAC ON CAB BACK WALL

A Pac Trac 7000 assembly shall be installed on the interior rear cab wall, on both the driver's side and the officer's side **in-between the outboard and inboard seats. The Pac Trac shall measure approximately 8.63" wide overall by 41.00" high on the driver's side. The Pac Trac shall measure approximately 8.63" wide overall by 30.00" high on the officer's side.**

Note: Other options selected for the cab interior, such as seats, speakers, back wall windows, compartments and other mounting brackets may affect the dimensions of the Pac Trac.

(Please reference the picture below for concept).



One (1)

Engine Enclosure - Black LINE-X, Marauder

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

20-25-101B

ENGINE ENCLOSURE

The engine enclosure structure shall have a 1-1/4" thick inner lining, on the engine side, comprised of aluminized foil and foam/barrier composite for heat insulation. The tunnel cover shall have 1/2" decoupled foam lower and 1" decoupled foam upper covering, on the cab interior side, for noise insulation. The top forward portion of the hood shall have a full-width riser with a sloped face for the installation of the switch panel. The sloped panels shall be used for vehicle accessory controls. A minimum of 1" shall be provided between the right edge of the accelerator pedal and the side of the engine hood. A removable cover over the engine enclosure and insulation shall be coated with black LINE-X to act as an insulator for sound and engine temperature, as well as to provide an easy-to-clean work surface.

In order to optimize in-cab vision and seating space for the driver, officer and crew members while properly seated and belted in turn-out gear, the maximum overall dimensions of the engine enclosure shall not exceed:

- 26.25" from floor to top of engine tunnel between driver and officer
- 26.25" from floor to top of engine tunnel at front center dash panel
- 31.25" from floor to top of driver and officer dash panels

ACCESSORY MOUNTING STRUCTURE

The top portion of the engine enclosure shall have a 1/8" thick aluminum channel frame located between the engine tunnel structure and the cover to support the cover and facilitate mounting of accessories and equipment.

ENGINE COMPARTMENT ACCESS DOOR

An access door shall be provided at the rear of the engine enclosure for routine engine fluid checks. The access door shall be insulated from engine heat with aluminized foil/foam/barrier composite and sealed to prevent exhaust fumes from entering the crew cab.

Removable Engine Tunnel Panels (Marauder Only)

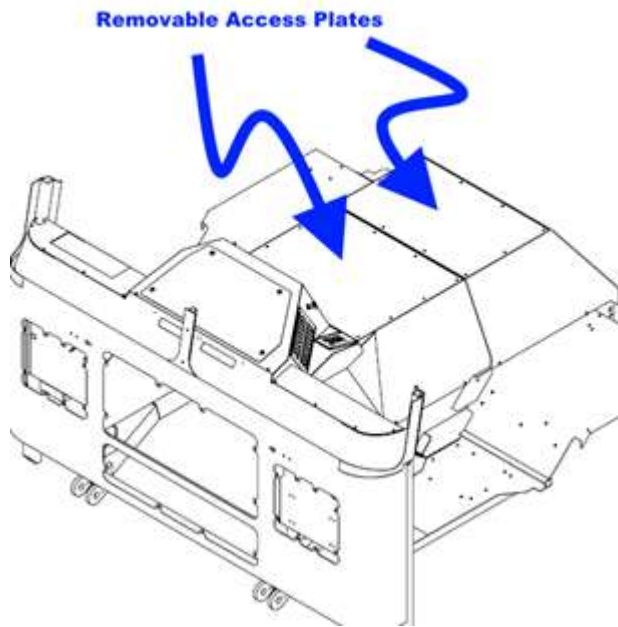
One (1)
20-25-1095

REMOVABLE PANELS - TUNNEL

A set of access panels LINE-X'd to match the engine tunnel shell shall be installed on top of the engine tunnel shell. They shall only provide access into the area beneath the shell and not into the actual engine tunnel. They shall be approximately the full width of the tunnel and shall be provided on each side of the horizontal split.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper



One (1)
20-25-3000

Steering Wheel - Tilt/Telescoping

18" STEERING WHEEL WITH TILT/TELESCOPE

A padded 18" steering wheel with center horn ring shall be provided. The upper steering column shall be of the tilt and telescopic type. A self-canceling directional switch with wiper control and headlight dimmer control shall be mounted on the steering column with an ICC four way flash switch. The self-canceling directional switch shall be easily removable and replaceable without removing the steering wheel or column assembly. The junction of the shaft and the cab floor shall be sealed to prevent air exchange between the cab interior and exterior.

One (1)
20-25-400B

Cab Dash Finish - Black LINE-X

BLACK LINE-X FOR CAB DASH

The cab dash shall be sprayed with black LINE-X having a high resistance to abrasion and tearing. A vinyl cloth glued or laminated in some manner to a metal backing surface shall not be acceptable.

The LINE-X shall absorb impact without surface damage. The LINE-X shall be resistant to gasoline, diesel fuel, paints, bleaches, organic solvents and other cleaning agents and chemicals. It shall include sound dampening and vibration elimination properties.

The LINE-X shall be solvent free and be environmentally safe to apply with no VOC or CFC hazards. Its surface shall have a non-glare, granular texture and be easily cleaned with common cleansing

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

compounds.

One (1)
20-25-408B

Overhead Dash - Black LINE-X Finish, Marauder Only

OVERHEAD DASH

An overhead drop down dash shall be provided with a full length piano hinge and four (4) 1/4 turn latches. This dash shall incorporate areas designed to hold emergency switching and selected options such as control heads and indicators that shall be accessible to the driver and officer. The overhead dash shall have a black LINE-X finish.

One (1)
20-25-4091

Overhead Dash Open Angle Limiting Strap, Marauder Only

LIMITING STRAP

A strap shall be provided to limit the extent of opening range for the overhead power distribution area (overhead dash) access. This 2" wide, retention strap shall prevent the contact between the upper, overhead, power distribution access housing and the lower, center, dash housing. An approximate clearance of 3 inches shall be maintained between the upper and lower dash structure and retained by the strap. The strap shall be fastened by footman loops between the cab roof structure and hinged upper power distribution housing.

One (1)
20-25-4120

Officer's Dash - Includes MDT-Laptop Pocket (NA for Attacker/Capitol Cabs)

OFFICER'S DASH

The top of the officer's dash shall include a pocket for a laptop computer. The pocket shall measure 15.25" wide x 8.75" deep x 3.00" high at the rear.

One (1)
20-25-5100

Sun Visors - (2) Lexan (Smoked Transparent)

SUN VISORS

Two (2) approximately 8" x 28" dark smoke colored transparent polycarbonate Lexan sun visors shall be provided, one on the driver's side and one on the officer's side. Visor shall be supported at both ends to prevent drooping.

One (1)
20-25-8000

Sign - Vehicle Dimension & Weight

VEHICLE DIMENSION SIGN

A sign shall be provided in the front cab area indicating the height of the completed apparatus in feet and inches, length of the completed apparatus in feet and inches, and the gross vehicle weight rating (GVWR) in tons.

One (1)
20-26-1200

Cable Raceway - Marauder

CABLE RACEWAY

A cable raceway, 1.75" x 5.75", shall be installed underneath the officer's floor. It shall run between the officer's kick plate and the seat riser.

10139-0008

06/07/24

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
20-26-2010

Cable Raceway Opened Underneath Officer Seat

The cable raceway shall be opened underneath the officer seat to assist in the installation of radio or additional equipment.

One (1)
20-26-2050

Cable Raceway Pull Wire Provided

A pull wire shall be provided within the cable raceway to assist in the installation of radio or additional equipment.

One (1)
21-00-0110

Seat - Driver's, Bostrom, Sierra, Air-100, Fixed Back (NA w RollTek)

DRIVER'S SEAT

The driver's seat shall be an H.O. Bostrom Sierra Air-100 fixed high back seat with air suspension. This seat shall have 5" horizontal adjustment.

One (1)
21-05-110D

Seat Riser - Driver, C-Channel Bracket, Not Available with RollTek

The driver's seat shall be held at NFPA regulated height by a C Channel Bracket.

One (1)
21-12-700B

Seat Belt - Driver's, 3 Point, Fixed, Marauder Only

SEAT BELT

The driver's seat shall have a 3-point fixed D Loop style shoulder harness, to meet FMVSS and NFPA 1901 current edition requirements. The seat belt shall be red in color.

One (1)
21-01-0160

Seat - Officer's, Bostrom, Tanker 450, SCBA

OFFICER'S SEAT

An H.O. Bostrom Tanker 450 SCBA seat shall be provided for the officer. This seat shall have 5" horizontal adjustment.

One (1)
21-07-053O

Seat Riser/Compt - Officer, 10.5 High, Long Depth, Marauder

The officer's seat shall be held at NFPA regulated height by a 3CR12 stainless steel frame which creates an enclosed compartment. The compartment measures approximately 15.5" wide x 10.5" high x 21" deep, front to back at the top and 12.5" deep front to back at the bottom. Access to this compartment shall be through a drop-down door.

One (1)
21-07-096F

Seat Riser/Compartment Door - Front Opening, 13.5"w x 8" h

The seat riser/compartment shall have a front opening door that measures 13.5" wide by 8" high.

One (1)
21-08-0150

SCBA Bracket - IMMI SmartDock Gen 2 (Ea)

One (1) NFPA compliant IMMI SmartDock Gen 2 SCBA bracket shall be installed in the seat(s). The bracket shall utilize a locking mechanism that engages during deceleration. The bracket shall hold the

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

cylinder in place while in transit and release using no straps, levers, buttons or switches.

One (1)
21-12-701B

Seat Belt - Officer's, 3 Point, Fixed, Marauder Only

SEAT BELT

The officer's seat shall have a 3-point fixed D Loop style shoulder harness, to meet FMVSS and NFPA 1901 current edition requirements. The seat belt shall be red in color.

One (1)
21-11-6410

Seat - (1) Inboard, Forward Facing, Bostrom, Flip-up (NA w RollTek)

REAR SEATING

The rear crew cab section shall contain one (1) forward facing seat. The forward facing seat shall be a fold-up seat with bottom and back cushion installed on the rear wall of the cab directly behind the engine enclosure. The seat cushion shall be made by H. O. Bostrom. The seating area shall allow maximum room for fire fighters in full turn out gear. There shall be no logo on the back cushion.

One (1)
21-12-704D

Seat Belts - Inboard, Forward Facing, 3 Point, Vertically Adjustable (Ea)

SEAT BELTS

The one (1) inboard, forward facing seat(s) shall have a 3-point vertically adjustable D Loop style shoulder harness, to meet FMVSS and NFPA 1901 current edition requirements. The seat belts shall be red in color.

One (1)
21-11-7B00

Seat - (2) Outboard, Forward Facing, Bostrom, 400 SCBA Flip-up

REAR SEATING

The rear crew cab section shall contain two (2) outboard forward facing H.O. Bostrom 400CT SCBA flip-up passenger seats. The seats shall be installed on the rear wall of the cab. The seating area shall allow maximum room for fire fighters in full turn out gear.

Two (2)
21-08-0150

SCBA Bracket - IMMI SmartDock Gen 2 (Ea)

Two (2) NFPA compliant IMMI SmartDock Gen 2 SCBA bracket shall be installed in the seat(s). The bracket shall utilize a locking mechanism that engages during deceleration. The bracket shall hold the cylinder in place while in transit and release using no straps, levers, buttons or switches.

Two (2)
21-12-705B

Seat Belts - Outboard, Forward Facing, 3 Point, Fixed, MAR Only, (Ea)

SEAT BELTS

The two (2) outboard, forward facing seat(s) shall have a 3-point fixed D Loop style shoulder harness, to meet FMVSS and NFPA 1901 current edition requirements. The seat belts shall be red in color.

One (1)
21-12-7400

Upholstery - Seat, Vinyl, Black

SEAT UPHOLSTERY

All cab seats shall be upholstered in black colored vinyl material.

10139-0008

06/07/24

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
21-13-1500

Marauder II Interior Decor, Miscellaneous Items

INTERIOR DÉCOR

The following components shall always be black in color:

Floor matting and floor mat edging
Headliner trim
Back liner trim
Crew heater, complete assembly
Electrical panels
Plastic snap plugs for wire access holes
Door seals
Seat risers
Under seat compartments
Rubber covered grab handles
Map Desk, if present

The following item shall always be gray in color:

Seat belt retractor cover.

Five (5)
21-13-2500

Sign - Seating Capacity

CAPACITY SIGN

A sign visible to the driver, that states the number of personnel the vehicle is designed to carry, shall be provided.

One (1)
21-13-7900

Seagrave Logos Only on Seats

SEAGRAVE LOGOS ON SEATS

The Seagrave Logo shall be embroidered onto the following seat locations, unless specified differently: on the headrest if present, or the front of the seat back cushion if not, and one on each side of the seat cushions.

Two (2)
21-15-1113

Cab Compt- Rear Facing, Outbd, 18wx21dx24h O.D., Front Opening (Ea)

STORAGE COMPARTMENT(S)

Two (2) storage compartment(s) with front opening shall be provided in the cab. The compartment(s) shall be rear facing and in the outboard position. The overall outside dimensions of each compartment shall be **18" wide x 21" deep x 24" high**. The compartment(s) shall be constructed of 1/8" smooth aluminum. The compartment exterior(s) shall have a LINE-X finish that shall match the lower cab dash/engine tunnel.

Two (2)
21-15-11V3

Cab Compartment Location - Driver's Side & Officer's Side

The cab compartment shall be located on the driver's side and on the officer's side.

Two (2)

Cab Compartment Door - Cargo Netting, f/ Front Opening

10139-0008

06/07/24

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

21-15-195N

CAB COMPARTMENT DOOR

A black cargo net shall be provided over the cabinet front opening to secure stored equipment. The netting shall be made of two (2) inch wide black cargo netting with approximately two (2) inch square openings. The netting shall be fastened on the bottom with footman's loops. The top of the netting shall have two (2) seat belt buckles to secure/release the cover, one (1) in each corner. The male portion of each buckle shall be secured to the top of the netting, the female receiver portion shall be secured to the header of the compartment. A pull strap with loop handle shall be attached to each female receiver to release the cover. Velcro fold overs to the interior of the compartment shall be located on the bottom of the netting to facilitate removal.

Two (2)
21-15-2150

Pull Strap(s) Color - Orange

The pull straps shall be orange in color.

Two (2)
23-25-002N

Cab Compartment Light - ROM LED, (1) Strip Light, for Cargo Netting

COMPARTMENT LIGHTS - LED

The cab interior storage compartment shall have a ROM LED lighting strip installed. The full height lighting strip shall be mounted vertically on the right side of the cab compartment door opening (facing the compartment door opening). A maintained toggle switch for light activation shall be installed in the upper right corner, inside the compartment.

Two (2)
21-15-2010

Shelf - Adjustable, 1/8" Aluminum with DA Finish (Ea)

ADJUSTABLE SHELF OR SHELVES

Two (2) adjustable shelf or shelves shall be provided in the cab compartment. Each shelf shall be made from 1/8" aluminum sheet metal and have welded corners and a DA finish on the outside edge of the shelf. It shall be supported by four (4) stainless steel angles bolted to "Alumastrut" tracks.

Two (2)
21-15-7010

If more than one of the same compartment is provided, then the shelves shall be equally distributed.

Compt/Shelf/Tray Floor Liner -Dri-Dek® , Per Compartment / Shelf / Tray (Ea)

DRI-DEK®

Two (2) black Dri-Dek® mats shall be provided and installed on cab compartment floors and/or in shelves/trays as specified. Ramped edging shall not be included.

Two (2)
21-15-709A

Compt/Shelf/Tray Floor Liner Location - Compartment

The floor liner shall be placed on the compartment floor.

Two (2)
91-01-0210

Finish - Cab Compartment Interior, Mill Finish (Ea Compt)

FINISH – CAB COMPARTMENT INTERIOR(S)

Two (2) cab compartment interior(s) shall have no finish applied.

10139-0008

06/07/24

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1) **Compartment - Under Seat, Rear Forward Facing (41") MII Only**

21-15-5503

REAR SEAT COMPARTMENT

There shall be provided one (1) compartment constructed of aluminum and measuring approximately 41" W x 11" H x 16" D. It shall be installed **under rear inboard forward facing seats and the rear outboard forward facing seat on the driver's side**. The interior and exterior walls of the compartment shall have a black spatter finish. Access to this compartment shall be through:

One (1) **Rear Under Seat Compt Access - (2) Front, Horizontally Hinged Doors**

21-15-56ZA

The rear under seat compartment shall be accessed by two (2) front facing, horizontally hinged drop down doors, each with one (1) D-ring handle.

One (1) **Compt/Shelf/Tray Floor Liner -Dri-Dek® , Per Compartment / Shelf / Tray (Ea)**

21-15-7010

DRI-DEK®

One (1) black Dri-Dek® mats shall be provided and installed on cab compartment floors and/or in shelves/trays as specified. Ramped edging shall not be included.

One (1) **Compt/Shelf/Tray Floor Liner Location - Compartment**

21-15-709A

The floor liner shall be placed on the compartment floor.

One (1) **Fire Extinguisher Storage - Rear Cab, ATP w/ Black LINE-X (Ea)**

21-15-7220

FIRE EXTINGUISHER STORAGE

One (1) Aluminum tread plate extinguisher holders shall be installed **under rear outboard forward facing seat on the officer's side**. The holders shall be installed on a slight angle toward the front of the cab to allow the extinguisher to be removed while standing. A Velcro strap shall be provided to secure the extinguisher from sliding out. The holder shall be approximately 9.75" wide x 11.0" tall x 20.5" long.

The exterior sides, top and rear shall be covered with black LINE-X over the aluminum tread plate.

One (1) **Heater/Defroster - Forward Cab, 30,000 BTU, Marauder**

21-23-0710

HEATER/DEFROSTER-FORWARD CAB

A front cab heater/defroster unit shall be provided. The unit shall have a heating capacity of 30,000 BTU and combined 520 CFM variable speed blower assembly. The unit shall be located on top of the engine tunnel and shall be centered on the windshield. Defroster outlets shall be located at the bottom of the windshield and shall direct air flow from the unit up on to the windshields. Vents shall be located in the drivers and officers dashes and kick plates.

One (1) **Air Conditioning Condenser Cover - AL, Painted Job Color, Addition, Marauder**

21-23-079B

CONDENSER COVER

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

The air conditioning condenser assembly shall have an additional cover and / or covers to protect the Freon hoses, dryer, valves, switches and / or solenoids above the cab roof and connected to the condenser body.

The main condenser body shall have one fabricated cover with openings for, and above, the condenser fans. The main condenser body cover shall be approximately 7.5" high x 46.5" long x 26.25" wide and fabricated from 1/8" aluminum and painted to match the cab roof.

Additional covers, formed from 1/8" aluminum painted to match the cab roof, shall be provided for hose and harness routing above the cab roof, as necessary.

Note: Condenser location and orientation is dependent on other influential options.

One (1) **Rear Crew Cab Heaters - 64,000 BTU Total, Marauder**

21-23-2710

REAR CREW CAB HEATERS

Two (2) rear crew cab heaters with a combined rating of 64,000 BTU output and 850 CFM air flow shall be provided. The rear cab heaters shall be mounted under the rear facing outboard seats each side. The units shall have a variable speed blower, and a removable, replaceable filter. The driver side rear facing heater shall have control of the thermostat and the on/off control.

One (1) **Air Conditioner - Cab, 79,000 BTU Total, Marauder**

21-23-3810

CAB AIR CONDITIONING SYSTEM

The cab shall be equipped with an air conditioning system that shall include two (2) ceiling mounted evaporators. The air conditioning system shall have a combined cooling capacity of 79,000 BTU and variable speed blower assemblies for a combined 1100 CFM. The main controls for the unit shall be located in the dash. The evaporators shall have air diffusers to allow for multi-directional airflow. Each diffuser shall be adjustable up and down and side-to-side for individual preference. Each evaporator shall have its own sump style drain system for removal of condensation. The sump shall be integrated into the ABS evaporator cover.

The evaporators shall be compliant with all EPA regulations and use R-134A Refrigerant. All hoses used in the air conditioning system shall be "barrier" type construction for containment of the refrigerant.

The condenser assembly shall be a stacked type, low profile, dual fan compact design with dryer and pressure switch included. The condenser assembly shall include a white powder coated housing over the stacked condenser coils, as provided from the manufacturer. The condenser shall be located on the cab roof.

The air conditioning system shall exceed the industry norm by cooling the cab from the ambient temperature of 100 degrees Fahrenheit at 50% relative humidity to an average cab temperature of 75 degrees Fahrenheit in 30 minutes.

Two (2) **Auxiliary Fan in Cab (Ea)**

21-23-5000

10139-0008

06/07/24

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

AUXILIARY FAN(S)

Two (2) adjustable 7.5" auxiliary fan(s) shall be provided in the cab with a two (2) speed control switch on the mounting pedestal.

Two (2)
21-23-5005

Auxiliary Fan - Wired Battery Switch

The auxiliary fans shall be wired battery switched and shall be activated by the switch on the fans.

Two (2)
21-23-500R

Auxiliary Fan Locations - (2) from Overhead, One each Side of Center Windshield

The auxiliary fans shall be located hanging from the overhead, one each side of the center windshield post.

One (1)
21-23-8010

HVAC Controls - Forward Cab, Marauder

HVAC CONTROLS - FORWARD CAB

HVAC controls shall feature rotary switches, function labeling, backlighting, and have colored indicators and shall be located in the center dash area between the driver and officer.

One (1)
22-00-0105

Electrical Wiring - 12V General

GENERAL 12-VOLT ELECTRICAL WIRING REQUIREMENTS

12-VOLT ELECTRICAL SYSTEM

The apparatus shall be equipped with a heavy-duty 12-volt electrical system. All 12-volt electrical equipment installed by the apparatus manufacturer shall conform to modern automotive practices. All electrical wiring and components installed in the apparatus shall be suitable for use in severe duty emergency vehicle applications.

GENERAL WIRING AND WIRE HARNESS CONSTRUCTION

Unless otherwise specified by the component supplier, all insulated wire and cable shall conform to SAE J1127 *Low Voltage Battery Cable* type SGX or STX, or SAE J1128 *Low Voltage Primary Cable* type SXL, GXL, or TXL.

Circuit feeder wires shall be stranded copper or copper alloy conductors of a gauge rated to carry 125 percent of the maximum current for which the circuit is protected.

Conductor materials and stranding, other than copper, shall be permitted if all applicable requirements for physical, electrical, and environmental conditions are met as dictated by the end application.

The overall covering of conductors shall be moisture-resistant loom or braid that has a minimum continuous rating of 194°F (90°C) except where good engineering practice dictates special consideration for loom installations exposed to higher temperatures.

The overall covering of jacketed cables shall be moisture resistant and have a minimum continuous

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

temperature rating of 194°F (90°C) except where good engineering practice dictates special consideration for cable installations exposed to higher temperatures.

CIRCUIT IDENTIFICATION

All wiring shall be uniquely identified by a circuit number and color coding. The identification shall be referenced on a wiring diagram. Wires less than 8 AWG shall be permanently identified at least every 2.0 inches (50.8 mm) by a circuit and function code. Cables equal to or larger than 8 AWG and wires included in jacketed cables shall be permanently identified by circuit number at all terminations.

WIRING CONNECTIONS

All wiring connections and terminations shall use a method that provides a positive mechanical and electrical connection. The wiring connections and terminations shall be installed in accordance with the device manufacturer's instructions. Secondary locks shall be utilized on all connectors that are secondary lock capable.

Exterior exposed wire connectors shall be environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids. Seal plugs shall be installed in all unused sealed connector cavities.

All ungrounded electrical terminals shall have covers or be in enclosures to protect against corrosion, excessive heat, excessive vibration, physical damage, liquid contaminants, dust, and other environmental factors.

Wiring splices shall be crimp-type, molded, or sonic weld type. Adhesive lined heat shrink tubing shall be used to seal and insulate splice joints.

WIRE AND CABLE ROUTING

Wiring routed through holes in sheet metal or castings shall have edges protected by an appropriately sized grommet.

Wiring shall be routed to avoid metal edges, screws, trim fasteners and abrasive surfaces. When such routings are not possible, protective devices (shields, caps, etc.) shall be used to protect the wires. When wires must cross a metal edge the edge shall be covered with a protective shield.

Wiring shall be routed to provide at least 3 inches (76.2 mm) clearance to moving parts, unless positively fastened or protected by a conduit.

Wire routings should avoid areas where temperatures exceed 180° F (82.2° C) and a minimum clearance of 6 inches (152.4 mm) shall be maintained from exhaust system components. Where compliance with this requirement is not possible, high temperature insulation and heat shields shall be utilized.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

When wiring is routed between two members where relative motion can occur the wiring shall be secured to each member, with enough wire slack to allow flexing without damage to the wires.

Wiring to all circuit components (switches, relays, etc.) in exposed locations shall provide a drip loop to prevent moisture from being conducted into the device via the wire connection.

Routing wires into areas exposed to wheel wash shall be avoided if possible. When such routings cannot be avoided, adequate clipping or protective shields shall protect the wires from stone and ice damage.

Wiring shall be secured in its intended location with appropriately sized bolt-on clips and nylon wire ties.

Electrical components designed to be removed for maintenance shall include a sufficient length of wire to allow the component to be pulled away from the mounting area for inspection and service work.

Bulkhead type connectors or sealed fittings shall be used to prevent the entry of liquid contaminants into weather tight enclosures.

SPARE WIRES

Wiring harnesses from/to major power and signal distribution areas of the apparatus shall include spare wires for future expansion of the system.

ELECTRICAL SYSTEM COMPONENTS

Serviceable components shall be readily accessible. Switches, relays, terminals and connectors shall have a dc rating of 125% of the maximum current for which the circuit is protected.

A distributed power and signal system shall be utilized on the apparatus to minimize power supply voltage drops. Power and signal distribution areas in the cab shall be concentrated in five (5) areas.

A lower cab power and signal distribution center shall be located in the center forward portion of the cab "dash". It shall be hinged and opened by unlocking two (2) top mounted, double hinged, lift and pull latches. This area shall contain relays and circuit breakers installed in a logical and serviceable fashion.

An additional lower cab power and signal distribution center shall be located below the officer's dash behind the kick plate.

An upper power and signal distribution area shall be located in the forward portion of the cab ceiling, above the engine tunnel. Components in this area shall be permanently labeled and easily accessible by opening a hinged cover.

A power and signal distribution area shall be located in the pump module, if applicable. Components in this area shall be permanently labeled and easily accessible.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

A power and signal distribution area shall be located on the front of the forward body compartments. Components in these areas shall be permanently labeled and easily accessible.

All electrical components or devices installed in an exposed area on the outside of the cab or body shall be mounted in such a manner, or protected by a gasket, caulking or other means, so that moisture shall not accumulate in it.

CORROSION PROTECTION

Externally exposed, non-plug type, electrical connections shall be given a hand applied or sprayed application of an industrial standard insulation coating with a minimum rating of 2100 volts per mil thickness. Insulation shall protect the connection from water induced electrical corrosion and accidental short circuiting. Should the connection be loosened or removed during the manufacturing process another coating shall be applied after it has been refastened or replaced.

Main Battery and Starter Circuits

One (1)
22-00-0110

MAIN BATTERY AND STARTER CIRCUITS

BATTERY POWER BUSS

All positive cables from the batteries shall be connected directly to a battery positive buss bar located as close to the batteries as practical. The alternator shall be wired directly to the battery positive buss bar through the ammeter shunt, if one is provided.

ENGINE STARTER AND INTERLOCK CIRCUITS

The starter solenoid(s) shall be connected directly to the battery positive buss bar. An interlock shall be provided to prevent the operator from engaging the starter when the engine is running.

BATTERY GROUND BUSS AND SINGLE POINT GROUND SYSTEM

All negative (ground) cables from the batteries shall be connected directly to a battery negative buss bar located as close to the batteries as practical. Appropriately sized ground feeder cables shall be utilized to provide a low impedance ground path to the negative buss bar for all electrical devices on the apparatus.

APPARATUS GROUND BONDING

The battery negative buss bar shall be connected to the chassis frame. The cab, pump enclosure (if furnished), and body structure shall be electrically bonded to the vehicle frame with braided copper grounding straps.

EMI/RFI Protection

One (1)
22-00-0120

EMI/RFI PROTECTION

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

The apparatus electrical system and related devices shall have the ability to function in the severe electromagnetic environment typical of fire ground operations.

EMI/RFI EMISSIONS

State-of-the-art electrical system design and components shall be utilized to ensure the suppression of radiated and conducted EMI (electromagnetic interference) and RFI (radio frequency interference) emissions that may cause communication and navigation radio-reception interference. The electrical system and related components shall comply with the applicable sections of J551/1 *Performance Levels and Methods of Measurement of Electromagnetic Compatibility of Vehicles, Boats (up to 15 m), and Machines (16.6 Hz to 18 GHz)*

EMI/RFI SUSCEPTIBILITY

The apparatus electrical system shall incorporate immune circuit designs, filtering, shielding and twisted-pair wiring to control EMI/RFI susceptibility. Particular attention shall be given to harness and cable routing to minimize the potential for conducted and radiated signal susceptibility.

Electrical / electronic equipment on the apparatus shall not be susceptible to radiated and conducted EMI/RFI emissions from on-board radio transmitter(s) and shall comply with the requirements of SAE J551-12 *Vehicle Electromagnetic Immunity--On-Board Transmitter Simulation*.

Low Voltage Electrical System Performance Testing

ELECTRICAL SYSTEM PERFORMANCE TESTING

An operational test shall be conducted to ensure that all installed electrical equipment is properly connected and is in working order. The apparatus alternator shall be tested with the total continuous electrical load applied and engine running up to the engine manufacturer's governed speed for a minimum of 2 hours. Additionally, all warning lights shall be run continuously during the three (3) hour NFPA pump certification test (or at another time for not less than three (3) hours). Activation of the load management system (if furnished) shall be permitted during this test. An alarm sounded by excessive battery discharge, as detected by the low voltage warning system, or a system voltage of less than 11.8 V dc at the battery for more than 120 seconds, shall be considered a test failure.

Cab Dash & Instruments

CAB DASH AND INSTRUMENTS FOR 2013 EMISSIONS ENGINE

A non-glare instrument panel, custom designed to accommodate the appropriate functions, shall be provided. Illumination shall be provided for controls, switches, instruction plates, gauges, and instruments necessary for the operation of the apparatus. The cab dash shall be forward slanted, and constructed of aluminum. Rocker switches that have integral lights shall be as follows when applicable: red indicator lights shall be provided for warning light and engine/mechanical functions, green indicator lights shall be provided for scene and auxiliary lighting and general functions; selection shall be at the

One (1)
22-00-0130

One (1)
22-00-014A

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

manufacturer's discretion.

A system shall be provided that interacts with the engine electronics and eliminates redundant senders and switches. The electronic engine gauges shall receive information on the SAE J1939 data link to improve reliability and gauge accuracy. Connectors shall be utilized for ease of service. The dial face shall be black with white lettering. The primary letters shall be in Imperial with the secondary, smaller letters in metric. The dial shall have international non-language symbols for the gauge function (except speedometer). Gauges shall have illumination with a monochrome LCD display located on the speedometer gauge. They shall also have a 250 degree dial sweep for greater definition of scale. SAE J1939 Faults and Warnings shall be displayed on the LED display.

DRIVER'S INSTRUMENTATION

The following individually mounted gauges shall be provided: (all inclusive gauge clusters not allowed, no exceptions)

Main Gauges

3" Speedometer:	0-85 mph with built-in LCD display
Speedometer Mode Switch:	Allows operator to select menu items in the display screen
Speedometer Up Switch:	Allows operator to scroll up through display menu items
Speedometer Down Switch:	Allows operator to scroll down through display menu items
3" Tachometer:	0-4000 rpm

Satellite Gauges

2" Fuel Level:	Empty – full with low level warning indicator
2" Voltmeter:	10-16 VDC
2" Coolant Temperature:	100-240 Degrees Fahrenheit
2: Engine Oil Pressure:	0-80 psi
2" Transmission Oil Temp:	100-320 Degrees Fahrenheit
2" Front Air Pressure:	0-150 psi
2" Rear Air Pressure:	0-150 psi
2" DEF Level:	Empty – full with low level warning indicator

DRIVER'S INDICATOR LIGHT MODULE

The following indicators shall be mounted in a removable modular panel in front of the steering column. The indicators shall be identified with universal ISO 2575 symbols where applicable and visible to the driver while seated. All applicable indicators in the modular panel shall automatically illuminate for 1 second upon activation of the ignition switch to verify operation:

- Battery Switch "On" green indicator light
- Ignition Switch "On" indicator (Seagrave Flame Logo)
- Check Transmission amber indicator light

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

- Check Engine amber indicator light
- Stop Engine (Engine Warning) red indicator light
- High Exhaust Temperature (HEST) amber indicator light (if applicable)
- Diesel Particulate Filter Regeneration (DPF) amber indicator light (if applicable)
- Wait-to-Start amber indicator light (if applicable)
- Malfunction Indicator Light (MIL) amber indicator light (if applicable)
- ABS warning amber indicator light
- ATC/ESC activated amber indicator light
- Spring (Parking) Brake "On" red indicator light
- High Beam "On" blue indicator light
- Low air pressure red indicator light
- Left Turn signal green indicator light
- Right Turn signal green indicator light
- General Warning red indicator light (if applicable)
- DEF Level Indicator Light

AUDIBLE CAB ALARMS

Audible alarms shall be provided in the cab to alert the operator of conditions that require attention. The alarm device(s) shall be audible in the driving compartment and feature an adjustable volume control.

An intermittent audible tone shall sound when the following conditions are present and the parking brake is disengaged:

- Active Hazard Warning –
(Do Not Move Apparatus; Door Open, Tower Raised, Ladder Rack Down, etc.)
- Seat Belt Warning

A steady audible tone shall sound when the following conditions are present:

- Stop Engine (includes High Engine Temperature and Low Engine Oil Pressure)
- Low Voltage
- Engine Air Filter Restriction
- Jackknife Warning (if applicable)
- Tiller Cab Operator Not in Position (if applicable)

DRIVER'S AND OFFICER'S CONTROLS

The following rocker style control switches shall be identified and accessible to the driver while seated. Switches shall include integral indicator lights (where applicable) to advise that the switch has been energized and identification labels shall be illuminated for night driving.

- Ignition switch with green indicator light

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Engine Start switch
Headlight / Tail-Marker-ID light switch
Instrument Panel Dimmer control rheostat

The following controls shall be stalk mounted on the steering column and identified and visible to the driver while seated:

Turn Signal Control and 4-Way Hazard Warning switch
High-beam headlight switch
Windshield wiper control switch
Windshield washer control switch

The following controls shall be identified and accessible to the driver while seated:

Parking (Spring) Brake Control
High Idle control switch
Other controls (as defined elsewhere in this specification)

The following controls shall be identified and accessible to both the driver and officer while seated.
Controls shall be identified and illuminated for night driving.

HVAC control panel

Other controls (as defined elsewhere in this specification)

One (1)
22-00-015D

Emergency & Work Light Switch Panel - Driver

EMERGENCY & WORK LIGHT SWITCH PANEL - DRIVER'S SIDE

All emergency light and work area lighting control switches shall be mounted in a removable panel located in the overhead position on the driver's side of the cab. The light switches shall be "rocker" type with an internal indicator light (where applicable) to show when the switch is energized. All switches shall be properly identified by an illuminated label for night driving.

A master warning light switch shall be provided for emergency lighting.

A momentary clear warning light switch shall be provided for clear emergency lighting control that shall default on.

Work lights are defined as ground, step, rear pick up, hose bed or dunnage area, if on the apparatus and specified.

One (1)
22-00-0160

Door Ajar/Hazard Warning Indicator - LED

DOOR AJAR/HAZARD INDICATOR LIGHT (DO NOT MOVE APPARATUS)

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

A Whelen "T0" series 2" round red flashing LED light with chrome flange shall illuminate automatically whenever the apparatus parking brake is not fully engaged and any of the following conditions exist:

Any passenger or equipment compartment door is open.

Any ladder or equipment rack is not in the stowed position.

Stabilizer system is not in its stowed position.

Powered light tower is extended.

Any other device permanently attached to the apparatus is open, extended, or deployed in a manner that is likely to cause damage to the apparatus if the apparatus is moved.

The hazard warning light shall be identified with a label that reads: "Do Not Move Apparatus When Light Is On." The light shall be located on the ceiling between the driver and the officer.

Digital Clock - 24 Hour

One (1)
22-00-017B

DIGITAL CLOCK

A 24 hour real-time digital clock shall be identified and visible to the driver while seated.

Electrical Wiring - 12V INTELEX™ PLUS, Marauder

One (1)
22-00-0300

ELECTRICAL WIRING REQUIREMENTS - INTELEX™ PLUS

The apparatus shall be equipped with an INTELEX™ PLUS management system for control of the electrical system devices, where applicable.

CIRCUIT PROTECTION

Circuit protection devices shall be utilized to protect each electrical circuit. All circuit protection devices shall be sized according to 125% of the anticipated load to prevent wire and component damage when subjected to extreme current overload.

SOLID STATE CIRCUIT PROTECTION

Intex power distribution modules shall utilize solid state output channels and feature fully protected high-side drivers (+12V) to protect wiring. High-side drivers shall provide overload protection, current limitation, transient protection, and replicate the function of an automatic reset circuit breaker. If output current exceeds the rated amperage, the output shall automatically turn off. After 30 seconds, the module shall attempt to re-energize the load. If the output is still overloaded, it shall remain off until the power is cycled. In the event of a communications loss with the vehicle's control module, all outputs not controlling a moving device, such as a ladder rack, shall remain in their previous state until communication is restored or the power is cycled.

NON-SOLID STATE CIRCUIT PROTECTION

Circuit breakers shall be Type-I automatic reset (continuously resetting) and conform to SAE J553 or

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

J258 unless operational requirements and/or safety concerns dictate Type-III manual reset type conforming to SAE J1625. Automotive-type fuses conforming to SAE J554, J1284, J1888 or J2077 shall be utilized when required to protect electronic equipment.

POWER CONTROL RELAYS AND SOLENOIDS

Power control relays and solenoids shall have a direct current (dc) rating of 125 percent of the anticipated current load.

BUSSMANN MVEC RELAYS AND CIRCUIT PROTECTION

Manufactured as a hardened and weather tight module, the mVEC is rated at 200 Amps. The mVEC is configured to provide various OEM circuit protection and switching functions, using industry standard fuses, relays and breakers, with the status and control of each circuit accessible through J1939 CAN open messages. Each mVEC is rated at 200 Amps, with individual outputs rated up to 30 Amps. Waterproof to high pressure spraying (IP66 equivalent). The mVEC is designed and manufactured with robust features such as heavy-duty housing, silicon and Gortex gaskets, and protective conformal coated electronics, to operate in demanding vehicle environments such as those found in fire apparatus.

Information Center II - INTELEX™ PLUS

INFORMATION CENTER II

A 5" color display capable of displaying graphical images as well as text messages shall be located on the cab dash. The main display page shall include the date, time and ambient air temperature in Fahrenheit. Additional information pages shall be provided for the warning indications, not stowed indications, and open doors. The display shall be dimmable with a Rheostat control on the dash and shall have an override button on the control to dim to ten (10) percent.

APPARATUS STATUS INDICATORS AND AUDIBLE ALARMS

If a monitored "Not Stowed" or "Warning" condition is active, the corresponding status indicator shall flash. In addition to visual indicators, audible alarms shall sound when designated conditions activate the "Not Stowed" and "Warning" status indicators.

WARNING INDICATOR

A flashing red triangle symbol shall alert the vehicle occupants of an active "WARNING" condition. This is defined as a situation or status on the vehicle that is of high priority or "mission critical" nature. The flashing red triangle shall be displayed on the Information Center and dash gauge panel in front of the driver. The following are typical "Warning" (high priority) conditions:

HYDRAULIC FILTER
CAB NOT LOCKED
AIR RESTRICTION

LOAD MANAGE
LOW VOLTAGE
ABS FAULT

LOW AIR PSI
JACK KNIFE
TRAILER ABS

One (1)
22-00-0310

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

NOT STOWED INDICATOR

A flashing Not Stowed indicator shall alert the vehicle occupants of an active "Not Stowed" condition. This is defined as a situation or status on the vehicle that is not of high priority or "mission critical" nature, but requires attention before the vehicle is put in motion. The following are typical "Not Stowed" (not high priority) conditions:

AERIAL RAISED

DECK GUN RAISED

JACKS EXTENDED

The following items are considered Not Stowed only when the parking brake is released.

LADDER UP
LIGHT TOWER UP
OUTRIGGERS
DS HATCH OPEN

JACKS EXTENDED
DECK GUN RAISED
STEP DOWN
PS HATCH OPEN

Q2B TILTED
DS TELE LIGHT UP
PS TELE LIGHT UP
PEDESTAL COVER UP

AUDIBLE ALARMS

The following conditions shall cause the audible alarm to sound "steady" (not an intermittent beep); signifying a "mission critical" condition exists that requires immediate attention.

STOP ENGINE
LOW AIR
LOW COOLANT

CAB NOT LATCHED
ABS FAULT
LOW OIL PRESSURE

LOW VOLT

Corresponding "Low Air", "Stop Engine" visual indicators shall be located in the dash gauge panel in front of the driver.

The following conditions shall cause a chime alarm to sound "intermittently" (i.e., beep), once the parking brake is released, signifying a condition exists that may become "mission critical" if not quickly addressed.

ANY LIGHT NOT STOWED
ANY BODY DOOR OPEN
ANY CAB OR CREW CAB DOOR OPEN

An audible alarm shall sound if any of the seat belts are not properly closed and the vehicle is going 5 mph or greater. The sound shall be different from all other audible alarms in the cab.

OPEN DOORS / DEPLOYED EQUIPMENT RACKS / EXTENDED STEPS

When a cab or compartment door is open, a step is extended, or equipment (i.e., ladder) rack is deployed, the "DOORS" indicator shall flash. Pressing the corresponding button shall display an overhead

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

graphical representation of the apparatus. This image depicts the open cab door(s), open compartment door(s), deployed equipment rack(s), and/or extended step(s). The chime alarm shall also sound when the parking brake is released.

One (1)
22-00-031A

Customer Information on Display - Customer Name & City

The customer's name and city shall display on the information display screen.

Shall be determined at final inspection

One (1)
22-00-0320

Load Management System - INTELEX™ PLUS

AUTOMATED ELECTRICAL LOAD MANAGEMENT SYSTEM

The apparatus shall be equipped with an automated load management system. The load management system shall monitor battery voltage and activate the engine high idle system (provided NFPA interlocks have been established) before disabling any electrical loads. If engine high idle is not available or activation does not result in sufficient battery system voltage, individual electrical loads shall be automatically and sequentially deactivated until voltage returns to an acceptable level. Loads shall be sequentially reactivated to avoid a sudden large voltage demand on the system. Electrical loads defined in NFPA 1901 as “minimum continuous” shall not be subject to automatic load management. Load prioritization shall be independently field programmable by authorized users.

If the load management system becomes active, the “LOAD MANAGE” indicator shall illuminate on the "Warnings" page of the INTELEX™ PLUS cab mounted display.

One (1)
22-00-0330

Load Sequencer - INTELEX™ PLUS

LOAD SEQUENCER

A sequential switching device shall automatically energize the specified optical warning devices to minimize potentially damaging voltage fluctuations due to the sudden addition or removal of large current demands on the electrical system. Upon activation of the “EMERGENCY MASTER” warning switch and provided the individual optical warning device switches are also activated, the following loads shall be activated (or deactivated) in 0.5 second intervals:

Front Light Bar

Side Light Bar (if applicable)

Front and Rear Flashing Lights

Side Warning

Rear Beacons

High Beam Headlight Flash

One (1)
22-00-0344

Vehicle Data Recorder & Seat Monitor - FRC #SBA200, INTELEX™ PLUS

VEHICLE DATA RECORDER AND SEAT MONITOR DISPLAY

Fire Research series SBA200-A00 seat monitor display and vehicle data recorder kit shall be installed. The kit shall include a seat monitor display module, a vehicle data recorder, and cables.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

The seat monitor display shall be programmable for up to twelve (12) seats and have a seatbelt icon for each. A message display, push buttons for navigating through programs, and vehicle system warning indicators shall be located on the front of the seat monitor display.

The data recorder case shall be waterproof. It shall have inputs for monitored information from the vehicle J1939 CAN bus, independent sensors, seatbelt and seat occupied switches, outputs for audible alarms, and two-way FRC datalink connectors.

The vehicle data recorder shall record the following data once per second and store it in a 48 hour loop:

Vehicle Speed
Acceleration
Deceleration
Engine Speed
Engine Throttle Position
ABS Event
Seat Occupied Status
Seat Belt Status
Master Optical Warning Device Switch
Time
Date

The vehicle data recorder shall record the following data once per minute and have memory to store it for 100 engine hours:

Maximum Vehicle Speed
Maximum Acceleration
Maximum Deceleration
Maximum Engine Speed
Maximum Engine Throttle Position
ABS Event
Seat Occupied with Seat Belt Unbuckled
Master Optical Warning Device Switch
Time
Date

The oldest data shall be erased first when memory capacity is reached. All data shall be password protected and uploadable from the vehicle data recorder to a computer running FRC HAWK data management software. The HAWK software shall store, manage, provide graphic displays and produce formatted reports of the vehicle data recorder data.

One (1)
22-00-0350

Electrical System Diagnostics - INTELEX™ PLUS

ELECTRICAL SYSTEM DIAGNOSTICS

The apparatus shall feature on-board electrical system diagnostics and provision for off-board diagnostic service equipment.

ON-BOARD DIAGNOSTICS

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

On-board diagnostic indicators shall be provided to support rapid troubleshooting of the INTELEX™ PLUS based electrical power and signal system. The input and output status of each INTELEX™ PLUS system module shall be easily determined through easy to use display pages.

Switches shall be provided in the cab to allow the operator or service personnel to obtain On-Board diagnostic information from the ABS system and Engine Controller.

A troubleshooting guide shall be provided with the vehicle to assist with interpretation of the diagnostic signals.

OFF-BOARD DIAGNOSTIC PROVISION

An interface port shall be provided for service access to the INTELEX™ PLUS data bus. The diagnostic port shall be mounted inside the cab on the driver side in a location that is accessible from the ground.

One (1)
22-00-0505

Power Studs - Overhead Switch Panel, (3) Stud Switched (MII INTELEX™ PLUS Only)

POWER STUDS (OVERHEAD SWITCH PANEL)

Three (3) studs shall be provided in the overhead switch panel to provide a 12 volt feed. The studs shall consist of a 12 volt direct stud, switched battery stud and grounding stud.

One (1)
22-00-0520

Power Studs - Cab Dash Area, (4) Stud Switched

POWER STUDS (CAB DASH)

Four (4) studs shall be provided in the cab dash area to provide a 12 volt feed. The studs shall consist of a 12 volt direct stud, switched battery stud, switched ignition stud and grounding stud.

One (1)
22-00-0529

No Buss Bar Required Under Officer's Seat

One (1)
22-00-0540

Buss Bar - Under Engine Tunnel Panel, 4-Stud (Ea)

BUSS BAR (UNDER ENGINE TUNNEL)

One (1) four (4) stud 30 Amp buss bar(s) shall be provided under the rear engine tunnel panel to provide a 12 volt feed. The studs shall consist of two (2) 12 volt direct studs, switched battery stud, and grounding stud.

One (1)
22-00-0595

Driver's Side &/or Rear Body 12-Volt Power Distribution

DRIVER'S SIDE &/OR REAR BODY 12-VOLT POWER DISTRIBUTION

The power distribution for the driver's side and/or rear body compartments shall be managed through a 50 amp manual resetting circuit breaker located behind an accessible service panel in the forward bulkhead of the driver's side front compartment of the body. The 50 amp circuit breaker shall be wired direct into the batteries.

One (1)

Dash Layout Drawing - Marauder INTELEX™ PLUS Multiplex, Full Tilt Cabs

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

22-00-06B0

DASH LAYOUT

The Manufacturer shall furnish a dash layout drawing to the Fire Department for their review and approval. The drawing shall detail the locations for installation of radios, sirens, light switches, gauges, etc. Due to the cab dash configuration and electrical wiring design, the components shall have designated locations that each will fit. The Fire Department shall review and approve the layout during the Engineering Conference.

One (1)
22-01-0210

Pump Engagement Controls & Indicators - For INTELEX™ PLUS

PUMP ENGAGEMENT CONTROLS AND INDICATORS

A "Pump Engaged" indicator shall be provided in the driving compartment to indicate the pump shift has been successfully completed. An "OK to Pump" indicator shall be provided in the driving compartment and on the pump operator's panel to indicate that all the following conditions have been met to safely operate the pump in stationary mode:

1. The pump shift is engaged.
2. The parking brake is engaged.
3. If the pump is driven from a transfer case PTO or auxiliary transmission PTO, the drive to the wheels in neutral.
4. If the apparatus is equipped with an automatic transmission, the chassis transmission is in the correct pump gear as follows:

(a) If the pump is driven by a PTO after the chassis transmission gearing (e.g., split shaft PTO, transfer case PTO, etc.) the transmission is in the correct forward drive gear as noted in the shift instruction placard located in the driving compartment.

(b) If the pump is driven by a PTO ahead of the chassis transmission gearing (e.g. flywheel PTO, crankshaft PTO, etc.) the transmission is in neutral.

A "Throttle Ready" indicator shall be provided on the pump operator's panel. The "Throttle Ready" indicator shall indicate when the pump is in "OK to Pump" mode.

One (1)
22-01-1500

Speedometer - Additional, Officer, Imperial, Analog

OFFICER SPEEDOMETER

An additional speedometer shall be provided on the right hand side of the dash so that the officer can monitor apparatus speed. The speedometer shall be analog. The speedometer lettering shall be in Imperial.

One (1)
22-03-1300

12V Power Point - Officer's Side Dash (Ea)

12 VOLT PLUG(S) AND RECEPTACLE(S)

One (1) 12 volt power plug receptacle(s) and cover(s) shall be provided on the officer's side of the dash and shall be wired battery direct, with a fused circuit. The plug and receptacle are made from corrosion

10139-0008

06/07/24

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

resistant marine grade materials. The plug locks into the receptacle providing a positive moisture proof connection.

The power point shall be located at the outboard lower corner of the center dash panel to the officer's side.

One (1)
22-03-1400

12V Power Point - User Defined Location (Ea)

12 VOLT PLUG(S) AND RECEPTACLE(S)

One (1) 12 volt power plug receptacle(s) and cover(s) shall be provided and shall be wired battery direct, with a fused circuit. The plug and receptacle are made from corrosion resistant marine grade materials. The plug locks into the receptacle providing a positive moisture proof connection.

One (1)
22-03-14SF

Location of the 12V Power Point(s) shall be located in zone 18 in the lower outboard position Outlet Box w/ USB - on Officer's Side Engine Tunnel, with Black LINE-X Finish

OUTLET BOX

A fabricated 0.090" aluminum enclosed box that follows the contour of the engine tunnel shall be provided aft of the officer's seat on the side of the engine tunnel. It shall be covered with black LINE-X to match the color of the engine tunnel. This outlet box shall be capable of holding one (1) 12 volt power point, one (1) USB charger port and one (1) 120 volt receptacle. (The power point, USB charger port and receptacle are not included in this cost.)

One (1)
22-03-1400

12V Power Point - User Defined Location (Ea)

12 VOLT PLUG(S) AND RECEPTACLE(S)

One (1) 12 volt power plug receptacle(s) and cover(s) shall be provided and shall be wired battery direct, with a fused circuit. The plug and receptacle are made from corrosion resistant marine grade materials. The plug locks into the receptacle providing a positive moisture proof connection.

One (1)
22-03-14UQ

Location of the 12V Power Point(s) shall be located on the outlet box on the officer's engine tunnel. USB Charger Port - Kussmaul Dual Port #091-219-5 (Ea)

USB CHARGER PORT

One (1) Kussmaul Electronics model 091-219-5 USB 2.4/2.4 Amp Dual Charger Ports shall be wired battery direct with a fused circuit and shall be located on the dash as follows:

One (1)
70-05-1920

Location of USB charger port shall be located in the officer's outlet box. Receptacle - 120V, 20 Amp for Cab Interior, Shoreline Powered (Ea)

120 VOLT SHORELINE POWERED RECEPTACLE(S) IN CAB INTERIOR

One (1) 120-volt, 20 amp, 3-wire receptacle(s) shall be provided in the cab interior in accordance with

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

NFPA guidelines. A brushed stainless steel cover plate shall be provided to protect the receptacle. The receptacle shall be powered by the shorepower inlet and labeled accordingly.

The receptacle(s) shall be located on the officer's side engine tunnel outlet box.

One (1)
70-05-2535

NEMA Rating - 5-20R (20 Amp) Non-Twist-Lock, Duplex

NEMA Rating: 5-20R (20 Amp) Non-Twist-Lock, Duplex.

One (1)
70-05-2720

Receptacle Cover - Stainless Steel Wall Plate (Interior Use Only) (Ea)

One (1) stainless steel wall plate(s) shall be installed.

Five (5)
22-03-14UR

USB Charger Port - Kussmaul Dual Port #091-219-5-WP (Ea)

USB CHARGER PORT

Five (5) Kussmaul Electronics model 091-219-5-WP USB 2.4/2.4 Amp Dual Charger Ports with weatherproof door shall be wired battery direct with a fused circuit and shall be located on the dash as follows:

Location of USB charger port shall be located in zone 17 and 18 in the lower outboard position and in zone 21. One (1) each side at the rear of the engine tunnel on the slanted area next to engine tunnel door.

Two (2)
22-0A-5120

Two-Way Radio Antenna Mount - Universal w/ Cable (Ea)

TWO-WAY RADIO ANTENNA MOUNT(S)

Two (2) universal antenna mount(s), model MATM, with 17 feet of coax cable and weatherproof cap shall be provided for the two-way radio equipment. The mount(s) shall be installed in the cab roof, behind the lightbar, unless specified differently.

Two (2)
22-0A-515C

Antenna Lead - Terminates in the Officer's Seat Riser

The antenna lead shall terminate in the officer's seat riser. Any excess cable shall be secured in an accessible location.

Two (2)
22-0A-516B

Antenna Location Shall be as Specified

The antenna location shall be **located behind the forward facing lightbar approx. 18" apart from the centerline of the truck. One (1) each side.**

One (1)
22-0B-3000

Headset Intercom System - David Clark 3800, Single Radio

INTERCOM SYSTEM

A David Clark Series 3800 intercom system for single radio shall be provided and installed on the apparatus. This system shall provide for in cab and on-scene communications for the crew. The system shall be compatible with UHF and VHF radios and be able to interface with each radio connected to the intercom using a mobile interface cable. David Clark connectors and double-shielded

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
22-0B-3040

cable shall be used. Cable substitution can cause noise in the system.

Intercom - David Clark, 4-Person Cab, Driver/Officer

INTERCOM MODULES

The David Clark modules shall provide radio transmit/receive and intercom capabilities for both the driver and the officer seating locations. Modules provided shall be the U3811 for the driver and the U3815 for the officer. The U3800 Master Station and the U3805 shall also be provided. These modules shall be installed on the upper drop-down dash in the user locations.

The U3800 Master Station is required with each system. It shall accommodate two headsets that do not require radio transmit function. It shall adjust automatically for 12 or 24 VDC power source. It shall contain the system on/off switch, the master volume control, two headset jacks with listen level controls, power input connector, and two remote output connectors. It shall draw less than 600 milliamperes current. It shall measure 8-1/4"L x 5-3/4"W x 4-3/4"D.

The U3805 Radio Cord Junction Module shall permit a maximum of 4 Series 3800 Radio Interface Modules to be connected to one radio. It shall measure 6-3/4"L x 5-1/4"W x 2-3/8"D.

The U3811 Radio Interface Module shall provide isolated radio transmit function for one headset and radio receive function for all users. It shall contain one radio push to talk switch, one listen level control, one system input connection, and one radio input connection. It shall measure 6-1/4"L x 5-1/4"W x 2-3/4"D.

The U3815 Radio Interface Module shall provide radio transmit function for one headset and radio receive function for all users. It shall contain one radio push to talk switch, one headset jack and listen level control, one radio input connection, two intercom connectors and one connector for remote PTT. It shall measure 7"L x 4-1/3"W x 3-1/8"D.

One (1)
22-0B-304A

Intercom - David Clark, 4-Person Cab, Crew Config. A

INTERCOM MODULES

The David Clark modules shall provide intercom capabilities only for the crew seating. The rear facing crew member behind the officer shall plug into the U3800 module. The rear facing crew member behind the driver shall plug into a U3801 module. These modules shall be installed on the cab ceiling in the user locations.

The U3801 module shall have one headset jack and a listen level control. It shall measure 3-1/4"L x 4-3/4"W x 3"D.

One (1)
22-0B-4400

Headset - Driver, DC #H3442, Under Helmet

HEADSET

One (1) David Clark model #H3442 under helmet style headset(s) shall be provided for the driver. Each

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

headset shall have one (1) headset hanger hook located above the seat position, over the inboard shoulder.

This headset shall provide a noise reduction of 23dB. It shall have a microphone on/off button. The boom shall have full flex for precise positioning and shall rotate 200 degrees for left or right side placement. It shall have a shielded 4-conductor, 5 ft coiled cord with PJ-051 plug.

One (1)
22-0B-4500

Headset - Officer, DC #H3442, Under Helmet

HEADSET

One (1) David Clark model #H3442 under helmet style headset(s) shall be provided for the officer. Each headset shall have one (1) headset hanger hook located above the seat position, over the inboard shoulder.

This headset shall provide a noise reduction of 23dB. It shall have a microphone on/off button. The boom shall have full flex for precise positioning and shall rotate 200 degrees for left or right side placement. It shall have a shielded 4-conductor, 5 ft coiled cord with PJ-051 plug.

Two (2)
22-0B-4600

Headset - Crew, DC #H3442, Under Helmet (Ea)

HEADSET

Two (2) David Clark model #H3442 under helmet style headset(s) shall be provided for the crew. Each headset shall have one (1) headset hanger hook located above the seat position, over the inboard shoulder.

This headset shall provide a noise reduction of 23dB. It shall have a microphone on/off button. The boom shall have full flex for precise positioning and shall rotate 200 degrees for left or right side placement. It shall have a shielded 4-conductor, 5 ft coiled cord with PJ-051 plug.

One (1)
22-0B-4020

D Clark Remote - Pump Panel, Radio / Intercom

PUMP PANEL HEADSET STATION

A remote headset station for radio transmit / receive and intercom capabilities shall be provided on the pump panel. The remote station, module U3815A, shall have one headset jack with listen level control, and one push to talk switch. This remote shall be able to accept the C3023 Belt Station. The U3815A module shall measure 7"L x 4-1/3"W x 3-1/8"D.

One (1)
22-0B-402A

Remote Headset Station Location - Left Side Pump Panel

The remote headset station shall be installed on the left side pump panel.

One (1)
91-75-3010

Warranty - David Clark Headsets & Cables, 1 Year

DAVID CLARK HEADSET WARRANTY

David Clark shall provide a 1 year warranty on its headsets and cables.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
91-75-3020

Warranty - David Clark Intercom Modules, 5 Years

DAVID CLARK INTERCOM WARRANTY

David Clark shall provide a 5 year warranty on its modules.

One (1)
22-0C-3210

Camera System - (2) Rosco #STSK7165, 7" LCD, Rear & RS

REAR VIEW CAMERA SYSTEM

A Rosco rear view color camera system, model STSK7165, shall be provided and installed. The system shall consist of the following items:

- One (1) STSM205 7" LCD monitor, 7.2" wide x 4.8" high x 1.1" deep, with remote control.
- One (1) STSC101 color camera with microphone, 120 degree lens and 18 infrared LEDs.
- One (1) STSC109B side color camera with microphone, 150 degree lens and infrared night vision.
- One (1) 65 foot cable
- One (1) STSH301 Harness
- One (1) STSH304 Harness
- Mounting brackets and hardware

One (1)
22-0C-3910

The side view camera shall be mounted on the right side of the cab to provide side blind spot viewing.

Camera Monitor Shall be Hung from the Overhead Console, Zone 9

The camera monitor shall be hung from the overhead console in zone 9.

One (1)
22-0C-4035

Rear View Camera Color - Charcoal

The rear view camera color shall be charcoal.

One (1)
22-0C-4060

Side View Camera Color - Black

The side view camera color shall be black.

One (1)
22-0C-4100

Rear Camera Location - Surface Mount, Rear Center Upper Bulkhead

The rear view camera shall be surface mounted on the rear upper bulkhead, close to center.

One (1)
22-10-0700

Batteries - (6) 12V, 950 CCA

BATTERIES

Six (6) 12V Group 31 950 CCA batteries shall be installed three each side of the cab under the rear entrance way.

One (1)
22-10-5200

Heavy-duty battery cables shall be provided to maximize power available to the electrical system.

Jumper Cable Studs - Under Driver's Side Battery Box

JUMPER CABLE STUDS

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

A pair of jumper cable studs with color coded covers shall be provided under the driver's side battery storage area.

One (1)
22-11-0600

Battery/Electrical Component Storage Areas - S/S, Full Tilt Cabs (Marauder)

BATTERY AND ELECTRICAL COMPONENT STORAGE AREAS

Battery and electrical component storage areas shall be constructed of stainless steel with structural steel tubes at the corner mounting points and shall be located one (1) each side mounted on the vehicle frame. They shall be well ventilated and enclosed to protect against road splash and debris. Suitable provisions shall be provided for drainage.

The batteries shall be held firmly in place by providing a full frame type top clamp which encloses the battery set on all four (4) upper corner sides. The one piece clamp shall be fabricated of 3/4" angles and be held in place by four (4) "J" shaped clamping bolts placed in the corners. Battery inspection shall be available by tilting the full tilt cab.

One (1)
22-11-0610

Battery Box Finish - Gloss Black Paint

The interior of the battery box where the batteries are installed shall be painted gloss black.

One (1)
22-11-5100

Battery Mats - Turtle Tile, Non-Corrosive

BATTERY MATS

The batteries shall be installed on a non-corrosive Turtle Tile mat.

One (1)
22-15-1400

Battery Disconnect Switch - Blue Sea 350 Amp

DISCONNECT SWITCH - BLUE SEA 9003

A master load disconnect switch shall be provided between the battery positive buss bar and the remainder of the switched battery electrical loads on the apparatus. A green "battery on" pilot light that is visible from the driver's position shall be provided.

One (1) single battery system switch mounted near the driver's side front entrance in a location so it may be turned off by a person standing on the ground outside the vehicle. It shall have the capacity to handle 350 amps of continuous power.

One (1)
22-15-3800

Battery Charger - Kussmaul #091-200-12, LPC 40 w Bar Graph Display

BATTERY CHARGER

There shall be one (1) Kussmaul model 091-200-12, LPC-40 single battery charger system installed in the vehicle's electrical system. The charger shall be fully automatic and shall maintain the truck batteries at a full charge level when connected to a 120 VAC source. Remote sensing shall be provided to compensate the charger output for the voltage drop in the charging wires.

DISPLAY

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

A remote mounted display, model 091-200-IND, shall be included which shall contain one bar graph to display the condition of the batteries. The remote display shall be mounted in the cab overhead console.

One (1)
22-15-4LDW

Charger/Compressor Location - Wall Adjacent to Side Window on Driver's Side

The battery charger/compressor shall be located on the driver's side wall adjacent to the side window.

One (1)
22-15-5000

Battery Charger/Air Compressor Cover

BATTERY CHARGER/AIR COMPRESSOR COVER

A smooth aluminum cover shall be provided over the battery charger/air compressor. The outside finish shall match the cab interior finish.

One (1)
22-15-5500

"Super Auto Eject" Plug - Kussmaul 20 Amp, 120 VAC

AUTO EJECT PLUG

A Kussmaul 20 Amp, 120 VAC "Super Auto Eject" shoreline power connector shall be provided for the battery charger. The shoreline power connector shall be provided with a spring loaded cover to prevent water from entering when the shoreline is not connected. A label shall be permanently affixed at the power inlet that indicates the line voltage in volts and the current rating in amps.

One (1)
22-20-5810

Shoreline Inlet Location - Behind Driver's Door on Cab's Side

The Kussmaul Super Auto Eject Plug shall be located behind the driver's door on the cab's side.

One (1)
22-20-58RD

Super Auto Eject Cover Color - Red

The Super Auto Eject Cover shall be red.

One (1)
22-15-410D

Air Compressor - Kussmaul 091-9B-1-AD, 120V, with Auto Drain

REDUNDANT AIR COMPRESSOR

A Kussmaul model #091-9B-1-AD "Auto Pump AC" redundant air compressor with auto drain shall be installed. The Auto Pump shall be wired to 120 VAC shoreline. Operation shall be automatic with the pressure switch sensing the system pressure and controlling the power input. The compressor shall automatically replace air lost due to leakage in the brake system without any interference to engine mounted air compressor functions.

The auto drain shall automatically purge the water separator bowl every time the compressor cycles off.

One (1)
22-15-4LOW

Charger/Compressor Location - Wall Adjacent to Side Window on Officer's Side

The battery charger/compressor shall be located on the officer's side wall adjacent to the side window.

One (1)
22-15-5000

Battery Charger/Air Compressor Cover

BATTERY CHARGER/AIR COMPRESSOR COVER

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

A smooth aluminum cover shall be provided over the battery charger/air compressor. The outside finish shall match the cab interior finish.

One (1)
22-90-004N

Headlights - Quad, HiViz, LED, with Dual Light Bezels

HEADLIGHTS

Front headlights shall be mounted on the front cab face to the left and right of the engine cooling intake grille. The headlights shall be quad type, rectangular HiViz FT-4X6, 12-volt LED with bright **finished trim rings and gloss black bezels**. The low beam headlights shall be located at the outer position.

HiViz LED headlights are provided with a lifetime warranty.

Reference Vendor Model, # 447-412715, for black dual light bezel.



One (1)
22-90-004U

Halo Activation - with Low Beam Daytime Running Lights

DAYTIME RUNNING LIGHTS

The VisionX LED Halo and the LED low beam daytime running lights shall be activated while the unit is running and the parking brake is released.

One (1)
22-90-004X

Headlight Position - Middle

The headlights shall be in the middle position.

One (1)
22-90-0065

Headlights - Alternating, Flashing

ALTERNATING FLASHING HEADLIGHTS

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
22-90-006A

The chassis high beam headlights shall flash alternately.

Alternating Flashing Headlights - Wired to Clear Warning Lights Switch

One (1)
22-90-007A

The alternating, flashing headlights shall be wired to the clear warning lights on/off switch.

Front Directional Dual Light Bezels, (2)

FRONT DIRECTIONAL DUAL LIGHT BEZEL

The front directional lights shall be mounted in a **gloss black dual** light bezel located on each side of the cab front face. The dual light bezel shall match the headlight housing.

Reference Vendor Model, # 447-412715, for black dual light bezel.



One (1)
22-90-007X

Front Directional Light Bezels Position - Uppermost

The front directional light bezels shall be in the uppermost position.

One (1)
22-90-008H

Front Directional Lights - (2) Whelen M6TC, LED, Amber Arrow, with Clear Lens

FRONT DIRECTIONAL LIGHTS

There shall be one (1) Whelen M6TC LED amber arrow directional signal light installed on each side of the cab front face. The light shall have an amber arrow shape with black background and shall be provided with a "flash" pattern; a "sweep" pattern shall not be allowed. Lens color shall be clear.

One (1)
22-90-0095

Additional Front Warning Light Dual Light Bezels, (2)

ADDITIONAL FRONT WARNING LIGHT DUAL LIGHT BEZELS

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

An additional pair of gloss black dual light bezels shall be provided for the optional warning lights.

Reference Vendor Model, # 447-412715, for black dual light bezel.



One (1)
22-90-009A

Additional Headlight Bezel Locations - Lowest

The additional headlight bezel shall be located in the lowest position.

One (1)
22-90-0100

Clearance Lights - (5) Weldon Amber LED/Amber Lens, Surface Mount

CLEARANCE LIGHTS

Exterior cab lighting shall meet or exceed Federal Department of Transportation, Federal Motor Vehicle Safety Standards and any National Fire Protection Association requirements in effect at the time of proposal.

Five (5) Weldon 9186-1500-20, amber LED type clearance and identification lights shall be surface mounted across the top leading edge of the cab roof.

One (1)
22-90-0140

Marker Lights - TecNiq #S34, (2) Amber LED/Amber Lens & (7) Red LED/Red Lens

MARKER LIGHTS

A TecNiq S34 amber LED marker light with amber lens shall be recess mounted in a rubber sealing grommet placed in the lower front cab side, forward of the driver and officer door, on each side of the cab. The light body shall be urethane filled to ensure against moisture intrusion. These cowl mounted lights shall have 100,000 hour life and shall carry a manufacturers 10 year warranty.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Seven (7) TecNiq S34, red LED marker and clearance lights with red lens shall be installed at the rear of the body. The three light identification cluster shall be surface mounted on the rear step vertical flange. Two lights shall be placed at each lower rear body corner, facing the side. Two lights shall be placed in the upper rear body corners, facing the rear.

One (1)
22-90-031Q

Side Turn/Marker Lights - (2) Britax L428 Rear & (2) TecNiq S34-A, LED, Midship

TURN/MARKER LIGHTS

One (1) Britax model L428, short rubber double faced directional light shall be provided and installed on the rear body fender panel on each side of the vehicle. The amber lens shall face forward and the red lens shall face to the rear.

One (1) TecNiq model S34-A amber marker light shall be located on each side of the the body just forward of the front compartments, near the bottom. The lens shall match the other marker light lenses on the apparatus.

One (1)
22-90-0320

Side Marker Lights - Britax #L427, LED, Long, Rear Corners

REAR MARKER LIGHTS

A Britax long stemmed "LED" dual faced #L427 long, marker light shall be placed at each rear corner of the body. The front lens shall be amber; the rear lens shall be red.

One (1)
22-90-0400

License Plate Bracket & LED Light

LICENSE PLATE LED LIGHT & BRACKET

A steel license plate bracket, painted black, shall be installed on the rear of the vehicle on the left hand side under the tailboard area. Mounted on the license plate bracket shall be a chrome light bracket containing a 12 volt LED lamp that shall illuminate the license plate.

One (1)
22-90-0500

D.O.T. Reflectors

D.O.T. REFLECTORS

Reflectors shall be placed on the cab and body as required by Federal standards. An amber reflector, Signal Stat, model 32ADB, shall be placed on each side of the cab. Four (4) Signal Stat model 32DB red reflectors shall be located on the rear face and sides of the body. The reflectors shall be rectangular in shape.

One (1)
23-02-9300

Cab Side Direct Lights - Double Faced, Britax #L428, LED, Short

SIDE DIRECTIONAL LIGHTS

Britax model #L428, short rubber side LED directional lights shall be provided in addition to the front turn signals. One (1) light shall be mounted just above the front fender on each side of the cab. Lamp shall have an amber plastic lens at front and a red lens facing rear.

One (1)

Configuration of Brake/Turn/Backup/Warning Lights at Rear of Apparatus

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

23-03-0010

BRAKE/TURN/BACKUP/WARNING LIGHTS CONFIGURATION

The brake, turn, backup and warning lights shall be located at the rear of the apparatus. Each light shall be mounted horizontally in a vertical configuration, one light atop the other.

The order of lights shall be as follows:

Top: Brake

Second from top: Turn

Third from top: Backup

Bottom: Warning



One (1)
23-03-0150

STBU Lights - Whelen M6 Series, Clear Lens

STOP-TURN-BACK UP LIGHTS

Two (2) Whelen M6 series LED red brake/tail lights, model M6BTTC, with clear outer lens, shall be mounted at the rear of the apparatus, one on each side. All brakes lights shall be programmed for "steady burn" operation in compliance with FMVSS No. 108.

Two (2) Whelen M6 series Super-LED amber turn lights, model M6TC, with clear outer lens, shall be mounted at the rear of the apparatus, one on each side. They shall be provided with a "flash" pattern; a "sweep" pattern shall not be allowed.

Two (2) Whelen M6 series clear Super-LED back up lights, model M6BUW, shall be mounted at the rear of the apparatus, one on each side.

One (1)
23-03-0720

Bezels - (6) Whelen #M6FC, Black-Single, f/ M6 Series Stop/Turn/Backup

BEZELS

Six (6) Whelen #M6FC **black bezels** shall be provided for the M6 series rear stop, turn, and backup lights.

Five (5)
23-04-0008

Front Hose Bed/Storage Floodlight - TecNiq E10 LED (Ea)

HOSE BED/STORAGE LIGHT

Three (3) TecNiq E10 LED light(s) shall be installed at the front of the hose bed/storage area and shall illuminate the hose bed/storage area.

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Two (2) shall be located in the open bin over the water tank. One (1) shall be mounted on the cross panel divider. One (1) shall be mounted on the forward wall of the open bin above the water tank. The lights shall centered in the open bin.

Five (5)
23-04-009A

Front Hose Bed/Storage Light(s) Activate w Body Step Lights

The front hose bed/storage light(s) shall activate with the body step lights.

One (1)
23-05-0010

Light Activation - Step Lights

LIGHT ACTIVATION

The cab step lights shall be activated with the cab door open switch.

The step lights on the body shall be activated with the parking brake in conjunction with the marker lights.

One (1)
23-05-0110

Step Lights - (8) Cab, TecNiq Eon, LED

CAB STEP LIGHTS

Eight (8) TecNiq model EON, LED step lights shall be provided, two (2) at each cab entrance door. They shall be mounted one (1) above and one (1) below each intermediate step.

One (1)
23-05-0210

Step Lights - (4) Body, TecNiq Eon, LED, Surface Mount

BODY STEP LIGHTS

Four (4) TecNiq Eon, LED horizontal step lights with a polished stainless steel flange shall be surface mounted, one (1) on each side of the rear step area to illuminate the rear step and one (1) on each side on the forward face of the side compartments.

One (1)
23-05-2010

Light Activation - Ground Lights

LIGHT ACTIVATION

The cab ground lights shall be activated with the cab door open switch.

The ground lights on the body shall be activated with the parking brake in conjunction with the marker lights.

One (1)
23-05-2111

Ground Lights - (4) Cab, TecNiq #E10 LED

GROUND LIGHTS

Four (4) weatherproof TecNiq #E10 LED ground lights shall be provided underneath the cab, per NFPA requirements.

One (1)
23-05-2121

Ground Lights - (2) Body, TecNiq #E10 LED

GROUND LIGHTS

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Two (2) weatherproof TecNiq #E10 LED ground lights shall be provided underneath the body rear step, per NFPA requirements.

One (1)
23-05-2165

Ground Lights - (2) Side Mount Operator Stand, TecNiq E10, LED

GROUND LIGHTS

Two (2) weatherproof TecNiq E10 LED ground lights shall be provided underneath the pump enclosure, one each side, per NFPA requirements.

Four (4)
23-05-2181

Ground Lights - Additional, TecNiq #E10 LED (Ea)

GROUND LIGHTS

In addition to the standard, NFPA required ground lights, four (4) weatherproof TecNiq #E10 LED ground lights shall be provided underneath the vehicle.

Location of the additional TecNiq #E10 LED ground lights shall be located under the following compartments:

LS1,LS3

RS1, RS2

One (1)
23-05-3010

Work Light - (1) Engine Compartment, TecNiq E10 LED, Marauder Only

ENGINE COMPARTMENT WORK LIGHT

One (1) TecNiq E10 LED engine compartment work light shall be provided and wired to illuminate automatically when the cab is tilted. The light shall also be wired through the engine compartment access door switch, providing illumination of fluid dip sticks and coolant overflow reservoir.

One (1)
23-05-3105

Work Lights- (2) Pump Module, TecNiq E18, LED

PUMP MODULE WORK LIGHTS

Two (2) TecNiq E18-WCS0-1 LED lights shall be installed, one (1) on the left side behind the master gauge panel and one (1) on the right side behind the hinged panel. Each light shall have a switch on it.

One (1)
23-05-3185

Work Light - Pump Module Open Bin, TecNiq E10 LED (Ea)

PUMP MODULE OPEN BIN WORK LIGHT(S)

One (1) TecNiq E10 LED light(s) shall be installed inside the open bin to illuminate the work area. The light(s) shall be mounted on the back wall of the open bin, high up in an area clear of open bin components such as a generator or reel. The light shall be switched with the pump panel lights.

One (1)
23-11-1100

Cab Dome Lights - (4) Whelen #60CREGCS, Red/Clear LED (Marauder Only)

INTERIOR CAB DOME LIGHTS

10139-0008

06/07/24

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Four (4) Whelen 60CREGCS 6" round red/clear LED lights with push buttons shall be mounted in the cab ceiling. Two (2) in front (driver & officer) and two (2) in the crew cab. All lights shall be controlled by a switch on the light head.

One (1)
23-11-1410

Door Switches - Dome Lights, Automatic

AUTOMATIC DOOR SWITCHES

Automatic door switches shall be provided for the cab dome lights.

One (1)
23-11-1450

White Dome Light Activates with Automatic Door Switch

The white dome light activates with the automatic door switch.

Five (5)
23-12-3010

Hand Light - Streamlight, Fire Vulcan® #44451, LED/LED (Ea)

HAND LIGHTS

Five (5) Streamlight Fire Vulcan® LED model 44451 rechargeable hand light(s) with quick release shoulder strap(s) shall be provided. The hand light shall be orange in color and feature a C4 LED primary bulb and two(2) blue LED taillights. The momentary toggle switch has 8 different modes of operation.

A 12 volt DC direct wire charging rack shall be installed and wired to vehicle electrical system.

Five (5)
23-12-3S80

Hand Light Location

Five (5) hand lights shall be located :

One (1) for driver on engine tunnel just aft of driver's elbow lighthouse facing forward.

One (1) for officer on engine tunnel just aft of officer's elbow lighthouse facing forward.

Two (2) at the rear of the engine tunnel one (1) each side lighthouse facing forward.

One (1) in LS1 compartment on the rearward facing wall

Six (6)
23-25-0150

Exterior Compartment Lights - (2) ROM LED Strips, Vertical Mount (Ea Pair)

EXTERIOR COMPARTMENT LIGHTS - (2) LED STRIP(S)

Six (6) exterior compartment(s) shall have a ROM LED lighting strip installed on both sides of the door. The lighting strips shall be mounted vertically along both sides of the door framing in all specified body compartments. The LED lights shall be mounted in an anodized aluminum track. A switch, installed in the door frame, shall be used to activate the lights.

Specify which compartment(s) shall receive lighting:

LS1, LS2, LS3

RS1, RS2

Rear

One (1)
24-10-WFE6

Lightbars - (2) Whelen #F4N MINI, 21.5", LED, Side Facing

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

MINI LIGHTBAR

Two (2) Whelen model F4N MINI Mini Freedom™ IV LED 21.5" lightbars shall be provided and installed on the cab roof, facing outward to the sides. Each lightbar consist of two (2) Linear-LED® heads with two (2) clear LED located in the center forward facing and one (1) red LED to the outside facing the side. The lightbar shall also be equipped with two (2) red corner Linear-LED® lights in the front corners.

One (1)
24-10-WFET

Side Facing Red LED Shall be Positioned Toward the Cab Rear

The one red LED on the side of the lightbar shall be positioned toward the cab rear.

One (1)
24-10-WFEX

Mini Lightbar Locations - Centered above Crew Doors

The mini lightbars shall be located above the crew doors.

Two (2)
24-15-3020

Lightbar Mount - Whelen MKEZ7, 1.5" high, on Mini Lightbars

The Whelen mini lightbar shall be mounted using a 1.5" high mount, model MKEZ7.

One (1)
24-UN-LNCC

Lens Color - Clear

The lens color shall be clear.

One (1)
24-10-WFE5

Lightbars - (3) Whelen #F4N MINI, 21.5", LED,(1 Center Forward Facing, 2 Angled)

MINI LIGHTBARS

Three (3) Whelen model F4N MINI Mini Freedom™IV LED 21.5" light bars shall be provided and installed on the cab roof. One (1) lightbar shall be located in the center of the roof facing forward and the other two (2) lightbars shall be placed on an approximate 30 degree angle on the front outer corners of the cab roof.

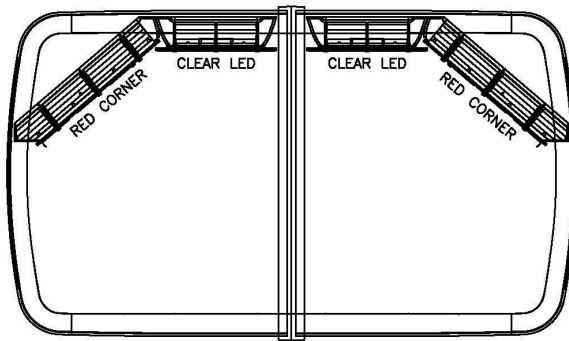
The forward facing lightbar shall consist of two (2) Linear-LED® heads with two (2) clear LED located in the center forward facing. The forward facing lightbar shall also be equipped with two (2) red corner Linear-LED® lights in the front corners.

Each angled lightbar shall consist of two (2) Linear-LED® heads with two (2) clear LED located in the center forward facing and one (1) red LED to the outside facing the side. The angles lightbars shall also be equipped with two (2) red corner Linear-LED® lights in the front corners.

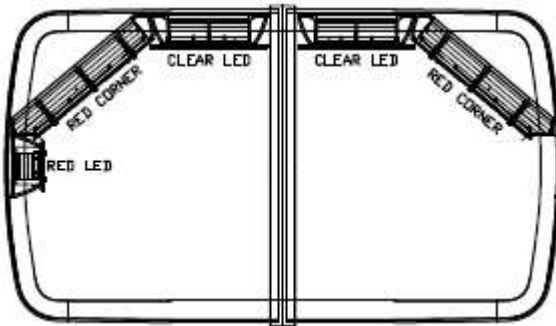
Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

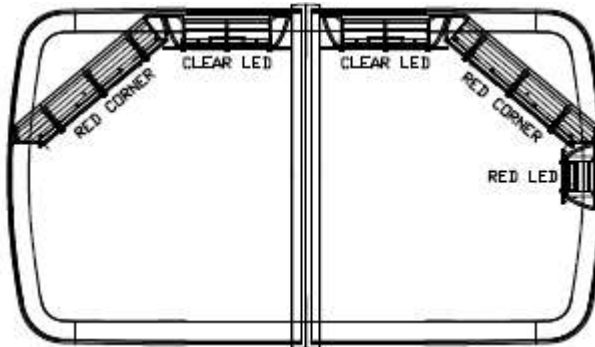
Center:



Left Side:



Right Side:



Three (3)
24-15-3020

Lightbar Mount - Whelen MKEZ7, 1.5" high, on Mini Lightbars

One (1)
24-UN-LNCC

The Whelen mini lightbar shall be mounted using a 1.5" high mount, model MKEZ7.

Lens Color - Clear

The lens color shall be clear.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
24-20-WLL2 **Beacons - (2) Whelen #L31H5FN, Super-LED®, Red with Clear Lens**

UPPER REAR WARNING LIGHTS

Two (2) Whelen model L315FN Super-LED® red beacons with clear lens shall be provided on the upper rear of the apparatus. The rear flasher shall have a Comet Flash pattern

Fourteen (14)
24-30-WLM6 **Perimeter - Whelen #M6RC Super-LED®, Red, with Clear Lens (Ea)**
WARNING LIGHTS

Fourteen (14) Whelen model M6RC red Super-LED® light(s) with **black** flange(s) and clear lens(es) shall be provided on the apparatus. The flash pattern of the light(s) shall be Triple Flash, also known as Comet Flash.

One (1)
24-35-0020 **Cab Cowl Lights - (2) Whelen 50R03ZCR, Red LED with Clear Lens**

CAB COWL LIGHTS

Two (2) Whelen 50R03ZCR red LED lights with clear lens and **5TSMB black flange** shall be provided on the cab cowl, one each side. The flash pattern of the lights shall be Triple Flash, also known as Comet Flash.

One (1)
24-35-021B **Cowl Light Location - (B) Middle, In-Line with Middle Light Cab Front**

The cowl lights shall be located on both of the cab cowls with the lights mounted approximately in-line with the middle light position on the front of the cab, at approximately 45 degrees.

One (1)
24-3L-0100 **Standard Perimeter Warning Light Locations - Custom Apparatus**

Location of each perimeter warning light shall be:

Zone A Upper:

Whelen #F4N MINI, 21.5", LED (1 Center Forward Facing, 2 Angled)

Zone A Lower:

Two (2) Whelen #M6RC Super-LED®, Red Clear Lens Warning lights inboard of turn signals One (1) each side

Additional warning lights located under the headlights:

Four (4) Whelen #M6RC Super-LED®, Red outboard, Two (2) each side

Zone B/D Upper:

Two (2) Whelen #F4N MINI, 21.5", LED, Side Facing, One (1) each side.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Zone B/D Lower:

Two (2) Whelen #M6RC Super-LED®, Red Clear Lens Warning lights, One (1) each side of the bumper extension.

Two (2) Whelen #M6RC Super-LED®, Red Clear Lens Warning lights on side of cab, to rear of axle center, near crew door hinge, One (1) each side.

Two (2) Whelen #M6RC Super-LED®, Red Clear Lens Warning lights on body fender, One (1) each side.

Zone C Upper:

Two (2) Whelen #L31H5FN, Super-LED®, Red with Clear Lens, One (1) each side.

Zone C Lower:

Two (2) Two (2) Whelen #M6RC Super-LED®, Red Clear Lens Warning lights below the backup lights, One (1) each side.

Electric horn - Single

One (1)
25-00-0100

AUDIBLE WARNING DEVICES

One (1) automotive electric horn controlled by the steering wheel horn button shall be provided.

Backup Alarm - Preco #LDA-50, 97DBA

One (1)
25-01-0100

BACKUP ALARM

One (1) Preco Model LDA-50 backup alarm shall be provided and activated when the vehicle transmission is placed in reverse. Alarm output shall be a minimum of 97 DBA.

Air Horns - Dual, Grover

One (1)
26-00-0030

DUAL AIR HORNS

Two (2) Grover Stuttertone chrome air horns shall be furnished. A pressure protection valve shall be installed in-line to prevent loss of all air from the vehicle air brake system. The air horns shall range from 18" to 24" in length and shall be as long as possible, dependent upon other selected options and extension length.

Air Horn Locations - Both in Center of Bumper

One (1)
26-00-006C

Both of the air horns shall be located in the center of bumper.

Air Horn Dual Lanyard - 1 Switch, Driver & Officer Sides, Marauder Only

One (1)
26-00-0310

AIR HORN DUAL LANYARD

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

The air horn(s) shall be activated by one (1) lanyard pull cord for the driver and by one (1) lanyard pull cord for the officer which shall both begin at a switch centered on the vertical face of the overhead dash panel and shall end at the rear of the center overhead, one on the driver's side, one on the officer's side. The lanyard pull cords shall be composed of a chain encased in a plastic tube.



One (1)
26-10-7410

Electronic Siren - Whelen 295SLSA1, 100/200 Watts, Hardwired Microphone

WHELEN SIREN

A Whelen model 295SLSA1 electronic siren shall be provided in the cab dash. The siren has a selectable output of 100 or 200 Watts. The microphone shall be hard-wired.

The siren head shall be wired battery switched. Auxiliary activation switches shall only be active when the emergency master and ignition are activated.

One (1)
26-10-8Z80

Mic Clip Location - Determine at Final Inspection

The location of the siren mic clip shall be determined at the final inspection.

One (1)
26-11-WS30

Siren Speaker - Whelen Projector #SA-315P w/ Flame Grille, In Bumper (Ea)

SIREN SPEAKER(S)

One (1) Whelen Projector Series SA-315P, 100-watt speaker(s) with Seagrave "Flame" polished grille shall be recess mounted in the front bumper extension.

One (1)
26-11-Y01R

One Speaker Location - Right Side of Bumper

The speaker shall be located on the right side of the bumper.

One (1)
26-15-4500

Mechanical Siren - Federal Signal Q2B®, Recessed in Bumper

MECHANICAL SIREN

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

A Federal Signal Model Q2B® siren with chrome plated housing shall be recessed mounted in the front bumper extension with front and vane grille exposed.

The siren activation switches shall only be active when the emergency master is activated.

One (1)
26-15-462G

Q2B® Siren Location - Left Side of Bumper, Notched out & Flush

The Q2B® siren shall be mounted on the left side of the bumper, notched out and flush.

One (1)
26-15-5980

Mechanical Q2B® Foot Switch - Linemaster® #491 (Ea)

MECHANICAL Q2B® FOOT SWITCH

One (1) Linemaster® Model 491 momentary foot operated switch(es) to activate the mechanical Q2B® siren shall be installed on the toe board of the cab floor.

One (1)
26-15-7015

Foot Switch Shall be Deactivated When the Parking Brake is Set

The foot switch shall be deactivated when the parking brake is set.

One (1)
26-15-7031

Foot Switch Location - Officer's Side, Inboard Position on Floor

The foot switch shall be located on the officer's side floor, inboard position.

One (1)
26-15-598K

Q2B Siren Brake Rocker Switch Location - Driver's Side

Q2B BRAKE ROCKER SWITCH

A siren brake rocker switch shall be installed in the cab, at the driver's side switch panel, properly labeled.

One (1)
26-15-7130

Officer's Foot Switch Bracket - ATP Raised, Single

FOOT SWITCH BRACKET

An aluminum tread plate angle panel shall be installed to hold a single foot switch shall be installed on the officer's side.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper



One (1)
26-15-7210

Siren/Horn Selector Switch

SIREN/HORN SELECTOR SWITCH

There shall be a selector switch that shall allow the driver to switch activation of the automotive electric horn to the vehicle siren. The switch shall allow the standard steering wheel button to sound either the horn or the siren.

One (1)
26-15-721A

Siren/Horn Selector Switch Up Position Use - Air Horn

The up position of the siren/horn selector switch shall be for the air horn.

One (1)
26-15-723B

Siren/Horn Selector Switch Bottom Position Use - Electronic Horn

The bottom position of the siren/horn selector switch shall be for the electronic horn.

One (1)
30-00-0046

Side Mount Operator Stand Shall Be 46" Wide

One (1)
30-00-SH1X

Operator Stand - 46", Side Ctrl, S/S, w/ No Crosslays; Only High Open Bin

OPERATOR STAND

A 46" wide modular operator stand with side mount controls, shall be installed between the cab and the apparatus body.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

The operator stand shall be independently mounted and furnished with flex joints between the cab and the body to allow for flexure of the chassis frame during road travel. (No exceptions to this requirement).

The operator stand substructure shall be fabricated of 304 stainless steel structural shapes and formed stainless steel plate and shall also support the side running boards. It shall be installed on the chassis with a four point isolator arrangement that allows it to flex independently of the chassis frame. A Tech Products rubber isolator shall be used at each mounting point for this purpose. The substructure, including the pump and plumbing shall be removable from the vehicle as one complete unit. The aluminum ceiling of the operator stand shall be fastened with stainless steel machine screws so that it may be removed for access to the pump and piping as required.

Removable 304 stainless steel panels, full height and width, shall be provided on both sides of the operator stand and a stainless steel pump access door shall be provided on each side of the vehicle. Each door shall be hinged along the top and held closed with compression latches or held open with two (2) gas struts.

CONTROL PANEL

All pump controls and gauges shall be located on the left side of the apparatus on a stainless steel panel with color coded identification plates.

The following controls and gauges shall be located on the control panel for convenient operation:

- All discharge controls
- Electronic engine throttle or governor
- Primer control
- Tank fill control
- Tank to pump control
- Master discharge gauge
- Master intake gauge
- 1/4" NPT Allen head pressure and vacuum test plugs
- Auxiliary cooler control
- Master pump drain control
- Individual pressure gauges
- Water level indicator

OPEN BIN

A 45.625" wide open bin area shall be provided atop the operator stand. The outward facing walls shall be vented as necessary for equipment such as a generator or other device which requires air flow and is located within the open bin.

One (1)
30-02-5090

Open Bin Height - 15.75"

One (1)
30-02-7020

The walls surrounding the open bin shall be 15.75" high.

Operator Stand Exterior Finish - Side Mount, Black LINE-X

OPERATOR STAND EXTERIOR FINISH

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

The stainless steel pump panels, on both sides of vehicle and including the gauge panel and inspection doors, shall be coated with black LINE-X, which has a high resistance to abrasion and tearing. The color shall be black. Panels with a black vinyl cloth glued or laminated in some process to a metal backing surface shall not be acceptable.

The LINE-X material shall absorb impact without surface damage, protect underlying sheet metal from corrosion and shall be resistant to gasoline, diesel fuel, paints, bleaches, organic solvents and other cleaning agents and chemicals. In the unlikely event it is damaged, such as in an accident, it shall be repairable to a like new condition. It shall also be sound dampening and eliminate vibration. Its surface shall have a non-glare, granular texture, easily cleaned with common cleansing compounds.

One (1)
30-05-46LF

Running Board - 46", LS, ATP, with Hose Well, NA Aerials

LEFT SIDE RUNNING BOARD WITH HOSE WELL

The left side running board shall be made of 3/16" aluminum tread plate. Two (2) supports shall extend from the operator stand framing to securely support the running board. The outer edges of the running boards shall be double flanged, i.e. formed down and in.

An air space shall be provided between the aluminum running board, the body and the operator stand to prevent moisture and debris from being trapped between these components.

There shall be one (1) hose well recess mounted in the running board. It shall be a minimum of 9" wide x 36.00" long x 9" deep. Drain holes shall be provided in all four (4) corners. Black Dri-Dek® shall be provided in the well.

One (1)
30-05-X020

Retaining Strap - Seat Belt Paddle Latch Buckle for Running Board Hose Well

RETAINING STRAP

A black polypropylene strap with a seat belt paddle latch buckle shall be provided for the running board hose well. It shall be permanently attached on the inboard and outboard side of the trough and shall secure in the center. Looped ends of the strap shall be secured to the apparatus with footman's loops.

One (1)
30-05-46RF

Running Board - 46", RS, ATP, with Hose Well, NA Aerials

RIGHT SIDE RUNNING BOARD WITH HOSE WELL

The right side running board shall be made of 3/16" aluminum tread plate. Two (2) supports shall extend from the operator stand framing to securely support the running board. The outer edges of the running boards shall be double flanged, i.e. formed down and in.

An air space shall be provided between the aluminum running board, the body and the operator stand to prevent moisture and debris from being trapped between these components.

There shall be one (1) hose well recess mounted in the running board. It shall be a minimum of 9" wide x

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

36.00" long x 9" deep. Drain holes shall be provided in all four (4) corners. Black Dri-Dek® shall be provided in the well.

One (1)
30-05-X020

Retaining Strap - Seat Belt Paddle Latch Buckle for Running Board Hose Well

RETAINING STRAP

A black polypropylene strap with a seat belt paddle latch buckle shall be provided for the running board hose well. It shall be permanently attached on the inboard and outboard side of the trough and shall secure in the center. Looped ends of the strap shall be secured to the apparatus with footman's loops.

One (1)
30-06-0W46

Pump Mount Bracket - for Waterous Pump and 46" Operator Stand

PUMP MOUNT BRACKET

A set of mounting brackets shall be used to mount the operator stand and the water pump as one complete module to the apparatus chassis. This system shall be mounted at four points to the chassis frame and shall incorporate flexible isolators to absorb stresses from chassis twisting and vibrations.

One (1)
30-12-000A

Grab Rails - (2) 8" Knurled Aluminum, on Operator Stand, Next to Cab

GRAB RAILS

An 8" knurled aluminum grab rail shall be provided on the right and left side of the operator stand, next to the hinged access door on the side of the door next to the cab, using offset stanchions.

One (1)
30-12-0020

Pump Panel Labels - Custom

PUMP PANEL LABEL COLOR CHART

POSITION	VERBIAGE	COLOR
Bumper	Frt Discharge	#01 Red
DS FWD 2.5 Dis	#1 Discharge	#10 Light Blue
DS Rear Discharge	#2 Discharge	#06 Light Green
DS Rear Discharge	#3 Discharge	#20 Grey
PS Rear Discharge	#4 Discharge	#15 Magenta
PS Rear Discharge	#5 Discharge	#14 Purple
PS FWD 2.5 Dis	#6 Discharge	#3 Yellow
PS LDH Dis	#7 Discharge	#8 Dark Green
Turret	Deck Gun	#16 Burgundy
Tank Fill	Tank Fill	#24 Black
Tank to Pump	Tank To Pump	#24 Black
DS 2.5 Intake	2.5 Inlet Left	#2 Orange

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
30-12-0110

Pump Panel Lights - (4) TecNiq E10 LED, Side Mount

PUMP PANEL LIGHTS

The driver's side of the operator stand shall have three (3) TecNiq E10 LED lights located beneath light shields to illuminate the pump panel controls and gauges. The officer's side shall have one (1) TecNiq E10 LED light beneath the light shield.

One (1)
30-12-0410

Pump Panel Light Activation - 1 Light by Pump Shift, Side Mount

PUMP PANEL LIGHT ACTIVATION

One (1) of the lights on the driver's side of the operator stand over the master gauge panel shall be activated when the pump is engaged.

One (1)
30-12-0490

Light Switch - Pump Panel

PUMP PANEL LIGHT SWITCH

A switch on the pump panel shall activate the pump panel lights not already activated by either the pump engaging or the marker/ground lights & parking brake combination.

One (1)
30-12-0920

Operator Stand Heater - Red Dot #R-295

OPERATOR STAND HEATER

A Red Dot model R-295 heater shall be provided in the pump compartment for use during freezing weather. The heater shall be rated for 35,000 BTU/hr at 180 degrees air temperature rise. Fan air flow shall be 430 CFM. The heater shall be controlled by a switch located on the pump operator's panel, set to maximum air flow.

One (1)
30-12-0925

Manual Coolant Shutoff Valves - OpStand Heater Inflow (Inlet) & Outflow (Return)

MANUAL COOLANT SHUTOFF VALVES

The operator stand heater inlet flow shall be interrupted by one (1) manual engine coolant shutoff valve mounted behind the engine for auxiliary engine coolant flow control. The valve shall be 1/4 turn style with label for ease of identification.

The operator stand heater return flow shall be interrupted by one (1) manual engine coolant shutoff valve, mounted on the lower radiator tube, for auxiliary engine coolant flow control. The valve shall be 1/4 turn style with label for ease of identification.

One (1)
31-00-0400

Pump - Waterous, 1500 GPM, Single Stage, CSU

WATEROUS PUMP

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Pump shall be a Waterous CSU single stage 1500 GPM midship mounted centrifugal type, carefully designed in accordance with good modern practice. The pump shall be tested at the manufacturer's facility and certified by an independent testing organization.

Pump shall be NFPA 1901 current version compliant.

The pump shall be designed with a two-piece, horizontally split body with intake and discharge passageways in a single casting and on the same level.

Casing:

The casing shall be two-piece, horizontally-split, high-tensile, close grained gray iron. All passageways shall be carefully matched to assure the very best hydraulic flow characteristics.

Wear Rings:

The wear rings shall be bronze, reverse-flow, labyrinth-type and replaceable.

Impellers:

The bronze impellers shall be balanced both mechanically and hydraulically for vibration-free operation. Flame plated impeller hubs shall be standard to assure longer life despite the presence of abrasives in the water supply.

Impeller Shaft:

The impeller shaft shall be heat-treated stainless steel that is ground at all critical areas and polished under packing. The two-piece design shall allow for separation of the transmission from the pump without disassembling either component.

Bearings:

Three deep-groove anti-friction ball bearings shall be located outside the pumping chamber to give support and proper alignment to the impeller shaft assembly. The bearings shall be oil or grease lubricated and shall be completely separate from the water being pumped. They shall be protected by seal housings, flinger rings and oil seals.

Flinger Rings:

Flinger rings shall be located on the impeller shaft between the seal housings and bearing housings. They shall provide added protection and keep water and foreign matter out of the bearings.

Transmission:

The Waterous C20 pump transmission shall have a high-strength, aluminum, three-piece, horizontally-split housing and a high-strength involute form chain drive. It shall have a constant-mesh, two-position sliding collar that engages all teeth simultaneously with an internal locking mechanism to provide a positive lock in PUMP or ROAD position.

Pump Packing - Graphite

PUMP PACKING

One (1)
31-01-0210

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Bearings to be protected from water and sediment by stuffing boxes with square graphite rings of packing at each end of impeller shaft. Packing to be held in place by split bronze glands which are fully removable and adjustable. Replaceable bronze wear rings to be provided on the pump.

One (1)
31-01-0570

Pump Shift - Waterous, Three-Position, Air, with Locking Collar

PUMP SHIFT

An air operated shift system shall be provided that allows the shift arm position to be changed by means of an in-cab mounted switch. It shall engage either the pump drive gear or the truck drive shaft gear. A three-position positive lock air shift shall be provided.

One (1)
31-01-0712

Relief Valve - Intake Pressure, Task Force Tips, 2-1/2"

INTAKE PRESSURE RELIEF VALVE

A 2-1/2" Task Force Tips intake relief valve shall be permanently installed to the pump intake manifold. It shall have minimum pressure adjustment of 75 to 250 PSIG. The surplus water shall be plumbed to the underside of the truck away from the operator.

One (1)
31-01-079C

Relief Valve Shall be Preset to 150 PSI

The relief valve shall be preset to 150 psi.

One (1)
31-01-108T

Priming Pump - Trident AirPrime™ with Triple Controls, for Front & Rear Inlets

PRIMING PUMP

A Trident Model #31.001.12 multi-location air operated priming system shall be installed. The unit shall be of all brass and stainless steel construction and designed for fire pumps of 1,250 GPM (4,690 LPM) or more. Due to corrosion exposure no aluminum or vanes shall be used in the primer design. The primer shall be three-barrel design with 3/4" NPT connection to the fire pump.

A Class 1 quarter turn 1/4" drain valve shall be provided and labeled on the operator's panel.

The primer shall be mounted above the pump impeller so that the priming line will automatically drain back to the pump. The primer shall also automatically drain when the panel control actuator is not in operation. The inlet side of the primer shall include a brass 'wye' type strainer with removable stainless steel fine mesh strainer to prevent entry of debris into the primer body.

Performance, Safety, and NFPA Compliance

The priming system shall be capable to a vertical lift to 22 inches of mercury and shall be fully compliant to applicable NFPA standards for vertical lift. The system shall create vacuum by using air from the chassis air brake system through a three-barrel multi-stage internal "venturi nozzles" within the primer body. The noise level during operation of the primer shall not exceed 75 Db.

Air Flow Requirements

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

The primer shall require a minimum of 15.6 cubic foot per minute air compressor and shall be capable of meeting drafting requirements at high idle engine speed. The air supply shall be from a chassis supplied 'protected' air storage tank with a pressure protection valve. The air supply line shall have a pressure protection valve set between 70 to 80 PSIG.

Primer Controls

The pump primer control shall have a manually operated, panel mounted "push to prime" air valve; which will direct air pressure from the air brake storage tank to the primer body. To prevent freezing, no water shall flow to and from the panel control.

Two (2) additional "push to prime" remote primer controls shall be installed on the panel for the front and rear intakes. The additional controls shall operate the air primer to pre-prime and may be used to remove air from the auxiliary intake piping and hose, while the fire pump is operating.

Power Requirements

To reduce the electrical power requirements on the fire apparatus the priming system shall be air powered. The system shall not require annual tear-down and maintenance, an electric motor or solenoid, electrical wiring, lubrication, belt drive, or clutch assembly.

Warranty

The primer shall be covered by a five (5) year parts warranty.

One (1)
31-01-1220

Pressure Governor - FRC, PumpBoss

PRESSURE GOVERNOR and MONITORING DISPLAY

Fire Research PumpBoss PBA400 series pressure governor and monitoring display kit shall be installed. The kit shall include a control module, intake pressure sensor, discharge pressure sensor, and cables. The control module case shall be waterproof and have dimensions not to exceed 6 3/4" high by 4 5/8". The control knob shall be 2" in diameter with no mechanical stops, have a serrated grip, and a red idle push button in the center. It shall not extend more than 1 3/4" from the front of the control module. Inputs for monitored information shall be from a J1939 data bus or independent sensors. Outputs for engine control shall be on the J1939 databus or engine specific wiring.

The following continuous displays shall be provided:

Engine RPM; shown with four daylight bright LED digits more than 1/2" high

Check engine and stop engine warning LEDs

Engine oil pressure; shown on a dual color (green/red) LED bar graph display

Engine coolant temperature; shown on a dual color (green/red) LED bar graph display

Transmission Temperature; shown on a dual color (green/red) LED bar graph display

Battery voltage; shown on a dual color (green/red) LED bar graph display

Pressure and RPM operating mode LEDs

Pressure / RPM setting; shown on a dot matrix message display

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Throttle ready LED.

A dot-matrix message display shall show diagnostic and warning messages as they occur. It shall show monitored apparatus information, stored data, and program options when selected by the operator. All LED intensity shall be automatically adjusted for day and night time operation.

The program shall store the accumulated operating hours for the pump and engine to be displayed with the push of a button. It shall monitor inputs and support audible and visual warning alarms for the following conditions:

High Battery Voltage

Low Battery Voltage (Engine Off)

Low Battery Voltage (Engine Running)

High Transmission Temperature

Low Engine Oil Pressure

High Engine Coolant Temperature

Out of Water (visual alarm only)

No Engine Response (visual alarm only).

The program features shall be accessed via push buttons located on the front of the control module. There shall be a USB port located at the rear of the control module to upload future firmware enhancements.

The governor shall operate in two control modes, pressure and RPM. No discharge pressure or engine RPM variation shall occur when switching between modes. A throttle ready LED shall light when the interlock signal is recognized. The governor shall start in pressure mode and set the engine RPM to idle. In pressure mode the governor shall automatically regulate the discharge pressure at the level set by the operator. In RPM mode the governor shall maintain the engine RPM at the level set by the operator except in the event of a discharge pressure increase. The governor shall limit a discharge pressure increase in RPM mode to a maximum of 30 PSI. Other safety features shall include recognition of no water conditions with an automatic programmed response and a push button to return the engine to idle.

The pressure governor and monitoring pressure display shall be programmed at installation for a specific engine.

One (1)
31-01-2020

Auxiliary Engine Cooling System

AUXILIARY COOLING SYSTEM

A supplementary heat exchange cooling system shall be installed to permit use of water from the discharge side of the fire pump to reduce the temperature of the antifreeze solution circulating through the engine cooling system.

One (1)
91-75-0500

Warranty - Waterous, Pump, 7 Yr, Parts Only

WATEROUS WARRANTY

The pump shall be warranted by Waterous to the original buyer that the pump is free from defects in material and workmanship under normal use and service for a period of seven (7) years from the date the

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

product is first placed in service, or seven and one-half (7-1/2) years from the date of shipment by Waterous, whichever period shall be the first to expire; provided the Buyer notifies Waterous, in writing, of the defect in said product within the warranty period, and said product is found by Waterous to be nonconforming with the aforesaid warranty. This warranty covers parts only. See warranty certificate for complete details.

One (1)
31-01-0120

Pump Anti-Corrosion System - Zinc Anode, Waterous Pumps

PUMP ANTI-CORROSION SYSTEM

An anti-corrosion system shall be installed to prevent galvanic corrosion within the pump. It shall consist of two (2) sacrificial zinc anodes. One shall be installed on each of the 6" main inlets. Anodes shall be easily removable for inspection and replacement.

One (1)
31-01-0580

Pump Shift Manual Override

PUMP SHIFT MANUAL OVERRIDE

A manual pump shift override shall be provided.

One (1)
31-01-0590

Transmission Lock up - Pump Shift Activation

TRANSMISSION LOCK UP

The direct gear transmission lockup for the fire pump operation shall engage when the pump shift control in the cab is activated and the transmission shift is changed to "Drive".

One (1)
31-01-2110

Pump Piping - S/S Pipe, Discharge Manifold and HP Hose, Hydrotested

PUMP PIPING –STAINLESS STEEL, MANIFOLD AND HIGH PRESSURE HOSE

All suction and discharge lines shall use schedule 10 stainless steel pipe or heavy duty pressure/vacuum hose with stainless steel end fittings. Sweat soldered copper tubing is not acceptable. Where vibration or chassis flexing may damage or loosen piping, the pipe shall be equipped with Victaulic or rubber couplings. All discharge and gated inlet lines to drain through individual drain valves. All individual drain lines are to be extended to drain below chassis frame.

A stainless steel discharge manifold shall be used to feed the discharges, 2-1/2" or less, as required by the plumbing layout.

All discharge caps on the apparatus 1-1/2" or larger shall be vented (except for the aerial rear inlet/outlet).

All threaded fittings shall be sealed with a heavy duty Teflon anaerobic pipe sealant. It shall be in a liquid form with a consistency similar to grease. Teflon tape shall not be acceptable. It shall be designed to prevent corrosion between the mating surfaces and to allow for easy disassembly of the joints if necessary. PermaBond shall manufacture with a trade name of Permalok.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

All water carrying pressure gauge lines are to be of flexible tubing to prevent breakage from vibration. All suction inlets and discharge outlets shall be equipped with National Standard Threads (NST).

The entire pump and plumbing system shall be tested in accordance with the current version of NFPA 1901.

One (1)
31-01-2120

Drain Valve - Master Pump, Brass/S/S, with Sealed Port

MASTER DRAIN - FIRE PUMP

A master drain valve shall be provided and installed. The drain assembly shall be constructed of brass and stainless steel with individually sealed ports for low point drainage of the fire pump and auxiliary devices.

One (1)
31-01-2130

Drain Valve - Line, Class 1, Quarter Turn

DRAINS

A Class 1 quarter turn .75" ball drain or bleed off valve shall be provided for each gated hydrant inlet or discharge outlet. The valve shall be mounted in an accessible location. The valve controls shall be properly labeled. The water discharged from the valve lines shall be routed so it is exhausted below the chassis frame rails.

One (1)
31-01-5020

Tank to Pump Line Valve - 3", Push-Pull Control, Side Panel Control

TANK TO PUMP LINE

A 3" tank to pump valve shall be installed between the water tank and the pump. The valve shall be a quarter turn ball type, drop out design and constructed of brass. The control handle shall be chrome push/pull locking "T" type and will be installed on the left side pump panel. A check valve shall be installed between the pump and the valve to prevent water from flowing back into the tank.

One (1)
31-02-0010

Valve Controls - Side Mount, Innovative Controls

INLET AND OUTLET PUSH PULL CONTROLS

Controls for all inlets and outlets shall be push-pull in design, unless otherwise stated at the inlet or discharge option. All inlet and outlet push-pull valve control handles shall be the "T" handle design with a recess in its face for a 7/8" x 2-7/8" identification plate. Handles and panel plates (escutcheons) shall be constructed of cast zinc with a polished chrome plated finish. Handles shall be labeled describing the function of the control handle. The discharge valves that are remote mounted in the pump system piping shall be actuated by the 1/4 turn locking push-pull control assembly. The sliding rod for the outlet which pulls out from the pump panel shall be constructed of 3/4" diameter aluminum with a hard coated anodized surface. The aluminum housing shall incorporate two bronze bushing sleeves. Inlet valve controls do not have to be the locking type nor have the control rod. All controls shall actuate without binding, per the manufacturer's requirements.

One (1)
31-02-0110

Valves - Direct & Inline, All Akron

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

AKRON VALVES

All direct and in-line valves shall be Akron model 8600 or 8800 heavy duty swing-out brass valves designed for operating pressures to 250 PSI. Akron 8000 series valves have a 316 stainless steel ball turning in self-adjusting ball seats and shall create a positive seal to hold pressure or vacuum in both directions without the use of high maintenance o-rings.

If electric valves are chosen, the controller shall be model 9327.

One (1)
91-75-052B

Warranty - Akron Brass, 8600/8800 Heavy Duty Valves, 10 Year

WARRANTY

Akron Brass warrants the 8600 and 8800 heavy duty valves for a period of ten (10) years after purchase against defects in materials or workmanship. See warranty certificate for complete details.

One (1)
31-02-0360

Master Compound Gauges - (2) Class 1, Back Lit, 4.5" dia., 30-0-600

MASTER GAUGES

A pair of Class 1 back lit liquid filled compound gauges, #91583953-L, shall be provided for the master Pump Intake and master Pump Discharge gauges. The gauges shall be 4.5" in diameter and have a pressure range of 30-0-600 and shall dampen vibration and pulsation. The cases shall be manufactured with corrosion and impact resistant Zytel nylon. To prevent internal freezing and to keep contaminants from entering the gauge, the stem and Bourdon tube of each gauge shall be filled with low temperature oil and sealed from the water system using an isolating diaphragm located in the stem (no exceptions). Light emitting diodes that are independent of the gauges shall back light the gauges. A bright metal bezel shall be supplied for resistance to corrosion and to protect the lens and case from damage.

The master gauges shall be grouped together on the pump operator's control panel for ease of observation during pump operations, as required by NFPA 1901. The backlights shall be activated by turning on the pump panel light switch.

One (1)
31-02-050W

Gauge LED Color - White

The gauge's LED color shall be white.

Nine (9)
31-02-0460

Gauges - Discharge, 2.5", Class 1, Back Lit, 30-0-600, 1 per Discharge (Ea)

PRESSURE GAUGE(S)

Nine (9) individual Class 1 back lit liquid filled line pressure gauge(s), #91523933-L, for the 1.50" and larger discharges shall be furnished. The gauge(s) shall be 2.5" in diameter and have a pressure range of 30-0-600 and shall dampen vibration and pulsation. The case(s) shall be manufactured with corrosion and impact resistant Zytel nylon. To prevent internal freezing and to keep contaminants from entering the gauge, the stem and Bourdon tube of each gauge shall be filled with low temperature oil and sealed from the water system using an isolating diaphragm located in the stem (no exceptions). Light emitting diodes that are independent of the gauge(s) shall back light the gauge(s). The backlights shall be

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

activated by turning on the pump panel light switch. A bright metal bezel shall be supplied for resistance to corrosion and to protect the lens and case from damage.

Nine (9)
31-02-050B
Gauge LED Color - Blue

The gauge's LED color shall be blue.

One (1)
31-02-1040
Pump Panel Engine Gauge Display NOT Required With Selected Pressure Governor

One (1)
31-02-1090
Fuel Gauge - Pump Panel

FUEL GAUGE

A 2" weatherproof fuel gauge shall be mounted on pump panel indicating the amount of fuel in tank. The gauge shall be mounted in a well lit area for night operations.

One (1)
31-02-1210
Air Horn Push Button - On Pump Panel

AIR HORN BUTTON

A red momentary push button shall be provided on the operator's pump panel to activate the air horn(s).

One (1)
31-02-2020
Tank Level Gauge - Water, Class1, Intelli-Tank

WATER TANK LEVEL GAUGE - MASTER

The apparatus shall be equipped with a Class 1 "Intelli-Tank" tank level gauge for indicating water level. The tank level gauge shall indicate the liquid level on a 4-light LED display and show increments of 1/8 of a tank.

The Class 1 "Intelli-Tank" tank level gauge utilizes a pressure transducer that mounts on the outside of the tank for sensing water or foam levels. No probes are required for the tank.

The lights shall be interlocked with the parking brake to operate only with the parking brake set.

One (1)
31-02-2190
Large Tank Level Displays - (2) Water, Whelen PSTANK2 LED - Cab

LARGE WATER TANK LEVEL DISPLAYS

Two (2) Whelen "PSTANK2" water tank level displays with chrome bezels shall be provided on the cab, one on each side of the cab. The displays shall be vertically mounted and wired to the Master water tank level gauge through a remote display driver module. The display shall activate when the maxi parking brake is activated.

The lights shall be interlocked with the parking brake to operate only with the parking brake set.

One (1)
31-02-2110
Remote Large Display Driver - Water Tank Level Gauge, Class1

CLASS 1 WATER TANK LEVEL GAUGE REMOTE LARGE DISPLAY DRIVER

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

A Class 1 remote large display driver for the water tank level gauge shall be provided. The driver shall provide four (4) separate outputs for large remote tank level displays. Each output shall support multiple lights up to a 7.5 amp capacity and shall mimic the function of the Master Tank Level display.

The lights shall be interlocked with the parking brake to operate only with the parking brake set.

One (1)
31-02-220S

Large Tank Level Display Location - Centered on Crew Cab Extension

Lights shall be mounted behind the crew cab door each side, up high, centered on the cab extension. Additional selected options may effect the exact placement of the light.

One (1)
33-10-0100

Main Pump Inlets - 6", (1) L/S, (1) R/S

PUMP INLETS

A 6" pump manifold inlet shall be provided on each side of the vehicle. Removable die cast zinc strainers shall be provided in each side inlet to provide cathodic protection for the pump and thus reduce corrosion in the pump. Each inlet shall extend past the pump panel and shall allow a minimum of 8" clearance to the outside edge of the running board.

One (1)
34-85-0010

No Adapter/Valve(s) Required for Main Pump Inlet(s)

Two (2)
34-85-0030

Cap - Main Pump Inlet, 6" NST Long Handled, Chrome Plated (Ea)

MAIN PUMP INLET CAP(S)

Two (2) 6" NST long handled chrome plated cap(s) shall be provided for the main pump inlet(s).

One (1)
33-10-140B

Auxiliary Inlet - Gated, 3", Right Side (Ea)

3" HYDRANT INLET(S)

One (1) 3" gated hydrant inlet(s) shall be furnished on the right side of the pump enclosure. The valve shall be recessed behind the panel and shall be provided with a swing valve control extending through the panel. The valve shall be of the drop out type. Inlet shall terminate with a 3" NST female swivel adapter and screen.

One (1)
34-85-0122

Plug & Chain - RS Auxiliary Gated Inlet, 3" NST, Chrome Plated (Ea)

RIGHT SIDE AUXILIARY GATED INLET PLUG(S)

One (1) 3" NST chrome plated plug(s) and retaining chain(s) shall be provided for the right side 3" auxiliary gated inlet(s).

One (1)
33-13-1300

Front Inlet - 5" w/o Valve

FRONT 5" PUMP INLET

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

The apparatus shall be provided with a 5" front pump inlet. It shall be installed with the hose inlet at the right side corner of the cab front bumper.

The inlet shall be constructed of schedule 10 stainless steel piping and shall enter the inlet manifold section of the pump. Galvanized or black iron (steel) pipe is not an acceptable alternative. Connection to the pump shall be via a bolted flange, threaded pipe turned into the manifold will not be acceptable. The front suction shall be a welded fabrication. Threaded pipe and elbows shall not be used in the design of the front inlet. Piping shall be routed under the cab and over the front axle in the right side wheel well area. It shall be mounted to the chassis frame (not cab or body) with heavy duty support brackets. A close nipple shall be installed on the front suction for the drain nearest the operator stand.

The multi-piece assembly shall be connected together with Victaulic couplings. They shall prevent damage to the piping when the chassis frame twists or flexes. Also they shall provide a means of disassembly and removal of any individual piping section if necessary because of accident or for easier access to other damaged areas or places requiring special maintenance needs. Front inlet piping shall be removable without having to remove the cab.

Total assembly shall be fully engineered, and not a "make on job" fabrication where future replacement parts cannot be ordered from the apparatus builder. Bidder may be required to provide evidence of his ability to supply engineering drawings of the front inlet assembly and its individual parts.

One (1)
34-85-0340

Swivel - Front Inlet, 5", Chrome Plated Brass

FRONT INLET SWIVEL

The front inlet shall extend up vertically through the aluminum treadplate gravel pan at the extreme right outer corner of the bumper extension. A polished chrome plated brass 5" 90 degree right angle swivel with screen shall be threaded onto the inlet pipe opening. The swivel shall rotate a full 180 degrees in a horizontal plane to allow soft hydrant hose (or hard drafting hose) to easily be attached to it and the hydrant with a minimum of effort and without special care regarding hose or vehicle alignment, i.e. the hose shall self-align itself with little assistance when pressurized by automatically turning the swivel to the optimum position. If drafting the hose shall be able to be moved to different locations without repositioning the truck. A lock shall be provided on the swivel to hold it in the travel position.

The swivel, when in the "in transit" position, shall not block apparatus headlights or warning lights (from a straight on perspective). Should there be an objectionable concern with the swivel affecting side headlight efficiency and recognition then an alternate higher location for them shall be available for the fire department's consideration.

One (1)
34-85-035C

Storz Adapter - Front Inlet, 5" NST x 5" Storz, Anodized

FRONT INLET STORZ ADAPTER

A 5" FNST x 5" Storz hard anodized aluminum straight adapter shall be provided for the 5" front inlet.

One (1)
34-85-035Z

Cap & Cable - Front Inlet, 5" Storz, Anodized

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

FRONT INLET CAP

One (1)
33-13-2W10

A 5" Storz hard anodized aluminum cap and cable shall be provided for the front inlet.

5" Butterfly Valve - Front Inlet f/ Waterous Pump, with Handwheel Control

5" BUTTERFLY VALVE

The front inlet shall include a handwheel controlled 5" butterfly valve. The chrome finished handwheel shall be located on the pump panel. The nameplate shall show handwheel direction for opening or closing. Valve shall be equipped with a thin profile disc. There shall be a right angle gear assembly mounted on top of valve with control rod extended to pump panel.

One (1)
31-01-0745

Relief Valve - Front Intake Pressure, Task Force Tips, 2-1/2"

INTAKE PRESSURE RELIEF VALVE

A 2-1/2" Task Force Tips intake relief valve shall be permanently installed in the front inlet piping. It shall have minimum pressure adjustment of 75 to 250 PSI. The surplus water shall be plumbed to the underside of the truck away from the operator.

One (1)
31-01-079C

Relief Valve Shall be Preset to 150 PSI

The relief valve shall be preset to 150 psi.

One (1)
33-13-3010

Rear Inlet - 5" without Valve, Inside Rear Compartment

REAR 5" PUMP INLET

The apparatus shall be provided with a 5" rear pump inlet. It shall be installed with the hose connection located in the center of the rear step compartment.

The inlet shall be constructed of schedule 10 stainless steel piping and shall enter the right side pump inlet manifold. Galvanized or black iron (steel) pipe is not an acceptable alternative. Connection to the pump shall be via a bolted flange, threaded pipe turned into the manifold will not be acceptable. A minimum of three (3) individual pipe sections shall be used in the rear inlet manifold. Individual pieces used in its design shall be welded fabrications with large sweep type welded pipe elbows. Threaded pipe and elbows shall not be used in the design of the rear inlet. The inlet piping shall run through a sleeve in the apparatus water tank.

The multi-piece assembly shall be connected together by a minimum of one (1) Victaulic coupling. They shall prevent damage to the piping when the chassis frame twists or flexes. Also they shall provide a means of disassembly and removal of any individual piping section if necessary because of accident or for easier access to other damaged areas or places requiring special maintenance needs. Rear inlet piping shall be removable without having to first remove the water tank.

Total assembly shall be fully engineered, and shall not be a "make on job" fabrication where future replacement parts cannot be ordered from the apparatus builder. Bidder may be required to provide

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

- One (1)
34-85-0210
evidence of his ability to supply engineering drawings of the rear inlet assembly and its individual parts.
Adapter & Screen - Rear Inlet, 5" NST, Chrome Plated
REAR INLET ADAPTER & SCREEN
- One (1)
34-85-0232
A 5" NST chrome plated adapter and screen shall be provided for the rear inlet.
Storz Adapter - Rear Inlet, 5" NST x 5" Storz, Anodized
REAR INLET STORZ ADAPTER
- One (1)
34-85-0252
A 5" FNST x 5" Storz hard anodized aluminum straight adapter shall be provided for the 5" rear inlet.
Cap & Cable - Rear Inlet, 5" Storz, Anodized
REAR INLET CAP
- One (1)
33-13-3W30
A 5" Storz hard anodized aluminum cap and cable shall be provided for the rear inlet.
5" Butterfly Valve - Rear Inlet f/Waterous Pump, with Air Control
5" BUTTERFLY VALVE
- One (1)
31-01-0755
The rear inlet shall include a 5" butterfly valve with air actuator, pump panel mounted remote control.
The valve shall be equipped with a thin profile disc.
Relief Valve - Rear Intake Pressure, Task Force Tips, 2-1/2"
INTAKE PRESSURE RELIEF VALVE
- One (1)
31-01-079C
A 2-1/2" Task Force Tips intake relief valve shall be permanently installed in the rear inlet piping. It shall have minimum pressure adjustment of 75 to 250 PSI. The surplus water shall be plumbed to the underside of the truck away from the operator.
Relief Valve Shall be Preset to 150 PSI
- One (1)
33-20-0200
The relief valve shall be preset to 150 psi.
Tank Fill Line - 2"
TANK FILL
- One (1)
34-15-0110
There shall be a 2" pump to tank fill line installed with a 2" inline valve. Valve shall be controlled at the pump panel with a chrome locking handle.
Front Bumper Discharge - 1.5" with Swivel & 2" & 2.5" Plumbing, Push-Pull Valve
FRONT BUMPER DISCHARGE

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

(1) 1.5" pre-connect discharge shall be located in the front bumper extension. The discharge shall be plumbed from the pump with 2" and 2.5" plumbing. It shall have a manual full flow quarter turn valve with push/pull control. The discharge shall end in a chrome plated 90 degree swivel elbow.

One (1)
34-15-020A

Front Bumper Discharge Location - A: Left Inside Position

The discharge shall be located on the bumper in the left inside (A) position.

One (1)
34-15-0305

Swivel Stop for Front Bumper Discharge - S/S Rod, U-Shaped

SWIVEL STOP

A U-shaped, polished rod swivel stop shall be provided for the front bumper discharge swivel. It shall prevent the swivel from rotating to the rear where it can come into contact with the cab during tilting operations.



One (1)
34-85-0510

No Cap & Chain for Front Bumper Discharge

One (1)
34-20-0250

Discharge - LS, 2-1/2", with Push-Pull Valve (Ea)

2-1/2" LEFT SIDE DISCHARGE(S)

One (1) 2 1/2" discharge(s), each with a pump mounted, quarter turn ball valve shall be located on the left side panel. Each valve shall be capable of being locked or unlocked at the valve from the control

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

panel at any position between open or closed and shall operate freely up to maximum pump discharge pressure.

One (1)
34-85-1210 **Adapter - LS 2.5" Discharge, 2.5" x 2.5" NST, Chrome Plated (Ea)**

LEFT SIDE DISCHARGE ADAPTER(S)

One (1) 2.5" FNPT x 2.5" MNST chrome plated adapter(s) shall be provided for the 2.5" left side discharge(s).

One (1)
34-85-1214 **Elbow - LS 2.5" Discharge, 2.5" NST, 45 Degree Chrome Plated (Ea)**

LEFT SIDE DISCHARGE ELBOW(S)

One (1) 2.5" FNST x 2.5" MNST 45 degree chrome plated elbow(s) shall be provided for the 2.5" left side discharge(s).

One (1)
34-85-1930 **Cap & Chain - LS 2.5" Discharge, 2.5", Chrome Plated (Ea)**

LEFT SIDE DISCHARGE CAP(S) & CHAIN(S)

One (1) 2.5" chrome plated cap(s) and retaining chain(s) shall be provided for the 2.5" left side discharge(s).

One (1)
34-21-0250 **Discharge - RS, 2-1/2", with Push-Pull Valve (Ea)**

2-1/2" RIGHT SIDE DISCHARGE(S)

One (1) 2 1/2" discharge(s), each with pump mounted, quarter turn ball valve shall be located on the right side panel. Each valve shall be capable of being locked or unlocked at the valve from the control panel at any position between open or closed and shall operate freely up to maximum pump discharge pressure. The valve shall be operated from the operator's panel.

One (1)
34-85-1610 **Adapter - RS Discharge, 2.5" NST, Chrome Plated (Ea)**

RIGHT SIDE DISCHARGE ADAPTER(S)

One (1) 2.5" FNPT x 2.5" MNST chrome plated adapter(s) shall be provided for the 2.5" right side discharge(s).

One (1)
34-85-1614 **Elbow - RS Discharge, 2.5" NST, 45 Degree Chrome Plated (Ea)**

RIGHT SIDE DISCHARGE ELBOW(S)

One (1) 2.5" FNST x 2.5" MNST 45 degree chrome plated elbow(s) shall be provided for the 2.5" right side discharge(s).

One (1)
34-85-2030 **Cap & Chain - RS Discharge, 2.5", Chrome Plated (Ea)**

RIGHT SIDE DISCHARGE CAP(S) & CHAIN(S)

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

- One (1)
34-21-0425 One (1) 2.5" chrome plated cap(s) and retaining chain(s) shall be provided for the right side discharge(s).
Discharge - RS, 4" with Electric Valve
4" RIGHT SIDE DISCHARGE
- One (1)
34-85-1820 There shall be one (1) 4" discharge to the right side pump panel. The outlet shall be piped from the discharge side of the pump through a 4" electric controlled valve with 4" piping. The valve shall be pump panel controlled. An open/closed indicator light module shall be provided on the pump panel.
Adapter - RS 4" Discharge, 4" x 5" NST, Chrome Plated (Ea)
RIGHT SIDE DISCHARGE ADAPTER(S)
- One (1)
34-85-1883 One (1) 4" FNPT x 5" MNST chrome plated adapter(s) shall be provided for the 4" right side discharge(s).
Elbow - RS 4" Discharge, 4" x 5" Storz, 30 Degree, Anodized (Ea)
RIGHT SIDE DISCHARGE ELBOW(S)
- One (1)
34-85-2090 One (1) 4" FNST x 5" Storz 30 degree hard anodized aluminum elbow(s) shall be provided for the 4" right side discharge(s).
Cap & Chain - RS Discharge, 5" Storz, Anodized (Ea)
RIGHT SIDE DISCHARGE CAP(S) & CHAIN(S)
- Two (2)
34-24-0250 One (1) 5" Storz cap(s) and retaining chain(s) shall be provided for the right side discharge(s). The Storz cap(s) shall have a hard anodized finish.
Rear Discharge - LS, 2-1/2", with Push-Pull Valve (Ea)
2-1/2" LEFT REAR DISCHARGE(S)
- Two (2)
34-85-2210 Two (2) 2-1/2" discharge(s) shall be provided at the rear of the hose bed on the left hand side. It shall be plumbed with 2-1/2" pipe. The outlet(s) shall be operated by an in-line 2-1/2" drop out type valve with control at the pump panel.
Adapter - LS Rear Discharge, 2.5" NST, Chrome Plated (Ea)
LEFT SIDE REAR DISCHARGE ADAPTER(S)
- Two (2)
34-85-2214 Two (2) 2.5" FNPT x 2.5" MNST chrome plated adapter(s) shall be provided for the 2.5" left side rear discharge(s).
Elbow - LS Rear Discharge, 2.5" NST, 45 Degree Chrome Plated (Ea)
LEFT SIDE REAR DISCHARGE ELBOW(S)

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Two (2) 2.5" FNST x 2.5" MNST 45 degree chrome plated elbow(s) shall be provided for the 2.5" left side rear discharge(s).

Two (2)
34-85-2930

Cap & Chain - LS Rear Discharge, 2.5", Chrome Plated (Ea)

LEFT SIDE REAR DISCHARGE CAP(S) & CHAIN(S)

Two (2) 2.5" chrome plated cap(s) and retaining chain(s) shall be provided for the left side rear discharge(s).

Two (2)
34-25-0250

Rear Discharge - RS, 2-1/2", with Push-Pull Valve (Ea)

2-1/2" RIGHT REAR DISCHARGE(S)

Two (2) 2-1/2" discharge(s) shall be provided at the rear of the hose bed on the right hand side. Each shall be plumbed 2-1/2" pipe. The outlet(s) shall be operated by an in-line 2-1/2" drop out type valve with control at the pump panel.

Two (2)
34-85-2610

Adapter - RS Rear Discharge, 2.5" NST, Chrome Plated (Ea)

RIGHT SIDE REAR DISCHARGE ADAPTER(S)

Two (2) 2.5" FNPT x 2.5" MNST chrome plated adapter(s) shall be provided for the 2.5" right side rear discharge(s).

Two (2)
34-85-2614

Elbow - RS Rear Discharge, 2.5" NST, 45 Degree, Chrome Plated (Ea)

RIGHT SIDE REAR DISCHARGE ELBOW(S)

Two (2) 2.5" FNST x 2.5" MNST 45 degree chrome plated elbow(s) shall be provided for the 2.5" right side rear discharge(s).

Two (2)
34-85-3030

Cap & Chain - RS Rear Discharge, 2.5", Chrome Plated (Ea)

RIGHT SIDE REAR DISCHARGE CAP(S) & CHAIN(S)

Two (2) 2.5" chrome plated cap(s) and retaining chain(s) shall be provided for the right side rear discharge(s).

One (1)
34-90-03AE

Discharge - Deck Gun, 3", w/ Electric Control

3" DELUGE RISER W/ ELECTRIC CONTROL

A 3" deluge gun riser shall be installed above the pump terminating in the open bin with National Pipe Thread (NPT). Location to be determined on the P. E. Drawing and approved by the customer. Piping shall be installed securely so no movement develops when the line is charged. The riser shall be gated and controlled at the pump operator panel by an electric valve. The outlet shall be piped from the discharge manifold of the pump through 3" piping. An open/closed indicator light module and pressure gauge shall be provided on the pump panel.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

The piping shall terminate above the pump housing floor to allow the the deck gun to clear the cord reel in the open bin. The deck gun shall have 360 deg. rotation.

One (1)
35-00-0T01

Deck Gun - TFT Crossfire® #XFT-NJ, Manual, 1250GPM, 2.5" MNH Outlet (Top Section)

DECK GUN

One (1) Task Force Tips Crossfire®, model # XFT-NJ portable monitor shall be installed on the deck gun discharge. This top only portion shall have a quick release swivel joint. The monitor shall include safety devices that include a locking button which locks the quick release lever when monitor is pressurized, and a 1/4 turn rotational lever lock that secures the horizontal rotation and provides a visual indication that the monitor rotation is locked. For corrosion resistance the monitor shall be constructed from hard coat anodized aluminum.

The monitor shall have a 3-1/4" waterway for delivery of up to 1250 GPM with low friction loss. Vertical elevation shall be controlled through use of a handwheel controlled stainless steel worm gear which allows full travel to the safety stop point of 35 degrees above horizontal with seven rotations of the wheel. When positioned on a truck mounted riser the monitor shall be able to be used below the 35 degree stop point through release of the spring-loaded safety pin.

An automatic drain to remove remaining water and avoid freezing shall be included. Integral stainless-steel stream straightener and pressure gauge shall be included. The monitor shall be configured with a Crossfire® inlet and 2-1/2" male NH outlet.

One (1)
35-00-0T11

Portable Ground Base - TFT Safe-Tak 1250™ #XFH-1SP, (1) 4" Storz Inlet

PORTABLE GROUND BASE

One (1) Task Force Tips Safe-Tak 1250™, model # XFH-1SP portable monitor base shall be provided. The monitor shall include a Safe-Tak, spring loaded butterfly valve designed to rapidly reduce the water flow by 90 percent in the event that contact with the ground is lost. The device shall include an integral carrying handle, four folding stainless-steel legs with replaceable tungsten carbide spikes and an anchoring strap (attached to a protective cap) designed to be stored inside the waterway. The butterfly valve shall have a reset handle located near the inlet to allow the water flow to be reestablished once the base is properly stabilized. The base shall allow an optional pressure relief valve to be installed.

The base shall be constructed from hard coat anodized aluminum. The inlet shall be configured with one (1) 4" Storz swivel coupling.

One (1)
35-00-0T1B

Monitor Storage Bracket - TFT Crossfire® #XF-B

MONITOR STORAGE BRACKET

One (1) Task Force Tips model # XF-B storage bracket and mounting screws shall be supplied. The bracket shall be constructed from stainless steel, include a quick release retention strap, and be designed for horizontal or vertical installation. The bracket is designed for storage of the Task Force Tips Crossfire® SAFE-TAK and STOWAWAY 800 series portable monitor base with or without monitor top attached.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
35-00-0T22 The storage bracket shall be shipped loose for the customer to install.

Monitor Color - TFT American Red

One (1)
35-00-0T34 The monitor shall be TFT American Red in color.

Nozzle - TFT MstrStrm #M-RF1000-NJ, 2.5"NH, 1000GPM, Manual

NOZZLE

One (1) Task Force Tips model # M-RF1000-NJ fixed flow master stream nozzle shall be provided. For corrosion resistance the nozzle shall be constructed for lightweight hard coat anodized aluminum.

The nozzle shall have fixed flow and pressure ratings determined by the end user. The flow and pressure ratings shall be laser engraved on the baffle plate. A UV resistant rubber bumper with integral teeth designed to produce a finger free fog pattern shall be included. A halo ring shall be included to assist with stream shape control. The nozzle shall be suitable for foam solution application and designed to accept the Task Force Tips FJ-LX-M low expansion air aspirating attachment. The nozzle shall be configured with a 2-1/2" female NH swivel rocker lug coupling.

One (1)
35-00-0T51 **Stacked Tip Set - TFT #MST-4NJ, Quad, 2.5" NH, Hard Coat Anodized**

STACKED TIP SET

One (1) Task Force Tips model MST-4NJ set of quad stacked tips shall be provided. They shall be hard coat anodized, have a 2.5" NH swivel female inlet, 2", 1-3/4", 1.5", and 1-3/8" recessed orifices for protection, and shall not exceed 16.9" in length.

One (1)
35-00-0T81 **Monitor Top Mount Adapter - TFT Crossfire® #XFF-APL (NA with Extend-A-Gun)**

MONITOR TOP MOUNT ADAPTER

One (1) Task Force Tips # XFF-APL piping adapter for mounting the monitor top to the truck deck pipe shall be provided. The adapter shall be constructed from hard coat anodized aluminum and be designed to attach directly to a 3" male NPT pipe thread.

One (1)
37-11-0200 **Water Tank - 750 Gallon, L-Type**

L-TYPE WATER TANK

An L-shaped polypropylene water tank shall be supplied. It shall have a capacity of 750 U.S. gallons and shall be constructed per the manufacturer's specifications.

One (1)
37-31-4000 **Tank Manufacturer - United Plastic Fabricating (UPF)**

The tank shall be manufactured by United Plastic Fabricating (UPF).

One (1)
37-31-4100 **Water Tank Fill Tower - UPF, Blue, 4" ID Vent Overflow**

WATER TANK FILL TOWER

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

The United Plastic Fabricating (UPF) tank shall have a combination vent and manual fill tower. The polypropylene fill tower shall have a minimum dimension of 8" x 8" outer perimeter. (Standard size shall be 12.00" x 12.00"). The fill tower shall be not less than 12.00" high and shall be flush with the top of the body risers as standard. The fill tower shall be blue in color indicating that it is a water-only fill tower. The tower shall be located in the left front corner of the tank unless otherwise specified by the tank manufacturer to the purchaser. The tower shall have a removable polypropylene screen and a polypropylene hinged cover. The capacity of the tank shall be engraved on the top of the fill tower lid.

Inside the fill tower there shall be a combination vent/overflow pipe. The vent overflow shall be a minimum of schedule 40 polypropylene pipe with a minimum I. D. of 4" that is designed to run through the tank, and shall be piped to discharge water behind the rear wheels as required in NFPA 1901 so as to not interfere with rear tire traction.

One (1)
91-75-053U

Warranty - United Plastic Fabricating Tank, Limited Lifetime

WARRANTY

The tank manufacturer, United Plastic Fabricating, shall provide a limited lifetime warranty. See warranty certificate for complete details.

One (1)
37-31-4220

Tank Cradle - Steel

WATER TANK CRADLE

The tank shall rest on steel cross members in conjunction with such additional cross-members, spaced at a distance that would not allow for more than 530 square inches of unsupported area under the tank floor. In cases where overall height of the tank exceeds 40 inches, cross-member spacing shall be decreased to allow for not more than 400 square inches of unsupported area. The tank shall be isolated from the cross members through the use of hard rubber strips with a minimum thickness and width dimension of .250" x 2.00" and a minimum Rockwell Hardness of 60 durometer. Additionally, the tank shall be supported around the entire bottom outside perimeter and captured both front and rear as well as side to side to prevent the tank from shifting during vehicle operation. Although the tank is designed on a free floating suspension principle, the tank shall have adequate hold down restraints to minimize movement during vehicle operation. If proper retention is not available or incorporated into the apparatus hose floor, an optional mounting restraint system shall be located on top of tank, half way between the front and the rear on each side of the tank. These stops shall be constructed of carbon steel having minimum angular dimensions of 3.00" x 3.00" x .250" and shall be approximately 6.00" to 12.00" long. These brackets shall incorporate a hard rubber isolating pad with a minimum thickness of .250" affixed on the underside of the angle. The angle shall then be bolted to the body sidewalls of the vehicle while extending down to rest on the top outside edge of the upper sidewall of the tank. Internal mounting block design and hose bed floors shall be so designed that the floor slat supports extend full width from side wall to side wall and are not permitted to drop off the edge of the tank or in any way come in contact with the individual covers where a puncture could occur. Hose floor loading shall support up to 200 lbs. per sq. foot and shall be evenly distributed whenever possible. Other equipment such as generators, portable pumps, etc. shall not be mounted directly to the tank top.

One (1)
37-31-501A

ATP Cover on Water Tank - Yellow Perimeter Marking

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

YELLOW PERIMETER MARKING

In accordance with NFPA 1901 chapter 15.7.1.6, the perimeter of the aluminum tread plate floor over the water tank shall be marked with a one-inch wide safety yellow line to delineate the designated standing or walking surface area.

One (1)
37-31-5005

Vent Overflow Pipe-Hose Extension

VENT OVERFLOW PIPE-HOSE EXTENSION

Rubber hose shall be connected to the vent overflow pipe on the lower portion of the water tank. This hose shall direct any overflowing water behind the rear axle of the apparatus.

One (1)
40-00-0146

When the water tank has one or more of the following: dump chute(s), large tank fill or multiple tank fill(s), the vent overflow pipe shall not be provided, as this causes the vent overflow pipe size to increase.
Pumper Body Over All Length - 146" Medium Extended (C=61.5")

146" OVERALL BODY LENGTH

The overall length of the body shall be 146". The distance from the front exterior edge of the body to the midline of the rear axle shall be 61.5". Body overall width shall be 98", fender to fender.

One (1)
40-00-1130

Body Material & Construction - Stainless Steel, Medium Extended

STAINLESS STEEL BODY CONSTRUCTION

The body and compartments shall be constructed of heavy duty 3CR12 stainless steel. The body shall be welded on external or hidden surfaces wherever possible to insure a clean compartment interior look. The compartments shall be a "sweep out" design with the floor higher than the door sill. The compartment floors shall be a minimum of 2.5 mm 3CR12 stainless steel. All compartment seams shall be caulked with gray adhesive/sealant. Each compartment shall be rated for 500 lbs. of storage. False bulkhead panels shall be provided on the inside of the forward and rearward wall of the side compartment panel to cover and protect all electrical wiring and components. This also provides a clean interior for equipment mounting. These panels shall be removable. Removable service panels shall be placed within each of the false bulkhead panels. Door frames on compartments with hinged doors shall be fabricated by flanging the door opening edges inward 1.88" and bending out again .75" to form an angle. The hose body side panels and partitions shall be raised in 5" increments to provide adequate storage for the required and specified hose load.

A bright aluminum tread plate cover shall be installed over the side compartments. The cover shall not form the compartment top but shall be an overlay. The forward and rearward edges of the cover shall be folded down 1.5" to cap the forward and rearward ends of the side compartment panel. The outside edge of the cover shall be folded down 1.5" to cap the outside of the side compartment panel and shall have a 45 degree outward bend to provide drip protection over any compartment doors which are immediately below the cover. This aluminum tread plate cover shall not be provided when rooftop compartments are present.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Extruded aluminum drip molding with a bright anodized finish shall provide drip protection for any compartment doors that are not directly below an aluminum tread plate cover. The forward face of the side compartments and the face of the front cross panel above the operator stand shall be covered with a bright aluminum tread plate overlay. All body components covered with aluminum tread plate overlays shall be coated with an anti-corrosion compound prior to installation. All tread plate shall be secured with threaded fasteners.

Fender compartments shall be integral with the body side compartmentation. There shall be no sharp objects protruding into the wheel well area that could cause injury while cleaning or doing other maintenance in this area.

One (1)
40-05-9950

Body Roof - (2) Signs, FAMA26 No-Step

FAMA26 NO-STEP SIGN

In accordance with NFPA 1901 chapter 15.7.1.6, a FAMA26 "No-Step" sign shall be located on the front and rear of the body roof. The sign reads: "Fall Hazard-Railings NOT provided. Surface may be slippery - Not intended for stepping, standing or walking. Fall will injure or kill"

One (1)
40-10-0010

Body Mounting Substructure for Stainless Steel Pumper Body

BODY MOUNTING SUBSTRUCTURE

The front portion of the right and left hand side compartments shall mount to a front cross panel. The panel shall be constructed of stainless steel tubing and heavy duty stainless steel sheet metal. The front cross panel assembly shall rest on two (2) heavy duty rubber isolators. These isolators shall be bolted to brackets mounted to the chassis frame, as close to the center line of the chassis frame as possible. These center mounted isolators shall provide a pivot point which shall allow chassis movement without introducing stresses into the body. The rear portion of each side compartment shall bolt directly to the rear step support assembly, which is bolted directly to the chassis frame. The rear steel step/body support assembly shall be constructed of formed .25" and .375" plate, 2" X 3" tubes, 2" X 2" angles, and 3" structural channels in a welded assembly. The rear wall shall be reinforced with formed heavy duty panels.

The compartment sizes shall be as follows:

One (1)
45-10-4225

LS Compts - Medium SS 70"H FH, 31.5/64/50.5, 28" Extended, Hinged

LEFT SIDE COMPARTMENTS

The full height left hand side panel at 146.00" long by 70.00" high shall be made of stainless steel. This panel consists of one (1) full height compartment ahead of the rear wheels, one (1) full height compartment behind the rear wheels, and one (1) upper compartment above the rear wheels. The compartment behind the rear wheels has a 25.75" wide x 29.75" high transverse area through the rear tailboard compartment. It also has extended compartmentation in place of standard beavertail. This extended area is half depth in the upper area and full depth in the lower area. All compartments shall have hinged doors.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

The compartment ahead of the rear wheels shall have a doorframe to doorframe dimension of 28.50" wide x 63.75" high. The clear door opening shall be 25.00" wide x 61.75" high. The usable compartment space of the lower full depth area shall be 28.50" wide x 29.75" high x 25.75" deep and the upper shallow area shall be 28.50" wide x 36.50" high x 11.75" deep. This compartment shall have a vertically hinged single door.

The compartment behind the rear wheels shall have a doorframe to doorframe dimension of 47.50" wide x 63.75" high. The clear door opening shall be 43.50" wide x 61.00" high. The usable compartment space of the lower full depth area shall be 47.50" wide x 29.75" high x 25.75" deep and the upper shallow area shall be 47.50" wide x 36.50" high x 11.75" deep. This compartment shall have vertically hinged double doors.

The upper compartment above the rear wheels shall have a doorframe to doorframe dimension of 58.00" wide x 30.50" high. The clear door opening shall be 54.50" wide x 27.00" high. The usable compartment space shall be 63.38" wide x 33.00" high x 11.75" deep. This compartment shall have a horizontally hinged door.

One (1)
45-20-4825

RS Compts - Medium SS 36"H Lo, 31.5/64/50.5, 28" Extended, Hinged

RIGHT SIDE COMPARTMENTS

The low right hand side panel at 146.00" long by 36.00" high shall be made of stainless steel. This panel consists of one (1) low compartment ahead of the rear wheels and one (1) low compartment behind the rear wheels. The compartment behind the rear wheels has a 25.75" wide x 29.75" high transverse area through the rear tailboard compartment. It also has extended compartmentation in place of standard beavertail. This extended area is full depth. Both compartments shall have hinged doors.

The compartment ahead of the rear wheels shall have a doorframe to doorframe dimension of 28.50" wide x 29.75" high. The clear door opening shall be 25.00" wide x 27.75" high. The usable compartment space shall be 28.50" wide x 29.75" high x 25.75" deep. This compartment shall have a vertically hinged single door.

The compartment behind the rear wheels shall have a doorframe to doorframe dimension of 47.50" wide x 29.75" high. The clear door opening shall be 43.50" wide x 27.00" high. The usable compartment space shall be 47.50" wide x 29.75" high x 25.75" deep. This compartment shall have vertically hinged double doors.

One (1)
45-38-0100

Vents - Body Compartments (Matrix)

VENTS

Compartment vents shall be provided to meet the requirements of NFPA 1901, current edition.

One (1)
45-39-0020

Inner Liners - Rear Single Axle, Aluminum

REAR ALUMINUM INNER LINERS

Full semi-circular inner liners shall be provided in each wheel housing. They shall be constructed of

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

aluminum and shall be bolted in place so they may be removed if damaged. Self-tapping sheet metal screws are not acceptable. The bottom edge of liner shall be reinforced along its full length, however, it shall not have a formed reinforcement flange to avoid trapping dirt and debris.

One (1)
45-39-0040

Fenderette - Rear Single Axle, Rubber

REAR FENDERETTE

Black rubber fenderettes shall be installed on the rear wheel openings. The fenders shall be wide enough to completely cover the outside rear tire and reduce wheel splash up the sides of the body. They shall be installed with 1/4" hex head bolts, self-tapping sheet metal screws are not acceptable. There shall be a stainless steel backing strip between the rubber and the mounting flange to add support. The fenderettes shall incorporate a vertical flange to cover the area where the body side and wheel opening mounting surface meet. The fenderettes shall be a minimum of 1/4" thick, have a mold-formed outer radius and a rounded bead at the wheel opening edge.

One (1)
45-39-0060

Fender Panel - Rear, S/S, Single Axle, Painted without Overlay

REAR FENDER PANELS

Painted 3CR12 stainless steel fender panels shall be provided on the outer face of each fender area. The panels shall be painted to match the job color.

One (1)
45-40-7027

Rear Compt. - 27.25" H, SS, Vertically Hinged Double Doors

REAR COMPARTMENT

One (1) full height, full width stainless steel compartment shall be provided at the rear of the apparatus above the tailboard, 42.00" wide x 32.13" high x 28.00" deep. The compartment shall be transverse as standard with a 25.75" wide x 29.75" high transverse area through each rear side compartment. In the rear wall, there shall be a removable access cover adequately sized to service the fuel tank pickup tube and sending unit without having to remove the tank.

The full height compartment shall have a doorframe to doorframe dimension of 38.00" wide x 27.25" high. The clear door opening shall be 34.00" wide x 24.50" high. This compartment shall have vertically hinged double doors. The usable compartment space shall be 41.75" wide x 29.75" high x 25.75" deep.

Two (2)
57-05-2000

Rear Compartment Partition - to Divide Transverse Compartment (Ea)

PARTITION(S) - TRANSVERSE REAR COMPARTMENT

Two (2) bolt-in partition(s) to match body material shall be installed in the rear transverse compartment. The partition(s) shall be fastened with #10 self-tapping screws. Each partition shall be used to close off one side of the transverse area into the rear tailboard compartment.

Two (2)
57-05-200R

Rear Compartment Partition Locations - Both Sides

The rear compartment partition shall be located on both sides.

One (1)
91-01-043D

Finish - Body Rear Compartment Interior, Black LINE-X (Ea Compt)

10139-0008

06/07/24

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

FINISH – BODY REAR COMPARTMENT INTERIOR(S)

One (1) body rear compartment interior(s) shall be coated with black LINE-X.

One (1)
57-00-0005

Compartment Doors - Side, Hinged, S/S

HINGED COMPARTMENT DOORS

The side compartment doors shall be lap type, double panel construction with 14 gauge outer and 14 gauge 3CR12 stainless steel inner panels. (NO EXCEPTIONS TO THIS STATEMENT.) Outer panel edges that form the lap portion of the door shall be "hemmed" (bent over and back 180 degrees) over the inner panel edges. Inside corners, at the hem area, shall be welded and ground smooth.

The doors shall be weather stripped with an automotive bulb type extruded rubber inner seal. A second outer seal of closed cell rubber shall be placed on the lap edge of the door to prevent damage to the paint finish. Outer seal shall have corrugated surface to prevent sticking.

The doors shall be mounted on stainless steel piano hinges with a pin diameter of .25". Mounting holes shall be slotted vertically on one side of the hinge and horizontally on the other side to provide for proper adjustment of the door. The hinge pins shall have spun ends (crowns) at both ends to hold them in place and provide a finished look. Eberhard 206 latches with stainless steel "D" ring handles shall be provided on the lift, single, drop down, and lock door (double door set-up). The free door (double door set-up) shall have an (2) Eberhard latches top and bottom with a single handle located inside the door (standard location at bottom). Isolation tape shall be furnished between the door hinge and door jam. A rubber gasket shall be provided between the "D" ring handle and the door.

Vertically hinged doors shall be equipped with Hansen 5EZ or Thomas EZ spring type door checks that also hold the doors in the open and closed position. Checks shall be the two point mounting type for simplicity. Spring tension (15 lb.) shall be easily adjustable. Checks shall have black zinc mounting brackets with stainless steel springs, 11" long rods and clamps. Springs shall be polished. Horizontally hinged doors shall be held in the opened position with gas cylinder type stays. Switches for automatic compartment light operation shall be installed in the door hinge area.

One (1)
57-00-200N

Keyed Locks - NONE

Seven (7)
57-00-5200

Liner - Interior Hinged Compartment Door, Brushed S/S (Ea)

BRUSHED STAINLESS COMPARTMENT DOOR LINER(S)

Brushed stainless steel overlay shall be provided on the inside of seven (7) compartment door(s) to protect the painted finish and to cover inside door hardware.

One (1)
57-00-0015

Compartment Door - Rear, Hinged, Aluminum

HINGED REAR COMPARTMENT DOORS

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

The rear compartment door shall be lap type, double panel construction, with .09" 5052-H32 aluminum outer and .09" 5052-H32 aluminum inner panels. (NO EXCEPTIONS TO THIS STATEMENT.) Outer panel edges that form the lap portion of the door shall be "hemmed" (bent over and back 180 degrees) over the inner panel edges. Inside corners, at the hem area, shall be welded and ground smooth. The exterior door shall be DA sanded on any exposed edges.

The doors shall be weather stripped with an automotive bulb type extruded rubber inner seal. A second outer seal of closed cell rubber shall be placed on the lap edge of the door to prevent damage to the paint finish. Outer seal shall have corrugated surface to prevent sticking.

The doors shall be mounted on stainless steel piano hinges with a pin diameter of .25". Mounting holes shall be slotted vertically on one side of the hinge and horizontally on the other side to provide for proper adjustment of the door. The hinge pins shall have spun ends (crowns) at both ends to hold them in place and provide a finished look. Eberhard 206 latches with stainless steel "D" ring handles shall be provided on the lift, single, drop down, and lock door (double door set-up). The free door (double door set-up) shall have an (2) Eberhard latches top and bottom with a single handle located inside the door (standard location at bottom). Isolation tape shall be furnished between the door hinge and door jam. A rubber gasket shall be provided between the "D" ring handle and the door.

Vertically hinged doors shall be equipped with Hansen 5EZ or Thomas EZ spring type door checks that also hold the doors in the open and closed position. Checks shall be the two point mounting type for simplicity. Spring tension (15 lb.) shall be easily adjustable. Checks shall have black zinc mounting brackets with stainless steel springs, 11" long rods and clamps. Springs shall be polished. Horizontally hinged doors shall be held in the opened position with gas cylinder type stays. Switches for automatic compartment light operation shall be installed in the door hinge area.

One (1)
57-00-200N

Keyed Locks - NONE

Two (2)
57-00-5200

Liner - Interior Hinged Compartment Door, Brushed S/S (Ea)

BRUSHED STAINLESS COMPARTMENT DOOR LINER(S)

Brushed stainless steel overlay shall be provided on the inside of two (2) compartment door(s) to protect the painted finish and to cover inside door hardware.

One (1)
57-00-6010

Body Door Hinges - Mill Finish

BODY DOOR HINGES

All piano hinges on the main body exterior doors shall be mill finished.

Five (5)
91-01-033D

Finish - Body Side Compartment Interior, Black LINE-X (Ea Compt)

FINISH – BODY SIDE COMPARTMENT INTERIOR(S)

Five (5) body side compartment interior(s) shall be coated with black LINE-X.

One (1)

Hose Bed Finish - DA Finish

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

91-02-2100

DA FINISHED HOSE BED

The interior of the hose bed shall be "DA" finished only, no paint shall be provided. If the body is made of stainless steel, the exposed surfaces on the interior of the hose bed shall be manufactured with 304 stainless steel.

One (1)
45-48-9000

Pumper Rear - Flush Compartments, for Extended Bodies Only

The rear compartments of the pumper body shall all be flush. Changes to the body to accommodate this design shall be as follows:

The rear frame cutoff shall be extended 16".

The water tank and tank cradle shall be 16" longer than standard.

The hose bed slat assemblies and hall be extended 16".

The hose bed dividers shall be extended 16" and shall have a special 2-piece design.

A special rear substructure shall be added to support the step.

One (1)
45-48-9210

Rear Surface - Smooth Aluminum Below Hose Bed

REAR SURFACE OF BODY

The rear facing body surface around the rear compartment shall be covered with smooth aluminum in preparation for the installation of reflective chevron striping.

Adequately reinforced tread plate shall cover any front to back walls facing the step area up to the height of the hose bed floor. Then the remaining upper inside surface shall be covered with brushed stainless steel. All tread plate shall be secured with threaded fasteners.

One (1)
57-20-5020

The rear facing bulkhead of the compartments shall be painted job color.

Tailboard - Pumper, 16"D x 98"W, for Non-Extended or Flush

TAILBOARD

The tailboard shall be 16" deep from the rear edge to the body face and shall run the full width of the body (98" wide). The tailboard surface shall be 3/16" thick aluminum tread plate with 2-1/2" deep flanges on the front, rear, and side edges. It shall be installed over a heavy-duty steel framework to prevent the tailboard from bending and flexing. The tailboard support shall be constructed of formed 1/4" - 3/8" plate, 2" X 3" tubes, 2" X 2" angles, and 3" structural channels in a welded assembly. It shall be bolted directly to the chassis frame rails, not the body.

All mounting bolts used to fasten the tread plate to the tailboard support shall be 5/16" truss-head Phillips. Self-tapping sheet metal screws shall not be used to install the aluminum tread plate. There shall be a 1/2" gap between the tailboard and the body to prevent moisture from being trapped.

One (1)
45-60-0100

Hose Load - Main Hose Bed

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

HOSE LOAD

The hose load in the main hose bed shall be from this manufacturer:

Location of each size of hose in the bed shall be (from left to right, facing the rear of the truck):

200' of 1.75" Hose Single Stacked

200' of 1.75" Hose Single Stacked

800' of 5.00" Hose

600' of 2.50" Hose Dead Lay Triple Stacked (Gated Wye)

200' of 2.50" Hose Double Stacked

One (1)
45-60-0200

Hose Bed - with Aluminum Slats, Pumper

HOSE BED

The hose bed shall be a minimum of 70" wide and shall be thoroughly reinforced at the corners. Removable aluminum grating shall be installed in the bottom of the hose bed to provide ventilation. The grating slats shall be 4-5/8" wide by 1/2" thick and shall have a corrugated or ribbed surface to help drain and dry the hose. The interior of the hose bed body shall be smooth and free from all sharp projections that might damage the hose.

Pumper Body Style:

The shape of the hose bed for a pumper body shall be rectangular, 70" wide as standard.

Rescue Pumper Body Style:

The shape of the hose bed for a rescue pumper body shall be T-shaped when the tank is shorter than the height of the body sides. The upper portion shall be 70" wide between the risers as standard. The bottom portion of the hose bed between the compartments shall be 42" wide.

Choosing options such as hatch compartments, hydraulic ladder rack, and/or split body styles (one side pumper and one side rescue) may change the width and shape of the hose bed.

One (1)
45-65-1005

Hose Bed Cross Panel Divider - S/S, DA Finish

HOSE BED CROSS PANEL DIVIDER

A hose bed cross panel divider shall be provided to separate the tank fill tower(s) from the hose load. The divider shall be constructed of 304 stainless steel and shall have a DA finish. The divider shall be installed laterally 4" behind the tank fill tower(s); if the water tank is an "L" tank, the divider shall be installed at the rear of the raised portion to support the hose bed dividers and slat flooring. The divider shall be bolted in place, allowing for its removal to facilitate tank removal.

Four (4)
45-65-1500

Hose Bed Partition - Aluminum, Etchfinish/DA with Handhold (Ea)

HOSE BED DIVIDER(S)

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Four (4) smooth aluminum hose bed divider(s) shall be provided to separate the individual hose loads. The divider shall be constructed of .1875" aluminum sheet welded to a T-shaped extruded foot that runs the full length of the partition. The divider(s) shall be fully adjustable by providing slide tracks at the front and rear of the hose bed. The divider shall be held in place by two (2) 5/16" tapered bolts at each end of the partition. The mounting bolts shall turn into threaded slide blocks located in the track. Holes in the T-shaped foot shall be countersunk so the bolt head is flush with the surrounding surface and will not damage the hose.

Partitions smaller than 36" in all dimensions shall have an Etchfinish. Larger partitions shall have a DA finish.

There shall be a handhold slot 3" from the back edge of the rear of the partition. The handhold shall be the full height of the partition beginning 3.5" from the top and bottom edges.

Four (4)
45-65-1715

Hose Bed Divider's Height - Match Height of Calculated Hose

The hose bed dividers height shall approximately match the height of the calculated hose.

Four (4)
45-68-0100

Hose Bed Part. Reinforcement - Required with Partitions 23"-36" tall (Ea)

HOSE BED DIVIDER REINFORCEMENT(S)

A 1.25" round aluminum extrusion slotted on the bottom to fit over the top and rear edge of the partition shall be provided on four (4) hose bed divider(s). The extrusion shall be beveled at the corner and welded in place to reinforce the partition. This option is required for partitions with excessive length or height.

One (1)
45-68-1000

Hose Bed Cover - Vinyl

HOSE BED COVER

A hose bed cover made from 20 oz. per square yard polyester shall be provided and installed over the hose bed. The cover shall be coated with a urethane top coat (vinyl). The rear of the hose bed cover shall be secured, and cover the hose bed opening.

This cover shall secure the hose from unintentional deployment while the vehicle is underway in normal operations.

One (1)
45-68-110B

Vinyl Hose Bed Cover Shall be Black in Color

The vinyl hose bed cover shall be black in color. Color number of the vinyl is 705-1075.

One (1)
45-68-111V

Hose Bed Cover Shall be Fastened down with Velcro Straps and Gator Straps

The hose bed cover shall be fastened down with Velcro straps on the top and Gator straps with stainless steel hook clips on the rear.

One (1)
57-00-1800

Front Comp Door - Hinged at Rear

REVERSE HINGE FRONT COMPARTMENT DOORS

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

The front side compartment door, at each side of the body, shall be hinged at the rear of the door so that it opens away from the pump panel. This modification is required to allow for easier access to the compartments from the operator's position.

Six (6)
57-05-0100 **Dri-Dek® - per Compartment / Shelf / Tray (Ea)**

DRI-DEK®

Six (6) black Dri-Dek® mat(s) shall be provided and installed on body compartment floors and/or in shelves/trays as specified. Ramped edging shall not be included.

Six (6)
57-05-5195 **Compartment Option Location - As Specified**

The location of the compartment option(s) shall be as follows:

Four (4) Adjustable Shelves

Two (2) Floor mounted Trays

Four (4)
57-05-3030 **Adjustable Shelf - Stainless Steel (Ea)**

ADJUSTABLE SHELF OR SHELVES

Four (4) adjustable shelf or shelves (with open corners) made from 12 gauge 304 stainless steel shall be provided in the body compartment(s). The shelf lip shall be 1.75" high. Each shelf shall be supported by four (4) stainless steel angles bolted to Aluma-Strut tracks for adjustability.

When in a split depth compartment, the Aluma-Strut tracks shall only be provided in the upper or lower area where the shelf(s) are located.

Four (4)
57-05-5195 **Compartment Option Location - As Specified**

The location of the compartment option(s) shall be as follows:

LS1 - Upper

LS1 - Lower

LS3 - Upper

RS1

Four (4)
91-01-5300 **Finish - Adjustable Shelf, DA outside Edge (Ea)**

FINISH - ADJUSTABLE SHELF (OR SHELVES)

Four (4) adjustable shelf (or shelves) shall have a DA finish on the outside edge of the shelf.

Two (2)
57-05-4055 **Floor Mount Roll Out Tray - Base Depth, in Compartment Ea)**

ROLL OUT TRAY(S)

Two (2) roll out tray assembly(s) shall be provided in the body compartment(s). The tray assembly shall

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

be bolted to the compartment floor.

Two (2)
57-05-4210

Tray Construction - Aluminum, Base Depth (Ea)

Two (2) base depth tray(s) shall be constructed of 0.188" aluminum and shall have edges on all four sides for added strength. The corners shall be open. The tray lip shall be 1.75" high.

Two (2)
91-01-6300

Finish - Roll Out Tray, DA Outside Edge (Ea)

FINISH - ROLL OUT TRAY(S)

Two (2) roll out tray(s) shall have a DA finish applied to the outside edge of the tray.

Two (2)
57-05-491F

SlideMaster #AM2, 70% Aluminum, 500#, Floor Mount, Base Depth (Ea)

Two (2) SlideMaster model AM2 aluminum base depth slide mechanisms shall be bolted to the compartment floor. It shall allow the tray to extend 70% of the slide length. The tray/compartment shall be able to support a 500 pound load.

Two (2)
57-05-4992

SlideMaster IMS Lock, 2-Rail

The SlideMaster slide mechanism shall be secured with a SlideMaster 2-rail IMS spring lock.

Two (2)
57-05-5195

Compartment Option Location - As Specified

The location of the compartment option(s) shall be as follows:

LS3

RS2

Two (2)
57-05-5015

Pac Trac - for Body Compartments (Ea)

PAC TRAC

Pac Trac assemblies consisting of extruded aluminum tool mounting tracks and "Z" shaped mounting brackets shall be located on the back wall of two (2) compartment(s). Pac Trac shall be 25.88" in height and as wide as the compartment door opening (maximum of minus 2.5"). Pac Trac in the full height compartments shall be located in the upper portion only.

Two (2)
57-05-5195

Compartment Option Location - As Specified

The location of the compartment option(s) shall be as follows:

LS1, LS3

One (1)
57-05-5040

Swing Out Tool Board - PAC Double Face Dual Track Aluminum, (Ea)

SWING-OUT TOOLBOARD(S)

One (1) swing-out tool board(s) shall be located in the compartment(s) over the rear axle allowing tools and equipment to be easily accessed. This option is a combination of P/N PM-1000 Pivot Mount

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Assembly and P/N 7040 PAC Double Face Dual Trac aluminum extrusion. The usable width of the aluminum extrusion surface will be 48.25". The usable height of the aluminum extrusion surface will be 23.00" with a hinged door body and 17.25" with a roll up door body. Each swing out tool board provides two mounting surfaces by utilizing PAC Double Face Dual Trac aluminum extrusion. Individual extrusion heights are in 5-3/4" increments. Each board shall be hinged at the front or rear (specify) and latched opposite the hinge. The approximate total weight load capacity shall not exceed 95 lbs.

One (1)
57-05-5195

Compartment Option Location - As Specified

The location of the compartment option(s) shall be as follows:

LS2

One (1)
57-05-5198

Hinge Location - at the Front

The hinge shall be located at the front.

One (1)
57-12-0100

Fender Storage - Single Axle

FENDER STORAGE

Storage compartments in the fender area of the apparatus shall be comprised of the following:

One (1)
57-12-0110

Fender Storage - Single Axle, Driver's Side Front

On the driver's side of the apparatus, forward of the rear axle there shall be:

One (1)
57-12-0720

Air Bottle Compartment - Dual

One (1) enclosure to accommodate two (2) air bottles, fabricated of high impact polyethylene material, with a minimum of 26.0" usable depth, and an 8.0" inside diameter. The double oval compartments shall have a single wide opening and a raised nylon center divider to prevent the bottles from rolling together. A detainment strap shall be installed.

One (1)
57-12-0140

Fender Storage - Single Axle, Driver's Side Rear

On the driver's side of the apparatus, aft of the rear axle there shall be:

One (1)
57-12-0730

Extinguisher Compartment - Single

One (1) enclosure to accommodate one (1) fire extinguisher (not included), fabricated of high impact polyethylene material, with approximately 26.0" usable depth, and an 8.0" inside diameter. A detainment strap shall be installed.

One (1)
57-12-0150

Fender Storage - Single Axle, Officer's Side Front

On the officer's side of the apparatus, forward of the rear axle there shall be:

One (1)
57-12-0720

Air Bottle Compartment - Dual

One (1) enclosure to accommodate two (2) air bottles, fabricated of high impact polyethylene material, with a minimum of 26.0" usable depth, and an 8.0" inside diameter. The double oval compartments shall have a single wide opening and a raised nylon center divider to prevent the bottles from rolling together. A detainment strap shall be installed.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1) **Fender Storage - Single Axle, Officer's Side Rear**

57-12-0180

On the officer's side of the apparatus, aft of the rear axle there shall be:

One (1) **Extinguisher Compartment - Single**

57-12-0730

One (1) enclosure to accommodate one (1) fire extinguisher (not included), fabricated of high impact polyethylene material, with approximately 26.0" usable depth, and an 8.0" inside diameter. A detainment strap shall be installed.

Four (4) **Fender Storage Doors - Painted Job Color w Push Button Lever Latch (Ea)**

57-12-0820

Four (4) fender storage doors shall be constructed of 12 gauge stainless steel painted job color, secured by a full length stainless steel hinge and a push button lever latch.

One (1) **Steps - Chrome Folding, with Integral LED, Rear of Body**

57-20-7900

BODY REAR STEPS

There shall be large polished, chrome plated, cast aluminum folding steps, each with integral LED light, on both sides of the rear, in sufficient quantities, to meet NFPA regulations for the height configured by the body and tank chosen.

One (1) **Steps - Chrome Folding w/ LED, (3) LS, Body Frt w (2) 8" Rails, NA Top Mt**

57-20-7940

BODY FRONT STEPS

There shall be three (3) large polished, chrome plated, cast aluminum folding steps, each with integral LED light, on the driver's side front of the body.

Two (2) 8" grab rails shall be provided on the front driver's side of the body, as high as possible in compliance with NFPA 1901 requirements for 3-point contact for access and egress at that location.

Two (2) **Handrail - Body, 8", Aluminum, Knurled**

57-25-808A

The 8" handrails shall be knurled aluminum.

All handrail stanchions shall be chrome plated. They shall be bolted to the body with 1/4" stainless steel hex head bolts. Stanchions shall have a rubberized gasket placed between them and the body surface they are mounted on. A drain hole shall be provided in each bottom stanchion.

One (1) **Handrails - (2) 30" AL, Vertical, each Side, Body Rear**

57-25-0210

HANDRAILS

One (1) handrail, a minimum of 30" long, shall be provided and installed on each rear beavertail or body side. Each handrail shall be located so as to provide a 3-point stance while climbing onto and off the rear step. The top of the handrail stanchion shall be located approximately 66" from the rear step.

The handrails shall be 1-1/4" diameter extruded, knurled, aluminum with a bright anodized finish. All handrail stanchions shall be chrome plated. They shall be bolted to the body with 1/4" stainless steel hex

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

head bolts. Stanchions shall have a rubberized gasket placed between them and the body surface they are mounted on. A drain hole shall be provided in each bottom stanchion.

One (1)
57-25-0310

Intermediate Cross Rail - (1) AL, Below Hose Bed, Body Rear

INTERMEDIATE CROSS RAIL

One (1) intermediate cross rail shall be installed below the hose bed. The rail width shall match the rear compartment width, or less if other components interfere.

The cross rails shall be 1-1/4" diameter extruded, knurled, aluminum with a bright anodized finish. All cross rail stanchions shall be chrome plated. They shall be bolted to the body with 1/4" stainless steel hex head bolts. Stanchions shall have a rubberized gasket placed between them and the body surface they are mounted on. A drain hole shall be provided in each bottom stanchion.

Four (4)
57-30-0110

Rub Rail, Body Sides - Black Poly

RUB RAIL - BODY SIDES

Black poly rub rails shall be provided along the lower portion of the body, beneath the compartment doors, on each side to prevent damage to the body and finish. The rub rails shall be a minimum of 2-3/8" wide x 1" deep, and shall be mounted on rubber supports. The rub rails shall have a 1" x 1" chamfer at the front and rear of the rails. The rails shall protrude a minimum of 1.75" from the face of the body.

One (1)
57-30-11NO

No Rub Rail Required on Rear of Apparatus

One (1)
70-05-0718

Power Inverter - Xantrex PRO #XM1800, 1800 watt

POWER INVERTER

One (1) Xantrex PRO model XM1800 power inverter with remote operation/control panel shall be installed. The inverter shall convert DC power stored in batteries into AC power to operate electronics and appliances. The digital remote control shall display power output, AC source and battery voltage.

Inverter shall be located in the LS1 compartment on the rear facing wall and has high as possible mount vertically. Control panel shall be located below the inverter.

One (1)
00-05-330S

Generator/Inverter Test and Certification - Third Party

GENERATOR/INVERTER TEST AND CERTIFICATION

The generator/inverter shall be third party tested at the manufacturer's facility and shall conform to NFPA requirements and standards. Copies of all tests shall be provided with the delivery documentation.

Four (4)
70-05-195B

Receptacle - 120V, 20 Amp for inside Body Compartment, Shoreline Powered (Ea)

120 VOLT SHORELINE POWERED RECEPTACLE IN BODY COMPARTMENT(S)

A 120-volt, 20 amp, 3-wire receptacle shall be provided inside four (4) body compartment(s) in

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

accordance with NFPA guidelines. A brushed stainless steel cover plate shall be provided to protect the receptacle. The receptacle shall be powered by the shorepower inlet and labeled accordingly.

LS1

LS2

Two (2) LS3

Four (4)
70-05-2535

NEMA Rating - 5-20R (20 Amp) Non-Twist-Lock, Duplex

NEMA Rating: 5-20R (20 Amp) Non-Twist-Lock, Duplex.

Four (4)
70-05-2720

Receptacle Cover - Stainless Steel Wall Plate (Interior Use Only) (Ea)

Four (4) stainless steel wall plate(s) shall be installed.

One (1)
70-05-3100

Cord Reel - Hannay ECR 1616-17-18, 3-Conductor (Capacity: 150 ft of 10/3) (Ea)

CORD REEL(S)

One (1) Hannay Model ECR1616-17-18 power rewind cord reel(s) for live electric cable shall be provided. The reel(s) shall be 12 volt electric rewind and be equipped with an electrical collector ring with a minimum #10 gauge, 3-conductor wiring. Capacity of each reel shall be a minimum of 150 feet 10/3 gauge or 200 feet of 12/3 gauge electric cable.

One (1)
70-05-4250

10/3 Cord Reel Cable - Per 150 foot length

CORD REEL CABLE(S)

One (1) one hundred fifty foot length(s) 10/3 type SO electric cable shall be provided and installed on the cord reel.

One (1)
70-05-45CB

Cord Cable Color - Black

The color of the cord cable shall be black.

One (1)
77-41-0010

Reel Motor Speed - 60 Seconds to Rewind 100 Ft

The AN250 motor shall take 60 seconds to rewind 100 feet.

One (1)
77-41-0030

Reel Color - Hannay Graphite

The reel shall be painted Hannay Graphite.

One (1)
77-41-0110

Reel Rewind Switch - Hannay Push Button #90030

REEL REWIND SWITCH

The reel shall be equipped with a Hannay Reel Rewind Push-Button Control #90030.

One (1)
77-41-0150

Reel Rewind Switch -Located at Manufacturer's Discretion

The reel rewind switch shall be located at the manufacturer's discretion in a position where the operator can safely observe the rewinding operation.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1) **Reel Location - Left Side of Open Bin above the Operator Stand**

77-41-0330

The reel shall be located on the left side in the open bin above the operator stand.

One (1) **Captive Rollers - Hannay Assembly "C2", Open Bin**

77-41-0410

CAPTIVE ROLLERS

A Hannay Assembly "C2" 4-way roller assembly with 1-1/2" diameter stainless steel rollers and cast alloy brackets shall be mounted on the exterior face of the open bin riser.

One (1) **Cable/Hose Stop**

77-41-0480

CABLE STOP

A molded plastic spherical type stop shall be provided near the end of the cable/hose.

One (1) **Twist-Lock Female Plug on Cord Reel Cable (Ea)**

70-05-5110

TWIST-LOCK FEMALE PLUG(S) ON CORD REEL CABLE

One (1) Hubbell model HBL2313SW 120V/20A heavy duty twist-lock female plug(s) with watertight safety-shroud and Insulgrip® connector body shall be provided. The plug(s) shall be installed on the working end of the cord reel cable(s).

One (1) **Tulip Clip to Secure Receptacle to Body**

70-05-5120

TULIP CLIP

A tulip clip shall be provided to secure the receptacle to the body.

One (1) **Tulip Clip Location - Shipped Loose**

70-05-5125

The tulip clip shall be shipped loose.

One (1) **Junction Box - Akron Brass, (4) L5-20R Twist-Lock w/ Pigtail & Mtg Box (Ea)**

70-05-5220

ELECTRICAL JUNCTION BOX(ES)

One (1) Akron Brass 4-receptacle junction box(es) shall be provided for distribution of electrical power on the fire ground. Each box shall be constructed of aluminum and shall be completely powder coated gray with gray hinged protective receptacle covers and the full length carry handle. Internally lighted faceplates shall provide sufficient light to make connections and alert the crew that the box is in "power-on" status. Each junction box shall have dimensions of 9.25" long x 5.5" wide x 8.5" high. Each box shall be equipped with a 12-inch pigtail and a L5-20 connection.

For each box, a total of four (4) NEMA L5-20R twist-lock, single receptacles shall be provided. Each receptacle shall be rated for 20 amps at 125 Volts.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
70-05-5589 A mounting box, with brushed stainless finish, shall be provided for each junction box.

Junction Box Mount Shall be Located at Final Inspection

One (1)
70-05-5590 The junction box mount shall be located at final inspection.

Junction Box Mount Shall be Placed Vertically

One (1)
71-0V-A41B The junction box mount shall be placed vertically.

Cab 12V Frt Brow Mt Light - HiViz #FT-B-46-B, Combo, Black (Ea)

CAB 12V FRONT BROW MOUNT LIGHT(S)

One (1) FireTech HiViz LED combination pattern model FT-B-46-B, 46.23" brow light(s) shall be mounted to the cab front brow. The light head shall have 36 LED and shall provide 19,008 raw lumen/13,306 effective lumens and draw 15 amps total. A combination spot and scene pattern shall be provided. It shall operate at 12 volts DC.

One (1)
71-1Z-0009 The light head and mounting bracket shall be black.

Cab Front Brow Mount Location - Center

One (1)
71-Y0-0010 The mount shall be on the center of the cab front brow.

12V Light Switched at Cab Dash (Ea)

Four (4)
71-0V-A7JD One (1) 12 volt light(s) shall be switched at the cab dash.

HiViz R3 Foot Bracket

HiViz R3 Foot Bracket shall be used to mount the HiViz Brow Light.

(Please reference the picture below for concept).

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper



One (1)
71-2V-A21B

Cab Side 12V Roof Mt Light - (2) HiViz #FT-MB-18-FT-B-GWA0011, Combo, Black

CAB 12V SIDE ROOF MOUNT LIGHTS

Two (2) FireTech HiViz LED combination pattern model FT-MB-18-FT-B-GWA0011, approximately 25.2" long mini brow lights shall be mounted to the cab roof with a TRGWA mount, one each side parallel to the edge. The light head shall have 18 LED and shall provide 9,504 raw lumen/6,660 effective lumens and draw 7.5 amps. It shall operate at 12 volts DC.

The light head and mounting bracket shall be black.

One (1)
71-3Z-0010

Cab Side Roof Light Location - Centered over Crew Cab Side Window

The cab side roof lights shall be centered over the crew cab side windows, one each side.

Two (2)
71-Y0-0010

12V Light Switched at Cab Dash (Ea)

Two (2) 12 volt light(s) shall be switched at the cab dash.

One (1)
71-Y0-00JD

HiViz R3 Foot Bracket

Three (3) HiViz R3 Foot Bracket shall be used to mount the HiViz cab side roof lights.

(Please reference the picture below for concept).

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper



One (1)
71-Y0-0410

Light Shall Not Activate with Respective Cab Door

The light shall not activate when a cab door on that side opens.

One (1)
71-KV-GE0B

Body Rear 12V Surface Mt Light - HiViz #FT-GESM-B, Guardian Elite, Black (Ea)

BODY REAR 12V SURFACE MOUNT LIGHT(S)

One (1) HiViz model FT-GESM-B, 12 volts, Guardian Elite LED, 7" x 9" surface mount light head(s) shall be installed on the body rear. Each light shall have a black flange.

The light shall be 10 amp, 125 watt and generate 20,000 raw lumens/ 12,500 effective lumens.

One (1)
71-LZ-0020

Body Rear Surface Mt Light Location - Left Side

The surface mounted light shall be located as high as possible on the left side on the rear of the body. Other equipment and light selections may affect placement.

One (1)
71-Y0-0010

12V Light Switched at Cab Dash (Ea)

One (1) 12 volt light(s) shall be switched at the cab dash.

One (1)
89-99-0010

NFPA Required Equipment - Pumpers

NFPA REQUIRED EQUIPMENT

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

NFPA requires that the purchasing authority supply a detailed list of furnished equipment that identifies who will be providing that equipment. The list shall be provided at the time of bid submittal to the manufacturer.

One (1)
90-00-0100

Ground Ladders - Pumpers, Duo-Safety, 48'

GROUND LADDERS

Ladders shall be provided in full compliance with NFPA 1901 requirements for pumper trucks. Forty-eight (48) feet of Duo-Safety ladders shall be provided as follows:

-One 24 ft., 2-Section	-Model 900-A
-One 14 ft., Roof	-Model 775-DR
-One 10 ft., Folding	-Model 585-A

One (1)
90-00-950C

Ladder Compartment for Duo-Safety 10 ft Folding Ladder - AL w/ Painted Door

FOLDING LADDER COMPARTMENT

One (1) aluminum compartment shall be located on the officer's side for storage of the Duo-Safety 10 foot folding ladder. The compartment and door shall be painted job color. The door shall have a lift and turn latch.

One (1)
90-00-950N

Ladder Compartment Location - Behind Ground Ladders

The ladder compartment shall be located behind the ground ladders.

One (1)
90-00-9510

Ladder Brackets & Pull/Twist Clamps (Not Avail w/ Hyd Ladder Rack)

LADDER BRACKETS AND CLAMPS

The ladders shall be installed on the right side of the hose body on stainless steel Unistrut with a mill finish. The ladder brackets shall have up and down adjustment without the need to drill holes or modify the brackets. The Unistruts shall be bolted to the upper flange of the hose bed at the top and to the compartment top at the bottom. Circular rubber spacers shall be used behind the ladder brackets to maintain the offset from the hose body side.

Polished aluminum pull/quarter turn type ladder clamps shall be provided for the ground ladders. They shall be vertically adjustable up and down independent of the ladder brackets. Clamps shall be attached to a stainless steel spring loaded shaft. Clamp spring tension shall be adjustable. The spring assembly shall be fully enclosed within a white metal cast housing. Housing shall be painted a silver/gray color. A vertically adjustable rubber bumper shall be placed in the ladder bracket mounting guide to serve as a stop or rest for the inside lower ladder beam and to prevent it from hitting and damaging the body sides.

One (1)
90-00-9700

Ladder Brackets - Leather Lined

LEATHER LINED BRACKETS

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
90-03-01SS The ladders brackets shall be leather lined to prevent damage to the ladders.
Hose Troughs - (2) Hard Suction, 6" S/S, Body Sides, Painted Job Color w/Clamps

HOSE TROUGHS

Two (2) stainless steel hard suction hose troughs with stainless steel support brackets, painted job color, shall be provided and installed. The troughs shall be installed on the side of the hose body on stainless steel Unistrut with a mill finish. Each trough shall include three (3) brushed finish stainless steel spring type clamps.

One (1)
90-03-01ZT **Hose Trough Location - One on Each Side of the Body**

The hose trough shall be located one on each side of the body.

Two (2)
90-03-5015 **Suction Hose - Kocheck # 2P601, 6" x 10', Long Handle (Ea)**

SUCTION HOSE(S)

Two (2) Kocheck model 2P601 suction hose(s) shall be provided. The suction hose shall be 10 feet in length, 6" ID and have 6" female swivel long handle coupling and 6" male rigid rocker lug coupling.

One (1)
90-05-0100 **Pike Poles**

PIKE POLES/MOUNTING

The following pike poles shall be furnished:

One (1)
90-05-5000 **Roof Hook - 6', Fire Hooks "NY" #RH-6 with Steel Handle (Ea)**

ROOF HOOK(s)

One (1) 6 ft. Fire Hooks "NY" fire hook(s) model RH-6 with handle(s) shall be provided.

One (1)
90-05-4700 **Pike Pole - 10' Fire Hooks APH-10 with Solid Fiberglass Handle (Ea)**

PIKE POLE(S)

One (1) 10 ft. Fire Hooks Unlimited APH-10 pike pole(s) shall be provided. The handles shall be solid fiberglass with stainless steel wear sleeves. There shall be a gas shutoff on the end of the pole opposite the hook.

Two (2)
90-05-6550 **Pike Pole Mounting - Aluminum Tube (Ea)**

ALUMINUM TUBE PIKE POLE MOUNT(S)

Two (2) aluminum tube(s) shall be mounted to facilitate storage of pike poles.

Two (2)
10139-0008 **The mounting tube(s) shall be located behind the ground ladder**
Pike Pole Tube Finish - Paint Job Color (Ea)

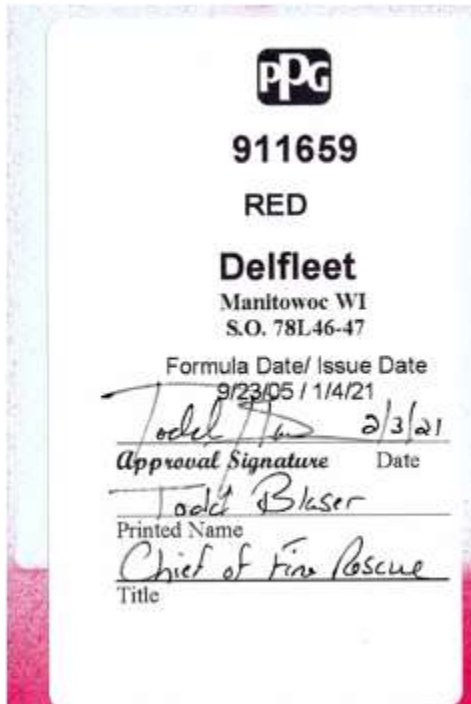
Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

91-02-4000

PAINT PIKE POLE TUBE(S)

Two (2) pike pole tube(s) shall be painted job color. Single Coat application process shall be used to apply the color selected in this order using direct gloss paint on identified parts.



One (1)
90-21-0300

Wheel Chocks - (2) Zico SAC-44-E Folding Aluminum (Pumper)

ZICO FOLDING ALUMINUM WHEEL CHOCKS

Two (2) folding aluminum wheel chocks Model SAC-44-E shall be furnished and shipped loose with the apparatus. Two (2) SQCH-44-H holders shall be installed by the manufacturer on the left side of the body, one in front of and one behind the rear wheel.

One (1)
91-00-1000

Paint - Preparation, Processes & Finish

PROCESSES

The following processes shall be employed in the finishing of the apparatus:

Manual Surface preparation – All metal surfaces on all custom body and cabs shall be thoroughly cleaned and prepared for paint. Surfaces that shall not be painted include all chrome plated, polished

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

stainless steel and bright aluminum tread plate. As required, weld seams and other areas shall be caulked to prevent water leaks or for appearance reasons. Each imperfection on the exterior metal surface shall be removed or filled and then sanded for a smooth flat appearance.

Chemical Cleaning and Treatment – All painted surfaces shall be washed with a chemical degreaser, cleaner and surface conditioner to allow for proper adherence of primer coat. Then they shall be washed with a neutralizer product. All products used are approved by paint supplier and applied under strict process control to meet performance requirements on corrosion prevention and chip resistance.

Primer/ Surface Coating for Top Coat application – a minimum of 2 coats of Epoxy based primer shall be applied to surfaces inside and outside of cabs and bodies and all other parts of apparatus that shall receive a Top color coat to achieve required corrosion protection. After that a minimum of 2 coats of sealer shall be applied over the primer surface. The overall thickness of the primer/sealer coat shall be between 3 to 8 mils wet. Once dried and cured all surfaces that shall receive a top coat shall be hand sanded to achieve a flat and smooth surface to meet gloss and other paint quality standards. All products used are approved by paint supplier and applied under strict process control to meet performance and appearance requirements according with Seagrave's Paint Quality Standard. The underside of the cab and body shall be finished with one coat of epoxy primer specifically designed for this application to prevent corrosion and provide chip resistance to typical paved road conditions.

Top Coat Application – Each Top Coat final color on the apparatus is applied using a two stage paint process. The unit shall be thoroughly hand cleaned to eliminate dust residues and to detect any imperfection in the surfaces to be painted. A fast drying 3.5 VOC polyurethane basecoat color shall be applied using a cross coat application technique. Additional coats may be applied as required until the coat thickness reaches 2.0 to 6.0 mils wet and a full hide appearance. If a second color is required, proper masking shall be applied to the unit and the basecoat application process shall be repeated for the second color. A slow drying low VOC High Build clear coat shall be applied using a cross coat application technique until a minimum of 5.0 mils wet is achieved. The unit is then properly heated to assure flash and cure of the paint before leaving the paint booth. All products used are approved by paint supplier and applied under strict process control to meet performance and appearance requirements according to Seagrave's Paint Quality Standard.

Each batch of color topcoat shall be tested for precise color match following paint supplier color matching process. A visual color match shall be checked prior to paint using customer approved paint chips.

The cab and body shall be primed and finish painted prior to installation on the chassis to ensure paint coverage in all areas including the difficult to reach places. The exterior and interior of the cab shall be finish painted before the doors are installed or any assembly is started to ensure a finish painted surface beneath all trim items.

Primer/ Surface Coating for Single Coat application – a minimum of 2 coats of Epoxy based primer shall be applied to all surfaces of the apparatus that shall receive a single color coat to achieve required corrosion protection. This is a wet coat process and it shall achieve a 3.0 to 8.0 mills wet thickness and complete coverage of all bare metal. All products used are approved by paint supplier and applied under

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

strict process control to meet performance and appearance requirements according with Seagrave's Paint Quality Standard.

Single Coat Application – A minimum of 2 coats of direct gloss paint shall be applied over all primed surface to achieve corrosion protection and appearance in accordance with Seagrave's Paint Quality Standard. This application shall be used for Gloss Black, Job Color and Color finishes in parts of the apparatus such as frame rails, outriggers, ladders and other aerial devices, suspension and other chassis parts, etc. as defined in the sales order.

Zolatone Coat Application – All areas to receive a Zolatone coat shall be primed following the primer/surface coating for top coat application. A high pressure coat of Zolatone paint shall be applied in a cross pattern technique to achieve smooth finished surface. A second low pressure coat of Zolatone paint shall be applied in a single pattern to achieve a textured appearance.

Zolatone Clear Coat Application – Starting with a completed and dry Zolatone coat application 2 to 3 coats of Zolatone clear coat shall be applied until a thickness of 5.0 mills wet is achieved.

PAINTERS

All painters shall be paint supplier certified. They shall be re-certified periodically in order to keep up to current standards and procedures required by the coatings manufacturer. This certification is performed independently by the paint supplier.

FACILITY

The finishing facility shall be certified independently by the paint supplier by meeting or exceeding its extensive and stringent requirements. The paint facility shall be audited quarterly by the paint supplier to ensure proper equipment, procedures and safety regulations are being used and adhered to in addition to the controls implemented by Seagrave to assure paint quality requirements are met in every job.

QUALITY STANDARDS

The finish quality and appearance shall be in accordance with the Seagrave's Paint Quality Standards for dirt, gloss, reflectivity, clarity and depth of image. The standard is available to the customer at any time upon request.

Paint - Frame Rails/Cross Members/Bumper Extension, Gloss Black

FRAME & UNDERCARRIAGE FINISH

The chassis frame, bumper extension, suspension, axles, air tanks, fuel tank, etc., shall be matte black finish as supplied by the component manufacturer. The chassis frame rails, cross members and front bumper extension shall have an additional coat of gloss black paint applied over the primed surface. Single Coat application process shall be used to apply Gloss Black direct gloss paint on identified parts.

The following items shall be furnished with the finish as provided by their respective manufacturer.

One (1)
91-00-4300

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Engine, transmission and accessories.
Exhaust system.
Retarder (when furnished).
PTO & hydraulic pump (when furnished).
Cab lift cylinders & hydraulic pump.
Shock absorbers.
Fuel filter.
Air drier and air cleaner.
Electrical wiring and loom.
Air brake lines, valves and mounting brackets.

One (1)
91-00-5000

Paint - Cab Interior, Gray Zolatone Paint

PAINT INSIDE OF CAB

The inside of the cab shall be provided with gray Zolatone paint following the Zolatone Coat application process.

The following components shall be painted:
Exposed interior surfaces of the cab structure
Exposed interior surfaces of the driver/officer/crew doors
All interior "Metal" access/wire covers of the cab
Head bumper brackets
Miscellaneous brackets, if present: camera mounts, non-recessed radios, charger covers.

One (1)
91-00-6000

Paint - Cab Exterior, Two Tone

TWO TONE CAB PAINT

The cab shall be two tone painted with the paint break just below the windshield. The paint break shall extend down the cab side and cab rear. The paint shall follow the Top Coat application process for two colors.

Note: Paint prices do not allow for metallic or pearlescent paint colors.

One (1)
91-00-A210

Cab Decorative Paint Break Molding - 5G Radius

A decorative molding shall separate the two colors around the cab. The paint break shall be horizontal across the front of the cab above the wipers and taper down with a radius even with the outside corners of the grille.

One (1)
91-02-1000

Paint - Body Exterior, Single Color

BODY PAINT, SINGLE COLOR

The body of the apparatus shall be painted to match the primary cab color. The paint shall follow the Top Coat application process for a single color.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
91-02-2AZ0

Finish - Operator Stand/Pump/Valves/Plumbing, Mill Finish except Exposed Pipe

OPERATOR STAND FINISH

The operator stand compartment interior, pump, intake and discharge valves, drains, drain lines, and foam system components, and all hard piping, shall have mill finish.

All exposed pipe (not including cut threads) at the rear of the truck or welded pre-connect assemblies at the front of the body shall be painted.

One (1)
91-02-4500

Standard Finishes for Small Parts

STANDARD FINISHES FOR SMALL PARTS, 2010 CUSTOM CAB

Definition: Mill Finish: as is from the manufacturer; no finish applied. It may have scratches, but it shall be shiny as a result of being cleaned through a deoxidization process. Parts with mill finish may have been cleaned in a dipping process to deoxidize the part.

Definition: Etchfinish: The part(s) shall be cleaned and etched to a uniform bright finish.

CHASSIS

Chassis bracket: Painted same as cab exterior

CAB

Cab compartments, including cab side access compartments:

Exterior Finish: Line-X.

Interior Finish: Mill finish (Upgrade available to DA or Paint)

Cab compartment shelves:

DA (Just the outside edge of the shelf shall be DA'd. All other surfaces shall be mill finish.)

CAB – BODY

Bumper / running board hose wells:

Flange: DA

Interior & exterior walls: Mill finish

If the hose well sticks above the gravel pan: DA the edges

Inner liners: Mill finish

All steps, including pull downs & those on access ladders: DA outsides

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Hat Section Bracket for Compartment, Ground or Step Lights: Mill finish. If compartment is painted, then the hat section brackets shall be painted.

Trim Rings: Mill finish

Patch plates: Brushed S/S (Upgrade available to polished or ATP) STD is No patch plates

Label backing plates: DA

Marker light guards: As purchased

Switch guards – S/S: Brushed

OPERATOR STAND AND PLUMBING

Plumbing: Pump, intake & discharge valves, drains, all hard piping*, including pipes protruding from the pump panel: Mill finish (Upgrade available to job color)

*1. All exposed pipe (not including cut threads) at the rear of the truck or welded pre-connect assemblies at the front of the body shall be painted job color.

*2. All pipe holding brackets made of black steel shall be painted black, or job color if the whole surrounding area is painted job color.

Pump enclosure interior: Mill finish (Upgrade available to job color)

Open bin interior surfaces: Mill finish (or ATP if that is the original surface). In no cases, paint unless “specialized” by the customer.

Crosslays –

Inside surfaces – DA

Partitions - DA

Speedlays:

With pull out tray- DA

Heat Pans: Mill finish (Upgrade available to DA or paint color of underside)

Running Board w/ Floating Trough: Frame shall be painted black.

BODY

Compartment louvers: Same color as compartment interior walls,

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Compartment shelves & trays:

DA (Just the outside edge of the shelf shall be DA'd. All other surfaces shall be mill finish.

Upgrades available: Paint Zolatone or job color. All surfaces shall be painted.

Compartment shelf & tray brackets: Mill finish

Brackets to hold compartment doors open: Mill finish

Compartment door auxiliary locking brackets: Brushed

Rear aluminum compartments: Mill finish (upgrade available to paint)

Rear aluminum compartment door interiors: ATP Exterior Door: DA Finish Interior
Smooth Exterior Door: Etchfinish Interior

Breaker box mounting brackets: Mill finish

Pegboard: Mill finish (upgrade available to DA)

Hose chutes & Ladders-Thru Compartments: Mill finish (upgrade available to paint)

Partition mounting brackets: Mill finish

Hydraulic ladder rack: Etchfinish (Upgrade to paint job color)

Ground ladder brackets: Etchfinish

Ground ladder or suction racking (fixtures, slides) within compartments: Mill finish

Pike poles tubes - Aluminum: D/A (Upgrade available to paint)

Pike poles tubes – S/S: D/A (Upgrade available to paint)

Wheel chock holders: Mill finish

AERIAL COMPONENTS

Turntable floor grating: DA sides

Turntable underside (except cut away area): Painted

Pedestal cover brackets: DA

Pedestal cover interior: DA

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Pedestal compartment door interiors: Mill finish

Electrical compartment panels:

Upper connection panel – Mill finish

Lower ECM panel – Mill finish

Aerialscope forward body step: DA

Grating on top of body: DA sides

Jack control boxes:

Interior – Mill finish

Door interiors – Mill finish

Cab avoidance switch brackets: Mill finish

Outrigger pad holder brackets: Mill finish

Outrigger pads: Mill finish

Downrigger watt pin & watt pin holder: DA

Piping – Swivel to Waterway: Mill finish

Waterway: Mill finish

Waterway brackets : Mill finish

Monitor: Mill finish

Brass elbow on cord reel on aerial: Mill finish

Cat Track holders/ boxes: Mill finish

Aerialscope Boom:

Base section and steel base collars – Painted boom color

Aluminum extendable sections and collars - DA

Aerialscope & Apollo Basket:

Control box – DA

Under basket L brackets – Mill finish

Under basket L bracket covers – Mill finish

Under basket L bracket piping – Mill finish

Under basket heat pans – Mill finish

Under basket waterway piping- Mill finish

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

Basket assembly parts- Etchfinish

Mounts/ brackets to hold ladders to aerial or boom: Painted same color as ladder

Mounts/brackets to hold pike poles to aerial or boom: painted same color as ladder

Mounts/brackets to hold stokes basket to ladder: painted same color as ladder

(ATP box to hold basket shall be mill finish)

One (1)
91-02-4550

Acorn Nuts - Standard Operating Procedure for Use

ACORN NUTS

Acorn nuts shall be installed on all exposed screws and bolts in areas where personal injury may result and/or damage to equipment may occur. For further details, please refer to the enclosed standards document.

One (1)
91-03-1400

4" Reflective Striping - Roll-up Doors

REFLECTIVE STRIPING

A 4" reflective stripe shall be provided around the perimeter of the vehicle. At least 50 percent of the cab and body sides, at least 50 percent of the rear body width and at least 25 percent of the width of the cab front shall have reflective material affixed to it per NFPA standards.

Exact location and presentation on the apparatus where the striping shall be installed will be handled through a sales change

One (1)
91-03-290B

Reflective Striping Color shall be Black

The reflective striping color shall be black.

One (1)
91-03-3810

Chevron Striping - Front Bumper

CHEVRON STRIPING

The front bumper shall be covered with 6" wide reflective striping in an alternating 3M™ Scotchlite™ Red #680-72 and Scotchlite™ Yellow #680-71 chevron pattern with the stripes running at a 45 degree downward angle from the top center of the bumper.

One (1)
91-03-4200

Chevron Striping - All Rear Body Panels

CHEVRON STRIPING

All rear facing body panels, both outside the hose bed area and under the hose bed, shall be covered with 6" wide reflective striping in an alternating Scotchlite™ Red #680-72 and Scotchlite™ Yellow #680-71 chevron pattern. The stripes shall run at a 45 degree downward angle from the top center of the vehicle. If the rear compartment is recessed below the hose bed, the surfaces in the recessed area not on the rear face of the truck will be covered with aluminum tread plate. Aluminum tread plate is needed to protect these inner surfaces when hose is loaded or laid.

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

One (1)
91-04-0009

Graphics Allowance

GRAPHICS ALLOWANCE

A graphics allowance of **\$6,000.00** shall be provided, to complete customer requested graphics and lettering of the apparatus.

If the graphics amount is less than the allowance, additional money shall be returned to the customer.
If the graphics amount exceeds the allowance, the customer shall be responsible for the additional charge.

One (1)
91-04-000A

Graphics Files Formats

GRAPHICS FILES FORMATS

In order to produce the desired lettering, seals and/or emblems, the customer shall provide graphics files of the lettering, seals and/or emblems in the following file formats:

- Vector images (Ai or EPS file types)
- Full Color (CMYK) version or
- Full color Pantone version, if exact color matching is required

The customer shall also provide the name and size of font for any graphics text, if specific font is desired.

One (1)
91-04-9900

Apparatus Logos and Name Plaques

APPARATUS LOGOS AND NAME PLAQUES

Logos and name plaques shall be placed on the apparatus as identified on the attached PDF.

One (1)
91-50-012A

Seagrave Limited Warranty - 2 Years Parts & Labor, Pumper

MANUFACTURER'S LIMITED WARRANTY

A Seagrave limited two (2) year warranty for parts and labor shall be provided.

One (1)
91-50-0205

Seagrave Limited Warranty - Cab, Structural - 15 Years

CAB FIFTEEN YEAR STRUCTURAL LIMITED WARRANTY

A Seagrave cab limited fifteen (15) year structural warranty shall be provided.

One (1)
91-50-030S

Seagrave Limited Warranty - Stainless Steel Body, Structural - 15 Years

STAINLESS STEEL BODY FIFTEEN YEAR STRUCTURAL LIMITED WARRANTY

A Seagrave limited stainless steel body fifteen (15) year structural warranty shall be provided.

One (1)

Seagrave Limited Lifetime Warranty - Frame Rail & Cross Members, Structural

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

91-50-0510

CHASSIS FRAME RAIL & CROSS MEMBER STRUCTURAL LIMITED LIFETIME WARRANTY

A Seagrave limited lifetime frame rail and cross members structural warranty shall be provided.

One (1)

Seagrave Limited Warranty - Paint & Corrosion, 6 Years, Pro-Rated, All Models

91-50-0600

PAINT/CORROSION LIMITED WARRANTY

A Seagrave limited pro-rated paint six (6) year warranty shall be provided.

One (1)

Seagrave Limited Warranty - Pump Plumbing, 10 Years

91-50-0700

PUMP PLUMBING LIMITED WARRANTY

A Seagrave limited stainless steel pump plumbing ten (10) year warranty shall be provided.

One (1)

Weight analysis - Required if over Minimum NFPA Equipment

92-00-1000

WEIGHT ANALYSIS - LOOSE EQUIPMENT

It shall be the responsibility of the purchaser to specify the details of the apparatus; its required performance, including where operations at elevations above 2000 ft (610m) or on grades greater than 6 percent are required; the maximum number of fire fighters to ride within the apparatus; specific added continuous electrical loads which exceed the minimum of this standard; and any hose, ground ladders, or equipment to be carried by the apparatus that exceed the minimum requirements of this standard.

One (1)

Operation & Parts Manuals w/ Wiring Diagrams - (2) Electronic Copies (Non-Aeria

98-50-500C

ELECTRONIC OPERATOR'S & PARTS MANUAL

A binder shall be supplied that has electronic copies and paper documents as listed below.

The binder shall contain 2 duplicate electronic copies. Each electronic copy shall have:

- Operations & maintenance instructions for items on the vehicle, except all purchased components.
- Material Safety Data Sheets.
- Electrical diagrams including charts illustrating the individual wire color, number code, and function.
- Parts manuals.
- Parts drawings and an overall vehicle layout.
- Certificates
- Warranties

Printed documents shall include:

- Operations & maintenance instructions for items on the vehicle, not including the vendor literature
- Operations & maintenance instructions for engine.
- Certificates of independent test results.
- Warranty documents.

10139-0008

Seagrave Fire Apparatus LLC

Marauder Side Mount Pumper

- Manufacturer's record of construction details and engine power curve.
- Vehicle final alignment report.
- Vendor literature provided by the manufacturer that arrives with the purchased component.

One (1) to two (2) manual electronic copies for the water pump shall be included, if there is a pump on the unit, and as provided by the pump manufacturer. Additional electronic copies, as provided by other equipment suppliers, shall also be included.

**ORDINANCE AMENDING BUDGET FOR THE
CITY OF KANNAPOLIS, NORTH CAROLINA
FOR THE FISCAL YEAR BEGINNING JULY 1, 2023
AND ENDING JUNE 30, 2024
Amendment # 24-42**

BE IT ORDAINED by the City Council of the City of Kannapolis, North Carolina meeting in open session this 10th day of June 2024, that the following amendment to the Budget Ordinance for the City of Kannapolis, North Carolina for the Fiscal Year beginning July 1, 2023, and ending June 30, 2024, is hereby adopted:

Description: This budget amendment budgets the purchase of a fire engine by appropriating fund balance.

SECTION I– GENERAL FUND

Revenue:	Increase: Fund Balance Appropriated Revenue: 19900-39900	\$ 975,000
Expenditure:	Increase: Fire Emergency Services: Capital Expenditure: 12540-59500	\$ 975,000

This ordinance is approved and adopted on this 10th day of June 2024.

Milton D. Hinnant, Mayor

ATTEST:

Bridgette Bell, MMC, NCCMC
City Clerk