



Town of Westlake

1500 Solana Blvd
Building 7, Suite 7100
Westlake, TX 76262



Town Council/Board of Trustees Agenda - Final

Monday, February 3, 2025

4:15 PM

Council Chamber

The Town Council of the Town of Westlake serves as the governing board for Westlake Academy. This agenda may contain both municipal and Westlake Academy items, which will be clearly identified. In an effort of transparency, this meeting will be viewable to the public via Live Stream and also available for viewing after the meeting. In an effort of meeting efficiency, any residents wishing to speak on action items must submit a speaker request form to the Town Secretary prior to the start of the meeting.

NOTE: As authorized by Section 551.071 of the Texas Government Code, Town Council may enter into closed Executive Session for the purpose of seeking confidential legal advice from the Town/School Attorney on any agenda item listed herein.

A. CALL REGULAR MEETING TO ORDER AND ANNOUNCE A QUORUM PRESENT

B. INVOCATION AND PLEDGES OF ALLEGIANCE

C. CITIZEN/PARENT COMMENTS

This is an opportunity for citizens to address the Town Council or Board of Trustees on any matter, whether or not it is posted on the agenda. Any residents wishing to speak on action items must submit a speaker request form to the Town Secretary prior to the start of the meeting. Individual citizen comments are normally limited to three (3) minutes. The presiding officer may ask the citizen to hold their comment on an agenda item if the item is posted as a Public Hearing. The Town Council and Board of Trustees cannot by law take action nor have any discussion or deliberations on any presentation made at this time concerning an item not listed on the agenda. The Town Council and Board of Trustees will receive the information, ask staff to review the matter, or an item may be noticed on a future agenda for deliberation or action.

D. ITEMS OF COMMUNITY INTEREST

D.1. [25-36](#) Items of Community Interest (Communications Director Jon Sasser)

E. PRESENTATION(S)

E.1. [WA 25-103](#) Westlake Academy International Baccalaureate (IB): Leaders in the Field (Michelle Briggs, Westlake Academy Director of Innovation and Development)

F. CONSENT AGENDA

All items listed below are considered routine by the Town Council and/or Board of Trustees and will be enacted with one motion. There will be no separate discussion of items unless a Council/Board Member or citizen so requests, in which event the item will be removed from the general order of business and considered in its normal sequence.

- F.1. [25-31](#)** Discuss, consider and act to approve the January 21, 2025 Joint Town Council and Planning and Zoning Commission Workshop Meeting Minutes (Town Secretary Dianna Buchanan)
- F.2. [25-32](#)** Discuss, consider and act to approve the January 21, 2025 Town Council/Board of Trustees Regular Meeting Minutes (Town Secretary Dianna Buchanan)

G. REGULAR AGENDA ITEMS

- G.1. [RES 25-04 v2](#)** (TABLED 1/21/2025) Discuss, consider and act to approve Resolution 25-04 approving a Development Agreement between the Town of Westlake, Texas and Otter Partners, LP, for subdivision improvements for Westlake Ventanas, a residential development to be designed and built in adjacency to Solana Boulevard. (Jason Alexander, AICP, CEcD, Deputy Town Manager)
- G.2. [25-38](#)** Discuss, consider, and act to approve the purchase of a new fire engine not to exceed \$1.3 million dollars.
- G.3. [WA RES 25-03](#)** Discuss, consider and act regarding WA Resolution 25-03 adopting the Westlake Academy Academic Calendar for School Year 2025-2026 (Head of School Dr. Kelly Ritchie)
- G.4. [WA RES 25-02](#)** Discuss, consider and act regarding WA Resolution 25-02 to add one additional section of 4th grade for School Year 2025-2026 and one section of Pre-K (4 year old) class for School Year 2025-2026 (Dr. Kelly Ritchie, Head of School)
- G.5. [RES 25-06](#)** Discuss, consider and act to approve Resolution 25-06, a Resolution by the Town Council of the Town of Westlake, Texas, approving the participation of the Town in the Texas Enterprise Zone Program pursuant to the Texas Enterprise Zone Act, Chapter 2303 of the Texas Local Government Code, as amended; nominating Charles Schwab & Co., Inc. to the Governor's Office for Economic Development and Tourism as a Triple Jumbo Enterprise Project through the Economic Development Bank; and authorizing the Town Manager or Designee to execute any related documents in support of that nomination. (Jason Alexander, AICP, CEcD, Deputy Town Manager)

H. DISCUSSION ITEM

- H.1. [WA 25-102](#) Discussion concerning recent conversations with multiple elected legislators regarding appropriate school funding for Westlake Academy (Mayor Kim Greaves)

I. EXECUTIVE SESSION

The Town Council/Board of Trustees will conduct a closed session pursuant to Section 551.071 (2) of the Texas Government Code, for the purpose of seeking confidential legal advice from the City Attorney/Westlake Academy Attorney for the following:

- I.1. [25-33](#) Section 551.071: Consultation with and legal advice from the Town Attorney regarding pending litigation - Vertical Bridge v. Town of Westlake
- I.2. [25-34](#) Section 551.087: Deliberation regarding Economic Development Negotiations to deliberate the offer of a financial or other incentive to a business prospect:
a) Project ED 25-01, and
b) Project ED 25-02.
- I.3. [25-37](#) Section 551.073: Deliberation regarding prospective gifts related to Westlake Academy facilities.

J. TAKE ANY ACTION, IF NEEDED, FROM EXECUTIVE SESSION ITEMS**K. FUTURE AGENDA ITEMS****L. STAFF RECAP OF COUNCIL DIRECTION****M. ADJOURNMENT**

I certify that the above notice was posted on the bulletin board at Town of Westlake, Town Hall, located at 1500 Solana Blvd., Building 7, Suite 7100, Westlake, TX 76262, in compliance with the Texas Open Meetings Act, Chapter 551 of the Texas Government Code.



Town Secretary

Disabilities Notice: If you plan to attend the meeting and have a disability that requires special needs, please contact the Town Secretary's Office 48 hours in advance at Ph. 817-490-5711 and reasonable accommodations will be made to assist you.



Town of Westlake

1500 Solana Blvd
Building 7, Suite 7100
Westlake, TX 76262

Staff Report

File #: 25-36

Agenda Date: 2/3/2025

Agenda #: D.1.

TOWN STAFF REPORT RECOMMENDATIONS

Items of Community Interest (Communications Director Jon Sasser)

STAFF: Communications Director Jon Sasser

BACKGROUND:

Pursuant to Texas Government Code Section 551.0415 the Town Council (and or designee) may report on the following items: (1) expression of thanks, congratulations, or condolences; (2) information about holiday schedules; (3) recognition of individuals; (4) reminders about upcoming Town Council events; (5) information about community events; and (6) announcements involving imminent threat to public health and safety.

NOTABLE ITEMS AND UPCOMING EVENTS:

Planning & Zoning Commission Meeting

Tuesday, February 4, 2025; 5 pm
1500 Solana Blvd, Westlake, TX

Town Hall/Municipal Court CLOSED

Presidents' Day
Monday, February 17, 2025

Town Council Meeting

Tuesday, February 18, 2025; 4 pm
1500 Solana Blvd, Westlake, TX

ADDITIONAL ITEMS

- **Town Council Election info:**

Would you like to serve on Westlake's Town Council/Board of Trustees? There are four seats to choose from:

*Place 1: Runs through May 2025-May 2027

*Place 3: Runs through May 2025-May 2027

*Place 5: Runs through May 2025-May 2027

*Place 2: Runs through May 2025-May 2026

The candidate filing period runs through February 14, 2025. The actual election is May 3rd. Applications are accepted by the Town Secretary's Office Monday through Friday from 8 am to 5 pm. Visit our election website for more information

- **WQA: Last month**

Every March, the Town of Westlake calculates each resident's sewer volume utilizing the Winter Quarter Average rate method. This is determined by **averaging the usage of water in December, January, and February of each calendar year** - typically the lowest 3 months of usage in the year. This average then sets the billing volume of sewer usage for the following 12 months.



Town of Westlake

1500 Solana Blvd
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Staff Report

File #: WA 25-103

Agenda Date: 2/3/2025

Agenda #:

WESTLAKE ACADEMY STAFF REPORT RECOMMENDATIONS

Westlake Academy International Baccalaureate (IB): Leaders in the Field (Michelle Briggs, Westlake Academy Director of Innovation and Development)

STAFF:

(Michelle Briggs, Westlake Academy Director of Innovation and Development)

Presentation of one in a series of videos:

Westlake Academy International Baccalaureate (IB): Leaders in the Field



Town of Westlake

1500 Solana Blvd
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Staff Report

File #: 25-31

Agenda Date: 2/3/2025

Agenda #: F.1.

TOWN STAFF REPORT RECOMMENDATIONS

Discuss, consider and act to approve the January 21, 2025 Joint Town Council and Planning and Zoning Commission Workshop Meeting Minutes (Town Secretary Dianna Buchanan)

STAFF: Town Secretary Dianna Buchanan

BACKGROUND:

The Town Council and Planning and Zoning Commission Joint Workshop Meeting Minutes from January 21, 2025 are attached for review and consideration of approval.

Once approved, all meeting minutes will be executed and uploaded to the Town of Westlake website for transparency and Laserfiche software for state retention compliance.

RECOMMENDATION:

Staff recommends approval of the minutes.

ATTACHMENTS:

01.21.2025 Joint TC and PandZ Joint Workshop Meeting Minutes

TOWN COUNCIL ACTION/OPTIONS:

- 1) Motion to approve minutes, as presented.
- 2) Motion to approve the minutes with the following corrections/changes (please state corrections/changes in motion)
- 3) Motion to table
- 4) Motion to deny



Town of Westlake

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Town Council/Board of Trustees Meeting Minutes - Draft

Tuesday, January 21, 2025

5:30 PM

Council Chamber

JOINT TOWN COUNCIL AND PLANNING AND ZONING COMMISSION WORKSHOP

A. CALL TO ORDER

Mayor Greaves called the meeting to order at 5:50 pm.

B. ATTENDANCE: ANNOUNCE TOWN COUNCIL AND PLANNING AND ZONING COMMISSION MEMBERS PRESENT

Council Members in Attendance:

Mayor Kim Greaves

Mayor Pro Tem Tammy Reeves

Council Member Anna White

Council Member Michael Yackira

Council Member Todd Gautier

Planning and Zoning Commissioners In Attendance:

Adam Coffey, Chair

Terry Wilkinson, Vice Chair

David Ricci, Commissioner

Nizar Didarali, Commissioner

Lanny Huggins, Commissioner

Staff Present:

Town Manager Wade Carroll

Deputy Town Manager Jason Alexander

Town Attorney Stan Lowry

Town Secretary Dianna Buchanan

IT Director Jason Power

Development Coordinator Kiana Pennywell

C. CONDUCT TRAINING WORKSHOP

Deputy Town Manager Jason Alexander conducted the Joint Training Workshop which provided an overview of the development review and approvals process, introduced a process to pair development review and approval with zoning regulations, and provided a glimpse of proposed text amendments that will come forward to for consideration of approval in the near future to achieve the desired process improvements. In summary: the Strategic Plan will outline priorities for the Town of Westlake for the next five years; the Update to the Comprehensive Plan will outline a vision that spans decade; the economic growth and activity in Westlake must be nurtured and sustained; and the development regulations and review and approvals process are critical for success.

D. ADJOURNMENT

Mayor Greaves adjourned the Joint Town Council and Planning and Zoning Commission Workshop at 6:46 p.m.

Kim Greaves, Mayor

ATTEST:

/s/ Dianna Buchanan
Town Secretary Dianna Buchanan



Town of Westlake

1500 Solana Blvd
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Staff Report

File #: 25-32

Agenda Date: 2/3/2025

Agenda #: F.2.

TOWN STAFF REPORT RECOMMENDATIONS

Discuss, consider and act to approve the January 21, 2025 Town Council/Board of Trustees Regular Meeting Minutes (Town Secretary Dianna Buchanan)

STAFF: Dianna Buchanan, Town Secretary

BACKGROUND:

The January 21, 2025 Town Council Regular Meeting Minutes are attached for review and consideration of approval.

Once approved, all meeting minutes will be executed and uploaded to the Town of Westlake website for transparency and Laserfiche software for state retention compliance

RECOMMENDATION:

Staff recommends approval of the minutes.

ATTACHMENT(S):

01.21.2025 TC/BOT Regular Meeting Minutes

TOWN COUNCIL ACTION/OPTIONS:

- 1) Motion to approve minutes, as presented.
- 2) Motion to approve the minutes with the following corrections/changes (please state corrections/changes in motion)
- 3) Motion to table
- 4) Motion to deny



Town of Westlake

1500 Solana Blvd
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Town Council/Board of Trustees Meeting Minutes - Draft

Tuesday, January 21, 2025

4:00 PM

Council Chamber

A. CALL REGULAR MEETING TO ORDER AND ANNOUNCE A QUORUM PRESENT

Mayor Greaves called the meeting to order at 4:00 pm and announced a quorum present.

PRESENT:

Mayor Kim Greaves
Mayor Pro Tem Tammy Reeves
Council Member Todd Gautier
Council Member Michael Yackira
Council Member Anna White
Council Member Asselta (virtually present, joined at 4:09 pm)

STAFF PRESENT:

Town Manager Wade Carroll	Deputy Town Manager Jason Alexander
Town Secretary Dianna Buchanan	IT Director Jason Power
Communications Director Jon Sasser	Town Attorney Stan Lowry
School Attorney Janet Bubert	Fire Chief John Ard
Finance Director Cayce Lay Lamas	Public Works Director Cheryl Taylor
Assistant Public Works Director Kyle Flanagan	Human Resources Director Sandy Garza
Academy Finance Manager Marlene Rutledge	Development Coordinator Kiana Pennywell
WA Middle School Principal Maxwell Ituah	

B. INVOCATION AND PLEDGES OF ALLEGIANCE

Pastor Nick Billardello, Abiding Grace Lutheran Church, Southlake, provided the invocation. Mayor Greaves and Westlake Academy Middle School Principal Maxwell Ituah introduced Westlake Academy students Cecilia Bugarin, 5th grade and Isaiah Bugarin, 2nd grade, to assist with leading the pledges to the U.S. Flag and the Texas Flag. Pledges recited.

C. CITIZEN/PARENT COMMENTS

There was no one to comment at this time.

D. ITEMS OF COMMUNITY INTEREST

D.1. 25-29 Items of Community Interest (Communications Director Jon Sasser)

Communications Director Jon Sasser reported upcoming items of community interest.

E. PRESENTATION

The Texas Student Housing Authority Annual Report was presented by Ms. Tracy Harrow, Executive Director, TSHA. Mayor Greaves would like to schedule a work session to include the TSHA and Town Council in the near future.

F. CONSENT AGENDA

F.1. 25-20 Discuss, consider and act to approve the Town Council/Board of Trustees Minutes for the January 6, 2025 Regular Meeting (Dianna Buchanan, Town Secretary)

F.2. 25-27 Discuss, consider and act to approve corrected April 1, 2024 Joint Town Council and Planning & Zoning Commission Meeting Minutes (Town Secretary Dianna Buchanan)

F.3. WARES 25-01 Discuss, consider and act to approve WA Resolution 25-01 to approve amended 2024-2025 Athletic Stipend Schedule. (Sandy Garza, Human Resources Director)

Motion by Council Member White and Motion Second by Council Member Yackira to approve the consent agenda. Mayor Greaves called for the vote.
MOTION TO APPROVE THE CONSENT AGENDA APPROVED UNANIMOUSLY.

G. REGULAR AGENDA ITEMS

G.1. ORD-1018 Discuss, consider and act to adopt Ordinance 1018 approving architectural standards and an architectural pattern book for the Villaggio Residential Development.

Deputy Town Manager Jason Alexander presented the item. The applicant's representative was present to answer questions. Motion by Council Member White and Motion Second by Mayor Pro Tem Reeves to Adopt Ordinance 1018 approving architectural standards and an architectural pattern book for the Villaggio Residential Development as presented. Mayor Greaves called for the vote.

MOTION TO ADOPT ORDINANCE 1018 AS PRESENTED APPROVED UNANIMOUSLY.

G.2. RES 25-04 Discuss, consider and act to approve Resolution 25-04 approving a Development Agreement between the Town of Westlake, Texas and Otter Partners, LP, for subdivision improvements for Westlake Ventanas, a residential development to be designed and built in adjacency to Solana Boulevard. (Jason Alexander, AICP, CEcD, Deputy Town Manager)

Deputy Town Manager Jason Alexander presented the item. Developer for the project, Frank Bonilla, addressed Council regarding the proposed Development Agreement and provided Council with handouts regarding the developer's agreement, the proposed gate, queing of traffic from Solana Boulevard and visibility triangles. Town Council wants the developer to update the development agreement as discussed. Motion by Council Member Asselta and Motion Second by Council Member White to table the item to the next Town Council meeting which is scheduled for February 3, 2025. Mayor Greaves called for the vote.

MOTION TO TABLE RESOLUTION 25-04 TO THE FEBRUARY 3, 2025 TOWN COUNCIL MEETING APPROVED UNANIMOUSLY.

- G.3. [25-25](#)** Discuss, consider and act to approve the purchase of a new fire engine not to exceed \$1.3 million dollars (Fire Chief John Ard)
- Mayor Greaves announced that at the request of staff, this item is being moved to the February 3rd meeting agenda.
- G.4. [RES 25-02](#)** Consider approving Resolution 25-02 authorizing the Town Manager to contract with inCon-Trol Water Systems to repair and update the existing well system at Glenwyck Park through a Master Interlocal Agreement with the City of Southlake in an amount not to exceed \$71,000. (Cheryl Taylor, Director of Public Works)
- Public Works Director Cheryl Taylor presented the item. Motion by Council Member White and Motion Second by Council Member Yackira to approve Resolution 25-02 authorizing the Town Manager to contract with inCon-Trol Water Systems to repair and update the existing well system at Glenwyck Park in an amount not to exceed \$71,000 through a Master Interlocal Agreement with the City of Southlake. Mayor Greaves called for the vote. MOTION TO APPROVE RESOLUTION 25-02 AS PRESENTED APPROVED UNANIMOUSLY.
- G.5. [25-26](#)** Consider and act to excuse Mayor and Council absence(s), if any.
- Motion by Council Member White and Motion Second by Mayor Pro Tem Reeves to excuse Council Member Asselta's absence from the January 6, 2025 Town Council Regular Meeting. Mayor Greaves called for the vote. MOTION APPROVED UNANIMOUSLY.
- At 5:38 pm, Mayor Greaves announced that the Regular Meeting would be recessed to hold a Joint Town Council and Planning and Zoning Commission Workshop following a short break.

At 6:45 pm, Mayor Greaves reconvened the Regular Meeting from the Joint Town Council and Planning and Zoning Commission Workshop.

H. EXECUTIVE SESSION

Mayor Greaves announced the items for Executive Session and recessed the Regular Meeting to Executive Session at 6:46 pm.

- H.1. [25-17](#)** Section 551.087: Deliberation regarding Economic Development Negotiations to deliberate the offer of a financial or other incentive to a business prospect: Project ED 25-01.
- H.2. [25-21](#)** Section 551.074(1): Deliberation regarding Personnel Matters - to deliberate the appointment, employment, evaluation, reassignment, duties, of a public officer or employee:
- a) Planning and Zoning Commission
 - b) Westlake Development Corporation, Inc. Board (EDC Type 4B)
- H.3. [25-22](#)** Section 551.071: Consultation with and legal advice from the Town Attorney regarding pending litigation - Vertical Bridge v. Town of Westlake
-

H.4. 25-30 Section 551.071: Consultation with and legal advice from the Academy Attorney regarding special education due process complaint

Mayor Greaves reconvened the Regular Meeting from Executive Session at 7:39 pm.

I. TAKE ANY ACTION, IF NEEDED, FROM EXECUTIVE SESSION ITEMS

Mayor Greaves asked if there was any action from Executive Session and there was.

Motion by Council Member Yackira and Motion Second by Council Member White to remove Ms. Linda Bjorn from Place 6 of the Planning and Zoning Commission. Mayor Greaves called for the vote.

MOTION TO REMOVE LINDA BJORN FROM PLACE 6 OF THE PLANNING AND ZONING COMMISSION APPROVED UNANIMOUSLY.

Motion by Council Member Yackira and Motion Second by Mayor Pro Tem Reeves to appoint Ms. Jennifer Konz-Alt to Place 6 of the Planning and Zoning Commission term through June 2025. Mayor Greaves called for the vote.

MOTION TO APPOINT JENNIFER KONZ-ALT TO PLACE 6 OF THE PLANNING AND ZONING COMMISSION APPROVED UNANIMOUSLY.

J. FUTURE AGENDA ITEMS

These items were mentioned together with the Staff Recap of Council Direction.

K. STAFF RECAP OF COUNCIL DIRECTION

Town Manager Wade Carroll summarized direction received from Town Council. Town Council would like to schedule a workshop with the Texas Student Housing Authority soon, have the redlined development agreement for Ventanas on the next agenda, and ask Dr. Ritchie to report about special education challenges in the near future.

L. ADJOURNMENT

Mayor Greaves adjourned the meeting at 7:41 pm.

Kim Greaves, Mayor

ATTEST:

Town Secretary Dianna Buchanan



Town of Westlake

1500 Solana Blvd
Building 7, Suite 7100
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Staff Report

File #: RES 25-04 v2

Agenda Date: 2/3/2025

Agenda #: G.1.

TOWN STAFF REPORT RECOMMENDATIONS

(TABLED 1/21/2025) Discuss, consider and act to approve Resolution 25-04 approving a Development Agreement between the Town of Westlake, Texas and Otter Partners, LP, for subdivision improvements for Westlake Ventanas, a residential development to be designed and built in adjacency to Solana Boulevard. (Jason Alexander, AICP, CEcD, Deputy Town Manager)

STAFF: Jason Alexander, AICP, CEcD, Deputy Town Manager

BACKGROUND:

Pursuant to the provisions contained in Sec. 102-316 of the Town of Westlake Code of Ordinances entitled, "Development agreements", a development agreement is required for "all land which is platted for development purposes and all planned development zoning."

In accordance with the provisions in Sec. 102-316 of the Town of Westlake Code of Ordinances, a development agreement has been prepared for Westlake Ventanas (the "Development"). Part of the Entrada Planned Development --- Westlake Ventanas will result in the design and the construction of 51 detached single-family homes.

As proposed, the terms and conditions in this development agreement are intended to address the minimum requirements of Sec. 102-316 of the Town of Westlake Code of Ordinances --- for the creation and retention of public and private benefits --- with an emphasis on the following:

- That all grading shall comply with the provisions found in the Developer's Agreement for Westlake Ventanas and when applicable Chapter 36 of the Town of Westlake Code of Ordinances;
- That all garage doors facing a front lot line be setback a minimum of 10 feet such that all "view corridors to ensure the safety of residents backing out driveways" are provided on each lot as required by Ordinance No. 1001 approved by the Town Council on August 19, 2024;
- That the required payment of \$10,000.00 to be made to the Westlake Academy for each residential lot to be developed within Westlake Ventanas has been paid (payment has been made); and
- That building materials and other architectural standards will be enforced pursuant to the Westlake Ventanas Final Development Standards seen in Exhibit "C".

DISCUSSION:

This development agreement is intended to satisfy the provisions in Sec. 102-316 of the Town of Westlake Code of Ordinances and to establish the specific obligations and responsibilities for the Town of Westlake and

Otter Partners, LP.

The purpose of this Agreement is to ensure that: (i) all proposed improvements and infrastructure appropriately serve the individual lots within the Development; (ii) identify whether the Town of Westlake or the Developer is responsible for the installation and maintenance of the proposed improvements and infrastructure; (iii) provide additional standards for the aesthetic quality and the visual quality of new construction; and (iv) otherwise ensure that the Development achieves the requirements of zoning.

FISCAL IMPACT:

N/A.

DEPARTMENT OF PLANNING AND DEVELOPMENT RECOMMENDATION:

Staff recommends that the Developer's Agreement with Otter Partners, LP be approved as presented.

ATTACHMENT(S):

1. Resolution 25-04
2. Exhibit "A" - Development Agreement
3. Exhibit "B" - Property Description
4. Exhibit "C" - Architectural Standards for Westlake Ventanas

TOWN COUNCIL ACTION / OPTIONS:

- 1) Motion to approve;
- 2) Motion to approve with amendments;
- 3) Motion to deny; or
- 4) Motion to table to a specific date.

TOWN OF WESTLAKE
RESOLUTION NO. 25-04

A RESOLUTION BY THE TOWN COUNCIL OF THE TOWN OF WESTLAKE, TEXAS, APPROVING A DEVELOPMENT AGREEMENT FOR SUBDIVISION IMPROVEMENTS BETWEEN THE TOWN OF WESTLAKE, TEXAS AND OTTER PARTNERS, LP FOR WESTLAKE VENTANAS RESIDENTIAL DEVELOPMENT (PD 1-2, PLANNED DEVELOPMENT DISTRICT 1-2), AND AUTHORIZING THE TOWN MANAGER OR DESIGNEE TO EXECUTE THE AGREEMENT.

WHEREAS, the Property is located within PD 1-2, Planned Development District 1-2, that is commonly known as “**WESTLAKE ENTRADA**”, as approved by Ordinance No. 703 by the Town Council on the **22ND** day of **APRIL 2013**; and

WHEREAS, pursuant to the provisions approved by Ordinance No. 703 by the Town Council on the **22ND** day of **APRIL 2013**, a development plan subject to review and approval by the Town Council is required, and such development plan was approved by Ordinance No. 720 by the Town Council on the **28TH** day of **OCTOBER 2013** (the “Development Plan”); and

WHEREAS, the Development Plan was subsequently amended by Ordinance No. 830, as adopted by the Town on the **19TH** day of **JUNE 2017**; and

WHEREAS, the Development Plan was subsequently amended by Ordinance No. 918, as adopted by the Town on the **26TH** day of **OCTOBER 2020**; and

WHEREAS, the Development Plan was subsequently amended by Ordinance No. 934, as adopted by the Town on the **23RD** day of **AUGUST 2021**; and

WHEREAS, the Development Plan was subsequently amended by Ordinance No. 959, as adopted by the Town on the **5TH** day of **DECEMBER 2022**; and

WHEREAS, the Development Plan was subsequently amended by Ordinance No. 994, as adopted by the Town on the **1ST** day of **APRIL 2024**; and

WHEREAS, the Development Plan was subsequently amended by Ordinance No. 997, as adopted by the Town on the **3RD** day of **JUNE 2024**; and

WHEREAS, the Development Plan was subsequently amended by Ordinance No. 1001, as adopted by the Town on the **19TH** day of **AUGUST 2024**, including a revised Development Plan attached thereto as EXHIBIT “A” and included therein for all references and purposes; and

WHEREAS, the Development Plan amended by Ordinance No. 1001, as adopted by the Town on the **19TH** day of **AUGUST 2024**, included specific provisions relating to the Property, including Architectural Standards “according to the development guidelines and standards for The Knolls Development” and that the amendment to the Development Plan for the development of this portion of Westlake Entrada shall further reflect approval provided by Ordinance No. 959, as adopted by the Town on the **5TH** day of **DECEMBER 2022**; and

WHEREAS, the Development Plan amended by Ordinance No. 1001, included conditions that apply to “all further applications for development that are submitted pursuant to the Entrada Development Plan”; and

WHEREAS, the Town of Westlake, Texas (the “Town”) is a duly created and validly existing Type A General Law Municipality, created under the laws of the State of Texas, including particularly, but not by way of limitation, Chapter 51, Texas Local Government Code, as amended (the “Code”); and

WHEREAS, the Town and Otter Partners, LP (the “Developer”) desire to enter into an agreement through a Development Agreement, which sets out certain responsibilities for the Town and the Developer as it relates to the development in Westlake; and,

WHEREAS, the Developer, as the owner of land located within the Town, intends to develop the approximately 22.164 acres of land fronting Solana Boulevard (the “Property”), and the development and construction on the Property is expected to significantly enhance the tax base of the Town; and

WHEREAS, the Town and the Developer desire to enter into a partnership to continue this planned growth through a Development Agreement for Subdivision Improvements, which sets out responsibilities for the Town and the Developer as it relates to the development in Westlake; and,

WHEREAS, the Town Council finds that the passage of this Resolution is in the best interest of the citizens of Westlake.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF WESTLAKE, TEXAS:

SECTION 1: That, all matters stated in the Recitals hereinabove are found to be true and correct and are incorporated herein by reference as if copied in their entirety.

SECTION 2: That, the Town Council of the Town of Westlake, Texas, hereby approves the Development Agreement for Subdivision Improvements attached hereto as **EXHIBIT “A”**, with the Developer; and further authorizes the Town Manager to execute said agreements and pursue any necessary procedures on behalf of the Town of Westlake.

SECTION 3: If any portion of this Resolution shall, for any reason, be declared invalid by any court of competent jurisdiction, such invalidity shall not affect the remaining provisions

hereof and the Council hereby determines that it would have adopted this Resolution without the invalid provision.

SECTION 4: That this resolution shall become effective from and after its date of passage.

PASSED AND APPROVED ON THIS 3rd DAY OF FEBRUARY 2025.

Kim Greaves, Mayor

ATTEST:

Dianna Buchanan, Town Secretary

APPROVED AS TO FORM:

L. Stanton Lowry, Town Attorney

EXHIBITS

EXHIBIT “A” — DEVELOPMENT AGREEMENT FOR SUBDIVISION IMPROVEMENTS

EXHIBIT “B” — PROPERTY DESCRIPTION

EXHIBIT “C” — ARCHITECTURAL STANDARDS FOR THE KNOLLS

DEVELOPMENT AGREEMENT FOR SUBDIVISION IMPROVEMENTS
FOR
WESTLAKE VENTANAS

This Development Agreement (this “**AGREEMENT**”) is made and entered into on this **3RD** day of **FEBRUARY, 2025** (the “**EFFECTIVE DATE**”) by and between the Town of Westlake, Texas, a Type A General Municipality located in the State of Texas (the “**TOWN**”), and **OTTER PARTNERS, LP**, a Texas Limited Partnership duly incorporated in the State of Texas (the “**DEVELOPER**”) to establish the terms and conditions for designing and installing infrastructure and other related improvements for **WESTLAKE VENTANAS**, a residential development approved by Ordinance No. 994 by the Town Council on the **1ST** day of **APRIL, 2024** and subject to certain conditions as set forth in Ordinance No. 1001 approved by the Town Council on the **19TH** day of **AUGUST, 2024** (the “**DEVELOPMENT**” as further defined below). The Town and the Developer may also be referred to collectively as the “**PARTIES**”, or individually as a “**PARTY**”.

WHEREAS, the Developer either owns or will own certain real property more particularly described on **EXHIBIT “B”** attached hereto and incorporated herein by reference for all purposes (the “**PROPERTY**” as further defined below); and

WHEREAS, the Property is located within PD 1-2, Planned Development District 1-2, that is commonly known as “**WESTLAKE ENTRADA**”, as approved by Ordinance No. 703 by the Town Council on the **22ND** day of **APRIL 2013**; and

WHEREAS, pursuant to the provisions approved by Ordinance No. 703 by the Town Council on the **22ND** day of **APRIL 2013**, a development plan subject to review and approval by the Town Council is required, and such development plan was approved by Ordinance No. 720 by the Town Council on the **28TH** day of **OCTOBER 2013** (“**DEVELOPMENT PLAN**”); and

WHEREAS, the Development Plan was subsequently amended by Ordinance No. 830, as adopted by the Town on the **19TH** day of **JUNE 2017**; and

WHEREAS, the Development Plan was subsequently amended by Ordinance No. 918, as adopted by the Town on the **26TH** day of **OCTOBER 2020**; and

WHEREAS, the Development Plan was subsequently amended by Ordinance No. 934, as adopted by the Town on the **23RD** day of **AUGUST 2021**; and

WHEREAS, the Development Plan was subsequently amended by Ordinance No. 959, as adopted by the Town on the **5TH** day of **DECEMBER 2022**; and

WHEREAS, the Development Plan was subsequently amended by Ordinance No. 994, as adopted by the Town on the **1ST** day of **APRIL 2024**; and

WHEREAS, the Development Plan was subsequently amended by Ordinance No. 997, as adopted by the Town on the **3RD** day of **JUNE 2024**; and

WHEREAS, the Development Plan was subsequently amended by Ordinance No. 1001, as adopted by the Town on the **19TH** day of **AUGUST 2024**, including a revised Development Plan attached thereto as EXHIBIT “A” and included therein for all references and purposes; and

WHEREAS, the Development Plan amended by Ordinance No. 1001, as adopted by the Town on the **19TH** day of **AUGUST 2024**, included specific provisions relating to the Property including that the Architectural Standards (further defined below) shall be “according to the development guidelines and standards for The Knolls Development” and that the amendment to

the Development Plan for the development of this portion of Westlake Entrada shall further reflect approval provided 959, as adopted by the Town on the 5TH day of **DECEMBER 2022**; and

WHEREAS, the Development Plan amended by Ordinance No. 1001, included conditions that apply to “all further applications for development that are submitted pursuant to the Entrada Development Plan be submitted to address and provide for the following in future site plan / applications: (a) [t]he need to provide off-street parking for delivery trucks to ensure fire lanes are open; and (b) [t]he provision of view corridors (visibility easements) to ensure the safety of residents backing out of driveways”; and

WHEREAS, the Developer intends to develop (or cause to be developed) the Property as the Development in strict accordance with the rules, regulations, and provisions as set forth in Ordinance No. **994**, approved by the Town on the 1ST day of **APRIL, 2024** and those certain terms and conditions for development as set forth in Ordinance No. 1001, approved by the Town Council on the 19TH day of **AUGUST, 2024**; and

WHEREAS, the Parties desire to clarify certain rules and regulations of the Ordinance No. 994, approved by the Town on the 1ST day of **APRIL, 2024**, for there to be certain assurance in the development requirements for the Property, including incorporating agreed upon standards for the installation of infrastructure and other public improvements as well as building materials and aesthetic methods for the design and construction of buildings and other structures within the Development, while recognizing the Developer’s reasonable expectations in the development of the Property, as more fully described herein.

NOW, THEREFORE, in consideration of the foregoing premises and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties covenant and agree as follows:

ARTICLE I.

DEFINITIONS

PARAGRAPH 1.01. “DEVELOPMENT” shall mean the construction of **51** single-family residential dwelling units and other accessory structures as approved in Ordinance No. 994, approved by the Town Council on the **1ST** day of **APRIL, 2024**, and subject to those certain terms and conditions for development as set forth in Ordinance No. 1001, approved by the Town Council on the **19TH** day of **AUGUST, 2024**.

PARAGRAPH 1.02. “PROPERTY” shall mean the **15.2 +/-** acres of real property, more or less, located wholly within Tarrant County and on which the Development shall be located.

PARAGRAPH 1.03. “TOWN ENGINEER” shall mean the person appointed by the Town and that is responsible for reviewing and approving engineering plans and related technical documents for the Town.

PARAGRAPH 1.04. “TOWN MANAGER” shall mean the Town Manager of the Town, or their designee.

ARTICLE II.

IMPROVEMENTS

PARAGRAPH 2.01. The Developer shall provide, at its own expense, all the engineering services required for the Development and Improvements (as defined in this Article II of this Agreement). Engineering services shall be performed by a professional engineer that is registered in the State of Texas. Such engineering services shall conform in all respects to the Town's engineering and design standards. Engineering services shall include, but shall not be limited to: surveys; designs; plans and profiles; estimates; construction supervision; and furnishing necessary documents in connection therewith as requested by the Town Manager and / or the Town Engineer. All engineering plans submitted shall be prepared by the Developer's Engineer, and such engineer plans shall be subject to the review, the approval, and the stamped acceptance of the Town Engineer. The Town Engineer's review and acceptance does not relieve the Developer or the Developer's engineer of the responsibility for design and construction. Further, the Developer's Engineer shall be a licensed engineer in the State of Texas.

PARAGRAPH 2.02. Construction of all the Improvements shall be in strict conformance with the plans to be prepared by the Developer (or on behalf of the Developer) and reviewed and accepted by the Town Engineer, in accordance with all policies, standards, and specifications that are adopted by the Town relating thereto. The Town Engineer's review and acceptance of the plans shall not be construed to limit or affect the Developer's responsibility for design and construction of the Improvements in whole or in part.

PARAGRAPH 2.03. The Developer shall employ, at its own expense, a qualified testing company, previously approved by the Town, to perform all testing of materials or construction that may be required by the Town and shall furnish copies of test results to the Town Engineer.

PARAGRAPH 2.04. At all times during the construction of the Improvements, the Town Manager shall have the right, but not the obligation or responsibility, to inspect the materials and

their workmanship; and the Developer shall ensure (or shall cause to be ensured) that all materials and work conform to the approved plans and specifications. Any material or work not conforming to the approved plans and the Town's engineering standards shall promptly be removed or replaced to the satisfaction of the Town Manager and / or the Town Engineer and at the sole expense of the Developer.

PARAGRAPH 2.05. The Developer shall be responsible for mowing all grass and weeds and otherwise reasonably maintaining all land within the Development which has not been sold to third parties. After 15 days' written notice from the Town Manager, and should the Developer fail in this responsibility to mow all grass and weeds, then at the sole discretion and option of the Town Manager, the Town Manager shall be authorized to: (i) issue (or cause to be issued) a citation to the Developer in the amount of \$2,000.00 ("TWO THOUSAND AND 00/100 UNITED STATES DOLLARS"), with each day that the grass and weeds are not mowed constituting a separate and distinct infraction; or (ii) the Town Manager may contract (or cause to be contracted) a landscaping company to mow all grass and weeds and, for this service, shall bill the Developer for costs. In the event the costs remain unpaid, the Town Manager shall issue a construction stop work order or withhold the issuance of any building permits until all costs are paid by the Developer.

PARAGRAPH 2.06. The obligations and responsibilities of the Developer as established by the terms and conditions of this Agreement for the construction of Improvements shall be performed and completed by the Developer no later than two (2) years from the issuance of the notice to proceed by the Town Manager for construction of Improvements, and proper application for acceptance of the Improvements shall be made by such date.

PARAGRAPH 2.07. The Improvements shall not be considered complete until the Town Engineer has certified to the Town, in writing, that the Improvements have been completed in strict conformance with the plans as accepted by the Town.

PARAGRAPH 2.08. Prior to the Town's acceptance of the Improvements, the Developer shall prepare and furnish a sworn affidavit, signed by an authorized representative of the Developer that the Improvements completed have been paid for, in full, by the Developer. The Developer shall be solely responsible for the information so provided on the affidavit. Said written certification shall be reviewed by the Town, but the Town, including its employees, shall assume no responsibility or liability to any party regarding the veracity of the information so provided.

PARAGRAPH 2.09. Prior to the Town accepting the Improvements, either in whole or in part, the Developer shall provide the Town with reproducible "as constructed" drawings, certified as accurate by the Town Engineer. All such drawings shall be provided in a digital format that is acceptable to the Town Engineer for review and approval.

PARAGRAPH 2.10. The Developer shall be solely responsible for all permit fees related to construction or installation of the Improvements. The permit fees shall include all fees contained in the Code of Ordinances of the Town and the most recent fee schedule adopted by the Town.

PARAGRAPH 2.11. Prior to commencing the construction of any Improvements agreed upon herein, the Developer shall acquire at its own expense clear and sufficient title to streets and easements, free and clear of any liens or encumbrances on all lands and facilities other than the Developer's development loan, if any, traversed by the proposed Improvements. All such streets and easements shall be private; and be permanently dedicated or conveyed to the Homeowners' Association ("**HOA**").

PARAGRAPH 2.12. Prior to the final acceptance of those portion of the Improvements that will be public by the Town, the Developer shall provide a maintenance bond for a period of two (2) years as set forth in the Code of Ordinances of the Town. The Developer shall submit the following for review, consideration, and possible action by the Town Council: Development covenants, conditions and restrictions to be enforced by the HOA, which should include HOA dues, duties and powers, transitional details providing for an orderly transition from the declarant to the HOA, and Town review of HOA dues to provide for adequacy of funding of maintenance of private infrastructure to Town standards by the HOA; homebuilder requirements and obligations; architectural design guidelines as described in Ordinance No. 994 , approved by the Town Council on the 1ST day of **APRIL, 2024**; and cluster mailbox designs and locations if applicable. Said items shall be approved by the Town Council prior the release of any building permits for the Development.

PARAGRAPH 2.13. In accordance with the Code of Ordinances of the Town, all existing overhead electric utility lines within and immediately adjacent to the Development shall be buried underground at the Developer’s sole expense to the extent permitted by the adjacent landowners. All overhead electric utility lines shall be buried prior to final acceptance of public improvements.

PARAGRAPH 2.14. There shall be no construction, grading, or other clearing activities permitted to commence until a notice to proceed is issued by the Town Manager.

PARAGRAPH 2.15. Prior to the issuance of the notice to proceed, the Developer shall submit (or shall cause to be submitted) an erosion control plan to the Town Manager and the Town Engineer for review and approval. The erosion control plan shall meet all requirements of the Code of Ordinances of the Town and additional conditions required by the Town Manager and / or the Town Engineer. Further, it is expressly acknowledged that there shall be no inspections scheduled,

and none shall be conducted unless and until the requisite Storm Water Pollution Prevention Plan (“SWPPP”) has been submitted and approved and the applicable inspections in relation to the SWPPP have been passed by the appropriate governmental agency or authority.

PARAGRAPH 2.16. In addition to the Town Manager, employees and agents of the Town shall have unrestricted access to the Development for official business, in perpetuity, including but not limited to construction inspections and general inspections of the condition of the Development and utilities maintenance.

PARAGRAPH 2.17. Prior to the issuance of any building permit, the Developer shall pay to the Town (or cause to be paid to the Town) the parkland dedication fees. The parkland dedication fees shall be calculated by the Town Manager and furnished to the Developer prior to making any application for a building permit.

PARAGRAPH 2.18. Prior to the issuance of any building permit for this Development, the Developer is expressly prohibited from grading (or causing to be graded) any individual lots for residential use. **However, the Developer is authorized to reasonably grade for streets and staging areas to be depicted on grading plans to be submitted to the Town Manager for review** and approval as set forth in Chapter 36 of the Code of Ordinances of the Town and any other applicable code, ordinance, or standard adopted by the Town. The Town Manager may issue a construction stop work order for any grading activities that are in violation of any federal or state law, any ordinances adopted by the Town, and any violations of the terms and conditions of this Agreement. The Town Manager shall be further authorized to issue (or cause to be issued) citations for any violation of any ordinances adopted by the Town regulating erosion and grading activities.

PARAGRAPH 2.19. The HOA (and its successor) shall be responsible for maintaining all public and private open space within the Development. The HOA (and its successor) shall also be

responsible for maintaining all property adjacent to the Development fronting Solana Boulevard, including the right-of-way, the easements between the lot line and the street curb, and all retaining walls, signs, and landscaping. All such public and private space as described in Paragraph 2.21 of this Agreement shall be submitted to the Town Manager for review and approval prior to submittal of a final plat by the Developer.

PARAGRAPH 2.20. Notwithstanding any of the paragraphs above in Article II of this Agreement, or any other paragraph, sentence, or clause of this Agreement:

A. Consistent with the conditions specified in Ordinance No. 1001, as approved by the Town Council on the **19TH** day of **AUGUST, 2024**, no detailed site plan shall be approved unless and until the Developer provides (or shall cause to be provided) such site plan to sufficiently depict to the satisfaction of the Town Manager and the Town Engineer that all “view corridors to ensure the safety of residents backing out of driveways” are provided on each lot.

i. All garage doors facing a street shall be setback from the front property line in accordance with the provisions for garages as set forth in the Westlake Ventanas Architectural Standards (as defined in Paragraph 4.01 of this Agreement.

B. All trees planted and located along both sides of the access easement for the private drive leading to the Town Hall shall be permanently protected and preserved by the HOA and its successor; such permanent protection and preservation shall be recorded by easement on the final plat and include a note expressing the same to the satisfaction of the Town Manager.

C. All visual screening walls to be located along Solana Boulevard shall be designed and constructed in accordance with the Entrada Design Guidelines as provided for in Ordinance No. 760, approved by the Town Council on the **14TH** day of **DECEMBER 2015** and subsequently

amended by Ordinance No. 933, approved by the Town Council on the **23RD** day of **AUGUST 2021**.

D. All fencing along streets and the private driveway leading to the Town Hall shall be wrought iron and black.

E. Chain-link and barbed-wire fencing is not allowed within any lot or portion of this Development.

F. The Parties acknowledge and agree that Developer has paid (or caused to be paid) an amount of \$10,000.00 (“TEN THOUSAND AND 00/100 UNITED STATES DOLLARS”) for each detached single-family residence to be constructed within the Development. The Parties also acknowledge and agree that such payment for each detached single-family residence to be constructed within the Development shall be exclusively and solely used for the impact to and the benefit of Westlake Academy. No further payment shall be required for the impact to and the benefit of Westlake Academy.

G. All private streets serving this development shall be paved in concrete or asphalt; all concrete paving materials shall meet applicable standards for engineering, public works, and public safety to the satisfaction of the Town Manager and Town Engineer.

ARTICLE III.

UTILITIES

PARAGRAPH 3.01. The Developer shall furnish proof that proper arrangements have been made for the installation of water, sanitary sewer, gas, electric, and duct bank utilities.

PARAGRAPH 3.02. The Developer shall install water facilities to serve all platted lots within the Development in accordance with plans and specifications prepared by the Developer's engineer and released by the Town for construction and in accordance with Chapter 82, Article IX, Water Facilities, of the Town Code of Ordinances, as amended, and any other local, state and federal regulations. The Developer shall be solely responsible for all construction costs, materials, and engineering.

PARAGRAPH 3.03. The Developer shall connect all water utilities to the Town utility system.

PARAGRAPH 3.04. The Developer shall install sanitary sewer collection facilities to service all platted lots within the Development. Sanitary sewer facilities shall be installed in accordance with the plans and specifications to be prepared by the Developer's engineer and released by the Town. Further, the Developer agrees to complete this installation in accordance with Chapter 82, Article X, Wastewater Facilities, of the Town Code of Ordinances, as amended, and any other local, state and federal regulations. The Developer shall be responsible for all construction costs, materials, engineering, and permits.

PARAGRAPH 3.05. The Developer shall install drainage facilities to service all platted lots within the Development in accordance with the plans and specifications to be prepared by the Developer's engineer and released by the Town for construction. The Developer shall adhere to all applicable provisions contained in Chapter 82, Article X, Drainage Facilities, of the Town Code of Ordinances, as amended. The Developer shall fully comply with all Environmental Protection Agency ("EPA"), Federal Emergency Management Authority ("FEMA") and Texas Commission on Environmental Quality ("TCEQ") requirements relating to the planning, permitting and management of storm water which may be in force at the time that development proposals are

being presented for approval to the Town. The Developer shall comply with all provisions of the Texas Water Code, as amended.

PARAGRAPH 3.06. In accordance with the Town’s Code of Ordinances, the Developer shall bury all utilities serving the development. Furthermore, all existing overhead utilities within, and adjacent to, the development shall be buried per the provisions contained within the Town’s Code of Ordinances prior to the final acceptance of public improvements.

ARTICLE IV.

BUILDING MATERIALS AND AESTHETICS

PARAGRAPH 4.01. All buildings and structures designed and constructed as part of this Development shall be in accordance with the architectural standards set forth in the Westlake Ventanas Design Guidelines (the “**ARCHITECTURAL STANDARDS**”). The Architectural Standards shall be the complete set of specific building material and aesthetics for all buildings, structures, landscaping, and other matters of aesthetics and visual quality as ordained by Ordinance No. 959 as approved by the Town Council on the 5TH day of **DECEMBER 2022** and by Ordinance No. 994 as approved by the Town Council on the 1ST day of **APRIL, 2024**, for architectural standards similar to The Knolls Development. The Westlake Ventanas Architectural Standards is attached hereto as EXHIBIT “C” for all purposes and references and all such standards shall be enforced by the Architectural Control Committee (the “ACC”) as described in the Architectural Standards. All future development or modifications to buildings and structures within the Development shall be in conformance with and shall adhere to the Architectural Standards. The Parties acknowledge and agree that the Architectural Standards satisfies all obligations of the

Developer to provide certain standards for architecture, landscape architecture, and other matters of aesthetics and visual quality as ordained by Ordinance No. 959 and Ordinance No. 994. The Parties further acknowledge and agree that the Development is an area of architectural significance as contemplated by the provisions found in Chapter 3000 of the Texas Government Code, as amended. Also, the covenant to develop and modify buildings and structures within the Development in accordance with the Architectural Standards is with the irrevocable and voluntary consent of the Developer in accordance with the provisions as found in Section 3000.002 (d) of the Texas Government Code, as amended. The Developer acknowledges and agrees that the consideration described herein shall constitute adequate consideration for such voluntary consent.

PARAGRAPH 4.02. Any request by the Developer, or their successors and assigns, or any property owner to modify or deviate from the Architectural Standards shall require a public hearing (e.g., a recommendation provided by the Planning and Zoning Commission and a decision made by the Town Council to approve, to approve with modifications, or to deny) pursuant to the Code of Ordinances for the Town. **FURTHER, IT IS ACKNOWLEDGED BY THE PARTIES THAT, WHERE THE PROVISIONS IN THE ARCHITECTURAL STANDARDS ARE SILENT, THE PROVISIONS IN THE PD 1-2, PLANNED DEVELOPMENT DISTRICT 1-2, AS AMENDED, SHALL GOVERN. WHERE THE PROVISIONS IN THE AFORESAID PD 1-2, PLANNED DEVELOPMENT DISTRICT 1-2, AS AMENDED, FOR WESTLAKE ENTRADA ARE SILENT, THEN THE APPLICABLE PROVISIONS OF THE CODE OF ORDINANCES FOR THE TOWN SHALL PREVAIL. UNLESS SPECIFICALLY STATED OTHERWISE IN ORDINANCE NO. 994 AS APPROVED BY THE TOWN COUNCIL ON THE 1ST DAY OF APRIL 2024, OR THE AFORESAID PD 1-2, PLANNED DEVELOPMENT DISTRICT 1-2 FOR WESTLAKE ENTRADA, IN THE EVENT OF**

ANY CONFLICT BETWEEN THOSE TWO (2) DOCUMENTS AND THE PROVISIONS OF THE CODE OF ORDINANCES FOR THE TOWN, THE PROVISIONS IN THE CODE OF ORDINANCES FOR THE TOWN SHALL GOVERN.

PARAGRAPH 4.03. With respect to any buildings and structures designed or constructed on the Property and as part of the Development pursuant to this Agreement, the Developer hereby waives any right, requirement or enforcement of the provisions of Section 3000.001-3000.005 of the Texas Government Code, as amended.

ARTICLE V.

COMPLETION OF AGREEMENT

This Agreement shall not be considered complete unless and until:

PARAGRAPH 5.01. All public improvements and infrastructure are finished, completed, and accepted by the Town.

PARAGRAPH 5.02. The lighting plan is reviewed, approved, and installed in accordance with said plan and accepted by the Town.

PARAGRAPH 5.03. All terms and conditions of this Agreement shall be satisfied.

PARAGRAPH 5.04. All Improvements shall be finished, completed, and accepted by the Town.

PARAGRAPH 5.05. The lighting plan as required and defined by applicable regulations in the Code of Ordinances of the Town is reviewed, approved, installed, and accepted by the Town.

PARAGRAPH 5.06. Record drawings for all streets, utilities, and other infrastructure in the Development, including street lighting, shall be (i) certified by the Developer’s engineer and (ii) accepted by and filed with the Town Engineer and provided in the following format:

- a. Three (3) sets of record drawings;
 - b. Digital record drawings with GIS spatial data and coordinates compatible with the latest version of ArcGIS Pro;
 - c. Digital record drawings compatible with the current version of AutoCAD;
- and;
- d. Digital record drawings in PDF format.

PARAGRAPH 5.07. All fees required by the Town and all other entities with review and permitting jurisdiction for the Improvements or the Development shall have been paid.

PARAGRAPH 5.08. Original Maintenance Bonds shall have been provided and any other bonds required for the completion of the Improvements.

PARAGRAPH 5.09. Lien release(s), affidavits of all bills paid, and claims have been provided.

PARAGRAPH 5.10. All obligations and responsibilities of the Developer under the terms and conditions of this Agreement, Ordinance No. 994 as approved by the Town Council on the 1ST day of **APRIL, 2024**, those certain terms and conditions for development as set forth in Ordinance No. 1001, approved by the Town Council on the 19TH day of **AUGUST, 2024**, and any other codes, ordinances, regulations or standards adopted by the Town have been met.

ARTICLE VI.

USE OF PUBLIC RIGHT-OF-WAY

PARAGRAPH 6.01. The Parties agree that the Developer may provide unique amenities within public right-of-way, including but not limited to landscape, irrigation, lighting, patterned concrete, and other similar features for enhancement of the Development, subject to the review and approval of the Town Manager. The Town Manager may defer review and approval of the provision of unique amenities within the public right-of-way to the Town Council for their decision (e.g., approve, approve with modifications, or deny). The Developer agrees to maintain these amenities until such responsibility is turned over to the HOA. The Developer, and their successors and assigns, acknowledge and understand that the Town is not responsible for the maintenance or replacement of these amenities under any circumstances, and further agrees to indemnify and hold harmless the Town and its employees and authorized agents from any and all damage, loss, or liability of any kind whatsoever by reason of injury to property or third person occasioned by the Developer's use of the public right-of-way with regard to these improvements and the Developer shall also, at their own cost and expense, defend and protect the Town and its employees and authorized agents against all such claims and demands.

ARTICLE VII.

DEFAULT, TERMINATION AND FAILURE BY THE DEVELOPER TO MEET VARIOUS DEADLINES AND COMMITMENTS

PARAGRAPH 7.01. FAILURE TO PAY TOWN TAXES OR FEES. An event of default shall occur under this Agreement if during the term hereof and after the expiration of any applicable notice and cure period any legally-imposed Town taxes or fees owed on, or generated

by, the Developer or one of its Affiliates with regard to the Development become delinquent and Developer or the Affiliate does not either: (i) pay such taxes and any associated penalties within 30 days of receipt of notification of such delinquency; or (ii) has not commenced the legal procedures for protest and / or contest of any such taxes within 30 days of receipt of notification of such delinquency. If the default has not been cured by such time, the Town shall have the right to terminate this Agreement by providing ten (10) days' written notice to the Developer and shall have all other rights and remedies that may be available to it under the law or in equity.

PARAGRAPH 7.02. VIOLATIONS OF TOWN CODE, STATE OR FEDERAL LAW.

An event of default shall occur under the terms and conditions of this Agreement if, during the term hereof and after the expiration of any applicable notice and cure period, that any written citation is issued to the Developer or their Affiliates due to the occurrence of a violation of a material provision of the Town Code of Ordinances with respect to the Development (including, without limitation, any violation of the Building Code, Fire Code, and any other violations related to the environmental condition of the Development or to matters concerning the public health, safety, or welfare) and such citation is not: (i) paid before it is delinquent; or (ii) the recipient of such citation does not properly follow the legal procedures for protest and/or contest of any such citation within the deadlines set forth in said citation. An event of default shall further occur under this Agreement if the Developer is in violation of any material state or federal law, rule or regulation on account of the Development, improvements in the Development or any operations thereon (including, without limitation, any violations related to: (i) the environmental condition of the Development; (ii) the environmental condition on other land or waters which is attributable to operations of the Development; or (iii) to other matters concerning the public health, safety or welfare related to the Development). Upon the occurrence of such default, the Town shall notify

the Developer in writing and Developer shall have (i) thirty (30) calendar days to cure such default or (ii) if Developer has diligently pursued cure of the default but such default is not reasonably curable within thirty (30) calendar days, then such amount of time as determined by both Parties mutually and in good faith necessary to cure such default. If the default has not been fully cured by such time, the Town shall have the right to terminate this Agreement with ten (10) days notice by providing written notice to the Developer and shall have all other rights and remedies that may be available to under the law or in equity.

PARAGRAPH 7.03. GENERAL BREACH. Unless stated elsewhere in this Agreement, the Developer shall be in default under this Agreement if the Developer breaches any material term or condition of this Agreement. In the event that such breach remains uncured after thirty (30) calendar days following receipt of written notice from the Town referencing this Agreement (or, if the Developer has diligently and continuously attempted to cure following receipt of such written notice but reasonably requires more than thirty (30) calendar days to cure, then such additional amount of time as is reasonably necessary to effect cure, as determined by both parties mutually and in good faith), the Town shall have the right to terminate this Agreement with ten (10) days' notice by providing written notice to Developer.

ARTICLE VIII.

NO INDEPENDENT CONTRACTOR OR AGENCY RELATIONSHIP

PARAGRAPH 8.01. It is expressly understood and agreed by the Parties hereto that the Developer shall not operate as a servant, contractor agent, representative or employee of the Town. The Developer shall have the exclusive right to control all details and day-to-day operations related

to its operations and obligations that it is required to perform under the terms and conditions of this Agreement, and shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors, subcontractors, licensees and invitees. The Developer acknowledges that the doctrine of respondeat superior will not apply as between the Town and the Developer, or the Town's officers, agents, employees, contractors, subcontractors, licensees, and invitees. Further, the Developer agrees that nothing contained in this Agreement shall be construed as the creation of a partnership or joint enterprise between the Town and the Developer of any kind.

ARTICLE IX.

INDEMNIFICATION AND INDEMNITY AGAINST NEGLIGENT DESIGN

PARAGRAPH 9.01. THE DEVELOPER, AT NO COST OR LIABILITY TO THE TOWN, AGREES TO DEFEND, INDEMNIFY AND HOLD THE TOWN, ITS OFFICERS, ELECTED AND APPOINTED OFFICIALS, AGENTS, ATTORNEYS, SERVANTS AND EMPLOYEES (TOGETHER WITH THE TOWN, EACH A "TOWN INDEMNIFIED PERSON") HARMLESS AGAINST ANY AND ALL THIRD PARTY CLAIMS, LAWSUITS, ACTIONS, COSTS AND EXPENSES RELATED THERETO, INCLUDING, BUT NOT LIMITED TO, THOSE FOR PROPERTY DAMAGE OR LOSS (INCLUDING ALLEGED DAMAGE OR LOSS TO THE DEVELOPER'S BUSINESS AND ANY RESULTING LOST PROFITS) AND/OR PERSONAL INJURY, INCLUDING DEATH, THAT RELATE TO, ARISE OUT OF OR ARE OCCASIONED BY (i) THE DEVELOPER'S BREACH OF ANY OF THE TERMS OR PROVISIONS OF THIS AGREEMENT; OR (ii) ANY ACT OR OMISSION OR INTENTIONAL MISCONDUCT

OF THE DEVELOPER, ITS OFFICERS, AGENTS, ASSOCIATES, EMPLOYEES, CONTRACTORS (OTHER THAN THE TOWN, OR ITS EMPLOYEES, OFFICERS, AGENTS, ASSOCIATES, CONTRACTORS OR SUBCONTRACTORS), OR SUBCONTRACTORS DUE OR RELATED TO, FROM, OR ARISING FROM THE OPERATION AND CONDUCT OF ITS OPERATIONS AND OBLIGATIONS OR OTHERWISE TO THE PERFORMANCE OF THIS AGREEMENT. NOTWITHSTANDING THE FOREGOING, NOTHING IN THIS SECTION SHALL REQUIRE DEVELOPER TO INDEMNIFY OR DEFEND FOR ANY CLAIMS ARISING OUT OF THE NEGLIGENCE OR WILLFUL MISCONDUCT OF THE TOWN ENGINEER OR ANY TOWN INDEMNIFIED PERSON.

PARAGRAPH 9.02. APPROVAL OF THE TOWN ENGINEER OR OTHER TOWN EMPLOYEE, OFFICIAL, CONSULTANT, EMPLOYEE, OR OFFICER OF ANY PLANS, DESIGNS OR SPECIFICATIONS SUBMITTED BY THE DEVELOPER UNDER THIS AGREEMENT SHALL NOT CONSTITUTE OR BE DEEMED TO BE A RELEASE OF THE RESPONSIBILITY AND LIABILITY OF THE DEVELOPER, ITS ENGINEER, CONTRACTORS, EMPLOYEES, OFFICERS, OR AGENTS FOR THE ACCURACY AND COMPETENCY OF THEIR DESIGN AND SPECIFICATIONS. SUCH APPROVAL SHALL NOT BE DEEMED TO BE AN ASSUMPTION OF SUCH RESPONSIBILITY OR LIABILITY BY THE TOWN FOR ANY DEFECT IN THE DESIGN AND SPECIFICATIONS PREPARED BY THE CONSULTING ENGINEER, ITS OFFICERS, AGENTS, SERVANTS, OR EMPLOYEES, IT BEING THE INTENT OF THE PARTIES THAT APPROVAL BY THE TOWN ENGINEER OR OTHER TOWN EMPLOYEE, OFFICIAL, CONSULTANT, OR OFFICER SIGNIFIES THE TOWN APPROVAL OF

ONLY THE GENERAL DESIGN CONCEPT OF THE IMPROVEMENTS TO BE CONSTRUCTED. IN THIS CONNECTION, THE DEVELOPER SHALL INDEMNIFY AND HOLD HARMLESS EACH TOWN INDEMNIFIED PERSON, FROM ANY LOSS, DAMAGE, LIABILITY OR EXPENSE ON ACCOUNT OF DAMAGE TO PROPERTY AND INJURIES, INCLUDING DEATH, TO ANY AND ALL PERSONS WHICH MAY ARISE OUT OF ANY NEGLIGENT DESIGN OF THE ENGINEER INCLUDED IN DESIGNS AND SPECIFICATIONS INCORPORATED INTO ANY IMPROVEMENTS CONSTRUCTED IN ACCORDANCE THEREWITH, AND THE DEVELOPER SHALL DEFEND AT ITS OWN EXPENSE ANY SUITS OR OTHER PROCEEDINGS BROUGHT AGAINST ANY TOWN INDEMNIFIED PERSON, ON ACCOUNT THEREOF, TO PAY ALL EXPENSES AND SATISFY ALL JUDGMENTS WHICH MAY BE INCURRED BY OR RENDERED AGAINST THEM, COLLECTIVELY OR INDIVIDUALLY, PERSONALLY OR IN THEIR OFFICIAL CAPACITY, IN CONNECTION HEREWITH; PROVIDED THAT DEVELOPER SHALL HAVE THE RIGHT TO SELECT COUNSEL OF ITS OWN CHOOSING AND SHALL HAVE ALL REQUISITE AUTHORITY TO ENTER INTO ANY SETTLEMENT AGREEMENT AT ANY TIME IN CONNECTION WITH ANY SUCH CLAIMS OR LIABILITIES FOR WHICH DEVELOPER OWES INDEMNITY UNDER THIS SECTION.

PARAGRAPH 9.03. NOTWITHSTANDING THE FOREGOING, NOTHING IN THIS ARTICLE SHALL REQUIRE THE DEVELOPER TO INDEMNIFY OR DEFEND ANY CLAIMS ARISING OUT OF THE NEGLIGENCE OR WILLFUL MISCONDUCT OF THE TOWN ENGINEER OR ANY TOWN INDEMNIFIED PERSON.

Building 7, Suite 7200

Westlake, Texas 76262

With a copy to: Boyle & Lowry, L.L.P.

Attn: L. Stanton Lowry

4201 Wingren Drive, Suite 108

Irving, Texas 75062

PARAGRAPH 10.02. ASSIGNMENT AND SUCCESSORS. The Developer may not assign, transfer or otherwise convey any of its rights or obligations under this Agreement to any other person or entity without the prior consent of the Town Council. Any lawful assignee or successor in interest of the Developer of all rights and obligations under this Agreement shall be deemed the “Developer” for all purposes under this Agreement.

PARAGRAPH 10.03. COMPLIANCE WITH LAWS, ORDINANCES, RULES AND REGULATIONS. This Agreement shall be subject to all applicable Federal, State and local laws, ordinances, rules and regulations, including, but not limited to, all provisions of the Town’s codes and ordinances, as amended.

PARAGRAPH 10.04. GOVERNMENTAL POWERS. It is acknowledged that, by execution of this Agreement, the Town does not waive or surrender any of its governmental powers or immunities that are outside of the terms, obligations, and conditions of this Agreement.

PARAGRAPH 10.05. NO WAIVER. The failure of either Party to insist upon the performance of any term or provision of this Agreement or to exercise any right granted hereunder shall not constitute a waiver of that Party’s right to insist upon appropriate performance or to assert any such right on any future occasion.

PARAGRAPH 10.06. VENUE AND JURISDICTION. If any action, whether real or asserted, at law or in equity, arises on the basis of any provision of this Agreement, venue for

such action shall lie in state courts located in Tarrant County, Texas or the United States District Court for the Northern District of Texas – Fort Worth Division. This Agreement shall be construed in accordance with the laws of the State of Texas.

PARAGRAPH 10.07. NO THIRD-PARTY RIGHTS. The provisions and conditions of this Agreement are solely for the benefit of the Town and the Developer, and any lawful assign or successor of the Developer, and are not intended to create any rights, contractual or otherwise, to any other person or entity.

PARAGRAPH 10.08. FORCE MAJEURE. It is expressly understood and agreed by the parties to this Agreement that if the performance of any obligation hereunder is delayed by reason of war, civil commotion, acts of God, inclement weather that prohibits compliance with any portion of this Agreement, or other circumstances which are reasonably beyond the control or knowledge of the party obligated or permitted under the terms of this Agreement to do or perform the same, regardless of whether any such circumstance is similar to any of those enumerated or not, the party so obligated or permitted shall be excused from doing or performing the same during such period of delay, so that the time period applicable to such requirement shall be extended for a period of time equal to the period such party was delayed.

PARAGRAPH 10.09. INTERPRETATION. In the event of any dispute over the meaning or application of any provision of this Agreement, this Agreement shall be interpreted fairly and reasonably, and neither more strongly for or against any party, regardless of the actual drafter of this Agreement.

PARAGRAPH 10.10. SEVERABILITY CLAUSE. It is hereby declared to be the intention of the Parties that any sections, paragraphs, clauses and phrases of this Agreement are severable, and if any phrase, clause, sentence, paragraph or section of this Agreement shall be declared unconstitutional or illegal by the valid judgment or decree of any court of competent

jurisdiction, such unconstitutionality or illegality shall not affect any of the remaining phrases, clauses, sentences, paragraphs or sections of this Agreement since the same would have been executed by the Parties without the incorporation in this Agreement of any such unconstitutional phrase, clause, sentence, paragraph or section. It is the intent of the parties to provide the economic incentives contained in this Agreement by all lawful means.

PARAGRAPH 10.11. CAPTIONS. Captions and headings used in this Agreement are for reference purposes only and shall not be deemed a part of this Agreement.

PARAGRAPH 10.12. ENTIRETY OF AGREEMENT. This Agreement, including any attachments attached hereto, including the Requirements for Contractor’s Insurance and any documents incorporated herein by reference, and the Economic Development Program Agreement, contain the entire understanding and Agreement between the Town and the Developer, and any lawful assign and successor of the Developer, as to the matters contained herein. Any prior or contemporaneous oral or written Agreement is hereby declared null and void to the extent in conflict with any provision of this Agreement. Notwithstanding anything to the contrary herein, this Agreement shall not be amended unless executed in writing by both parties and approved by the Town Council of the Town in an open meeting held in accordance with Chapter 551 of the Texas Government Code.

PARAGRAPH 10.13. COUNTERPARTS. This Agreement may be executed in multiple counterparts, each of which shall be considered an original, but all of which shall constitute one instrument.

SIGNATURES ON FOLLOWING PAGE

DEVELOPER:

By: _____

Frank Bonilla, Manager Otter Partners, LP

TOWN OF WESTLAKE, TEXAS

By: _____

Wade Carroll, Town Manager

ATTEST:

Dianna Buchanan, Town Secretary

Stan Lowry, Town Attorney

EXHIBIT "B"

PROPERTY DESCRIPTION

BEING, all of that 15.175 acre (661,028 square foot) tract of land situated in the C.M. Throop Survey, Abstract 1510, in the Town of Westlake, Tarrant County, Texas; being part of that tract of land described in Special Warranty Deed to Texas Holdco LLC as recorded in Instrument Nos. D210070861 and D210070862 of the Official Public Records of Tarrant County, Texas; and being part of Lot 2R1, Block 1, Westlake/Southlake Addition No. 1, an addition to the Town of Westlake as recorded in Instrument Number D209080990 of the Plat Records of Tarrant County, Texas; said 15.175 acre tract of land being more particularly described by metes and bounds as follows:

COMMENCING, at a 1/2-inch iron rod with "HUITT ZOLLARS" cap found at the southeast corner of said Lot 2R1; said point being the southwest corner of Lot 1R2, Block 1, Westlake/Southlake Park Addition No. 1, an addition to the Town of Westlake as recorded in Instrument Number D218212046 of the Plat Records of Tarrant County, Texas; said point being the beginning of a curve to the right in the northeast right-of-way line of Solana Boulevard (variable width right-of-way);

THENCE, in a northwesterly direction, with said curve to the right in the southwest line of said Lot 2R1 and the northeast line of said Solana Boulevard, an arc length of 239.83 feet, having a radius of 772.00 feet, a central angle of 17 degrees 47 minutes 58 seconds, and a chord which bears North 72 degrees 59 minutes 47 seconds West, 238.87 feet to the POINT OF BEGINNING;

THENCE, with the southwest line of said Lot 2R1 and the northeast line of said Solana Boulevard, the following three (3) courses and distances:

In a northwesterly direction, continuing along said curve to the right, an arc length of 346.60 feet, having a radius of 772.00 feet, a central angle of 25 degrees 43 minutes 26 seconds, and a chord which bears North 51 degrees 14 minutes 05 seconds West, 343.70 feet to a 1/2-inch iron rod with "HUITT ZOLLARS" cap found for corner;

North 38 degrees 22 minutes 22 seconds West, a distance of 233.71 feet to a 1/2-inch iron rod found for corner at the beginning of a tangent curve to the left;

In a northwesterly direction, along said curve to the left, an arc length of 136.18 feet, having a radius of 1,428.00 feet, a central angle of 05 degrees 27 minutes 50 seconds, and a chord which bears North 41 degrees 06 minutes 17 seconds West, 136.12 feet to a point at the most southerly southwest corner of said Lot 2R1; said point being the southeast corner of Block I, Westlake Entrada, an addition to the Town of Westlake as recorded in Instrument Number D217209886 of the Plat Records of Tarrant County, Texas;

THENCE, North 00 degrees 32 minutes 55 seconds West, with the west line of said Lot 2R1 and the east lie of said Block I, a distance of 168.55 feet to an angle point for corner;

THENCE, North 51 degrees 27 minutes 05 seconds East, continuing with the west line of said Lot 2R1, a distance of 694.14 feet to a point for corner;

THENCE, South 38 degrees 32 minutes 55 seconds East, departing the west line of said Lot 2R1, a distance of 14.21 feet to a point for corner at the beginning of a non-tangent curve to the left;

THENCE, in a southeasterly direction, along said curve to the left, an arc length of 193.75 feet, having a radius of 106.08 feet, a central angle of 104 degrees 38 minutes 52 seconds, and a chord which bears South 04 degrees 28 minutes 37 seconds East, 167.92 feet to a point for corner;

THENCE, South 60 degrees 27 minutes 21 seconds East, a distance of 637.72 feet to a point for corner in an east line of said Lot 2R1 and the west line of said Lot 1R2;

THENCE, South 29 degrees 41 minutes 02 seconds West, with the east line of said Lot 2R1 and the west line of said Lot 1R2, a distance of 346.87 feet to a point for corner;

THENCE, South 44 degrees 43 minutes 11 seconds West, departing the east line of said Lot 2R1 and the west line of said Lot 1R2, a distance of 91.30 feet to a point for corner at the beginning of a tangent curve to the right;

THENCE, in a southwesterly direction, along said curve to the right, an arc length of 201.17 feet, having a radius of 314.00 feet, a central angle of 36 degrees 42 minutes 29 seconds, and a chord which bears South 63 degrees 04 minutes 26 seconds West, 197.75 feet to a point for corner;

THENCE, South 81 degrees 25 minutes 42 seconds West, a distance of 72.18 feet to a point for corner at the beginning of a tangent curve to the left;

THENCE, in a southwesterly direction, along said curve to the left, an arc length of 137.15 feet, having a radius of 136.00 feet, a central angle of 57 degrees 46 minutes 46 seconds, and a chord which bears South 52 degrees 32 minutes 22 seconds West, 131.41 feet to a point for corner;

THENCE, South 23 degrees 39 minutes 01 seconds West, a distance of 68.43 feet to the POINT OF BEGINNING and containing an area of 15.175 acres or 661,028 square feet of land, more or less.

Exhibit "C" - Development Standards

WESTLAKE VENTANAS F I N A L DEVELOPMENT STANDARDS January 2025

This document is intended to be a specific set of development terms and principles proposed for the development of Westlake Ventanas, a 15.2-acre tract parcel that fronts on Solana Boulevard and is located between the Entrada Development and Solana Boulevard.

GENERAL INFORMATION

Developer:	Entrada Villa Partners, LLC
Community:	Gated enclave of 51 custom villa homes walkable to Entrada
Product Type:	Luxury Custom Villa Homes (a minimum of 3,600 square feet) 1 to 3 story massing, 2 to 4-car garages Higher security and lower maintenance typologies
Home Pricing:	Estimated to be \$2.4 to \$4.5 million
Sales Program:	Lot sales to local custom home builders with a limited offering to individuals
Access:	Primary Gated Entrada from Solana Boulevard. Secondary Fire Access/Egress on to Campus Circle / Parking Lot
Community Amenities:	Internal Dog Park and Water Features
Community Fencing:	The community's Solana Boulevard frontage will be a continuation of the Entrada Screening and Landscape Pattern. The fence shall be located at the boundary of the Solana Boulevard buffer area and the development zone.

COMMUNITY INFORMATION

Homeowners' Association:	The community will be governed by a to-be-established Homeowner's Association ("HOA") that will be responsible for common area maintenance, private street maintenance, front yard maintenance and enforcing the Design Guidelines for the community.
Home Builders:	An Approved Home Builder program will be established by the Developer with specific criteria that will limit home building to only approved custom home builders.

Exhibit "C" - Development Standards

Design Guidelines: The Westlake Ventanas are intended to replace the standards for architecture, landscape architecture and other matters of aesthetics found in the existing PD 1-2 (Entrada) Design Guidelines and to incorporate distinct standards for architecture, landscape architecture and other matters of aesthetics that will produce a physical outcome and a quality of construction similar in style and nature to the Knolls for the land incorporated within Westlake Ventanas.

Architectural Review: An Architectural Control Committee ("ACC") will be established through the HOA/Declarant that has approval authority over house designs prior to submittal for permitting. The ACC shall provide the Town of Westlake with a formal letter of approval of each house design when submitting to the appropriate department (or departments) for approval. Nothing contained within these Design Guidelines or the imposed by the ACC shall eliminate any building code requirements (including electrical, mechanical and plumbing), fire code, or other life safety requirements as adopted by the Town of Westlake.

LOT SPECIFICATIONS

Lot Density: 51 residential lots with typical lot dimensions of 60' x 110'.

Lot Coverage: To follow PD 1-2 (Entrada) Standards

HOUSE SPECIFICATIONS

Minimum Size: All residences shall be a minimum of 3,600 square feet of air-conditioned living space.

Massing: To Follow either the established Entrada Design Guidelines or as amended for this phase of development only.

Building Height: Building height shall be limited to 45 feet to peak of highest rooftop.

Building Setbacks: Minimum building setbacks (i.e., build-to lines) shall be 10 feet from the front and rear property lines and 5 feet from the side property lines.

Garages: To follow the established Entrada Design Guidelines, as applicable, or as amended for this phase of development only. In the event of any conflict between the Entrada Design Guidelines and these Design Guidelines established for Westlake Ventanas, these Design Guidelines shall control in matters of aesthetics for garages.

Roofs: Roofing materials shall be limited to concrete or clay tile, slate, or standing seam metal.

Exterior Walls: Exterior walls shall have horizontal and vertical articulation or architectural delineation on all building elevations (e.g., the front, sides, and rear).

Exhibit "C" - Development Standards

Fences: All homes may have lot line fences comprised of metal picket. Only privacy fences comprised of metal picket shall be permitted on interior side lot lines to provide privacy to outdoor patio and pool areas.

Exterior Lighting: All exterior lighting shall be subdued, indirect, and comply with Town of Westlake Code of Ordinances, including all provisions for Dark Skies.

PARKS AND OPEN SPACE

Open Space: In following the Entrada standards, the Community will be providing Open Space as prescribed within PD 1-2. These open spaces include the two water features at the main entrance and the dog park near Solana Boulevard.

Parkland Dedication: The open space described in these Design Guidelines shall satisfy all requirements for open space as mandated by PD 1-2 (Entrada) and any other requirements as found in the Town of Westlake Code of Ordinances, including the provisions found in Sec. 82-389 of the Town of Westlake Code of Ordinances. There shall be no other obligations of the Developer, the HOA and their successors and assigns to fulfill any requirements of Sec. 82-389 of the Town of Westlake Code of Ordinances and its successor codes or ordinances. Westlake Ventanas is part of PD 1-2 (Entrada) and benefits from the prior Parkland Dedication made by Maguire Partners as part of the 322 total residential unit count prescribed by zoning.

STREETS, PARKING, SIDEWALKS, TRAILS

Streets: All community streets in Westlake Ventanas shall be private and maintained by the HOA and constructed of asphalt with concrete outer bands and/or mountable curbs fronting the lots. All streets be no less than 31 feet in width (back-to-back) including a mountable concrete curb on both sides within a 31' ROW.

Utility Easement: In addition to the street width, there will be a utility easement of up to 10 feet in width on each side of the street to provide for the Duct Bank.

Visitor Parking: The community is located immediately adjacent to an existing 401-space surface parking lot that can be utilized through valet for larger functions to be held by homeowners. In a departure from Entrada, the 31-foot-wide streets allow for safe and convenient on-street parking as needed.

Streetlights: Street lighting shall be privately-owned and maintained by the HOA, and shall be located at all corners and intersections. Lights shall be low pedestal type fixtures that comply with all Town of Westlake Code of Ordinances as well as follow Dark Skies Ordinance adopted by the Town of Westlake.

Exhibit "C" - Development Standards

Sidewalks: No sidewalks will be constructed within Westlake Ventanas.

UTILITIES

Water: Town of Westlake

Sewer: Town of Westlake

Storm Water: Combination of Curb and Gutter collection, underground storm water pipes, detention pond(s), and connection to the existing public street storm water system

Duct Bank: A Duct Bank system shall be installed by the Developer in a utility easement throughout the community as required by Town of Westlake Code of Ordinances. The home builder shall tie into the Duct Bank prior to making any request for a Final Inspection.

Development Setbacks: Minimum building setbacks shall be 10 feet from the front and rear property lines and 5 feet from the side property lines.

TREE MITIGATION

Tree Survey: A tree survey of the site was conducted by BGE in 2023 and is included with the completed PD Site Plan submittal made.

Tree Mitigation: The development plan has been carefully designed to minimize grade and tree disturbance other than for the creation of the private street and utility easement areas

ADMINISTRATIVE

Project Consultants:	Environmental	Envirophase
	Geotech	Alpha Environmental
	Site Plan	BGE
	Civil Engineering	BGE
	Survey	BGE
	Tree Survey	BGE

Disclaimer: This Development Plan is not intended to be, and does not constitute, a binding agreement by either party, nor an agreement by either party to enter into a binding agreement but is merely intended to specify certain of the proposed terms and conditions of a Development Plan or Agreement contemplated herein.

Exhibit "C" - Development Standards

**SUPPLEMENTAL DESIGN GUIDELINES TO BE INCLUDED AS
AMENDMENT TO EXISTING ENTRADA DESIGN GUIDELINES**

Exhibit "C" - Development Standards

WESTLAKE VENTANAS SUPPLEMENTAL DESIGN GUIDELINES

Any notice or information required to be submitted to the ACC under these Design Guidelines hereunder will be submitted to the Westlake Ventanas ACC at 65 Andorra, Westlake TX 76262.

Background

Westlake Ventanas is a master planned community located in Tarrant County, Texas. Lots _____ (hereinafter "Westlake Ventanas") a subdivision in Tarrant County Texas, according to the plat Recorded under Document No. _____ (the "**Property**"), are subject to the terms and provisions of that certain Declaration of Covenants, Conditions and Restrictions for Westlake Ventanas, recorded in the Official Public Records of Tarrant County, Texas (the "**Declaration**"). Capitalized terms used but not defined in these Design Guidelines shall have the meaning subscribed to such terms in the Declaration.

Architectural Control Committee (ACC)

Article 7 of the Declaration includes procedures and criteria for the construction of improvements within the Westlake Ventanas community. Section 7.01 of the Declaration provides that no Improvements may be erected, placed, constructed, painted, altered, modified or remodeled on any Lot, and no Lot may be re-subdivided or consolidated with other Lots or Property, by anyone other than Declarant, without prior written approval of the ACC.

The ACC consists of three (3) members who have been appointed by **Otter Partners, LP a Texas Limited Liability Corporation** (the "**Declarant**"). At least one member of the ACC shall be a licensed architect registered in the state of Texas. As provided in Article 7 of the Declaration, the Declarant has a substantial interest in ensuring that Improvements within Westlake Ventanas maintain and enhance Declarant's reputation as a community developer and do not impair Declarant's ability to market and sell all or any portion of the community. The members of the ACC appointed by Declarant act solely in Declarant's interest and shall owe no duty to any other Owner or Westlake Ventanas Residential Community, Inc. (the "**Association**").

Governmental Requirements

Governmental ordinances and regulations and the Planned Development zoning for Westlake Ventanas are applicable to all Lots. It is the responsibility of each Owner to obtain all necessary permits and inspections. Compliance with these Design Guidelines is not a substitute for compliance with the applicable ordinances and regulations. Please be advised that these Design Guidelines do

Exhibit "C" - Development Standards

not list or describe each requirement which may be applicable to a Lot within Westlake Ventanas. Each Owner is advised to review all encumbrances affecting the use and improvement of their Lot prior to submitting plans to the ACC for approval. Furthermore, approval by the ACC should not be construed by the Owner that any Improvement complies with the terms and provisions of all encumbrances which may affect the Owner's Lot. Certain encumbrances may benefit parties whose interests are not addressed by the ACC. All construction must meet applicable regulations of Federal, State, and local requirements, including but not limited to, applicable zoning, building construction codes, fire sub-code necessary for the intended use of any Lot.

The ACC shall bear no responsibility for ensuring plans submitted to the ACC comply with Applicable Law. It is the responsibility of the Owner to secure any required governmental approvals prior to construction on such Owner's Lot.

Interpretation

In the event of any conflict between these Design Guidelines and the Declaration, the Declaration shall control. Capitalized terms used in these Design Guidelines and not otherwise defined in this document shall have the same meaning as set forth in the Declaration.

Amendments

The ACC may amend these Design Guidelines from time to time. All amendments shall become effective upon publication to the community website. Amendments shall not apply retroactively so as to require modification or removal of work already approved and completed or approved and in progress. It is the responsibility of each Owner to ensure that they have the most current edition of the Design Guidelines and every amendment thereto.

Legal Description for the Westlake Ventanas Design Guideline Supplement

BEING, all of that 15.175 acre (661,028 square foot) tract of land situated in the C.M. Throop Survey, Abstract 1510, in the Town of Westlake, Tarrant County, Texas; being part of that tract of land described in Special Warranty Deed to Texas Holdco LLC as recorded in Instrument Nos. D210070861 and D210070862 of the Official Public Records of Tarrant County, Texas; and being part of Lot 2R1, Block 1, Westlake/Southlake Addition No. 1, an addition to the Town of Westlake as recorded in Instrument Number D209080990 of the Plat Records of Tarrant County, Texas; said 15.175 acre tract of land being more particularly described by metes and bounds as follows:

COMMENCING, at a 1/2-inch iron rod with "HUITT ZOLLARS" cap found at the southeast corner of said Lot 2R1; said point being the southwest corner of Lot 1R2, Block 1, Westlake/Southlake Park Addition No. 1, an addition to the Town of Westlake as recorded in Instrument Number D218212046 of the Plat Records of Tarrant County, Texas; said point being the beginning of a curve to the right in the northeast right-of-way line of Solana Boulevard (variable width right-of-way);

Exhibit "C" - Development Standards

THENCE, in a northwesterly direction, with said curve to the right in the southwest line of said Lot 2R1 and the northeast line of said Solana Boulevard, an arc length of 239.83 feet, having a radius of 772.00 feet, a central angle of 17 degrees 47 minutes 58 seconds, and a chord which bears North 72 degrees 59 minutes 47 seconds West, 238.87 feet to the POINT OF BEGINNING;

THENCE, with the southwest line of said Lot 2R1 and the northeast line of said Solana Boulevard, the following three (3) courses and distances:

In a northwesterly direction, continuing along said curve to the right, an arc length of 346.60 feet, having a radius of 772.00 feet, a central angle of 25 degrees 43 minutes 26 seconds, and a chord which bears North 51 degrees 14 minutes 05 seconds West, 343.70 feet to a 1/2-inch iron rod with "HUITT ZOLLARS" cap found for corner;

North 38 degrees 22 minutes 22 seconds West, a distance of 233.71 feet to a 1/2-inch iron rod found for corner at the beginning of a tangent curve to the left;

In a northwesterly direction, along said curve to the left, an arc length of 136.18 feet, having a radius of 1,428.00 feet, a central angle of 05 degrees 27 minutes 50 seconds, and a chord which bears North 41 degrees 06 minutes 17 seconds West, 136.12 feet to a point at the most southerly southwest corner of said Lot 2R1; said point being the southeast corner of Block I, Westlake Entrada, an addition to the Town of Westlake as recorded in Instrument Number D217209886 of the Plat Records of Tarrant County, Texas;

THENCE, North 00 degrees 32 minutes 55 seconds West, with the west line of said Lot 2R1 and the east line of said Block I, a distance of 168.55 feet to an angle point for corner;

THENCE, North 51 degrees 27 minutes 05 seconds East, continuing with the west line of said Lot 2R1, a distance of 694.14 feet to a point for corner;

THENCE, South 38 degrees 32 minutes 55 seconds East, departing the west line of said Lot 2R1, a distance of 14.21 feet to a point for corner at the beginning of a non-tangent curve to the left;

THENCE, in a southeasterly direction, along said curve to the left, an arc length of 193.75 feet, having a radius of 106.08 feet, a central angle of 104 degrees 38 minutes 52 seconds, and a chord which bears South 04 degrees 28 minutes 37 seconds East, 167.92 feet to a point for corner;

THENCE, South 60 degrees 27 minutes 21 seconds East, a distance of 637.72 feet to a point for corner in an east line of said Lot 2R1 and the west line of said Lot 1R2;

THENCE, South 29 degrees 41 minutes 02 seconds West, with the east line of said Lot 2R1 and the west line of said Lot 1R2, a distance of 346.87 feet to a point for corner;

THENCE, South 44 degrees 43 minutes 11 seconds West, departing the east line of said Lot 2R1 and the west line of said Lot 1R2, a distance of 91.30 feet to a point for corner at the beginning of a tangent curve to the right;

THENCE, in a southwesterly direction, along said curve to the right, an arc length of 201.17 feet, having a radius of 314.00 feet, a central angle of 36 degrees 42 minutes 29 seconds, and a chord which bears South 63 degrees 04 minutes 26 seconds West, 197.75 feet to a point for corner;

Exhibit "C" - Development Standards

THENCE, South 81 degrees 25 minutes 42 seconds West, a distance of 72.18 feet to a point for corner at the beginning of a tangent curve to the left;

THENCE, in a southwesterly direction, along said curve to the left, an arc length of 137.15 feet, having a radius of 136.00 feet, a central angle of 57 degrees 46 minutes 46 seconds, and a chord which bears South 52 degrees 32 minutes 22 seconds West, 131.41 feet to a point for corner;

THENCE, South 23 degrees 39 minutes 01 seconds West, a distance of 68.43 feet to the POINT OF BEGINNING and containing an area of 15.175 acres or 661,028 square feet of land, more or less.

Exhibit "C" - Development Standards

CHAPTER ONE

ARCHITECTURAL DESIGN

Overall Intent of the Architectural Guidelines

The developer encourages the design of homes that are appropriate for the community's setting and location and to complement the surrounding natural environment. **While there are no stylistic restrictions** in Westlake Ventanas, homes should be visually connected through the use of similar materials and colors. These guidelines should be read in tandem with the Town of Westlake's Building Quality Manual. In the event where there is a conflict, the Building Quality Manual will rule.

Guideline Basics

The essential mission of these Guidelines is to protect and enhance the value of the entire community. They have been created with the best of intent and draw from the experience of its authors and numerous successful communities of similar quality. The ACC has broad capacity to interpret the Guidelines to either stiffen or relax requirements based on its mission to realize the intent of these Guidelines over and above the enforcement of the quantitative requirements PROVIDED THE INTENT OF THE ZONING AND BUILDING QUALITY MANUAL ARE ENFORCED.

Interpretations of the ACC shall always comply with the Town of Westlake's Building Quality Manual, Zoning and Ordinances.

. The applicable departments of the Town of Westlake shall only be responsible for reviewing and approving the design and construction of homes for compliance with the building code (including the electrical, mechanical and plumbing codes), the fire codes and any other life safety codes as adopted by the Town.

Where this document, these Design Guidelines for Westlake Ventanas, does not reference any paragraph, sentence, clause or other provision of Ordinance 760, these Design Guidelines for Westlake Ventanas shall prevail and govern. These Design Guidelines shall not prevail over any provision of the Town of Westlake Code of Ordinances unless specifically expressed and provided for such herein.

Exhibit "C" - Development Standards

Maximum Height Limitation

Homes at Westlake Ventanas are generally to be limited to three stories and/or 45 feet in height (above finished grade). Single story homes are also welcomed.

Homes at Westlake Ventanas are required to be composed of attached simple volumes that move up and down with the topography. Therefore, the Maximum Building Height is determined at multiple points on each home on a volume by volume basis. The ACC will have final say in the determination of what constitutes the delineation between volumes.

Unless otherwise approved in advance by the ACC, no building or residential structure may exceed three stories or forty-five feet (45') in height as measured from existing grade to the midpoint of the highest pitched or hipped roof above. The measurement locations will be chosen by the ACC based upon which points are most restrictive, however the measurement shall exclude grades where walk out basements exist.

Views are neither guaranteed, preserved, nor protected within Westlake Ventanas.

Exhibit "C" - Development Standards

General Massing Requirements

The general form and massing of homes in Westlake Ventanas are to reflect a residential scale that achieves the following:

- Responds to natural conditions such as topography
- Works within the structural limits of stone, wood and other natural materials.
- Is composed of multiple, simple volumes with discrete roofs.

The design for a home in Westlake Ventanas must therefore accomplish the following:

- Appear residential in scale.
- Be composed of multiple, simple volumes as appropriate for the scale of a home.
- Arrange those volumes with balance and rhythm.
- Incorporate roof forms that step down from a dominant, usually central volume.
- Express the nature and organization of the home's interior spaces through articulation of volumes and fenestration patterns.
- Step up or down with grade using variation in the heights of foundations, walls and roof forms such that the structure appears integrated into its natural setting.
- Include covered and/or uncovered spaces such as balconies, courtyards and porches that enhance the composition of the larger volumes of the home.
- Include the garage in the composition such that it appears subordinate to the rest of the home.

Exhibit "C" - Development Standards

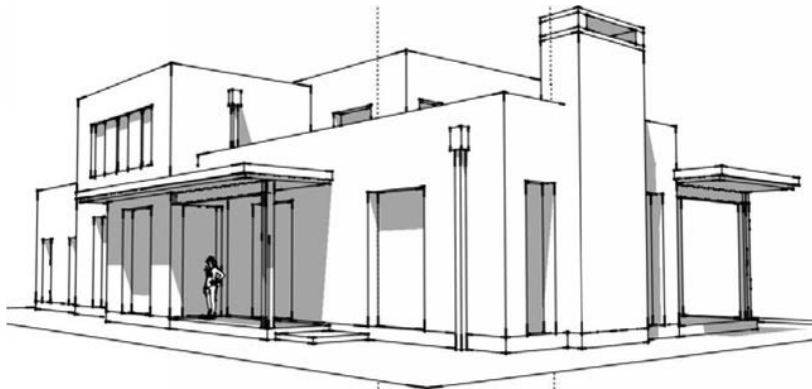
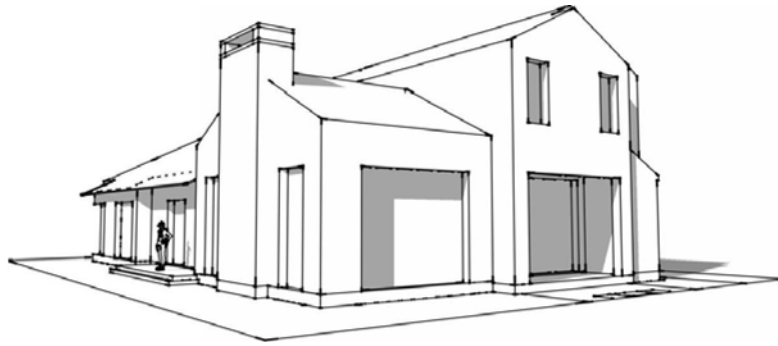
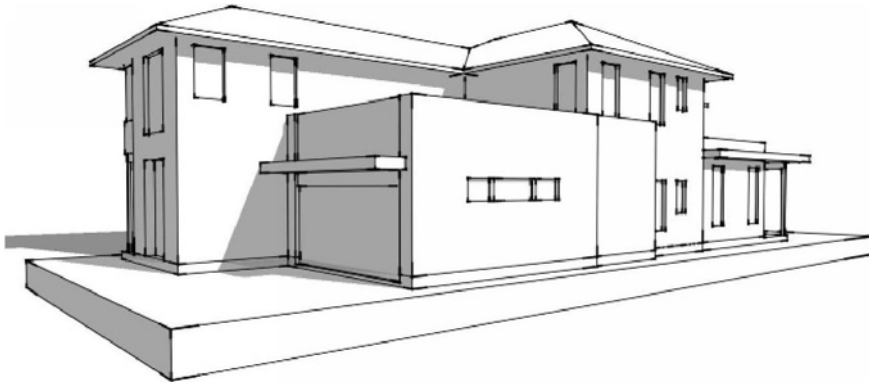


Exhibit "C" - Development Standards



Roofs

Roofs are generally required to be simple in form and appear logical to construct. Their design should not appear to be an afterthought to the design of the floor plan.

Roof forms are limited to gable, shed and hip forms with dormers as secondary forms. Flat and curved roofs are also acceptable.

Mansard roofs are not permitted.

No more than 50% of the total roof may be designed as a single plane. No more than 75% of the roof may be designed as a single gable; the ACC may reduce this maximum requirement for particularly large homes as it deems necessary. A shed dormer may not exceed 2/3 of the area of the roof plane to which it is attached.

Dormers must be functional to allow actual window openings and head heights for upper-level spaces as well as bring light into first floor spaces; "false" dormers are prohibited.

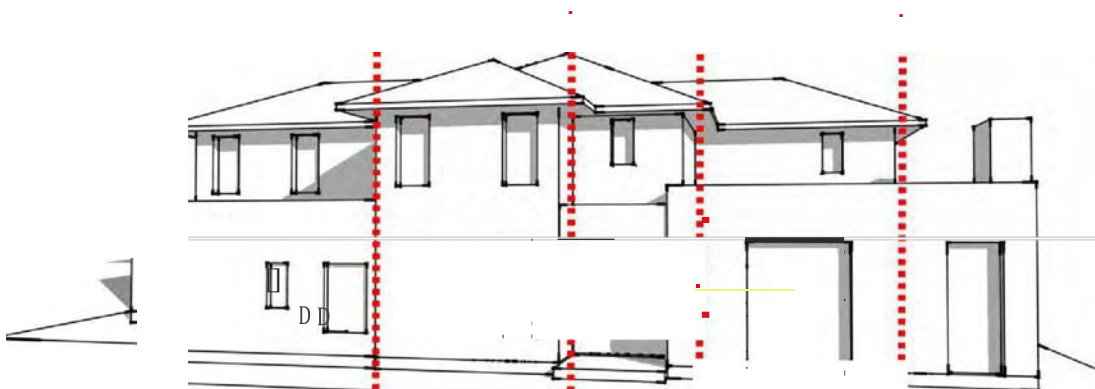


Exhibit "C" - Development Standards

THE ABOVE DIAGRAM ILLUSTRATES ROOF BREAKS

Garages

Front facing garage doors are allowed if located, a minimum of 20 feet from the front property line. Side entry garages and/or motor court setting with a side entry garage can be constructed on the build line (10 feet from property line). Car ports are permissible provided that they are architecturally consistent with the rest of the home and landscaping is used to screen the paved area. Car ports should not be used to reduce or eliminate the garage requirement.

Provide architectural elements such as recessed doors, awnings and single-stall doors to articulate garage elevations.



Chimneys and Other Vertical Elements

Chimneys are important elements in the overall formal composition of homes at Westlake Ventanas. They are required to be expressed as if they are serving a wood burning fireplace in scale and height.

When adjacent to an exterior wall, the chimney must start at grade, be offset from the exterior wall a minimum of 1 foot and be of sufficient height to serve a wood burning fireplace, even in situations when there is a gas appliance in lieu of a traditional firebox. Spark arrestors must be shielded from view with an architectural chimney cap. Vents for direct vent fireplaces should not face the street.

Plumbing vents should be minimally visible from the street as determined by the ACC. If there must be a vent visible to the street, then it should blend in color with the roof.

Exhibit "C" - Development Standards



Detached / Ancillary Structures

Detached garages, guest houses, home offices, art studios, playhouses, garden sheds and other ancillary structures are encouraged. They must, however, be designed as part of a composition with the primary structure, subordinate in scale and consistent with its architectural vocabulary. Further, no detached: ancillary structure shall be used for any purpose or activity that is inconsistent with or prohibited by, any provision of zoning for Westlake Ventanas.

In most circumstances, the Enclosed Area of detached structures shall be limited to 400 square feet. In no event will the total square footage of any approved accessory structure be interpreted to reduce the minimum square footage requirements of the principal residential structure as set forth in these Design Guidelines.

Detached structures must be consistent in massing, materials and style with the primary structure and are, in general, also subject to these Guidelines. Ancillary structures and buildings must be set back a minimum of 5 ft. from the side and rear property line and at the build line on the front of the lot and not within any easements.

Fenestration

Windows and doors must be designed in scales and patterns that are both complimentary to the form of the home and expressive of the internal organization of the home. In combination with the form of the various components of the building, an observer of the exterior of the home should largely be able to identify the functions of the rooms behind the windows.

Window and door patterns are to be characterized by simple forms and a high level of detail.

Exhibit "C" - Development Standards

Front doors are to be of high quality and craft and consistent with the requirements for simple forms and patterns for the rest of the architecture of homes in Westlake Ventanas.

Windows

Rectangular or square windows are encouraged. Special exceptions may be granted by the ACC for horizontal or banded windows when deemed appropriate to the style of the proposed architecture provided that the style meets ACC approval. Arched windows are permissible only in areas such as stone walls where they are consistent with a structural or load bearing expression. Glass block is prohibited for all exterior applications.

Double hung, single hung, casement, awning and fixed windows are appropriate. Divided lite patterns are encouraged. The ACC may also approve - as an alternative - gangs of fixed or single hung windows that create a similar effect. "Snap-in" or removable mullions are not permitted.

Approved window materials include wood, metal-clad, steel, aluminum or fiberglass clad. At a minimum, windows must be double-paned. Glass may be coated or tinted to control heat gain, but reflective and etched glass surfaces are prohibited. Commercial storefront window systems are allowed provided they are used in floor to ceiling glazing conditions.

Metallic finishes such as clear-anodized aluminum are not permitted. Owners will be required to submit proposed manufacturers at final design review.

Windows that are set in stone, brick, or stucco walls must be recessed a minimum of 3 inches. The expression of structural headers over windows is encouraged.

Doors

Approved door materials include iron, wood, metal clad, steel, aluminum or fiberglass clad. Materials that appear artificial are prohibited. Owners will be required to submit proposed manufacturers at final design review.

Doors that are set in stone, brick, or stucco walls must be recessed a minimum of 3 inches. The expression of structural headers over doors is encouraged. Doors shall have a minimum 8'-0" height.

Exhibit "C" - Development Standards



All elevations must have sufficient fenestration to create visual interest and to prevent the appearance of blank wall areas. Windows and doors must be balanced such that the majority of openings are not concentrated on single elevations. Large door and window openings are encouraged to connect interior spaces with outdoor living areas such as porches and courtyards. In some cases, glazing from floor to ceiling may be appropriate. Trim is to be consistent in material, color and proportion with the details of the rest of the structure.

Windows and Skylights The solar orientation of windows must be considered in their design. On south and west facing exposures, appropriate overhangs in the form of shed roofs or extended overhangs are recommended.

In general, dormers are preferred over skylights. Skylights are, however, permitted provided that they are (1) located in areas that cannot be seen from the street, (2) utilize flat glass in lieu of the older plastic "bubble" designs and (3) are colored to match the roof.

Window colors are to be complimentary to the color palette of the rest of the home and are to be drawn from the following: bronze, copper, brown or other earth tones, black.

Doors

Hardware for exterior doors including hinges, latches, handles and pulls must be chosen for their high quality and artistic expression. Wrought iron, bronze, copper, satin nickel or similar materials are required.

Exhibit "C" - Development Standards

In particular, the main entry door is subject to special review to ensure that it is in keeping with the community's high standards of quality and consistent with the overall design of the home. Art glass may be included but is also subject to similar special review.

Doors are to be stained or painted (with the exception of glass and some types of metal doors). Color used to emphasize a home's front door is allowed.

Garage Doors

Single-wide garage doors are preferred over double-wide. Garage doors must be made of materials and include details that are commensurate with the high standards of these Design Guidelines. Garage doors shall be made of sectional wood, or be wood clad, or glass and steel. Garage doors shall be recessed a minimum of six inches from the plane of the adjacent wall.

Garage doors must be clad with wood or metal that coordinate with the exterior materials and windows and doors on the house. Metal-framed doors with frosted glass panels are also allowed. Owners will be required to submit proposed manufacturers at final design review.

Double-wide doors are permitted provided that the garage doors are set back from the street a minimum of 10'-0" from the front yard setback or face the side yard and that the door is designed with cladding that visually minimizes the width of the door.

Doors are to be stained or painted or may be clad to match windows and are to be either the same color as the exterior siding or a slightly darker color that is still within the generally approved earth tones and hues.

Exterior Finish Materials and Details

The exterior finish materials and details of homes in Westlake Ventanas must appear to be natural. The application of exterior materials and details must be coherently applied across the entire home in a manner consistent with the overall stylistic intent of the design.

All materials are to be used in such a manner as to appear structurally correct. Stone walls and columns, timber post, beams and trusses and other structural elements must appear to be self-supporting and/or appropriately massive for their task.

Exhibit "C" - Development Standards

Material changes must occur at logical transition points. Vertical transitions must occur at inside corners and horizontal transitions must occur at appropriate heights with dividing ledge stone or trim materials. Some appropriate locations for horizontal transitions include second floor finish floor elevations and windowsills and foundations.

Connection details must be appropriately authentic. Materials shall express appropriate weight and dimension.



Foundations

All property owners are required to provide a geotechnical report from a licensed provider on which their foundation design is to be based.

Exhibit "C" - Development Standards

Foundation walls that are above grade by more than 6 inches must be clad with stone or other suitable finish material. Faux stone is prohibited.

Foundation vents must either be concealed in some fashion or be made to be decorative. Plastic or galvanized metal vents are prohibited.

Exterior Siding Materials

The predominant materials to be used for exterior walls at Westlake Ventanas are to be stucco, brick and stone. Wood may be used as an accent material but should be limited. Wood is to be finished to take advantage of its natural grain. Wood and stone colors and patterns must complement the surrounding natural environment.



Homes at Westlake Ventanas may not use more than three major exterior wall materials.

Wood Siding Materials

Wood must be stained, not painted, such that the natural grain shows through. Synthetic wood products are permitted provided that they are of sufficient quality and design to appear real. Some approved manufactures include James Hardie, Geolam, and Cali Bamboo. Builders are required to provide samples for alternative materials. Owners will be required to submit proposed materials including required trim and accessory components at final design review.

Exhibit "C" - Development Standards

Log homes are not permitted in Westlake Ventanas. Plastic and PVC trim is prohibited.



Stone

In general, cladding whole masses is preferred over wainscoting. When used, stone wainscoting must be either discontinuous or varied in height. Stone wainscoting must have a ledge stone cap or coping.

Openings for windows must include sufficiently massive lintels to appear structural. As an alternative, arched openings are permissible provided that the stonework is applied to appear structurally correct. Owners will be required to submit proposed materials including required trim and accessory components at final design review.

Stone is subject to the following requirements:

- No faux stone with the exception of 'Stone Coat' or similar limestone-based materials as allowed in Entrada
- Stone must appear to be indigenous and work within the overall color palette. River rock is prohibited.
- Stone must appear to start below grade and be designed to appear structural and not a thin veneer.
- Stone must also appear to be load-bearing. The longest dimension should predominately run horizontally.
- Although thin veneer stone applications are not prohibited, they are required to be detailed such as to appear at least full bed depth.

Exhibit "C" - Development Standards



Stucco

Portland cement stucco is allowed in Westlake Ventanas. Exterior Insulating Finishing Systems (E.I.F.S.) or other comparable imitation or synthetic products are not allowed. Owners will be required to submit proposed materials including required trim and accessory components at final design review.

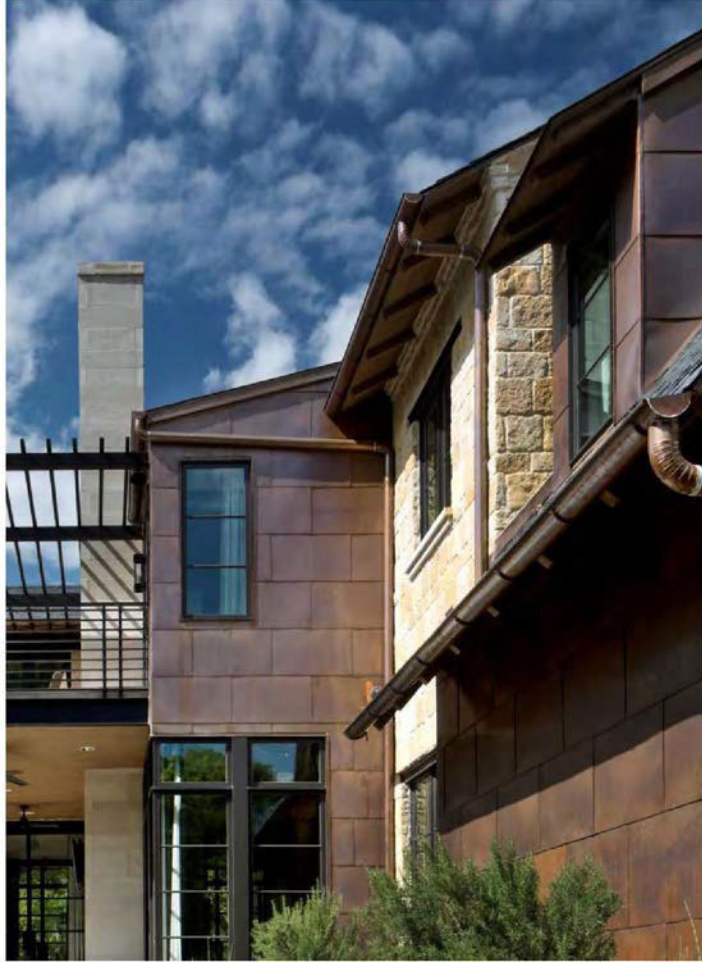
Exhibit "C" - Development Standards



Metal Siding

Non-reflective metal materials are permissible as an exterior siding material but is limited to coverage of no more than 20% of the total area of the exterior walls. Some approved materials include paint grip, copper, and zinc.

Exhibit "C" - Development Standards



Prohibited Materials

The following materials are prohibited for use as siding:

- Plastics or Vinyls
- Plywood, **T-111**, OSB or other engineered wood sheet goods
- Composite shingles
- Wood shingles or shakes
- Masonite

Exhibit "C" - Development Standards

Roof Materials

Roofing materials are to be non-reflective, textured and a variegated dark color that is compatible with the surrounding natural environment. Their use should also be consistent with the practical requirements of the local environment. For example, shading large wall openings.

Approved roofing materials include:

- Slate and high-quality faux slate tiles (DaVinci Roofscapes tile or equal)
- Flat and barrel clay tile
- Concrete tile (Monier Life tile or equal)
- Non-reflective standing seam metal (paint grip, copper, and zinc)
- Prefinished metal such as "Galvalume"
- Materials suitable for flat roofs such as TPO so long as they are not visible to a street.

Prohibited roofing materials:

- All reflective metals including galvanized products
- Plastic shingles or tiles
- Wood shingles or shakes
- Metal panels designed to appear as other materials
- Composition shingles

The ACC is, however, instructed to keep an open mind to advances in technology that may make some simulated materials sufficiently genuine in appearance. Owners will be required to submit proposed materials including required trim and accessory components at final design review.

Flues, vents and other penetrations through the roof plane must be painted to match the roof if not enclosed in a concealing structure.

Exhibit "C" - Development Standards

Roof Colors

Approved colors include:

- Earth and other muted forest tones
- Dark greens
- Variegated blacks
- Grey, blue, and green slate colors
- Copper (oxidized)
- Bronze
- Oxidized metals
- Prefinished metal such as "Galvalume"



Gutters and Downspouts

Gutters and downspouts are to be integrated into the overall design of the home in form, location and color. All downspouts shall occur at building corners unless the locations are part of a unique design intent.

Exhibit "C" - Development Standards

Plastic or other non-metal gutters and downspouts are prohibited.

In locations where gutters are not used, the landscaping below the drip line must be reinforced with some form of decorative gravel or other means of preventing erosion. If a downspout drains to open ground, the receiving area must be similarly reinforced. Water should not be discharged onto adjacent lots.

Paint grip, copper, and zinc are encouraged as materials. Pre-finished metal such as "Galvalume" is also allowed. Painted gutters and downspouts are discouraged.

Trim, Details, Texture and Ornamentation

A richness of architectural detailing is required in Westlake Ventanas. The selection of details has a major impact on the apparent style of the design. Details must be applied consistently on all elevations and in concert with the stylistic intent of the design. Refer Town of Westlake Building Quality Manual.

Details must be substantial in scale relative to the structure and to their inherent structural properties. In all cases, elements that are structural or clad structural components must be scaled and detailed such that they appear functional and structurally appropriate.

Some preferred details include:

- Exposed timber or steel, beams and trusses
- Corbels, brackets and kickers
- Exposed rafter tails
- Lintels or headers over opening in masonry walls (limestone, board-formed concrete)
- Architectural attic vents
- Flat roofs should be hidden behind parapets or provided with integral box gutters to provide seamless transitions with fasciae
- Highly crafted closure details

Exhibit "C" - Development Standards



Exhibit "C" - Development Standards

The ACC has wide latitude to ensure that an appropriate level of detail and ornamentation is included in proposed designs. The ACC must be the arbiter that determines the right balance between the poles of austerity and excess.

The ACC will also determine whether or not an element appears to be structurally appropriate in scale and detailing for its apparent loads.

Porches / Balconies / Outdoor Spaces

Porches, balconies, and other forms of outdoor spaces that are an extension of the architecture of the home are encouraged. They must be designed to appear complementary and in appropriate proportion to the form to which they are attached or otherwise relate.



Exhibit "C" - Development Standards



The underside of balconies where visible must be finished comparably to eaves and overhangs of roofs. Minimum depth for porches shall be 6'-0" unless a Juliet balcony is installed for stylistic considerations. Porches, when low to the ground, must be designed to screen the view below the porch.

Wood, plastic, or metal lattice is not permitted; similar skirting deemed not to be sufficiently substantial by the ACC is prohibited.

Structural elements such as columns, braces and kickers must be designed to appear appropriately massive to carry their apparent load, even when non- structural.

If constructed of wood, the stain colors must be equal to or complementary to the trim colors on the home. Similarly, stone used on porches must be consistent with the stone on the home.

Exterior Light Fixtures

Exterior Light fixtures, both attached to the home and installed elsewhere on the site must be limited in their impact in order to preserve the nighttime dark sky by minimizing the

Exhibit "C" - Development Standards

visibility of the lamp or light source. They are to use low intensity, indirect light sources to the extent required for safety and subtle accenting of the architecture and landscape.

The quality and style of the fixtures must be in keeping with the architecture of the home.

Exterior lighting shall comply with the Town of Westlake's Dark Sky Ordinance.

All exterior light fixtures must be shielded such that no direct light is allowed to exit the light fixture horizontally. Light from one property should not be allowed to spill onto an adjacent property . This includes security lighting operated by a motion sensor.

Pole-mounted lights shall not be more than 8 feet tall. Lights mounted on masonry plinths and bollards are encouraged.

Polished brass fixtures are prohibited. Wrought iron, bronze, copper, tarnished brass, and other non-reflective metals are encouraged.



The ACC will review exterior light fixtures with a high amount of scrutiny to ensure that their quality and design is commiserate with the overall requirements of these Guidelines and the home to which they are to be installed. Their scale must be appropriate to their use; oversized fixtures as determined by the ACC will be prohibited. Fixtures that are or appear to be hand crafted are encouraged.

Exhibit "C" - Development Standards

Miscellaneous Requirements

Trash storage, satellite dishes, meters and utility hook-ups and other such equipment are to be hidden from street view. Further, trash storage, and utilities as mentioned above, should be screened from adjacent properties if located in a side yard.

Meters and utility hook-ups can be screened from view either by their location on the home or with landscape walls or similar structures. They must be shown on the elevations of proposed designs.

Trash storage enclosures with doors easily accessible for the trash removal are required for each home at Westlake Ventanas. Each enclosure must be sized to contain at least one of the 20-gallon trash bins as required by the outside provider. Trash enclosures can either be attached to the home or free-standing. For security reasons, the trash storage enclosure must not be accessible from inside the home.

Satellite dishes may not exceed 2 feet in diameter and must be approved specifically by the ACC prior to their installation. The ACC will work with the Owner to find a practical location that creates the least impact on neighbors and passersby. Potential satellite dish locations must be identified in all design submissions and then pre-wired during construction regardless of the owner's intent to have or not have satellite service.

Solar Applications

Equipment used to capture the energy of the sun- such as photovoltaic panels or shingles and hot water collectors must be both integrated into the architecture and largely hidden from primary viewsheds. Windmills are prohibited.

The ACC is instructed to support Owners and Architects who wish to integrate such panels and other equipment into their homes with as much flexibility as possible while maintaining its main requirement of mitigating any potential negative aesthetic impacts.

Exhibit "C" - Development Standards

THIS



...NOT THIS



Exhibit "C" - Development Standards

Combining Homesites

Prior to combining two or more Homesites, approval is to be obtained from the Declarant during the Development Period or from the ACC thereafter. When combining two or more Home sites, the ACC will designate new Building and Landscape Envelopes and a new Maximum Enclosed Area. The ACC shall respect the Town of Westlake's zoning regulations.

Driveways and Address Markers

- Minimize visibility of paved areas from off-site through vegetative screening or low wall.
- Blend driveways into the terrain by following the natural grade.
- Utilize distinctive paving materials at motor-courts and parking areas.
- Minimize width of driveway at connection with street.
- Prevent cars from overhanging onto adjacent lots.

Appropriate paving materials for driveways and auto courts include:

- Colored, stamped, exposed aggregate, broom finished and/or patterned concrete
- Pre-cast concrete pavers that are chosen to blend into the natural environment or to complement adjacent paving types in both color and pattern.
- Native stone
- Decomposed granite or decorative gravel with a concrete apron of at least 20 feet in length starting at the curb. Only use if grades allow.
- Turf block or similar structured turf in low volume areas.
- Colored gravels that complement the natural environment such as iron ore or pea gravel. Only use if grades allow.

Exhibit "C" - Development Standards

- Driveway gradients are not to exceed 12%.
- Provide wheel stops or curbs 18" from side lot line.

Inappropriate paving materials include:

- Untextured, uncolored concrete
- Asphalt (unless banded or bordered with concrete)
- White, angular gravel
- Faux stone

Driveways are encouraged to narrow at the driveway apron. Parking and turn-around areas must be screened from off-site views by supplementary plantings as approved by the ACC as part of the Landscape Plan.

Neutra Modern House Numbers (6" tall) in any finish may be used for address markers.



Exhibit "C" - Development Standards



18 THIS MOTOR COURT IS SCREENED BY A LOW WALL

Driveway alignments, parking and garage layouts are to minimize visibility of garage doors, driveways, and parking from the street and adjoining Homesites.

Plantings of trees, shrubs and other vegetation are to be incorporated to screen driveways, garages and motor-courts.

and private drainage systems as shown in the community's grading plans.

Retaining Walls

Minimize the use and height of retaining walls. Blend retaining walls with the natural topography. A series of shorter stacked walls is preferable over one tall wall.

Construct retaining walls out of stone that is either locally sourced or appears to be indigenous. Board-formed concrete and cor-ten steel are also permitted where not visible to a street or common area.

Exhibit "C" - Development Standards



The tops of walls are to follow the natural contours as closely as possible. Ends of walls are not to end abruptly but are to create natural-looking transitions with existing landforms and vegetation and die into existing contours.

See Attachment Two for rules regarding shared retaining walls and fences.

Drainage

- Maintain natural drainage patterns.
- Encourage on-site percolation.
- Minimize any potential for erosion.
- Direct runoff and respect public and private drainage easements, street, conveyance systems, as shown in the community grading plans.

Drainage is to be designed by a professional engineer that is licensed by the State of Texas. Natural drainage courses and patterns are to be protected and maintained, wherever feasible.

Impervious surfaces are to be minimized to the extent feasible to encourage water percolation into the ground. The use of more pervious (water permeable) materials, such as approved gravels or open-celled pavers is encouraged.

Concentrated flows from impervious surfaces, roofs, and regrading must be collected and discharged to a street or common area. It may also be collected in an on-site rainwater collection system.

Materials and sizes for all culverts, headwalls, visible drainage structures and driveways are to be approved by the Architectural Control Committee to ensure

Exhibit "C" - Development Standards

structures appear natural and "disappear" into the landscape. Stone-reinforced dry creek beds designed to carry water without causing erosion are encouraged in lieu or in combination with underground drainage structures.

Drainage across or under driveways is to be incorporated into driveway and apron design and any culverts are to be concealed with stone headwalls or similar treatments.

Drainage design is to minimize any potential for erosion and consequent downstream water quality impacts.

Exterior Hardscape Design: Outdoor Stairs, Paths, Courtyards, Terraces



- Create outdoor "rooms" as extensions of indoor rooms.
- Appropriate paving materials for exterior hardscape areas include:
 - Native stone
 - Colored, stamped, exposed aggregate and/or patterned concrete
 - Brick or pre-cast concrete pavers that are chosen to blend into the natural environment or to complement adjacent paving types in both color and pattern.
 - Decomposed granite or gravel

Inappropriate paving materials for exterior hardscape areas include:

- Clay tile
- Non-colored, non-patterned concrete
- Asphalt
- Asphaltic concrete

Exhibit "C" - Development Standards

Screen Walls, Fences and Gates

Construct high quality walls and fences out of stone, metal, or concrete in a design that is complementary to the architecture of the home.

Fences, walls and gates are to relate to the residence and site topography. Fencing materials are restricted to steel picket or metal pipe rail and wire mesh in flat black color. Wood fences are prohibited.

All fencing is limited to decorative steel picket or wire mesh. Each post shall have a decorative "cap." Living plant materials for screening is encouraged.



Transitions in fence and/or wall heights required by topography are to be gradually stepped.

Solid screen walls are only allowed as extensions of the house and accessory structures. These extensions shall be restricted to the building envelope and not be located on any lot line.

Exhibit "C" - Development Standards



Appropriate wall types include:

- Cast in place concrete
- Low stone walls not to exceed 4 feet in height
- Wing wall extensions that match building materials
- Stucco on CMU

Appropriate fence types include:

- Metal (maximum 6' height to horizontal top rail with 1/2" minimum picket painted black or near-black. Picket spacing to be less than 6" on center.)
- Hedges used to disguise lower cost fences, particularly fences required for pets or around pools.

Inappropriate fencing materials/types include:

- Exposed Concrete block
- Chain link
- Wood fences of any type
- Opaque fences of any type

Dog runs are permitted within Westlake Ventanas, provided they are constructed of materials that are complementary to the principal building walls, site walls and/or landscape structures.

Exhibit "C" - Development Standards

Dog Runs shall be attached to residences and not free standing and are limited to an area of 200 square feet. Dog runs shall be screened from the street and adjacent lots and must be contained within the Building Envelope.

Any side yard fence may be installed by the first homeowner and the subsequent homeowner shall share in cost by reimbursing the first homeowner by 50% of the portion on the common lot line.

Retaining walls on the front of a Lot shall be constructed of the same stone used as the project stone which is Leuders Charcoal chopped typically as 6" height laid in horizontal coursing of generally 18" lengths. The retaining wall material shall blend with the improvements constructed by the Declarant. Stone for interior Lot line walls shall be Milsap charcoal stone, randomly coursed ashlar pattern with natural grey grout.



23 AN EXAMPLE OF GRANBURY CHOPPED STONE

Landscape Structures, Site Furnishings, Fire Pits and Outdoor Art

In general, the same Guidelines that apply to architecture apply to the design of landscape structures.

- Design landscape structures that appear as extensions and/or additional building components of the main Residence.
- Incorporate landscape structures such as trellises to help mitigate the climate and create shade, shadow and texture.
- Screen fire pits, outdoor art and other ornamentation from off-site views.

Site furnishings, fire pits, outdoor art and landscape structures, such as arbors, gazebos, pavilions, porte cocheres, greenhouses and/or decks, are permitted within the Building Envelope.

The height, color, materials, and style of outdoor structures are to be the same or similar to that of the Residence.

Fire pits must be permanent and be designed to be complementary to the architecture and landscape architecture of the overall property. Any masonry used is subject to the same requirements for the use of stone as described in the preceding chapter.

Exhibit "C" - Development Standards

Basketball Goals and Sporting Equipment

Basketball goals, or backboards, or any other similar sporting equipment of a temporary nature, shall not be placed on any Lot or street or where same would be visible from an adjoining street or Lot without the prior written consent of the ACC. No permanent basketball goals or sport equipment will be allowed.

The ACC shall have the authority to establish additional guidelines for the placement and design of basketball goals, backboards, or any other similar sporting equipment and the same shall be kept and maintained out of view from any street, except in accordance with any such established guidelines.

Portable goals must meet the following criteria:

- The goal may be placed to the side of the driveway and maintained at all times in a full upright position and only between the hours of 7:00 am and 7:00 pm.
- The pole, backboard and net must be maintained in good condition at all times.
- Poles may not be installed facing the street.
- Goals may not be rolled into the street or any other public right-of-way.

Exhibit "C" - Development Standards

Playscapes and Sport Courts

Sports courts, tennis courts, and playscapes or any similar recreational facilities may not be constructed on any Lot without the advance written approval of the ACC. The ACC may prohibit the installation of sports courts, tennis courts, playscapes or similar recreational facilities on any Lot. All sport courts shall follow the setback requirements for accessory buildings and accessory structures contained in these design guidelines. (minimum 5 feet from property line and not within any easement).

Quantitative / Specific Requirements

Playscapes or any similar recreational facilities must comply with all the following requirements:

- Must be located where the equipment will have minimum impact on adjacent Lots and be screened from public view.
- All playscapes or any similar recreational facilities equipment must be of earth tones colors, i.e., medium to dark greens, browns, and tans. Bright primary colors will not be permitted.
- Views of playscapes or any similar recreational facilities must be reduced from public streets and adjoining units whenever possible.
- Playscapes or any similar recreational facilities must be placed no closer than five feet (5') to any property line.
- Trampolines, whether portable or non-portable must be placed no closer than five feet (5') to any property line.
- Playscapes, playground equipment and trampolines are prohibited in the front yard.

If approved, portable playscapes, including but not limited to, non-permanent and/or inflatable slides, moon bounces, water parks and above ground inflatable pools or kiddie pools (collectively "**Portable Playscapes**") must be stored in a screened area, the rear of the Lot, or inside the garage when not in use. In no event, shall any Portable Playscapes be visible from or in the front of any Owner's Lot for any period of time exceeding twenty- four (24) consecutive hours.

Water Features, Spas and Pools

- Locate pools, spas (hot tubs) and plunge pools so that their visibility is minimized from areas outside the Homesite.
- Design pools and water features that augment outdoor spaces and extend the architectural style of the Residence.

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Pools, spas and other water features are to be located within the Building Envelope, visually connected to the Residence and designed as an integral part of the house's exterior design.

Water features such as small ponds, waterfalls and streams are to appear natural and not contrived . They must be made out of materials that appear indigenous to the site and be landscaped such that they appear to have occurred naturally.

Swimming pools may only be located within the building envelope. Pool safety measures are to be taken in accordance with local governmental regulations. No swimming pool, spa and hot tub shall be located in the front or side yard on any Lot unless enclosed in a courtyard.

Pool and spa covers are to be dark and muted in color to recede from view. Pools and spas are to be set down into the ground, terraces and/or decks. Above grade pools or spas are not permitted.

Spa and water feature equipment enclosures may be in the side yard and are to appear as extensions of the home and/or located in underground vaults to contain noise. Solid noise absorbing covers for equipment may be required after installation if it is discovered that the equipment is audible from adjacent properties.

The drains serving a swimming pool, spa and hot tub must be connected to street or private drainage systems.

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Planting Design

- Utilize new plantings to frame outdoor spaces, lessen the impact of new structures, screen use areas and preserve and extend the forest landscape.
- Use plants that are adapted to the climate, are less invasive and require less water and maintenance.
- Minimize the visibility of non-native plant materials, as viewed from off-site.
- Preserve and enhance the existing forest areas in the Natural Areas and existing high quality and larger trees in the Building Envelope and Landscape Area.



Each Lot shall be landscaped, at a minimum, with the following number of hardwood shade trees in the yard of each Lot - two (2) per Lot on all Lots other than

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corner Lots and four (4) per corner Lot (with two (2) in the front portion of the Lot, and two (2) in the side of the Lot adjacent to the street), and ten (10) shrubs sized five gallons or more. The hardwood shade trees required in the front yard of each Lot shall be no smaller in size than 3.5" caliper. After installation, landscaping (including temporary landscaping) shall be properly maintained at all times. Any Owner who wishes to plant one or more gardens upon their Lot must obtain the approval of the ACC of any such garden and must follow applicable requirements as to size of the Lot, visibility of the Lot from other Lots, streets or common areas, and such other matters as the ACC may specify in any written approval.

Notwithstanding the foregoing, a minimum of one (1), three and one half inch (3.5") caliper trees from the Approved Plant List must be planted on each Lot in addition to the Front Yard Requirement. If existing protected trees are preserved in the front yard of a Lot, they can be used to satisfy this requirement.

Manicured or groomed yards and non-native plantings are to be restricted to spaces confined by buildings, walls and plantings or other well-defined edges so as to not be visible from the street. Moving away from the house, towards the Natural Area, non-native planting areas are to gradually transition to a native landscape so that a buffer of native vegetation surrounds the Residence. Non-native plant species may not extend outside of the Building or Landscape Envelopes.

Plant materials are to use a mix of sizes and be spaced in natural, informal patterns. Plant species should be drifted (grouped to replicate natural occurring masses of same-kind plant communities).

Shrubs, ground covers and vines are to be used to soften and reduce the perceived height of foundation walls.

Tree and shrub plantings are to be of a sufficient quantity and size to effectively continue the native forest canopy and under-story.

Trees and other vegetation are to be planted so that they define outdoor spaces, buffer views of buildings and frame views.

Cut and fill slopes are to be re-vegetated with plantings appropriate to the site (see Attachment 3) to blend them into the surrounding environment.

Trees and shrubs should be pruned to avoid blocking clear view of signs, address marker, illumination by light fixtures, the flow of air vents and air conditioner compressors as well as pedestrian and vehicular traffic.

Plant materials are to be grouped according to water consumption needs.

Areas of irrigated landscape are not to exceed 40% of the combined area of the Building and Landscape Envelopes. Xeriscaping is encouraged.

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Irrigation

- Minimize the amount of landscape irrigation required through water sensitive landscape design.
- Utilize automated irrigation systems that provide efficient water coverage and minimize water usage and runoff. Drip type systems are encouraged.

Incorporate bubbler/drip irrigation systems that provide deep root-zone irrigation of trees and shrubs. Trees are to be irrigated on a bubbler/drip system except when planted in irrigated lawns.

Note that introduction of irrigation lines may jeopardize existing trees. Trenching for irrigation lines is not to encroach within the drip line of existing trees unless required to maintain appropriate moisture content of soils around foundations. All permanent irrigation systems are to be below ground and fully automatic. Temporary irrigation systems are required at all revegetation areas. These systems are to be removed once plantings have been clearly established and after a minimum of one growing season. Black poly pipe is to be used for all temporary, above-ground irrigation systems.

Group plant materials according to their water consumption needs. Mulch all new planting areas, including trees in lawn areas with a minimum of 3 inches to retain soil moisture, reduce erosion and provide for weed control.

Exterior Lighting

- Preserve the nighttime dark sky by minimizing the amount of exterior lighting.
- Utilize low intensity, indirect light sources to the extent required for safety and subtle visual effect.
- Avoid unnecessary illumination of structures or the installation of Jelly Fish lights or similar products. Exterior lighting will be kept to a minimum and shall be subdued and indirect but consistent with good security practices. Such illumination shall be designed and installed so as to light only landscaping, driveway areas and walkways upon a Lot. Indirect sources and horizontal cut-off fixtures are recommended to reduce glare and provide general ambient light. Soffit or tree lights must be shielded or directed towards vegetation so as to eliminate glare and source visibility. Exterior lighting shall comply with Town of Westlake's Dark Sky Ordinance.

No exterior light whose direct source is visible from a street or neighboring property, or which produces excessive glare to pedestrian or vehicular traffic will be allowed. Nuisance lighting and or glare must be avoided.

Up-lighting shall be limited to lighting landscaping elements and shall be limited to 25 watt incandescent or equivalent lumens.

Building walls shall not be illuminated and light from landscape lighting may not illuminate building walls higher than four feet (4') above grade.

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Floodlights are prohibited. Exterior lighting in motor courts and over garage doors may/shall be motion detector activated and not installed higher than ten feet (10') above the grade of the driveway.

All light sources must be fully shielded from view from adjacent property or right-of-ways.

Decorative Light sources such as entry sconces must be shielded with frosted or translucent glass.

Path lighting fixtures are to be a maximum height of 24 inches.

Exterior lighting is to fall within the following wattage ranges:

- Architectural lights mounted to buildings and that are fully recessed, and downward facing are not to exceed 75 watts.
- All other architectural lights are not to exceed 40 watts.
- All landscape lights are not to exceed 20 watts.

Exterior Holiday Decorations

Lights or decorations may be erected on the exterior of the principal residential structure in commemoration or celebration of publicly observed holidays provided that such lights or decorations do not unreasonably disturb the peaceful enjoyment of adjacent Owners. All lights and decorations must not be permanent fixtures of the principal residential structure without prior written approval of the ACC and shall be removed within thirty (30) days after the holiday has ended.

Air-Conditioning and Other Mechanical Equipment

No air-conditioning apparatus may be installed on the ground in front of the principal residential structure or on the roof of the principal residential structure unless screened in a manner approved by the ACC. Ground level air conditioning units shall be installed at street level only. All mechanical equipment, including air-conditioning equipment, shall be located in a side or rear yard only and shall not be visible from streets or Common Areas.

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No window air-conditioning apparatus or evaporative cooler may be attached to any front wall or front window of the principal residential structure or at any other location where it would be visible from any street, any other Lot or any Common Area.

Pool/spa equipment must be located behind walls or screened from view with landscape to contain noise.

Barbecue Grills

Freestanding barbecue grills are permitted only if they are stored and used in the rear yard space of the Lot that is not visible from the street. BBQ grills may also be built into outdoor kitchens and the masonry and other materials shall match the materials used on the residence.

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CHAPTER THREE CONSTRUCTION GUIDELINES

Overall Intent

The following restrictions shall apply to all construction activities at Westlake Ventanas. All construction shall comply with the adopted codes, ordinances, regulations and rules of the Town of Westlake; no construction, renovation or restoration of any building or structure shall occur without submitting the applicable plans and having the proper permit issued by the Town of Westlake. Any construction not permitted by the Town of Westlake shall be subject to enforcement and penalties as allowed for by the Town of Westlake Code of Ordinances. Periodic inspections by a representative of the ACC may take place in order to identify non-complying construction activities. If items identified as not complying with the regulations are not remedied in a timely manner, fines will be levied.

Erosion Control Installation and Maintenance

It is the responsibility of each Owner to install erosion control measures prior to the start of construction and to maintain them throughout the entire construction process.

Silt fencing installed to all applicable standards is required to be properly installed and maintained to protect the low sides of all disturbed areas, where storm-water will flow during construction. The purpose of the silt fence is to capture the sediment from the runoff and to permit filtered, clean water to exit the site. The Owner should anticipate that built-up sediment will need to be removed from the silt fence after heavy or successive rains, and that any breach in the fencing will need to be repaired or replaced immediately.

If for any reason the silt fence is to be temporarily removed, please contact a representative of the ACC prior to the removal.

Security/Screening

Neither the ACC, the Association, nor the Declarant shall be responsible for the security of job sites during construction. Temporary security fencing with screening around construction sites are mandatory for builders and owners and conform to ACC standards.

Construction Hours

Unless a written waiver is obtained from the ACC, construction may only take place during the following hours: Monday through Friday from 7:00a.m. until 7:00p.m., and on Saturdays and Sundays from 9:00 a.m. until 6:00 p.m. or as regulated by the Town of Westlake if more restrictive.

Noise, Animals, Children

The use of radios, tape and CD players must be restrained so as not to be heard on an adjoining Lot or street.

Contractors and subcontractors may not bring dogs to construction sites.

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Contractors and subcontractors may not bring children under 16 years of age to construction sites.

Material and Equipment Storage

All construction materials and equipment shall be neatly stacked, properly covered and secured. Any storage of materials or equipment shall be the Owner's responsibility and at their risk. Owners may not disturb, damage or trespass on other Lots or adjacent property.

Insurance

The ACC requires an Owner to procure adequate commercial liability insurance during construction naming the Association, the Declarant and the ACC as additional insureds, in an amount to be determined, from time to time by the ACC.

Site Cleanliness

During the construction period, each construction site shall be kept neat and shall be properly policed to prevent it from becoming an eyesore.

Owners and Builders shall be responsible for removing refuse and shall provide a container for debris and shall clean up all trash and debris on the construction site on a daily basis. Trash and debris shall be removed from each construction site on a timely basis. Lightweight material, packaging and other items shall be covered or weighted down to prevent wind from blowing such materials off the construction site.

The dumping, burying or burning of trash is not permitted anywhere in Westlake Ventanas.

It is imperative that, when moving heavy equipment around, precautions be taken to prevent damage to pavement, curbs, and vegetation. Crawler tractors are not to be operated on paved or concrete surfaces. Mud, dirt and other construction debris that is tracked off site shall be cleaned on a daily basis.

Sanitary Facilities

A temporary sanitary facility (chemical toilet) shall be provided and maintained for the use of construction workers and shall be screened from view in a manner approved in advance by the ACC. It should be installed on level ground, at the back of the lot unless it cannot be serviced and screened from view. A mockup construction wall shall be used to screen it if located in the front part of the lot.

Construction Parking

Construction crews shall not park on, or otherwise use, other Lots. No construction vehicle will be permitted to leak oil or otherwise damage or deface any street located within the community.

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Schedule of Fines

Periodic inspections by a representative of the ACC may take place in order to identify non-complying construction activities. Listed below is the schedule of fines which may be assessed.

Fine Schedule

Premature Clearing	\$5000
Construction without ACC approval	\$5000
Encroachment on Adjacent Properties	\$5000 plus cost of repair
Violation of rules, restrictions, or guidelines	\$500/day
Failure to install or maintain erosion control measures	\$1000/day
Sign violation	\$500/day

*In the event, the Association or Declarant is required to repair, clean up or provide necessary service to bring the improvement into compliance, the Owner will be assessed the cost of repair, clean up, or service plus an additional 10% for time and service expended.

Duration of Construction

The principal residential structure residence shall be complete and available for occupancy on or before eighteen (18) months after the commencement of construction and construction activity must be continuous. Additional extensions shall be determined by the ACC.

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CHAPTER FOUR DESIGN REVIEW PROCESS

Overall Intent

The design review process has been developed to ensure that all new construction, alterations and renovations to existing buildings and major site Improvements conform to the guiding principles of Westlake Ventanas as outlined in the Design Guidelines. The design review process has been structured to eliminate excessive delays. The ACC suggests that property Owners begin the review process early to allow ample time to obtain required permits. When reviewing design and construction projects, the ACC will be looking for compliance with the principles outlined in this document. No plans shall be submitted to the Town of Westlake without being accompanied with written approval from the ACC.

Project Types for Review

New Construction

Construction of any new, freestanding structure, whether as a Residence, Accessory Structure, or landscape structure.

Alterations, Additions or Rehabilitation of an Existing Structure

Any new construction or rehabilitation to an existing building or landscape structure that alters the original massing, exterior finishes, window placement, roof design, exterior lighting, interior lighting visible from off-site and/or other significant design elements.

Major site and/or landscape Improvements

Any major Improvements or changes to Improvements, including, but not limited to, grading (for any excavation and/or fill involving more than 50 cubic yards of dirt), planting of non-native plants, tree removal, irrigation, swimming pools, driveways, fencing, paving and/or drainage, that alter an existing landscape.

The ACC evaluates all development proposals on the basis of these Guidelines. Some of the Guidelines are written as broad standards and the interpretation of these standards is left up to the discretion of the ACC.

Design Review Process Overview

Westlake Ventanas' design review process, unless otherwise noted takes place in five steps.

1. Pre-Design Conference
2. Preliminary Design Review
3. Final Design Review
4. Construction Monitoring
5. Final Observation

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Any Improvement as described above will require and be preceded by the submission of plans and specifications describing the proposed Improvements and accompanied by an application fee. The Owner is to retain competent assistance from a licensed Architect, Arborist, Landscape Architect, Civil Engineer, Soils Engineer and a licensed and bonded Contractor (Consultants) as appropriate. The Owner and Consultant(s) are to carefully review the CC&R 's and the Guidelines prior to commencing with the design review process.

Having secured final design approval from the ACC, the Owner is to also meet all submittal and approval requirements of the water utility company and the Town of Westlake Planning and Building Departments to obtain any necessary building permits.

In accordance with the CC&Rs, the Owner is to commence construction within one year of final design approval and is to diligently pursue completion of construction within a year of start. Final landscape installation is to be completed within 3 months of occupancy. Written approval from the ACC is required in order for any construction and/or landscaping to extend beyond the time limits noted above.

Design Review Process- Minor Improvements

Minor Improvements (including, but not limited to, construction of, or addition to, fences, walls, and/or enclosure structures), which are being completed independent of any major Improvements, do not need to proceed through all four steps of the general design review process. Minor Improvements may generally be submitted as part of a two-step review process:

1. Final Design Review
2. Final Observation

Specific submission requirements and fees will be determined on a case-by-case basis as required by the nature of the Improvement. Owners and/or Consultants should contact the ACC to verify whether an Improvement qualifies for the abbreviated design review process. Upon receipt of permission to proceed with an abbreviated process, the Owner and/or Consultant will obtain a list of specific submission requirements from the ACC.

Exclusions to ACC review would be rehabilitation or maintenance of an existing structure or landscaping elements. For example; replacement of dead plant material with same or similar pre-approved plants; mulching or routine tree trimming; repainting same colors or routine maintenance of structure.

Actions and Approvals

The ACC's actions on matters are to be by a majority vote of the ACC. Any action required to be taken by the ACC may be taken regardless of its ability to meet as a quorum, if a majority of the ACC is able to review the matter individually and come

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to a majority opinion. In such cases, the ACC shall make every effort to facilitate a discussion of the matter between all members through teleconferencing and/or other means of communication. The ACC will keep and maintain a record of all actions taken by it.

If an Owner and/or Consultant disagrees with the ACC's written conclusions from a meeting, the Owner and/or Consultant should list specifically, in writing, which portions of the written record require clarification or correction. The ACC will then review the requested clarifications or corrections and either amend the record accordingly or let it stand, while noting the issues raised by the Owners and/or consultant(s). In the latter case, a subsequent meeting shall be held between the Owner and the ACC to resolve the difference in interpretation. However, the decision of the ACC will be final.

After the Declarant has delegated to the Board the appointment of ACC members, any Owner may appeal ACC actions as described in the CC&Rs. The powers of the ACC relating to design review will be in addition to all design review requirements imposed by any other governing body with legal action.

Approved Design Professionals

In addition to the Declarant, the design team is to be comprised of the following Consultants:

- Architect
- Landscape Architect
- Arborist
- Additional professional services such as Civil Engineer, as required.

Protocol for Approval of Architects

Architects and Landscape Architects may work on a particular Homesite at Westlake Ventanas provided the conditions listed below are met.

1. Samples of previous residential work:

- The Architect is to provide the ACC with three recent examples of residential designs that would generally meet the Design Guidelines.
- The Architect is to provide the ACC with a list of residential clients, general contractors, structural and Civil Engineers (preferably three each) whom the ACC may contact as references.

2. Affidavit on compliance with regulations:

- The Architect is to review Westlake Ventanas Design Guidelines.
- The Architect is to review the zoning and building regulations for the town of Westlake.
- The Architect is to provide the ACC with a signed copy of the Affidavit,

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available from the ACC office, certifying that he/she has reviewed and understood the documents referred to above and will comply with their provisions.

3. Approval by ACC:

- The ACC shall have sole discretion to approve or disapprove any Architect submitted by an Owner. The ACC may disapprove an Architect if in the ACC's reasonable opinion, the Architect does not have the qualifications, training, license, experience or understanding of the design requirements to execute the design and construction of a residence at Westlake Ventanas.
- The ACC shall have the sole and absolute discretion to include an Architect on its list of Invited Architects. The approval of an Architect to design a particular residence for a particular client does not require the ACC to approve him/her for any other Owner.

Pre-Design Conference

Prior to preparing any drawings for a proposed project, the Owner, Architect, Landscape Architect and any other key project team members are to meet with at least one member of the ACC or ACC Administrator to discuss the proposed project. During this meeting, the ACC will explain to the project team their responsibilities in implementing the Guidelines. This meeting will initiate the review and approval process and allow any questions regarding building requirements, interpretation of the Guidelines or the design review process to be resolved. The Owner may request that the meeting take place on the Homesite. Prior to the Pre-Design Conference, the Owner is to have engaged the services of an Architect and Landscape Architect and reviewed the Guidelines together with these Consultants. The Owner and Architect, at a minimum, are to attend this initial meeting.

Additional information may be requested by the ACC as necessary to describe the project. The Pre-Design Conference may be scheduled by submitting the Pre-Design Conference Request Form at least ten (10) working days prior to the desired meeting date.

Preliminary Design Review

Within six months of the Pre-Design Conference, the Owner is to submit a written application and preliminary design documents for Preliminary Design Review. A checklist of the required preliminary design documents follows.

The Preliminary Design Review will insure that:

- All structures are sited to step with the topography, blend into the landscape and minimize grading and site impact.
- The transition between the building and the surrounding environment accomplishes the intent and specifics of the Guidelines.
- The roofs, massing, building materials, landscape materials and other site

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and architectural Improvements are consistent with any adjoining buildings and/or outdoor amenities and the Guidelines.

Conceptual Submissions (optional)

Owners and / or design representatives may choose to submit sketches and / or conceptual designs for ACC feedback prior to submitting for Preliminary Design Review.

Preliminary Design Review Submission Materials

The Applicant is to prepare and submit to the ACC for review and approval a Preliminary Design Review package, which adequately conveys (as appropriate): existing site conditions, building orientation and design, vehicular and pedestrian access, the proposed use of exterior materials and colors, and conceptual landscape design. The package shall include one full-size sets and two sets of 11" x 17" reductions of the drawings and/or materials listed below.

The following list describes the information that will be required for new construction projects and for alteration, rehabilitation, or additions to an existing structure. New construction projects are to submit all items listed below. Submissions for additions to existing buildings need only submit items two (2) through six (6). Submissions for the alteration and/or rehabilitation of an existing structure and/or major landscape Improvements need only submit items five (5) and six (6).

1. Preliminary Design Review Application Form - A completed application form. (ATTACHMENT ONE)
2. Property Survey- (1" = 20'-0" minimum scale), a property survey prepared by a licensed surveyor indicating property boundaries; front, rear and side setbacks; the area of the property and Improvement Envelope; all easements of record; all existing 4" caliper and greater trees (as measured four (4) feet from the ground); and any significant drainages, as applicable.
3. Site Plan - (1" = 20'-0" minimum scale), showing existing topography and proposed grading and drainage (1' contour interval), building footprint with finished floor grades, driveway, parking area, drainage, fences, walls, patios, decks, pools and any other site amenities. Existing vegetation patterns, proposed clearance areas and trees to be removed and/or preserved are to be indicated.
4. Floor and Roof Plans- (1/8" = 1'-0" minimum scale, unless otherwise specified), including all proposed uses, proposed walls, door and window locations, overall dimensions, finished floor elevations, and total square footage for all floors of all structures.
5. Schematic Elevations- (1/8" = 1'-0" minimum scale), including Building Heights, roof pitch, existing and finished grades and notation of exterior materials. In addition to black and white elevations, one unbound set is to be rendered in color and illustrate shadows.
6. Conceptual Landscape Plan- (1" = 20'-0" minimum scale), a conceptual plan showing irrigated areas, areas of planting, a preliminary plant list, extent of

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lawns, areas to be revegetated, water features, patios, decks, courtyards, schematic utility layout, service areas and any other significant design elements.

7. Study Model - (1/8" = 1' - 0" minimum scale), illustrating the relationship between proposed and existing building forms and topography, tree heights and prevailing site conditions. This need not be an expensively detailed model, but simply adequate to communicate basic three-dimensional concepts. A three-dimensional computer rendering(s) may be substituted to fulfill this requirement.

The ACC reserves the right to amend the Preliminary Design Review submission requirements on a case-by-case basis as required by conditions and considerations particular to each Homesite and/or building(s).

Staking and Tree Taping

Upon submittal of the Preliminary Design Review Application for all Improvements, the Owner is to stake the corners of the proposed building, any proposed building additions, all other major improvements and driveway centerlines. The Preliminary Design Review submission will not be considered complete until the building footprint and driveway are staked.

Trees proposed for removal are to be marked in the field with red tape. Trees to be pruned and/or limbed are to have blue tape tied to the limb and/or area of trimming. Trees proposed for transplanting are to be taped with yellow ribbon and a stake placed in the proposed location of transplant.

Preliminary Design Review Meeting

The Owner and/or Consultant(s) may attend the meeting but are not required to be present. The ACC will review and comment on the application at the meeting, allow time for discussion with the Owner and/or Consultant(s), and subsequently provide the Owner with the conclusions of the meeting in writing.

The comments of the ACC on the preliminary approval shall not be binding upon either the Owner or the ACC if approval is not initially granted. If there are significant changes required, the ACC may determine that a second review meeting may be necessary to review corrected and/or new materials prior to submitting for final plat. Corrected materials must be provided to the ACC a minimum of five (5) working days prior to the next regularly scheduled meeting.

Final Design Review

Within one year of Preliminary Design Review approval, the Owner is to initiate Final Design Review by submitting the written application and final design documents. All items are to be in compliance with the Guidelines prior to submitting for Final Design Review.

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Final Design Review Submission Materials

The Applicant is to prepare and submit to the ACC for review and approval a Final Design Review package that adequately conveys compliance with the Guidelines. Final design documents are to generally conform to the approved Preliminary Design Review documents. All architectural plans are to be prepared by an Architect or approved Designer.

The package is to include one full-size sets and two sets of 11" x 17" reductions of the following drawings and/or materials. Submissions for new construction and additions to existing buildings should submit all items listed below. Submissions for the alteration and/or rehabilitation of an existing structure and/or major landscape Improvements need only submit items 3 through 10 as applicable.

1. Final Design Review Application Form - A current application form, available from the ACC office, is to be completed and submitted.

2. Site Plan - (1" = 20'-0" minimum scale) showing existing topography and proposed grading and drainage (1' contour interval), building footprint (including accessory structures) with finished floor grades, building setbacks, easements, driveway, address marker, parking area, drainage, utilities, fences/walls, patios, decks, pools and any other site amenities. Existing vegetation patterns (including extent of tree canopies), proposed clearance areas and trees to be removed and/or preserved are to be indicated.

3. Grading, Drainage and Erosion Control Plans- (1" = 20'-0" minimum scale), showing existing and proposed grades, all drainage structures and/or other drainage design solutions, and cut and fill calculations. Plans are to also indicate the size of stockpiles, where they are to be located on the Construction Site and the length of time they will remain. The extent and location of sediment fencing, and measures taken to control erosion during grading and construction are also to be indicated.

4. Foundation, Floor and Roof Plans - (1/8" = 1'-0" minimum scale, unless otherwise specified), for all buildings, including all proposed uses, room dimensions, total square footage for conditioned and unconditioned spaces, door and window locations and sizes, location and type of all exterior lighting fixtures. Roof plans are to indicate ridge elevations, roof pitches and locations of drainage systems, chimneys, vents, flues, satellites, antennas, and solar panels. Visual screening of satellites, antennas and solar panels is to likewise be addressed.

5. Elevations- (1/8" = 1'-0" minimum scale), illustrating the exterior appearance of all views labeled in accordance with the site plan. Indicate the height of chimney(s) as compared with the ridge of the roof, the highest ridge of the roof, finished floor elevations, and existing and finished grades for each elevation. Describe all exterior materials, colors, and finishes (walls, roofs, trim, chimneys, windows, doors, light fixtures, etc.).

6. Landscape Plans- (1" = 20'-0" minimum scale), including irrigation plans with locations of main irrigation lines, areas of automatic irrigation, type of controls and type of heads; proposed plant materials, sizes, and locations; trees to be removed; tree protection plan; areas of planting, water features, patios, decks, courtyards,

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utility layout, service areas and any other significant design elements.

7. Lighting Plan - (1/8" = 1'-0" minimum scale), including locations of all exterior architectural and landscape light fixtures. Cut sheets are to be submitted for all proposed fixtures and bulb types, including wattage and lumen specifications for each fixture and the total lumen output calculation for the Homesite.

8. Sample Board (as applicable)- including:

- Roof materials and colors
- Wall materials and colors
- Exterior trim material and color
- Window material and color
- Exterior door material and color
- Stone/rock materials
- Exterior rails, fencing, and paving materials
- Lighting fixture cut sheets

9. Construction Schedule - include start and completion dates for both building and landscape construction.

The ACC reserves the right to amend the Final Design Review submission requirements on a case-by-case basis as required by conditions and considerations particular to each specific project and/or property.

Staking and Tree Taping

Upon submittal of Final Design Review documents, Applicants are to re-stake the buildings, if the building footprint has been altered from that staked at Preliminary Design Review or if requested by the ACC. The Applicant is to contact the ACC prior to submitting final design documents to confirm staking requirements.

Trees proposed for removal are to be marked in the field with red tape. Trees to be pruned and/or limbed are to have blue tape tied to the limb and/or area of trimming. Trees proposed for transplanting are to be taped with yellow ribbon and a stake placed in the proposed location of transplant.

Final Design Review Meeting

The Owner and/or Consultant(s) may attend the meeting but are not required to be present. The ACC will review and comment on the application at the meeting, allow time for discussion with the Owner and/or Consultant(s), and subsequently provide the Owner with an approval or conclusive recommendations in writing for refinements to the design. A second review meeting may be necessary to review corrected and/or new materials. Corrected materials are to be provided to the

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ACC a minimum of five (5) working days prior to the next regularly scheduled meeting.

Final Design Approval

The ACC will issue final design approval in writing. Construction must commence within twelve (12) months of final design approval. Past the twelve months, the owner is required to provide an affidavit that plans are intact and unchanged.

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Changes to Approved Plans

Westlake Ventanas Residential CC&R's contain provisions that any improvements by property Owner must conform with approved plans. Therefore, the final approval of a proposed design constitutes an agreement with the Association that the proposed home or modification to a home be consistent with the approved plans and specifications. The ACC, however, understands that the construction process may ultimately result in either a need or desire to make a change in the approved drawings and will welcome the opportunity to review proposed changes. In the event a change is desired, the Owner, Contractor or Architect must submit the proposed changes in a graphic form to the ACC for review. The ACC will work in a reasonable manner to respond to a request for change as quickly as possible, but the review process will remain consistent with the aforementioned policies and guidelines. Applications for changes to approved plans shall include the following:

- A clear statement of the scope of the requested change
- A statement supporting the reasons for the change.
- Appropriate graphic materials illustrating the change.

Note: If changes are made to approved drawings without ACC review and approval, a stop work notice may be posted on the project until such time as the required approval is obtained. To avert delays in construction, submit changes as early as possible for ACC approval.

Re-submittal of Plans

In the event that final submittals are not approved by the ACC, the Owner will follow the same procedures for a resubmission as for original submittals. An additional design review fee is to accompany each resubmission as required by the ACC.

Subsequent Changes

Subsequent construction, landscaping or other changes in the intended Improvements that differ from approved final design documents, sample boards or the mock-up are to be submitted to the ACC for review and approval prior to making changes.

Work in Progress Observations

During construction, the ACC will check construction to ensure compliance with approved final design documents. If changes or alterations have been found that have not been approved, the ACC will issue a Notice to Comply.

Notice to Comply

In the event that the ACC finds changes and/or alterations during the Construction Monitoring process that have not been approved, the ACC will issue a

Exhibit "C" - Development Standards

Notice to Comply.

Exhibit "C" - Development Standards

Notice of Completion

Upon completion of construction of the Residence and the landscaping, the Owner and/or Contractor will submit to the ACC a Final Observation Request form for any Improvement(s) given final design approval by the ACC. The ACC will make a final inspection of the property within ten (10) working days of notification, weather permitting. Construction deposit will be returned at this time.

Right of Waiver

The ACC recognizes that each Homesite and/or Building has its own characteristics, and that each Owner has their own individual needs and desires. For this reason, the ACC has the authority to approve deviations from portions of the Guidelines. It should be understood, however, that any request to deviate from these Guidelines will be evaluated at the sole discretion of the ACC. Prior to the ACC approving any deviation from the Design Guidelines, it must be demonstrated that the proposal is consistent with the overall objectives of these Design Guidelines and that the deviation will not adversely affect adjoining properties or Westlake Ventanas as a whole. The ACC also reserves the right to waive any of the procedural steps outlined in the Guidelines provided that the Owner demonstrates there is good cause.

Non-Waiver, No Inadvertent Precedents

An approval by the ACC of drawings, specifications or work done or proposed, or in connection with other matters requiring approval under the Guidelines, including a waiver by the ACC, shall not be deemed to constitute a waiver of the right to withhold subsequent approval. For example, the ACC may disapprove an item shown in the final design submittal even though it may have been evident and could have been, but was not, disapproved at the Preliminary Design Review. An oversight by the ACC of non-compliance at any time during the review process, construction process or during its final inspection does not relieve the Owner/Developer from compliance with these Guidelines and all other applicable codes, ordinances, and laws.

Any error, omission or misjudgment by the ACC in any one instance shall not constitute the creation of a precedent governing future approvals and decisions. The ACC reserves the right to learn from any such errors or misjudgments and shall not be required to approve repetitions of them.

Non-Liability

The ACC or any member, employee or agent of the ACC will not be liable to any party for any action, or failure to act with respect to any matter if such action or failure to act was in good faith and without malice.

Exhibit "C" - Development Standards

Design Review Schedule

The ACC will make every reasonable effort to comply with the time schedule for design review. However, the ACC will not be liable for delays that are caused by circumstances beyond their control. The ACC will provide design review according to the following schedule, provided that all plans approved by the ACC shall be submitted to the Town of Westlake for review and approval in accordance with the submittal calendar established by the Town of Westlake:

1. Pre-Design Conference

- Meeting scheduled within ten (10) working days of receipt of Pre-Design
- Conference request form.

2. Preliminary Design Review

- Application documents to be submitted ten (10) working days prior to the next scheduled ACC meeting.
- The ACC shall meet within twenty (20) working days to consider a complete application.

3. Final Design Review

- Application documents to be submitted ten (10) working days prior to the next scheduled ACC meeting and within one year of preliminary design approval
- The ACC shall meet within fifteen (15) working days to consider a complete application.
- A second review meeting may be necessary to review corrected and/or new materials. Corrected materials will be provided to the ACC a minimum of five (5) working days prior to the next regularly scheduled meeting.

4. Minor Improvement

- Application documents to be submitted a minimum of seven (7) working days prior to the next scheduled ACC meeting.
- Written comments from the ACC meeting provided to Owner within seven (7) working days.
- A second review meeting may be deemed necessary by the ACC to review refinements, revisions and/or new materials. These materials must be provided to the ACC a minimum of five (5) working days prior to the next regularly scheduled meeting.
- Written comments and/or notice of final design approval provided by ACC to Owner within seven (7) working days of the review meeting.

5. Construction Observations

- Site Observation with the Contractor prior to any site disturbance, and

Exhibit "C" - Development Standards

within seven (7) working days of receipt of written request.

- Foundation/Mock-Up Observation within seven (7) working days of receipt of written request.

Exhibit "C" - Development Standards

- Final Construction Observation within seven (7) working days of receipt of written request.
- Notice of Completion issued within seven (7) working days of approved Final Landscape Observations.

Plan Submittals and Review Fees

New residential home construction within Westlake Ventanas will utilize the process described in this section. No Improvements may be commenced until the Owner has received a written "Approval" from the ACC.

Construction Security Deposit

In order to ensure an owner's compliance with the documents, each owner shall pay to the Association a construction deposit (in an amount established by the Board from time to time) upon the owner's submission of final plans and specifications for the construction or modification of an improvement under these Guidelines. Currently, the construction deposit for new construction is \$25,000 and \$12,500 for remodels, additions, or expansions. Said funds shall be held in escrow. Upon final inspection by the ACC and compliance with the approved plans and completion of all landscape and site requirements, the deposit shall be returned net of any Association draws as described below. The Association may draw against the deposit to repair or replace damages to Open Spaces, Association owned improvements including gates, curbs, streetlights, landscape, and irrigations systems. The deposit may also be utilized for site clean-up, repairs or replacements to erosion control devices and the like if owner or builder fail to keep the construction site clean or fails to keep mud and silt from the streets and Open Spaces.

New or Revision House-Start ACC Application- \$2,500 per application

Submittal process: Current ACC application completely filled out, plot plan attached (no plans required), and a check per application mailed or delivered to the ACC. Revisions will be charged same as a new submittal.

Master Plans ACC Submittal- \$500 per package

Submittal process: These packages usually occur when a builder enters a community, or changes product. All plans are to be submitted on ledger paper 11x16 or half size sets. Plans must include all elevations, roof pitch, brick/stone/stucco/siding percentages, and dimensional page for house width. Please include a submittal letter explaining the section(s) and specifics of the review. Mail or deliver the plan sets along with a check to the ACC.

Plans are reviewed in advance by the ACC.

Additional/New ACC Plan Review- \$500 per plan

Submittal process: Mail or deliver half size or 11x16 set of plans that include all

Exhibit "C" - Development Standards

elevations, roof pitch, brick/stone/stucco/siding percentages, and a dimensional page. Include a submittal letter describing the request along with a check per each plan to be reviewed to the ACC.

Variance ACC Review - \$250 per variance

Submittal process: Variance request letters must include the legal address, street address, and a description of the variance, i.e. measurements, etc. Mail or deliver the letter and any supportive materials (plot plan) along with a check to the ACC.

Exhibit "C" - Development Standards

ATTACHMENT ONE

ACC APPLICATION

Deliver to:

ACC c/o _____

Address

Date: _____

Lot: _____ Block: _____ Phase: _____ Section: _____

Plan #: _____ Bedrooms: _____ Baths: _____

Address: _____

Lot Plan Attached: (Please Circle) Yes/No

1st Floor Masonry % _____ 2nd Floor Masonry % _____

Chimney:

(Please Circle) Yes/No Masonry

Fencing Type: _____

Stone Manufacturer and Color: _____

Brick Manufacturer and Color: _____

Roof Pitch: _____ Roof Color: _____ Roof Material: _____

Paint Color: _____

Fill in the information if different from color above

Exhibit "C" - Development Standards

Trim Color: _____ Door Color: _____

Shutters Color: _____ Garage Color: _____

Square Footage of House: _____ House Width: _____

Front Retaining Wall:

(Please Circle) Yes/No Deck:
Yes/No

Patio: _____ square feet

Comments: _____

Builder Name/Contact Information: _____

By: _____ Approval Date: _____

Exhibit "C" - Development Standards

ATTACHMENT TWO

WESTLAKE VENTANAS SUPPLEMENT TO THE DESIGN GUIDELINES

Shared side yard retaining wall rule

These rules shall set forth the responsibilities of adjacent lot owners and are applicable for lots with cross slopes such that the natural grade falls across the street face or width of the lot.

Project Consistent Stone

All retaining walls constructed on a property line shall be constructed or faced with the stone designated as the community stone. This stone specification shall also apply to any wall visible to a street. The project stone is hereby designated to be available from quarry or as sourced by lot owner to be consistent in type.

Wall Location

Where retaining walls are constructed alongside lot lines to either facilitate fill on the uphill lot or cut on the downhill lot, the wall shall be located wholly within the lot where the construction activity first occurs. In other words, if the uphill lot is developed first, then builder shall construct the retaining wall within the uphill lot. If the downhill lot is developed first and desires to cut into the slope, thus requiring a retaining wall to withhold the natural grade, the wall shall be wholly located within the downhill lot unless mutually agreed to in writing by the adjacent lot owners. The cost of the retaining wall shall be borne by the owner of the lot where the wall is constructed subject to the following criteria:

Cost Sharing

If a lot owner constructs a residence on any lot whereby the natural grade is unaltered a side lot line, that lot owner is exempt from participating in any retaining wall cost that the adjacent lot owner may construct. Refer to diagram "A". In diagram "A" the owner of lot 1 did not alter grades at either side yard lot line, and therefore would not participate in any side yard retaining wall costs. They would pay for 50% of each side yard fence.

If two adjacent lots are both altered from natural grade whereby the uphill lot and the downhill lot both require the shared side yard retaining wall as illustrated in diagram "B", then the cost of the wall shall be shared 50/50 by both lot owners. In diagram "B", both lot owner 1 and 2 have altered the grade at their common side property line and therefore both contribute equally to the cost of the shared wall.

The owner of the lot to be developed first shall fund the full cost of the wall. The lot owner shall provide the ACC, or their designate, an invoice showing the full cost of the side yard wall. At such time as the adjacent lot is developed, the owner of that lot shall remit a reimbursement of 50% of that wall to the ACC at the time

Exhibit "C" - Development Standards

the construction deposit is paid to the ARC. The ARC shall remit the reimbursement to the lot owner who constructed the wall. Any agreement to the contrary must be made in writing prior to the wall construction, signed by both lot owners and provided to the ARC. The obligation to reimburse shall attach to the lot and the ARC shall be able to lien the lot owing the reimbursement.

Shared Fences

All side yard retaining walls shall be constructed with corning at 8 ft on center to receive fence posts for a steel picket fence as described in the Design Guidelines.

Regardless of whether a retaining wall is constructed along a side yard lot line, any fence that is installed along a side yard lot line shall be shared 50/50 by both lot owners.

The fence shall be installed as part of the retaining wall construction regardless of whether the wall was constructed by the uphill or downhill lot owner.

Exhibit "C" - Development Standards

Westlake Ventanas

Retaining Wall Rule

la+ 1.

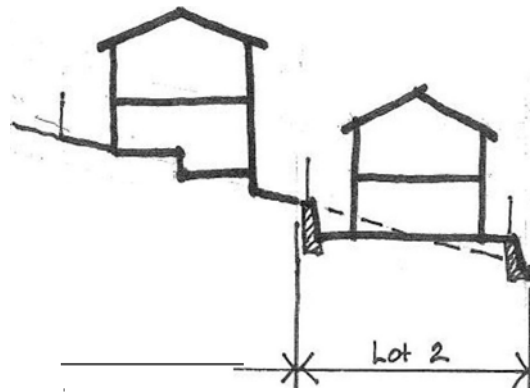


Diagram "A"

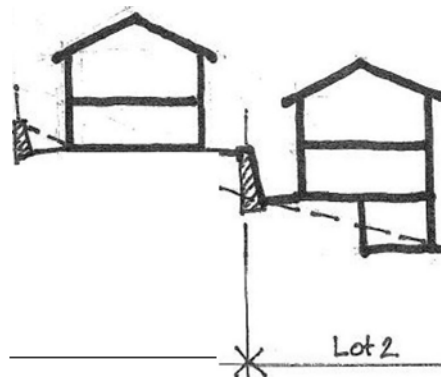


Diagram "B"

Exhibit "C" - Development Standards

ATTACHMENT THREE

NORTH TEXAS PLANT LIST

The following list should be used as a starting point for selecting plants in Westlake Ventanas. Requirements for specific Lots may be more or less restrictive depending on landscape indigenous to the immediate site and the location of the site within the Property.

Canopy Trees at Street I Lot:

Shumard Red Oak (*Quercus shumardii*)
Live Oak (*Quercus virginiana*)
Chinquapin Oak (*Quercus muehlenbergii*)
Lacebark Elm (*Ulmus parvifolia*)
Cedar Elm (*Ulmus crassifolia*)
Allee Elm (*Ulmus parvifolia 'Emer II'*)
Texas Ash (*Fraxinus texensis*)
White Ash (*Fraxinus americana*)

Canopy Trees at Open Spaces:

Bald Cypress (*Taxodium distichum*)
Bur Oak (*Quercus macrocarpa*)
Lacey Oak (*Quercus laceyi*)

Ornamental Trees:

Desert Willow (*Chilopsis linearis*)
Thornless Mesquite (
Mexican Plum (*Prunus mexicana*)
Redbud (*Redbud spp.*)
Yaupon Holly (*Ilex vomitoria*)
Possomhaw Holly (*Ilex decidua*)
Eastern Red Cedar (*Juniperus virginiana*)
Vitex (*Vitex agnus*)
Crape Myrtle (*Lagerstroemia indica*)

Exhibit "C" - Development Standards

Shrubs:

Abelia spp. (*Abelia*)
Cast Iron Plant (*Aspidistra elatior*)
Coral Beauty Cotoneaster (*Cotoneaster dammeri*)
Agarito (*Mahonia trifoliolata*)
American Beautyberry (*Callicarpa Americana*)
Apache Plume (*Fallugia paradoxa*)
Autumn Sage (*Salvia greggii*)
Dwarf Wax Myrtle (*Myrica pussila*)
Flame Acanthus (*Anisacanthus wrightii*)
Fragrant Sumac (*Rhus aromatic*)
Pale Leaf Yucca (*Yucca pallida*)
Red Yucca (*Hesperaloe parviflora*)
Smooth Sumac (*Rhus glabra*)
Texas Barberry (*Mahonia swaseyi*)
Texas Sage (*Leucophyllum frutescens*)
Turk's Cap (*Malvaviscus drummondii*)

Grasses:

Switchgrass (*Panicum virgatum*)
Big Bluestem (*Andropogon gerardii*)
Bushy Bluestem (*Andropogon glomeratus*)
Eastern Gamagrass (*Tripsacum dactyloides*)
Gulf Muhly (*Muhlenbergia capillaris*)
Indiangrass (*Sorghastrum nutans*)
Inland Sea oats (*Chasmanthium latifolium*)
Lindheimer Muhly (*Muhlenbergia lindheimeri*)
Little Bluestem (*Schizachyrium scoparium*)

Exhibit "C" - Development Standards

Perennials:

Black Eyed Susan (*Rudbeckia hirta*)

Blackfoot Daisy (*Melampodium*

leucanthum) Blue Mist Flower (*Eupatorium*

greggii) Butterfly Weed (*Asclepias*

tuberosa) Cardinal Flower (*Lobelia*

cardinalis) Coreopsis (*Coreopsis lanceolata*)

Fall Obedient Plant (*Physostegia virginiana*)

Four-nerve Daisy (*Hymenoxys scaposa*)

Fragrant Phlox (*Phlox pilosa*)

Cedar Sage (*Salvia roemeriana*)

Mealy Blue Sage (*Salvia farinacea*)

Prairie Verbena (*Verbena*

bipinnatifida) Purple Coneflower

(*Echinacea spp.*) Rockrose (*Pavonia*

lasiopetala)

Ruellia (*Ruellia spp.*)

Scarlet Sage (*Salvia coccinea*)

Texas Lantana (*Lantana horrida*)

Winecup (*Callirhoe involunrata*)

Yellow Columbine (*Aquilegia spp.*)

Exhibit "C" - Development Standards

Canopy Trees at Street / Lot:

Shumard Red Oak (*Quercus shumardii*)-



Lacebark Elm (*Ulmusparvifolia*)



Live Oak (*Quercus virginiana*)-



Cedar Elm (*Ulmus crassifolia*)-



Chinquapin Oak (*Quercus muehlenbergii*)



Allee Elm (*Ulmus parvifolia* 'Emer II')



Exhibit "C" - Development Standards

Texas Ash (*Fraxinus texensis*)



Bur Oak (*Quercus macrocarpa*)



White Ash (*Fraxinus americana*)



Lacey Oak (*Quercus laceyi*)



Canopy Trees at Open Spaces:

Bald Cypress (*Taxodium distichum*)



Ornamental Trees:

Desert Willow (*Chilopsis linearis*)



Exhibit "C" - Development Standards

Thornless Mesquite



Yaupon Holly (*Ilex vomitoria*)



Mexican Plum (*Prunus mexicana*)



Possomhaw Holly (*Ilex decidua*)



Redbud (*Redbud spp.*)



Eastern Red Cedar (*Juniperus virginiana*)



Exhibit "C" - Development Standards

Vitex (*Vitex agnus*)



Cast Iron Plan (*Aspidistra elatior*)



CrapeMyrtle (*Lagerstroemia indica*)



Coral Beauty Cotoneaster (*Cotoneaster dammeri*)



Shrubs:

Abelia spp. (*Abelia*)



Agarito (*Mahonia trifoliolata*)



Exhibit "C" - Development Standards

American Beautyberry (*Callicarpa Americana*)



Dwarf Wax Myrtle (*Myrica pusilla*)



ApachePlume (*Fallugia paradoxa*)



Flame Acanthus (*Anisacanthus wrightii*)



Autumn Sage (*Salvia greggii*)



Fragrant Sumac (*Rhus aromatic*)



Exhibit "C" - Development Standards

Pale Leaf Yucca (*Yucca pallida*)



Texas Barberry (*Mahonia swaseyi*)



Red Yucca (*Hesperaloe parviflora*)



Texas Sage (*Leucophyllum frutescens*)



Smooth Sumac (*Rhus glabra*)



Turk's Cap (*Malvaviscus drummondii*)



Exhibit "C" - Development Standards

Grasses:

Switchgrass (*Panicum virgatum*)



Eastern Gamagrass (*Tripsacum dactyloides*)



Big Bluestem (*Andropogon gerardii*)



Gulf Muhly (*Muhlenbergia capillaris*)



Bushy Bluestem (*Andropogon glomeratus*)



Indiangrass (*Sorghastrum nutans*)



Exhibit "C" - Development Standards

Perennials

Inland Seaots (*Chasmanthium latifolium*)



Black Eyed Susan (*Rudbeckia hirta*)



Lindheimer Muhly (*Muhlenbergia lindheimeri*) Blackfoot Daisy (*Melampodium leucanthum*)



Little Bluestem (*Schizachyrium scoparium*)



Blue Mist Flower (*Eupatorium greggii*)



Exhibit "C" - Development Standards

Butterfly Weed (*Asclepias tuberosa*)



Fall Obedient Plant (*Physostegia virginiana*)



Cardinal Flower (*Lobelia cardinalis*)



Four-nerve Daisy (*Hymenoxys scaposa*)



Coreopsis (*Coreopsis lanceolata*)



Fragrant Phlox (*Phlox pilosa*)



Exhibit "C" - Development Standards

Cedar Sage (*Salvia roemeriana*)



Purple Coneflower (*Echinacea spp.*)



Mealy Blue Sage (*Salvia farinacea*)



Rockrose (*Pavonia lasiopetala*)



Prairie Verbena (*Verbena bipinnatifida*)



Ruellia (*Ruellia spp.*)



Exhibit "C" - Development Standards

Scarlet Sage (*Salvia coccinea*)



Yellow Columbine (*Aquilegia spp.*)



Texas Lantana (*Lantana horrida*)



Winecup (*Callirhoe involucrata*)





Town of Westlake

1500 Solana Blvd
Building 7, Suite 7100
Westlake, TX 76262

Staff Report

File #: 25-38

Agenda Date: 2/3/2025

Agenda #: G.2.

TOWN STAFF REPORT RECOMMENDATIONS

Discuss, consider, and act to approve the purchase of a new fire engine not to exceed \$1.3 million dollars.

STAFF: John Ard, Fire Chief

BACKGROUND:

The department currently operates two fire engines: a 2003 model (22 years old) as a reserve engine and a 2015 model (10 years old) in frontline service. Last summer, the council approved \$1.3 million in the FY24/25 budget for the replacement of the 2003 fire engine with a new, fully equipped apparatus. Since the approval, the fire department has been focused on selecting, designing, and outfitting the new engine to ensure it meets the community's needs and risks, while aligning with our deployment strategies.

Please see the attached support documents for the purchase of a new fire engine.

DISCUSSION:

Apparatus Replacement

It is important to note that the lead time for the new fire engine will be approximately three years.

The standard practice for fire apparatus replacement in the fire service industry follows a 10/10 model, where the apparatus serves in frontline status for 10 years and then transitions to reserve status for another 10 years with a lifecycle of 20 years. The Town's vehicle replacement policy aligns with this, stating that a fire apparatus has a total life span of 20 years. According to the 2020 Community Risk Assessment: Standard of Cover for the Westlake Fire-EMS Department, the expected life span for an engine is also 20 years. It's important to note that while age is a key factor in assessing the need for replacement, other considerations such as vehicle mileage and engine hours are also critical in determining serviceability. A common tool utilized in the industry to evaluate vehicle replacement is illustrated in the attached report "Apparatus Replacement Justification 2024." Additionally, the fire department has created "Vehicle Replacement Schedule" that illustrates the replacement of the reserve engine.

Loose Emergency Equipment Replacement

Only one fire engine is equipped with all the necessary emergency equipment. All loose fire equipment should follow the apparatus replacement schedule, which means we should be replacing the equipment every 10 years or on an as needed basis.

By delivery of the new fire engine (approx. three years), nearly all loose equipment on the current fire engine will be 13 years old and will need to be replaced. It is important to note that some equipment, including Self-Contained Breathing Apparatus (SCBA), and extrication equipment have been replaced in recent years and will

not be part of this equipment purchase.

FISCAL IMPACT:

\$1,286,031.53

STAFF RECOMMENDATION:

While working with Finance Director Cayce Lay Lamas, two potential options for purchasing a fire engine were considered. The first option is to prepay and receive a guaranteed savings of \$124,897.16, which amounts to a 9% discount. The second option is to wait approximately three years, with the possibility of earning approximately \$161,991.40, though the exact amount is uncertain.

Given the minimal difference between the two options and the guaranteed savings from prepayment, staff recommends proceeding with the purchase of the new fire engine now.

ATTACHMENT(S):

1. PowerPoint "Fire Engine Purchase"
2. Engine Proposal
3. Proposal Detail
4. Proposal Option List
5. Loose Equipment
6. Engine Design Drawing (Not exact)
7. June 2024 Council Presentation
8. Apparatus Replacement Justification 2024
9. FD Vehicle Replacement Schedule

TOWN COUNCIL ACTION/OPTIONS:

- 1) Motion to approve
- 2) Motion to amend with the following stipulations (please state stipulations in motion)
- 3) Motion to table
- 4) Motion to deny

Westlake Fire-EMS Dept. Fire Engine Purchase

February 6, 2025

Background

- Presentation provided last summer discussing needs of the Department
- Needed to address fire engine replacement
- Fire Engines: 2003 Spartan (22 years old) & 2015 Ferrara (10 years old)
- Discussed best practices for fire engine replacement
 - 20-year life cycle
 - 10 years frontline and 10 years reserve
 - Other considerations: vehicle type, age, condition, mileage, and engine hours
 - Immediate Replacement suggested
- Town Council approved \$1.3 million in F24/25 budget

Background

- Apparatus committee created
- Research conducted - fire engine manufactures, models, etc.
- Pierce Manufacturing – Why? Premier fire truck builder in the country
- Selection of the model – Peirce-Custom Enforcer Pumper, PUC
- Series of design meetings
- Equipment discussions and planning

Pierce-Custom Enforcer Pumper, PUC

- Pierce Custom Enforcer Pumper, PUC
 - Peirce Ultimate Configuration or Pump Under Cab
- Features
 - Shorter wheelbase – Improved turning radius
 - Independent front suspension – Improved handling and safety
 - Scene safety light tower – Increased visibility at emergency scenes
 - Low hose bed – Quick hose deployment for fast fire attack
 - Roll up doors – Quick access to emergency equipment
 - Pump and roll capable – Allows for pumping and fire control at same time
 - 2000 GPM fire pump
 - 750-gallon water tank



Pierce-Custom Enforcer Pumper, PUC

Note: Image is not exact engine, illustration only

Fire Engine Equipment

Key Fire Equipment included in purchase

- Thermal imager for Officer-in-Charge
- Ballistic equipment – Vest, helmets, and trauma Packs
- Multi-gas detector
- Fire attack hoses and supply hoses
- Portable electric power tools – circular saws, reciprocating saws, drills, etc.
- Ground ladders

*Note: Replacement of equipment follows the Apparatus (Engine)
Replacement Plan schedule – 10 years*

Payment Options

	Upfront	Upon Delivery
List Price	\$1,270,626	\$1,270,626
Discount	\$124,897.16	
Potential Interest (4%)		\$161,991.40
Present Value	\$1,145,728.84	\$1,108,634.60

Potential Difference:
\$37,094.24

Note: Fire engine loose equipment and installation in the amount not to exceed \$138,302.69 will remain unchanged regardless of payment option.

Staff Recommendations

- Collaborating with Finance Director, Cayce Lay Lamas
- Minimal difference between two options
- Upfront option is guaranteed
- Purchase new fire engine now

Siddons Martin Emergency Group, LLC
 3500 Shelby Lane
 Denton, TX 76207
 GDN P115891
 TXDOT MVD No. A115890



December 17, 2024

John Ard, Fire Chief
 WESTLAKE FIRE-EMS DEPARTMENT
 2000 W. Dove Rd.
 WESTLAKE, TX 76262

Proposal For: 2024 Westlake Pumper

Siddons-Martin Emergency Group, LLC is pleased to provide the following proposal to WESTLAKE FIRE-EMS DEPARTMENT. Unit will comply with all specifications attached and made a part of this proposal. Total price includes delivery FOB WESTLAKE FIRE-EMS DEPARTMENT and training on operation and use of the apparatus.

Description	Amount
<hr/>	
Qty. 1 - 1165 - Pierce-Custom Enforcer Pumper, PUC (Unit Price - \$1,409,343.00)	
Delivery within 34-35 months of order date	
QUOTE # - SMEG-0008607-2	
	Vehicle Price \$1,270,626.00
	Chassis Prepay Discount (\$17,283.86)
	Full Prepay Discount (\$107,613.30)
	<hr/> 1165 - UNIT TOTAL \$1,145,728.84
	Loose Equipment \$138,302.69
	SUB TOTAL \$1,284,031.53
	<hr/> HGAC FS12-23 (FIRE) \$2,000.00
	<hr/> TOTAL \$1,286,031.53

Price guaranteed until 1/31/2025

Additional: Due to global supply chain constraints, any delivery date contained herein is a good faith estimate as of the date of this order/contract, and merely an approximation based on current information. Delivery updates will be made available, and a final firm delivery date will be provided as soon as possible.

Persistent Inflationary Environment Notification: If the Producer Price Index of Components for Manufacturing [www.bls.gov Series ID: WPUID6112] (the "PPI") has increased at a compounded annual growth rate greater than 5.0% from the date of acceptance of this proposal letter (the "Order Month") and 14 months prior to the anticipated Ready for Pickup Date (the "Evaluation Month"), then the proposal price may be increased by an amount equal to any increase exceeding 5.0% for the time period between the Order Month and the Evaluation Month. Siddons Martin and Pierce will provide documentation of

such increase and the updated price for the customer's approval before proceeding with completion of the order along with an option to cancel the order.

Taxes: Tax is not included in this proposal. In the event that the purchasing organization is not exempt from sales tax or any other applicable taxes and/or the proposed apparatus does not qualify for exempt status, it is the duty of the purchasing organization to pay any and all taxes due. Balance of sale price is due upon acceptance of the apparatus at the factory.

Late Fee: A late fee of .033% of the sale price will be charged per day for overdue payments beginning ten (10) days after the payment is due for the first 30 days. The late fee increases to .044% per day until the payment is received. In the event a prepayment is received after the due date, the discount will be reduced by the same percentages above increasing the cost of the apparatus.

Cancellation: In the event this proposal is accepted and a purchase order is issued then cancelled or terminated by Customer before completion, Siddons-Martin Emergency Group may charge a cancellation fee. The following charge schedule based on costs incurred may be applied:

- (A) 10% of the Purchase Price after order is accepted and entered by Manufacturer;
- (B) 20% of the Purchase Price after completion of the approval drawings;
- (C) 30% of the Purchase Price upon any material requisition.

The cancellation fee will increase accordingly as costs are incurred as the order progresses through engineering and into manufacturing. Siddons-Martin Emergency Group endeavors to mitigate any such costs through the sale of such product to another purchaser; however, the customer shall remain liable for the difference between the purchase price and, if applicable, the sale price obtained by Siddons-Martin Emergency Group upon sale of the product to another purchaser, plus any costs incurred by Siddons-Martin to conduct such sale.

Acceptance: In an effort to ensure the above stated terms and conditions are understood and adhered to, Siddons-Martin Emergency Group, LLC requires an authorized individual from the purchasing organization sign and date this proposal and include it with any purchase order. Upon signing of this proposal, the terms and conditions stated herein will be considered binding and accepted by the Customer. The terms and acceptance of this proposal will be governed by the laws of the state of Texas. No additional terms or conditions will be binding upon Siddons-Martin Emergency Group, LLC unless agreed to in writing and signed by a duly authorized officer of Siddons-Martin Emergency Group, LLC.

Sincerely,



Brian Peters

I, _____, the authorized representative of WESTLAKE FIRE-EMS DEPARTMENT, agree to purchase the proposed and agree to the terms of this proposal and the specifications attached hereto.

Signature & Date



Proposal Details Report

12/17/2024

Customer: Westlake, TX Fire Department - **Bid Number:** 1165

Denton County

Representative Peters, Brian

Job Number:

Requirements Manager: **Organization:** Siddons-Martin Emergency Group

Description: Westlake Enforcer PUC Pumper

Chassis: Enforcer Chassis, PUC-NG

Body: Pumper, PUC, Aluminum

OptionCode	Type	Option	ProposalText
0766589		Boiler Plates, PUC Pumper	

Siddons-Martin is pleased to submit a proposal to Westlake Fire Department for a **Pierce® multi purpose response vehicle** per your request for quotation. The following paragraphs will describe in detail the apparatus, construction methods, and equipment proposed. This proposal will indicate size, type, model and make of components parts and equipment, providing proof of compliance with each and every item (except where noted) in the departments advertised specifications.

PIERCE MANUFACTURING was founded in 1913. Since then, we have been building bodies with one philosophy, "BUILD THE FINEST". Our skilled craftsmen take pride in their work, which is reflected, in the final product. We have been building fire apparatus since the early "forties" giving Pierce Manufacturing over 75 years of experience in the fire apparatus market. Pierce Manufacturing has built and put into service more than 62,500 apparatus, including more than 33,900 on Pierce custom chassis designed and built specifically for fire and emergency applications. Our Appleton, Wisconsin facility has over 870,000 total square feet of floor space situated on approximately 105 acres of land. Our Bradenton, Florida facility has 300,000 square feet of floor space situated on approximately 38 acres of land.

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

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

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

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

GENERAL DESIGN AND CONSTRUCTION

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

QUALITY AND WORKMANSHIP

Pierce has set the pace for quality and workmanship in the fire apparatus field. Our tradition of building the highest quality units with craftsmen second to none has been the rule right from the beginning and we demonstrate that ongoing commitment by: Ensuring all steel welding follows American Welding Society D1.1-2004 recommendations for structural steel welding. All aluminum welding follows American Welding Society and ANSI D1.2-2003 requirements for structural welding of aluminum. All sheet metal welding follows American Welding Society B2.1-2000 requirements for structural welding of sheet metal. Our flux core arc welding uses alloy rods, type 7000 and is performed to American Welding Society standards A5.20-E70T1. Furthermore, all employees classified as welders are tested and certified to meet the American Welding Society codes upon hire and every three (3) years thereafter. Pierce also employs and American Welding Society certified welding inspector in plant during working hours to monitor weld quality.

Pierce Manufacturing operates a Quality Management System under the requirements of ISO 9001. These standards sponsored by the International Organization for Standardization (ISO) specify the quality systems that are established by the manufacturer for design, manufacture, installation and service. A copy of the certificate of compliance is included with this proposal. In addition to the Quality Management system, we also employ a Quality Achievement Supplier program to ensure the vendors and suppliers that we utilize meet the high standards we demand. That is just part of our overall "Quality at the Source" program at Pierce.

To demonstrate the quality of our products and services, a list of at least two (2) fire departments/municipalities that have purchased vehicles for a second time is provided.

DELIVERY

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

MANUAL AND SERVICE INFORMATION

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

SAFETY VIDEO

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

PERFORMANCE TESTS

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

SERVICE AND WARRANTY SUPPORT

Pierce dealership support will be provided by Siddons-Martin by operating in conjunction with a Pierce authorized service center. The service center will have factory-trained mechanics on staff versed in Pierce fire apparatus. The service facility will be located within twenty five (25) miles of the fire department.

In addition to the dealership, Pierce has service facilities located in both, Weyauwega, Wisconsin and Bradenton, Florida. Pierce also maintains a dedicated parts facility of over 100,000 square feet in Appleton, Wisconsin. The parts facility stocks in excess of \$5,000,000 in parts dedicated to service and replacement parts. The parts facility employs a staff dedicated solely for the distribution and shipment of service and replacement parts.

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

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

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

LIABILITY

The successful bidder will defend any and all suits and assume all liability for the use of any patented process including any device or article forming a part of the apparatus or any appliance furnished under the contract.

INSURANCE PROVIDED BY BIDDER

Commercial General Liability Insurance

The successful bidder will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of commercial general liability insurance:

Each Occurrence:

\$1,000,000

Products/Completed Operations Aggregate:

\$1,000,000

Personal and Advertising Injury:

\$1,000,000

General Aggregate:

\$2,000,000

Coverage will be written on a Commercial General Liability form. The policy will be written on an occurrence form and will include Contractual Liability coverage for bodily injury and property damage subject to the terms and conditions of the policy. The policy will include Owner as an additional insured when required by written contract.

Commercial Automobile Liability Insurance

The successful bidder will, during the performance of the contract, keep in force at least the following minimum limits of commercial automobile liability insurance and coverage will be written on a Commercial Automobile liability form:

Each Accident Combined Single Limit:

\$1,000,000

Umbrella/Excess Liability Insurance

The successful bidder will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:

Aggregate:

\$3,000,000

Each Occurrence:

\$3,000,000

The umbrella policy will be written on an occurrence basis and at a minimum provide excess to the bidder's General Liability and Automobile Liability policies.

The required limits can be provided by one (1) or more policies provided all other insurance requirements are met.

Coverage will be provided by a carrier(s) rated A- or better by A.M. Best.

All policies will provide a 30-day notice of cancellation to the named insured. The Certificate of Insurance will provide the following cancellation clause: Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

Bidder agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with the bid. The certificate will show the purchaser as certificate holder.

INSURANCE PROVIDED BY MANUFACTURER

Product Liability Insurance

The manufacturer will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of Product Liability insurance:

Each Occurrence:

\$1,000,000

Products/Completed Operations Aggregate:

\$1,000,000

Coverage will be written on a Commercial General Liability form. The policy will be written on an occurrence form. The manufacturer's policy will include the owner as additional insured when

required by written contract between the Owner and a Pierce authorized dealer.

Umbrella/Excess Liability Insurance

The manufacturer will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:

Each Occurrence:

\$25,000,000

Aggregate:

\$25,000,000

The umbrella policy will be written on an occurrence basis and provide excess to the manufacturer's General Liability/Products policies.

The required limits can be provided by one (1) or more policies provided all other insurance requirements are met.

Coverage will be provided by a carrier(s) rated A- or better by A.M. Best.

All policies will provide a 30-day notice of cancellation to the named insured. The Certificate of Insurance will provide the following cancellation clause: Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

Manufacturer agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with the bid. The certificate will show the purchaser as the certificate holder.

0661794 Single Source Compliance

SINGLE SOURCE MANUFACTURER

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

0584456 Manufacture Location, Appleton, Wisconsin

Your apparatus will be manufactured in Appleton, Wisconsin.

0584452 RFP Location: Appleton, Wisconsin

0588609 Vehicle Destination, US

0764706 SP BMP Truck - Pre-Approval at Bid - Approved Option Will Be Required at Booking

0816491 Comply NFPA 1900 Changes Effective Jan 1, 2024, With Exceptions

NFPA 2024 STANDARDS

This unit will comply with the NFPA standards effective January 1, 2024, except for fire department directed exceptions. These exceptions will be set forth in the Statement of Exceptions.

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

All horizontal surfaces designated as a standing or walking surface that are greater than 48.00" above the ground must be defined by a 1.00" wide line along its outside perimeter. Perimeter markings and designated access paths to destination points will be identified on the customer approval print and are shown as approximate. Actual location(s) will be determined based on materials used and actual conditions at final build. Access paths may pass through hose storage areas and opening or removal of covers or restraints may be required. Access paths may require the operation of devices and equipment such as the aerial device or ladder rack.

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

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

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

0533347 Pumper/Pumper with Aerial Device Fire Apparatus

0588611 Vehicle Certification, Pumper

0661778	Agency, Apparatus Certification, Pumper/Tanker, U.L.	<p>NFPA COMPLIANCY Apparatus proposed by the bidder will meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in current edition at time of contract execution. Fire department's specifications that differ from NFPA specifications will be indicated in the proposal as "non-NFPA".</p> <p>PUMP TEST Underwriters Laboratory (UL) will test, approved, and certify the pump. The test results and the pump manufacturer's certification of hydrostatic test; the engine manufacturer's certified brake horsepower curve; and the pump manufacturer's record of pump construction details will be forwarded to the Fire Department.</p> <p>GENERATOR TEST If the unit has a generator, Underwriters Laboratory (UL) will test, approved, and certify the generator. The test results will be provided to the Fire Department at the time of delivery.</p> <p>BREATHING AIR TEST If the unit has breathing air, Pierce Manufacturing will draw an air sample from the air system and have the sample certified that the air quality meets the requirements of NFPA 1989, <i>Standard on Breathing Air Quality for Fire and Emergency Services Respiratory Protection</i>.</p>
0816495	Certification, Vehicle Inspection Program, NFPA 1900	<p>VEHICLE INSPECTION PROGRAM CERTIFICATION To assure the vehicle is built to current NFPA1900 standards, the apparatus, in its entirety, will be third-party, independent, audit-certified through Underwriters Laboratory (UL) that it is built and complies to all applicable standards in the current edition. The certification includes: all design, production, operational, and performance testing of not only the apparatus, but those components that are installed on the apparatus. A placard will be affixed in the driver's side area stating the third party agency, the date, the standard and the certificate number of the whole vehicle audit.</p>
0000114	Inspection Trip(s)	<p>INSPECTION TRIP(S) The bidder will provide two (2) factory inspection trip(s) for 3 Westlake personnel customer representative(s). The inspection trip(s) will be scheduled at times mutually agreed upon between the manufacturer's representative and the customer. All costs such as travel, lodging and meals will be the responsibility of the bidder.</p>
0620362	Consortium, HGAC	
0537375	Unit of Measure, US Gallons	
0529326	Bid Bond, 10%, Pierce Built Chassis	<p>BID BOND A bid bond as security for the bid in the form of a 10 percent bid bond will be provided with the proposal. This bid bond will be issued by a Surety Company who is listed on the U.S. Treasury Departments list of acceptable sureties as published in Department Circular 570. The bid bond will be issued by an authorized representative of the Surety Company and will be accompanied by a certified power of attorney dated on or before the date of bid. The bid bond will include language which assures that the bidder/principal will give a bond or bonds, as may be specified in the bidding or contract documents, with good and sufficient surety for the faithful performance of the contract, including the Basic One (1) Year Limited Warranty, and for the prompt payment of labor and material furnished in the prosecution of the contract. Notwithstanding any document or assertion to the contrary, any surety bond related to the sale of a vehicle will apply only to the Basic One (1) Year Limited Warranty for such vehicle. Any surety bond related to the sale of a vehicle will not apply to any other warranties that are included within this bid (OEM or otherwise) or to the warranties (if any) of any third party of any part, component, attachment or accessory that is incorporated into or attached to the vehicle. In the event of any contradiction or inconsistency between this provision and any other document or assertion, this provision will prevail.</p>

0816569	Performance Bond, Not Requested, PPI Terms	<p>PERFORMANCE BOND NOT REQUESTED</p> <p>A performance bond will not be included. If requested at a later date, one will be provided to you for an additional cost and the following will apply:</p> <p>The successful bidder will furnish a Performance and Payment bond (Bond) equal to 100 percent of the total contract amount within 30 days of the notice of award. Such Bond will be in a form acceptable to the Owner and issued by a surety company included within the Department of Treasury's Listing of Approved Sureties (Department Circular 570) with a minimum A.M. Best Financial Strength Rating of A and Size Category of XV. In the event of a bond issued by a surety of a lesser Size Category, a minimum Financial Strength rating of A+ is required.</p> <p>Bidder and Bidder's surety agree that the Bond issued hereunder, whether expressly stated or not, also includes the surety's guarantee of the vehicle manufacturer's Bumper to Bumper warranty period included within this proposal. Owner agrees that the penal amount of this bond will be simultaneously amended to 25 percent of the total contract amount upon satisfactory acceptance and delivery of the vehicle(s) included herein. Notwithstanding anything contained within this contract to the contrary, the surety's liability for any warranties of any type will not exceed three (3) years from the date of such satisfactory acceptance and delivery, or the actual Bumper to Bumper warranty period, whichever is shorter.</p> <p>Due to global supply chain constraints, any delivery date contained herein is a good faith estimate as of the date of this order/contract, and merely an approximation based on current information. Delivery updates will be made available, and a final firm delivery date will be provided as soon as possible.</p> <p>If the Producer Price Index of Components for Manufacturing [www.bls.gov Series ID: WPUID6112] ("PPI") has increased at a compounded annual growth rate of 5.0% or more between the month Pierce accepts the order ("Order Month") and a month 14 months prior to the then predicted Ready For Pickup date ("Evaluation Month"), then pricing may be updated in an amount equal to the increase in PPI over 5.0% for each year or fractional year between the Order Month and the Evaluation Month.</p> <p>The seller will document any such updated price for the customer's approval before proceeding and provide an option to cancel the order.</p>
000007	Approval Drawing	<p>APPROVAL DRAWING</p> <p>A drawing of the proposed apparatus will be prepared and provided to the purchaser for approval before construction begins. The Pierce sales representative will also be provided with a copy of the same drawing. The finalized and approved drawing will become part of the contract documents. This drawing will indicate the chassis make and model, location of the lights, siren, horns, compartments, major components, etc.</p> <p>A "revised" approval drawing of the apparatus will be prepared and submitted by Pierce to the purchaser showing any changes made to the approval drawing.</p>
0002928	Electrical Diagrams	<p>ELECTRICAL WIRING DIAGRAMS</p> <p>Two (2) electrical wiring diagrams, prepared for the model of chassis and body, will be provided.</p>
0889378	Enforcer Chassis, PUC-NG	<p>ENFORCER CHASSIS</p> <p>The Pierce Enforcer™ is the custom chassis developed exclusively for the fire service. Chassis provided will be a new, tilt-type custom fire apparatus. The chassis will be manufactured in the apparatus body builder's facility eliminating any split responsibility. The chassis will be designed and manufactured for heavy-duty service, with adequate strength, capacity for the intended load to be sustained, and the type of service required. The chassis will be the manufacturer's first line tilt cab.</p>
0000110	Wheelbase	<p>WHEELBASE</p> <p>The wheelbase of the vehicle will be 194.00".</p>
0000070	GVW Rating	<p>GVW RATING</p> <p>The gross vehicle weight rating will be 46,500.</p>
0729280	Frame Rails, 13.38 x 3.50 x .375, Enforcer	<p>FRAME</p> <p>The chassis frame will be built with two (2) steel channels bolted to five (5) cross members or more, depending on other options of the apparatus. The side rails will have a 13.38" tall web over the front and mid sections of the chassis, with a continuous smooth taper to 10.75" over the rear axle. Each rail will have a section modulus of 25.992 cubic inches and a resisting bending moment (rbm) of 3,119,040 in-lb over the critical regions of the frame assembly, with a section modulus of 18.96 cubic inches with an rbm of 2,275,200 in-lb over the rear axle. The frame rails will be constructed of 120,000 psi yield strength heat-treated 0.38" thick steel with 3.50" wide flanges.</p>
0889469	Frame Liner, "C/Inv L" 12.50" x 3.00" x .25", AXT/Vel/Imp/Enf, 56" QVal	<p>FRAME REINFORCEMENT</p> <p>In addition, a mainframe internal liner will be provided. The liner will be an internal "C" design that steps to an internal "L" design over the rear axle. It will be heat-treated steel measuring 12.50" x 3.00" x 0.25" through the front portion of the liner, stepping to 9.38" x 3.00" x 0.25" through the rear portion of the liner. Each liner will have a section modulus of 13.58 cubic inches, yield strength of 110,000 psi, and rbm of 1,494,042 in-lb. Total rbm at wheelbase center will be 4,391,869 in-lb.</p> <p>The frame liner will be mounted inside of the chassis frame rail and extend the full length of the frame.</p>

0630705	Axle, Front, Oshkosh TAK-4, Non Drive, 19,500 lb, Enforcer	<p>FRONT NON DRIVE AXLE</p> <p>The Oshkosh TAK-4® front axle will be of the independent suspension design with a ground rating of 19,500 lb.</p> <p>Upper and lower control arms will be used on each side of the axle. Upper control arm castings will be made of 100,000-psi yield strength 8630 steel and the lower control arm casting will be made of 55,000-psi yield ductile iron.</p> <p>The center cross members and side plates will be constructed out of 80,000-psi yield strength steel.</p> <p>Each control arm will be mounted to the center section using elastomer bushings. These rubber bushings will rotate on low friction plain bearings and be lubricated for life. Each bushing will also have a flange end to absorb longitudinal impact loads, reducing noise and vibrations.</p> <p>There will be nine (9) grease fittings supplied, one (1) on each control arm pivot and one (1) on the steering gear extension.</p> <p>The upper control arm will be shorter than the lower arm so that wheel end geometry provides positive camber when deflected below rated load and negative camber above rated load.</p> <p>Camber at load will be zero degrees for optimum tire life.</p> <p>The ball joint bearing will be of low friction design and be maintenance free.</p> <p>Toe links that are adjustable for alignment of the wheel to the center of the chassis will be provided.</p> <p>The wheel ends must have little to no bump steer when the chassis encounters a hole or obstacle.</p> <p>The steering linkage will provide proper steering angles for the inside and outside wheel, based on the vehicle wheelbase.</p> <p>The axle will have a turning angle of up to 45 degrees.</p>
0030264	Suspension, Front TAK-4, 19,500 lb, Qtm/AXT/Imp/Vel/Enf/SFR	<p>FRONT SUSPENSION</p> <p>Front Oshkosh TAK-4™ independent suspension will be provided with a minimum ground rating of 19,500 lb.</p> <p>The independent suspension system will be designed to provide maximum ride comfort. The design will allow the vehicle to travel at highway speeds over improved road surfaces and at moderate speeds over rough terrain with minimal transfer of road shock and vibration to the vehicle's crew compartment.</p> <p>Each wheel will have torsion bar type spring. In addition, each front wheel end will also have energy absorbing jounce bumpers to prevent bottoming of the suspension.</p> <p>The suspension design will be such that there is at least 10.00" of total wheel travel and a minimum of 3.75" before suspension bottoms.</p> <p>The torsion bar anchor lock system allows for simple lean adjustments, without the use of shims. One can adjust for a lean within 15 minutes per side. Anchor adjustment design is such that it allows for ride height adjustment on each side.</p> <p>The independent suspension was put through a durability test that simulated 140,000 miles of inner city driving.</p>
0087572	Shock Absorbers, KONI, TAK-4, Qtm/AXT/Imp/Vel/DCF/Enf	<p>FRONT SHOCK ABSORBERS</p> <p>KONI heavy-duty telescoping shock absorbers will be provided on the front suspension.</p>
0000322	Oil Seals, Front Axle	<p>FRONT OIL SEALS</p> <p>Oil seals with viewing window will be provided on the front axle.</p>
0899438	Tires, Front, Goodyear, Armor MAX MSA, 425/65R22.50, 20 ply	<p>FRONT TIRES</p> <p>Front tires will be Goodyear 425/65R22.50 radials, 20 ply Armor Max MSA, rated for 22,800 lb maximum axle load and 68 mph maximum speed.</p>
0725046	Wheels, Front, 22.50" x 12.25", Steel, Hub Pilot, 24k	<p>The tires will be mounted on 22.50" x 12.25" steel disc type wheels with a ten (10)-stud, 11.25" bolt circle.</p>
0640711	Axle, Rear, Dana S26-190, 27,000 lb Saber/Enforcer	<p>REAR AXLE</p> <p>The rear axle will be a Dana, Model S26-190, with a capacity of 27,000 lb.</p>
0544253	Top Speed of Vehicle, 68 MPH /109 KPH	<p>TOP SPEED OF VEHICLE</p> <p>A rear axle ratio will be furnished to allow the vehicle to reach a top speed of 68 mph / 109 kph.</p>
0565380	Suspen, Rear, Single Slipper Spring, 27,000 lb, Saber/Enforcer	<p>REAR SUSPENSION</p> <p>The rear suspension will be Standens, semi-elliptical, 3.00" wide x 52.50" long, 12-leaf pack with a ground rating of 27,000 lb. The spring hangers will be castings.</p> <p>The two (2) top leaves will wrap the forward spring hanger pin, and the rear of the spring will be a slipper style end that will ride in a rear slipper hanger.</p> <p>A steel encased rubber bushing will be used in the spring eye. The steel encased rubber bushing will be maintenance free and require no lubrication.</p>
0000485	Oil Seals, Rear Axle	<p>REAR OIL SEALS</p> <p>Oil seals will be provided on the rear axle(s).</p>

0782552	Tires, Rear, Goodyear, Endurance RSA, 12R22.50, LRH, Single	<p>REAR TIRES</p> <p>Rear tires will be four (4) Goodyear 12R22.50 radials, load range H, Endurance RSA highway tread, rated for 27,120 lb maximum axle load and 75 mph maximum speed.</p>
0654806	Wheels, Rear, Accuride, 22.50" x 8.25", Steel, Hub Pilot, Single	<p>The tires will be mounted on Accuride® 22.50" x 8.25" steel disc type wheels with a ten (10) stud, 11.25" bolt circle.</p>
0568081	Tire Balancing, Counteract Beads	<p>TIRE BALANCE</p> <p>All tires will be balanced with Counteract balancing beads. The beads will be inserted into the tire and eliminate the need for wheel weights.</p>
0620570	Tire Pressure Monitoring, RealWheels, AirSecure, Valve Cap, Single Axle	<p>TIRE PRESSURE MANAGEMENT</p> <p>There will be a RealWheels LED AirSecure™ tire alert pressure management system provided, that will monitor each tire's pressure. A sensor will be provided on the valve stem of each tire for a total of six (6) tires.</p> <p>The sensor will calibrate to the tire pressure when installed on the valve stem for pressures between 10 and 200 psi. The sensor will activate an integral battery operated LED when the pressure of that tire drops 5 to 8 psi.</p> <p>Removing the cap from the sensor will indicate the functionality of the sensor and battery. If the sensor and battery are in working condition, the LED will immediately start to flash.</p>
0801926	Lug Nut, Covers, Black	<p>BLACK LUG NUT COVERS</p> <p>Black lug nut covers will be supplied on front and rear wheels.</p>
0002045	Mud Flap, Front and Rear, Pierce Logo	<p>MUD FLAPS</p> <p>Mud flaps with a Pierce logo will be installed behind the front and rear wheels.</p>
0544802	Chocks, Wheel, SAC-44-E, Folding, (Up to 44" Diameter Tires)	<p>WHEEL CHOCKS</p> <p>There will be one (1) pair of folding Ziamatic, Model SAC-44-E, aluminum alloy, Quick-Choc wheel blocks, with easy-grip handle provided.</p>
0544806	Mounting Brackets, Chocks, SAC-44-E, Folding, Horizontal	<p>Wheel Chock Brackets</p> <p>There will be one (1) pair of Zico, Model SQCH-44-H, horizontal mounting wheel chock brackets provided for the Ziamatic, Model SAC-44-E, folding wheel chocks. The brackets will be made of aluminum and consist of a quick release spring loaded rod to hold the wheel chocks in place. The brackets will be mounted forward of the left side rear tire.</p>
0820509	ESC/ABS/ATC Wabco Brake System, Single Rear Axle, NFPA 1900/ULC	<p>ELECTRONIC STABILITY CONTROL</p> <p>A vehicle control system will be provided as an integral part of the ABS brake system from Meritor Wabco.</p> <p>The system will monitor and update the lateral acceleration of the vehicle and compare it to a critical threshold where a side roll event may occur. If the critical threshold is met, the vehicle control system will automatically reduce engine RPM, engage the engine retarder (if equipped), and selectively apply brakes to the individual wheel ends of the front and rear axles to reduce the possibility of a side roll event.</p> <p>The system will monitor directional stability through a lateral accelerometer, steer angle sensor and yaw rate sensor. If spinout or drift out is detected, the vehicle control system will selectively apply brakes to the individual wheel ends of the front and rear axles to bring the vehicle back to its intended direction.</p> <p>ANTI-LOCK BRAKE SYSTEM</p> <p>The vehicle will be equipped with a Wabco 4S4M, anti-lock braking system. The ABS will provide a four (4) channel anti-lock braking control on both the front and rear wheels. A digitally controlled system that utilizes microprocessor technology will control the anti-lock braking system. Each wheel will be monitored by the system. When any wheel begins to lockup, a signal will be sent to the control unit. This control unit will then reduce the braking of that wheel for a fraction of a second and then reapply the brake. This anti-lock brake system will eliminate the lockup of any wheel thus helping to prevent the apparatus from skidding out of control.</p> <p>AUTOMATIC TRACTION CONTROL</p> <p>An anti-slip feature will be included with the ABS. The Automatic Traction Control will be used for traction in poor road and weather conditions. The Automatic Traction Control will act as an electronic differential lock that will not allow a driving wheel to spin, thereby supplying traction at all times. The ABS electronic control unit (ECU) will work with the engine ECU, sharing information concerning wheel slip. Engine ECU will use information to control engine speed, allowing only as much throttle application as required for the available traction, regardless of how much the driver is asking for. An "off road traction" switch will be provided on the instrument panel. Activation of the switch will allow additional tire slip to let the truck climb out and get on top of deep snow or mud.</p>

0030185	Brakes, Knorr/Bendix 17", Disc, Front, TAK-4	<p>BRAKES The service brake system will be full air type. The front brakes will be Knorr/Bendix disc type with a 17.00" ventilated rotor for improved stopping distance. The brake system will be certified, third party inspected, for improved stopping distance.</p>
0627930	Brakes, Bendix, Cam, Rear, 16.50 x 8.63"	<p>The rear brakes will be Bendix™ 16.50" x 8.63" cam operated with automatic slack adjusters.</p>
0735527	Air Compressor, Brake, Wabco 26.8 CI, Paccar	<p>AIR COMPRESSOR, BRAKE SYSTEM The air compressor will be a Wabco single piston compressor with a 26.8 CI displacement.</p>
0644232	Brake Reservoirs, 4,272 Cubic Inch Minimum Capacity, Saber FR/Enforcer	<p>BRAKE SYSTEM The brake system will include: Brake treadle valve Heated automatic moisture ejector on air dryer Total air system minimum capacity of 4,272 cubic inches Two (2) air pressure gauges with a red warning light and an audible alarm, that activates when air pressure falls below 60 psi Spring set parking brake system Parking brake operated by a push-pull style control valve A parking "brake on" indicator light on instrument panel Park brake relay/inversion and anti-compounding valve, in conjunction with a double check valve system, with an automatic spring brake application at 40 psi A pressure protection valve to prevent all air operated accessories from drawing air from the air system when the system pressure drops below 80 psi (550 kPa) 1/4 turn drain valves on each air tank The air tank will be primed and painted to meet a minimum 750 hour salt spray test. The air tanks will be painted black #98. To reduce the effects of corrosion, the air tank will be mounted with stainless steel brackets.</p>
0568012	Air Dryer, Wabco System Saver 1200, Heater, 2010	<p>BRAKE SYSTEM AIR DRYER The air dryer will be WABCO System Saver 1200 with spin-on coalescing filter cartridge and 100 watt heater.</p>
0000790	Brake Lines, Nylon	<p>BRAKE LINES Color-coded nylon brake lines will be provided. The lines will be wrapped in a heat protective loom in the chassis areas that are subject to excessive heat.</p>
0544415	Inlet/Outlet, Air, w/Disconnect Fitting, Location	<p>AIR INLET/OUTLET One (1) air inlet/outlet will be installed with the female coupling located DS Step Well. This system will tie into the "wet" tank of the brake system and include a check valve in the inlet line and an 85 psi pressure protection valve in the outlet line. The air outlet will be controlled by a needle valve. A mating male fitting will be provided with the loose equipment. The air inlet will allow a shoreline air hose to be connected to the vehicle. This will allow station air to be supplied to the brake system of the vehicle to insure constant air pressure.</p>
0014130	Air Tank, Additional for Extra Air Horn Capacity	<p>ADDITIONAL AIR TANK FOR AIR HORN An additional air tank with 1,454 cubic inch displacement will be provided to increase the capacity of the air system. This tank will be dedicated for air horn use. The air tank will be primed and painted to meet a minimum 750 hour salt spray test. To reduce the effects of corrosion, the air tank will be mounted with stainless steel brackets. The air tank(s) will be painted same as frame color. The output flow of the engine air compressor varies with engine rpm. Full compressor output is only achieved at governed engine speed. Engine speed may be limited by generators, pumps and other PTO driven options.</p>

0808515	Engine, Paccar MX, 510HP, 1850 lb-ftW/OBD, EPA 2027, Saber FR/Enforcer	<p>ENGINE</p> <p>The chassis will be powered by an electronically controlled engine as described below:</p> <p>Make: Paccar Model: MX Power: 510 hp at 1600rpm Torque: 1850 lb-ft at 1000rpm Governed Speed: 1900 rpm Emissions Certification: EPA 2027 Fuel: Diesel Cylinders: Six (6) Displacement: 13.7L Starter: DP60 Fuel Filters: Dual cartridge style with check valve, water separator, and water in fuel sensor The engine will include On-board diagnostics (OBD), which provides self diagnostic and reporting. The system will give the owner or repair technician access to state of health information for various vehicle sub systems. The system will monitor vehicle systems, engine and after treatment. The system will illuminate a malfunction indicator light on the dash console if a problem is detected.</p>
0811409	Not Required, Engine Contingency Adjustment	
0001244	High Idle w/Electronic Engine, Custom	<p>HIGH IDLE</p> <p>A high idle switch will be provided, inside the cab, on the instrument panel, that will automatically maintain a preset engine rpm. A switch will be installed, at the cab instrument panel, for activation/deactivation. The high idle will be operational only when the parking brake is on and the truck transmission is in neutral. A green indicator light will be provided, adjacent to the switch. The light will illuminate when the above conditions are met. The light will be labeled "OK to Engage High Idle."</p>
0735687	Engine Brake, Fully Integrated, Paccar MX13 Engine	<p>ENGINE BRAKE</p> <p>The compression release brake option is a fully integrated MX engine braking system. It utilizes the turbocharger and back pressure valve, but adds in a hydraulically operated compression brake to increase overall retarding power. To maximize the effectiveness of the compression brake the MX engine brake system works in conjunction with the turbocharger and back pressure valve. The driver will be able to turn the engine brake system on/off and have a high, medium and low setting.</p>
0644227	Clutch, Fan, Air Actuated, Saber FR/Enforcer	<p>CLUTCH FAN</p> <p>A fan clutch will be provided. The fan clutch will be automatic when the pump transmission is in "Road" position, and constantly engaged when in "Pump" position.</p>
0644573	Air Intake, Water & Ember Screen, Saber FR/Enforcer	<p>ENGINE AIR INTAKE</p> <p>The engine air intake will be located above the engine cooling package. It will draw fresh air from the front of the apparatus through the radiator grille. The ember separator is designed to prevent road dirt and recirculating hot air from entering the engine. The ember separator will be easily accessible by tilting the cab.</p>
0814375	Exhaust System, Horizontal, Right Side	<p>EXHAUST SYSTEM</p> <p>The exhaust system will be stainless steel from the turbo to the engine's aftertreatment device. The exhaust system will include an aftertreatment device to meet current EPA standards. An insulation wrap will be provided on all exhaust pipe between the turbo and the aftertreatment device to minimize the transfer of heat to the cab. The exhaust will terminate horizontally ahead of the right side rear wheels and will extend 2.00" past the body rub rail. The exhaust pipes will be aluminized steel. There will be an aluminized steel exhaust diffuser increased to 7.00" in the center to accommodate the fire department's air recovery system with a standard straight tip on the end provided to reduce the temperature of the exhaust as it exits. Heat deflector shields will be provided to isolate chassis and body components from the heat of the tailpipe diffuser.</p>
0816167	SP Adapter, Exhaust, Plymovent Magnetic Grabber, for 6" or 7" Diffuser Outlet	<p>EXHAUST MODIFICATION</p> <p>A Plymovent Magnetic Grabber conical adapter will be provided on the end of the tail pipe.</p>

0788765	Radiator, Saber FR/Enforcer	<p>RADIATOR</p> <p>The radiator and the complete cooling system will meet or exceed the current edition of applicable NFPA and engine manufacturer cooling system standards.</p> <p>For maximum corrosion resistance and cooling performance, the entire radiator core will be constructed using long life aluminum alloy. The radiator core will consist of aluminum fins, having a serpentine design, brazed to aluminum tubes.</p> <p>The radiator core will have a minimum front area of 1060 square inches.</p> <p>Supply tank will be made of heavy duty glass-reinforced nylon and the return tank will be made of aluminum. Both tanks will be crimped onto the core assembly using header tabs and a compression gasket to complete the radiator core assembly. There will be a full steel frame around the inserts to enhance cooling system durability and reliability.</p> <p>The radiator will be compatible with commercial antifreeze solutions.</p> <p>The radiator assembly will be isolated from the chassis frame rails with rubber isolators to prevent the development of leaks caused by twisting or straining when the apparatus operates over uneven terrain.</p> <p>The radiator will include a de-aeration/expansion tank. For visual coolant level inspection, the radiator will have a built-in sight glass. The radiator will be equipped with a 15 psi pressure relief cap.</p> <p>A drain port will be located at the lowest point of the cooling system and/or the bottom of the radiator to permit complete flushing of the coolant from the system.</p> <p>Shields or baffles will be provided to prevent recirculation of hot air to the inlet side of the radiator.</p>
0001090	Cooling Hoses, Rubber	<p>COOLANT LINES</p> <p>Gates, or Goodyear, rubber hose will be used for all engine coolant lines installed by Pierce Manufacturing.</p> <p>Hose clamps will be stainless steel constant torque type to prevent coolant leakage. They will expand and contract according to coolant system temperature thereby keeping a constant clamping pressure on the hose.</p>
0794888	Fuel Tank, 65 Gallon, Left Side Fill, Door Finish Feature	<p>FUEL TANK</p> <p>A 65 gallon fuel tank will be provided and mounted at the rear of the chassis. The tank will be constructed of 12-gauge, hot rolled steel. It will be equipped with swash partitions and a vent. To eliminate the effects of corrosion, the fuel tank will be mounted with stainless steel straps.</p> <p>A 0.75" drain plug will be located in a low point of the tank for drainage.</p> <p>A fill inlet will be located on the left hand side of the body and is covered with a hinged, spring loaded, painted job color door that is marked "Ultra Low Sulfur - Diesel Fuel Only."</p> <p>A 0.50" diameter vent will be installed from tank top to just below fuel fill inlet.</p> <p>The fuel tank will meet all FHWA 393.67 requirements including a fill capacity of 95 percent of tank volume.</p>
0001129	Lines, Fuel	All fuel lines will be provided as recommended by the engine manufacturer.
0889521	DEF Tank, 7.3 Gallon, LS Fill, Under Cab, Paccar, Lift Up Fill Dr, Spring, ENF	<p>DIESEL EXHAUST FLUID TANK</p> <p>A 7.3 gallon diesel exhaust fluid (DEF) tank will be provided and mounted under the cab on the driver's side.</p> <p>A fill inlet will be provided on the driver's side of the cab. The lift up door will be spring loaded and be painted.</p>
0552793	Not Required, Fuel Priming Pump	
0552712	Not Required, Shutoff Valve, Fuel Line	
0699437	Cooler, Chassis Fuel, Not Req'd.	
0690880	No Selection Required From This Category	
0801890	Trans, Allison 6th Gen, 4500 EVS P, w/Prognostics, Imp/Vel/Enf	<p>TRANSMISSION</p> <p>An Allison 6th generation, Model EVS 4500P, electronic, torque converting, automatic transmission will be provided.</p> <p>The transmission will be equipped with prognostics to monitor oil life, filter life, and transmission health. A wrench icon on the shift selector's digital display will indicate when service is due.</p> <p>Two (2) PTO openings will be located on left side and top of converter housing (positions 8 o'clock and 1 o'clock).</p> <p>A transmission temperature gauge with amber light and buzzer will be installed on the cab instrument panel.</p>
0512762	Transmission, Shifter, 6-Spd, Push Button, 4500, Imp/Vel/Qtm/DCF/Enf	<p>TRANSMISSION SHIFTER</p> <p>A six (6)-speed push button shift module will be mounted right of driver on console. Shift position indicator will be indirectly lit for after dark operation.</p> <p>The transmission ratio will be: 1st - 4.70 to 1.00, 2nd - 2.21 to 1.00, 3rd - 1.53 to 1.00, 4th - 1.00 to 1.00, 5th - 0.76 to 1.00, 6th - 0.67 to 1.00, R - 5.55 to 1.00.</p>

0517604	Transmission Programming, Park to Neutral, PUC	TRANSMISSION PROGRAMMING The transmission will be programmed to automatically shift the transmission to neutral when the parking brake is set to simplify operation and increase operational safety.
0684459	Transmission Oil Cooler, Modine, External	TRANSMISSION COOLER A Modine plate and fin transmission oil cooler will be provided using engine coolant to control the transmission oil temperature.
0001375	Driveline, Spicer 1810	DRIVELINE Drivelines will be a heavy-duty metal tube and be equipped with Spicer® 1810 universal joints. The shafts will be dynamically balanced before installation. A splined slip joint will be provided in each driveshaft where the driveline design requires it. The slip joint will be coated with Glidecoat® or equivalent.
0734211	Steering, Sheppard M110 w/Tilt, TAK-4, Paccar Pump, w/Cooler, Paccar	STEERING Dual Sheppard, Model M110, steering gears, with integral heavy-duty power steering, will be provided. For reduced system temperatures, the power steering will incorporate an air to oil cooler and Paccar hydraulic pump with integral pressure and flow control. All power steering lines will have wire braded lines with crimped fittings. A tilt and telescopic steering column will be provided to improve fit for a broader range of driver configurations.
0605356	Steering Wheel, 4 Spoke without Controls, Saber FR/Enforcer	STEERING WHEEL The steering wheel will be 18.00" in diameter, have tilting and telescoping capabilities, and a 4-spoke design.
0690274	Logo/Emblem, on Dash	LOGO AND CUSTOMER DESIGNATION ON DASH The dash panel will have an emblem containing the Pierce logo and customer name. The emblem will have three (3) rows of text for the customer's department name. There will be a maximum of eight (8) characters in the first row, 11 characters in the second row and 11 characters in the third row. The first row of text will be: Westlake The second row of text will be: Fire-EMS The third row of text will be: Department
0606441	Bumper, 19" Extended, Steel Painted, Saber FR/Enforcer	BUMPER A one (1)-piece bumper manufactured from 0.25" formed steel with a 0.38" bend radius will be provided. The bumper will be a minimum of 10.00" high with a 1.50" top and bottom flange, and will extend 19.00" from the face of the cab. The bumper will be 95.28" wide with 45 degree corners and side plates. The bumper will be metal finished and painted job color. To provide adequate support strength, the bumper will be mounted directly to the front of the C channel frame. The frame will be a bolted modular extension frame constructed of 50,000 psi tensile steel. Gravel Pan A gravel pan, constructed of bright aluminum treadplate, will be furnished between the bumper and the cab face. The pan will be properly supported from the underside to prevent flexing and vibration.
0637813	Tray, Hose, Center, 19" Bumper, Outside Air Horns, 15" Deep, 13" Below/2" Above	CENTER HOSE TRAY A hose tray, constructed of aluminum, will be placed in the center of the bumper extension. The tray will have a capacity of 150' of 1.75" double jacket cotton-polyester hose. Black rubber grating will be provided at the bottom of the tray. Drain holes are also provided.
0630813	Cover, Aluminum Treadplate, One (1) D-Ring Latch, Hose Tray	Center Hose Tray Cover A bright aluminum treadplate cover will be provided over the center hose tray. The cover will be attached with a stainless steel hinge. One (1) D-ring latch will secure the cover in the closed position and a pneumatic stay arm will hold the cover in the open position.
0778092	Lift & Tow Package, Enforcer	LIFT AND TOW MOUNTS Mounted to the frame extension will be lift and tow mounts. The lift and tow mounts will be designed and positioned to adapt to certain tow truck lift systems. The lift and tow mounts with eyes will be painted the same color as the frame.

0032932	Tow Eyes, Painted, Extended Out Front of Bumper	<p>TOW EYES</p> <p>Two (2) tow eyes will be mounted through the front face of the bumper. The inner and outer edges of the tow eyes will have a .25" radius. The tow eyes will be mounted directly to the bumper frame. Cutouts will be provided in the front face of the stainless steel bumper to allow the tow eyes to extend out the front. The tow eyes will be designed and positioned to allow up to a 9,000 lb straight horizontal pull in line with the centerline of the vehicle. The tow eyes will not be used for lifting of the apparatus. The tow eyes will be painted job color.</p>
0698960	Coating, Top Flange, Front Bumper, Outside Exterior, UL-LX Coating, Black	<p>FRONT BUMPER UL-LX COATING</p> <p>Protective black UL-LX® coating will be provided on the outside exterior of the top front bumper flange. It will not be sprayed on the underside of the flange. The lining will be properly installed by an authorized UL-LX dealer.</p>
0625646	Cab, Enforcer, 7010, PUC	<p>CAB</p> <p>The Enforcer cab will be designed specifically for the fire service and manufactured by the chassis builder. The cab will be built by the apparatus manufacturer in a facility located on the manufacturer's premises. For reasons of structural integrity and enhanced occupant protection, the cab will be a heavy duty design, constructed to the following minimal standards. The cab will have 12 main vertical structural members located in the A-pillar (front cab corner posts), B-pillar (side center posts), C-pillar (rear corner posts), and rear wall areas. The A-pillar will be constructed of solid A356-T5 aluminum castings. The B-pillar and C-pillar will be constructed from 0.13" wall extrusions. The rear wall will be constructed of two (2) 2.00" x 2.00" outer aluminum extrusions and two (2) 2.00" x 1.00" inner aluminum extrusions. All main vertical structural members will run from the floor to 4.625" x 3.864" x 0.090" thick roof extrusions to provide a cage-like structure with the A-pillar and roof extrusions being welded into a 0.25" thick corner casting at each of the front corners of the roof assembly. The front of the cab will be constructed of a 0.13" firewall plate, covered with a minimum 0.090" front skin thickness, and reinforced with a full width x 0.50" thick cross-cab support located just below the windshield and fully welded to the engine tunnel. The cross-cab support will run the full width of the cab and weld to each A-pillar, the 0.13" firewall plate, and the front skin. The cab floors will be constructed of 0.125" thick aluminum plate and reinforced at the firewall with an additional 0.25" thick cross-floor support providing a total thickness of 0.375" of structural material at the front floor area. The front floor area will also be supported with two (2) triangular 0.30" wall extrusions that also provides the mounting point for the cab lift. This tubing will run from the floor wireway of the cab to the engine tunnel side plates, creating the structure to support the forces created when lifting the cab. The cab will be 96.00" wide (outside door skin to outside door skin) to maintain maximum maneuverability. The centerline of front axle to the rear of the cab will be 70.00" long. The forward cab section will have an overall height (from the cab roof to the ground) of approximately 99.00". The crew cab section will have a 10.00" raised roof, with an overall cab height of approximately 109.00". The overall height listed will be calculated based on a truck configuration with the lowest suspension weight rating, the smallest diameter tires for the suspension, no water weight, no loose equipment weight, and no personnel weight. Larger tires, wheels, and suspension will increase the overall height listed. The floor to ceiling height inside the crew cab will be 63.50" in the forward facing outboard positions and 54.50" in the forward facing center position. The crew cab floor will measure 46.00" from the rear wall to the back side of the rear facing seat risers. The medium block engine tunnel, at the rearward highest point (knee level), will measure 61.50" to the rear wall. The big block engine tunnel will measure 51.50" to the rear wall. The crew cab will be a totally enclosed design with the interior area completely open to improve visibility and verbal communication between the occupants. The cab will be a full tilt cab style. A 3-point cab mount system with rubber isolators will improve ride quality by isolating chassis vibrations from the cab.</p> <p>CAB ROOF DRIP RAIL</p> <p>For enhanced protection from inclement weather, a drip rail will be furnished on the sides of the cab. The drip rail will be painted to match the cab roof, and bonded to the sides of the cab. The drip rail will extend the full length of the cab roof.</p> <p>CAB PUMP ENCLOSURE</p> <p>The rear of the cab will be made to house the fire pump below the forward facing crew cab seats. The cab side panels will be notched to accommodate the pump panel.</p> <p>FENDER LINERS</p> <p>Full circular inner fender liners in the wheel wells will be provided.</p> <p>PANORAMIC WINDSHIELD</p> <p>A one (1)-piece safety glass windshield will be provided with over 2,775 square inches of clear viewing area. The windshield will be full width and will provide the occupants with a panoramic view. The windshield will consist of three (3) layers: outer light, middle safety laminate, and inner light. The outer light layer will provide superior chip resistance. The middle safety laminate layer will prevent the windshield glass pieces from detaching in the event of breakage. The inner light will provide yet another chip resistant layer. The cab windshield will be bonded to the aluminum windshield frame using a urethane adhesive. A custom frit pattern will be applied on the outside perimeter of the windshield for a finished automotive appearance.</p> <p>WINDSHIELD WIPERS</p> <p>Three (3) electric windshield wipers with washer will be provided that meet FMVSS and SAE requirements. The washer reservoir will be able to be filled without raising the cab.</p>

0826074	Engine Tunnel, X12, MX13, Foil Insulation w/Mech Fasteners, Extreme Climate, Enf	<p>ENGINE TUNNEL Engine tunnel side walls will be constructed of 0.375" aluminum. The top will be constructed of 0.125" aluminum and will be tapered at the top to allow for more driver and passenger elbow room. The engine tunnel will be insulated for protection from heat and sound. Perforated foil faced insulation will be over a closed cell foam affixed with pressure sensitive adhesive and further secured with mechanical fasteners. The noise insulation keeps the dBA level within the limits stated in the current edition of applicable NFPA standards. The engine tunnel will be no higher than 17.00" off the crew cab floor (no exception).</p>
0810166	Cab Insulation, Extreme Climate, Foil Insulation, Enforcer/Saber FR	<p>INSULATION PACKAGE All insulation utilized in the cab construction will be provided for extreme climate temperatures. The insulation will be provided in the following areas: Engine tunnel Cab and crew cab floors Cab and crew cab step wells Cab and crew cab doors Cab roof Cab and crew cab walls</p>
0610508	Rear Wall, Interior, Adjustable Seating, Not Available	
0632103	Rear Wall, Exterior, Cab, Saber FR/Enforcer	<p>CAB REAR WALL EXTERIOR COVERING The exterior surface of the rear wall of the cab will be overlaid with bright aluminum treadplate except for areas that are not typically visible when the cab is lowered.</p>
0644201	Cab Lift, Elec/Hyd, Saber FR/Enforcer	<p>CAB LIFT A hydraulic cab lift system will be provided consisting of an electric powered hydraulic pump, dual lift cylinders, and necessary hoses and valves. Lift controls will be located on the right side pump panel or front area of the body in a convenient location. The cab will be capable of tilting 43 degrees to accommodate engine maintenance and removal. The cab will be locked down by a 2-point normally closed spring loaded hook type latch that fully engages after the cab has been lowered. The system will be hydraulically actuated to release the normally closed locks when the cab lift control is in the raised position and cab lift system is under pressure. When the cab is completely lowered and system pressure has been relieved, the spring loaded latch mechanisms will return to the normally closed and locked position. The hydraulic cylinders will be equipped with a velocity fuse that protects the cab from accidentally descending when the control is located in the tilt position. For increased safety, a redundant mechanical stay arm will be provided that must be manually put in place on the left side between the chassis and cab frame when the cab is in the raised position. This device will be manually stowed to its original position before the cab can be lowered. Cab Lift Interlock The cab lift system will be interlocked to the parking brake. The cab tilt mechanism will be active only when the parking brake is set and the ignition switch is in the on position. If the parking brake is released, the cab tilt mechanism will be disabled.</p>
0751129	Grille, Painted, Bright Finished Mesh Screen, Front of Cab, Enforcer	<p>GRILLE A bright finished aluminum mesh grille screen, inserted behind a grille surround, will be provided on the front center of the cab. The grille surround will be painted black #101.</p>
0647932	Not Required, Trim, S/S Band, Across Cab Face, AXT/Saber/Enforcer	
0015440	No Chrome Molding, On side of cab	
0829403	SP Mirrors, Retractable, West Coast Style, Htd/Rmt, w/Htd/Rmt Convex, Painted Blk #101	<p>MIRRORS A Retractable, Model 613422, dual vision, motorized, west coast style mirror will be mounted on each side of the front cab door with spring loaded retractable arms. The mirror arm and head will be painted black #101. The flat glass and convex glass will be heated and adjustable with remote control within reach of the driver.</p>

0648172	Door, Full Height, Saber FR/Enforcer 4-Door Cab, Raised Roof	<p>DOORS</p> <p>To enhance entry and egress to the cab, the forward cab doors will be a minimum of 37.50" wide x 75.50" high. The crew cab doors will be located on the sides of the cab and will be constructed in the same manner as the forward cab doors. The crew cab door openings will be a minimum of 34.30" wide x 85.50" high.</p> <p>The forward cab and crew cab doors will be constructed of extruded aluminum with a nominal material thickness of 0.093". The exterior door skins will be constructed from 0.090" aluminum. A customized, vertical, pull-down type door handle will be provided on the exterior of each cab door. The finish of the door handle will be black/black. The exterior handle will be designed specifically for the fire service to prevent accidental activation and will provide 4.00" wide x 2.00" deep hand clearance for ease of use with heavy gloved hands.</p> <p>Each door will also be provided with an interior flush, open style paddle handle that will be readily operable from fore and aft positions and designed to prevent accidental activation. The interior handles will provide 4.00" wide x 1.25" deep hand clearance for ease of use with heavy gloved hands.</p> <p>The cab doors will be provided with both interior (rotary knob) and exterior (keyed) locks exceeding FMVSS standards. The keys will be Model 751. The locks will be capable of activating when the doors are open or closed. The doors will remain locked if locks are activated when the doors are opened, then closed.</p> <p>A full length, heavy duty, stainless steel, piano-type hinge with a 0.38" pin and 11 gauge leaf will be provided on all cab doors. There will be double automotive-type rubber seals around the perimeter of the door framing and door edges to ensure a weather-tight fit.</p> <p>A chrome grab handle will be provided on the inside of each cab door for ease of entry. A red webbed grab handle will be installed on the crew cab door stop strap. The grab handles will be securely mounted.</p> <p>The cab steps at each cab door location will be located inside the cab doors to protect the steps from weather elements.</p>
0655543	Door Panel, Brushed Stainless Steel, Saber/Enforcer 4-Door Cab	<p>Door Panels</p> <p>The inner cab door panels will be constructed out of brushed stainless steel.</p>
0617333	Controls, Electric Roll-Up Windows, 4dr, 2 Frt Elect, 2 Driver Control, SFR/Enf	<p>ELECTRIC OPERATED CAB DOOR WINDOWS</p> <p>The two (2) front cab doors will be equipped with electric operated windows with one (1) flush mounted automotive style switch on each of the front doors. The driver's door will have two (2) switches, one (1) to control each for the driver and officer door windows. The crew cab door windows will be controlled manually.</p> <p>Each switch will allow intermittent or auto down operation for ease of use. Auto down operation will be actuated by holding the window down switch for approximately 1 second.</p>
0749512	SP Steps, 4-Door Cab, Painted Black Step Wells, Saber FR/Enforcer	<p>CAB STEPS</p> <p>The forward cab and crew cab access steps will be a full size two (2) step design to provide largest possible stepping surfaces for safe ingress and egress. The bottom steps will be designed with a grip pattern punched into bright aluminum treadplate material to provide support, slip resistance, and drainage. The bottom steps will be a bolt-in design to minimize repair costs should they need to be replaced. The forward cab steps will be a minimum 25.00" wide, and the crew cab steps will be 21.65" wide with a 10.00" minimum depth. The inside cab steps will not exceed 16.50" in height.</p> <p>The vertical surfaces of the step well will be painted # 101 black.</p>
0770198	Handrail, Exterior, Hansen, Knurled, Alum, LED Backlit, Black, 4-Dr Cab	<p>CAB EXTERIOR HANDRAILS</p> <p>A Hansen knurled aluminum, black anodized handrail will be provided adjacent to each cab and crew cab door opening to assist during cab ingress and egress. The handrails will be e-coated and have black powder coated stanchions. Each handrail will be provided with red LED lights. The lights will be activated when the parking brake is applied and with a separate switch on the left side in the cab. The LED lights may be load managed.</p>
0892638	Lights, Cab & Crw Cab Acs Stps, P25, LED w/Bezel, 6lts	<p>STEP LIGHTS</p> <p>There will be six (6) white LED step lights with black housing installed for cab and crew cab access steps.</p> <p>One (1) light for the left side cab access steps.</p> <p>Two (2) lights for the left side crew cab access steps.</p> <p>Two (2) lights for the right side crew cab access steps.</p> <p>One (1) light for the right side cab access step.</p> <p>In order to ensure exceptional illumination, each light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light. The lights will be activated when the battery switch is on and the adjacent door is opened.</p>
0057836	Crowns, Front Fender, Rubber, TAK-4	<p>FENDER CROWNS</p> <p>Rubber fender crowns will be provided around the cab wheel openings. Crowns will be black.</p>

0771672	Handrail, 10", Below Cab Windshield, Hansen Knurled, LED Backlit, Black, Pair	LIGHTED HANDRAIL BELOW CAB WINDSHIELD A 10.00" long Hansen LED backlit knurled black anodized aluminum handrail will be mounted below the front cab windshield, one (1) on each side. The handrails will have e-coated and black powder coated stanchions. Each handrail will be provided with red back lighted LED lights. The lights will be activated by the same means as the body handrail light controls.
0042105	No Windows, Side of Crew Cab	
0012090	Not Required, Windows, Front/Side of raised roof	
0779033	Not Required, Windows Rear of Crew Cab, Saber FR/Enforcer	
0722796	Dash, Poly, Saber FR/Enforcer	CAB DASH The driver side dash, switch panel located to the right of the driver, and center console will be an easily removable high impact resistant polymer cover. The instrument gauge cluster will be surrounded with a high impact ABS plastic contoured to the same shape of the instrument gauge cluster. The officer side dash will be a flat top design with an upper beveled edge to provide easy maintenance and will be constructed out of aluminum and painted to match the cab interior.
0773925	SP Partition Below Shelf, Equipment Mounting, Crew Cab	PARTITION SUPPORT FOR SHELF There will be a partition for permanent mounting and support of the full width shelf. A quantity of one (1) will be located Mounted on forward side of the 2 shelves between the rear facing EMS cabinets. Similar to 36426. Each partition will be fabricated from aluminum and will be painted to match the cab interior.
0817141	Hook, Coat, Heavy Duty, Non-NFPA 2024	COAT HOOK(S), HEAVY DUTY There will be two (2) coat hooks supplied and installed Above PAC TRAC on back wall of cab. These hooks will be for coat storage only and will include a warning label mounted in the crew cab. NFPA 1900, 2024 edition, section 11.1.11.2 requires all equipment not required to be used during an emergency response, with the exception of SCBA units, will not be mounted in a driving or crew area unless it is contained in a fully enclosed and latched compartment capable of containing the contents when a 9G force is applied in the longitudinal axis of the vehicle or a 3G force is applied in any other direction, or the equipment is mounted in a bracket(s) that can contain the equipment when the equipment is subjected to those same forces. Coat hooks can not contain the equipment when it is subjected to 9G or 3G force. Per fire department specification and request for this coat hook, this apparatus will be non-compliant to NFPA 1900 standards effective at time of contract execution.
0607217	Mounting Provisions, 3/16" Alum, Full Engine Tunnel, Saber FR/Enforcer	MOUNTING PLATE ON ENGINE TUNNEL Equipment installation provisions will be installed on the engine tunnel. A 0.188" smooth aluminum plate will be bolted to the top surface of the engine tunnel. The plate will follow the contour of the engine tunnel and will run the entire length of the engine tunnel. The plate will be spaced off the engine tunnel 1.00" to allow for wire routing below the plate. The mounting surface will be painted to match the cab interior.
0664351	Pac Trac, Installed in Cab/Crew Cab	MOUNTING SYSTEM There will be two (2) section(s) of Pac Trac equipment mounting systems located (1) each side of forward facing seats on back wall . Pac Trac mounts will be certified by Pac Trac to meet the current edition of applicable NFPA standards for mounting of equipment inside the cab.
0606282	Shelf, Equipment Mounting, Aluminum, Lip, Size	EQUIPMENT MOUNTING SHELF There will be two (2) shelves for permanent mounting of equipment provided. Each shelf will have a 2.00" lip around the edge. The size of the shelves will be to fit between the EMS compartments one as low as possible on engine tunnel and the other 12" above it. Similar to job #36426. Each shelf will be fabricated from aluminum and will be painted to match the cab interior. The shelves will be located Between rear facing EMS cabinets. Similar to 36426.. Not intended for storage of loose equipment. Items stored on tray will be permanently attached to meet current edition of applicable NFPA standards.
0826219	Mounting Provisions, Computer, Tray, S/S, Straps, Slides, No Sides, Locking	COMPUTER MOUNTING There will be one (1) computer installation provision(s) installed Officer side dash. The tray will be constructed of stainless steel. The tray will be supplied with two (2) straps over the top connected to footman loops. These straps will secure the computer in place during travel. The slides will be mounted vertically and lock in the in and out positions.

0750824	Cab Interior, Vinyl Headliner, Saber FR/Enforcer, CARE	<p>CAB INTERIOR The cab interior will be constructed of primarily metal (painted aluminum) to withstand the severe duty cycles of the fire service. The engine tunnel will be padded and covered, on the top and sides, with black 36 ounce leather grain vinyl resistant to oil, grease, and mildew. For durability and ease of maintenance, the cab interior side walls will be painted aluminum. The rear wall will be painted aluminum. The headliner will be installed in both forward and rear cab sections. Headliner material will be vinyl. A sound barrier will be part of its composition. Material will be installed on an aluminum sheet and securely fastened to interior cab ceiling. The forward portion of the cab headliner will permit easy access for service of electrical wiring or other maintenance needs. All wiring will be placed in metal raceways.</p> <p>CAB INTERIOR UPHOLSTERY The cab interior upholstery will be 36 oz black vinyl.</p>
0753903	Cab Interior, Paint Color, Saber FR/Enforcer	<p>CAB INTERIOR PAINT The cab interior metal surfaces, excluding the rear heater panels, will be painted red, vinyl texture paint. The rear heater panels will be painted black, vinyl textured paint.</p>
0888673	Floor, Rubber Padded, Cab & Crew Cab, Blister, Enforcer PUC-NG	<p>CAB FLOOR A small blister will be provided at the rear of the engine tunnel for chassis components. The cab and crew cab floor areas will be covered with Polydamp™ acoustical floor mat consisting of a black pyramid rubber facing and closed cell foam decoupler. The top surface of the material has a series of raised pyramid shapes evenly spaced, which offer a superior grip surface. Additionally, the material has a 0.25" thick closed cell foam (no water absorption) which offers a sound dampening material for reducing sound levels.</p>

DEFROST/AIR CONDITIONING SYSTEM

A ceiling mounted combination heater, defroster and air conditioning system will be installed in the cab above the engine tunnel area.

Cab Defroster

A 54,000 BTU heater-defroster unit with 690 SCFM of air flow will be provided inside the cab. The heater-defrost will be installed in the forward portion of the cab ceiling. Air outlets will be strategically located in the cab header extrusion per the following:

One (1) adjustable will be directed towards the left side cab window

One (1) adjustable will be directed towards the right side cab window

Six (6) fixed outlets will be directed at the windshield

The defroster will be capable of clearing 98 percent of the windshield and side glass when tested under conditions where the cab has been cold soaked at 0 degrees Fahrenheit for 10 hours, and a 2 ounce per square inch layer of frost/ice has been able to build up on the exterior windshield. The defroster system will meet or exceed SAE J382 requirements.

Cab/Crew Auxiliary Heater

There will be one (1) 31,000 BTU auxiliary heater with 560 SCFM of air flow provided in each outboard rear facing seat riser with a dual scroll blower. An aluminum plenum incorporated into the cab structure to be used to transfer heat to the forward positions.

Air Conditioning

A 13.10 cubic inch compressor will be installed on the engine.

A roof-mounted condenser with a 78,000 BTU output at 2,400 SCFM that meets and exceeds the performance specification will be installed on the cab roof. Mounting the condenser below the cab or body would reduce the performance of the system and will not be acceptable. The condenser cover to be painted to match the cab roof.

The evaporator unit will be installed in the rear portion of the cab ceiling over the engine tunnel.

The evaporator will include one (1) high performance heating core, one (1) high performance cooling core with (1) plenum directed to the front and one (1) plenum directed to the rear of the cab.

The evaporator unit will have a 80,000 BTU at 690 SCFM rating that meets and exceeds the performance specifications.

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

Four (4) will be directed towards the seating position on the left side of the cab

Four (4) will be directed towards the seating position on the right side of the cab

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

12 will be directed towards crew cab area

A high efficiency particulate air (HEPA) filter will be included for the system. Access to the filter cover will be hinged with two (2) thumb latches.

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

Climate Control

An automotive style controller will be provided to control the heat and air conditioning system within the cab. The controller will have three (3) functional knobs for fan speed, temperature, and air flow distribution (front to rear) control.

The system will control the temperature of the cab and crew cab automatically by pushing the center of the fan speed control knob. Rotate the center temperature control knob to set the cab and crew cab temperature.

The AC system will be manually activated by pushing the center of the temperature control knob. Pushing the center of the air flow distribution knob will engage the AC for max defrost, setting the fan speeds to 100 percent and directing all air flow to the overhead forward position.

The system controller will be located within panel position #13.

Gravity Drain Tubes

Two (2) condensate drain tubes will be provided for the air conditioning evaporator. The drip pan will have two (2) drain tubes plumbed separately to allow for the condensate to exit the drip pan. No pumps will be provided.

0677382

Guard, Brush, Painted, For Coleman
A/C Unit, Cab Roof**BRUSH GUARD**

A protective enclosure will be provided around the roof mounted air conditioning unit. The enclosure will provide protection from tree limbs and debris. The enclosure will be made of aluminum and painted to match the cab exterior.

0787034

Air Conditioning, Coleman-Mach 8,
Roughneck, 120V, 15K, 6K Heat, Cab
Roof,Black**HEATING AND AIR CONDITIONING**

There will be one (1) black, Coleman®-Mach® 8, Roughneck™, 120 volt, low profile air conditioning unit installed on the crew cab roof. The air conditioner will have cooling capacity of 15,000 BTU and heating capacity of 6000 BTU and include a condensate pump and hose to prevent accumulation of condensate on the roof.

Ceiling unit controls will control the air conditioning unit.

The thermostat will be wired battery direct to operate when the battery switch is off.

This unit will be powered from the shoreline inlet.

INTERIOR CAB INSULATION

The walls and roof will be insulated to aid in cooling.

0639675

Sun Visor, Smoked Lexan, AXT,
Imp/Vel, SFR/Enf**SUN VISORS**

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

There will be a black plastic thumb latch provided to help secure each sun visor in the stowed position.

0634328

Grab Handles, Driver and Officer
Door Posts, Saber FR/Enforcer**GRAB HANDLES**

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

0668638	Lights, Engine Compt, Custom, Auto & Manual Switch, WIn 3SC0CDCR, 3" LED,Trim	<p>ENGINE COMPARTMENT LIGHTS</p> <p>There will be one (1) Whelen Model 3SC0CDCR, 12 volt DC, 3.00" white LED light(s) with Model 3FLANGEC chrome flange kit(s) installed under the cab to be used as engine compartment illumination.</p> <p>The light(s) will be activated with a switch located by the engine fluid level access door and automatically when the cab is raised.</p>
0631830	Fluid Check Access, Saber FR/Enforcer, Arrow XT	<p>ACCESS TO ENGINE DIPSTICKS</p> <p>For access to the engine oil and transmission fluid dipsticks, there will be a door on the engine tunnel, inside the crew cab. The door will be on the rear wall of the engine tunnel, on the vertical surface.</p> <p>The engine oil dipstick will allow for checking only. The transmission dipstick will allow for both checking and filling.</p> <p>The door will have a rubber seal for thermal and acoustic insulation. One (1) Southco C2 black powder coated flush latch will be provided on the access door.</p>
0583042	Side Roll and Frontal Impact Protection	<p>CAB SAFETY SYSTEM</p> <p>The cab will be provided with a safety system designed to protect occupants in the event of a side roll or frontal impact, and will include the following:</p> <p>A supplemental restraint system (SRS) sensor will be installed on a structural cab member behind the instrument panel. The SRS sensor will perform real time diagnostics of all critical subsystems and will record sensory inputs immediately before and during a side roll or frontal impact event.</p> <p>A slave SRS sensor will be installed in the cab to provide capacity for eight (8) crew cab seating positions.</p> <p>A fault-indicating light will be provided on the vehicle's instrument panel allowing the driver to monitor the operational status of the SRS system.</p> <p>A driver side front air bag will be mounted in the steering wheel and will be designed to protect the head and upper torso of the occupant, when used in combination with the 3-point seat belt.</p> <p>A passenger side knee bolster air bag will be mounted in the modesty panel below the dash panel and will be designed to protect the legs of the occupant, when used in combination with the 3-point seat belt.</p> <p>Air curtains will be provided in the outboard bolster of outboard seat backs to provide a cushion between occupant and the cab wall.</p> <p>Suspension seats will be provided with devices to retract them to the lowest travel position during a side roll or frontal impact event.</p> <p>Seat belts will be provided with pre-tensioners to remove slack from the seat belt during a side roll or frontal impact event.</p> <p>Frontal Impact Protection</p> <p>The SRS system will provide protection during a frontal or oblique impact event. The system will activate when the vehicle decelerates at a predetermined G force known to cause injury to the occupants. The cab and chassis will have been subjected, via third party test facility, to a crash impact during frontal and oblique impact testing. Testing included all major chassis and cab components such as mounting straps for fuel and air tanks, suspension mounts, front suspension components, rear suspensions components, frame rail cross members, engine and transmission and their mounts, pump house and mounts, frame extensions and body mounts. The testing provided configuration specific information used to optimize the timing for firing the safety restraint system. The sensor will activate the pyrotechnic devices when the correct crash algorithm, wave form, is detected.</p> <p>The SRS system will deploy the following components in the event of a frontal or oblique impact event:</p> <ul style="list-style-type: none"> Driver side front air bag Passenger side knee bolster air bag Air curtains mounted in the outboard bolster of outboard seat backs Suspension seats will be retracted to the lowest travel position Seat belts will be pre-tensioned to firmly hold the occupant in place <p>Side Roll Protection</p> <p>The SRS system will provide protection during a fast or slow 90 degree roll to the side, in which the vehicle comes to rest on its side. The system will analyze the vehicle's angle and rate of roll to determine the optimal activation of the advanced occupant restraints.</p> <p>The SRS system will deploy the following components in the event of a side roll:</p> <ul style="list-style-type: none"> Air curtains mounted in the outboard bolster of outboard seat backs Suspension seats will be retracted to the lowest travel position Seat belts will be pre-tensioned to firmly hold the occupant in place
0622619	Seating Capacity, 4 Belted Seats	<p>SEATING CAPACITY</p> <p>The seating capacity of the vehicle (including tiller cab and belted seat positions in the rescue body) will be four (4).</p>

0636955	Seat, Driver, Pierce PSV, Air Ride, High Back, Safety, PRIMARY, SFR/Enf	<p>DRIVER SEAT A seat will be provided in the cab for the driver. The seat design will be a cam action type, with air suspension. For increased convenience, the seat will include a manual control to adjust the horizontal position (6.00" travel). The manual horizontal control will be a towel-bar style located below the forward part of the seat cushion. To provide flexibility for multiple driver configurations, the seat will have an adjustable reclining back. The seat back will be a high back style with side bolster pads for maximum support. For optimal comfort, the seat will be provided with 17.00" deep foam cushions designed with EVC (elastomeric vibration control). The seat will include the following features incorporated into the side roll protection system: Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position. A suspension seat safety system will be included. When activated in the event of a side roll, this system will pretension the seat belt and retract the seat to its lowest travel position. The seat will be furnished with a 3-point, shoulder type seat belt.</p>
0632926	Seat, Officer, Pierce PSV, Air Ride, SCBA, Safety, PRIMARY, SFR/Enf	<p>OFFICER SEAT A seat will be provided in the cab for the passenger. The seat will be a cam action type, with air suspension. For optimal comfort, the seat will be provided with 17.00" deep foam cushions designed with EVC (elastomeric vibration control). The seat back will be an SCBA back style with 5 degree fixed recline angle. The SCBA cavity will be adjustable from front to rear in 1.00" increments, to accommodate different sized SCBA cylinders. Moving the SCBA cavity will be accomplished by unbolting, relocating, and re-bolting it in the desired location. The seat will include the following features incorporated into the side roll protection system: Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position. A suspension seat safety system will be included. When activated, this system will pretension the seat belt and then retract the seat to its lowest travel position. The seat will be furnished with a 3-point, shoulder type seat belt.</p>
0002517	Not Required, Radio Compartment	
0822580	Cabinet, Rear Facing, LS, 23 W x 39 H x 26.75 D, Web, Ext Acc, SFR/Enf	<p>REAR FACING LEFT SIDE CABINET A rear facing cabinet will be provided in the crew cab at the left side outboard position. The cabinet will be 23.00" wide x 39.00" high x 26.75" deep. The interior door will be web netting. The netting is to be made with 1.00" wide nylon material with 2.00" openings permanently fastened on the bottom with 1.00" side release fasteners on the top to secure it. The clear door opening will be 16.00" wide x 36.00" high. The cabinet will also provide access from outside the cab with one (1) double pan door painted to match the cab exterior with a non-locking D-ring latch. A pneumatic stay arm will be provided as a door stop. The door will be located on the side of the cab over the wheelwell. The clear door opening will be 17.00" wide x 34.00" high. The cabinet will include one (1) infinitely adjustable shelf with a 0.75" up-turned lippainted to match the cab interior. The cabinet will include no louvers. The exterior access will be provided with a brushed stainless steel scuffplate on the lower door frame. The cabinet will be constructed of smooth aluminum and painted to match the cab interior. Cabinet Light There will be one (1) white Amdor LED strip light installed on the right side of the interior cabinet door opening. The lights will be controlled by an automatic door switch and a rocker switch on the front of the cabinet.</p>
0102783	Not Required, Seat, Rr Facing C/C, Center	
0822239	Cabinet, Rear Facing, RS, 22 W x 39 H x 26.75 D, Web, Ext Acc, SFR/Enf	<p>REAR FACING RIGHT SIDE CABINET A rear facing cabinet will be provided in the crew cab at the right side outboard position. The cabinet will be 22.00" wide x 39.00" high x 26.75" deep. The interior door will be web netting. The netting is to be made with 1.00" wide nylon material with 2.00" openings permanently fastened on the bottom with 1.00" side release fasteners on the top to secure it. The interior clear door opening will be 15.00" wide x 36.00" high. The cabinet will include one (1) infinitely adjustable shelf with a 0.75" up-turned lippainted to match the cab interior. The cabinet will include no louvers. The cabinet will also provide access from outside the cab with one (1) double pan door painted to match the cab exterior with a non-locking D-ring latch. The door will be located on the side of the cab over the wheelwell. A pneumatic stay arm will be provided as a door stop. The exterior clear door opening will be 17.00" wide x 34.00" high. The exterior access will be provided with a brushed stainless steel scuffplate on the lower door frame. The cabinet will be constructed of smooth aluminum and painted to match the cab interior. Cabinet Light There will be one (1) white Amdor LED strip light installed on the left side of the interior cabinet door opening. The lighting will be controlled by an automatic door switch and a rocker switch on the front of the cabinet.</p>
0108189	Not Required, Seat, Forward Facing C/C, LS Outboard	

0819392	Seat, Fwd Fcng C/C, Ctr, (2) Pierce PSV, SCBA, Safety, 5.5" Sp, PRIMARY, SFR/Enf	FORWARD FACING CENTER SEATS
		<p>There will be two (2) forward facing seats provided at the center position in the crew cab. The seats will be spaced an additional 5.50" apart to provide more room for each occupant. For optimal comfort, the seats will be provided with 15.00" deep foam cushions designed with EVC (elastomeric vibration control).</p> <p>The seat backs will be an SCBA style with 90 degree back. The SCBA cavity will be adjustable from front to rear in 1.00" increments to accommodate different sized SCBA cylinders. Moving the SCBA cavity will be accomplished by unbolting, relocating, and re-bolting it in the desired location.</p> <p>The seat will include the following features incorporated into the side roll protection system: A seat safety system will be included. When activated, this system will pretension the seat belt. The seats will be furnished with a 3-point, shoulder type seat belt.</p>
0108190	Not Required, Seat, Forward Facing C/C, RS Outboard	
0042923	Netting, Cargo, Ship Loose	CARGO NETTING
		<p>Net is to be made with 1.00" wide nylon material with 2.00" openings.</p> <p>Net is to be fastened on all sides of a specified opening with quick-release buckles. The nets will be designed for between the 2 shelves between EMS compartments rear facing.</p> <p>There will be one (1) nets provided.</p>
0629833	Compt, Storage, (2) Rear Facing, Overhead, 21 W x 10 H x 20 D, Saber FR/Enforcer	REAR FACING OVERHEAD STORAGE COMPARTMENT
		<p>There will be two (2) overhead rear facing storage compartments installed at the raised roof within the crew cab, on each side of the air conditioner. The compartments will be approximately 21.00" wide x 10.00" high x 20.00" deep at the bottom.</p> <p>Each compartment will include one (1) lift up compartment door. Locking latch, paddle handle, and gas operated stay arms will be provided.</p> <p>The compartment will be constructed of smooth aluminum and painted to match the cab interior.</p> <p>Compartment Light</p> <p>The storage compartment lighting will consist of one (1) white LED strip light installed horizontally above each compartment door opening.</p>
0761572	SP Compt, Storage, Forward Facing, Overhead, 88 W x 10 H x 9 D, Saber FR/Enf	FORWARD FACING OVERHEAD STORAGE COMPARTMENT
		<p>There will be an overhead forward facing storage compartment installed at the raised roof within the crew cab. The compartment will be 88.00" wide x 10.00" high x 9.00" deep.</p> <p>The compartment will include three (3) lift up compartment doors. Non-locking latch and gas operated stay arms will be provided. The compartment will be provided with a divider between each door opening.</p> <p>The compartment will be constructed of smooth aluminum and painted to match the cab interior.</p> <p>Compartment Light</p> <p>There will be one (1) white LED strip light installed horizontally above each compartment door opening.</p>
0766467	Upholstery, Seats In Cab, All Vinyl, Seats Inc, CARE	SEAT UPHOLSTERY
		<p>All seat upholstery will be leather grain 36 oz black vinyl resistant to oil, grease and mildew. The cab will have four (4) seating positions.</p>
0543991	Bracket, Air Bottle, Hands-Free II, Cab Seats	AIR BOTTLE HOLDERS
		<p>All SCBA type seats in the cab will have a "Hands-Free" auto clamp style bracket in its backrest. For efficiency and convenience, the bracket will include an automatic spring clamp that allows the occupant to store the SCBA bottle by simply pushing it into the seat back. For protection of all occupants in the cab, in the event of an accident, the inertial components within the clamp will constrain the SCBA bottle in the seat and will exceed the NFPA standard of 9G.</p> <p>There will be a quantity of three (3) SCBA brackets.</p>
0690610	Embroidery, Seats, Cab and Crew Cab	SEAT EMBROIDERY
		<p>The seats in the cab and crew cab will be provided with custom embroidery. The Fire Department will determine what the embroidery will be by providing pictures at the time of order.</p> <p>The custom logo will be provided in place of the standard OEM logo.</p> <p>The embroidery will be provided on four (4) seats.</p>

0603866	Seat Belt, Dual Retractor, ReadyReach, Saber FR/Enforcer	<p>SEAT BELTS</p> <p>All cab and tiller cab (if applicable) seating positions will have red seat belts. To provide quick, easy use for occupants wearing bunker gear, the female buckle and seat belt webbing length will meet or exceed the current edition of applicable NFPA and CAN/ULC - S515 standards. The 3-point shoulder type seat belts will include height adjustment. This adjustment will optimize the belts effectiveness and comfort for the seated firefighter. The 3-point shoulder type seat belts will be furnished with dual automatic retractors that will provide ease of operation in the normal seating position.</p> <p>The 3-point shoulder type belts will also include the ReadyReach® D-loop assembly to the shoulder belt system. The ReadyReach feature adds an extender arm to the D-loop location placing the D-loop in a closer, easier to reach location.</p> <p>Any flip up seats will include a 3-point shoulder type belts only.</p> <p>To ensure safe operation, the seats will be equipped with seat belt sensors in the seat cushion and belt receptacle that will activate an alarm indicating a seat is occupied but not buckled.</p>
0817557	Helmet Storage, Provided by Fire Department, NFPA/ULC 2024	<p>HELMET STORAGE PROVIDED BY FIRE DEPARTMENT</p> <p>NFPA 1900, 2024 edition, section 11.1.8.4.1 and CAN/ULC S515:2024 edition, section 5.2, requires a location for helmet storage be provided.</p> <p>There is no helmet storage on the apparatus as manufactured. The fire department will provide a location for storage of helmets.</p>
0647647	Lights, Dome, FRP Dual LED 4 Lts	<p>CAB DOME LIGHTS</p> <p>There will be four (4) dual LED dome lights with black bezels provided. Two (2) lights will be mounted above the inside shoulder of the driver and officer and two (2) lights will be installed and located, one (1) on each side of the crew cab.</p> <p>The color of the LED's will be red and white.</p> <p>The white LED's will be controlled by the door switches and the lens switch.</p> <p>The color LED's will be controlled by the lens switch.</p> <p>In order to ensure exceptional illumination, each white LED dome light will provide a minimum of 10.1 foot-candles (fc) covering an entire 20.00" x 20.00" square seating position when mounted 40.00" above the seat.</p>
0896451	Enhanced Software for Cab and Crew Cab Dome Lts	<p>ENHANCED SOFTWARE FOR CAB AND CREW CAB DOME LIGHTS</p> <p>The cab and crew cab dome lights will remain on for 10 seconds for improved visibility after the doors are closed.</p> <p>The dome lights will dim after 10 seconds or immediately if the vehicle's transmission is put into gear.</p>
0816997	Portable Hand Light, Provided by Fire Dept, NFPA/ULC 2024	<p>PORTABLE HAND LIGHTS PROVIDED BY FIRE DEPARTMENT</p> <p>The hand lights are not on the apparatus as manufactured. The fire department will provide and mount these hand lights.</p>
0622803	Cab Instruments, Black Gauges, Black Bezels, Enforcer MUX	<p>CAB INSTRUMENTATION</p> <p>The cab instrument panel include gauges, an LCD display, telltale indicator lamps, control switches, alarms, and a diagnostic panel. The function of the instrument panel controls and switches will be identified by a label adjacent to each item. Actuation of the headlight switch will illuminate the labels in low light conditions. Telltale indicator lamps will not be illuminated unless necessary. The cab instruments and controls will be conveniently located within the forward cab section, forward of the driver. The gauge assembly and switch panels are designed to be removable for ease of service and low cost of ownership.</p> <p>Gauges</p> <p>The gauge panel will include the following ten (10) black faced gauges with black bezels to monitor vehicle performance:</p> <p>Voltmeter gauge (volts):</p> <ul style="list-style-type: none"> Low volts (11.8 VDC) Amber caution indicator on the information center with intermittent alarm Amber caution light on gauge assembly High volts (15.5 VDC) Amber caution indicator on the information center with intermittent alarm Amber caution light on gauge assembly Very low volts (11.3 VDC) Red warning indicator on the information center with a steady alarm Amber caution light on gauge assembly Very high volts (16.0 VDC) Red warning indicator on the information center with a steady alarm Amber caution light on gauge assembly <p>Engine Tachometer (RPM)</p> <p>Speedometer MPH (Major Scale), KM/H (Minor Scale)</p> <p>Fuel level gauge (Empty - Full in fractions):</p> <ul style="list-style-type: none"> Low fuel (1/8 full) Amber caution indicator on the information center with intermittent alarm Amber caution light on gauge assembly Very low fuel (1/32 full) Red caution indicator on the information center with steady alarm Amber caution light on gauge assembly <p>Engine Oil pressure Gauge (PSI):</p> <ul style="list-style-type: none"> Low oil pressure to activate engine warning lights and alarms Red caution indicator on the information center with steady alarm Amber caution light on gauge assembly <p>Front Air Pressure Gauges (PSI):</p>

Low air pressure to activate warning lights and alarm
Red warning indicator on the information center with a steady alarm
Amber caution light on gauge assembly
Rear Air Pressure Gauges (PSI):
Low air pressure to activate warning lights and alarm
Red warning indicator on the information center with a steady alarm
Amber caution light on gauge assembly
Transmission Oil Temperature Gauge (Fahrenheit):
High transmission oil temperature activates warning lights and alarm
Amber caution indicator on the information center with intermittent alarm
Amber caution light on gauge assembly
Engine Coolant Temperature Gauge (Fahrenheit):
High engine temperature activates an engine warning light and alarms
Amber caution indicator on the information center with intermittent alarm
Amber caution light on gauge assembly
Diesel Exhaust Fluid Level Gauge (Empty - Full in fractions):
Low fluid (1/8 full)
Amber indicator light in gauge dial
All gauges will perform prove out at initial power-up to ensure proper performance.

Indicator Lamps

To promote safety, the following telltale indicator lamps will be located on the instrument panel in clear view of the driver. The indicator lamps will be "dead-front" design that is only visible when active. The colored indicator lights will have descriptive text or symbols.

The following amber telltale lamps will be present:

Low coolant
Trac cntl (traction control) (where applicable)
Check engine
Check trans (check transmission)
Aux brake overheat (Auxiliary brake overheat)
Air rest (air restriction)
Caution (triangle symbol)
Water in fuel
DPF (engine diesel particulate filter regeneration)
Trailer ABS (where applicable)
Wait to start (where applicable)
HET (engine high exhaust temperature) (where applicable)
ABS (antilock brake system)
MIL (engine emissions system malfunction indicator lamp) (where applicable)
Side roll fault (where applicable)
Front air bag fault (where applicable)

The following red telltale lamps will be present:

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

The following green telltale lamps will be provided:

Left turn
Right turn
Battery on

The following blue telltale lamp will be provided:

High beam

Alarms

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

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

Alarm silence: Any active audible alarm will be able to be silenced by holding the ignition switch at the top position for three (3) to five (5) seconds. For improved safety, silenced audible alarms will intermittently chirp every 30 seconds until the alarm condition no longer exists. The intermittent chirp will act as a reminder to the operator that a caution or warning condition still exists. Any new warning or caution condition will enable the steady or pulsing tones respectively.

Indicator Lamp and Alarm Prove-Out

A system will be provided which automatically tests telltale indicator lights and alarms located on the cab instrument panel. Telltale indicators and alarms will perform prove-out at initial power-up to ensure proper performance.

Control Switches

For ease of use, the following controls will be provided immediately adjacent to the cab instrument panel within easy reach of the driver. All switches will have backlit labels for low light applications.

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

Panel back lighting intensity control switch: A three (3)-position momentary rocker switch will be provided. Pressing the top half of the switch, "Panel Up" increases the panel back lighting intensity and pressing the bottom half of the switch, "Panel Down" decreases the panel back lighting intensity. Pressing the half or bottom half of the switch several times will allow back lighting intensity to be gradually varied from minimum to maximum intensity level for ease of use.

Ignition switch: A three (3)-position maintained/momentary rocker switch will be provided. The first switch position will turn off and deactivate vehicle ignition. The second switch position will activate vehicle ignition and will perform prove-out on the telltale indicators and alarms for 3 to 5 seconds after the switch is turned on. A green indicator lamp is activated with vehicle ignition. The third momentary position will temporarily silence all active cab alarms. An alarm "chirp" may continue as long as alarm condition exists. Switching ignition to off position will terminate the alarm silence feature and reset function of cab alarm system.

Engine start switch: A two (2)-position momentary rocker switch will be provided. The first switch position is the default switch position. The second switch position will activate the vehicle's engine. The switch actuator is designed to prevent accidental activation. Hazard switch will be provided on the instrument panel or on the steering column. Heater, defroster, and air conditioning control panel. Turn signal arm: A self-canceling turn signal with high beam headlight controls will be provided. Windshield wiper control will have high, low and intermittent modes. Parking brake control: An air actuated push/pull park brake control valve will be provided. Chassis horn control: Activation of the chassis horn control will be provided through the center of the steering wheel. High idle engagement switch: A momentary rocker switch with integral indicator lamp will be provided. The switch will activate and deactivate the high idle function. The "OK To Engage High Idle" indicator lamp must be active for the high idle function to engage. A green indicator lamp integral to the high idle engagement switch will indicate when the high idle function is engaged. "OK To Engage High Idle" indicator lamp: A green indicator light will be provided next to the high idle activation switch to indicate that the interlocks have been met to allow high idle engagement. Emergency switching will be controlled by multiple individual warning light switches for various groups or areas of emergency warning lights. An Emergency Master switch provided on the instrument panel that enables or disables all individual warning light switches is included. An additional "Emergency Master" button will be provided on the lower left hand corner of the gauge panel to allow convenient control of the "Emergency Master" system from inside the driver's door when standing on the ground.

Custom Switch Panels

The design of cab instrumentation will allow for emergency lighting and other switches to be placed within easy reach of the operator thus improving safety. There will be positions for up to four (4) switch panels in the lower instrument console and up to six (6) switch panels in the overhead visor console. All switches have backlit labels for low light conditions.

Diagnostic Panel

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

The diagnostic panel will include the following:

- Engine diagnostic port
- Transmission diagnostic port
- ABS diagnostic port
- Roll sensor diagnostic port
- Command Zone USB diagnostic port
- ABS diagnostic switch (blink codes flashed on ABS telltale indicator)
- Diesel particulate filter regeneration switch (where applicable)
- Diesel particulate filter regeneration inhibit switch (where applicable)

Cab LCD Display

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

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

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

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

0509511 Air Restriction Indicator, Imp/Vel, AXT, Dash CF, Enf MUX

AIR RESTRICTION INDICATOR

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

0543751 Light, Do Not Move Apparatus

"DO NOT MOVE APPARATUS" INDICATOR

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

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

0509042	Messages, Open Dr/DNMT, Color Dsply,	<p>DO NOT MOVE TRUCK MESSAGES</p> <p>Messages will be displayed on the Command Zone™, color display located within sight of the driver whenever the Do Not Move Truck light is active. The messages will designate the item or items not in the stowed for vehicle travel position (parking brake disengaged). The following messages will be displayed (where applicable):</p> <ul style="list-style-type: none"> Do Not Move Truck DS Cab Door Open (Driver Side Cab Door Open) PS Cab Door Open (Passenger's Side Cab Door Open) DS Crew Cab Door Open (Driver Side Crew Cab Door Open) PS Crew Cab Door Open (Passenger's Side Crew Cab Door Open) DS Body Door Open (Driver Side Body Door Open) PS Body Door Open (Passenger's Side Body Door Open) Rear Body Door Open DS Ladder Rack Down (Driver Side Ladder Rack Down) PS Ladder Rack Down (Passenger Side Ladder Rack Down) Deck Gun Not Stowed Lt Tower Not Stowed (Light Tower Not Stowed) Fold Tank Not Stowed (Fold-A-Tank Not Stowed) Aerial Not Stowed (Aerial Device Not Stowed) Stabilizer Not Stowed Steps Not Stowed Handrail Not Stowed <p>Any other device that is opened, extended, or deployed that creates a hazard or is likely to cause major damage to the apparatus if the apparatus is moved will be displayed as a caution message after the parking brake is disengaged.</p>
0622798	Switching, Cab Instrument Lower Console & Overhead, Rocker MUX, Enforcer	<p>SWITCH PANELS</p> <p>The built-in switch panels will be located in the lower console or overhead console of the cab. The switches will be rocker-type and include an integral indicator light. For quick, visual indication the switch will be illuminated whenever the switch is active. A 2-ply, scratch resistant laser engraved Gravoply label indicating the use of each switch will be placed below the switches. The label will allow light to pass through the letters for improved visibility in low light conditions. Switches and light source are integral to the switch panel assembly.</p>
0802940	Wiper Control, 2-Speed with Intermittent, Saber FR/Enforcer	<p>WIPER CONTROL</p> <p>Wiper control will consist of a two (2)-speed windshield wiper control with intermittent feature and windshield washer controls. The control will be located on the left side of the center instrument panel.</p>
0820904	Wiring, Spare, 15 A 12V DC 1st NFPA1900/ULC	<p>SPARE CIRCUIT</p> <p>There will be two (2) pair of wires, including a positive and a negative, installed on the apparatus. The above wires will have the following features:</p> <ul style="list-style-type: none"> The positive wire will be connected directly to the ignition switched power. The negative wire will be connected to ground. Wires will be protected to 15 amps at 12 volts DC. Power and ground will terminate officer side dash area and in the center console. Termination will be with heat shrinkable butt splicing. Wires will be sized to 125 percent of the protection. The circuit(s) may be load managed when the parking brake is set.
0821263	Wiring, Spare, 20 A 12V DC, 12 Ckt FB, Blue Sea 5026 Batt Dir 1st NFPA1900/ULC	<p>SPARE CIRCUIT</p> <p>There will be one (1) pair of wires, including a positive and a negative, installed on the apparatus. The above wires will have the following features:</p> <ul style="list-style-type: none"> The positive wire will be connected directly to the battery power. The negative wire will be connected to ground. Wires will be protected to 20 amps at 12 volts DC. Power and ground will terminate Exterior forward wall of EMS cabinet behind officer, mounted as low as possible.. Termination will be to a Blue Sea System, Model 5026, 12 circuit with negative bus bar, straight blade fuse block. The terminal block will include a cover with circuit labels. Wires will be sized to 125% of the protection. Battery direct loads cannot be Load Managed
0821266	Wiring, Spare, 20 A 12V DC, 12 Ckt FB, Blue Sea 5026 Batt Dir 2nd NFPA1900/ULC	<p>SPARE CIRCUIT</p> <p>There will be one (1) pair of wires, including a positive and a negative, installed on the apparatus. The above wires will have the following features:</p> <ul style="list-style-type: none"> The positive wire will be connected directly to the battery power. The negative wire will be connected to ground. Wires will be protected to 20 amps at 12 volts DC. Power and ground will terminate Mounted as low as possible between the forward facing seats.. Termination will be to a Blue Sea System, Model 5026, 12 circuit with negative bus bar, straight blade fuse block. The terminal block will include a cover with circuit labels. Wires will be sized to 125% of the protection. Battery Direct loads cannot be Load Managed

0821298	Wiring, Spare, 12V DC, USB-A, USB-C AlfredDireck Batt Dir 1st NFPA1900/ULC	<p>SPARE CIRCUIT There will be two (2) pair of wires, including a positive and a negative, installed on the apparatus. The above wires will have the following features: The positive wire will be connected directly to the battery power. The negative wire will be connected to ground. Power and ground will terminate in the switch panel LOC #12. Termination will be a AlfredDireck QC4.0 PD & QC3.0 with the 60W PD USB-C port and 36W Quick Charge 3.0 USB-A port. Wires will be sized to 125 percent of the protection. Battery direct loads cannot be Load Managed</p>
0821325	Wiring, Spare, 10 A 12V DC 1st NFPA1900/ULC	<p>SPARE CIRCUIT There will be one (1) pair of wires, including a positive and a negative, installed on the apparatus. The above wires will have the following features: The positive wire will be connected directly to the ignition switched power. The negative wire will be connected to ground. Wires will be protected to 10 amps at 12 volts DC. Power and ground will terminate LOC #4. Termination will be with heat shrinkable butt splicing. Wires will be sized to 125 percent of the protection. This circuit(s) may be load managed when the parking brake is applied.</p>
0814201	Vehicle Information Center, 7" Color Display, Touchscreen, MUX, CL714	<p>INFORMATION CENTER An information center employing a 7.00" diagonal touch screen color LCD display will be encased in an ABS plastic housing. The information center will have the following specifications: Operate in temperatures from -40 to 158 degrees Fahrenheit LCD optically bonded to hardened AR glass lens Five weather resistant user interface switches Grey with black accents Sunlight Readable Linux operating system Minimum of 1000nits rated display Display can be changed to an available foreign language A LCD display integral to the cab gauge panel will be included as outlined in the cab instrumentation area. Programmed to read US Customary</p> <p>General Screen Design Where possible, background colors will be used to provide "At a Glance" vehicle information. If information provided on a screen is within acceptable limits, a green background will be used. If a caution or warning situation arises the following will occur: An amber background/text color will indicate a caution condition A red background/text color will indicate a warning condition The information center will utilize an "Alert Center" to display text messages for audible alarm tones. The text messages will be written to identify the item(s) causing the audible alarm to sound. If more than one (1) text message occurs, the messages will cycle every second until the problem(s) have been resolved. The background color for the "Alert Center" will change to indicate the severity of the "warning" message. If a warning and a caution condition occur simultaneously, the red background color will be shown for all alert center messages. A label for each button will exist. The label will indicate the function for each active button for each screen. Buttons that are not utilized on specific screens will have a button label with no text or symbol.</p> <p>Home/Transit Screen This screen will display the following: Vehicle Mitigation (if equipped) Water Level (if the water level system includes compatible communications to the information center) Foam Level (if the foam level system includes compatible communications to the information center) Seat Belt Monitoring Screen Tire Pressure Monitoring (if equipped) Digital Speedometer Active Alarms</p> <p>On Scene Screen This screen will display the following and will be auto activated with pump engaged (if equipped): Battery Voltage Fuel Oil Pressure Coolant Temperature RPM Water Level (if equipped) Foam Level (if equipped) Foam Concentration (if equipped) Water Flow Rate (if equipped) Water Used (if equipped) Active Alarms</p> <p>Virtual Buttons There will be four (4) virtual switch panel screens that match the overhead and lower lighting and HVAC switch panels.</p> <p>Page Screen The page screen will display the following and allow the user to progress into other screens for further functionality: Diagnostics Faults</p>

Listed by order of occurrence

Allows to sort by system

Interlock

Throttle Interlocks

Pump Interlocks (if equipped)

Aerial Interlocks (if equipped)

PTO Interlocks (if equipped)

Load Manager

A list of items to be load managed will be provided. The list will provide a description of the load. The lower the priority numbers the earlier the device will be shed should a low voltage condition occur.

The screen will indicate if a load has been shed (disabled) or not shed.

"At a glance" color features are utilized on this screen.

Systems

Command Zone

Module type and ID number

Module Version

Input or output number

Circuit number connected to that input or output

Status of the input or output

Power and Constant Current module diagnostic information

Foam (if equipped)

Pressure Controller (if equipped)

Generator Frequency (if equipped)

Live Data

General Truck Data

Maintenance

Engine oil and filter

Transmission oil and filter

Pump oil (if equipped)

Foam (if equipped)

Aerial (if equipped)

Setup

Clock Setup

Date & Time

12 or 24 hour format

Set time and date

Backlight

Daytime

Night time

Sensitivity

Unit Selection

Home Screen

Virtual Button Setup

On Scene Screen Setup

Configure Video Mode

Set Video Contrast

Set Video Color

Set Video Tint

Do Not Move

The screen will indicate the approximate location and type of item that is open or is not stowed for travel. The actual status of the following devices will be indicated

Driver Side Cab Door

Passenger's Side Cab Door

Driver Side Crew Cab Door

Passenger's Side Crew Cab Door

Driver Side Body Doors

Passenger's Side Body Doors

Rear Body Door(s)

Ladder Rack (if applicable)

Deck Gun (if applicable)

Light Tower (if applicable)

Hatch Door (if applicable)

Stabilizers (if applicable)

Steps (if applicable)

Notifications

View Active Alarms

Shows a list of all active alarms including date and time of the occurrence is shown with each alarm

Silence Alarms - All alarms are silenced

Timer Screen

HVAC (if equipped)

Tire Information (if equipped)

Ascendant Set Up Confirmation (if equipped)

Button functions and button labels may change with each screen.

0816633	Collision Mitigation, HAAS Alert (R2V), HA7	<p>COLLISION MITIGATION</p> <p>There will be a HAAS Alert®, Model HA7 Responder-to-Vehicle (R2V) collision avoidance system provided on the apparatus. The HA7 cellular transponder module will be installed behind the cab windshield, as high and near to the center as practical, to allow clear visibility to the sky. The module dimensions are 5.40" long x 2.70" wide x 1.30" high, and operating temperature range is -40 degrees Celsius to 85 degrees Celsius.</p> <p>The transponder will be connected to the vehicle's emergency master circuit and battery direct power and ground.</p> <p>While responding with emergency lights on, the HA7 transponder sends alert messages via cellular network to motorists in the vicinity of the responding truck that are equipped with the WAZE app.</p> <p>While on scene with emergency lights on, the HA7 transponder sends road hazard alerts to motorists in the vicinity of the truck that are equipped with the WAZE app.</p> <p>The HA7 Responder-to-Vehicle (R2V) collision avoidance system will include the transponder and a 5 year cellular plan subscription.</p> <p>Activation of the HAAS Alert system requires a representative of the customer to accept the End User License Agreement (EULA) via an on-line portal.</p>
0820299	Seat Belt Monitor w/CZ Display, NFPA1900/ULC	<p>Seat Belt Monitoring System</p> <p>A seat belt monitoring system (SBMS) will be provided on the Command Zone™ color display. The SBMS will be capable of monitoring up to 10 seating positions indicating the status of each seat position per the following:</p> <p>Seat Occupied & Buckled = Green LED indicator illuminated</p> <p>Seat Occupied & Unbuckled = Red LED indicator with audible alarm</p> <p>No Occupant & Buckled = Red LED indicator with audible alarm</p> <p>No Occupant & Unbuckled = No indicator and no alarm</p> <p>The seat belt monitoring screen will become active on the Command Zone color display when:</p> <p>The home screen is active:</p> <p>and there is any occupant seated but not buckled or any belt buckled with an occupant.</p> <p>and there are no other Do Not Move Apparatus conditions present. As soon as all Do Not Move Apparatus conditions are cleared, the SBMS will be activated.</p> <p>The SBMS will include an audible alarm that will warn that an unbuckled occupant condition exists and the parking brake is released, or the transmission is not in park.</p>
0696439	Antenna Mount, Custom Chassis, Cable Routed to Instrument Panel Area	<p>RADIO ANTENNA MOUNT</p> <p>There will be one (1) standard 1.125", 18 thread antenna-mounting base(s) installed on the right side on the cab roof with high efficiency, low loss, coaxial cable(s) routed to the instrument panel area. A weatherproof cap will be installed on the mount.</p>
0817058	Camera, Pierce, LS Mux, R Camera, SD, CL714	<p>VEHICLE CAMERA SYSTEM</p> <p>There will be a color vehicle camera system provided with the following:</p> <p>One (1) Standard Definition (SD) camera located at the rear of the apparatus, pointing rearward, displayed automatically with the vehicle in reverse.</p> <p>The camera images will be displayed on the left side vehicle information center display. Audio from the microphone on the rear camera will be not provided.</p> <p>The following components will be included:</p> <p>One (1) SV-CW134639CAI Camera</p> <p>All necessary cables</p>
0814831	Not Required, Camera Switcher	<p>Camera Switcher</p> <p>A camera switcher is not required.</p>
0677933	Camera System, CSS, Body to Waterproof Pump Panel 7" LCD Display	<p>OBSERVATION CAMERA SYSTEM</p> <p>There will be a, Model SM07F, color video camera system provided. The IP69, heated, camera will be located on the apparatus body Right side of body above crosslays . Images will be viewed on a waterproof, IP69 rated, 7.00" LCD display monitor located at the pump operators panel.</p>
0523921	Recess, Rear Vision Camera	<p>RECESS REAR CAMERA</p> <p>A rear camera recess will be provided in the center at the rear.</p>
0890416	Pierce Command Zone, Advanced Electronics & Control System, Enforcer, WiFi CZT	<p>ELECTRICAL POWER CONTROL SYSTEM</p> <p>The primary power distribution will be located forward of the officer's seating position and be easily accessible while standing on the ground for simplified maintenance and troubleshooting. Additional electrical distribution centers will be provided throughout the vehicle to house the vehicle's electrical power, circuit protection, and control components. The electrical distribution centers will be located strategically throughout the vehicle to minimize wire length. For ease of maintenance, all electrical distribution centers will be easily accessible. All distribution centers containing fuses, circuit breakers and/or relays will be easily accessible.</p> <p>Distribution centers located throughout the vehicle will contain battery powered studs for supplying customer installed equipment thus providing a lower cost of ownership.</p> <p>Circuit protection devices, which conform to SAE standards, will be utilized to protect electrical circuits. All circuit protection devices will be rated per NFPA requirements to prevent wire and component damage when subjected to extreme current overload. General protection circuit breakers will be Type-I automatic reset (continuously resetting). When required, automotive type fuses will be utilized to protect electronic equipment. Control relays and solenoid will have a direct current rating of 125 percent of the maximum current for which the circuit is protected per NFPA.</p> <p>Solid-State Control System</p>

A solid-state electronics based control system will be utilized to achieve advanced operation and control of the vehicle components. A fully computerized vehicle network will consist of electronic modules, electronic control modules to include black housings, a power indicator and status indicator located near their point of use to reduce harness lengths and improve reliability. The control system will comply with SAE J1939-11 recommended practices.

The control system will operate as a master-slave system whereas the main control module instructs all other system components. The system will contain patented Mission Critical software that maintains critical vehicle operations in the unlikely event of a main controller error. The system will utilize a Real Time Operating System (RTOS) fully compliant with OSEK/VDX™ specifications providing a lower cost of ownership.

For increased reliability and simplified use the control system modules will include the following attributes:

Green LED indicator light for module power

Red LED indicator light for network communication stability status

Control system self test at activation and continually throughout vehicle operation

No moving parts due to transistor logic

Software logic control for NFPA mandated safety interlocks and indicators

Integrated electrical system load management without additional components

Integrated electrical load sequencing system without additional components

Customized control software to the vehicle's configuration

Factory and field programmable to accommodate changes to the vehicle's operating parameters

To assure long life and operation in a broad range of environmental conditions, the solid-state control system modules will meet the following specifications:

Module circuit board will meet SAE J771 specifications

Operating temperature from -40 degrees Celsius to +70 degrees Celsius

Storage temperature from -40 degrees Celsius to +70 degrees Celsius

Vibration to 50g

IP67 rated enclosure (Totally protected against dust and also protected against the effect of temporary immersion between 15 centimeters and one (1) meter)

Operating voltage from eight (8) volts to 32 volts DC

The main controller will activate status indicators and audible alarms designed to provide warning of problems before they become critical.

Circuit Protection and Control Diagram

Copies of all job-specific, computer network input and output (I/O) connections will be provided with each chassis. The sheets will indicate the function of each module connection point, circuit protection information (where applicable), wire numbers, wire colors and load management information.

On-Board Electrical System Diagnostics

The on-board information center will include the following diagnostic information:

Text description of active warning or caution alarms

Simplified warning indicators

Amber caution indication with intermittent alarm

Red warning indication with steady tone alarm

Advanced diagnostic feature will be provided in this control system. From the Command Zone display or connected wireless device, these features allow the user to monitor the real-time status of every input or output on the vehicle. It also allows users logged in as an administrator to force on inputs or outputs to assist the troubleshooting process.

TCU Module with WiFi

An in cab module will provide WiFi wireless interface and data logging capability. The WiFi interface will comply with IEEE 802.11 b/g/n capabilities while communicating at 2.4 Gigahertz.

The module will communicate through a black WiFi antenna allowing a line of site communication range of up to 300 feet with a roof mounted antenna.

The module will transmit a password protected web page to a WiFi enabled device (i.e. most smart phones, tablets or laptops) allowing two levels of user interaction. The firefighter level will allow vehicle monitoring of the vehicle and firefighting systems on the apparatus. The technician level will allow diagnostic access to inputs and outputs installed on the Command Zone™, control and information system.

The TCU capability will record faults from the engine, transmission, ABS and Command Zone™, control and information systems as they occur. No other data will be recorded at the time the fault occurs. The data TCU will provide up to 2 Gigabytes of data storage.

The TCU will provide a means to download the TCU information and update software in the device.

Indicator Light and Alarm Prove-Out System

A system will be provided which automatically tests basic indicator lights and alarms located on the cab instrument panel.

Voltage Monitor System

A voltage monitoring system will be provided to indicate the status of the battery system connected to the vehicle's electrical load. The system will provide visual and audible warning when the system voltage is below or above optimum levels.

The alarm will activate if the system falls below 11.8 volts DC for more than two (2) minutes.

Dedicated Radio Equipment Connection Points

There will be three (3) studs provided in the primary power distribution center located in front of the officer for two-way radio equipment. The studs will consist of the following:

12-volt 40-amp battery switched power

12-volt 60-amp ignition switched power

12-volt 60-amp direct battery power

There will also be a 12-volt 100-amp ground stud located in or adjacent to the power distribution center.

EMI/RFI Protection

To prevent erroneous signals from crosstalk contamination and interference, the electrical system will meet, at a minimum, SAE J551/2, thus reducing undesired electromagnetic and radio frequency emissions. An advanced electrical system will be used to ensure radiated and conducted electromagnetic interference (EMI) or radio frequency interference (RFI) emissions are suppressed at their source.

The apparatus will have the ability to operate in the electromagnetic environment typically found in fire ground operations to ensure clean operations. The electrical system will meet, without exceptions, electromagnetic susceptibility conforming to SAE J1113/25 Region 1, Class C EMR

for 10KHz-1GHz to 100 Volts/Meter. The vehicle OEM, upon request, will provide EMC testing reports from testing conducted on an entire apparatus and will certify that the vehicle meets SAE J551/2 and SAE J1113/25 Region 1, Class C EMR for 10KHz-1GHz to 100 Volts/Meter requirements. Component and partial (incomplete) vehicle testing is not adequate as overall vehicle design can impact test results and thus is not acceptable by itself. EMI/RFI susceptibility will be controlled by applying appropriate circuit designs and shielding. The electrical system will be designed for full compatibility with low-level control signals and high-powered two-way radio communication systems. Harness and cable routing will be given careful attention to minimize the potential for conducting and radiated EMI/RFI susceptibility.

0896456 Prognostics, Electrical System

ELECTRICAL SYSTEM PROGNOSTICS

There will be a software based vehicle tool provided to predict remaining life of the vehicles critical fluid and events.

The system will send automatic indications to the Command Zone™ information center and/or wireless enabled devices to proactively alert of upcoming service intervals.

Prognostics will include the following:

Engine oil and filter
Transmission oil and filter

0624253 Electrical System, Enforcer MUX

ELECTRICAL

All 12-volt electrical equipment installed by the apparatus manufacturer will conform to modern automotive practices. All wiring will be high temperature crosslink type. Wiring will be run, in loom or conduit, where exposed and have grommets where wire passes through sheet metal. Automatic reset circuit breakers will be provided which conform to SAE Standards. Wiring will be color, function and number coded. Function and number codes will be continuously imprinted on all wiring harness conductors at 2.00" intervals. Exterior exposed wire connectors will be positive locking, and environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids.

Electrical wiring and equipment will be installed utilizing the following guidelines:

All holes made in the roof will be caulked with silicon. Large fender washers, liberally caulked, will be used when fastening equipment to the underside of the cab roof.

Any electrical component that is installed in an exposed area will be mounted in a manner that will not allow moisture to accumulate in it. Exposed area will be defined as any location outside of the cab or body.

Electrical components designed to be removed for maintenance will not be fastened with nuts and bolts. Metal screws will be used in mounting these devices. Also a coil of wire will be provided behind the appliance to allow them to be pulled away from mounting area for inspection and service work.

Corrosion preventative compound will be applied to all terminal plugs located outside of the cab or body. All non-waterproof connections will require this compound in the plug to prevent corrosion and for easy separation (of the plug).

All lights that have their sockets in a weather exposed area will have corrosion preventative compound added to the socket terminal area.

All electrical terminals in exposed areas will have silicon applied completely over the metal portion of the terminal.

All lights and reflectors, required to comply with Federal Motor Vehicle Safety Standard #108, will be furnished. Rear identification lights will be recessed mounted for protection. Lights and wiring mounted in the rear bulkheads will be protected from damage by installing a false bulkhead inside the rear compartments.

An operational test will be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order.

The results of the tests will be recorded and provided to the purchaser at time of delivery.

0079211 Batteries, (6) Stryten/Exide Grp 31, 950 CCA each, Threaded Stud

BATTERY SYSTEM

There will be six (6) 12 volt Stryten/Exide®, Model 31S950X3W, batteries that include the following features will be provided:

950 CCA, cold cranking amps

190 amp reserve capacity

High cycle

Group 31

Rating of 5700 CCA at 0 degrees Fahrenheit

1140 minutes of reserve capacity

Threaded stainless steel studs

Each battery case will be a black polypropylene material with a vertically ribbed container for increased vibration resistance. The cover will be manifold vented with a central venting location to allow a 45 degree tilt capacity.

The inside of each battery will consist of a "maintenance free" grid construction with poly wrapped separators and a flooded epoxy bottom anchoring for maximum vibration resistance.

0008621 Battery System, Single Start, All Custom Chassis

BATTERY SYSTEM

There will be a single starting system with an ignition switch and starter button provided and located on the cab instrument panel.

MASTER BATTERY SWITCH

There will be a master battery switch provided within the cab within easy reach of the driver to activate the battery system.

An indicator light will be provided on the instrument panel to notify the driver of the status of the battery system.

0002698	Battery Compartment, Saber/Enforcer	<p>BATTERY COMPARTMENTS Batteries will be placed on non-corrosive mats and be stored in well ventilated compartments located under the cab and bolted directly to the chassis frame. The battery boxes will have reinforced sides. The battery compartments will be constructed of 0.188" steel plate and be designed to accommodate a maximum of three (3) group 31 batteries in each compartment. The battery hold-downs will be of a non-corrosive material. All bolts and nuts will be stainless steel. Heavy-duty, 2/0 gauge, color coded battery cables will be provided. Battery terminal connections will be coated with anti-corrosion compound. Battery solenoid terminal connections will be encapsulated with semi-permanent rubberized compound.</p> <p>JUMPER STUDS One (1) set of battery jumper studs with plastic color-coded covers will be included on the battery compartments.</p>
0813848	Charger, Sngl Sys, IOTA, DLS-75, 75 amp, IQ4 Controller	<p>BATTERY CHARGER There will be an IOTA, Model DLS 75, 75 amp battery charger with IQ4 controller provided. The battery charger will be wired to the AC shoreline inlet through an AC receptacle adjacent to this battery charger.</p>
0814869	Location, Cab, Charger, Behind Driver Seat	The battery charger will be located in the cab behind the driver seat.
0813791	Panel, Charger Display, Kussmaul, 091-94-12, Batt Dir	<p>REMOTE CONTROL PANEL - BATTERY CHARGER There will be a Kussmaul™, Model 091-94-12 universal display panel included. It will be wired directly to the chassis batteries.</p>
0814939	Location, Cab, Ind/Remote, Driver's Seat Riser	The battery charger indicator will be located on the driver's seat riser.
0816871	Inverter, Xantrex Freedom X, 817-1000, Non-NFPA 2024 Batt Sw	<p>INVERTER There will be a Xantrex Model 817-1000, 1000W, 12 volt DC to 120 volt AC inverter with a built in LCD display, on/off switch and internal 30A transfer relay provided. The inverter will be connected battery direct through proper fusing. A load management solenoid will be installed between the battery and the inverter. The inverter will be connected to power when the battery switch is on and system voltage is above the low voltage threshold. When the shoreline is connected to the truck, the internal auto transfer switch will allow AC shoreline power to pass through the inverter to the AC loads connected to the inverter. Per NFPA 1900, 2024 Edition, Section 21.5.5.2, the alternator and/or battery system will be adequate to provide power for continuous operation for a minimum of 2 hours at full output. Per the fire department specifications, if all DC loads on the NFPA required electrical analysis report are active, the alternator cannot provide adequate power for continuous operation for 2 hours. The apparatus will be non-compliant to NFPA 1900 standards at time of contract execution. The load management system will activate in low voltage situations, and the inverter will be de-energized until chassis electrical system voltage recovers.</p>
0814953	Location, Body, Inverter, LS Forward Compartment	<p>INVERTER LOCATION The Inverter will be located in the left side forward body compartment located on the back wall as high as practical.</p>
0016857	Shoreline, 20A 120V, Kussmaul Auto Eject, 091-55-20-120, Super	<p>AUTO EJECT FOR SHORELINE There will be one (1) Kussmaul™, Model 091-55-20-120, 20 amp 120 volt AC shoreline inlet(s) provided to operate the dedicated 120 volt AC circuits on the apparatus. The shoreline inlet(s) will include red weatherproof flip up cover(s). There will be a release solenoid wired to the vehicle's starter to eject the AC connector when the engine is starting. The shoreline(s) will be connected to the battery charger. There will be a mating connector body supplied with the loose equipment. There will be a label installed near the inlet(s) that state the following: Line Voltage Current Rating (amps) Phase Frequency</p>
0026800	Shoreline Location	The shoreline receptacle will be located on the driver side of cab, to the front of cab door.

0097486	Shoreline Inlet, 20A 120V Kussmaul Auto Eject, "Super"	<p>KUSSMAUL AUTO EJECT FOR SHORELINE</p> <p>Quantity of one (1) additional shorelines will be provided to operate the dedicated 120-volt circuits on the truck without the use of the generator.</p> <p>The shoreline receptacle (s) will be provided with a NEMA 5-20, 120 volt, 20 amp, straight blade Kussmaul Super auto eject plug with a red weatherproof cover. The cover is spring loaded to close, preventing water from entering when the shoreline is not connected.</p> <p>The unit is completely sealed to prevent road dirt contamination.</p> <p>A solenoid wired to the vehicle's starter is energized when the engine is started. This instantaneously drives the plug from the receptacle.</p> <p>An internal switch arrangement will be provided to disconnect the load prior to ejection to eliminate arcing of the connector contacts.</p> <p>The shoreline(s) will be connected to Coleman AC .</p> <p>The shoreline(s) will be located DS front cab corner.</p> <p>Mating connector bodies will also be supplied with the loose equipment.</p>
0647728	Alternator, 430 amp, Delco Remy 55SI	<p>ALTERNATOR</p> <p>A Delco Remy®, Model 55SI, alternator will be provided. It will have a rated output current of 430 amps, as measured by SAE method J56. The alternator will feature an integral regulator and rectifier system that has been tested and qualified to an ambient temperature of 257 degrees Fahrenheit (125 degrees Celsius). The alternator will be connected to the power and ground distribution system with heavy-duty cables sized to carry the full rated alternator output.</p>
0092582	Load Manager/Sequencer, MUX	<p>ELECTRONIC LOAD MANAGER</p> <p>An electronic load management (ELM) system will be provided that monitors the vehicles 12-volt electrical system, automatically reducing the electrical load in the event of a low voltage condition, and automatically restoring the shed electrical loads when a low voltage condition expires. This ensures the integrity of the electrical system.</p> <p>For improved reliability and ease of use, the load manager system will be an integral part of the vehicle's solid state control system requiring no additional components to perform load management tasks. Load management systems which require additional components will not be allowed.</p> <p>The system will include the following features:</p> <ul style="list-style-type: none"> System voltage monitoring. A shed load will remain inactive for a minimum of five minutes to prevent the load from cycling on and off. Sixteen available electronic load shedding levels. Priority levels can be set for individual outputs. High Idle to activate before any electric loads are shed and deactivate with the service brake. <p>If enabled:</p> <ul style="list-style-type: none"> "Load Man Hi-Idle On" will display on the information center. Hi-Idle will not activate until 30 seconds after engine start up. Individual switch "on" indicator to flash when the particular load has been shed. The information center indicates system voltage. The information center, where applicable, includes a "Load Manager" screen indicating the following: <ul style="list-style-type: none"> Load managed items list, with priority levels and item condition. Individual load managed item condition: <ul style="list-style-type: none"> ON = not shed SHED = shed <p>SEQUENCER</p> <p>A sequencer will be provided that automatically activates and deactivates vehicle loads in a preset sequence thereby protecting the alternator from power surges. This sequencer operation will allow a gradual increase or decrease in alternator output, rather than loading or dumping the entire 12 volt load to prolong the life of the alternator.</p> <p>For improved reliability and ease of use, the load sequencing system will be an integral part of the vehicle's solid state control system requiring no additional components to perform load sequencing tasks. Load sequencing systems which require additional components will not be allowed.</p> <p>Emergency light sequencing will operate in conjunction with the emergency master light switch. When the emergency master switch is activated, the emergency lights will be activated one by one at half-second intervals. Sequenced emergency light switch indicators will flash while waiting for activation.</p> <p>When the emergency master switch is deactivated, the sequencer will deactivate the warning light loads in the reverse order.</p> <p>Sequencing of the following items will also occur, in conjunction with the ignition switch, at half-second intervals:</p> <ul style="list-style-type: none"> Cab Heater and Air Conditioning Crew Cab Heater (if applicable) Crew Cab Air Conditioning (if applicable) Exhaust Fans (if applicable) Third Evaporator (if applicable)
0724853	Headlights, Rect LED, HiViz FT-4X6-4KIT, AXT/DCF/Enf/Imp/Sab/Vel, Trim	<p>HEADLIGHTS</p> <p>There will be a HiViz part number FT-4X6-4KIT, that includes four (4) 4.00" high x 6.00" long rectangular LED lights with parking lamp illumination around the outside of the lamps mounted in the front quad style housings on each side of the cab grille:</p> <ul style="list-style-type: none"> the outside lamp on each side will contain a part number FT-4X6-HL with low beam LEDs the inside lamp on each side will contain a part number FT-4X6-H with high beam LEDs <p>the lights will be controlled through the headlight switch</p> <p>The headlight housing and headlight trim to be painted black.</p>

0625953	Light, Directional, WIn 600 Cmb, Cab Crn, Wrp Bzl Out HD Lts, Enf/Sab	<p>DIRECTIONAL LIGHTS There will be two (2) Whelen 600 series, LED combination directional/marker lights provided. The lights will be located on the outside cab corners, next to the headlights. The color of the lenses will be clear.</p>
0620054	Light, Directional/Marker, Intermediate, Weldon 9186-8580-29 LED 2lts	<p>INTERMEDIATE LIGHT There will be two (2) Weldon, Model 9186-8580-29, amber LED turn signal marker lights furnished, one (1) each side, in the rear fender panel. The light will double as a turn signal and marker light.</p>
0735474	Lights, Clearance/Marker/ID, Front, P25 LED 7 Lts, Saber FR/Enforcer	<p>CAB CLEARANCE/MARKER/ID LIGHTS There will be seven (7) amber LED lights provided per the following: Three (3) amber LED identification lights will be installed in the center of the cab above the windshield. Two (2) amber LED clearance lights will be installed, one (1) on each outboard side of the cab above the windshield as close to the outside of the apparatus as practical. Two (2) amber LED clearance lights will be installed, one (1) on each side of the cab as high and far forward as practical. The lights will be installed without guards.</p>
0625210	Lights, Directional, Cab Front Side, Truck-Lite 19036Y LED, AXT/Enf	<p>FRONT CAB SIDE CLEARANCE/MARKER LIGHTS There will be two (2) Truck-Lite®, Model 19036Y, amber LED lights installed to the outside of the chrome wrap around bezel, one (1) on each side of the cab. The lights will activate as additional directional lights with the corresponding directional circuit.</p>
0088869	Lights, Clearance/Marker/ID, Rear, Truck-Lite 26250R LED 7Lts	<p>REAR CLEARANCE/MARKER/ID LIGHTING There will be three (3) Truck-Lite®, Model 26250R, LED lights used as identification lights located at the rear of the apparatus per the following: As close as practical to the vertical centerline Centers spaced not less than 6.00" or more than 12.00" apart Red in color All at the same height There will be two (2) Truck-Lite, Model 26250R, LED lights installed at the rear of the apparatus used as clearance lights located at the rear of the apparatus per the following: To indicate the overall width of the vehicle One (1) each side of the vertical centerline As near the top as practical Red in color To be visible from the rear All at the same height There will be two (2) Truck-Lite, Model 26250R, LED lights installed on the side of the apparatus as marker lights as close to the rear as practical per the following: To indicate the overall length of the vehicle One (1) each side of the vertical centerline As near the top as practical Red in color To be visible from the side All at the same height There will be two (2) red reflectors located on the rear of the truck facing to the rear. One (1) each side, as far to the outside as practical, at a minimum of 15.00", but no more than 60.00", above the ground. There will be two (2) red reflectors located on the side of the truck facing to the side. One (1) each side, as far to the rear as practical, at a minimum of 15.00", but no more than 60.00", above the ground. Per FMVSS 108 and CMVSS 108 requirements.</p>
0804519	Lights, Tail, WIn M62BTT* Red Stop/Tail & M62T* Amber Dir Arw w/Flange	<p>REAR FMVSS LIGHTING The rear stop/tail and directional lighting will include the following: Two (2) Whelen®, Model M62BTT, 4.30" high x 6.70" wide x 1.40" deep brake/tail lights with red LEDs Two (2) Whelen, Model M62T, 4.30" high x 6.70" wide x 1.40" deep directional lights with amber LEDs. The directional lights will be set to Steady On (Arrow) flash pattern. The lens color(s) to be clear. The lights to include black trim.</p>
0806466	Lights, Backup, WIn M62BU, LED, For Tail Lt Housing	<p>There will be two (2) Whelen Model M62BU, LED backup lights provided in the tail light housing.</p>
0889577	Bracket, License Plate & Light, P25 LED, Stainless Brkt	<p>LICENSE PLATE BRACKET One (1) license plate bracket constructed of stainless steel will be provided at the rear of the apparatus. One (1) white LED light with black housing will be provided to illuminate the license plate. A stainless steel light shield will be provided over the light that will direct illumination downward, preventing white light to the rear.</p>

0589905	Alarm, Back-up Warning, PRECO 1040	BACK-UP ALARM A PRECO, Model 1040, solid-state electronic audible back-up alarm that actuates when the truck is shifted into reverse will be provided. The device will sound at 60 pulses per minute and automatically adjust its volume to maintain a minimum ten (10) dBA above surrounding environmental noise levels.
0626588	Lights, Perimeter Cab, TecNiq T10-LC00-1 15" LED 4Dr	CAB PERIMETER SCENE LIGHTS There will be four (4) TecNiq, Model T10-LC00-1, 15.00" lights with white LEDs and 45 degree stainless steel brackets provided per the following: one (1) under the driver's side cab access step one (1) under the passenger's side cab access step one (1) under the passenger's side crew cab access step one (1) under the driver's side crew cab access step The lights will be activated when the battery switch is on, when the respective door is open and by the same control selected for the body perimeter lights.
0617901	Lights, Perimeter Pump House, TecNiq T10-LC00-1 15" LED 2lts	PUMP HOUSE PERIMETER LIGHTS There will be two (2) TecNiq, Model T10-LC00-1, 15.00" white 12 volt DC LED weatherproof strip lights provided under the pump panel running boards, one (1) each side. The lights will be controlled by the same means as the body perimeter lights.
0626579	Lights, Perimeter Body, TecNiq T10-LC00-1 15" LED 2lts, Rear Step	BODY PERIMETER SCENE LIGHTS There will be two (2) TecNiq, Model T10-LC00-1, 15.00" 12 volt DC LED strip lights provided at the rear step area of the body, one (1) each side shining to the rear. The perimeter scene lights will be activated when the parking brake is applied, the reverse signal activated, activating all the side facing perimeter lights, the driver's side directional is activated, activating only the driver side facing perimeter lights and the passenger's side directional is activated, activating only the passenger side facing perimeter lights.
0896454	Enhanced Software for Perimeter Lts	ENHANCED SOFTWARE FOR PERIMETER LIGHTS All perimeter lights will be deactivated when the parking brake is released unless alternate control is selected. The cab and crew cab perimeter lights will remain on for ten (10) seconds for improved visibility after the doors closed.
0729151	SP Lights, Step, P25 at Rear Tailboard, PUC, 4lts Perm Lts, Blk Trim	STEP LIGHTS There will be four (4) white LED step lights provided at the rear to illuminate the tailboard/step area. The housing for these lights will be painted black. In order to ensure exceptional illumination, each light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light. These step lights will be actuated with the perimeter scene lights. All other steps on the apparatus will be illuminated per the current edition of applicable NFPA standards.
0760447	Light, Roof Mt, HiViz, FT-B-72-*-* , Cnt Feature, Mux	12 VOLT LIGHTING There will be a HiViz Model FT-B-72-*-* , 2.56" high x 72.69" long x 3.31" deep 21,067 effective lumens 12 volt DC light with white LEDs configured with a combination of flood and spot optics mounted, as far forward on the cab roof as practical. The painted parts of the light housing and brackets to be black. The light will be activated by a switch at the driver's side switch panel and by a switch at the passenger's side switch panel. The light may be load managed when the parking brake is applied.
0736729	Lights, HiViz FT-GESM LED 2nd	12 VOLT LIGHTING There will be one (1) HiViz®, Model FT-GESM, 20,500 equivalent lumens 8.65" high x 10.61" wide x 2.78" deep light(s) with white LEDs installed on the cab Above PS EMS cabinet door. The light(s) to include black optic holders, black bezels and black fixture body. The light(s) will be activated by a switch at the driver's side switch panel, by a switch at the left side pump panel and by a switch at the passenger's side switch panel. The light(s) may be load managed when the parking brake is applied.
0736731	Lights, HiViz FT-GESM LED 1st	12 VOLT LIGHTING There will be one (1) HiViz®, Model FT-GESM, 20,500 equivalent lumens 8.65" high x 10.61" wide x 2.78" deep light(s) with white LEDs installed on the cab Above DS EMS cabinet door. The light(s) to include black optic holders, black bezels and black fixture body. The light(s) will be activated by a switch at the driver's side switch panel, by a switch at the left side pump panel and by a switch at the passenger's side switch panel. The light(s) may be load managed when the parking brake is applied.

0733336	Lights, HiViz FT-GESM* LED 2nd	<p>12 VOLT LIGHTING - BODY</p> <p>There will be two (2) HiViz®, Model FT-GESM, surface mount, 20,500 equivalent lumens, 8.65" high x 10.61" wide x 2.78" deep with white LED's installed on the body PS front upper body corner and rear upper body corner. The light(s) to include black optic holders, black bezels and black fixture body.</p> <p>The light(s) will be activated by the same control that has been selected for the right side scene light(s).</p> <p>The light(s) may be load managed when the parking brake is applied.</p>
0733343	Lights, HiViz FT-GESM* LED 1st	<p>12 VOLT LIGHTING - BODY</p> <p>There will be two (2) HiViz®, Model FT-GESM, surface mount, 20,500 equivalent lumens, 8.65" high x 10.61" wide x 2.78" deep with white LED's installed on the body DS front upper body corner and rear upper body corner. The light(s) to include black optic holders, black bezels and black fixture body. The light(s) will be activated by the same control that has been selected for the left side scene light(s).</p> <p>The light(s) may be load managed when the parking brake is applied.</p>
0532358	Not Required, Deck Lights, Other Hose Bed & Rear Lighting	
0893593	Lights, Hose Bed, Below Alum Cvr, Dual LED Light Strips	<p>HOSE BED LIGHTS</p> <p>There will be white 12 volt DC LED light strips provided to light the hose bed area. Hose bed lights will meet the photometric levels listed in the current edition of applicable NFPA standards for Hose Bed lighting requirements.</p> <p>Light strip(s) will be installed below lower support tube on the left side of the hose bed cover. Light strip(s) will be installed below lower support tube on the right side of the hose bed cover. The lights will be activated by a stainless steel cup switch located at the rear no more than 72.00" from the ground.</p>
0645677	Lights, Not Required, Rear Work, Alt. 12 Volt Lights At Rear Body	
0743346	Lights, Rear Scene, HiViz FT-GSMJR-*, Surface Mt	<p>REAR SCENE LIGHT(S)</p> <p>There will be two (2) HiViz, Model FT-GSMJR-*, 5.04" high x 7.40" wide x 1.54" deep 5,000 raw lumens light(s) with white LEDs black trim and black optic holder(s) surface mounted at the rear of the apparatus, DS and PS rear bulkheads as high as possible.</p> <p>The light(s) will be controlled by a switch at the driver's side switch panel and by a stainless steel cup switch at the driver's side rear bulkhead.</p> <p>The light(s) may be load managed when the parking brake is applied.</p>
0892704	Lights, Walk Surf, 8-P25 LED, Hose Bed Cover, Overall Height Restrictions	<p>WALKING SURFACE LIGHT</p> <p>There will be eight (8) P25 12 volt DC LED lights with chrome housing provided on the hose bed cover to illuminate the walking surface. The lights will be located near the hose bed cover hinges evenly spaced four (4) on each side. The lights will be activated when the body step lights are on.</p>
0518282	Pumper, PUC, Aluminum	
0554271	Body Skirt Height, 20"	

0682617	Tank, Water, 750 Gallon, Poly, 67 LHB, PUC	<p>WATER TANK</p> <p>Booster tank will have a capacity of 750 gallons and be constructed of UV stabilized ultra high impact polypropylene plastic by a manufacturer with a minimum of 20 years experience building tanks, is ISO 9001:2000 certified in all its manufacturing facilities, and has over 50,000 tanks in service.</p> <p>Tank joints and seams will be nitrogen welded inside and out.</p> <p>Tank will be baffled in accordance with the current edition of applicable NFPA standards. Baffles will have vent openings at both the top and bottom to permit movement of air and water between compartments.</p> <p>Longitudinal partitions will be constructed of .38" polypropylene plastic and will extend from the bottom of the tank through the top cover to allow for positive welding.</p> <p>Transverse partitions will extend from 4.00" off the bottom of the tank to the underside of the top cover.</p> <p>All partitions will interlock and will be welded to the tank bottom and sides.</p> <p>Tank top will be constructed of .50" polypropylene. It will be recessed .38" and will be welded to the tank sides and the longitudinal partitions.</p> <p>Tank top will be sufficiently supported to keep it rigid during fast filling conditions.</p> <p>Construction will include 2.00" polypropylene dowels spaced no more than 30.00" apart and welded to the transverse partitions. Two (2) of the dowels will be drilled and tapped (.50" diameter, 13.00" deep) to accommodate lifting eyes.</p> <p>A sump that will be sized dependent on the tank to pump plumbing will be provided at the bottom of the water tank.</p> <p>Sump will include a drain plug and the tank outlet.</p> <p>Tank will be installed in a fabricated cradle assembly constructed of structural steel. Sufficient crossmembers will be provided to properly support bottom of tank. Crossmembers will be constructed of steel bar channel or rectangular tubing.</p> <p>Tank will "float" in cradle to avoid torsional stress caused by chassis frame flexing. Rubber cushions, .50" thick x 3.00" wide, will be placed on all horizontal surfaces that the tank rests on. Stops or other provision will be provided to prevent an empty tank from bouncing excessively while moving vehicle.</p> <p>Mounting system will be approved by the tank manufacturer.</p>
0003405	Overflow, 4.00" Water Tank, Poly	<p>Fill tower will be constructed of 0.50" polypropylene and will be a minimum of 8.00" wide x 14.00" long.</p> <p>Fill tower will be furnished with a 0.25" thick polypropylene screen and a hinged cover.</p> <p>An overflow pipe, constructed of 4.00" schedule 40 polypropylene, will be installed approximately halfway down the fill tower and extend through the water tank and exit to the rear of the rear axle.</p>
0028107	Not Required, Foam Cell Modification	
0633066	Sleeve, Through Tank	<p>SLEEVE PLUMBING THROUGH TANK</p> <p>Three (3) sleeves will be provided in the water tank for a 2.50" pipe to the rear.</p>
0553725	Restraint, Water Tank, Heavy Duty, Special Type Tank, 4x4, or Export	<p>WATER TANK RESTRAINT</p> <p>A heavy-duty water tank restraint will be provided.</p>
0003429	Not Required, Direct Tank Fill	
0003424	Not Required, Dump Valve	
0048710	Not Required, Jet Assist	
0030007	Not Required, Dump Valve Chute	
0514778	Not Required, Switch, Tank Dump Master	
0597043	Body Height, PUC/HDRP	<p>BODY HEIGHT</p> <p>The height of the body will be 92.00" from the bottom of the body to the top of the body.</p>

0683290	Hose Bed, Aluminum, Pumper, PUC, 67 LHB	<p>HOSE BED The hose bed will be fabricated of .125"-5052 aluminum with a nominal 38,000 psi tensile strength. Flooring of the hose bed will be removable aluminum grating with the top surface corrugated to aid in hose aeration. The grating slats will be a minimum of 0.50" x 4.50" with spacing between slats for hose ventilation. A cross divider will be provided at the point the tank transitions from the lower section to the upper section. The divider will run from the top of the side sheet down below the hose bed grating. The hose bed will be directly above the rear compartment door. The dimension from the ground will be approximately 67.00" depending on the suspension and equipment load. The hose bed will be at a minimum 85.00" long.</p>
0723340	Unpainted/Brush Finished, Hose Bed, 3G PUC/HDRP	The hose bed walls will be unpainted and with a brushed finish.
0003481	Hose Bed Capacity, Special	Hose bed will accommodate Bay 1: 400' of 3" Bay 2: 800' of 5" Bay 3: 300' of 1.75" Bay 4: 300' of 2" Bay 5: 400' of 2" .
0003488	Divider, Hose Bed, Unpainted	<p>HOSE BED DIVIDER Two (2) hosebed dividers will be furnished for separating hose. Each divider will be constructed of a .125" brushed aluminum sheet fitted and fastened into a slotted, 1.50" diameter radiused extrusion along the top, bottom, and rear edge. Divider will be fully adjustable by sliding in tracks, located at the front and rear of the hose bed. Divider will be held in place by tightening bolts, at each end. Acorn nuts will be installed on all bolts in the hose bed which have exposed threads.</p>
0805760	Cover, Hose Bed, Alum Treadplate	<p>HOSE BED COVER A two (2) section hose bed cover, constructed of .125" bright aluminum treadplate will be furnished. The cover will be hinged with full length stainless steel piano hinge. The sides will be slanted down. A stationary bridgework support assembly will be provided at the rear to support the cover. The cover will be reinforced so that it can support the weight of a man walking on the cover. The cover is designed with the left cover opening first. If access to the water tank fill tower is blocked by the hose bed cover, then a hinged door will be provided in it so that the tank may be filled without raising cover doors. Chrome grab handles and four (4) gas filled cylinders will be provided to assist in opening and closing the cover. A handrail is to be provided at the rear, in the center of the support, to assist in opening the cover. The hose bed cover will be connected to the Do Not Move Truck indicator. The light will be activated if the cover is not in the stowed position and the parking brake is released.</p>
0807414	Hose Restraint, Hose Bed, Vinyl, Rear, Separate From Top, Split 2-Sec, Seat Belt	<p>HOSE RESTRAINT REAR At the rear of the hose bed, a black vinyl flap will be provided. The vinyl flap will be split into two sections between bay 1 and bay 2. The vinyl flap will be provided with permanent strap footman loop at the bottom of the hose bed. The top of the vinyl flap will be attached to the top of the hosebed with seat belt buckles. The seat belt buckles will be provided with a metal bar, to connect each set of two buckles, and attached to a web strap, to allow a single pull release per set of two buckles. The vinyl flap will be provided with no fasteners between each section. The bottom of the flap will be not weighted. If a strap is provided, the color of the strap will be red.</p>
0518191	Hose Tray, Poly, Removable, Hose Bed, Basic	<p>REMOVABLE HOSE TRAY(S) IN HOSE BED There will be two (2) removable U-shaped poly hose tray(s) provided inside the hose bed. Tray will be sized Full length of hose bed and 7" wide inside tray. Bay 3 - Build for 350' of 1.75" hose double stacked Bay 4 - Build for 350' of 2.0" hose double stacked. Tray will be located far right side of hose bed, bay 3 and bay 4. See job #37591.</p>
0097958	Shelf, Permanent, Hose Bed	<p>SHELF, IN HOSE BED A permanent shelf will be provided for hose storage inside the hose bed 2" above poly trays at right side of hose bed.. The shelf will be constructed out of aluminum hose bed grating. The shelf will be mounted between two (2) hose bed dividers.</p>
0611509	Running Boards, Flip Out, PUC	<p>RUNNING BOARDS A running board will be provided on each side of the front body to allow access to the backboard/crosslay storage area. The running boards will be designed with a grip pattern punched into .125" bright aluminum treadplate material providing support, slip resistance, and drainage. The runningboard will have a flip out section design that allows easier access to the full width equipment area above. The flip out section will be tied to the "do not move truck indicator" with a sensor when it is flipped out. There will be a latch provided that secures the flip out section when not in use.</p>

0683043	Tailboard, 12" Deep, Full Width, Angled Corners, PUC/HDRP	<p>TAILBOARD</p> <p>The tailboard will be constructed of .125" bright aluminum treadplate and spaced .50" from the body, as well as supported by a structural steel assembly.</p> <p>The tailboard area will be 12.00" deep and full width of the body. The outboard sides of the tailboard will be angled at 45 degrees beginning at the point where the body meets the tailboard at the outboard edge angling rearward to the rear edge of the tailboard.</p> <p>The exterior side will be flanged down and in for increased rigidity of tailboard structure.</p>
0690029	Wall, Rear, Body Material, PUC/HDRP	<p>REAR WALL, BODY MATERIAL, PUC</p> <p>The rear wall will be smooth and the same material as the body.</p> <p>The rear wall body material will be painted. Unpainted aluminum overlays will be provided to allow for chevron application and to provide continuously smooth rear wall panels.</p> <p>The outboard edges of the rear wall will be trimmed in polished stainless steel.</p>
0003531	Tow Bar, Under Tailboard	<p>TOW BAR</p> <p>A tow bar will be installed under the tailboard at center of truck.</p> <p>Tow bar will be fabricated of 1.00" CRS bar rolled into a 3.00" radius.</p> <p>Tow bar assembly will be constructed of .38" structural angle. When force is applied to the bar, it will be transmitted to the frame rail.</p> <p>Tow bar assembly will be designed and positioned to allow up to a 30-degree upward angled pull of 17,000 lb, or a 20,000 lb straight horizontal pull in line with the centerline of the vehicle.</p> <p>Tow bar design will have been fully tested and evaluated using strain gauge testing and finite element analysis techniques.</p>

COMPARTMENTATION

The apparatus body will be built of aluminum construction using a minimum of 0.125" thick, 5052-H32 aluminum.

The body panel assembly will be constructed in a fixture and consist of formed sheet metal for the front and rear bulkheads, door frames, floors, ceilings, and back walls. These parts will be welded together to ensure greatest longevity with no visible welds in compartment interior. Welded construction will consist of 1.00" x 0.38" engineered plug weld holes that control the size, location, and the amount of weld required. The bodies will be assembled and welded from engineered prints that call out the size, location, and type of weld required.

In structural areas the sheet metal components will have flanges for welding. No butt joints will be allowed. Gussets and support posts will be provided for additional strength where needed.

The fender panel will be an integral part of the complete welded body assembly. All light and compartment holes are pre punched prior to construction to provide accuracy and rounded corners to prevent stress risers in the material.

Circular fender liners will be provided. For prevention of paint chips and ease of suspension maintenance the fender liners will be formed from brush finished 304L stainless steel, be unpainted, and removable for suspension maintenance.

Side compartment flooring will be of the sweep out design with the floor minimum of 1.00" higher than the compartment door lip.

Drip protection will be provided above the doors by means of aluminum extrusion, or formed bright aluminum treadplate.

The top of the compartment will be sheet metal and covered with bright aluminum treadplate rolled over the edges on the front, and rear. These covers will have the corners welded.

The aluminum treadplate covers will not make up the ceiling of the compartment.

All screws and bolts, which are not Grade 8, will be stainless steel and where they protrude into a compartment will have acorn nuts on the ends to prevent injury.

UNDERBODY SUPPORT SYSTEM

Due to the severe loading requirements of this pumper a method of body and compartment support suitable for the intended load will be provided.

The backbone of the body support system will begin with the chassis frame rails which is the strongest component of the chassis and is designed for sustaining maximum loads. The support system will include lateral frame rail extensions that are formed from 0.375" 80k high strength steel and bolted to the chassis frame rails with 0.625" diameter Grade 8 bolts.

The vertical and horizontal members of the frame rail extensions are to be reinforced with welded gussets and extend to the outside edge of the body. The lateral frame extensions will be electro-coated for superior corrosion resistance.

The floating substructure will be separated from the lateral frame extensions with neoprene elastomer isolators. These isolators will reduce the natural flex stress of the chassis from being transmitted to the body, and absorb road shock and vibration.

The isolators will have a broad load range, proven viability in vehicular applications, be of a fail safe design and allow for all necessary movement in three (3) transitional and rotational modes.

The neoprene isolators will be installed in a modified V three (3)-point mounting pattern to reduce the natural flex of the chassis being transmitted to the body. Two (2) 3.50" diameter isolators are provided at the front of the body near the centerline of the vehicle above the chassis frame. A minimum of eight (8) - 2.55" diameter isolators will be provided, two (2) under each front compartment and two (2) under each rear side compartment. A minimum of four (4) 3.50" diameter isolators will be provided under the rear compartment.

AGGRESSIVE WALKING SURFACE

All exterior surfaces designated as stepping, standing, and walking areas will comply with the required average slip resistance of the current NFPA standards. Documentation of the material meeting the standard will be provided at time of delivery.

LOUVERS

All body compartments will have a minimum of one (1) set of automotive style, dust resistant louvers pressed into a wall. The louvers will incorporate a one (1)-way rubber valve that provides airflow out of the compartment and prevents water and dirt from gaining access to the compartment. Compartments over the wheel will not have louvers.

TESTING OF BODY DESIGN

Body structural analysis will be fully tested. Proven engineering and test techniques such as finite element analysis and strain gauging have been performed with special attention given to fatigue life and structural integrity of the body and substructure.

The body will be tested while loaded to its greatest in-service weight.

The criteria used during the testing procedure will include:

Raising opposite corners of the vehicle tires 9.00" to simulate the twisting a truck may experience when driving over a curb.

Making a 90 degree turn, while driving at 20 mph to simulate aggressive driving conditions.

Driving the vehicle on at 35 mph on a washboard road.

Driving the vehicle at 55 mph on a smooth road.

Accelerating the vehicle fully, until reaching the approximate speed of 45 mph on rough pavement.

Evidence of the actual testing techniques will be made available upon request.

FEA will have been performed on all substructure components.

0503804

LS 189" Rollup, (1) 62" Fwd, (1) 52" Rr, Full Height & Depth Front & Rear, PUC

LEFT SIDE COMPARTMENTATION

The left side compartmentation will consist of three rollup door compartments. A full height, rollup door compartment ahead of the rear wheels will be provided. The pump operator's panel will be located in this compartment. The partition to the right of the pump operator's panel will be 2.50" in width. The interior dimensions of the remaining space in this compartment will be 25.25" wide x 53.63" high x 26.00" deep. The clear door opening will be a minimum of 59.25" wide x 53.63" high. A rollup door compartment over the rear wheels will be provided. The interior dimensions of this compartment will be 60.00" wide x 22.88" high x 26.00" deep. The clear door opening will be a minimum of 57.25" wide x 22.88" high. A full height, rollup door compartment behind the rear wheels will be provided. **The interior dimensions of this compartment will be 51.75" wide x 54.63" high x 26.00" deep. The clear door opening will be a minimum of 49.25" wide x 54.63" high. The roll up door spool will be installed in a recess above the compartment ceiling. All compartments will include a drip pan below the roll of the door. The drip pan will be installed level with the compartment ceiling. The interior height of the compartments will be measured from the compartment floor to the ceiling. The depth of the compartments will be measured from the back wall to the inside of the door frame. Closing of the doors will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.**

0503803

RS 189" Rollup, (1) 62" Fwd, (1) 52" Rr, Full Height & Depth Front & Rear, PUC

RIGHT SIDE COMPARTMENTATION

A full height, jump off compartment with a roll-up door ahead of the rear wheels will be provided, as convenient large storage compartment for often used items for the crew. The interior dimensions of this compartment will be 62.00" wide x 54.50" high x 25.88" deep. The area behind the roll up door spool will be notched for exterior storage or larger capacity water tank tee. The depth of the compartment will be calculated with the compartment door closed. The compartment interior will be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment will be 59.00" wide x 54.50" high. Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand. A roll-up door compartment over the rear wheels will be provided. The interior dimensions of this compartment will be 60.00" wide x 23.00" high x 25.88" deep. The area behind the roll up door spool will be notched for exterior storage or larger capacity water tank tee. The depth of the compartment will be calculated with the compartment door closed. The clear door opening of this compartment will be 57.00" wide x 23.00" high. Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand. A full height, roll-up door compartment behind the rear wheels will be provided. **The interior dimensions of this compartment will be 52.00" wide x 54.50" high x 25.88" deep. The area behind the roll up door spool will be notched for exterior storage or larger capacity water tank tee. The depth of the compartment will be calculated with the compartment door closed. The compartment interior will be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment will be 49.00" wide x 54.50" high. Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand. All compartments will include a drip pan below the roll of the door.**

0594005

Doors, Rollup, Amdor, Side Compartments

SIDE COMPARTMENT ROLLUP DOOR(S)

There will be six (6) compartment doors installed on the side compartments, double faced, aluminum construction, painted one (1) color to match the lower portion of the body and manufactured by AMDOR™ brand rollup doors. Door(s) will be constructed using 1.00" extruded double wall aluminum slats which will feature a flat smooth interior surface to provide maximum protection against equipment hang-up. The slats will be connected with a structural driven ball and socket hinge designed to provide maximum curtain diaphragm strength. Mounting and adjusting the curtain will be done with a clip system that connects the curtain to the balancer drum allowing for easy tension adjustment without tools. The slats will be mounted in reusable slat shoes with positive snap-lock securement. Each slat will incorporate weather tight recessed dual durometer seals. One (1) fin will be designed to locate the seal within the extrusion. The second will serve as a wiping seal which will also allow for compression to prevent water ingress. The doors will be mounted in a one (1)-piece aluminum side frame with recessed side seals to minimize seal damage during equipment deployment. All seals including side frames, top gutters and bottom panel are to be manufactured utilizing non-marring materials. Bottom panel flange of rollup door will be equipped with two (2) cut-outs to allow for easier access with gloved hands. A polished stainless steel lift bar to be provided for each roll-up door. The lift bar will be located at the bottom of door with striker latches installed at the base of the side frames. Side frame mounted door strikers will include support beneath the stainless steel lift bar to prevent door curtain bounce, improve bottom seal life expectancy and to avoid false door ajar signals. All injection molded rollup door wear components will be constructed of Type 6 nylon. Each rollup door will have a 3.00 inch diameter balancer/tensioner drum to assist in lifting the door. The header for the rollup door assembly will not exceed 4.00". A heavy-duty magnetic switch will be used for control of open compartment door warning lights.

0599445	Compt, Rear, Rollup, 33.50" FF, w/Tailboard, PUC/HDRP	<p>REAR COMPARTMENTATION</p> <p>A roll-up door compartment above the rear tailboard will be provided. the interior dimensions of this compartment will be 37.00" wide x 36.50" high x 25.88" deep in the lower 27.00" of the compartment and 15.00" deep in the remaining upper portion. The clear door opening will be a minimum of 33.88" wide x 26.63" high.</p> <p>A removable access panel will be furnished on the back wall of the compartment.</p> <p>The rear compartment will be open into the rear side compartments. The transverse opening will be a minimum of 22.00" wide x 27.50" high.</p> <p>A drip pan will be installed below the roll of the door. A guard will be installed behind the roll of the door. The interior height of the compartment will be measured from the floor to the ceiling. The depth of the compartment will be measured from the back wall to the inside of the door frame. Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.</p>
0593958	Door, Amdor, Rollup, Rear Compartment, PUC	<p>ROLL-UP REAR COMPARTMENT DOOR</p> <p>The rear compartment will have a roll-up door.</p> <p>The door will be double faced, aluminum construction, painted one (1) color to match the lower portion of the body and manufactured by AMDOR™ brand roll-up doors.</p> <p>The door will be constructed using 1.00" extruded double wall aluminum slats which will feature a flat smooth interior surface to provide maximum protection against equipment hang-up. The slats will be connected with a structural driven ball and socket hinge designed to provide maximum curtain diaphragm strength. Mounting and adjusting the curtain will be done with a clip system that connects the curtain to the balancer drum allowing for easy tension adjustment without tools.</p> <p>The slats will be mounted in reusable slat shoes with positive snap-lock securement.</p> <p>Each slat will incorporate weather tight recessed dual durometer seals. One (1) fin will be designed to locate the seal within the extrusion. The second will serve as a wiping seal which will also allow for compression to prevent water ingress.</p> <p>The door will be mounted in a one (1)-piece aluminum side frame with recessed side seals to minimize seal damage during equipment deployment. All seals including side frames, top gutters and bottom panel are to be manufactured utilizing non-marring materials.</p> <p>Bottom panel flange of roll-up door will be equipped with two (2) cut-outs to allow for easier access with gloved hands.</p> <p>A stainless steel lift bar to be provided for opening the door and located at the bottom of each door with latches on the outer extrusion of the door frame. A ledge to be supplied over lift bar for additional area to aid in closing the door. The lift bar will be located at the bottom of door with striker latches installed at the base of the side frames. Side frame mounted door strikers will include support beneath the stainless steel lift bar to prevent door curtain bounce, improve bottom seal life expectancy and to avoid false door ajar signals.</p> <p>All injection molded roll-up door wear components will be constructed of Type 6 nylon.</p> <p>The door will have a 3.00 inch diameter balancer/tensioner drum to assist in lifting the door.</p> <p>The header for the roll-up door assembly will not exceed 4.00".</p> <p>A heavy-duty magnetic switch will be used for control of open compartment door warning lights.</p>
0611794	Trim, Rollup Door, Painted Door Color, Amdor	<p>ROLL-UP DOOR TRIM</p> <p>The exterior of the aluminum trim around the door opening will be painted to match the color of the applicable door.</p> <p>There will be eight (8) compartments located All body compartments and crosslay doors with the trim painted.</p>
0768509	Lights, Compt, Amdor AY-LB-12HW0** LED, Dual Lt Strip	<p>COMPARTMENT LIGHTING</p> <p>There will be seven (7) compartments that include Amdor, Model AY-LB42HW0**, white 12 volt DC LED compartment light strips with 45 degree brackets. The light manufacturers electrical connectors will be included in the circuit. The lights will be mounted with mechanical fasteners.</p> <p>There will be two (2) strip lights installed vertically in each compartment opening per the latest NFPA requirements.</p> <p>The lights will be activated when the battery switch is on and the respective compartment door is opened.</p>
0594766	189" Hatch, (2) Lift-up, 21" Wide, RS Only, PUC/HDRP	<p>HATCH COMPARTMENTS</p> <p>A hatch compartment 189.00" long x 21.00" wide x 22.00" maximum depth will be provided above the right side body compartments, with two (2) lift-up top opening hatch doors.</p> <p>The compartment will extend the full length of the side body compartmentation except for a 20.00" recessed step area at the rear of the compartment on the access side.</p> <p>Sides of the compartment will be constructed of the same material as the body and painted job color on the outside panels. A 2.00" tall formed painted aluminum trim will be provided to cover the seam between the top of the body panel and the bottom of the hatch compartment. The vertical outboard seam at the center of the compartment will have a 1.00" wide painted aluminum extrusion.</p> <p>Top of the compartment will be constructed of bright aluminum treadplate.</p> <p>Two (2) lift-up, bright aluminum treadplate doors will be provided on the top of the compartment, each door with a slam style latch with lever handle to hold the doors in the closed position.</p> <p>Double pan doors will have lipped edges with a rubber seal for weather resistance.</p> <p>Doors will be hinged on the outboard side and will be held open with pneumatic stay arms.</p> <p>Compartment will have a 3/4" drain that extends to below the body.</p> <p>Black rubber matting shall be provided to help prevent stored equipment in pooled water.</p>

0732644	Handrails, (3), Hatch Step Area, Straight, Hansen Knurled Alum LED Backlit, Black	There will be three (3) separate straight handrails provided for the step landing at the rear of the hatch compartment. The handrails will be 1.25" diameter black anodized aluminum extrusion. The handrails will be Hansen LED backlit. The handrails will be lit with a red LED light. The handrails will be activated by the same means as the cab handrail light controls. E-coated and black powder coated stanchions will support the handrail. Plastic gaskets will be used between end stanchions and any painted surfaces. Drain holes will be provided in the bottom of all vertically mounted handrails.
0893291	Lights, Pump Cargo/Dunnage Forward Over Tank, Dual LED Light Strips, Each Side	PUMP CARGO/DUNNAGE AREA FORWARD OVER TANK LIGHTING There will be four (4), 12 volt DC strips lights, with white LEDs and stainless steel protective covers, provided to illuminate both the cargo area over the pump and forward over the water tank. One (1) light strip will be installed the entire length of the left side of the pump cargo area. One (1) light strip will be installed the entire length of the right side of the pump cargo area. One (1) light strip will be installed the entire length of the left side of the cargo area forward over the water tank. One (1) light strip will be installed the entire length of the right side of the cargo area forward over the water tank. The light(s) will be activated by the same switch control that has been selected for the hose bed light(s).
0687145	Shelf Tracks, Recessed, PUC/3rd Generation	MOUNTING TRACKS There will be recessed tracks installed vertically to support the adjustable shelf(s). Tracks will not protrude into any compartment in order to provide the greatest compartment space and widest shelves possible. The tracks will be provided in each compartment except for the one that contains the pump operator's panel.
0600350	Shelves, Adj, 500 lb Capacity, Full Width/Depth, Predefined Locations	ADJUSTABLE SHELVES There will be four (4) shelves with a capacity of 500 lb provided. The shelf construction will consist of .188" aluminum painted spatter gray with 2.00" sides. Each shelf will be infinitely adjustable by means of a threaded fastener, which slides in a track. The shelves will be held in place by .12" thick stamped plated brackets and bolts. The location(s) will be in RS1 centered between the floor and the ceiling to the right of the partition, in RS1 in the upper third to the right of the partition, in LS1 centered between the floor and ceiling and in LS3 in the upper third.
0601834	Tray, 215 lb, Tilt/Slide-Out, 30 Deg, Adj, Max Width/Depth, 3G	SLIDE-OUT/TILT-DOWN TRAY There will be three (3) slide-out trays provided. The bottom of each tray will be constructed of 0.188" thick aluminum while special aluminum extrusions will be utilized for the tray sides, ends, and tracks. The corners will be welded to form a rigid unit. Each tray will be as wide and as deep as the compartment space will allow. The shelf will be aluminum painted spatter gray to match compartment interior. A spring loaded lock will be provided on each side at the front of the tray. Releasing the locks will allow the tray to slide out approximately two-thirds (2/3) of its length from the stowed position and tip 30 degrees down from horizontal. The tray will be equipped with ball bearing rollers for smooth operation. Rubber padded stops will be provided for the tray in the extended positions. The capacity rating of the tray will be a minimum of 215 lb in the extended position. The vertical position of the tray within the compartment will be adjustable. The tray(s) will be located RS2 - Centered LS2 - Upper Third LS2 - as close to the floor as possible.
0667235	Cable, Single Hand Operation, Tilt/Slide Out, Utility Trays	SINGLE HANDED CABLE LATCH A cable will be provided to tie together the two (2) spring loaded locks that are provided as standard at the front of a slide-out/tilt tray in order to provide single hand operation of the tray. The single hand operation cable will be provided on a total of three (3) slide-out trays located Tilt-out trays in LS2 and RS2.
0647091	Tray, Floor Mounted, Slide-Out, 500lb, 2.00" Sides	SLIDE-OUT FLOOR MOUNTED TRAY There will be two (2) floor mounted slide-out tray(s) provided. Each tray will have 2.00" high sides and a minimum capacity rating of 500 lb in the extended position. Each tray will be constructed of aluminum painted spatter gray. There will be two undermount-roller bearing type slides rated at 250 lb each provided. The pair of slides will have a safety factor rating of 2. To ensure years of dependable service, the slides will be coated with a finish that is tested to withstand a minimum of 1,000 hours of salt spray per ASTM B117. To ensure years of easy operation, the slides will require no more than a 50lb force for push-in or pull-out movement when fully loaded after having been subjected to a 40 hour vibration (shaker) test under full load. The vibration drive file will have been generated from accelerometer data collected from a heavy truck chassis driven over rough gravel roads in an unloaded condition. Proof of compliance will be provided upon request. Automatic locks will be provided for both the "in" and "out" positions. The trip mechanism for the locks will be located at the front of the tray for ease of use with a gloved hand. The location(s) will be RS1 and LS1.

0725644	Cabinet, Drawer Assembly, CTECH, Three Drawers, Up To 24" Wide, 24" Deep	<p>DRAWER ASSEMBLY</p> <p>A slide-out drawer assembly will be installed Floor of LS3.</p> <p>The clear dimensions of the first drawer starting at the top will be 3.00" with a face plate that is 4.00" high x 21.00" deep. The clear dimensions of the second drawer will be 6.75" with a face plate that is 7.00" high x 21.00" deep. The clear dimensions of the third drawer will be 8.75" with a face plate that is 9.00" high x 21.00" deep. Each drawer will be the same width and not exceed 24.00".</p> <p>The drawers will have a capacity of 250 pounds.</p> <p>The drawers will be mounted in a cabinet housing constructed of light gray powder coated aluminum with anodized aluminum frames. The housing will be 24.00" deep, and completely enclose the drawer.</p> <p>A full-length aluminum extruded rail will be provided at the top edge of each drawer. This rail will act as the latching mechanism as well as the handle for each drawer.</p> <p>There will be a total of one (1) provided.</p>
0617454	Toolboard, Slide-out, Alum, .188", Peg Board, Painted, 3G, Slides Top and Bottom	<p>SLIDE-OUT TOOLBOARD</p> <p>A slide-out aluminum toolboard will be provided. It will have a painted finish to match the compartment interior.</p> <p>It will be a minimum of 0.188" thick with 0.203" diameter holes in a pegboard pattern with 1.00" centers between holes.</p> <p>A 1.00" x 1.00" aluminum tube frame will be welded to the edge of the pegboard. A handhold cutout will be provided on the outboard edge of the toolboard.</p> <p>The board will be mounted on an undermount-roller bearing type slide rated at 250 lb with a factor of safety of 2 at the bottom.</p> <p>To ensure years of dependable service the slides will be coated with a finish that is tested to withstand a minimum of 1,000 hours of salt spray per ASTM B117.</p> <p>To ensure years of easy operation, the slides will require no more than a 50 pound force for push-in or pull-out movement when fully loaded after having been subjected to a 40 hour vibration (shaker) test under full load. The vibration drive file will have been generated from accelerometer data collected from a heavy truck chassis driven over rough gravel roads in an unloaded condition. Proof of compliance will be provided upon request.</p> <p>The toolboard will have positive lock in the stowed and extended position.</p> <p>The board will also have a non locking roller bearing slide at the top.</p> <p>The toolboard will be mounted on adjustable tracks side to side within the compartment.</p> <p>There will be Two (2) provided.</p> <p>The toolboard(s) will be located RS3.</p>
0654369	Recess, Partition, Right of Pump Operator's Panel, PUC	<p>RECESS FOR MOUNTING</p> <p>There will be a recess in the partition of the pump operator's panel compartment just rearward of the pump panel. The recess will be full height starting 3.00" off the floor of the compartment and ending where the pump panel angles toward the outside of the body.</p>
0797957	Pac Trac, Installed on Compartment Wall, Back Wall Only	<p>EQUIPMENT MOUNTING SYSTEM</p> <p>Pac Trac equipment mounting system will be installed on the back wall of one (1) compartment (s), Upper wall of LS3.</p>
0695412	Rack, Air Bags Inside Compartment, 2-Slot	<p>AIR BAG STORAGE</p> <p>There will be a rack installed for storing two (2) air bags in the RS1 Compartment to serve as a divider between Little Giant and remaining compartment. compartment.</p> <p>The rack will be fabricated from painted spatter gray .125" aluminum. The fire department will provide exact sizes of air bags prior to construction. The size of the air bags will be Full height of compartment from floor to ceiling and 12" from left wall. Rack will be 3" wide (outside width). Each slot will be evenly in size vertically (27.25" tall)..</p>
0775959	Strap, Nylon w/Velcro Hook & Loop, 2" wide	<p>STRAP</p> <p>There will be two (2) black 2.00" wide nylon strap(s) that will provide positive restraint by hooking through a footman loop, similar to what is used with a hose bed flap. The strap(s) will be located (1) for each air bag slot . The strap(s) will have a Velcro® fastener.</p>
0899067	Rub Rail, Black Plastic w/.50" Spacer, Body Sides, Light Cut Outs	<p>RUB RAILS</p> <p>The bottom edge of the side body compartments will be trimmed with a black 1.00" thick x 2.63" high UHMW plastic rub rail. There will be 0.50" rubber spacers included between the rub rail and the body.</p> <p>The rub rails will not be an integral part of the body construction, which allows replacement in the event of damage.</p> <p>Cut outs will be provided in the rub rail for lighting.</p>
0653982	Fender Crowns, Rear, Rubber, w/Removable Fender Liner, Pumper, 3G	<p>BODY FENDER CROWNS</p> <p>Rubber fender crowns will be provided around the rear wheel openings.</p> <p>A fender liner constructed of aluminum painted to match the lower body color will be provided to avoid paint chipping. The liners will be removable to aid in the maintenance of rear suspension components.</p>

0519849	Not Required, Hose, Hard Suction	HARD SUCTION HOSE Hard suction hose will not be required.
0759459	Handrails Located @ Front Body, Hansen Knurled Alum LED Backlit, Black	HANDRAILS Hansen handrails will be located on the front of the body in positions needed to meet NFPA requirements. The handrails will be Hansen LED black anodized backlit knurled aluminum. The handrails will be lit with a red LED light. The handrail lighting will be activated by the same means as the cab handrail light controls. E-coated and black powder coated end stanchions will support the handrail. Plastic gaskets will be used between end stanchions and any painted surfaces. Drain holes will be provided in the bottom of all vertically mounted handrails.
0759458	Handrails, Rear, Hansen Tubing, Knurled Aluminum, LED Backlit, Black, PUC	Two (2) vertical Hansen handrails will be located at the rear, one on each side of the rear compartment. The handrail will be black anodized knurled aluminum and backlit with a red LED light. E-coated and black powder coated end stanchions will support the handrail. Plastic gaskets will be used between end stanchions and any painted surfaces. The hand rail will be activated by the same means as the cab handrail light controls.
0764331	Handrail, Rear, Below Hose Bed, Full Width, Hansen, Knurled Alum LED Backlit, Black	One (1) full width horizontal handrail will be provided below the hose bed at the rear of the apparatus. The handrail will be Hansen LED backlit black anodized knurled aluminum. E-coated and black powder coated end stanchions will support the handrail. The handrail will be lit with a red LED light. The handrail will be activated with the application of the parking brake.
0753717	Handrail, Extra - 15-20" Long, Hansen Tubing, Knurled Alum LED Backlit, Black	- One (1) handrail, will be provided mounted DS upper rear bulkhead, left of the hose bed. The handrail will be 1.25" diameter black anodized aluminum extrusion, with a ribbed design, to provide a positive gripping surface. E-coated and black powder coated stanchions will support the handrail. Plastic gaskets will be used between end stanchions and any painted surfaces. The handrails will be Hansen LED backlit. The handrails will be lit with a red LED light. The handrails will be activated by the same means as the cab handrail light controls. Drain holes will be provided in the bottom of all vertically mounted handrails.
0816729	Compt, Extinguisher (2) Fender Panel, Triangular Door, 8"/8.5"Dia	EXTINGUISHER/AIR BOTTLE/ STORAGE (Triangular) A total of one (1) extinguisher/air bottle/storage compartments will be provided RS rear of wheels. The triangular shaped compartment will be sized to fit a 8.00" diameter extinguisher in the lower area and a 8.50" diameter extinguisher in the upper area. The compartment will be approximately 25.50" deep. A partition will be provided to separate the compartment. Also inside the compartment, black Dura-Surf friction reducing material will be provided. The compartment will be furnished with a drain hole. A painted stainless steel, triangular shaped door with a Southco raised trigger C2 black lever latch will be provided to contain the air bottles. A dielectric barrier will be provided between the door hinge, hinge fasteners and the body sheet metal. AIR BOTTLE COMPARTMENT STRAP A strap will be provided in the air bottle compartment(s) to help contain the bottles when the vehicle is parked on an incline. The strap will wrap around the neck and attach to the wall of the compartment.
0657522	Compt, Air Bottle, Triple, Fender Panel	AIR BOTTLE STORAGE (Triple) A quantity of two (2) air bottle compartments designed to hold (3) air bottles up to 7.25" in diameter x 26.00" deep will be provided on the left side forward of the rear wheels and on the right side forward of the rear wheels. A painted stainless steel door with a Southco raised trigger C2 black lever latch will be provided to contain the air bottle. A dielectric barrier will be provided between the door hinge, hinge fasteners and the body sheet metal. Inside the compartment, black Dura-Surf friction reducing material will be provided. AIR BOTTLE COMPARTMENT STRAP A strap will be provided in the air bottle compartment(s) to help contain the air bottles when the vehicle is parked on an incline. The strap will wrap around the neck and attach to the wall of the compartment.
0004225	Ladder, 24' Duo-Safety 900A 2-Section	EXTENSION LADDER There will be a 24' two-section aluminum Duo-Safety Series 900-A extension ladder provided.
0004230	Ladder, 14' Duo-Safety 775A Roof	ROOF LADDER There will be a 14' aluminum Duo-Safety Series 775-A roof ladder provided.

0638382	Rack, Ladders, LS Full Depth Body, PUC/HDRP	<p>LADDER STORAGE The ladders will be stored inside the upper section of the left side compartments. This ladder rack will reduce the depth of the upper section in the side compartments. A partition will be installed inside the compartment on the side of the rack to allow for equipment storage and to conceal the ladders. The ladders will be banked in separate storage troughs. The ladder storage assembly will be fabricated of stainless steel track channels to aid in loading and removal of ladders. Rear of the ladder storage area will have a vertically hinged smooth aluminum door with a D-handle latch to contain the ladders. The door will be vertically hinged.</p>
0733387	Ladder, 10' Duo-Safety Folding 585A	<p>FOLDING LADDER One (1) 10.00' aluminum, Series 585-A, Duo-Safety folding ladder will be installed.</p>
0733005	Compt w/Trough, Folding Ladder, In Upper Body, LS	<p>FOLDING LADDER/LONG TOOL COMPARTMENT A compartment will be provided, recessed in the upper, inside part of body compartment on the left side. The compartment will be equipped with a stainless steel trough for the folding ladder and storage for long handle tools. A door constructed of smooth aluminum and hinged along the outboard edge will be provided at the rear with a Southco C2 black powder coated raised trigger latch.</p>
0802284	Little Giant/Werner Ladder Storage, Vertical In Compartment	<p>LITTLE GIANT LADDER STORAGE Storage will be provided in RS1 compartment for a Little Giant ladder. The ladder will be stored vertically in the compartment left of the air bag rack partition. A Velcro® strap will be provided to aid in restraint and removal of the Little Giant ladder. The ladder will be a Little Giant Revolution 2.0 Model 17 - 13117.</p>
0816920	Pike Pole, Provided by Fire Department, NFPA/ULC 2024	<p>PIKE POLE PROVIDED BY FIRE DEPARTMENT The pike poles are not on the apparatus as manufactured. The fire department will provide and mount the pike poles. There will be two (2) pike pole(s) provided. The pike pole(s) will be a Fire Hooks Unlimited 8' roof hook RH-8.</p>
0816918	Pike Pole, 6', Provided by Fire Department, NFPA/ULC 2024	<p>6' PIKE POLE PROVIDED BY FIRE DEPARTMENT The pike pole is not on the apparatus as manufactured. The fire department will provide and mount the pike poles. There will be two (2) 6' pike pole(s) provided. The pike pole(s) will be a Fire Hooks Unlimited 6 foot roof hook.</p>
0732992	Tube, Pike Pole 6', In Upper Body Long Tool Storage Compt	<p>PIKE POLE STORAGE A aluminum tube for a 6' pike pole with 1.38" notch, to accommodate a New York style pike pole will be provided in the upper body compartment on the left side. Two (2) pike poles will require a tube provided in this location.</p>
0768409	Compt, Long Tools, Thru Body Compts, Right Side	<p>LONG TOOL STORAGE One (1) compartment will be provided recessed in the upper section of the right side compartments. The compartment will be roughly 14" wide in size. A door will be provided at the rear of the compartment for access. The door will be made of smooth aluminum with a Southco C2 black powder coated raised trigger latch. The door will be hinged along the outboard edge.</p>
0521734	No Steps Required, Front Of Body, PUC	
0724124	Steps, Folding, Rear of Body, w/LED, Trident, Black Powder Coat, PUC/HDRP	<p>REAR FOLDING STEPS Black powder coat finished, non-skid folding steps with a black tread coating on the stepping surface will be provided at the rear. Each step will incorporate an LED light to illuminate the stepping surface. The steps can be used as a hand hold with two openings wide enough for a gloved hand.</p>
0724149	Step, Folding - Extra, Body Only, w/LED, Trident, Black Powder Coat	<p>Two (2) additional folding steps will be located DS rear bulkhead to access upper long tool storage . The step(s) will be black powder coat finished, non-skid with a black tread coating on the stepping surface. Each step will incorporate an LED light to illuminate the stepping surface. The step(s) can be used as a hand hold with two openings wide enough for a gloved hand.</p>

PUMP CONTROL PANELS (Left Side Control)

Pump controls and gauges will be located midship at the left side of the apparatus and properly identified.

The main pump operator's control panel will be completely enclosed and located in the forward section of the body compartment, to protect against road debris and weather elements. The pump operator's panels will be no more than 31.00" wide, and made in four (4) sections with the center section easily removable with simple hand tools. For the safety of the pump operator, there will be no discharge outlets or pump inlets located on the main pump operators panel.

Layout of the pump control panel will be ergonomically efficient and systematically organized. The upper section will contain the master gauges. This section will be angled down for easy visibility. The center section will contain the pump controls aligned in two horizontal rows. The pressure control device, engine monitoring gauges, electrical switches, and foam controls (if applicable) will be located on or adjacent to the center panel, on the side walls for easy operation and visibility. The lower section will contain the outlet drains.

Manual controls will be easy moving 8" long lever style controls that operate in a vertical, up and down swing motion. These handles will have a 2.25" diameter knob and be able to lock in place to prevent valve creep under any pressure. Bright finish bezels will encompass the opening, be securely mounted to the pump operator's panel, and will incorporate the discharge gauge bezel. Bezel will be bolted to the panel for easy removal and gauge service. The left side discharges will be controlled directly at the valve. There will be no push-pull style control handles.

Identification tags for the discharge controls will be recessed within the same bezel. The discharge identification tags will be color coded, with each discharge having its own unique color. All remaining identification tags will be mounted on the pump panel in chrome-plated bezels. All discharge outlets will be color coded and labeled to correspond with the discharge identification tag.

The pump panels for the midship discharge and intake ports will be located ahead of the body compartments with no side discharge or intake higher than the frame rail. The pump panels will be easily removable with simple hand tools.

A recessed cargo area will be provided at the front of the body, ahead of the water tank above the plumbing.

0520016

Not Required, Pumphouse Structure, PUC

0889383

Pump, Pierce, 2000 GPM, Single Stage, PUC-NG

PUMP

Pump will be a Pierce, low profile, 2000 gpm single stage midship mounted centrifugal type, mounted below the cab. The pump will have a 15 percent reserve capacity to allow for extended time between pump rebuild. To ensure efficient pump/vehicle design the capacity to weight ratio will not be less than 1.5:1.

The pump casing will consist of three (3) discharge outlets, one (1) to each side in line with the impeller and one (1) to the rear. The pump casing will incorporate two (2) water strippers to maintain radial balance.

Pump will be the Class A type.

Pump will be certified to deliver the percentage of rated discharge from draft at pressure indicated below:

100 percent of rated capacity at 150 psi net pump pressure

70 percent of rated capacity at 200 psi net pump pressure

50 percent of rated capacity at 250 psi net pump pressure

The pump will have the capacity to deliver the percentage of rated discharge from a pressurized source as indicated below:

135 percent of rated capacity at 100 psi net pump pressure from a 5 psi source

Pump body will be fine-grained gray iron. Pump will incorporate a heater/cooling jacket integral to the pump housing.

The impeller will be high strength vacuum cast bronze alloy accurately machine balanced and splined to a ten (10) spline stainless steel pump shaft for precision fit, exceptional durability, and efficiency. Double replaceable reverse flow labyrinth type bronze wear ring design will help to minimize end thrust. The impeller will be a twisted vane design to create higher lift. No keyed shafts will be acceptable.

The pump will include o-ring gaskets throughout the pump.

Deep groove radial type oversize ball bearings will be provided. The bearings will be protected at the openings from road dirt and water with an oil seal and water slinger.

The pump will have a flat, patterned area on the top of the pump intake wye to allow standing for plumbing maintenance. The main inlet manifold will be 6.00" in diameter and will have a low profile design to facilitate low crosslays and high flows.

For ease of service, the pump housing, intake wye, impeller, mechanical seal, and gear case will be accessible from above the chassis frame by tilting the cab. Removal of the main inlet wyes will provide access to the impeller, mechanical seal, and wear ring.

The tank to pump line and the primary discharge line will be the only piping required to be removed for overhaul.

For ease of service and overhaul there will be no piping or manifolding located directly over the pump.

PUMP MOUNTING

Pump will be mounted to the chassis frame rails directly below the crew cab, to minimize wheelbase and facilitate service, using rubber isolators in a modified V pattern that include one (1) central mounted isolator located between the frame rails and one (1) on each side outside the frame rails. The mounting will allow chassis frame rails to flex independently without damage to the fire pump. Each isolator will be 2.55" in total outside diameter and will be rated at 490 lb. The pump will be completely accessible by tilting the cab with no piping located directly above the pump.

0515822	Seal, Mechanical, Silicon Carbide, PUC Pump	<p>MECHANICAL SEALS</p> <p>Silicon carbide mechanical seals will be provided. The seals will be spring loaded and self-adjusting. The seals will have a minimum thermal conductivity of 126 W/m*K to run cooler. Seals will have a minimum hardness of 2800 kg/mm2 to be more resistant to wear, and have thermal expansion characteristics of no more than 4.0 X106mm/mm*K to be more resistant to thermal shock.</p>
0889382	Gear Case, Integrated Pump Transmission, PUC-NG, Paccar	<p>PUMP GEAR CASE</p> <p>The integrated pump transmission gear case will use a pressure-lubricated system to cool, lubricate, and filter the oil. The gear case will be constructed of lightweight aluminum, and impregnated with resin in accordance to MIL Spec MIL-I-17563. A sight glass, accessible by tilting the cab, will be provided for easy fluid level checks.</p> <p>The gear case will consist of three (3) gears to drive the pump.</p> <p>CLUTCH</p> <p>There will be a heavy-duty hydraulic clutch mounted directly to the integrated pump transmission to engage and disengage the pump without gear clash. The clutch will be a multiple disc design for maximum torque. The clutch will be fully self-adjusting to provide automatic wear compensation, and consistent torque throughout the life of the clutch. Positive engagement and disengagement will be provided through a high efficient and dependable hydraulic system to assure superior performance.</p> <p>LOW PRESSURE/HIGH TEMPERATURE LIGHTS</p> <p>Lights will be provided to indicate when a high temperature or low pressure situation occurs. Lights will be provided next to the master gauges at the pump panel as well as on the control panel in the cab. A pair of lights will be provided in each location. One light will be provided to indicate high temperature. The second light will be provided to indicate a low pressure. All lights will be labelled accordingly.</p>
0721196	Pumping Mode, Pump and Roll/Stationary, Basic, MUX, PUC	<p>PUMPING MODE</p> <p>Pump will provide for both pump and roll mode and stationary pumping mode. Stationary pumping mode will be accomplished by stopping the vehicle, setting the parking brake and engaging the water pump switch on the cab switch panel. The transmission will shift to "Neutral" range automatically when the parking brake is set. The "OK to Stationary Pump" indicator will also illuminate when the parking brake is set.</p> <p>If the vehicle is equipped with a suitable Husky foam system or Hercules CAFS system, these systems will be engaged from the cab switch panel as well.</p> <p>pump and roll mode will be accomplished by the use of the main pump and will not require the use of a secondary pump. pump and roll mode will use the same operation sequence as stationary pumping mode with a few additional steps. After the vehicle is setup for stationary pumping, the operator will leave the cab and setup the pump panel to discharge at the desired outlet(s). Upon returning to the cab, the operator will disengage the parking brake. An "OK to pump and roll" indicator will illuminate on the cab switch panel. First gear on the transmission gear selector will be selected by the operator for pump and roll operations. The operator as needed will apply the foot throttle. pump and roll mode will be maintained unless the transmission shifts out of first gear.</p> <p>Stopping either stationary pumping mode or pump and roll mode will be accomplished by pressing the "Water Pump" switch down to disengage the pump.</p> <p>A pump pressure reading will be displayed in view of the driver.</p>
0515829	Pump Shift, Sure-Shift	<p>PUMP SHIFT</p> <p>Pump will be engaged in not more than two steps, by simply setting the parking brake, which will automatically put the transmission into neutral, and activating a rocker switch in the cab. Switches in the cab will also allow for water, foam, or CAFS if equipped, and activate the appropriate system to preset parameters. The engagement will provide simple two-step operation, enhance reliability, and completely eliminate gear clash. The shift will include the indicator lights as mandated by NFPA. A direct override switch will be located behind a door in the lower pump operator's panel. The switch will automatically disengage when the door is closed.</p> <p>As the parking brake is applied, the pump panel throttle will be activated and deactivate the chassis foot throttle for stationary operation.</p>
0515833	Transmission Lock-up, Not Req'd, Park to Neutral, Pump, PUC	<p>TRANSMISSION LOCK UP</p> <p>Transmission lock up is not required as transmission will automatically shift to neutral as soon as the parking brake is set.</p>
0515835	Auxiliary Cooling System, PUC	<p>AUXILIARY COOLING SYSTEM</p> <p>A supplementary heat exchange cooling system will be provided to allow the use of water from the discharge side of the pump for cooling the engine water. A water-to-coolant heat exchanger will be used.</p>
0014486	Not Required, Transfer Valve, Single Stage Pump	

0746508	Valve(s), Relief Intake, Trident Air Max, Control Location	<p>INTAKE RELIEF VALVE</p> <p>One (1) Trident Air Max intake relief valve(s) will be installed on the suction side of the pump preset at 125 psig.</p> <p>The relief valve will have a working range of 50 psi to 350 psi.</p> <p>The outlet will terminate below the frame rails with a 2.50" National Standard hose thread adapter and will have a "do not cap" warning tag.</p> <p>One (1) adjustable air regulator and pressure indicating gauge will be located on a common bezel on the left side pump panel to control the intake valve(s).</p>
0724463	Controller, Pressure, Pierce LCD , PUC	<p>PIERCE PRESSURE CONTROLLER</p> <p>A Pierce electronic pressure controller will be provided.</p> <p>A pressure transducer will be installed in the discharge side of the water pump. The transducer continuously monitors pump pressure sending a signal to the electronic pressure controller.</p> <p>The pressure controller can be used in two (2) modes of operation, RPM mode and pressure modes. The controller will be programmed to turn on/default to No Mode/Default Press Setting mode.</p> <p>In the RPM mode, the controller can be activated after vehicle parking brake has been set. When in this mode, the controller will maintain the set engine speed, regardless of engine load (within engine operation capabilities).</p> <p>In the pressure mode, the controller can be activated after vehicle parking brake has been set. When in this mode, the controller will automatically maintain the discharge pressure set by the operator (within the discharge capabilities of the pump and water supply) regardless of flow.</p> <p>A 2.00" diameter throttle control knob with no mechanical stops, a serrated grip, and a red idle push button in the center will be a integrated/part of the pressure controller. The throttle control knob will be programmed for Clockwise rotation to increase engine speed.</p> <p>Individual LED indicators for ok to pump, throttle ready, pressure mode and rpm mode will be located on the pressure controller for easy viewing.</p> <p>A pump cavitation protection feature will also be provided which will return the engine to idle should the pump cavitate. Cavitation is sensed by the combination of pump pressure below 30 psi and engine speed above 2000 rpm for more than five (5) seconds.</p> <p>Other safety features include recognition of low water and no water conditions with an automatic programmed response and a push button to return the engine to idle.</p> <p>The pressure controller LCD screen will be 4.20" in size with a minimum brightness of 750 nits.</p> <p>The LCD screen and LED intensity will automatically adjust for day and nighttime operation. The LCD screen intensity can also be manually adjusted if needed.</p> <p>The following information will be provided/displayed on the LCD screen:</p> <ul style="list-style-type: none"> Engine RPM Check engine and stop engine warning indicators Engine oil pressure Engine coolant temperature Water pump transmission temperature Fuel Level Water tank level Battery voltage Operating mode (RPM or pressure) Pressure or RPM setting <p>On screen messaging show diagnostic and warning messages as they occur. It will show apparatus information, stored data, and program options when selected by the operator. It will monitor inputs outputs and support audible and visual warning alarms for the following conditions:</p> <ul style="list-style-type: none"> High battery voltage Low battery voltage/engine off Low battery voltage/engine running High water pump temperature Low fuel Low engine oil pressure High engine coolant temperature Water tank out of water (visual alarm only) No engine response (visual alarm only) <p>The pressure controller will store the accumulated operating hours for the pump and engine. These items are to be displayed within the pressure controller menu.</p> <p>The pressure controller will include a USB port on the back of the controller for easy software upgrades if needed.</p>
0072153	Primer, Trident, Air Prime, Air Operated	<p>PRIMING PUMP</p> <p>The priming pump will be a Trident Emergency Products compressed air powered, high efficiency, multistage venturi based AirPrime System, conforming to standards outlined in the current edition of applicable NFPA standards.</p> <p>All wetted metallic parts of the priming system are to be of brass and stainless steel construction.</p> <p>One (1) priming control will open the priming valve and start the pump primer.</p>
0780359	Manuals, Pump, (2) Total, Electronic Copies, Pierce PUC Pump	<p>PUMP MANUALS</p> <p>There will be a total of two (2) pump manuals provided by the pump manufacturer and furnished with the apparatus. The manuals will be provided by the pump manufacturer in the form of two (2) electronic copies. Each manual will cover pump operation, maintenance, and parts.</p>

0602496	Plumbing, Stainless Steel and Hose, Single Stage Pump, PUC	<p>PLUMBING, STAINLESS STEEL AND HOSE</p> <p>All inlet and outlet lines will be plumbed with either stainless steel pipe, flexible polypropylene tubing or synthetic rubber hose reinforced with hi-tensile polyester braid. All hose's will be equipped with brass or stainless steel couplings. All stainless steel hard plumbing will be a minimum of a schedule 10 wall thickness.</p> <p>Where vibration or chassis flexing may damage or loosen piping or where a coupling is required for servicing, the piping will be equipped with victaulic or rubber couplings.</p> <p>Plumbing manifold bodies will be ductile cast iron or stainless steel.</p> <p>All piping lines are to be drained through a master drain valve or will be equipped with individual drain valves. All drain lines will be extended with a hose to drain below the chassis frame.</p> <p>All water carrying gauge lines will be of flexible polypropylene tubing.</p> <p>All piping, hose and fittings will have a minimum of a 500 PSI hydrodynamic pressure rating.</p>
0089437	Plumbing Without Foam System	
0517852	Inlets, 6.00" - 1250-2000 GPM, Pierce PUC Pump	<p>MAIN PUMP INLETS</p> <p>A 6.00" pump manifold inlet will be provided on each side of the vehicle. The suction inlets will include removable die cast zinc screens that are designed to provide cathodic protection for the pump, thus reducing corrosion in the pump.</p> <p>Main pump inlets will not be located on the main operator's panel and will maintain a low connection height by terminating below the top of the chassis frame rail.</p>
0014650	Pump Suction Tube(s), Short, All	<p>SHORT SUCTION TUBE(S)</p> <p>The suction tube(s) on the water pump will have short suction tube(s) installed to allow for installation of adapters, elbows or intake valves without excessive overhang.</p>
0004646	Cap, Main Pump Inlet, Long Handle, NST, VLH	<p>MAIN PUMP INLET CAP</p> <p>The main pump inlets will have National Standard Threads with a long handle chrome cap. The cap will be the Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.</p>
0084610	Valves, Akron 8000 series- All	<p>VALVES</p> <p>All ball valves will be Akron® Brass. The Akron valves will be the 8000 series heavy-duty style with a stainless steel ball and a simple two-seat design. No lubrication or regular maintenance is required on the valve.</p> <p>Valves will have a ten (10) year warranty.</p>
0520002	Valve, Inlet(s) Recessed, Side Cntrl, PUC	The location of the valve for the one (1) inlet will be recessed behind the pump panel.
0004700	Control, Inlet, at Valve	<p>INLET CONTROL</p> <p>The side auxiliary inlet(s) will incorporate a quarter-turn ball valve with the control located at the inlet valve. The valve operating mechanism will indicate the position of the valve.</p>
0004660	Inlet (1), Left Side, 2.50"	<p>LEFT SIDE INLET</p> <p>There will be one (1) auxiliary inlet with a 2.50" valve at the left side pump panel, terminating with a 2.50" (F) National Standard hose thread adapter.</p> <p>The auxiliary inlet will be provided with a strainer, chrome swivel and plug.</p>
0029147	Not Required, Inlet, Right Side	
0521137	Anode, Zinc, Pair, Pump Inlets, PUC	<p>ANODE, INLET</p> <p>A pair of sacrificial zinc anodes will be provided in the water pump inlets to protect the pump from corrosion.</p>
0092569	No Rear Inlet (Large Dia) Requested	
0064116	No Rear Inlet Actuation Required	
0092696	Not Required, Cap, Rear Inlet	
0009648	No Rear Intake Relief Valve Required on Rear Inlet	

0092568	No Rear Auxiliary Inlet Requested	
0723049	Valve, .75" Bleeder, Aux. Side Inlet, "T" Swing Handle	<p>INLET BLEEDER VALVE</p> <p>A 0.75" bleeder valve will be provided for each side gated inlet. The valves will be located behind the panel with a "T" swing style handle control extended to the outside of the panel.</p> <p>The handles will be chrome plated and provide a visual indication of valve position. The swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage.</p> <p>The water discharged by the bleeders will be routed below the chassis frame rails.</p>
0520277	Tank to Pump, (1) 3.00" Valve, 4.00" Plumbing, PUC	<p>TANK TO PUMP</p> <p>The booster tank will be connected to the intake side of the pump with heavy duty 4.00" piping and a quarter turn 3.00" full flow line valve with the control located at the operator's panel. A rubber coupling will be included in this line to prevent damage from vibration or chassis flexing. A check valve will be provided in the tank to pump supply line to prevent the possibility of "back filling" the water tank.</p>
0595508	Outlet, Tank Fill, 1.50", PUC	<p>TANK REFILL</p> <p>A 1.50" combination tank refill and pump re-circulation line will be provided, using a quarter-turn full flow ball valve controlled from the pump operator's panel.</p>
0766941	Control, Outlets, Swing Handle, Elec Right Outlets Akron 9335 w/Press Disp, PUC	<p>DISCHARGE OUTLET CONTROLS</p> <p>The right side discharges will incorporate a quarter-turn ball valve and be controlled by Akron 9335 electric valve controllers provided on the pump operators panel. The electric controls must be of a true position feedback design, requiring no clutches in the motor or current limiting. The units must be completely sealed with momentary open, close as well and an optional one touch full open feature to operate their corresponding valve actuator. The controllers will provide position indication on a full color, backlit LCD display. They will have manual adjustment of the brightness as well as an auto dimming option. In addition to the valve controls, the electric valve controllers will include a pressure display</p> <p>All other outlets will have manual swing handles that operate in a vertical up and down motion. These handles will be able to lock in place to prevent valve creep under pressure.</p>
0516755	Outlet, Left Side, 2.50" (2), PUC	<p>LEFT SIDE DISCHARGE OUTLETS</p> <p>There will be two (2) discharges with a 2.50" valves on the left side of the apparatus, terminating with a 2.50" (M) National Standard hose thread adapter. Discharges will be located below the cab, and will be no higher than the top of the chassis frame rail. Discharges will not be located on the pump operator's panel. Lever controls will be provided at the valve.</p>
0055095	Not Required, Elbow, Left Side Outlets, 2.50"	
0092570	Not Required, Outlets, Left Side Additional	
0035094	Not Required, Elbow, Left Side Outlets, Additional	
0766761	Outlet, Right Side, 2.50", (1), Electric Akron 9335 Controller, PUC	<p>RIGHT SIDE DISCHARGE OUTLETS</p> <p>There will be One (1) discharge outlet with a 2.50" valve on the right side of the apparatus, terminating with a 2.50" MNST adapter. The discharge(s) will be located below the crew cab and will be no higher than the top of the chassis frame rail.</p> <p>There will be Akron 9335 electric valve controller(s) provided on the pump operators panel. The electric control(s) must be of a true position feedback design, requiring no clutches in the motor or current limiting. The unit(s) must be completely sealed with momentary open, close as well and an optional one touch full open feature to operate the valve actuator. The controller(s) will provide position indication on a full color, backlit LCD display. They will have manual adjustment of the brightness as well as an auto dimming option.</p> <p>In addition to valve position, each controller will include a pressure display.</p>
0021134	Not Required, Elbow, Right Side Outlets, 2.50"	
0092571	Not Required, Outlets, Right Side Additional	
0089584	Not Required, Elbow, Right Side Outlets, Additional	

0818640	Outlet, Large Diameter, Right Side, Akron Valve, PUC	<p>LARGE DIAMETER DISCHARGE OUTLET</p> <p>There will be an Akron 8800 4.00" flat ball valve with 4.00" plumbing terminating with a 4.00" MNST chrome adapter on the right side pump panel.</p> <p>The valve will be controlled with a(n) Akron 9335 with pressure located at the pump operator's panel.</p>
0699320	Adapter, 4.00" FNST x 5.00" Storz, w/Cap and Chain, PUC	<p>LARGE DIAMETER OUTLET ADAPTER</p> <p>one (1) 4.00" outlet will be furnished with a 4.00" (F) National Standard hose thread x 5.00" Storz adapter. A 5.00" Storz cap and chain will be provided with the adapter.</p>
0649939	Outlet, Front, 1.50" w/2" Plumbing	<p>FRONT DISCHARGE OUTLET</p> <p>There will be one (1) 1.50" discharge outlet piped to the front of the apparatus and located in the center bumper tray.</p> <p>Plumbing will consist of 2.00" piping and flexible hose with a 2.00" ball valve with control at the pump operator's panel. A fabricated weldment made of stainless steel pipe will be used in the plumbing where appropriate. The piping will terminate with a 1.50" NST with 90 degree stainless steel swivel.</p> <p>There will be automatic drains provided at all low points of the piping.</p>
0516777	Outlet, Rear, 2.50", (1), Thru Tank, PUC	<p>REAR DISCHARGE OUTLET</p> <p>There will be One (1) discharge outlet piped to the rear of the hose bed on left side, installed so proper clearance is provided for spanner wrenches or adapters. Plumbing will consist of 2.50" piping along with a 2.50" full flow ball valve with the control from the pump operator's panel. Discharge will terminate with 2.50" NST thread. Discharge piping will be schedule 10 304L welded or formed stainless steel and routed through the water tank.</p>
0045091	Elbow, Rear Outlets, 45 Degree, 2.50" FNST x 2.50" MNST, VLH	<p>REAR OUTLET ELBOWS</p> <p>The 2.50" discharge outlets located at the rear of the apparatus will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45 degree elbow.</p> <p>The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.</p>
0516782	Outlet, Rear, 2.50" w/2.50" Plumbing, Thru Tank, PUC, Additional	<p>REAR DISCHARGE OUTLET</p> <p>There will be Two (2) discharge outlets piped to the rear of the hose bed, on two (2) on the right side, installed so proper clearance is provided for spanner wrenches or adapters. Plumbing will consist of 2.50" piping along with a 2.50" full flow ball valve with the control from the pump operator's panel. Discharge will terminate with 2.50" NST thread. Discharge piping will be schedule 10 304L welded or formed stainless steel and routed through the water tank.</p>
0536635	Elbow, Rear Outlets, 45 Degree, 2.50" FNST x 2.50" MNST, VLH, PUC, Additional	<p>ADDITIONAL REAR OUTLET ELBOWS</p> <p>Two (2) discharge outlets 2.50" discharge outlets, located at the rear of the apparatus, will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45 degree elbow.</p> <p>The elbow will be the Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.</p>
0752097	Caps/Plugs for 1.00" to 3.00" Discharges/Inlets, Chain	<p>DISCHARGE CAPS/ INLET PLUGS</p> <p>Chrome plated, rocker lug, caps with chain will be furnished for all discharge outlets 1.00" thru 3.00" in size, besides the pre-connected hose outlets.</p> <p>Chrome plated, rocker lug, plugs with chain will be furnished for all auxiliary inlets 1.00" thru 3.00" in size.</p> <p>The caps and plugs will incorporate a thread design to automatically relieve stored pressure in the line when disconnected.</p>
0723042	Valve, 0.75" Bleeder, Discharges, "T" Swing Handle	<p>OUTLET BLEEDER VALVE</p> <p>A 0.75" bleeder valve will be provided for each outlet 1.50" or larger. Automatic drain valves are acceptable with some outlets if deemed appropriate with the application.</p> <p>The valves will be located behind the panel with a T swing style handle control extended to the outside of the side pump panel.</p> <p>The handles will be chrome plated and provide a visual indication of valve position.</p> <p>The T swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage.</p> <p>Bleeders will be located at the bottom of the pump panel. They will be properly labeled identifying the discharge they are plumbed in to.</p> <p>The water discharged by the bleeders will be routed below the chassis frame rails.</p>

0753335	Outlet, 3.00" Deluge w/2.50" Valve, Dual Control, LG HW's, PUC	<p>DELUGE RISER A 3.00" deluge riser will be installed above the pump in such a manner that a monitor can be mounted and used effectively. 3.00" piping will be installed securely so no movement develops when the line is charged. The riser will be gated and controlled at the pump operator's panel by a large handwheel control. A 2.50" valve will be provided. The deluge riser will allow flow for 1000 GPM.</p> <p>DUAL CONTROL There will be a second large handwheel control, within reach of the deluge appliance operator.</p>
0770359	No Monitor Requested, Customer/Dealer Furnished and Installed	<p>MONITOR A customer/dealer supplied and installed make and model TFT Crossfire monitor will be properly installed on the deluge riser.</p>
0029304	No Nozzle Req'd	
0005070	Deluge Mount, NPT	The deluge riser will have male National Pipe Threads for mounting the monitor.
0750982	Crosslay Module, Full Width, Roll Up Doors, PUC	<p>CROSSLAY MODULE The crosslay module will be full width of the rear body. The forward, upper corners of the module will have full body corners. The crosslay module will be manufactured for installation of roll up doors on each side.</p>
0750897	Doors, Crosslay, Roll-up Amdor, Each End, Full Height, PUC	<p>ROLL-UP DOOR, CROSSLAY ENDS, PUC All compartment doors will be roll-up style double faced, aluminum construction, painted two (2) colors to match the rear body paint break and manufactured by AMDOR™. The crosslay enclosure will be full width of the body. The track will be the flanged track with the screws installed to the rear of the track guide. The slats will be double wall box frame extrusion. The exterior surface will be flat and the interior surface will be concave to help loose equipment fall to the ground and prevent it from jamming the door. Between each slat will be a PVC inner seal to prevent metal to metal contact and prevent dirt or moisture from entering the compartments. Each door will have a 4.00" counter balance to assist in lifting. A polished stainless steel lift bar to be provided for each roll-up door. The lift bar will be located at the bottom of door with striker latches installed at the base of the side frames. Side frame mounted door strikers will include support beneath the stainless steel lift bar to prevent door curtain bounce, improve bottom seal life expectancy and to avoid false door ajar signals. The crosslays will have a drip pan below the roll of the door.</p>
0747660	Lights, Crosslay Compt, Forward LED, 2Lts	<p>CROSSLAY COMPARTMENT LIGHTING There will be two (2) 12 volt DC light strips with white LEDs and mechanical fasteners, provide behind the front door frame on the crosslay compartments per the following: One (1) strip light for the left side crosslay compartment door One (1) strip light for the right side crosslay compartment door The lights will be activated when the battery switch is on and the respective door is opened.</p>
0737370	Crosslays, (1) 2.50", W/Poly Trays, PUC	<p>CROSSLAY(S), LOWER There will be one (1) lower crosslays provided. 2.50" Crosslays There will be one (1) 2.50" crosslays plumbed with 2.50" welded or formed schedule 10 304L stainless steel pipe. The crosslays will be low mounted with the bottom of both crosslay trays no more than 11.00" above the frame rails for simple, safe reloading and deployment (no exception). There will be a 2.50" National Standard hose thread 90-degree swivel provided in each hose bed, so that the hose may be removed from either side of apparatus. The swivel will be as far outbound as possible for ease of changing hose. Each crosslay will be gated with a 2.50" quarter turn ball valve with the controls located at the pump operator's panel. Each hose bed will be capable of carrying 200' of 3" DJ Hose . Crosslay Hose Trays A removable tray will be provided for each crosslay hose bed. The crosslay tray will be constructed of black poly to provide a lightweight sturdy tray. Two (2) hand holes will be in the floor and additional hand holes will be provided in the sides for easy removal and installation from the compartment. The floor of the trays will be perforated to allow for drainage and hose drying. Trays will be held in place by a mechanical spring-loaded stainless-steel latch that automatically deploys upon loading the trays to hold the trays in place during transit.</p>

0749435	Crosslays, (2) 1.50", W/Poly Trays, PUC	<p>CROSSLAY(S), UPPER There will be two (2) upper crosslays provided.</p> <p>1.50" Crosslays There will be two (2) 1.50" crosslays plumbed with 2.00" welded or formed schedule 10 304L stainless steel pipe. There will be a 1.50" National Standard hose thread 90-degree swivel provided in each hose bed, so that the hose may be removed from either side of apparatus. The swivel will be as far outbound as possible for ease of changing hose. Each crosslay will be gated with a 2.00" quarter turn ball valve with the controls located at the pump operator's panel. Each hose bed will be capable of carrying 200' of 1.75" double jacket hose .</p> <p>Crosslay Hose Trays A removable tray will be provided for each crosslay hose bed. The crosslay tray will be constructed of black poly to provide a lightweight sturdy tray. Two (2) hand holes will be in the floor and additional hand holes will be provided in the sides for easy removal and installation from the compartment. The floor of the trays will be perforated to allow for drainage and hose drying. Trays will be held in place by a mechanical spring-loaded stainless-steel latch that automatically deploys upon loading the trays to hold the trays in place during transit.</p>
0729571	Tube, Aluminum, Pike Pole, Special Ny Style Notch, Upper Crosslay Module, PUC	<p>PIKE POLE STORAGE A quantity of two (2) pike poles aluminum tubes will be provided and located (1) deployed out DS and (1) deployed out PS in the upper crosslay module. The pike pole tube(s) will be notched to allow a New York style pike pole to fit in the tube. If the head of a pike pole can come in contact with a painted surface, a stainless steel scuffplate will be provided.</p>
0653355	Reel, Booster, Steel, Rear Tailboard Compartment, PUC/HDRP	<p>BOOSTER HOSE REEL A Hannay electric rewind steel booster hose will be installed in the rear tailboard compartment. The exterior finish of the reel will be painted #269 gray from the reel manufacturer. Roll-up door for this compartment will not interfere with the hose reel. A polished stainless steel roller and guide assembly will be provided so the booster hose does not rub against a painted surface. Discharge control will be provided at the pump operator's panel. Plumbing to the reel will consist of 1.50" or larger Aeroquip hose, stainless steel pipe and a 2.00" valve.</p> <p>HOSE REEL BLOWOUT A hose reel blowout will be furnished to blow out any remaining water from the hose reel. The blowout will be piped from the wet tank of the brake system to the hose reel and will be controlled at the pump operator's panel.</p>
0005279	Switch, Reel Rewind - One at Reel	Reel motor will be protected from overload with a circuit breaker rated to match the motor. An electric rewind control switch will be installed adjacent to the reel.
0005300	Hose, Booster - 150' of 1.00"/800 PSI	Booster hose, 1.00" diameter and 150 feet, with chrome plated Barway, or equal couplings will be provided. Working pressure of the booster hose will be a minimum of 800 psi.
0005244	Capacity, Hose Reel 200' of 1"	Capacity of the hose reel will be 200 feet of 1.00" booster hose.
0007428	Nozzle for Booster Reel Not Req'd	
0044333	Not Required, Foam System	<p>FOAM SYSTEM A foam system will not be required on this apparatus.</p>
0012126	Not Required, CAF Compressor	
0552517	Not Required, Refill, Foam Tank	
0042573	Not Required, Foam System Demonstration	
0045465	Not Required, Foam Tanks	
0091110	Not Required, Foam Tank Drain	
0091079	Not Required, Foam Tank #2	

0091112	Not Required, Foam Tank #2 Drain	
0738072	Approval Dwg, Pump Panel(s), Not Required	
0032479	Pump Panel Configuration, Control Zone	<p>PUMP PANEL CONFIGURATION The pump panel configuration will be arranged and installed in an organized manner that will provide user-friendly operation.</p>
0686774	Material, Pump Panels, Operators Black UL-LX, Sides Black UL-LX, PUC	<p>PUMP AND GAUGE PANEL The pump operators panel and gauge panels will be constructed of stainless steel. The pump panels on the left and right side will be constructed of stainless steel. All of the panels will be covered with black UL-LX® spray-on polyurethane/polyurea material finish.</p>
0516978	Pump and Plumbing Access, Simple Tilt Service, PUC	<p>PUMP AND PLUMBING ACCESS Simple access to the plumbing will be provided through the front of the body area by raising the cab for complete plumbing service and valve maintenance. Access to valves will not require removal of operator panels or pump panels. Access for rebuilding of the pump will not require removal of more than the tank to pump line and a single discharge line. This access will allow for fast, easy valve or pump rebuilding, making for reduced out of service times. Steps will be provided for access to the top of the pump. Access to the pump will be provided by raising the cab. The pump will be positioned such that all maintenance and overhaul work can be performed above the frame and under the tilted cab. The service and overhaul work on the pump will not require the removal of operator panels or pump panels. Complete pump casing and gear case removal will require no more than removal of the intake and discharge manifolds, driveline, coolers and a single discharge line. The pump case and gear case will be able to be removed by lifting upward without interference from piping and be removable in less than 3 hours.</p>
0618458	Light, Pump Compt, WIn 3SC0CDCR LED White, PUC	<p>PUMP COMPARTMENT LIGHT There will be one (1) Whelen®, Model 3SC0CDCR, 3.00" white 12 volt DC LED light(s) with Whelen, Model 3FLANGEC, flange(s) installed in the plumbing area. The light(s) will be activated by a toggle switch located in the pump compartment area.</p>
0516983	Gauges, Engine, Included With Pressure Controller, PUC	Engine monitoring graduated LED indicators will be incorporated with the pressure controller.
0005601	Throttle, Engine, Incl'd w/Press Controller	
0739224	Indicator Light @ Pump Panel, Throttle Ready, Incl w/Pressure Gov/Throttle, Green	<p>THROTTLE READY GREEN INDICATOR LIGHT There will be a green indicator light integrated with the pressure governor and/or engine throttle installed on the pump operators panel that is activated when the pump is in throttle ready mode.</p>
0549333	Indicators, Engine, Included with Pressure Controller	
0511078	Gauges, 4.00" Master, Class 1, 30"-0-600psi	<p>VACUUM AND PRESSURE GAUGES The pump vacuum and pressure gauges will be liquid filled and manufactured by Class 1 Incorporated. The gauges will be a minimum of 4.00" in diameter and will have white faces with black lettering, with a pressure range of 30.00"-0-600#. Gauge construction will include a Zytel nylon case with adhesive mounting gasket and threaded retaining nut. The pump pressure and vacuum gauges will be installed adjacent to each other at the pump operator's control panel. Test port connections will be provided at the pump operator's panel. One (1) will be connected to the intake side of the pump, and the other to the discharge manifold of the pump. They will have 0.25 in. standard pipe thread connections and non-corrosive polished stainless steel or brass plugs. They will be marked with a label. This gauge will include a 10 year warranty against leakage, pointer defect, and defective bourdon tube.</p>
0511100	Gauge, 2.00" Pressure, Class 1, 30"-0-400psi	<p>PRESSURE GAUGES The individual "line" pressure gauges for the discharges will be Class 1 interlube filled. They will be a minimum of 2.00" in diameter and have white faces with black lettering. Gauge construction will include a Zytel nylon case with adhesive mounting gasket and threaded retaining nut. Gauges will have a pressure range of 30"-0-400#. The individual pressure gauge will be installed as close to the outlet control as practical. This gauge will include a 10 year warranty against leakage, pointer defect, and defective bourdon tube.</p>

0750526	Gauge, Water Level, Pierce, In pressure Controller, Lt Driver	WATER LEVEL GAUGE An electric water level gauge will be incorporated in the pressure controller that registers water level by means of nine (9) LEDs. They will be at 1/8 level increments with a tank empty LED. The LEDs will be a bright type that is readable in sunlight and have a full 180-degree of clear viewing. To further alert the pump operator, the gauge will have a warning flash when the tank volume is less than 25 percent. The gauge will have down chasing LEDs when the tank is almost empty. The level measurement will be ascertained by sensing the head pressure of the fluid in the tank or cell. There will be a light driver module with this installation to power additional water level gauge(s) included on the apparatus.
0604028	Water Level Gauge, FRC, MaxVision WLA280-A00 Programmable Remote Display	ADDITIONAL WATER LEVEL GAUGE There will be two (2) additional Fire Research MaxVision, model WLA280-A00, water tank remote indicator(s) provided and installed Each side of cab behind crew doors up high. The indicators will show the volume of water in the tank on 96 easy to see super bright Tri-color LEDs. The indicator case will be waterproof and manufactured of Polycarbonate material with an integrated lens. The remote indicator will indicate the level as a single color: Red for 25 percent or less Amber for up to 50 percent volume Blue for up to 75 percent volume Green for up to 100 percent volume When the level reaches 25 percent, the red LEDs will begin flashing. When the level is empty, the red LEDs will scroll in a down-chasing motion and then flash three (3) times. The flash rate will be determined by the main water tank sensor. It will have the program capability to adjust the brightness level for day time and night time viewing. The LEDs can also be programmed for different colors. This module will be activated when the battery switch is on.
0006774	Not Required, Foam Level Gauge	
0653081	Light, Pump Operator & Panel, Side Ctrl, PUC, 60354C LED Cab & LED OH Chr Cvr	SIDE CONTROL PUMP OPERATOR'S/PUMP PANEL LIGHTING Illumination will be provided for controls, switches, essential instructions, gauges, and instruments necessary for the operation of the apparatus and the equipment provided on it. External illumination will be a minimum of five (5) foot-candles on the face of the device. Internal illumination will be a minimum of four (4) footlamberts. The pump panels will be illuminated by two (2) Truck-Lite, Model 60354C, 6.00" x 2.00" oval white LED lights with Model 60700, grommets and chrome covers installed on the back of the cab, one (1) on the driver's side and one (1) on the passenger's side. The pump operator's panel will utilize the same LED strip lighting at the forward doorframe as all other compartment lighting. There will be a small white LED pump engaged indicator light installed overhead.
0828301	SP Air Horn, (2) Hadley, 6" Round, 21.00", eTone, Black, In Bumper	AIR HORN SYSTEM Two (2) Hadley®, eTone, 21.00" long black air horns will be recessed in the front bumper. The air horn system will be piped to the air brake system wet tank utilizing 0.38" tubing. A pressure protection valve will be installed to prevent the loss of air, in the brake system.
0606834	Location, Air Horns, Bumper, Each Side, Outside Frame, Inboard (Pos #2 & #6)	Air Horn Location The air horns will be located on each side of the bumper, just outside of the frame rails.
0757092	Control, Air Horn, Multi Select	Air Horn Control The air horn(s) will be activated by the following:
0757076	Control, Air Horn, Lanyard, RS	Right side lanyard. The lanyard to be a link chain inside vinyl tubing.
0757077	Control, Air Horn, Lanyard, LS	Left side lanyard. The lanyard to be a link chain inside vinyl tubing.
0525667	Siren, WIn 295SLSA1, 100 or 200 Watt	ELECTRONIC SIREN A Whelen®, Model 295SLSA1, electronic siren with noise canceling microphone will be provided. This siren to be active when the battery switch is on and that emergency master switch is on.
0510206	Location, Elect Siren, Recessed Overhead In Console	Electronic siren head will be recessed in the driver side center switch panel.
0748306	Control, Elec Siren, Multi Select	ELECTRONIC SIREN CONTROL The electronic siren will be activated by the following:

0748287	Control, Elec Siren, Rocker/Membrane Sw, RS	The right side momentary switch.
0805709	Control, Elec Siren, Horn Ring, Interlock	The steering wheel horn ring with siren/horn selector switch. The control to be available when the parking brake is released.
0783670	Speaker, (2) WIn, SA315P, w/Pierce Black Painted Grille, 100 watt	SPEAKERS There will be two (2) Whelen®, Model SA315P, black nylon composite, 100-watt, speakers with through bumper mounting brackets and black steel grilles provided. Each speaker will be connected to the siren amplifier.
0601559	Location, Speaker, Frt Bumper, Recessed, Each Side, Inside Frame (Pos 3 & 5)	The speakers will be recessed in each side of the front bumper, inside of the frame rails.
0895310	Siren, Federal Q2B	AUXILIARY MECHANICAL SIREN There will be a Federal Signal Model Q2B mechanical siren furnished and installed in the front of the apparatus. The Q2B will be black chrome finish. The siren will have a 2-gauge cable connected to a power solenoid that is connected by a 2-gauge cable ran battery direct to the primary chassis batteries and will be labeled Q2B+ at the battery. The power solenoid will only be enabled when the emergency master switch is on. The siren will have a 2-gauge ground wire connected to the chassis battery stud. The cable will be labeled Q2B- at the battery.
0006095	Siren, Mechanical, Mounted Above Deckplate	The mechanical siren will be mounted on the bumper deck plate. It will be mounted on the left side. A reinforcement plate will be furnished to support the siren.
0748305	Control, Mech Siren, Multi Select	MECHANICAL SIREN CONTROL The mechanical siren will be activated by the following:
0748282	Control, Mech Siren, Ft Sw LS	Left side foot switch.
0729537	Control Mech Siren, Rocker Momentary On, Brake RS	The siren will be controlled by a 3-position rocker switch located in the cab on the right side switch panel. The switch will control the siren per the following: The momentary top position will activate the mechanical siren. The home middle position will be neutral. The momentary bottom position will apply the mechanical siren brake.
0737437	Sw, Siren Brake, Momentary Red, Pnl 9, Saber FR/Enf	A momentary red switch will be included in switch panel #9 to activate the siren brake.
0734674	Sw, Siren Brake, Mom Rocker, Red Outline, RS Overhead Sw Pnl, Mux	A momentary rocker switch will be included in the right side overhead switch panel to activate the siren brake. There will be a red outline decal around the black rocker switch.
0746353	Not Required, Warning Lights Intensity	

0807805

Lightbar, WIn, Freedom IV-D, 72",
RRRRWRRROptRRRWRRRR

FRONT ZONE UPPER WARNING LIGHTS

There will be one (1) 72.00" Whelen® Freedom™ IV LED lightbar mounted on the cab roof. The lightbar will include the following:
One (1) photocell to dim the lightbar LED modules when the parking brake is applied and in low light conditions.
One (1) red flashing LED module in the left side rear corner position.
One (1) red flashing LED module in the left side end position.
One (1) red flashing LED module in the left side front corner position.
One (1) red flashing LED module in the left side first front position.
One (1) white flashing LED module in the left side second front position.
One (1) red flashing LED module in the left side third front position.
One (1) red flashing LED module in the left side fourth front position.
One (1) red flashing LED module in the left side fifth front position.
One (1) 795 LED traffic light controller set to national standard high priority in the center positions.

One (1) red flashing LED module in the right side fifth front position.
One (1) red flashing LED module in the right side fourth front position.
One (1) red flashing LED module in the right side third front position.
One (1) white flashing LED module in the right side second front position.
One (1) red flashing LED module in the right side first front position.
One (1) red flashing LED module in the right side front corner position.
One (1) red flashing LED module in the right side end position.
One (1) red flashing LED module in the right side rear corner position.
There will be clear lenses included on the lightbar.
The following switches may be installed in the cab on the switch panel to control the lightbar:
a switch to control the flashing LED modules.
the traffic light controller will be activated by a cab switch with emergency master control, and there will be a driver's side momentary cab switch with no emergency master control to activate the traffic light controller.
The two (2) white flashing LED modules and the traffic light controller will be disabled when the parking brake is applied.
The eight (8) red flashing LED modules in the front positions, and the two red (2) flashing LED modules in the end positions may be load managed when the parking brake is applied.

0016380

No Additional Lights Req'd, Side
Zone Upper

0734071

Lights, Front Zone, WIn M6** M6**
M6** M6** LED, Q Bzl, 4lts

LIGHTS, FRONT ZONE LOWER

There will be four (4), Whelen® Model M6** 4.32" high x 6.75" wide x 1.37" deep flashing LED warning lights installed on the cab face above the headlights in twin bezels.
The left side outside warning light to include red LEDs
The left side inside warning light to include red LEDs
The right side inside warning light to include red LEDs
The right side outside warning light to include red LEDs
The warning light lens color(s) to be clear
The housing and trim shall be painted black
The lights may be controlled per the following:
A switch on the cab instrument panel will control the lights
White LEDs will be deactivated when the parking brake is applied
Amber LEDs will be activated when the parking brake is applied
Amber, blue green or red LEDs in the inside positions may be load managed when the parking brake is applied

0826917

Light, Front, Roto Ray 4000W,
PAR46 LED, 2-R, 1-W,Hdn Mt Tp Sct
Grl Blk,VoidWrnt

ROTO RAY LIGHT

There will be one (1) Roto Ray, Model 4000W rotating warning light provided on the front of the cab mounted through the top section of the front grille.
This warning light will include the following:
Two (2) PAR46 lights with red LEDs and clear lenses
One (1) PAR46 light with white LEDs and a clear lens
There will be a switch in the cab on the switch panel to control this light.
The rotation motor and the warning lights will be deactivated when the parking brake is applied.
The exterior parts of this assembly will be painted black.
Portions painted in house will void the warranty.

0653937

Flasher, Headlight Alternating

HEADLIGHT FLASHER

The high beam headlights will flash alternately between the left and right side.
There will be a switch installed in the cab on the switch panel to control the high beam flash. This switch will be live when the battery switch and the emergency master switches are on.
The flashing will automatically cancel when the hi-beam headlight switch is activated or when the parking brake is set.

0747228	Lights, Side Zone Lower, WIn M6**, M6**, M6**, 6Lts	<p>SIDE ZONE LOWER LIGHTING</p> <p>There will be six (6) Whelen®, Model M6**, 4.31" high x 6.75" long x 1.37" deep flashing LED warning lights with black trim installed per the following:</p> <p>Two (2) lights located, one (1) each side on the bumper extension. The driver's side, side front light to include red warning LEDs and the passenger's side, side front light to include red warning LEDs.</p> <p>Two (2) lights located, one (1) each side of cab rearward of crew cab doors. The driver's side, side middle light to include red warning LEDs and the passenger's side, side middle light to include red warning LEDs.</p> <p>Two (2) lights located, one (1) each side above rear wheels. The driver's side, side rear light to include red warning LEDs and the passenger's side, side rear light to include red warning LEDs.</p> <p>The warning light lens color(s) to be clear.</p> <p>There will be a switch in the cab on the switch panel to control the lights.</p>
0896616	Lights, Door Interior Flash, 4 Dr Cab, Weldon 8401-0000-20 Strip Light	<p>INTERIOR CAB DOOR WARNING LIGHTS</p> <p>There will be four (4) Weldon, Model 8401-0000-20, 16" long x 3/4" High x 5/8" deep amber 12 volt DC LED flashing strip lights provided.</p> <p>One (1) light on the left side cab door.</p> <p>One (1) light on the right side cab door.</p> <p>One (1) light on the right side crew cab door.</p> <p>One (1) light on the left side crew cab door.</p> <p>Each light will be located over the door window..</p> <p>Each light will be activated when the battery switch is on, respective door is opened and the ignition switch is on.</p> <p>Each light will be installed so the flash pattern directs traffic away from the doors.</p>
0815847	Connectors, Door Interior Flash, All Cabs, Weatherproof	<p>ELECTRICAL CONNECTORS FOR WARNING LIGHTS</p> <p>The lights will be installed with a weatherproof insulated crimped connectors in order to provide ease of connection/disconnection of the circuit applied to.</p>
0745867	Lights, Side, WIn M9** LED, Trm Fet 1st	<p>SIDE WARNING LIGHTS</p> <p>There will be two (2) Whelen®, Model M9**, 6.50" high x 10.37" wide x 1.37" deep flashing LED warning light(s) with black trim provided, DS and PS front upper body corners.</p> <p>The light(s) to include green LEDs. The warning light lens color(s) to be clear.</p> <p>These lights will be activated with the side warning switch.</p> <p>White LEDs will be deactivated when the parking brake is applied.</p> <p>Amber, blue, green or red LEDs may be load managed when the parking brake is applied.</p>
0827630	Lights, Side, WIn WION* LED, Recessed in Cab Steps, 4lts	<p>SIDE WARNING LIGHTS</p> <p>There will be four (4) Whelen®, Model WION* wide angle flashing LED warning lights with universal mounting brackets provided and mounted as follows:</p> <p>One (1) recessed in the driver's side cab step on the front, vertical surface, below bottom of door.</p> <p>The left side, side front light to include red LEDs.</p> <p>One (1) recessed in the driver's side crew cab step on the front, vertical surface, below bottom of door. The left side, side rear light to include red LEDs.</p> <p>One (1) recessed in the passenger's side crew cab on the front, vertical surface, below bottom of door. The right side, side rear light to include red LEDs.</p> <p>One (1) recessed in the passenger's side cab step on the front, vertical surface, below bottom of door. The right side, side front light to include red LEDs.</p> <p>The lenses for these lights will be clear.</p> <p>These lights will be activated with the side warning switch.</p> <p>These lights may be load managed when the parking brake is applied.</p> <p>White LEDs will be deactivated when the parking brake is applied.</p>
0804023	Lights, Side, WIn WIONSM** LED, Mounted Behind Poly Rub Rail, 1st	<p>SIDE WARNING LIGHTS</p> <p>There will be four (4) Whelen®, Model WIONSM** LED light(s) provided and located behind the body poly rub rails Centered below LS1, LS3, RS1, RS3. The poly rub rails will be cut out to allow the light(s) to shine through the poly rub rails.</p> <p>The color of each light will be red LED with a clear lens.</p> <p>Each light will be provided with black trim and mounting gasket.</p> <p>Any white light(s) will be disabled when the park brake is set.</p>
0894842	Lights, Rear Zn Lwr, WIn M6*, For Tail Lt Housings	<p>REAR ZONE LOWER WARNING LIGHTS</p> <p>There will be two (2) Whelen®, Model M6**, 4.31" high x 6.75" wide x 1.37" deep flashing LED warning lights located in the rear tail light housings of the apparatus per the following:</p> <p>The driver's side rear light to be red.</p> <p>The passenger's side rear light to be red.</p> <p>The lens color(s) to be clear.</p> <p>There will be a switch located in the cab on the switch panel to control the lights.</p>
0747386	Lights, Rear, WIn 6RB** LED, Features 1st	<p>REAR WARNING LIGHTS</p> <p>There will be two (2) Whelen®, Model 6RB**, LED flashing warning light(s) with Whelen, black trim provided DS and PS rear bulkheads below M9 warning lights.</p> <p>The color of the lights will be red.</p> <p>The color of the lens of the light(s) will be clear.</p> <p>These lights will be activated with the rear upper warning switch.</p>

0725515	Lights, Rear/Side Up Zone, WIn M9°C LED, Clear Lens, Flange Kit, 4lts	<p>WARNING LIGHTS (Rear and Side upper zones)</p> <p>Four (4) Whelen, model M9°C LED flashing warning lights will be provided at the rear of the apparatus.</p> <p>The side rear upper light(s) on the driver's side to be red.</p> <p>The rear upper light(s) on the driver's side to be red.</p> <p>The rear upper light(s) on the passenger's side to be red.</p> <p>The side rear upper light(s) on the passenger's side to be red.</p> <p>These lights will include a lens that is clear.</p> <p>These lights will include a black trim .</p> <p>There will be a switch located in the cab on the switch panel to control the lights.</p>
0006551	Not Required, Lights, Rear Upper Zone Blocking	
0590000	No Hose Bed Warn Lts Brkts Required, Lts On Hatch/Body Compts,PUC	
0751112	Lights, Traffic Directing, WIn TLIA Amber LED, 8 Lts, TACTL5	<p>TRAFFIC DIRECTING LIGHT</p> <p>There will be eight (8) Whelen® Model TLIA, 1.50" high x 5.14" long x 0.50" deep lights with amber LEDs, clear lenses and black trim installed at the rear of the apparatus as a traffic directing light.</p> <p>There will be one (1) Whelen, Model TACTL5 control head energized when the battery switch is on, included with this installation.</p> <p>The auxiliary flash to be activated when the emergency master switch is on.</p>
0791018	Location, TDL, Surface Mounted, Hose Bed Cover Rear Flange	The lights used as traffic directing will be surface mounted on the rear vertical flange of the hose bed cover as close to the center as practical.
0530288	Location, Traf Dir Lt Controller, Overhead Recessed Console, above Eng Tnl DS	The traffic directing light controller will be located within the overhead recessed console above the engine tunnel on the driver's side.
0772909	Light Twr, W-B Chf NS2.3-600 WHL, 4-P*H2, 12VDC Lts Cld 7.5'	<p>LIGHT TOWER</p> <p>There will be one (1) Will-Burt, Model NS2.3-600 WHL, light tower provided.</p> <p>There will be four (4) Whelen, Model P*H2, 150 watt 12 volt LED DC light heads included on this tower.</p> <p>The light tower will have with a combination of flood and spot optics lights.</p> <p>The painted parts of the light tower and the light heads to be white.</p> <p>This tower will be connected to the Do Not Move Truck Indicator in the cab.</p> <p>The lights included on this tower may be load managed when the parking brake is applied.</p>
0664471	Location, Light Tower, Cargo Area	<p>Light Tower Location</p> <p>The light tower will be installed in the cargo area.</p>
0617750	Controller, Lt Twr, W-B, Wired Hndhld, E-STOP Chf, Chf Pr, Pow Pr	<p>Light Tower Controller</p> <p>There will be one (1) handheld wired controller included.</p>
0782222	Location, Light Tower Controller, PUC Pump Panel Area, Recess Rear Wall	<p>Light Tower Controller Location</p> <p>The light tower controller will be recessed in the partition wall just rearward of the pump panel. An open top bin at the base of the recess will be provided in this recessed location to help retain the controller cord.</p>
0779707	Receptacle Strip, 20A 120V 6-Place, Interior Body	<p>POWER OUTLET STRIP</p> <p>There will be one (1) receptacle strip(s) with six (6) 20 amp 120 volt AC straight blade receptacles provided RS1 on right wall centered from floor to ceiling.</p> <p>The strip(s) selected will be powered from the shoreline to 120 volt AC power inverter internal transfer sw through a receptacle located adjacent to the strip(s).</p> <p>There will be a label installed near the strip(s) that state the following:</p> <p>Line Voltage</p> <p>Current Rating (amps)</p> <p>Phase</p> <p>Frequency</p>

0783678	Receptacle, 15/20A 120V 3-Pr 3-Wr, NEMA 5-20R SB Dup, 1st	<p>120 VOLT RECEPTACLE</p> <p>There will be two (2), 15/20 amp 120 volt AC three (3) wire straight blade duplex receptacle(s) with interior stainless steel wall plate(s), installed Interior on inboard wall, up high of LS/RS rear facing EMS cabinets. The NEMA configuration for the receptacle(s) will be 5-20R.</p> <p>The receptacle(s) will be powered from the shoreline to 120 volt AC power inverter internal transfer sw.</p> <p>There will be a label installed near the receptacle(s) that state the following: Line Voltage Current Rating (amps) Phase Frequency</p>
0519934	Not Required, Brand, Hydraulic Tool System	
0649753	Not Required, PTO Driven Hydraulic Tool System	
0816508	NFPA Required Loose Equipment, Pumper, NFPA/ULC 2024, Provided by Fire Dept	<p>NFPA LOOSE EQUIPMENT</p> <p>NFPA Required Loose Equipment Provided by Fire Department</p> <p>The following loose equipment as outlined in NFPA 1900, 2024 edition, table 8.1 and CAN/ULC S515:2024 edition, section 5.2 will be provided by the fire department: One (1) traffic vest for each seating position, each vest to comply with ANSI/ISEA 207, <i>Standard for High Visibility Public Safety Vests</i>, and have a five-point breakaway feature that includes two (2) at the shoulders, two (2) at the sides, and one (1) at the front. Five (5) fluorescent orange traffic cones not less than 28.00" (711 mm) in height, each equipped with a 6.00" (152 mm) retro-reflective white band no more than 4.00" (152 mm) from the top of the cone, and an additional 4.00" (102 mm) retro-reflective white band 2.00" (51 mm) below the 6.00" (152 mm) band. Five (5) illuminated warning devices such as highway flares, unless the five (5) fluorescent orange traffic cones have illuminating capabilities.</p> <p>NFPA Loose Equipment That Should be Considered</p> <p>The following loose equipment as outlined in NFPA 1900, 2024 edition, appendix table A.8.4 (a) and CAN/ULC S515:2024 edition, section 5.2 should be considered: 800 ft (60 m) of 2.50" (65 mm) or larger fire hose. 400 ft (120 m) of 1.50" (38 mm), 1.75" (45 mm), or 2.00" (52 mm) fire hose. One (1) handline nozzle, 200 gpm (750 L/min) minimum. Two (2) handline nozzles, 95 gpm (360 L/min) minimum. One (1) smooth bore or combination nozzle with shutoff and with 2.50" (65 mm) inlet that flows a minimum of 250 gpm (950 L/min). Four (4) SCBA apparatus Four (4) SCBA spare cylinders One (1) first aid kit. Four (4) combination spanner wrenches. Two (2) hydrant wrenches. One (1) double female 2.50" (65 mm) adapter with national hose (NH) threads. One (1) double male 2.50" (65 mm) adapter with national hose (NH) threads. One (1) rubber mallet, for use on suction hose connections. Two (2) salvage covers each a minimum size of 12 ft x 18 ft (3.7 m x 5.5 m). One (1) automatic external defibrillator (AED).</p>
0816941	Soft Suction Hose, Provided by Fire Department, NFPA/ULC 2024	<p>SOFT SUCTION HOSE PROVIDED BY FIRE DEPARTMENT</p> <p>Hose is not on the apparatus as manufactured. The fire department will provide suction or supply hose.</p>
0027023	No Strainer Required	
0816939	Extinguisher, Dry Chemical, NFPA 2024, Provided by Fire Department	<p>DRY CHEMICAL EXTINGUISHER PROVIDED BY FIRE DEPARTMENT</p> <p>The extinguisher is not on the apparatus as manufactured. The fire department will provide and mount the extinguisher.</p>
0816937	Extinguisher, 2.5 Gal. Pressurized Water, NFPA/ULC 2024, Provided by Fire Dept	<p>WATER EXTINGUISHER PROVIDED BY FIRE DEPARTMENT</p> <p>The extinguisher is not on the apparatus as manufactured. The fire department will provide and mount the extinguisher.</p>
0816998	Axe, Flathead, Provided by Fire Department	<p>FLATHEAD AXE PROVIDED BY FIRE DEPARTMENT</p> <p>The axe is not on the apparatus as manufactured. The fire department will provide and mount the axe.</p>
0817000	Axe, Pickhead, Provided by Fire Department	<p>PICKHEAD AXE PROVIDED BY FIRE DEPARTMENT</p> <p>The axe is not on the apparatus as manufactured. The fire department will provide and mount the axe.</p>

PAINT PROCESS

The exterior custom cab and body painting procedure will consist of a seven (7) step finishing process as follows:

Manual Surface Preparation - All exposed metal surfaces on the custom cab and body will be thoroughly cleaned and prepared for painting. Imperfections on the exterior surfaces will be removed and sanded to a smooth finish. Exterior seams will be sealed before painting. Exterior surfaces that will not be painted include; chrome plating, polished stainless steel, anodized aluminum and bright aluminum treadplate.

Chemical Cleaning and Pretreatment - All surfaces will be chemically cleaned to remove dirt, oil, grease, and metal oxides to ensure the subsequent coatings bond well. The aluminum surfaces will be properly cleaned and treated using a high pressure, high temperature 4 step Acid Etch process. The steel and stainless surfaces will be properly cleaned and treated using a high temperature 3 step process specifically designed for steel or stainless. The chemical treatment converts the metal surface to a passive condition to help prevent corrosion.

Surfacer Primer - The Surfacer Primer will be applied to a chemically treated metal surface to provide a strong corrosion protective basecoat. A minimum thickness of 2 mils of Surfacer Primer is applied to surfaces that require a Critical aesthetic finish. The Surfacer Primer is a two-component high solids urethane that has excellent sanding properties and an extra smooth finish when sanded.

Finish Sanding - The Surfacer Primer will be sanded with a fine grit abrasive to achieve an ultra-smooth finish. This sanding process is critical to produce the smooth mirror like finish in the topcoat.

Sealer Primer - The Sealer Primer is applied prior to the Basecoat in all areas that have not been previously primed with the Surfacer Primer. The Sealer Primer is a two-component high solids urethane that goes on smooth and provides excellent gloss hold out when topcoated.

Basecoat Paint - Two coats of a high performance, two component high solids polyurethane basecoat will be applied. The Basecoat will be applied to a thickness that will achieve the proper color match. The Basecoat will be used in conjunction with a urethane clear coat to provide protection from the environment.

Clear Coat - Two (2) coats of Clear Coat will be applied over the Basecoat color. The Clear Coat is a two-component high solids urethane that provides superior gloss and durability to the exterior surfaces. Lap style and roll-up doors will be Clear Coated to match the body. Paint warranty for the roll-up doors will be provided by the roll-up door manufacturer.

After the cab and body are painted, the color will be verified to make sure that it matches the color standard. Electronic color measuring equipment will be used to compare the color sample to the color standard entered into the computer. Color specifications will be used to determine the color match. A Delta E reading will be used to determine a good color match within each family color.

All removable items such as brackets, compartment doors, door hinges, and trim will be removed and painted separately if required, to ensure paint behind all mounted items. Body assemblies that cannot be finish painted after assembly will be finish painted before assembly.

The paint finish quality levels for critical areas of the apparatus (cab front and sides, body sides and doors, and boom lettering panels) are to meet or exceed Cadillac/General Motors GMW15777 global paint requirements. Orange peel levels are to meet or exceed the #6 A.C.T. standard in critical areas. The manufacturer's written paint standards will be available upon request.

Environmental Impact

Contractor will meet or exceed all current state regulations concerning paint operations. Pollution control will include measures to protect the atmosphere, water and soil. Controls will include the following conditions:

Topcoats and primers will be chrome and lead free.

Metal treatment chemicals will be chrome free. The wastewater generated in the metal treatment process will be treated on-site to remove any other heavy metals.

Particulate emission collection from sanding operations will have a 99.99 percent efficiency factor.

Particulate emissions from painting operations will be collected by a dry filter or water wash process. If the dry filter is used, it will have an efficiency rating of 98 percent. Water wash systems will be 99.97 percent efficient.

Water from water wash booths will be reused. Solids will be removed on a continual basis to keep the water clean.

Paint wastes are disposed of in an environmentally safe manner.

Empty metal paint containers will be recycled to recover the metal.

Solvents used in clean-up operations will be recycled on-site or sent off-site for distillation and returned for reuse.

Additionally, the finished apparatus will not be manufactured with or contain products that have ozone depleting substances. Contractor will, upon demand, present evidence that the manufacturing facility meets the above conditions and that it is in compliance with his state EPA rules and regulations.

0709566

Paint, Two-Tone Color, Enforcer

TWO-TONE CAB PAINT

The cab will be painted two-tone with the upper section painted #101 black and the lower section painted #90 red. There will be a standard two-tone cab paint break provided.

There will be a standard cab shield provided.

0709833

Paint, Two-Tone Color, Body

TWO-TONE BODY PAINT

The body will be painted two-tone with the upper section painted to match the upper section of the cab and the lower section painted to match the lower section of the cab. The body paint break will be above the body compartment door openings.

0646901	Paint Chassis Frame Assy, With Liner, E-Coat, Standard	<p>PAINT CHASSIS FRAME ASSEMBLY</p> <p>The chassis frame assembly will be finished with a single system black top coat before the installation of the cab and body, and before installation of the engine and transmission assembly, air brake lines, electrical wire harnesses, etc.</p> <p>Components that are included with the chassis frame assembly that will be painted (unless otherwise stated in a secondary option) are:</p> <ul style="list-style-type: none"> Frame rails Frame liners Cross members Axles Suspensions Steering gear Battery boxes Bumper extension weldment Frame extensions Body mounting angles Rear Body support substructure (front and rear) Pump house substructure Steel fuel tank Castings <p>Individual piece parts used in chassis and body assembly</p> <p>Components treated with epoxy E-coat protection prior to paint:</p> <ul style="list-style-type: none"> Two (2) C-channel frame rails Two (2) frame liners <p>The E-coat process will meet the technical properties shown.</p>
0693798	Paint, Front Wheels	<p>FRONT WHEELS PAINT</p> <p>All wheel surfaces, inside and outside, will be provided with paint black #101.</p>
0693793	Paint, Rear Wheels, Single Axle	<p>REAR WHEELS PAINT</p> <p>All wheel surfaces, inside and outside, will be provided with paint black #101.</p>
0733739	Paint, Axle Hubs	<p>AXLE HUB PAINT</p> <p>All axle hubs will be painted to match lower job color.</p>
0007230	Compartment, Painted, Spatter Gray	<p>COMPARTMENT INTERIOR PAINT</p> <p>The interior of all compartments will be painted with a gray spatter finish for ease of cleaning and to make it easier to touch up scratches and nicks.</p>
0544129	Reflective Band, 1"-6"-1"	<p>REFLECTIVE STRIPES</p> <p>Three (3) reflective stripes will be provided across the front of the vehicle and along the sides of the body. The reflective band will consist of a 1.00" black stripe at the top with a 1.00" gap then a 6.00" black stripe with a 1.00" gap and a 1.00" black stripe on the bottom.</p>
0007356	Reflective across Cab Face	<p>The reflective band provided on the cab face will be at the headlight level.</p>
0820076	Stripe, Chevron, Rear, Reflective, NFPA/ULC 2024, Pumper, PUC	<p>REAR CHEVRON STRIPING</p> <p>There will be alternating chevron striping located on the rear-facing vertical surface of the apparatus. The rear surface, excluding the rear roll up door will be covered. The colors will be black and ruby red reflective. Each stripe will be 6.00" in width.</p>
0073811	Folded "Z" Ribbon in Reflective Stripe, Pair	<p>FOLDED RIBBON IN REFLECTIVE STRIPE</p> <p>There will be one (1) folded type ribbon/s added to the reflective stripe LS3 and RS3.</p>
0609444	SP Stripe, Sign Gold Outline Above Reflective Band	<p>SIGN GOLD STRIPE</p> <p>There will be a Sign Gold stripe applied above the reflective band. The sign gold stripes will be 1.00" wide with an outline.</p>
0512024	Stripe, Reflective, Chevron/Inverted "V", On Front Bumper	<p>CHEVRON/INVERTED "V" STRIPING ON THE FRONT BUMPER</p> <p>There will be alternating chevron striping located on the front bumper. The striping will consist of the following colors:</p> <ul style="list-style-type: none"> The first color will be black The second color will be ruby red <p>The size of the striping will be 6.00".</p>

0509398	Stripe, Reflective, Chevron, Cab and Crew Cab Doors Interior	<p>INVERTED "V" CHEVRON STRIPING ON CAB AND CREW CAB DOORS There will be alternating chevron striping located on the inside of each cab and crew cab door. The striping will consist of the following colors: The first color will be black The second color will be ruby red The size of the striping will be 6.00".</p>
0679822	Stripe, Sign Gold, Two-Tone Paint Break with Shield, IPO Chrome Molding	<p>CAB STRIPE There will be a Sign Gold stripe provided on both sides of the cab in place of the chrome molding and on the cab face with shield.</p>
0594559	Lettering Specifications, (Sign Gold Process)	<p>LETTERING The lettering will be 22 karat gold vinyl.</p>
0685931	Lettering, Sign Gold, 3.00", (61-80)	<p>LETTERING Sixty-one (61) to eighty (80) Sign Gold lettering, 3.00" high, with outline will be provided.</p>
0685744	Lettering, Sign Gold, 10.00", (1-20)	<p>LETTERING One (1) to twenty (20) Sign Gold lettering, 10.00" high, with outline will be provided.</p>
0685798	Lettering, Sign Gold, 6.00", (1-20)	<p>LETTERING One (1) to twenty (20) Sign Gold lettering, 6.00" high, with outline will be provided.</p>
0685817	Lettering, Sign Gold, 4.00", Each	<p>LETTERING There will be sign gold lettering, 4.00" high, with outline provided. There will be eight (8) letters provided.</p>
0695610	Emblem, Reflective, Per Dept. Submittal, Each	<p>EMBLEM There will be five (5) reflective emblem(s), approximately 14.00" - 16.00" in size, installed Crew doors, EMS compt. doors, and rear roll up door. the emblem will be modeled after the department submitted information (art, patch, etc).</p>
0769755	Emblem, Texas Flag Painted on Cab Grille, All Custom Chassis	<p>CAB GRILLE DESIGN A Texas flag design will be painted on the cab grille.</p>
0772003	Manual, Fire Apparatus Parts, USB Flash Drive, Custom	<p>FIRE APPARATUS PARTS MANUAL There will be one (1) custom parts manual(s) in USB flash drive format for the complete fire apparatus provided. The manual(s) will contain the following: Job number Part numbers with full descriptions Table of contents Parts section sorted in functional groups reflecting a major system, component, or assembly Parts section sorted in alphabetical order Instructions on how to locate parts Each manual will be specifically written for the chassis and body model being purchased. It will not be a generic manual for a multitude of different chassis and bodies. Service Parts Internet Site The service parts information included in these manuals are also available on the Pierce website. The website offers additional functions and features not contained in this manual, such as digital photographs and line drawings of select items. The website also features electronic search tools to assist in locating parts quickly.</p>

0772037	Manual, Chassis Service, USB Flash Drive, Custom	CHASSIS SERVICE MANUALS There will be one (1) chassis service manuals on USB flash drives containing parts and service information on major components provided with the completed unit. The manual will contain the following sections: Job number Table of contents Troubleshooting Front Axle/Suspension Brakes Engine Tires Wheels Cab Electrical, DC Air Systems Plumbing Appendix The manual will be specifically written for the chassis model being purchased. It will not be a generic manual for a multitude of different chassis and bodies.
0773381	Manual, Chassis Operation, (1) USB Flash Drive, Custom	CHASSIS OPERATION MANUAL The chassis operation manual will be provided on one (1) USB flash drive.
0030008	Warranty, Basic, 1 Year, Apparatus, WA0008	ONE (1) YEAR MATERIAL AND WORKMANSHIP A Pierce basic apparatus limited warranty certificate, WA0008, is included with this proposal.
0735523	Warranty, Engine, Paccar MX13, 5 Year, WA0386	ENGINE WARRANTY A Paccar five (5) year limited engine warranty will be provided. A limited warranty certificate is included with this proposal.
0684953	Warranty, Steering Gear, Sheppard M110, 3 Year WA0201	STEERING GEAR WARRANTY A Sheppard three (3) year limited steering gear warranty will be provided. A copy of the warranty certificate will be submitted with this proposal.
0596017	Warranty, Frame, 50 Year, Custom Chassis, WA0013	FIFTY (50) YEAR STRUCTURAL INTEGRITY The Pierce custom chassis frame only (does not include crossmembers) limited warranty certificate, WA0013, is included with this proposal.
0595698	Warranty, Axle, 3 Year, TAK-4, WA0050	FRONT AXLE THREE (3) YEAR MATERIAL AND WORKMANSHIP WARRANTY The Pierce TAK-4 suspension limited warranty certificate, WA0050, is included with this proposal.
0610485	Warranty, Axle, Eaton/Dana, 5 Year/100,000 Mile, Parts and Labor	REAR AXLE WARRANTY A Eaton five (5)-year/100,000 mile parts and labor warranty will be provided.
0652758	Warranty, ABS Brake System, 3 Year, Meritor Wabco, WA0232	ABS BRAKE SYSTEM THREE (3) YEAR MATERIAL AND WORKMANSHIP WARRANTY A Meritor Wabco™ ABS brake system limited warranty certificate, WA0232, is included with this proposal.
0019914	Warranty, Structure, 10 Year, Custom Cab, WA0012	TEN (10) YEAR STRUCTURAL INTEGRITY The Pierce custom cab limited warranty certificate, WA0012, is included with this proposal.
0744240	Warranty, Paint, 10 Year, Cab, Pro-Rate, WA0055	TEN (10) YEAR PRO-RATED PAINT AND CORROSION A Pierce cab limited pro-rated paint warranty certificate, WA0055, is included with this proposal.
0524627	Warranty, Electronics, 5 Year, MUX, WA0014	FIVE (5) YEAR MATERIAL AND WORKMANSHIP The Pierce Command Zone electronics limited warranty certificate, WA0014, is included with this proposal.
0695416	Warranty, Pierce Camera System, WA0188	CAMERA SYSTEM WARRANTY A Pierce fifty four (54) month warranty will be provided for the camera system.
0708760	Warranty, Not Applicable, LED Strip Lights	COMPARTMENT LIGHT WARRANTY The compartment lights will not offer an extended warranty.

0046369	Warranty, 5-year EVS Transmission, Standard Custom, WA0187	<p>TRANSMISSION WARRANTY The transmission will have a five (5) year/unlimited mileage warranty covering 100 percent parts and labor. The warranty will be provided by Allison Transmission. Note: The transmission cooler is not covered under any extended warranty you may be getting on your Allison Transmission. Please review your Allison Transmission warranty for coverage limitations.</p>
0685945	Warranty, Transmission Cooler, WA0216	<p>TRANSMISSION COOLER WARRANTY The transmission cooler will carry a five (5) year parts and labor warranty (exclusive to the transmission cooler). In addition, a collateral damage warranty will also be in effect for the first three (3) years of the warranty coverage and will not exceed \$10,000 per occurrence. A copy of the warranty certificate will be included with this proposal.</p>
0688798	Warranty, Water Tank, Lifetime, UPF, Poly Tank, WA0195	<p>WATER TANK WARRANTY A UPF poly water tank limited warranty certificate, WA0195, is included with this proposal.</p>
0596025	Warranty, Structure, 10 Year, Body, WA0009	<p>TEN (10) YEAR STRUCTURAL INTEGRITY The Pierce apparatus body limited warranty certificate, WA0009, is included with this proposal.</p>
0693126	Warranty, AMDOR, Roll-up Door, 10 Year/5 Year Painted, WA0185	<p>ROLL UP DOOR MATERIAL AND WORKMANSHIP WARRANTY An AMDOR roll-up door limited warranty will be provided. The roll-up door will be warranted against manufacturing defects for a period of ten (10) years. A five (5) year limited warranty will be provided on painted roll up doors. The limited warranty certificate, WA0185, is included with this proposal.</p>
0889364	Warranty, Pump, Pierce, PUC-NG, 7 Year Parts, 1 Year Labor, WA0390	<p>SEVEN (7) YEAR PARTS, ONE (1) YEAR LABOR The pump and its components will be provided with a seven (7) year parts and one (1) year labor limited warranty. The manufacturer's warranty will provide that the pump and its components will be free from failures caused by defects in material and workmanship that would arise under normal use and service. A copy of the warranty certificate will be submitted with the bid package.</p>
0648675	Warranty, 10 Year S/S Pumping, WA0035	<p>TEN (10) YEAR PUMP PLUMBING WARRANTY The Pierce apparatus plumbing limited warranty certificate, WA0035, is included with this proposal.</p>
0641372	Warranty, Foam System, Not Available	
0595820	Warranty, Paint, 10 Year, Body, Pro-Rate, WA0057	<p>TEN (10) YEAR PRO-RATED PAINT AND CORROSION A Pierce body limited pro-rated paint warranty certificate, WA0057, is included with this proposal.</p>
0595412	Warranty, Graphics Lamination, 1 Year, Apparatus, WA0168	<p>ONE (1) YEAR MATERIAL AND WORKMANSHIP The Pierce graphics fading and deterioration limited warranty limited warranty certificate, WA0168, is included with this proposal.</p>
0819254	Certification, Vehicle Stability, CD0196	<p>VEHICLE STABILITY CERTIFICATION The fire apparatus manufacturer will provide a certification stating the apparatus complies with NFPA 1900, current edition, section 7.14, Vehicle Stability. The certification is included with this proposal.</p>
0808565	Certification, Engine Installation, Enf, Paccar MX, 2027	<p>ENGINE INSTALLATION CERTIFICATION The fire apparatus manufacturer will provide a certification, along with a letter from the engine manufacturer stating they approve of the engine installation in the bidder's chassis. The certification will be provided at the time of delivery.</p>
0686786	Certification, Power Steering, CD0098	<p>POWER STEERING CERTIFICATION The fire apparatus manufacturer will provide a certification stating the power steering system as installed meets the requirements of the component supplier. The certification is included with this proposal.</p>

CAB INTEGRITY CERTIFICATION

The fire apparatus manufacturer will provide a cab crash test certification with this proposal. The certification will state that a specimen representing the substantial structural configuration of the cab has been tested and certified by an independent third party test facility. Testing events will be documented with photographs, real-time and high-speed video, vehicle accelerometers, cart accelerometers, and a laser speed trap. The fire apparatus manufacturer will provide a state licensed professional engineer to witness and certify all testing events. Testing will meet or exceed the requirements below:

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

European Occupant Protection Standard ECE Regulation No.29.

SAE J2420 COE Frontal Strength Evaluation - Dynamic Loading Heavy Trucks.

Side Impact

The cab will be subjected to dynamic preload where a 14,320-lb moving barrier is slammed into the side of the cab at 5.50 mph, striking with an impact of 13,000 ft-lb of force. This test is part of the SAE J2422 test procedure and more closely represents the forces a cab will see in a rollover incident.

Frontal Impact

The same cab will withstand a frontal impact of 32,600 ft-lb of force using a moving barrier in accordance with SAE J2420.

Additional Frontal Impact

The same cab will withstand a frontal impact of 65,098 ft-lb of force using a moving barrier. (Twice the force required by SAE J2420)

Roof Crush

The cab will be subjected to a roof crush force of 22,500 lb. This value meets the ECE 29 criteria, and is equivalent to the front axle rating up to a maximum of ten (10) metric tons.

Additional Roof Crush

The same cab will be subjected to a roof crush force of 110,000 lbs. (Four and a half times the load criteria of ECE 29)

The same cab will withstand all tests without any measurable intrusion into the survival space of the occupant area.

There will be no exception to any portion of the cab integrity certification. Nonconformance will lead to immediate rejection of bid.

0631973

Certification, Cab Door Durability,
Saber FR/Enforcer, CD0137**CAB DOOR DURABILITY CERTIFICATION**

Robust cab doors help protect occupants. Cab doors will survive a 200,000 cycle door slam test where the slamming force exceeds 20 G's of deceleration. The bidder will certify that the sample doors similar to those provided on the apparatus have been tested and have met these criteria without structural damage, latch malfunction, or significant component wear.

0631978

Certification, Windshield Wiper
Durability, Saber FR/Enforcer,
CD0132**WINDSHIELD WIPER DURABILITY CERTIFICATION**

Visibility during inclement weather is essential to safe apparatus performance. Windshield wipers will survive a 3 million cycle durability test in accordance with section 6.2 of SAE J198 *Windshield Wiper Systems - Trucks, Buses and Multipurpose Vehicles*. The bidder will certify that the wiper system design has been tested and that the wiper system has met these criteria.

0631974

Certification, Electric Window
Durability, Saber FR/Enforcer,
CD0133**ELECTRIC WINDOW DURABILITY CERTIFICATION**

Cab window roll-up systems can cause maintenance problems if not designed for long service life. The window regulator design will complete 30,000 complete up-down cycles and still function normally when finished. The bidder will certify that sample doors and windows similar to those provided on the apparatus have been tested and have met these criteria without malfunction or significant component wear.

0631977

Certification, Seat Belt Anchors and
Mounting, Saber FR/Enforcer,
CD0134**SEAT BELT ANCHOR STRENGTH**

Seat belt attachment strength is regulated by Federal Motor Vehicle Safety Standards and should be validated through testing. Each seat belt anchor design will withstand 3000 lb of pull on both the lap and shoulder belt in accordance with FMVSS 571.210 Seat Belt Assembly Anchorages.

The bidder will certify that each anchor design was pull tested to the required force and met the appropriate criteria.

SEAT MOUNTING STRENGTH

Seat attachment strength is regulated by Federal Motor Vehicle Safety Standards and should be validated through testing. Each seat mounting design will be tested to withstand 20 G's of force in accordance with FMVSS 571.207 Seating Systems. The bidder will certify, at time of delivery, that each seat mount and cab structure design was pull tested to the required force and met the appropriate criteria.

0735949	Certification, Cab HVAC System Performance, SFR/Enf, CD0165/CD0167/CD0174/CD0175	<p>PERFORMANCE CERTIFICATIONS</p> <p>Cab Air Conditioning Good cab air conditioning temperature and air flow performance keeps occupants comfortable, reduces humidity, and provides a climate for recuperation while at the scene. The cab air conditioning system will cool the cab from a heat-soaked condition at 100 degrees Fahrenheit to an average of 78 degrees Fahrenheit in 30 minutes. The bidder will certify that a substantially similar cab has been tested and has met these criteria.</p> <p>Cab Defroster Visibility during inclement weather is essential to safe apparatus performance. The defroster system will clear the required windshield zones in accordance with SAE J381 Windshield Defrosting Systems Test Procedure And Performance Requirements - Trucks, Buses, And Multipurpose Vehicles. <i>The bidder will certify that the defrost system design has been tested in a cold chamber and passes the SAE J381 criteria.</i></p> <p>Cab Auxiliary Heater <i>Good cab heat performance and regulation provides a more effective working environment for personnel, whether in-transit, or at a scene. An auxiliary cab heater will warm the cab 77 degrees Fahrenheit from a cold-soak, within 30 minutes when tested using the coolant supply methods found in SAE J381. The bidder will certify, at time of delivery, that a substantially similar cab has been tested and has met these criteria.</i></p>
0545073	Amp Draw Report, NFPA Current Edition	<p>AMP DRAW REPORT The bidder will provide, at the time of bid and delivery, an itemized print out of the expected amp draw of the entire vehicle's electrical system. The manufacturer of the apparatus will provide the following: Documentation of the electrical system performance tests. A written load analysis, which will include the following: The nameplate rating of the alternator. The alternator rating under the conditions specified per: Current edition of applicable NFPA standards. The minimum continuous load of each component that is specified per: Current edition of applicable NFPA standards. Additional loads that, when added to the minimum continuous load, determine the total connected load. Each individual intermittent load. All of the above listed items will be provided by the bidder per the current edition of applicable NFPA standards.</p>
0002758	Amp Draw, NFPA/ULC Radio Allowance	
0799248	Appleton/Florida BTO	
0000048	PUMPER/TANKER, 3rd Gen	
0000012	PIERCE CHASSIS	
0735525	PACCAR MX13 ENGINE	
0046396	EVS 4000 Series TRANSMISSION	
0520324	PIERCE PUMP, PUC	
0020009	POLY TANK	
0028047	NO FOAM SYSTEM	
0020006	SIDE CONTROL	
0020007	AKRON VALVES	
0020015	ABS SYSTEM	
0658751	PUMPER BASE	



Option List

12/17/2024

Customer: Westlake, TX Fire Department - Denton County
Representative Peters, Brian
Organization: Siddons-Martin Emergency Group
Requirements Manager:
Description: Westlake Enforcer PUC Pumper
Body: Pumper, PUC, Aluminum
Chassis: Enforcer Chassis, PUC-NG

Bid Number: 1165
Job Number:
Number of Units: 1
Bid Date: 10/31/2024
Stock Number:
Price Level: 51 (Current: 51)
Lane: Lane 1

Line	Option	Type	Option Description	Qty
1	0766589		Boiler Plates, PUC Pumper Fire Department/Customer - Westlake Fire Department Operating/In conjunction W-Service Center - In Conjunction Miles - 25 Miles Number of Fire Dept/Municipalities - 2 Bidder/Sales Organization - Siddons-Martin Delivery - Delivery representative Dealership/Sales Organization, Service - Siddons-Martin	1
2	0661794		Single Source Compliance	1
3	0584456		Manufacture Location, Appleton, Wisconsin	1
4	0584452		RFP Location: Appleton, Wisconsin	1
5	0588609		Vehicle Destination, US	1
6	0764706	SP	BMP Truck - Pre-Approval at Bid - Approved Option Will Be Required at Booking	1
7	0816491		Comply NFPA 1900 Changes Effective Jan 1, 2024, With Exceptions	1
8	0533347		Pumper/Pumper with Aerial Device Fire Apparatus	1
9	0588611		Vehicle Certification, Pumper	1
10	0661778		Agency, Apparatus Certification, Pumper/Tanker, U.L.	1
11	0816495		Certification, Vehicle Inspection Program, NFPA 1900	1
12	0000114		Inspection Trip(s) Qty, - 02 Fill in Blank - 3 Westlake personnel	2
13	0620362		Consortium, HGAC	1
14	0537375		Unit of Measure, US Gallons	1
15	0529326		Bid Bond, 10%, Pierce Built Chassis	1
16	0816569		Performance Bond, Not Requested, PPI Terms	1
17	0000007		Approval Drawing	1
18	0002928		Electrical Diagrams	1
19	0889378		Enforcer Chassis, PUC-NG	1
20	0000110		Wheelbase Wheelbase - 194.00"	1
21	0000070		GVW Rating GVW rating - 46,500	1
22	0729280		Frame Rails, 13.38 x 3.50 x .375, Enforcer	1
23	0889469		Frame Liner, "C/Inv L" 12.50" x 3.00" x .25", AXT/Vel/Imp/Enf, 56" QVal	1
24	0630705		Axle, Front, Oshkosh TAK-4, Non Drive, 19,500 lb, Enforcer	1
25	0030264		Suspension, Front TAK-4, 19,500 lb, Qtm/AXT/Imp/Vel/Enf/SFR	1
26	0087572		Shock Absorbers, KONI, TAK-4, Qtm/AXT/Imp/Vel/DCF/Enf	1
27	0000322		Oil Seals, Front Axle	1
28	0899438		Tires, Front, Goodyear, Armor MAX MSA, 425/65R22.50, 20 ply	1
29	0725046		Wheels, Front, 22.50" x 12.25", Steel, Hub Pilot, 24k	1
30	0640711		Axle, Rear, Dana S26-190, 27,000 lb Saber/Enforcer	1
31	0544253		Top Speed of Vehicle, 68 MPH /109 KPH	1
32	0565380		Suspen, Rear, Single Slipper Spring, 27,000 lb, Saber/Enforcer	1
33	0000485		Oil Seals, Rear Axle	1
34	0782552		Tires, Rear, Goodyear, Endurance RSA, 12R22.50, LRH, Single	1
35	0654806		Wheels, Rear, Accuride, 22.50" x 8.25", Steel, Hub Pilot, Single	1
36	0568081		Tire Balancing, Counteract Beads	1
37	0620570		Tire Pressure Monitoring, RealWheels, AirSecure, Valve Cap, Single Axle Qty, Tire Pressure Ind - 6	1
38	0801926		Lug Nut, Covers, Black	1
39	0002045		Mud Flap, Front and Rear, Pierce Logo	1

Line	Option	Type	Option Description	Qty
40	0544802		Chocks, Wheel, SAC-44-E, Folding, (Up to 44" Diameter Tires) Qty, Pair - 01	1
41	0544806		Mounting Brackets, Chocks, SAC-44-E, Folding, Horizontal Qty, Pair - 01 Location, Wheel Chocks - Left Side Rear Tire, Forward	1
42	0820509		ESC/ABS/ATC Wabco Brake System, Single Rear Axle, NFPA 1900/ULC	1
43	0030185		Brakes, Knorr/Bendix 17", Disc, Front, TAK-4	1
44	0627930		Brakes, Bendix, Cam, Rear, 16.50 x 8.63"	1
45	0735527		Air Compressor, Brake, Wabco 26.8 CI, Paccar	1
46	0644232		Brake Reservoirs, 4,272 Cubic Inch Minimum Capacity, Saber FR/Enforcer Paint Color, Air Tanks - Black #98	1
47	0568012		Air Dryer, Wabco System Saver 1200, Heater, 2010	1
48	0000790		Brake Lines, Nylon	1
49	0544415		Inlet/Outlet, Air, w/Disconnect Fitting, Location Location - DS Step Well Qty, Air Coupling (s) - 1	1
50	0014130		Air Tank, Additional for Extra Air Horn Capacity Paint Color, Air Tanks - Frame color	1
51	0808515		Engine, Paccar MX, 510HP, 1850 lb-ftW/OBD, EPA 2027, Saber FR/Enforcer	1
52	0811409		Not Required, Engine Contingency Adjustment	1
53	0001244		High Idle w/Electronic Engine, Custom	1
54	0735687		Engine Brake, Fully Integrated, Paccar MX13 Engine Switch, Engine Brake - MX13	1
55	0644227		Clutch, Fan, Air Actuated, Saber FR/Enforcer	1
56	0644573		Air Intake, Water & Ember Screen, Saber FR/Enforcer	1
57	0814375		Exhaust System, Horizontal, Right Side Exhaust, Diffuser - 4" x 5" x 7" (Premium) Exhaust, Material/Finish - Aluminized Steel (Standard) Location, Diffuser Termination - 2.00" Past Rub Rail (Standard) Tip, Exhaust - Straight Tip (Standard)	1
58	0816167	SP	Adapter, Exhaust, Plymovent Magnetic Grabber, for 6" or 7" Diffuser Outlet	1
59	0788765		Radiator, Saber FR/Enforcer	1
60	0001090		Cooling Hoses, Rubber	1
61	0794888		Fuel Tank, 65 Gallon, Left Side Fill, Door Finish Feature Finish - Painted, Job Color	1
62	0001129		Lines, Fuel	1
63	0889521		DEF Tank, 7.3 Gallon, LS Fill, Under Cab, Paccar, Lift Up Fill Dr, Spring, ENF Door, Material & Finish, DEF Tank - Painted	1
64	0552793		Not Required, Fuel Priming Pump	1
65	0552712		Not Required, Shutoff Valve, Fuel Line	1
66	0699437		Cooler, Chassis Fuel, Not Req'd.	1
67	0690880		No Selection Required From This Category	1
68	0801890		Trans, Allison 6th Gen, 4500 EVS P, w/Prognostics, Imp/Vel/Enf	1
69	0512762		Transmission, Shifter, 6-Spd, Push Button, 4500, Imp/Vel/Qtm/DCF/Enf Trans, ratio - 4500 EVS, 6Spd	1
70	0517604		Transmission Programming, Park to Neutral, PUC	1
71	0684459		Transmission Oil Cooler, Modine, External	1
72	0001375		Driveline, Spicer 1810	1
73	0734211		Steering, Sheppard M110 w/Tilt, TAK-4, Paccar Pump, w/Cooler, Paccar	1
74	0605356		Steering Wheel, 4 Spoke without Controls, Saber FR/Enforcer	1
75	0690274		Logo/Emblem, on Dash Text, Row (1) One - Westlake Text, Row (2) Two - Fire-EMS Text, Row (3) Three - Department	1
76	0606441		Bumper, 19" Extended, Steel Painted, Saber FR/Enforcer	1
77	0637813		Tray, Hose, Center, 19" Bumper, Outside Air Horns, 15" Deep, 13" Below/2" Above Grating, Bumper extension - Grating, Rubber Capacity, Bumper Tray - 21) 150' of 1.75"	1
78	0630813		Cover, Aluminum Treadplate, One (1) D-Ring Latch, Hose Tray Stay arm, Tray Cover - b) Pneumatic Stay Arm	1
79	0778092		Lift & Tow Package, Enforcer	1
80	0032932		Tow Eyes, Painted, Extended Out Front of Bumper	1

Line	Option	Type	Option Description	Qty
81	0698960		Coating, Top Flange, Front Bumper, Outside Exterior, UL-LX Coating, Black	1
82	0625646		Cab, Enforcer, 7010, PUC	1
83	0826074		Engine Tunnel, X12, MX13, Foil Insulation w/Mech Fasteners, Extreme Climate, Enf	1
84	0810166		Cab Insulation, Extreme Climate, Foil Insulation, Enforcer/Saber FR	1
85	0610508		Rear Wall, Interior, Adjustable Seating, Not Available	1
86	0632103		Rear Wall, Exterior, Cab, Saber FR/Enforcer	1
			Material, Exterior Rear Wall - Aluminum Treadplate	
87	0644201		Cab Lift, Elec/Hyd, Saber FR/Enforcer	1
88	0751129		Grille, Painted, Bright Finished Mesh Screen, Front of Cab, Enforcer	1
			Paint Color, Grille Surround - Black #101	
89	0647932		Not Required, Trim, S/S Band, Across Cab Face, AXT/Saber/Enforcer	1
90	0015440		No Chrome Molding, On side of cab	1
91	0829403	SP	Mirrors, Retractable, West Coast Style, Htd/Rmt, w/Htd/Rmt Convex, Painted Blk #101	1
92	0648172		Door, Full Height, Saber FR/Enforcer 4-Door Cab, Raised Roof	1
			Key Model, Cab Doors - 751	
			Cab, Exterior Door Handle, Finish - 4-Door, Black	
93	0655543		Door Panel, Brushed Stainless Steel, Saber/Enforcer 4-Door Cab	1
94	0617333		Controls, Electric Roll-Up Windows, 4dr, 2 Frt Elect, 2 Driver Control, SFR/Enf	1
95	0749512	SP	Steps, 4-Door Cab, Painted Black Step Wells, Saber FR/Enforcer	1
96	0770198		Handrail, Exterior, Hansen, Knurled, Alum, LED Backlit, Black, 4-Dr Cab	1
			Color, Handrail Light - Red	
			Control, Handrail Light - Parking Brake and Cab Switch LS	
97	0892638		Lights, Cab & Crw Cab Accts Stps, P25, LED w/Bezel, 6lts	1
			Color, Trim - Black Housing	
98	0057836		Crowns, Front Fender, Rubber, TAK-4	1
99	0771672		Handrail, 10", Below Cab Windshield, Hansen Knurled, LED Backlit, Black, Pair	1
			Color, Handrail Light - Red	
			Control, Handrail Light - Body Handrail Controls	
100	0042105		No Windows, Side of Crew Cab	1
101	0012090		Not Required, Windows, Front/Side of raised roof	1
102	0779033		Not Required, Windows Rear of Crew Cab, Saber FR/Enforcer	1
103	0722796		Dash, Poly, Saber FR/Enforcer	1
104	0773925	SP	Partition Below Shelf, Equipment Mounting, Crew Cab	1
			Location - Mounted on forward side of the 2 shelves between the rear facing EMS cabinets. Similar to 36426	
			Qty, - 01	
			Material Finish, Cab Interior - Painted	
105	0607217		Mounting Provisions, 3/16" Alum, Full Engine Tunnel, Saber FR/Enforcer	1
			Mounting Provision Spacing - 1.00"	
			Material Finish, Cab Interior - Painted	
106	0817141		Hook, Coat, Heavy Duty, Non-NFPA 2024	2
			Location - Above PAC TRAC on back wall of cab	
			Qty, - 02	
107	0664351		Pac Trac, Installed in Cab/Crew Cab	2
			Location - (1) each side of forward facing seats on back wall	
			Qty, - 02	
108	0606282		Shelf, Equipment Mounting, Aluminum, Lip, Size	2
			Location - Between rear facing EMS cabinets. Similar to 36426.	
			Qty, - 02	
			Size - to fit between the EMS compartments one as low as possible on engine tunnel and the other 12" above it. Similar to job #36426	
			Material Finish, Cab Interior - Painted	
			Lip - 2.00"	
109	0826219		Mounting Provisions, Computer, Tray, S/S, Straps, Slides, No Sides, Locking	1
			Location - Officer side dash	
			Qty, - 01	
110	0750824		Cab Interior, Vinyl Headliner, Saber FR/Enforcer, CARE	1
			Color, Cab Interior Vinyl/Fabric - Endure Vinyl - Black	
			Engine Tunnel Cover - Black Endure Vinyl	
			Cab Interior Rear Wall Material - Painted Aluminum	
111	0753903		Cab Interior, Paint Color, Saber FR/Enforcer	1
			Color, Cab Interior Paint - d) red	
112	0888673		Floor, Rubber Padded, Cab & Crew Cab, Blister, Enforcer PUC-NG	1

Line	Option	Type	Option Description	Qty
113	0819166		HVAC, Extreme-Duty, Enforcer, Paccar, CARE Paint Color, A/C Condenser - Painted to Match Cab Roof HVAC System, Filter Access - Tool Free Panel Auxiliary Cab Heater - Both HVAC System, Control Loc. - Panel Position #13	1
114	0677382		Guard, Brush, Painted, For Coleman A/C Unit, Cab Roof	1
115	0787034		Air Conditioning, Coleman-Mach 8, Roughneck, 120V, 15K, 6K Heat, Cab Roof,Black Thermostat - Coleman ceiling unit AC Power Source - Shoreline	1
116	0639675		Sun Visor, Smoked Lexan, AXT, Imp/Vel, SFR/Enf Sun Visor Retention - Thumb Latch	1
117	0634328		Grab Handles, Driver and Officer Door Posts, Saber FR/Enforcer	1
118	0668638		Lights, Engine Compt, Custom, Auto & Manual Switch, WIn 3SC0CDCR, 3" LED, Trim Qty, - 01	1
119	0631830		Fluid Check Access, Saber FR/Enforcer, Arrow XT Latch, Door, Storage - Southco C2 Black Flush	1
120	0583042		Side Roll and Frontal Impact Protection	1
121	0622619		Seating Capacity, 4 Belted Seats	1
122	0636955		Seat, Driver, Pierce PSV, Air Ride, High Back, Safety, PRIMARY, SFR/Enf	1
123	0632926		Seat, Officer, Pierce PSV, Air Ride, SCBA, Safety, PRIMARY, SFR/Enf	1
124	0002517		Not Required, Radio Compartment	1
125	0822580		Cabinet, Rear Facing, LS, 23 W x 39 H x 26.75 D, Web, Ext Acc, SFR/Enf Light, Short Cabinet - Amdor, Interior, White, Right Side Scuffplate, Material/Finish - S/S, Brushed Material Finish, Shelf - Painted - Cab Interior Shelf/Tray, Cabinet - (1) Shelf, Adjustable, 0.75" Up-Turned Lip Door, Cab Exterior Cabinet - Double Pan, Non-Locking Door, Exterior Stop - Stay Arm Louvers, Cabinet - 0-No Louvers Fastener, Web, Cab Cabinet - 1" Side Release, Top	1
126	0102783		Not Required, Seat, Rr Facing C/C, Center	1
127	0822239		Cabinet, Rear Facing, RS, 22 W x 39 H x 26.75 D, Web, Ext Acc, SFR/Enf Light, Short Cabinet - Amdor, Interior, White, Left Side Scuffplate, Material/Finish - S/S, Brushed Material Finish, Shelf - Painted - Cab Interior Shelf/Tray, Cabinet - (1) Shelf, Adjustable, 0.75" Up-Turned Lip Door, Cab Exterior Cabinet - Double Pan, Non-Locking Door, Exterior Stop - Stay Arm Louvers, Cabinet - 0-No Louvers Fastener, Web, Cab Cabinet - 1" Side Release, Top	1
128	0108189		Not Required, Seat, Forward Facing C/C, LS Outboard	1
129	0819392		Seat, Fwd Fcng C/C, Ctr, (2) Pierce PSV, SCBA, Safety, 5.5" Sp, PRIMARY, SFR/Enf	1
130	0108190		Not Required, Seat, Forward Facing C/C, RS Outboard	1
131	0042923		Netting, Cargo, Ship Loose Location - between the 2 shelves between EMS compartments rear facing Qty, - 1	1
132	0761572	SP	Compt, Storage, Forward Facing, Overhead, 88 W x 10 H x 9 D, Saber FR/Enf Latch, Storage Compt - a) Non Locking Qty, Compt Door - (3) Light, Overhead Compt - Pierce, Horizontal Mounted	1
133	0629833		Compt, Storage, (2) Rear Facing, Overhead, 21 W x 10 H x 20 D, Saber FR/Enforcer Latch, Storage Compt - b) Locking Light, Overhead Compt - Pierce, Horizontal Mounted	1
134	0766467		Upholstery, Seats In Cab, All Vinyl, Seats Inc, CARE Color, Cab Interior Vinyl/Fabric - Endure Vinyl - Black Qty, - 04	4
135	0543991		Bracket, Air Bottle, Hands-Free II, Cab Seats Qty, - 03	3
136	0690610		Embroidery, Seats, Cab and Crew Cab Qty, Seats Embroidery - 4 Seats	1

Line	Option	Type	Option Description	Qty
137	0603866		Seat Belt, Dual Retractor, ReadyReach, Saber FR/Enforcer	1
			Seat Belt Color - Red	
138	0817557		Helmet Storage, Provided by Fire Department, NFPA/ULC 2024	1
139	0647647		Lights, Dome, FRP Dual LED 4 Lts	1
			Color, Dome Lt - Red & White	
			Color, Dome Lt Bzl - Black	
			Control, Dome Lt White - Door Switches and Lens Switch	
			Control, Dome Lt Color - Lens Switch	
140	0896451		Enhanced Software for Cab and Crew Cab Dome Lts	1
141	0816997		Portable Hand Light, Provided by Fire Dept, NFPA/ULC 2024	1
142	0622803		Cab Instruments, Black Gauges, Black Bezels, Enforcer MUX	1
			Emergency Switching - Individual Switches	
143	0509511		Air Restriction Indicator, Imp/Vel, AXT, Dash CF, Enf MUX	1
144	0543751		Light, Do Not Move Apparatus	1
			Alarm, Do Not Move Truck - Pulsing Alarm	
145	0509042		Messages, Open Dr/DNMT, Color Dsply,	1
146	0622798		Switching, Cab Instrument Lower Console & Overhead, Rocker MUX, Enforcer	1
147	0802940		Wiper Control, 2-Speed with Intermittent, Saber FR/Enforcer	1
			Location, Wiper Control - Standard Location	
148	0821266		Wiring, Spare, 20 A 12V DC, 12 Ckt FB, Blue Sea 5026 Batt Dir 2nd NFPA1900/ULC	1
			12vdc power from - Battery direct	
			Location - Mounted as low as possible between the forward facing seats.	
149	0821298		Wiring, Spare, 12V DC, USB-A, USB-C AlfredDireck Batt Dir 1st NFPA1900/ULC	2
			Qty, - 02	
			12vdc power from - Battery direct	
			Location - LOC #12	
150	0820904		Wiring, Spare, 15 A 12V DC 1st NFPA1900/ULC	2
			Qty, - 02	
			12vdc power from - Ignition power	
			Wire termination - Butt Splice	
			Location, Spare Wiring - Officer Dash and Center Console	
151	0821263		Wiring, Spare, 20 A 12V DC, 12 Ckt FB, Blue Sea 5026 Batt Dir 1st NFPA1900/ULC	1
			12vdc power from - Battery direct	
			Location - Exterior forward wall of EMS cabinet behind officer, mounted as low as possible.	
152	0821325		Wiring, Spare, 10 A 12V DC 1st NFPA1900/ULC	1
			Qty, - 01	
			12vdc power from - Ignition power	
			Wire termination - Butt Splice	
			Location - LOC #4	
153	0814201		Vehicle Information Center, 7" Color Display, Touchscreen, MUX, CL714	1
			System Of Measurement - US Customary	
154	0816633		Collision Mitigation, HAAS Alert (R2V), HA7	1
			Subscription, HAAS R2V - R2V - 5 Year Data Plan Subscription	
155	0820299		Seat Belt Monitor w/CZ Display, NFPA1900/ULC	1
156	0696439		Antenna Mount, Custom Chassis, Cable Routed to Instrument Panel Area	1
			Qty, - 01	
			Location, Antenna Mount - Right Side	
157	0817058		Camera, Pierce, LS Mux, R Camera, SD, CL714	1
			Camera System Audio - Not Provided	
158	0814831		Not Required, Camera Switcher	1
159	0523921		Recess, Rear Vision Camera	1
			Location, Camera, Recessed - Center Rear	
160	0677933		Camera System, CSS, Body to Waterproof Pump Panel 7" LCD Display	1
			Location - Right side of body above crosslays	
161	0890416		Pierce Command Zone, Advanced Electronics & Control System, Enforcer, WiFi CZT	1
			Color, Antenna - Black Antenna	
			Module Housings - Black Housing with Power and Status Ind	
162	0896456		Prognostics, Electrical System	1
163	0624253		Electrical System, Enforcer MUX	1
164	0079211		Batteries, (6) Stryten/Exide Grp 31, 950 CCA each, Threaded Stud	1
165	0008621		Battery System, Single Start, All Custom Chassis	1

Line	Option	Type	Option Description	Qty
166	0002698		Battery Compartment, Saber/Enforcer	1
167	0813848		Charger, Sngl Sys, IOTA, DLS-75, 75 amp, IQ4 Controller	1
168	0814869		Location, Cab, Charger, Behind Driver Seat	1
169	0813791		Panel, Charger Display, Kussmaul, 091-94-12, Batt Dir	1
170	0814939		Location, Cab, Ind/Remote, Driver's Seat Riser	1
171	0816871		Inverter, Xantrex Freedom X, 817-1000, Non-NFPA 2024 Batt Sw	1
172	0814953		Location, Body, Inverter, LS Forward Compartment	1
			Location, Comp Body - High On Back Wall	
173	0016857		Shoreline, 20A 120V, Kussmaul Auto Eject, 091-55-20-120, Super	1
			Qty, - 01	
			Color, Kussmaul Cover - b) red	
			Shoreline Connection - Battery Charger	
174	0026800		Shoreline Location	1
			Location, Shoreline(s) - DS Cab, Frt Corner	
175	0097486		Shoreline Inlet, 20A 120V Kussmaul Auto Eject, "Super"	1
			Location - DS front cab corner	
			Qty, - 01	
			Color, Kussmaul Cover - b) red	
			Connection, Shoreline - Coleman AC	
176	0647728		Alternator, 430 amp, Delco Remy 55SI	1
177	0092582		Load Manager/Sequencer, MUX	1
			Enable/Disable Hi-Idle - e)High Idle enable	
178	0724853		Headlights, Rect LED, HiViz FT-4X6-4KIT, AXT/DCF/Enf/Imp/Sab/Vel, Trim	1
			Color, Headlight Housing and Trim - Black Painted Housing and Trim	
179	0625953		Light, Directional, Wln 600 Cmb, Cab Crn, Wrp Bzl Out HD Lts, Enf/Sab	1
			Color, Lens, LED's - c)clear	
180	0620054		Light, Directional/Marker, Intermediate, Weldon 9186-8580-29 LED 2lts	1
181	0735474		Lights, Clearance/Marker/ID, Front, P25 LED 7 Lts, Saber FR/Enforcer	1
			Light Guard - No Guards	
182	0625210		Lights, Directional, Cab Front Side, Truck-Lite 19036Y LED, AXT/Enf	1
183	0088869		Lights, Clearance/Marker/ID, Rear, Truck-Lite 26250R LED 7Lts	1
184	0804519		Lights, Tail, Wln M62BTT* Red Stop/Tail & M62T* Amber Dir Arw w/Flange	1
			Color, Lens, LED's - Clear	
			Color, Trim - Black Trim	
			Flash Pattern, Directional Lts - Steady On (Arrow)	
185	0806466		Lights, Backup, Wln M62BU, LED, For Tail Lt Housing	1
186	0889577		Bracket, License Plate & Light, P25 LED, Stainless Brkt	1
			Color, Trim - Black Housing	
187	0589905		Alarm, Back-up Warning, PRECO 1040	1
188	0626588		Lights, Perimeter Cab, TecNiq T10-LC00-1 15" LED 4Dr	1
189	0617901		Lights, Perimeter Pump House, TecNiq T10-LC00-1 15" LED 2lts	1
190	0626579		Lights, Perimeter Body, TecNiq T10-LC00-1 15" LED 2lts, Rear Step	1
			Control, Perimeter Lts - Parking Brake Applied, Reverse Signal	
			Activation, DS Directional Light to DS Side Lts and PS Directional Light to PS	
			Side Lts	
191	0896454		Enhanced Software for Perimeter Lts	1
192	0729151	SP	Lights, Step, P25 at Rear Tailboard, PUC, 4lts Perm Lts, Blk Trim	1
193	0760447		Light, Roof Mt, HiViz, FT-B-72-*-* , Cnt Feature, Mux	1
			Control, Scene Lts - Cab Sw Panel DS and Cab Sw Panel PS	
			Color, Lt Housing HiViz - Black	
			Scene Light Optics - Flood/Spot	
194	0736731		Lights, HiViz FT-GESM LED 1st	1
			Location - Above DS EMS cabinet door	
			Qty, - 01	
			Control, Scene Lts - Cab Sw Panel DS, Pump Panel Sw LS and Cab Sw	
			Panel PS	
			Color, Lt Housing HiViz - Blk Opt Hold, Blk Bez, Blk Fix	
195	0736729		Lights, HiViz FT-GESM LED 2nd	1
			Location - Above PS EMS cabinet door	
			Qty, - 01	
			Control, Scene Lts - Cab Sw Panel DS, Pump Panel Sw LS and Cab Sw	
			Panel PS	
			Color, Lt Housing HiViz - Blk Opt Hold, Blk Bez, Blk Fix	

Line	Option	Type	Option Description	Qty
196	0733336		Lights, HiViz FT-GESM* LED 2nd Location - PS front upper body corner and rear upper body corner Qty, - 02 Control, Scene Lts - RS Scene Lts Color, Lt Housing HiViz - Blk Opt Hold, Blk Bez, Blk Fix	2
197	0733343		Lights, HiViz FT-GESM* LED 1st Location - DS front upper body corner and rear upper body corner Qty, - 02 Control, Scene Lts - LS Scene Lts Color, Lt Housing HiViz - Blk Opt Hold, Blk Bez, Blk Fix	2
198	0532358		Not Required, Deck Lights, Other Hose Bed & Rear Lighting	1
199	0893593		Lights, Hose Bed, Below Alum Cvr, Dual LED Light Strips Control, Hose Bed Lts - Cup Switch At Rear SS	1
200	0645677		Lights, Not Required, Rear Work, Alt. 12 Volt Lights At Rear Body	1
201	0743346		Lights, Rear Scene, HiViz FT-GSMJR-*, Surface Mt Location, Lights - DS and PS rear bulkheads as high as possible Qty, - 02 Control, Rear Scene Lts - Cab Switch Panel DS and Body Switch, DS Rear Bulkhead SS Color, Trim - Black Trim & Optic Holder	2
202	0892704		Lights, Walk Surf, 8-P25 LED, Hose Bed Cover, Overall Height Restrictions Color, Trim - Chrome Housing	1
203	0518282		Pumper, PUC, Aluminum	1
204	0554271		Body Skirt Height, 20"	1
205	0682617		Tank, Water, 750 Gallon, Poly, 67 LHB, PUC	1
206	0003405		Overflow, 4.00" Water Tank, Poly	1
207	0028107		Not Required, Foam Cell Modification	1
208	0633066		Sleeve, Through Tank Qty, Sleeve - 3 Water Tank Sleeve - Plumbing/Hydraulic Diameter - 2.50" Plumbing	3
209	0553725		Restraint, Water Tank, Heavy Duty, Special Type Tank, 4x4, or Export	1
210	0003429		Not Required, Direct Tank Fill	1
211	0003424		Not Required, Dump Valve	1
212	0048710		Not Required, Jet Assist	1
213	0030007		Not Required, Dump Valve Chute	1
214	0514778		Not Required, Switch, Tank Dump Master	1
215	0597043		Body Height, PUC/HDRP Body Height - 92.00"	1
216	0683290		Hose Bed, Aluminum, Pumper, PUC, 67 LHB	1
217	0723340		Unpainted/Brush Finished, Hose Bed, 3G PUC/HDRP	1
218	0003481		Hose Bed Capacity, Special Capacity, Hosebed - Bay 1: 400' of 3" Bay 2: 800' of 5" Bay 3: 300' of 1.75" Bay 4: 300' of 2" Bay 5: 400' of 2"	1
219	0003488		Divider, Hose Bed, Unpainted Qty, Hosebed Dividers - 2	2
220	0805760		Cover, Hose Bed, Alum Treadplate	1
221	0807414		Hose Restraint, Hose Bed, Vinyl, Rear, Separate From Top, Split 2-Sec, Seat Belt Color, Vinyl Cover - c) black location - between bay 1 and bay 2 Vinyl Flap Weight - Not Weighted Color, Strap - Red Release, Seat Belt Buckle - Two Bars Fastener, Rear Restraint, At Split - No Fasteners Fastener, Rear Restraint, Bottom - Permanent Strap Footman Loop	1
222	0518191		Hose Tray, Poly, Removable, Hose Bed, Basic Location - far right side of hose bed, bay 3 and bay 4. See job #37591 Qty, - 02 Size - Full length of hose bed and 7" wide inside tray. Bay 3 - Build for 350' of 1.75" hose double stacked Bay 4 - Build for 350' of 2.0" hose double stacked	2

Line	Option	Type	Option Description	Qty
223	0097958		Shelf, Permanent, Hose Bed Location - 2" above poly trays at right side of hose bed.	1
224	0611509		Running Boards, Flip Out, PUC	1
225	0683043		Tailboard, 12" Deep, Full Width, Angled Corners, PUC/HDRP	1
226	0690029		Wall, Rear, Body Material, PUC/HDRP	1
227	0003531		Tow Bar, Under Tailboard	1
228	0656764		Construction, Compt, Alum, Pumper, PUC	1
229	0503804		LS 189" Rollup, (1) 62" Fwd, (1) 52" Rr, Full Height & Depth Front & Rear, PUC Width, PUC Pump Operators Panel Partition - 2.5"	1
230	0503803		RS 189" Rollup, (1) 62" Fwd, (1) 52" Rr, Full Height & Depth Front & Rear, PUC	1
231	0594005		Doors, Rollup, Amdor, Side Compartments Qty, Door Accessory - 06 Color, Roll-up Door - AMDOR Painted to Match Lower Body Latch, Roll-up Door - Non-Locking Liftbar	6
232	0599445		Compt, Rear, Rollup, 33.50" FF, w/Tailboard, PUC/HDRP	1
233	0593958		Door, Amdor, Rollup, Rear Compartment, PUC Color, Roll-up Door - AMDOR Painted to Match Lower Body Latch, Roll-up Door - Non-Locking Liftbar	1
234	0611794		Trim, Rollup Door, Painted Door Color, Amdor Location, Door Accessory - All body compartments and crosslay doors Qty, - 08	8
235	0768509		Lights, Compt, Amdor AY-LB-12HW0** LED, Dual Lt Strip Qty, - 07	7
236	0594766		189" Hatch, (2) Lift-up, 21" Wide, RS Only, PUC/HDRP Size, Hatch Compt, Height - 22.00" Trim, Body/Hatch Compt Seam, Horizontal - Painted Formed Aluminum Trim, Body/Hatch Compt Seam, Vertical, PUC - Painted Extrusion Matting, Floor, Hatch Compt - Rubber Matting	1
237	0732644		Handrails, (3), Hatch Step Area, Straight, Hansen Knurled Alum LED Backlit,Black Switch, Handrail Light Control - With Cab Hand Rail Controls Color, Light, Hansen Handrail - Red	1
238	0893291		Lights, Pump Cargo/Dunnage Forward Over Tank, Dual LED Light Strips, Each Side Control, Scene Lts - Hose Bed Light Sw	1
239	0687145		Shelf Tracks, Recessed, PUC/3rd Generation	1
240	0600350		Shelves, Adj, 500 lb Capacity, Full Width/Depth, Predefined Locations Qty, Shelf - 04 Material Finish, Shelf - Painted - Spatter Gray Location, Shelves/Trays, Predefined - RS1-Centered Right of Partition, RS1-Upper Third Right of Partition, LS1-Centered and LS3-Upper Third	4
241	0667235		Cable, Single Hand Operation, Tilt/Slide Out, Utility Trays Location - Tilt-out trays in LS2 and RS2 Qty, Tray (slide-out) - 03	3
242	0601834		Tray, 215 lb, Tilt/Slide-Out, 30 Deg, Adj, Max Width/Depth, 3G Location - RS2 - Centered LS2 - Upper Third LS2 - as close to the floor as possible Qty, Tray (slide-out) - 03 Finish - Painted, Compt Interior, Spatter Gray	3
243	0647091		Tray, Floor Mounted, Slide-Out, 500lb, 2.00" Sides Qty, - 02 Location, Tray Slide-Out, Floor Mounted - RS1 and LS1 Material Finish, Tray - Painted - Spatter Gray	2
244	0725644		Cabinet, Drawer Assembly, CTECH, Three Drawers, Up To 24" Wide, 24" Deep Qty, - 01 Location - Floor of LS3 Size, Drawer Height 1 (Top) - 3.00" Size, Drawer Height 2 - 6.75" Size, Drawer Height 3 - 8.75"	1
245	0617454		Toolboard, Slide-out, Alum, .188", Peg Board, Painted, 3G, Slides Top and Bottom location - RS3 Qty - 2 Mounting, Toolboard - Adjustable side-side	2
246	0654369		Recess, Partition, Right of Pump Operator's Panel, PUC	1

Line	Option	Type	Option Description	Qty
247	0797957		Pac Trac, Installed on Compartment Wall, Back Wall Only Location - Upper wall of LS3 Qty, Comp. Accessory - 01	1
248	0695412		Rack, Air Bags Inside Compartment, 2-Slot Location - RS1 Compartment to serve as a divider between Little Giant and remaining compartment. Size - Full height of compartment from floor to ceiling and 12" from left wall. Rack will be 3" wide (outside width). Each slot will be evenly in size vertically (27.25" tall). Finish - Painted, Spatter Gray	1
249	0775959		Strap, Nylon w/Velcro Hook & Loop, 2" wide Location - (1) for each air bag slot Qty, - 02	2
250	0899067		Rub Rail, Black Plastic w/.50" Spacer, Body Sides, Light Cut Outs	1
251	0653982		Fender Crowns, Rear, Rubber, w/Removable Fender Liner, Pumper, 3G Material Finish, Fender Liner - Painted Aluminum Lower Body	1
252	0519849		Not Required, Hose, Hard Suction	1
253	0759459		Handrails Located @ Front Body, Hansen Knurled Alum LED Backlit, Black Switch, Handrail Light Control - With Cab Hand Rail Controls Color, Light, Hansen Handrail - Red	1
254	0759458		Handrails, Rear, Hansen Tubing, Knurled Aluminum, LED Backlit, Black, PUC Switch, Handrail Light Control - With Cab Hand Rail Controls Color, Light, Hansen Handrail - Red	1
255	0764331		Handrail, Rear, Below Hose Bed, Full Width,Hansen,Knurled Alum LED Backlit,Black Switch, Handrail Light Control - Park Brake Color, Light, Hansen Handrail - Red	1
256	0753717		Handrail, Extra - 15-20" Long, Hansen Tubing, Knurled Alum LED Backlit, Black Location, Handrails - DS upper rear bulkhead, left of the hose bed Qty, Handrails - 01 Switch, Handrail Light Control - With Cab Hand Rail Controls Color, Light, Hansen Handrail - Red	1
257	0816729		Compt, Extinguisher (2) Fender Panel, Triangular Door, 8"/8.5"Dia Location, Bracket/comp. - RS rear of wheels Qty, - 1 Door Finish, Fender Compt - Painted Latch, Air Bottle Compt - Southco C2 Black Raised Insert, Air Bottle Compt - Dura-Surf Lining	1
258	0657522		Compt, Air Bottle, Triple, Fender Panel Qty, Air Bottle Comp - 2 Door Finish, Fender Compt - Painted Location, Fender Compt - Triple - LS Fwd and Triple - RS Fwd Latch, Air Bottle Compt - Southco C2 Black Raised Insert, Air Bottle Compt - Dura-Surf Lining	2
259	0004225		Ladder, 24' Duo-Safety 900A 2-Section	1
260	0004230		Ladder, 14' Duo-Safety 775A Roof	1
261	0638382		Rack, Ladders, LS Full Depth Body, PUC/HDRP Door, Material & Finish, Ladder Storage - smooth aluminum Latch, Door Ladder Storage - D-Handle latch	1
262	0733387		Ladder, 10' Duo-Safety Folding 585A	1
263	0733005		Compt w/Trough, Folding Ladder, In Upper Body, LS Door, Material & Finish, Storage - Smooth Aluminum Latch, Door, Storage - Southco C2 Black Raised Hinge Location - Outboard	1
264	0802284		Little Giant/Werner Ladder Storage, Vertical In Compartment Ladder, Make/Model - Little Giant Revolution 2.0 Model 17 Location Within Compartment - left of the air bag rack partition Location, Compartment, Predefined - RS1	1
265	0816920		Pike Pole, Provided by Fire Department, NFPA/ULC 2024 Qty, - 02 Pike Pole Make/Model - Fire Hooks Unlimited 8' Roof Hook	2
266	0816918		Pike Pole, 6', Provided by Fire Department, NFPA/ULC 2024 Qty, - 02 Pike Pole Make/Model - Fire Hooks Unlimited New York Roof Hook, RH-6	2

Line	Option	Type	Option Description	Qty
267	0732992		Tube, Pike Pole 6', In Upper Body Long Tool Storage Compt Qty, Pike Poles - 2 Location, Left Side, Right Side - Left Side Material/Finish, Tube, Pike Pole - Aluminum Width, Notch, Pike Pole Tube - 1.38", NY Notch	2
268	0768409		Compt, Long Tools, Thru Body Compts, Right Side Dimensions - 14" wide Door, Material & Finish, Storage - Smooth Aluminum Latch, Door, Storage - Southco C2 Black Raised Hinge Location - Outboard	1
269	0521734		No Steps Required, Front Of Body, PUC	1
270	0724124		Steps, Folding, Rear of Body, w/LED, Trident, Black Powder Coat, PUC/HDRP Coating, Step - black	1
271	0724149		Step, Folding - Extra, Body Only, w/LED, Trident, Black Powder Coat Qty, Folding Step - 02 Location, Additional Step - DS rear bulkhead to access upper long tool storage Coating, Step - black	2
272	0515692		Pump Operators Panel, 31", Control Zone, PUC	1
273	0520016		Not Required, Pumphouse Structure, PUC	1
274	0889383		Pump, Pierce, 2000 GPM, Single Stage, PUC-NG	1
275	0515822		Seal, Mechanical, Silicon Carbide, PUC Pump	1
276	0889382		Gear Case, Integrated Pump Transmission, PUC-NG, Paccar	1
277	0721196		Pumping Mode, Pump and Roll/Stationary, Basic, MUX, PUC	1
278	0515829		Pump Shift, Sure-Shift	1
279	0515833		Transmission Lock-up, Not Req'd, Park to Neutral, Pump, PUC	1
280	0515835		Auxiliary Cooling System, PUC	1
281	0014486		Not Required, Transfer Valve, Single Stage Pump	1
282	0746508		Valve(s), Relief Intake, Trident Air Max, Control Location Qty - 1 Pressure Setting - 125 psig Intake Relief Valve Control - Left Side Pump Panel	1
283	0724463		Controller, Pressure, Pierce LCD, PUC Pressure Governor Throttle Control - Clockwise Pressure Governor Default Mode - No Mode/Default Press Setting	1
284	0072153		Primer, Trident, Air Prime, Air Operated	1
285	0780359		Manuals, Pump, (2) Total, Electronic Copies, Pierce PUC Pump	1
286	0602496		Plumbing, Stainless Steel and Hose, Single Stage Pump, PUC	1
287	0089437		Plumbing Without Foam System	1
288	0517852		Inlets, 6.00" - 1250-2000 GPM, Pierce PUC Pump	1
289	0014650		Pump Suction Tube(s), Short, All	1
290	0004646		Cap, Main Pump Inlet, Long Handle, NST, VLH	1
291	0084610		Valves, Akron 8000 series- All	1
292	0520002		Valve, Inlet(s) Recessed, Side Cntrl, PUC Qty, Inlets - 1	1
293	0004700		Control, Inlet, at Valve	1
294	0004660		Inlet (1), Left Side, 2.50"	1
295	0029147		Not Required, Inlet, Right Side	1
296	0521137		Anode, Zinc, Pair, Pump Inlets, PUC	1
297	0092569		No Rear Inlet (Large Dia) Requested	1
298	0064116		No Rear Inlet Actuation Required	1
299	0092696		Not Required, Cap, Rear Inlet	1
300	0009648		No Rear Intake Relief Valve Required on Rear Inlet	1
301	0092568		No Rear Auxiliary Inlet Requested	1
302	0723049		Valve, .75" Bleeder, Aux. Side Inlet, "T" Swing Handle	1
303	0520277		Tank to Pump, (1) 3.00" Valve, 4.00" Plumbing, PUC	1
304	0595508		Outlet, Tank Fill, 1.50", PUC	1
305	0766941		Control, Outlets, Swing Handle, Elec Right Outlets Akron 9335 w/Press Disp, PUC	1
306	0516755		Outlet, Left Side, 2.50" (2), PUC	1
307	0055095		Not Required, Elbow, Left Side Outlets, 2.50"	1
308	0092570		Not Required, Outlets, Left Side Additional	1
309	0035094		Not Required, Elbow, Left Side Outlets, Additional	1

Line	Option	Type	Option Description	Qty
310	0766761		Outlet, Right Side, 2.50", (1), Electric Akron 9335 Controller, PUC Qty, Discharges - 01	1
311	0021134		Not Required, Elbow, Right Side Outlets, 2.50"	1
312	0092571		Not Required, Outlets, Right Side Additional	1
313	0089584		Not Required, Elbow, Right Side Outlets, Additional	1
314	0818640		Outlet, Large Diameter, Right Side, Akron Valve, PUC Outlet, Large Diameter, Plumbing - 4.00" Outlet, Large Diameter, NST Adapter - 4.00" MNST Outlet, Large Diameter, Valve Actuation - PUC Akron 9335 w/PSI	1
315	0699320		Adapter, 4.00" FNST x 5.00" Storz, w/Cap and Chain, PUC Qty, - 1	1
316	0649939		Outlet, Front, 1.50" w/2" Plumbing Fitting, Outlet - 1.50" NST with 90 degree swivel Drain, Front Outlet - Automatic Location, Front, Single - in center bumper tray	1
317	0516777		Outlet, Rear, 2.50", (1), Thru Tank, PUC Qty, Discharges - 01 Location, Outlet - b) left side	1
318	0045091		Elbow, Rear Outlets, 45 Degree, 2.50" FNST x 2.50" MNST, VLH	1
319	0516782		Outlet, Rear, 2.50" w/2.50" Plumbing, Thru Tank, PUC, Additional Qty, Discharges - 02 Location, Outlet - g) two (2) right side	2
320	0536635		Elbow, Rear Outlets, 45 Degree, 2.50" FNST x 2.50" MNST, VLH, PUC, Additional Qty, Discharges - 02	2
321	0752097		Caps/Plugs for 1.00" to 3.00" Discharges/Inlets, Chain	1
322	0723042		Valve, 0.75" Bleeder, Discharges, "T" Swing Handle	1
323	0753335		Outlet, 3.00" Deluge w/2.50" Valve, Dual Control, LG HW's, PUC	1
324	0770359		No Monitor Requested, Customer/Dealer Furnished and Installed Fill in Blank - TFT Crossfire	1
325	0029304		No Nozzle Req'd	1
326	0005070		Deluge Mount, NPT	1
327	0750982		Crosslay Module, Full Width, Roll Up Doors, PUC	1
328	0750897		Doors, Crosslay, Roll-up Amdor, Each End, Full Height, PUC Color, Roll-up Door - Paint to Match Rear Body Paint Break Latch, Roll-up Door - Non-Locking Liftbar Drip Pan - Drip Pan Required	1
329	0747660		Lights, Crosslay Compt, Forward LED, 2Lts	1
330	0737370		Crosslays, (1) 2.50", W/Poly Trays, PUC Crosslay/Deadlay/Speedlay Capacity 1 - 200' of 3" DJ Hose	1
331	0749435		Crosslays, (2) 1.50", W/Poly Trays, PUC Crosslay/Deadlay/Speedlay Capacity 1 - 200' of 1.75" double jacket hose	1
332	0729571		Tube, Aluminum, Pike Pole, Special Ny Style Notch, Upper Crosslay Module, PUC Qty, Pike Pole Tubes - 02 Location, Tube - (1) deployed out DS and (1) deployed out PS	2
333	0653355		Reel, Booster, Steel, Rear Tailboard Compartment, PUC/HDRP Finish, Reel - Painted Gray	1
334	0005279		Switch, Reel Rewind - One at Reel	1
335	0005300		Hose, Booster - 150' of 1.00"/800 PSI	1
336	0005244		Capacity, Hose Reel 200' of 1"	1
337	0007428		Nozzle for Booster Reel Not Req'd	1
338	0044333		Not Required, Foam System	1
339	0012126		Not Required, CAF Compressor	1
340	0552517		Not Required, Refill, Foam Tank	1
341	0042573		Not Required, Foam System Demonstration	1
342	0045465		Not Required, Foam Tanks	1
343	0091110		Not Required, Foam Tank Drain	1
344	0091079		Not Required, Foam Tank #2	1
345	0091112		Not Required, Foam Tank #2 Drain	1
346	0738072		Approval Dwg, Pump Panel(s), Not Required	1
347	0032479		Pump Panel Configuration, Control Zone	1
348	0686774		Material, Pump Panels, Operators Black UL-LX, Sides Black UL-LX, PUC	1
349	0516978		Pump and Plumbing Access, Simple Tilt Service, PUC	1

Line	Option	Type	Option Description	Qty
350	0618458		Light, Pump Compt, WIn 3SC0CDCR LED White, PUC Qty, - 01	1
351	0516983		Gauges, Engine, Included With Pressure Controller, PUC	1
352	0005601		Throttle, Engine, Incl'd w/Press Controller	1
353	0739224		Indicator Light @ Pump Panel, Throttle Ready, Incl w/Pressure Gov/Throttle,Green	1
354	0549333		Indicators, Engine, Included with Pressure Controller	1
355	0511078		Gauges, 4.00" Master, Class 1, 30"-0-600psi	1
356	0511100		Gauge, 2.00" Pressure, Class 1, 30"-0-400psi	1
357	0750526		Gauge, Water Level, Pierce, In pressure Controller, Lt Driver	1
358	0604028		Water Level Gauge, FRC, MaxVision WLA280-A00 Programmable Remote Display Location - Each side of cab behind crew doors up high Qty, - 02 Activation, Water Level G - b) battery switched	2
359	0006774		Not Required, Foam Level Gauge	1
360	0653081		Light, Pump Operator & Panel, Side Ctrl, PUC, 60354C LED Cab & LED OH Chr Cvr	1
361	0828301	SP	Air Horn, (2) Hadley, 6" Round, 21.00", eTone, Black, In Bumper	1
362	0606834		Location, Air Horns, Bumper, Each Side, Outside Frame, Inboard (Pos #2 & #6)	1
363	0757092		Control, Air Horn, Multi Select	1
364	0757077		Control, Air Horn, Lanyard, LS Lanyard - Link Chain, Vinyl Tubing	1
365	0757076		Control, Air Horn, Lanyard, RS Lanyard - Link Chain, Vinyl Tubing	1
366	0525667		Siren, WIn 295SLSA1, 100 or 200 Watt	1
367	0510206		Location, Elect Siren, Recessed Overhead In Console Location, Elec Siren - Overhead, DS Center Sw Pnl	1
368	0748306		Control, Elec Siren, Multi Select	1
369	0748287		Control, Elec Siren, Rocker/Membrane Sw, RS	1
370	0805709		Control, Elec Siren, Horn Ring, Interlock Control, Interlocks - Prk Brk Released	1
371	0783670		Speaker, (2) WIn, SA315P, w/Pierce Black Painted Grille, 100 watt Connection, Speaker - siren head	1
372	0601559		Location, Speaker, Frt Bumper, Recessed, Each Side, Inside Frame (Pos 3 & 5)	1
373	0895310		Siren, Federal Q2B Finish, Q2B Siren - Black Chrome	1
374	0006095		Siren, Mechanical, Mounted Above Deckplate Location, Siren, Mech - a) Left	1
375	0748305		Control, Mech Siren, Multi Select	1
376	0748282		Control, Mech Siren, Ft Sw LS	1
377	0729537		Control Mech Siren, Rocker Momentary On, Brake RS	1
378	0737437		Sw, Siren Brake, Momentary Red, Pnl 9, Saber FR/Enf	1
379	0734674		Sw, Siren Brake, Mom Rocker, Red Outline, RS Overhead Sw Pnl, Mux	1
380	0746353		Not Required, Warning Lights Intensity	1
381	0807805		Lightbar, WIn, Freedom IV-D, 72", RRRRWRRROptRRRWRRRR Opticom Priority - b) High Opticom Activation - Cab Switch & E-Master Momentary Opticom Activation - DS Switch Filter, Whl Freedom Ltbrs - No Filters	1
382	0016380		No Additional Lights Req'd, Side Zone Upper	1
383	0734071		Lights, Front Zone, WIn M6** M6** M6** M6** LED, Q Bzl, 4lts Color, Lens, LED's - Clear Color, Lt DS Frnt Outside - Left Red Color, Lt PS Frnt Outside - Right Red Color, Lt DS Front Inside - Left Red Color, Lt PS Front Inside - Right Red Color, Q Bezel and Trim - Black	1
384	0826917		Light, Front, Roto Ray 4000W, PAR46 LED, 2-R, 1-W,Hdn Mt Tp Sct Grl Blk,VoidWrnt	1
385	0653937		Flasher, Headlight Alternating Headlt flash deactivation - a)w/high beam	1
386	0747228		Lights, Side Zone Lower, WIn M6**, M6**, M6**, 6Lts Location, Lights Front Side - b)each side bumper Color, Lens, LED's - Clear	1

Line	Option	Type	Option Description	Qty
386			Location, Lights Mid Side - Rearward of Crew Cab Doors Location, Lights Rear Side - Over Rear Wheels Color, Trim - Black Trim Color, Lt Side Front, DS - Red Color, Lt Side Front, PS - Red Color, Lt Side Mid DS - Red Color, Lt Side Mid PS - Red Color, Lt Side Rear PS - Red Color, Lt Side Rear DS - Red	
387	0896616		Lights, Door Interior Flash, 4 Dr Cab, Weldon 8401-0000-20 Strip Light Control, Door Int Flash - Ignition Switch Location, Light, Door Int Flash - Over Window	1
388	0815847		Connectors, Door Interior Flash, All Cabs, Weatherproof	1
389	0827630		Lights, Side, WIn WION* LED, Recessed in Cab Steps, 4lts Control, Light - b) side warning Color, Lt Side Front, DS - Left Red SB Color, Lt Side Front, PS - Right Red SB Color, Lt Side Rear PS - Right Red SB Color, Lt Side Rear DS - Left Red SB	1
390	0745867		Lights, Side, WIn M9** LED, Trm Fet 1st Location, Lights - DS and PS front upper body corners Qty, - 02 Color, Lights, Warning - Green Control, Light - b) side warning Color, Lens, LED's - Clear Color, Trim - Black Trim	2
391	0804023		Lights, Side, WIn WIONSM** LED, Mounted Behind Poly Rub Rail, 1st Location, Lights - Centered below LS1, LS3, RS1, RS3 Qty, - 04 Color, Lights, Warning - gla) red Control, Light - b) side warning Color, Trim - Black Trim	4
392	0894842		Lights, Rear Zn Lwr, WIn M6*, For Tail Lt Housings Color, Lens, LED's - Clear Color, Lt DS Rear - r) DS Rear Lt Red Color, Lt PS Rear - r) PS Rear Lt Red	1
393	0747386		Lights, Rear, WIn 6RB** LED, Features 1st Location - DS and PS rear bulkheads below M9 warning lights Color, Light - ae) red Qty, - 02 Control, Light - a) rear upper warning Color, Lens, LED's - c)clear Color, Trim - Black Trim	2
394	0725515		Lights, Rear/Side Up Zone, WIn M9*C LED, Clear Lens, Flange Kit, 4lts Flange Kit - Black Color, Lt, Side Rear Upper DS - Side Rear Upper Red Color, Lt, Side Rear Upper PS - Side Rear Upper Red Color, Lt, Rear Upper DS - r) DS Rear Upper Red Color, Lt, Rear Upper PS - r) PS Upper Rear Red	1
395	0006551		Not Required, Lights, Rear Upper Zone Blocking	1
396	0590000		No Hose Bed Warn Lts Brkts Required, Lts On Hatch/Body Compts,PUC	1
397	0751112		Lights, Traffic Directing, WIn TLIA Amber LED, 8 Lts, TACTL5 Activation, Traffic Dir L - Aux Flash with Emergency Master Color, Trim - Black Trim	1
398	0791018		Location, TDL, Surface Mounted, Hose Bed Cover Rear Flange	1
399	0530288		Location, Traf Dir Lt Controller, Overhead Recessed Console, above Eng Tnl DS	1
400	0772909		Light Twr, W-B Chf NS2.3-600 WHL, 4-P*H2, 12VDC Lts Cld 7.5' Color, Tower, Wlb - White Paint Scene Light Optics - Flood/Spot	1
401	0664471		Location, Light Tower, Cargo Area	1
402	0617750		Controller, Lt Twr, W-B, Wired Hndhld, E-STOP Chf, Chf Pr, Pow Pr	1
403	0782222		Location, Light Tower Controller, PUC Pump Panel Area, Recess Rear Wall	1
404	0779707		Receptacle Strip, 20A 120V 6-Place, Interior Body Qty, - 01	1

Line	Option	Type	Option Description	Qty
404			Location 1 - RS1 on right wall centered from floor to ceiling	
405	0783678		AC Power Source - Shoreline to Inverter Internal Transfer Sw Receptacle, 15/20A 120V 3-Pr 3-Wr, NEMA 5-20R SB Dup, 1st	2
			Location, Receptacles - Interior on inboard wall, up high of LS/RS rear facing EMS cabinets	
			Qty, - 02	
			AC Power Source - Shoreline to Inverter Internal Transfer Sw	
			Cover, Receptacle - Interior SS Wall Plate(s)	
406	0519934		Not Required, Brand, Hydraulic Tool System	1
407	0649753		Not Required, PTO Driven Hydraulic Tool System	1
408	0816508		NFPA Required Loose Equipment, Pumper, NFPA/ULC 2024, Provided by Fire Dept	1
409	0816941		Soft Suction Hose, Provided by Fire Department, NFPA/ULC 2024	1
410	0027023		No Strainer Required	1
411	0816939		Extinguisher, Dry Chemical, NFPA 2024, Provided by Fire Department	1
412	0816937		Extinguisher, 2.5 Gal. Pressurized Water, NFPA/ULC 2024, Provided by Fire Dept	1
413	0816998		Axe, Flathead, Provided by Fire Department	1
414	0817000		Axe, Pickhead, Provided by Fire Department	1
415	0741569		Paint Process / Environmental Requirements, Appleton	1
416	0709566		Paint, Two-Tone Color, Enforcer	1
			Paint Color, Upper Area, Predefined - #101 Black	
			Shield, Cab - Standard Shield	
			Paint Color, Lower Area, Predefined - #90 Red	
			Paint Break, Cab - Standard Two-Tone Cab Break	
417	0709833		Paint, Two-Tone Color, Body	1
			Paint Break, Body - Above Body Compt Doors	
			Paint, Lower Body - Match Cab Lower	
			Paint, Upper Body - Match Cab Upper	
418	0646901		Paint Chassis Frame Assy, With Liner, E-Coat, Standard	1
			Paint Color, Frame Assembly, Predefined - Standard Black	
419	0693798		Paint, Front Wheels	1
			Paint, Wheels - Black #101	
420	0693793		Paint, Rear Wheels, Single Axle	1
			Paint, Wheels - Black #101	
421	0733739		Paint, Axle Hubs	1
			Paint, Axle Hub - Lower Job Color	
422	0007230		Compartment, Painted, Spatter Gray	1
423	0544129		Reflective Band, 1"-6"-1"	1
			Color, Reflect Band - A - e) black	
			Color, Reflect Band - B - p) black	
			Color, Reflect Band - C - za) black	
424	0007356		Reflective across Cab Face	1
425	0820076		Stripe, Chevron, Rear, Reflective, NFPA/ULC 2024, Pumper, PUC	1
			Color, Reflect Band - A - e) black	
			Color, Reflect Band - B - n) ruby red	
426	0073811		Folded "Z" Ribbon in Reflective Stripe, Pair	1
			Location - LS3 and RS3	
			Qty, - 1	
427	0609444	SP	Stripe, Sign Gold Outline Above Reflective Band	1
428	0512024		Stripe, Reflective, Chevron/Inverted "V", On Front Bumper	1
			Color, Reflect Band - A - c) ruby red	
			Size, Chevron Striping - 06	
			Color, Reflect Chev - A - e) black	
429	0509398		Stripe, Reflective, Chevron, Cab and Crew Cab Doors Interior	1
			Color, Reflect Band - B - n) ruby red	
			Size, Chevron Striping - 06	
			Color, Reflect Chev - A - e) black	
430	0679822		Stripe, Sign Gold, Two-Tone Paint Break with Shield, IPO Chrome Molding	1
431	0594559		Lettering Specifications, (Sign Gold Process)	1
432	0685931		Lettering, Sign Gold, 3.00", (61-80)	1
			Outline, Lettering - Outline	
433	0685744		Lettering, Sign Gold, 10.00", (1-20)	1
			Outline, Lettering - Outline	

Line	Option	Type	Option Description	Qty
434	0685798		Lettering, Sign Gold, 6.00", (1-20) Outline, Lettering - Outline	1
435	0685817		Lettering, Sign Gold, 4.00", Each Qty, Lettering - 08 Outline, Lettering - Outline	8
436	0695610		Emblem, Reflective, Per Dept. Submittal, Each Qty, - 05 Location, Emblem - Crew doors, EMS compt. doors, and rear roll up door Size, Dept Seal, Reflect - 14" - 16"	5
437	0769755		Emblem, Texas Flag Painted on Cab Grille, All Custom Chassis	1
438	0772003		Manual, Fire Apparatus Parts, USB Flash Drive, Custom Qty, - 01	1
439	0772037		Manual, Chassis Service, USB Flash Drive, Custom Qty, - 01	1
440	0773381		Manual, Chassis Operation, (1) USB Flash Drive, Custom	1
441	0030008		Warranty, Basic, 1 Year, Apparatus, WA0008	1
442	0735523		Warranty, Engine, Paccar MX13, 5 Year, WA0386	1
443	0684953		Warranty, Steering Gear, Sheppard M110, 3 Year WA0201	1
444	0596017		Warranty, Frame, 50 Year, Custom Chassis, WA0013	1
445	0595698		Warranty, Axle, 3 Year, TAK-4, WA0050	1
446	0610485		Warranty, Axle, Eaton/Dana, 5 Year/100,000 Mile, Parts and Labor	1
447	0652758		Warranty, ABS Brake System, 3 Year, Meritor Wabco, WA0232	1
448	0019914		Warranty, Structure, 10 Year, Custom Cab, WA0012	1
449	0744240		Warranty, Paint, 10 Year, Cab, Pro-Rate, WA0055	1
450	0524627		Warranty, Electronics, 5 Year, MUX, WA0014	1
451	0695416		Warranty, Pierce Camera System, WA0188	1
452	0708760		Warranty, Not Applicable, LED Strip Lights	1
453	0046369		Warranty, 5-year EVS Transmission, Standard Custom, WA0187	1
454	0685945		Warranty, Transmission Cooler, WA0216	1
455	0688798		Warranty, Water Tank, Lifetime, UPF, Poly Tank, WA0195	1
456	0596025		Warranty, Structure, 10 Year, Body, WA0009	1
457	0693126		Warranty, AMDOR, Roll-up Door, 10 Year/5 Year Painted, WA0185	1
458	0889364		Warranty, Pump, Pierce, PUC-NG, 7 Year Parts, 1 Year Labor, WA0390	1
459	0648675		Warranty, 10 Year S/S Pumbing, WA0035	1
460	0641372		Warranty, Foam System, Not Available	1
461	0595820		Warranty, Paint, 10 Year, Body, Pro-Rate, WA0057	1
462	0595412		Warranty, Graphics Lamination, 1 Year, Apparatus, WA0168	1
463	0819254		Certification, Vehicle Stability, CD0196	1
464	0808565		Certification, Engine Installation, Enf, Paccar MX, 2027	1
465	0686786		Certification, Power Steering, CD0098	1
466	0892691		Certification, Cab Integrity, Saber FR/Enforcer, CD0189	1
467	0631973		Certification, Cab Door Durability, Saber FR/Enforcer, CD0137	1
468	0631978		Certification, Windshield Wiper Durability, Saber FR/Enforcer, CD0132	1
469	0631974		Certification, Electric Window Durability, Saber FR/Enforcer, CD0133	1
470	0631977		Certification, Seat Belt Anchors and Mounting, Saber FR/Enforcer, CD0134	1
471	0735949		Certification, Cab HVAC System Performance, SFR/Enf, CD0165/CD0167/CD0174/CD0175	1
472	0545073		Amp Draw Report, NFPA Current Edition	1
473	0002758		Amp Draw, NFPA/ULC Radio Allowance	1
474	0799248		Appleton/Florida BTO	1
475	0000048		PUMPER/TANKER, 3rd Gen	1
476	0000012		PIERCE CHASSIS	1
477	0735525		PACCAR MX13 ENGINE	1
478	0046396		EVS 4000 Series TRANSMISSION	1
479	0520324		PIERCE PUMP, PUC	1
480	0020009		POLY TANK	1
481	0028047		NO FOAM SYSTEM	1
482	0020006		SIDE CONTROL	1
483	0020007		AKRON VALVES	1
484	0020015		ABS SYSTEM	1
485	0658751		PUMPER BASE	1



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Customer Info:

Westlake Fire Dept., Town of
 1500 Solana Blvd.
 Suite 7200
 Roanoke, TX, 76262
 USA

Document Info:

Quote #: 700-0021515
 Taken By: Tyler Ramsey
 Expiration Date: 01/09/2025

Item #	Description	Quantity / Unit	Unit Price	Amount
254735	SENSIT COMBUSITBLE GAS INDICATOR 50,000 PPM SENSIT	1.00 / EA	1,005.00	1,005.00
254735	HONEYWELL Multi-Gas Detector: IP65, HONEYWELL RAE Systems MinRAE Lite, Lithium Ion, CO/H2S/O2, LCD MULTIRAE	1.00 / EA	2,790.00	2,790.00
254735	ROTHCO BINOCULARS 10X55MM RTH-10266	1.00 / EA	75.00	75.00
182615	SURVIVOR 120V/100V AC/12V DC ORANGE SLI-90503	4.00 / EA	143.00	572.00
002943	E-FLOOD LITEBOX VEHICLE MOUNT SYSTEM 12V DC w/SHOULDER STRAP & DIRECT WIRE RACK ORANGE SLI-45805	2.00 / EA	230.00	460.00
252826	FIREPRO 300 THERMAL IMAGING CAMERA MES-FQ-AAAX	4.00 / EA	999.00	3,996.00
254735	Seek FirePRO Retractor MES-RR-CAA	4.00 / EA	40.00	160.00
254518	ATTACKPRO+ (NFPA) CAMERA (2) BATTERIES (1) DESKTOP BATTERY CHARGER MES-FQ-PANX-SEEK	1.00 / EA	3,999.00	3,999.00
154754	6# FLATHEAD AXE HICKORY HANDLE FHU-WA-6	1.00 / EA	72.50	72.50
254735	Fire Maul Reaper, 32" composite handle, red FIRE MAUL	1.00 / EA	220.00	220.00
154702	30" PRO BAR FORCIBLE ENTRY HALLIGAN TYPE BAR FHU-PB-30	1.00 / EA	285.00	285.00



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154722	10# SLEDGEHAMMER FIBERGLASS-HANDLE 32"- OVERALL 34" FHU-SHF-10	1.00 / EA	56.25	56.25
254735	Fire Maul, 32" composite handle, black Fire Maul	1.00 / EA	220.00	220.00
154583	24" BOLT CUTTERS FHU-BC-24	1.00 / EA	82.50	82.50
084300	51" PRY BAR 3FE95	1.00 / EA	65.78	65.78
154714	6' NY ROOF HOOK FIBERGLASS POLL FHU-RH-6	1.00 / EA	135.00	135.00
166643	LOCKWOOD HOOK OAL 6' FLAT BLACK w/CHISEL END LHT-LWHB-6	1.00 / EA	156.55	156.55
154720	8' NY ROOF HOOK STEEL FHU-RH-8	1.00 / EA	145.50	145.50
154709	10' NY ROOF HOOK STEEL FHU-RH-10	1.00 / EA	169.50	169.50
254735	FHU 4' COLORADO HOOK COLORADO HOOK-4	1.00 / EA	172.50	172.50
154651	K-TOOL LEATHER POUCH TWO LOCK TOOLS KEYS SHOVE KNIFE & INSTRUCTIONS ON THROUGH THE LOCK METHODS FHU-KTKIT	1.00 / EA	180.00	180.00
069659	18" RIGID ALUMINUM PIPE WRENCH 31100	1.00 / EA	105.00	105.00
254735	GRAINGER 36" WATER KEY 34A511	1.00 / EA	17.00	17.00
191518	BIG EASY GLO DELUXE KIT LOCK OUT WIT-32955DLX	1.00 / EA	102.00	102.00



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167326	LS-PIG-33-B-NOTCHED LS-PIG-33-B-NOTCHED	1.00 / EA	217.00	217.00
167332	LS-PLET-B LS-PLET-B	1.00 / EA	210.00	210.00
241473	HAND HELD HOSE ROLLER TFT-A3820	1.00 / EA	217.00	217.00
242559	ADJ HYDRANT WRENCH DBL HEAD SPANNER -FG- KOC-K05-P18	3.00 / EA	52.00	156.00
159305	(4) HSSW-101 SPANNERS w/HOLDER HAR-HSSW-401	3.00 / EA	152.00	456.00
159304	2.5" - 5" SINGLE END SPANNER HAR-HSSW-101	2.00 / EA	37.00	74.00
246989	2 WRENCH HOLDER BRACKET ONLY ZINC SPC-WH7601-2	3.00 / EA	59.00	177.00
254735	ZICO SCBA BRACKET ZIA-UN-6-30-3-SF-CRS	1.00 / EA	90.00	90.00
254735	COLLIION RESTRAINT STRAP ZIA-CRS	1.00 / EA	73.00	73.00
254735	.5" TOOL CLIP ZIA-CL .50	1.00 / EA	27.00	27.00
186504	BLIND CAP 5" STORZ w/LANYARD STORZ LOCK NOT INCLUDED TFT-A01ST	1.00 / EA	130.00	130.00
186503	BLIND CAP 4" STORZ w/LANYARD STORZ LOCK NOT INCLUDED TFT-A01SP	1.00 / EA	103.00	103.00



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135605	ADAPTER 2.5" NHM x 2.5" NHM RIGID MALE TO RIGID MALE TFT-AA6NJ-NJ	1.00 / EA	44.00	44.00
135601	ADAPTER 2.5" NHF x 1.5" NHM RIGID FEMALE ROCKER LUG TO RIGID MALE TFT-AA5NJ-NF	1.00 / EA	47.00	47.00
134877	ADAPTER 1.5" NHF x 1.5" NHF SWIVEL ROCKER LUG TO SWIVEL ROCKER LUG TFT-AA7NF-NF	1.00 / EA	70.00	70.00
186512	HYDRANT ADAPTER 4.5" NHF x 5" STORZ w/5.0" STORZ BLIND CAP & LANYARD TFT-A04NR-ST	1.00 / EA	291.00	291.00
186511	HYDRANT ADAPTER 4" NHF x 5" STORZ w/5" STORZ BLIND CAP & LANYARD TFT-A04NP-ST	1.00 / EA	437.00	437.00
165883	5" STZ w/LOCK x 4" STZ w/LOCK -FG- KOC-S60S54-H52	1.00 / EA	233.00	233.00
241580	ADAPTER 2.5" NHF x 2.5" NHF SWIVEL ROCKER LUG TO SWIVEL ROCKER LUG TFT-AA7NJ-NJ	1.00 / EA	78.00	78.00
241566	ADAPTER 1.5"NHM x 1.5"NHM RIGID MALE TO RIGID MALE TFT-AA6NF-NF	1.00 / EA	43.00	43.00
135601	ADAPTER 2.5" NHF x 1.5" NHM RIGID FEMALE ROCKER LUG TO	1.00 / EA	47.00	47.00



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	RIGID MALE			
	TFT-AA5NJ-NF			
254735	ELBOW, 2.5" NH F X 2.5" NH M TFT-AH5NJ-NJ	1.00 / EA	236.00	236.00
151863	STANDPIPE BAG KIT ELK-80035001	1.00 / EA	1,430.00	1,430.00
154595	CONNECTION MALLET FHU-CM-2	1.00 / EA	23.00	23.00
187109	HE BLITZFIRE COMBO PKG 2.5"NH MONITOR/ BRACKET/MAX-FORCE/3- STACK	1.00 / EA	4,581.00	4,581.00
	TFT-XXC-52-HENH1			
151587	GATED WYE B-97-A 2.5"FNH x (2)2.5"MNH ELK O LITE ELK-00302111	1.00 / EA	1,488.00	1,488.00
168230	40V MAX XGT 18" CHAINSAW KIT w/ (1) 5.0 AH BATTERY RAPID CHARGER 18" GUIDE BAR & 18" CHAIN MAK-GCU04T1	1.00 / EA	612.00	612.00
168236	40V MAX (x2) XGT 14' POWER CUTTER KIT w/ (4) BATTERIES (1) RAPID CHARGER SOCKET WRENCH & CUTT OFF WHEEL MAK-GEC01PL4	1.00 / EA	2,602.00	2,602.00
168249	40V MAX XGT RECIPRO SAW TOOL ONLY (NO BATTERY OR CHARGER) MAK-GRJ01Z	1.00 / EA	238.00	238.00
168258	40V MAX XGT 4PC COMBO KIT GPH01Z GDT01Z GSH01 ML001G (1) 2.5AH BATTERY (1) 4.0AH BATTERY CHARGER & TOOL BAG MAK-GT400M1D1	1.00 / EA	754.00	754.00



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185198	20" PPV, 2x8Ah 2x AC Chargers, Shore Power, MAKITA SVI-V20-BK-08-SP	1.00 / EA	6,659.00	6,659.00
168214	18V X2 LXT LED WORK LIGHT (LIGHT ONLY) MAK-DML809	1.00 / EA	304.00	304.00
168216	MAKITA 18V LXT TOWER WORK/MULTI-DIRECTIONAL LIGHT (LIGHT ONLY) MAK-DML814	1.00 / EA	416.00	416.00
159320	LDH Hose Clamp, HASBRA, 5" HAS-HB228-5	1.00 / EA	902.00	902.00
159321	Bracket, 5" Hasbra hose clamp HAS-HB228A-5	1.00 / EA	105.00	105.00
148912	DBAK-800, 1.75" X 50 w/ALUM COUP, RED NAFH-DK175X50REN	9.00 / EA	309.00	2,781.00
254735	D-BAK 800, 2" W/ 2.5" COUPLINGS BLUE, 50FT NAFH-DK2X50B25EN	18.00 / EA	534.00	9,612.00
170727	HOSE DURA BUILT 800, 50FT, YELLOW NAFH-DB3X50YEN	11.00 / EA	443.00	4,873.00
170745	HOSE, HI-FLOW 400 LDH, 5" X 25, STORZ NAFH-HF5X25YRS	1.00 / EA	535.00	535.00
170764	HOSE, HI-FLOW 400 LDH, 5" X 50, STORZ NAFH-HF5X50YRS	1.00 / EA	793.00	793.00
170743	NORTH AMERICAN, HI-FLOW 400 LDH, 5" X 100, STORZ NAFH-HF5X100YRS	8.00 / EA	1,197.00	9,576.00
186995	EDUCTOR 95 GPM 1.5"F x 1.5"M w/36" HOSE .25% .5% 1% 3% 6%	1.00 / EA	770.00	770.00

TFT-UE-095-NF



Siddons-Martin Emergency Group
 3500 Shelby Lane
 Denton, TX, 76207
 USA
 Phone: (940) 315-4948

ESTIMATE

DO NOT PAY

Document Info:

Quote #: 700-0021515

151587	GATED WYE B-97-A 2.5"FNH x (2)2.5"MNH ELK O LITE ELK-00302111	1.00 / EA	1,488.00	1,488.00
151533	XD SMOOTH BORE TIP SHORT BARREL 1.5" FNH INLET 7/8" DISCHARGE RED ELK-000187XD-0103	1.00 / EA	110.00	110.00
151599	XD SHUTOFF 1 3/8" WATERWAY 1.5" FNH INLET 1.5"MNH OUTLET NO PISTOL GRIP RED 0033XD0F-0101000200	1.00 / EA	412.00	412.00
254735	ELKHART 1" TIP RED SHORT ELK-000187XD-0303	4.00 / EA	110.00	440.00
151652	XD SHUTOFF 1 3/8" WATERWAY 2.5"FNH INLET 1.5"MNH NO PISTOL GRIP RED 0069XD0F-0101000200	4.00 / EA	540.00	2,160.00
254735	CHIEF XD 150 GPM @ 75PSI RED 04XD0F57-0201020202B	1.00 / EA	841.00	841.00
151587	GATED WYE B-97-A 2.5"FNH x (2)2.5"MNH ELK O LITE ELK-00302111	1.00 / EA	1,488.00	1,488.00
150187	FOLDING LADDER 10' (SAFETY SHOES ARE STD) DUO-585-A-10	1.00 / EA	362.00	362.00
150195	ROOF LADDER 14' 2 3/4" RAIL DUO-775-A-14	1.00 / EA	502.00	502.00
150205	2 SECTION EXTENSION LADDER 24' 3-1/4" RAIL DUO-900-A-24	1.00 / EA	1,075.00	1,075.00
254735	LITTLE GIANT 12017 LITTLE GIANT	1.00 / EA	855.00	855.00
154728	27" SCOOP SHOVEL w/DHANDLE FHU-SHV-S27	2.00 / EA	60.00	120.00



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154725	55" FLAT SHOVEL FHU-SHV-F55	1.00 / EA	57.00	57.00
154727	55" POINTED SHOVEL FHU-SHV-P55	1.00 / EA	60.00	60.00
150138	28" CONE 5 PACK w/STORAGE BAG DTC-CC5B	1.00 / EA	158.96	158.96
004790	AMEREX 2.5 GAL WATER FIRE EXTINGUISHER w/WALL HANGER BKS-AX240	1.00 / EA	163.22	163.22
140237	AMEREX 15LB CO2 FIRE EXTINGUISHER w/WALL HANGER 10B:C BKS-AX331	1.00 / EA	348.55	348.55
140241	AMEREX 20LB ABC FIRE EXTINGUISHER w/WALL HANGER 10A:120B:C BKS-AX411	1.00 / EA	180.23	180.23
254735	12x14 HD Tarp B0BG8FPQ6D	1.00 / EA	72.99	72.99
254735	12x18 HD Tarp B0CMXLL6CJ	1.00 / EA	65.99	65.99
173908	SFP-4578-YF SFP-4578-YF	1.00 / EA	15.82	15.82
254735	Job Site 24 in. Smooth Surface Push Broom 863JSHDSU	1.00 / EA	38.55	38.55
178275	R&B LARGE HYDRANT TOOL BAG YELLOW RB-439YL	1.00 / EA	89.90	89.90
254735	RTS Tactical XR32 Level IV Premium Active Shooter Kit MISC-700	4.00 / EA	827.99	3,311.96
254735	The BattlePAK TraumaPAK MISC-700	1.00 / EA	2,499.99	2,499.99



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ESTIMATE

DO NOT PAY

Document Info:

Quote #: 700-0021515

246364	TEAM WENDY ADVENTURER HELMET RED (FORMERLY SAR BACKCOUNTRY) TWH-82N-RD	4.00 / EA	357.08	1,428.32
254735	Spec Ops DELTA Gen II Ballistic Helmet MISC-700	4.00 / EA	999.99	3,999.96
257620	BASIC VEHICLE & STRUCTURAL SHORING PNEUMATIC SET VS- PS1 HOL-151.004.155	1.00 / EA	10,925.75	10,925.75
161385	HDC 12 CONTROL PANEL HOL-350.182.095	1.00 / EA	1,575.11	1,575.11
242471	ACS 12 HIGH PRESS HLB 12 BAR PKG (CGA 347/4500) HOL-159.000.070	1.00 / EA	2,465.78	2,465.78
161394	HLB31 LIFTING BAG 31 TON 12 BAR 23.9X20.9X1.1 HOL-350.321.028	2.00 / EA	1,798.00	3,596.00
254735	BUILDOUT ESTIMATE (POLY, MOUNTING, ETC) BUILDOUT	1.00 / EA	15,000.00	15,000.00
254735	INFLATION ESTIMATE INFLATION ESTIMATE	1.00 / EA	13,893.53	13,893.53
300056	FREIGHT FREIGHT	1.00 / EA	750.00	750.00

Total of All Services			
Labor total	\$0.00	Shop supplies	\$15.82
Parts total	\$137,536.87	Sublet total	\$0.00
Freight total	\$ 750.00	Core charges	\$0.00
		Sales tax	\$0.00

Total: \$138,302.61 242

Pumper, PUC BODY

Pumper, PUC, Aluminum

CHASSIS

Enforcer Chassis, PUC

CHASSIS AXLE, FRONT, CUSTOM

18,000 Lb TAK-4 Axle

AXLE, REAR

27,000 Lb Meritor Axle

ENGINE

450 HP Cummins L9 Engine

TRANSMISSION

Allison 6th Gen, 3000 EVS P

BUMPER

19" Extended Painted Steel

CAB

7010 Enforcer Cab, PUC

BODY

WATER TANK

730 Gallon Poly Water Tank

COMPT, PUMPER, REAR

29.50" FF Lap Rear Compt w/Tailboard, PUC

COMPT, PUMPER, LEFT SIDE

189" RollUp Full Height & Depth Front & Rear, PUC

COMPT, PUMPER, RIGHT SIDE

189" RollUp Full Height & Depth Front & Rear, PUC

FIRE SUPPRESSION PUMPHOUSE

Control Zone, PUC

PUMP

1500 GPM Pierce PUC

CROSSLAYS, 1.50"

(2) 1.50", Poly Trays, 200"

CROSSLAYS, 2.50"

(1) 2.50" DeadLay, Poly Tray, 200"

GENERATOR

Generator Not Required

Foam System

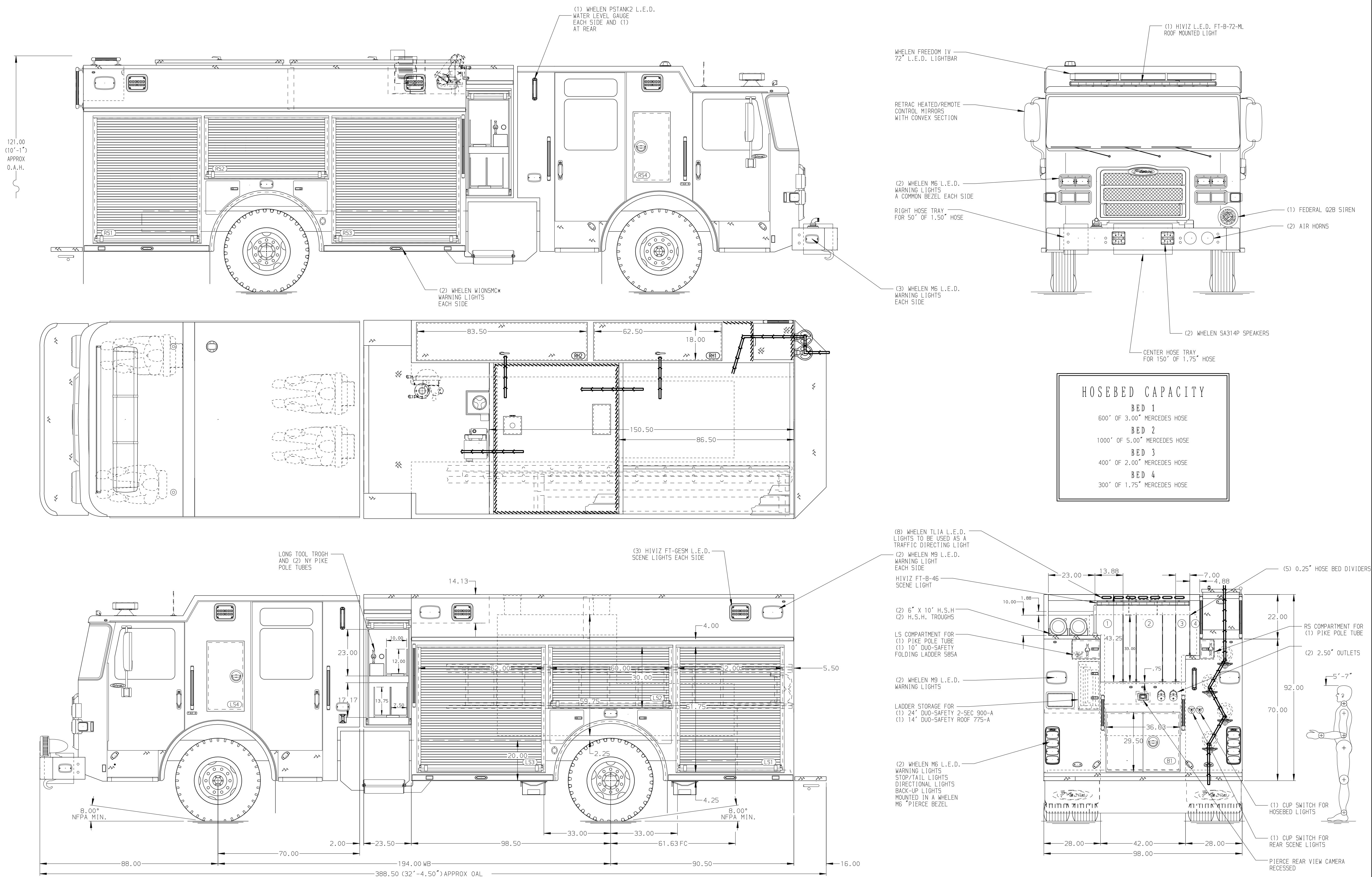
Husky 3 Foam System

Foam Cell

20 Gal Foam Reduce Water

NOTE
DIMENSIONS SHOWN ARE APPROXIMATE AND ARE SUBJECT TO MINOR DEVIATIONS AS MAY OCCUR OR BE NECESSARY IN CONSTRUCTION.
MINOR DETAILS NOT SHOWN.

1. ONE 1.50" OUTLET WITH 2.00" PIPING AND SWIVEL LOCATED ON TOP BUMPER RIGHT SIDE
2. BLUE SEA SHORELINE RECEPTACLE LOCATED ON DRIVER SIDE BEHIND CREW CAB
3. AIR INLET WITH DISCONNECT COUPLING IN THE DRIVER SIDE STEPWELL
4. BATTERY CHARGER LOCATED IN COMPARTMENT PER SHOP ORDER
5. BATTERY CHARGE INDICATOR LOCATED ON THE DRIVER SIDE SEAT RISER
6. EIGHT ADJUSTABLE SHELVES IN COMPARTMENTS PER SHOP ORDER
7. TWO FLOOR MOUNTED SLIDE-OUT TRAY IN COMPARTMENT PER SHOP ORDER
8. ONE SWING-OUT TOOLBOARDS IN COMPARTMENTS PER SHOP ORDER
9. FOUR TILT/SLIDE-OUT TRAYS LOCATED PER SHOP ORDER
10. LITTLE GIANT VELOCITY LADDER - MODEL 13 ON THE FLOOR PER SHOP ORDER
11. TWO RECEPTACLES LOCATED PER SHOP ORDER



		JOB NO.	39218
		SCALE	DATE
TITLE	Pierce PUC Pumper Approval Drawing	DRAWN BY	MMF
FOR	Guadalupe County	CHECKED BY	AMI
DWG NO.	39218AD	SHEET SIZE	SHEET NO.
ENFORCER			1 OF 1

REV	DATE	BY	CH	ENFORCER
15APR24	MMF	CHR		CHASSIS DATA
15FEB24	MMF	CHR		MAKE
28NOV23	MMF	CHR		PIERCE
20SEP23	MMF	CHR		MODEL

Westlake Fire-EMS Department

Introduction and Background Significance

Who We Are



Values Focused
& Intellectually
Driven



Leader of
Character
Culture



High
expectations –
hiring,
onboarding,
promotion
standards



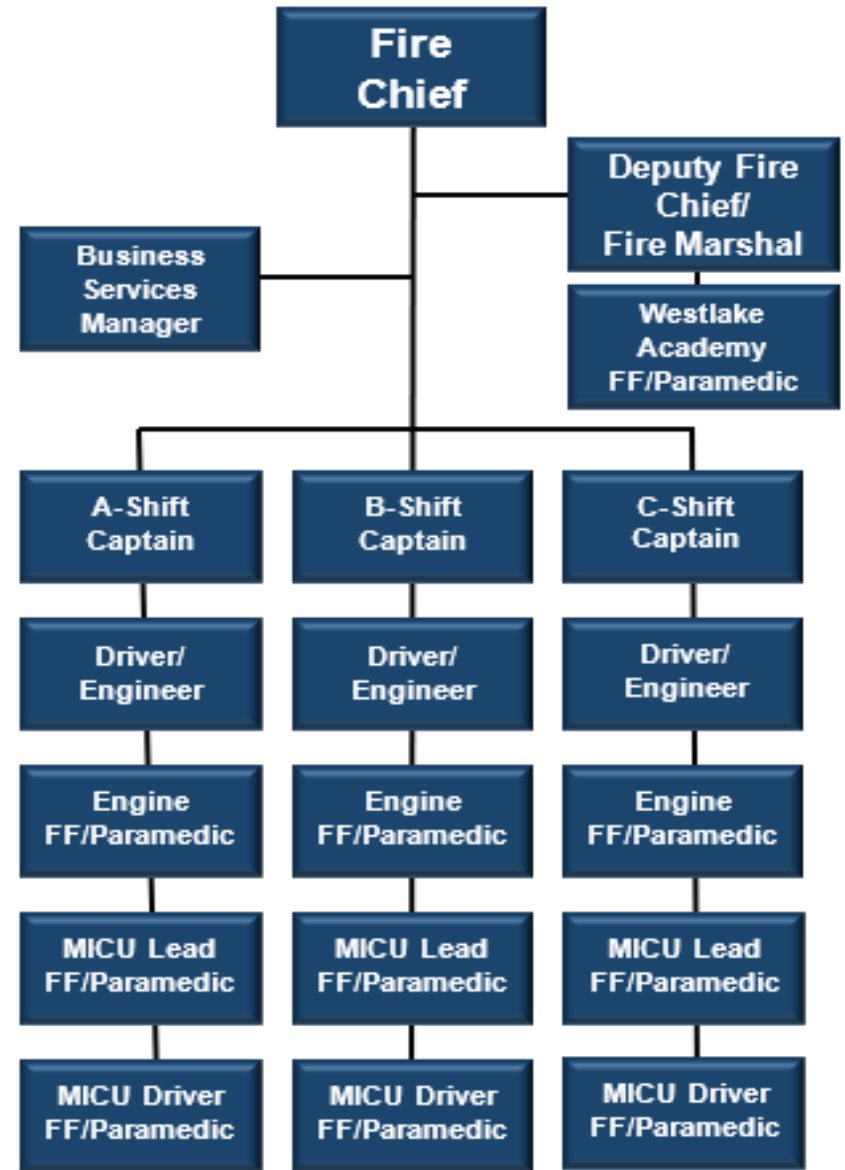
Highly educated
workforce – over
75% of staff have
a Bachelors
degree and all the
Administration
staff have a
Masters degree



Performance
measures for
Operations,
Training, & Risk
Reduction

Organizational Chart

- Minimum Operations daily staffing
- Engine
 - 2 personnel
- Ambulance (MICU)
 - 2 personnel



Divisions

Administration

- Payroll, Invoicing, Budget Monitoring & Preparation, Human Resource Mgmt., Mental Health Support

Operations

- Emergency and Non-Emergency Responses, Training, Program Mgmt.

Risk Reduction

- Fire Inspection and Testing, Plan Review, Fire Investigations, Arson Investigations, Public Education

Emergency Management

- Maintain and Support Town and Academy Emergency Operation Plans (EOP)
- Monitor Threats to the Town (e.g., severe weather)
- Maintain and Activate Outdoor Weather Sirens (OWS)
- Provide EOP Training (e.g., drills, exercises, tabletops, etc.)

What We Do - Scope of Services

- Fires – Structural and Non-structural
- Emergency Medical Services
- Social Services
- Active Shooter/Hostile Event Response (ASHER)
- Risk Reduction – Inspection, Education, Enforcement, and Code Development
- Fire Investigation – Arson, Cause/Origin, Intelligence, Prosecution
- Terrorist Acts – Chemical, Biological, Radiological, Nuclear, and Explosives
- Hazardous Materials Response
- Technical Rescue
- Transportation Incidents – Traffic Incident Management
- Catastrophic Weather Events – Tornados, Storms, Hail, Lightning, Floods & Heat
- Special Events
- Emergency Management

Partnerships and Public Education

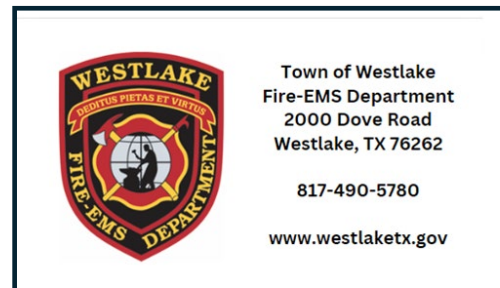
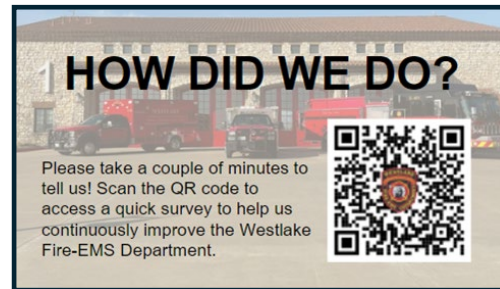
Partnerships

- Westlake Academy
- Westlake Area Network Group (WANG)
- Northeast Fire Department Association
- North Tarrant Regional ???

Initiatives

- Offer CPR and Stop the Bleed Training
- Offer car seat inspections
- Offer home safety inspections
- Fire Extinguisher demonstrations
- Annual Open House
- Station Tours

What does the community say about us?



- very caring and attentive. They represent the best of our community. 2/11/2024 04:49 PM
- They were so great at helping me with my car seat. Such nice men, glad we have them! 2/15/2024 11:52 AM
- I wish I'll never have to need your services, but if I ever do... You have our complete trust and respect. 4/29/2024 10:24 AM

Threats

Non-Competitive
Compensation
System

Attrition

Insufficient
Staffing

Unfunded Capital
Equipment

Non-Competitive Compensation System

- All fire department personnel are drastically below market
- We need a current salary market analysis
- We need a comprehensive pay policy
- We need a current adopted competitive pay plan

Example:

Firefighter/Paramedic left our organization in December of 2023 to Lewisville FD.

Westlake paid him a salary of \$67,995.00 (2-year firefighter)

Lewisville offered him lateral pay of \$90,458.34

Difference: \$22,463.34 (33%)

City of Lewisville

Effective 10/1/2023									
			Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7
Firefighter	Annual	\$	74,460.15	\$ 77,405.89	\$ 80,474.85	\$ 83,686.78	\$ 87,023.93	\$ 90,458.34	\$ 94,073.88
7101	Monthly	\$	6,205.01	\$ 6,450.49	\$ 6,706.24	\$ 6,973.90	\$ 7,251.99	\$ 7,538.20	\$ 7,839.49
	Hourly (2080)	\$	35.7981	\$ 37.2144	\$ 38.6898	\$ 40.2340	\$ 41.8384	\$ 43.4896	\$ 45.2278
	Hourly (2912)	\$	25.5701	\$ 26.5817	\$ 27.6356	\$ 28.7386	\$ 29.8846	\$ 31.0640	\$ 32.3056

Non-Competitive Compensation System

Sample Comparison

	Westlake	Flower Mound	Lewisville	Southlake	Flower Mound, Lewisville, & Southlake Average	Difference between Average & Westlake
Firefighter/EMT - Step 1	\$59,987.20	\$76,148.80	\$74,460.15	\$63,324.68	\$71,311.21	\$11,324.01
Firefighter/Paradic - Step 1	\$64,093.12	\$80,167.80	\$77,460.15	\$78,459.28	\$78,695.74	\$14,602.62
Firefighter/Paramedic - Step 5	\$70,179.20	\$90,242.88	\$90,023.93	\$86,582.04	\$88,949.62	\$18,770.42
Driver Engineer - Step 1	\$86,136.96	\$102,327.68	\$103,160.19	\$97,545.94	\$101,011.27	\$14,874.31
Lieutenant - Step 1	\$94,057.60			\$110,519.55	\$110,519.55	\$16,461.95
Captain - Step 1	\$98,512.96	\$124,371.52	\$120,321.77		\$122,346.65	\$23,833.69

Non-Competitive Compensation System

Common public safety incentive pays offered by other cities

Incentive Pays	Other Cities	Town of Westlake
Longevity Pay	Yes	No
Certification Pay	Yes	No
Education Based Pay	Yes	No
Out of Class Pay/Interim Status Pay	Yes	No
Standby/On-call Pay	Yes	No
Tuition Reimbursement	Yes	No
Paramedic Pay	Some	No
Assignment Pay: FTO, MICU, etc.	Some	No

Attrition



Disruptive



Hardship



Time



Energy



Lost knowledge



Lost Experience



Very Costly

Facts:

- 12 personnel replaced in 4.5 years
- 10 hiring process completed
- Hiring process takes 4 months

Insufficient Staffing - Independent Studies

Three independent services recommended more personnel and resources

1. Mike Pietsch, P.E. Consulting Services, Inc. (ISO Evaluation, 2013)

- Westlake have in service two (2) engine companies and one (1) ladder truck company deployed from two (2) fire stations
- Note: Company implies both the apparatus and staffing required to operate the apparatus
- Largest deficiency were the result of insufficient engine company staffing and no ladder company (2013 and 2017)

2. Comprehensive Plan Update, Mesa Planning (2015)

- Identified Westlake will need 27 firefighters at build out, which does not include the driver/engineers, company officers, battalion chiefs, or ambulance staffing
- At build out, it is estimated the total fire personnel is 56 (2 Engines, 2 MICUs, 1 Truck, & Administration)
- Two fire stations and illustrates one station located at Dove Road and Davis Blvd, and a second fire station located near Hwy 170 and Roanoke Road

Insufficient Staffing - Independent Studies

3. Community Risks Assessment/Standards of Cover, ESCI (2020)

Current Recommendations

- Four personnel is critical for firefighting operational tasks
- First-arriving companies staffed with three and four firefighters are more efficient
- Add one (1) Fire Inspector/Public Education Coordinator
- Add one (1) Shift Commander/Training Battalion Chief
- Add one (1) ladder truck with 4 personnel

Future Recommendations

- Add second station with training facility at or around 2050 Roanoke Rd. to improve total response time goals of 9:20 90% of the time
- Add one (1) ALS engine for Station 2 with four (4) personnel
- Add one (1) Ambulance (MICU) with two (2) personnel

Insufficient Staffing - Industry Best Practices

National Fire Protection Association (NFPA)

NFPA 1710: Organization and Deployment of Fire Suppression Operations

- First arriving company must consist of four (4) firefighters

NFPA 1730: Organization and Deployment of Fire Prevention Inspection and Code Enforcement

- Add a Fire Inspector based on workload calculations

National Institute of Standards and Technology (NIST)

Four-person crews are able to complete time-critical fireground tasks 25% faster than 3-person crews

Occupational Safety and Health Administration (OSHA)

2-in /2-out Rule

Two firefighters in Immediate Danger to Life and Health (IDLH) and two firefighters outside prepared to perform rescue operations

Insufficient Staffing – Structure Fire

Westlake Fire-EMS Dept.

Engine: 2 personnel

Ambulance: 2 personnel

Challenges:

Engine staffing

Ambulance availability

Mutual aid availability

Arrival time of resources

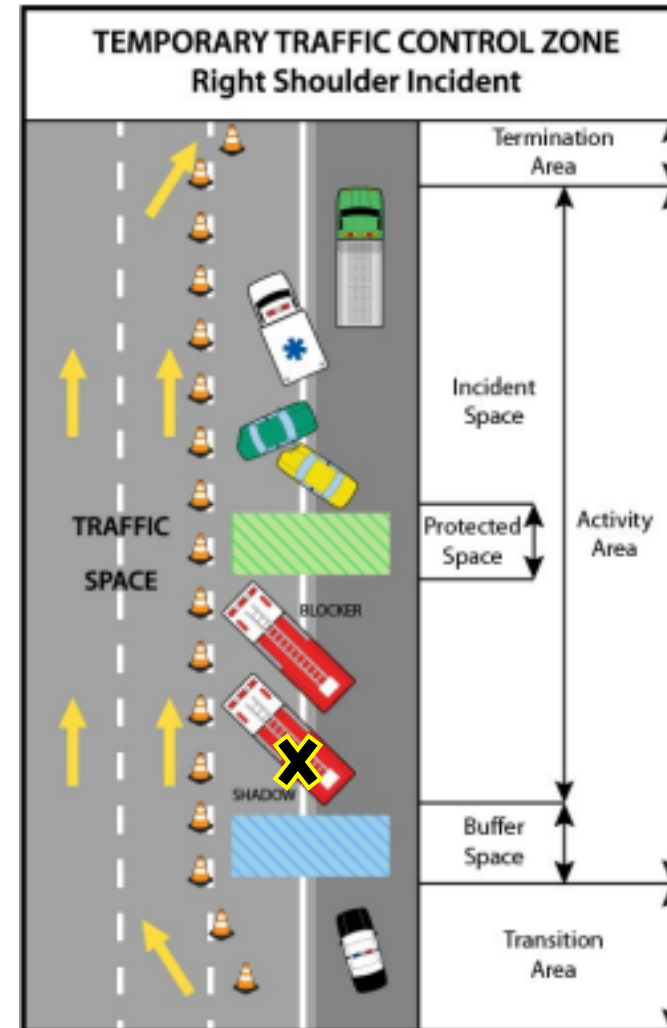
Common Responsibilities for Residential Structure Fire

Initial Full Alarm Assignment	10,000 ft ²
Incident Commander	1
Water Supply Operator	1
2 Application Hose Lines	4
1 Support member per line	2
Victim Search and Rescue Team	2
Ground Ladder Deployment	2
Aerial Device Operator	1
Incident Rapid Intervention Crew (4 FF)	3/4
Safety Officer	1
Medical	2
Total	19/20

Insufficient Staffing – Motor Vehicle Accident

Critical Tasks

- Incident Command
- Scene Safety
- Vehicle Stabilization
- Patient Care
- Fire Control
- Patient Extrication
- Hazardous Materials



Insufficient Staffing – Medical Emergency (CPR)

Critical Tasks

- Scene Safety
- Airway
- Compressions
- IV/IO Drugs
- Cardiac Monitoring
- Lead Medic
- Patient Moving & Transport
- Bystanders (e.g., family)

Unfunded Capitol Equipment and Vehicle Replacement Plan

Capital Equipment Plan

- Cardiac Monitors
- Portable Radios
- Bunker Gear (PPE)
- Lucas Device (CPR compression machine)

Apparatus Replacement Plan

- Ambulances
- Engines
- Attack trucks
- Support vehicles



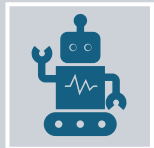
Critical Needs -Solutions



Implemented Competitive Pay Plan



Three (3) additional Firefighter/Paramedics (one per shift)



One (1) Engine Replacement

Future Needs

- Three (3) additional Firefighter/Paramedics (one per shift) - Engine
- One (1) Ladder Truck
- Four (4) Firefighter/Paramedics – Ladder Truck
- One (1) Fire Inspector
- One (1) Fire Inspector Vehicle
- One (1) Emergency Management Coordinator
- One (1) Shift Commander
- Second Fire Station Site

Closing Remarks

We strive to be the best we can be

We deliver a broad range of services

We are highly skilled and efficient at what we do

We lack the resources to effectively and safely deliver
emergency services

The industry experts supports more staffing and resources



TOWN OF WESTLAKE

FIRE-EMS DEPARTMENT



Engine Replacement Justification 2024

Industry Guides

For fire apparatus replacement, local best practice utilizes a 10/10 method. The fire apparatus' 20 year life cycle would be in frontline status for 10 years and then placed in reserve status for 10 years. The Town's vehicle replacement policy states a fire apparatus life span should be 20 years. It also states, "front-line life span of the Engine is 15 years and has a reserve lifespan for an additional five years".

National Fire Protection Association (NFPA) states that frontline apparatus should be moved to reserve status after 15 years of service and placed in reserve status. NFPA also states apparatus over 25 years old should be replaced.

The 2020 Community Risks Assessment: Standard of Cover for Westlake Fire-EMS Department states that the life expectancy for an engine is 20 years (Figure 1). It is important to note that age is *not* the only factor for evaluating serviceability and replacement. Vehicle mileage and hours on engines must also be taken into consideration.

Figure 1

Vehicle	Life Expectancy
Utility	15
Engine/Pumper	20
Ladder Truck	25
Attack/Brush	20
Ambulance	10

A common tool utilized in the industry to evaluate vehicle replacement is listed in Figure 2.
Figure 2

Evaluation Components		Points Assignment Criteria
Age:		One point for every year of chronological age, based on in-service date.
Miles/Hours:		One point for each 10,000 miles or 1,000 hours.
Service:		1, 3, or 5 points are assigned based on service-type received (e.g., a pumper would be given a 5 since it is classified as severe duty service).
Condition:		This category takes into consideration body condition, rust interior condition, accident history, anticipated repairs, etc. The better the condition, the lower the assignment of points.
Reliability:		Points are assigned as 1, 3, or 5, depending on the frequency a vehicle is in for repair (e.g., a 5 would be assigned to a vehicle in the shop two or more times per month on average; while a 1 would be assigned to a vehicle in the shop an average of once every three months or less.
Point Ranges	Condition Rating	Condition Description
Under 18 points	Condition I	Excellent
18–22 points	Condition II	Good
23–27 points	Condition III	Consider Replacement
28 points or higher	Condition IV	Immediate Replacement

Current Condition

Currently, we have two fire engines. The 2003 model (21 years old) is our reserve engine, while the other engine is a 2015 model (9 years old) in frontline status.

Engine #1401 (21 years old)

Age:	2003	21
Miles/Hours:	10,253hrs./116,119miles	11
Service:	Pumper	5
Condition:	Average condition	3
Reliability:	Average Reliability	3
Total Points:	-----	43

The point value illustrates: Immediate Replacement

While repair costs have been manageable, the larger concern is the availability of parts. Numerous times we have encountered challenges related to replacement of broken parts that have simply worn out. Additionally, and equally concerning is the out of service (OOS) time and frequency related to difficult repairs. OOS time creates challenges when the frontline apparatus goes OOS for repair at the same time. At that point, we have no other engines for structural firefighting and vehicle extrication.

Benefits to funding and Consequences to Not funding

Benefits: Purchasing a fire engine will improve safety, improve operational effectiveness with a more reliable and dependable fleet, and secure current costs or financing.

Consequences: As reserve unit ages, fleet costs will naturally increase with more downtime associated with necessary repairs and routine maintenance—sometimes because of parts obsolescence. Regardless of its net effect on current apparatus costs, the deferral of replacement purchases unquestionably increases future replacement spending needs and may impact overall operational capabilities impacting safe and efficient use of the apparatus.

Important Notes

Manufactures have reported the lead time for delivery of any engine is approximately 24 months to 40 months. With that in mind, ordering this fall would allow us to receive the engine in late 2026 or late 2027, which would position us better with a new apparatus and a well-maintained backup engine.

Inflation costs are increasing at a rate of approximately eight percent and purchasing now would provide overall savings due to securing the current price.

Recommendations

Based on the age and condition, industry best practice, and nationally recognized standards, we are seeking to replace the 2003 engine and place the 2015 engine in reserve status.

Vehicle Purchase/Replacement Schedule

Vehicle	Unit #	Year Model		FY24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31	FY 31/32	FY 32/33	FY 33/34	FY 34/35	FY 35/36	FY 36/37	FY 37/38
Fire Engine	1401	2003	20 Year Life: 10 Frontline/10 Reserve	\$ 1,300,000													
Ambulance	1404	2012	14 Year Life: 7 Frontline/7 Reserve		\$ 500,000												
Fire Attack (Brush Truck)	1405	2012	20 Year Life: Chassis Remount									\$ 400,000					
Fire Engine	1408	2015	20 Year Life: 10 Frontline/10 Reserve												\$ 1,500,000		
Fire Chief Tahoe	1409	2017	10 Year Life		\$ 75,000												
Ambulance	1410	2019	14 Year Life: 7 Frontline/7 Reserve											\$ 600,000			
Deputy Chief F150	1411	2022	10 Year Life								\$ 85,000						
UTV	1413	2022	20 Year Life														
Ladder Truck			20 Year Life: 10 Frontline/10 Reserve		\$ 2,400,000												



Town of Westlake

1500 Solana Blvd
Building 7, Suite 7100
Westlake, TX 76262

Staff Report

File #: WA RES 25-03

Agenda Date: 2/3/2025

Agenda #: G.3.

ACADEMY STAFF REPORT RECOMMENDATIONS

Discuss, consider and act regarding WA Resolution 25-03 adopting the Westlake Academy Academic Calendar for School Year 2025-2026 (Head of School Dr. Kelly Ritchie)

STAFF: Dr. Kelly Ritchie, Head of School

BACKGROUND:

The Westlake Academy Administrative Team has reviewed and is proposing the approval of the 2025-2026 Academic Calendar.

DISCUSSION:

In November, a committee of Westlake Academy teachers and staff members was formed to develop two drafts of the 2025-2026 academic calendar. The group's main task was to gather feedback from staff on the effectiveness of the current late-start Wednesdays and to identify areas where the calendar could be innovated. By considering input from various stakeholders, the committee aimed to design a more effective and flexible academic schedule that better supports both students and staff, while fostering continued growth and improvement at the academy.

In addition, the Westlake Academy community was asked to respond to a survey indicating their preference to retain late state Wednesdays. The staff and community surveys indicated a slight majority preference to continue with late start Wednesdays for the 2025-2026 school year. It is our recommendation that the board approve Draft 2 and take appropriate action.

FISCAL IMPACT:

None.

STAFF RECOMMENDATION:

The administration met and reviewed all feedback and have found Draft 2 to reflect the current preference of the overall community to continue with late start Wednesdays. It is our recommendation that the board approve Draft 2 and take appropriate action.

ATTACHMENT(S):

Resolution WA 25-03
Draft 1 Proposed SY 25-26 Academic Calendar
Draft 2 Proposed SY 25-26 Academic Calendar

BOARD OF TRUSTEES ACTION/OPTIONS:

- 1) Motion to approve
- 2) Motion to amend with the following stipulations (please state stipulations in motion)
- 3) Motion to table
- 4) Motion to deny

WESTLAKE ACADEMY

WA RESOLUTION NO. 25-03

**A RESOLUTION OF THE WESTLAKE ACADEMY BOARD OF TRUSTEES
ADOPTING THE WESTLAKE ACADEMY ACADEMIC CALENDAR FOR SCHOOL
YEAR 2025-2026**

WHEREAS, Westlake Academy’s mission is to provide students with an internationally minded education of the highest quality, so they are well- balanced life-long learners; and

WHEREAS, The Academy’s Academic Calendar is one of the tools that the Academy utilizes to fulfill this mission; and

WHEREAS, Approving the Westlake Academy Academic Calendar for School Year 2025-2026 is necessary in order for the Academy to be in compliance with State attendance requirements; and

WHEREAS, the Board of Trustees finds that the passage of this Resolution is in the best interest of the citizens of Westlake as well as the students, their parents, and faculty of Westlake Academy.

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF
WESTLAKE ACADEMY:**

SECTION 1: That all matters stated in the recitals hereinabove are found to be true and correct and are incorporated herein by reference as if copied in their entirety.

SECTION 2: That, the Board of Trustees Westlake Academy, hereby approves and adopts the amended Westlake Academy Academic Calendar for School Year 2025-2026 attached to this resolution as Exhibit “A”.

SECTION 3: If any portion of this Resolution shall, for any reason, be declared invalid by any court of competent jurisdiction, such invalidity shall not affect the remaining provisions hereof and the Council hereby determines that it would have adopted this Resolution without the invalid provision.

SECTION 4: That this resolution shall become effective from and after its date of passage.

PASSED AND APPROVED ON THIS 3rd DAY OF FEBRUARY 2025.

Kim Greaves, President

ATTEST:

Dianna Buchanan, Board Secretary

Dr. Kelly Ritchie, Head of School

APPROVED AS TO FORM:

Janet S. Bubert or L. Stanton Lowry,
School Attorney

Yearly Calendar

Year: Year:
 Month: Month:



Westlake Academy Draft 1 Academic Calendar 2025-2026

August 2025

S	M	T	W	Th	F	Sa
			30 31	1	2	
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

September 2025

S	M	T	W	Th	F	Sa
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28	29	30				

October 2025

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November 2025

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30						

December 2025

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21	22	23	24	25	26	27
28	29	30	31			

January 2026

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18	19	20	21	22	23	24
25	26	27	28	29	30	31

February 2026

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22	23	24	25	26	27	28

March 2026

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April 2026

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May 2026

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31						

June 2026

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28	29	30				

July 2026

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12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- First / Last Day of School
- No School
- Professional Day - Student Holiday
- Teacher Work Day
- Teacher Work Day (Remote)

- Bad weather day & Flex Work day for staff (if needed)
- Senior Commencement TBC
- Student Half day & Teacher work day
- PYP Conferences and Half Day (PYP only)

August

- July 30-August 1- New Hire Days / PLED Day
- August 4-7: Teachers PD
- August 8: Teachers Work Day (TWD)
- August 8: Whole School Back to School Night
- August 13: Teachers Work Day (TWD)
- August 14: First Day of School/Start of Q1

September

- Labor Day/No School
- September 24: Teachers PD

October

- October 9: End of Q1
- October 10: AM PD & PM Teachers Work Day (TWD-Remote)
- October 13: Columbus Day/No School
- October 15: PYP Conference - No School PYP only

November

- November 21: Grandparents Day (PYP) Students Half Day/ Staff PM PD
- November 24-28: Thanksgiving Break

December

- December 17-18: MOY exams - Students Half Day/PM Teachers Work Day
- December 18: End of Q2
- December 19: Teachers Work Day (TWD-Remote)
- December 22-31: Winter Break

January

- January 1-2: Winter Break
- January 5 and 6: Teachers PD
- January 19: MLK Holiday/No School

February

- February 16: Presidents Day/No School
- February 25: Teachers PD / Bad Weather make up day

March

- March 12: End of Q3
- March 13: Teachers Work Day (TWD)
- March 16-20: Spring Break

April

- April 3: No School/Bad Weather Day
- April 6: Easter Monday / No School

May

- May 4-21: EOY Testing window
- May 21: End of Q4/Last Day of School - Students Half Day/PM Teachers Work Day
- May 22: Teacher Work Day (TWD)
- May 24: Senior Commencement TBC
- May 25: Memorial Day Holiday
- May 26-28: PLED Day

Yearly Calendar

Year: Year:

Month: Month:



Westlake Academy Draft 2 Academic Calendar 2025-2026

August 2025						
S	M	T	W	Th	F	Sa
			30	31	1	2
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10	11	12	13	14	15	16
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September 2025						
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October 2025						
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November 2025						
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December 2025						
S	M	T	W	Th	F	Sa
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28	29	30	31			

January 2026						
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February 2026						
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22	23	24	25	26	27	28

March 2026						
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April 2026						
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May 2026						
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17	18	19	20	21	22	23
24	25	26	27	28	29	30
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June 2026						
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21	22	23	24	25	26	27
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July 2026						
S	M	T	W	Th	F	Sa
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12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- First / Last Day of School
- No School
- Professional Day - Student Holiday
- Teacher Work Day
- TWD (Remote)
- Student Half Days/Teacher Work Days

- Bad Weather Day
- Senior Commencement TBC
- Late Start Wednesdays
- PYP Conference - No School PYP Only
- Semester Exams / Assessments

- August**
- July 30-August 1- New Hire Days
 - August 4-7: Teachers PD
 - August 8: Teachers work day (Remote TWD)
 - August 8: Whole School Back to School Night
 - August 13: Teachers Work Day (TWD)
 - August 14: First Day of School/Start of Q1
- September**
- September 1: Labor Day/No School
- October**
- October 9: end of Q1
 - October 10: Teachers work day (Remote TWD) No School
 - October 13: Columbus day (No School)
 - October 15: PYP Conferences - No School PYP Only
- November**
- November 21: Grandparents Day (PYP)
 - November 24-28: Thanksgiving break
- December**
- December 15-18: MOY exams / end of Q2
 - December 17-18 Students Half Day/PM Teacher Work Day
 - December 19: Teachers work day (Remote TWD) No School
 - December 22-31 Winter Break
- January**
- January 1-2 Winter Break
 - January 5: Teachers PD (no school)
 - January 19: MLK day (No School)
- February**
- February 13: Teachers PD (no school)/ Bad weather make up
 - February 16: President's day (No School)
- March**
- March 12: end of Q3
 - March 13: Teachers PD (no school) / Bad weather make up
 - March 16-20: Spring Break
- April**
- April 3: Student / Teacher holiday (no school)
 - April 6: Teachers PD - (No School) / Bad weather make up day
- May**
- May 4-22: EOY Testing window
 - May 23: Senior Commencement TBC
 - May 25: Memorial Day (No School)
 - May 26-27: Teachers work day



Town of Westlake

1500 Solana Blvd
Building 7, Suite 7100
Westlake, TX 76262

Staff Report

File #: WA RES 25-02

Agenda Date: 2/3/2025

Agenda #: G.4.

ACADEMY STAFF REPORT RECOMMENDATIONS

Discuss, consider and act regarding WA Resolution 25-02 to add one additional section of 4th grade for School Year 2025-2026 and one section of Pre-K (4 year old) class for School Year 2025-2026 (Dr. Kelly Ritchie, Head of School)

STAFF: Dr. Kelly Ritchie, Head of School

BACKGROUND:

In response to the Baker Tilly report, which identified opportunities for increased revenue generation, Westlake Academy decided to add an additional 4th grade class and a new Pre-K (4) class. These additions were designed not only to meet growing demand but also to strengthen enrollment and enhance the academy's financial sustainability, creating more opportunities for both students and the institution.

DISCUSSION:

Adding a 4th grade class to Westlake Academy will help accommodate the growing demand for enrollment, addressing the current waitlist and providing more opportunities for students. By expanding the grade offering, the Academy can reduce waitlist pressures while maintaining its commitment to smaller class sizes and personalized attention. This addition also supports the Academy's long-term growth and sustainability by mitigating the impact of the attrition that often occurs after 5th and 8th grades.

The addition of a Pre-K (4) class at Westlake Academy comes in direct response to a growing need for quality early childhood education within our community. As more families in the area seek structured learning environments for their young children, the demand for pre-kindergarten programs has steadily increased. By offering this new class, the Academy not only addresses this need but also reinforces its commitment to providing educational excellence at every stage of a child's academic journey. A Pre-K program will offer foundational learning experiences that help prepare young students for success as they transition into Kindergarten and beyond.

This new Pre-K class will serve as a pilot program and will allow time to assess the level of interest and the effectiveness of early childhood education as an ancillary private offering to the Academy's current framework.

The Pre-K program would be a standalone private institution, Westlake Day School, separate from Westlake Academy's charter school structure. This expansion of services would allow for further growth and specialization, offering more families in the community access to a premium early childhood education option. By establishing the Pre-K as a separate, private entity, it allows for funding and revenue generation. The success of this pilot class could be the first step in positioning Westlake as a leader in both K-12 and early childhood education in the region.

FISCAL IMPACT:

4th Grade Class: one additional teacher (salary and benefits)

Pre-K Class: curriculum, furniture, materials - approx. \$20,000; salaries associated with this venture (leadership, teacher, and paraprofessional)-approx. \$100,000.

Both of these initiatives will have positive net financial impacts of approx.\$200,000 during the 25-26 SY.

STAFF RECOMMENDATION:

The administration met and reviewed the information from the Baker Tilly report. We recommend approval of WA Resolution 25-02 authorizing the addition of an additional 4th grade classroom for SY 25-26 and an addition of a private Pre-K (4 year old) class for SY 25-26.

ATTACHMENT(S):

None.

BOARD OF TRUSTEES ACTION/OPTIONS:

- 1) Motion to approve
- 2) Motion to amend with the following stipulations (please state stipulations in motion)
- 3) Motion to table
- 4) Motion to deny



Town of Westlake

1500 Solana Blvd
Building 7, Suite 7100
Westlake, TX 76262

Staff Report

File #: RES 25-06

Agenda Date: 2/3/2025

Agenda #: G.5.

TOWN STAFF REPORT RECOMMENDATIONS

Discuss, consider and act to approve Resolution 25-06, a Resolution by the Town Council of the Town of Westlake, Texas, approving the participation of the Town in the Texas Enterprise Zone Program pursuant to the Texas Enterprise Zone Act, Chapter 2303 of the Texas Local Government Code, as amended; nominating Charles Schwab & Co., Inc. to the Governor's Office for Economic Development and Tourism as a Triple Jumbo Enterprise Project through the Economic Development Bank; and authorizing the Town Manager or Designee to execute any related documents in support of that nomination. (Jason Alexander, AICP, CEcD, Deputy Town Manager)

STAFF: Jason Alexander, AICP, CEcD, Deputy Town Manager

BACKGROUND:

Pursuant to Ordinance No. 946 --- adopted by the Town Council on April 25, 2022, the Town of Westlake found that Charles Schwab & Co., Inc., met the criteria established by the provisions of Chapter 2303, Subchapter F, of the Texas Enterprise Zone Act (the "Act") to request nomination as an "Enterprise Project" as such is defined in the Act.

To receive additional economic development incentives through the Economic Development Bank (the "Bank") in the Office of the Governor Economic Development and Tourism, the Town of Westlake must nominate a "Qualified Business" as such is defined in the Act.

By Ordinance No. 946, the Town of Westlake nominated Charles Schwab & Co., Inc., as a Qualified Business; and, as such, Charles Schwab and Co., Inc., is eligible for additional economic development incentives offered through the Bank. The focus of the economic development incentives offered through the Bank is a refund of the State sales and use tax to "encourage private investment and job creation in economically distressed areas."

As Charles Schwab & Co., Inc., is a globally recognized leader in investment and related financial services, it is growing and would be eligible to receive additional economic development incentives and benefits from the Bank if nominated by the Town of Westlake. Should the Bank --- with a nomination from the Town of Westlake vis-à-vis Resolution No. 25-06 --- provide additional economic development incentives and benefits to support the expansion of Charles Schwab & Co., Inc., the State would also be investing in the continued economic development and economic growth of Westlake. The increase in employment opportunities would encourage increased investment from new businesses including lodging, restaurant, and retail users.

As presented, Resolution No. 25-06 would nominate Charles Schwab & Co., Inc. to the Bank as a Triple Jumbo

Enterprise Project, meaning that the company would be eligible to receive the maximum refund allocation per job created. It should be noted that the State would refund up to \$7,500.00 per each job created up to a maximum amount of \$3,750,000.00. This refund does not impact --- nor does it reduce --- any of the portion of sales and use tax collected and distributed to the Town of Westlake. The refunds will come directly from the State's portion of the sales and use tax collected.

DISCUSSION:

A resolution nominating Charles Schwab & Co., Inc., as Triple Jumbo Enterprise will not impact the portion of the sales and use tax collected by the Town of Westlake.

FISCAL IMPACT:

N/A.

OFFICE OF THE TOWN MANAGER RECOMMENDATION:

The Office of the Town Manager recommends approval of the Resolution as presented.

ATTACHMENT(S):

1. Resolution 25-06

TOWN COUNCIL ACTION / OPTIONS:

- 1) Motion to approve;
- 2) Motion to approve with amendments;
- 3) Motion to deny; or
- 4) Motion to table to a specific date.

TOWN OF WESTLAKE

RESOLUTION NO. 25-06

A RESOLUTION BY THE TOWN COUNCIL OF THE TOWN OF WESTLAKE, TEXAS, APPROVING THE PARTICIPATION OF THE TOWN IN THE TEXAS ENTERPRISE ZONE PROGRAM PURSUANT TO THE TEXAS ENTERPRISE ZONE ACT, CHAPTER 2303 OF THE TEXAS LOCAL GOVERNMENT CODE, AS AMENDED; NOMINATING CHARLES SCHWAB & CO., INC. TO THE GOVERNOR’S OFFICE FOR ECONOMIC DEVELOPMENT AND TOURISM AS A TRIPLE JUMBO ENTERPRISE PROJECT THROUGH THE ECONOMIC DEVELOPMENT BANK; AND AUTHORIZING THE TOWN MANAGER OR DESIGNEE TO EXECUTE ANY RELATED DOCUMENTS IN SUPPORT OF THAT NOMINATION.

WHEREAS, the Town of Westlake previously passed and adopted Ordinance No. 946 on April 25, 2022, electing to participate in the Texas Enterprise Zone Program, and that the local economic development incentives offered under this Resolution are the same on this date as were outlined in Ordinance No. 946; and

WHEREAS, the Office of the Governor for Economic Development and Tourism (“GEDT”) through the Economic Development Bank (“Bank”) will consider Charles Schwab & Co., Inc. as a triple jumbo enterprise project pursuant to a nomination and an application made by the Town of Westlake, Texas; and

WHEREAS, the Town of Westlake, Texas desires to pursue and sustain the creation of a proper economic and social environment in order to induce the investment of private resources in productive business enterprises located within Westlake and to provide employment for residents of enterprise zones and other economically disadvantaged individuals; and

WHEREAS, pursuant to Chapter 2303, Subchapter F of the Texas Enterprise Zone Act, Texas Government Code (the “Act”), Charles Schwab & Co., Inc. has applied to the Town of Westlake, Texas for designation as a triple jumbo enterprise project; and

WHEREAS, the Town finds that Charles Schwab & Co., Inc. meets the criteria for designation as a triple jumbo enterprise project under Chapter 2303, Subchapter F of the Act on the following grounds:

1. Charles Schwab & Co., Inc. is a “qualified business” as such is defined under the provisions of Section 2303.402 of the Act since it will be engaged in the active conduct of a trade or business at a qualified business site within the governing body’s jurisdiction located outside of

an enterprise zone and at least 35 percent of the business' new employees will be residents of an enterprise zone, economically disadvantaged individuals, or veterans; and

2. There has been and will continue to be a high level of cooperation between public, private, and neighborhood entities within the area; and

3. The designation of Charles Schwab & Co., Inc. as a triple jumbo enterprise project will contribute significantly to the achievement of the vision and plans of the Town of Westlake, Texas for economic development and economic regeneration of the area; and

WHEREAS, the Town of Westlake, Texas finds that Charles Schwab & Co., Inc. meets the criteria for tax relief and other economic development incentives adopted by the Town of Westlake, Texas, and nominates Charles Schwab & Co., Inc. for a triple jumbo enterprise project status on the grounds that it will be located at the qualified business site, will create a higher level of employment, economic activity and stability; and

WHEREAS, the Town of Westlake, Texas finds it to be in the best interest of the community to nominate Charles Schwab & Co., Inc. as a triple jumbo enterprise project, and that such triple jumbo enterprise project designation will count as three (3) designations against the total number of designations allocated to the Town of Westlake, Texas, pursuant to the Act.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF WESTLAKE, TEXAS:

SECTION 1: That, all matters stated in the Recitals hereinabove are found to be true and correct and are incorporated herein by reference as if copied in their entirety.

SECTION 2: That, Charles Schwab & Co., Inc. is a "qualified business" as defined in Sec. 2303.402 of the Act, and that Charles Schwab & Co., Inc. meets the criteria for designation as a triple jumbo enterprise project, as set forth in the Sec. 2303, Subchapter F of the Act. The triple jumbo enterprise project shall take effect on the date of designation of the triple jumbo enterprise project by the agency and shall terminate five (5) years afterwards.

SECTION 3: That, the Town Council of the Town of Westlake, Texas, hereby nominates Charles Schwab & Co., Inc to the Office of the Governor for Economic Development and Tourism and further authorizes the Town Manager or designee to execute any related documents and pursue any necessary procedures on behalf of the Town of Westlake.

SECTION 4: If any portion of this Resolution shall, for any reason, be declared invalid by any court of competent jurisdiction, such invalidity shall not affect the remaining provisions hereof and the Town Council hereby determines that it would have adopted this Resolution without the invalid provision.

SECTION 5: That this Resolution shall become immediately effective from and after its date of passage.

PASSED AND APPROVED ON THIS 3rd DAY OF FEBRUARY 2025.

Kim Greaves, Mayor

ATTEST:

Dianna Buchanan, Town Secretary

APPROVED AS TO FORM:

L. Stanton Lowry, Town Attorney



Town of Westlake

1500 Solana Blvd
Building 7, Suite 7100
Westlake, TX 76262

Staff Report

File #: WA 25-102

Agenda Date: 2/3/2025

Agenda #: H.1.

TOWN STAFF REPORT RECOMMENDATIONS

Discussion concerning recent conversations with multiple elected legislators regarding appropriate school funding for Westlake Academy (Mayor Kim Greaves)

STAFF: Mayor Kim Greaves



Town of Westlake

1500 Solana Blvd
Building 7, Suite 7100
Westlake, TX 76262

Staff Report

File #: 25-33

Agenda Date: 2/3/2025

Agenda #: I.1.

TOWN STAFF REPORT RECOMMENDATIONS

Section 551.071: Consultation with and legal advice from the Town Attorney regarding pending litigation - Vertical Bridge v. Town of Westlake



Town of Westlake

1500 Solana Blvd
Building 7, Suite 7100
Westlake, TX 76262

Staff Report

File #: 25-34

Agenda Date: 2/3/2025

Agenda #: 1.2.

TOWN STAFF REPORT RECOMMENDATIONS

Section 551.087: Deliberation regarding Economic Development Negotiations to deliberate the offer of a financial or other incentive to a business prospect:

- a) Project ED 25-01, and
- b) Project ED 25-02.



Town of Westlake

1500 Solana Blvd
Building 7, Suite 7100
Westlake, TX 76262

Staff Report

File #: 25-37

Agenda Date: 2/3/2025

Agenda #: 1.3.

TOWN STAFF REPORT RECOMMENDATIONS

Section 551.073: Deliberation regarding prospective gifts related to Westlake Academy facilities.