



CITY OF MELROSE
APPROPRIATIONS & OVERSIGHT COMMITTEE
AGENDA • MAY 8, 2023

Council Chamber, First Floor, Melrose City Hall Committee Meeting
562 Main Street, Melrose, MA 02176

8:00 PM

I. CALL TO ORDER

Leila Migliorelli	Chair
Maya Jamaledine	Vice Chair
Shawn M. MacMaster	
Christopher Cinella	
Jack Eccles	
Mark Garipay	
Robb Stewart	
Manjula Karamcheti	
John Obremski	
Ryan Williams	
Jen Grigoraitis	President, Ex Officio

II. PUBLIC COMMENT

III. ORDERS

1. **ORDER-2023-81** : Previously under Order 2023-59 until a vote by Council divided order into eleven different orders reflecting each Zoning Amendment: Amending Melrose Revised Zoning Ordinance, Chapter 235, BA-2 Zoning District Line Change at 521-529 Franklin St.

Offered by: Mayor Paul Brodeur

From: City Council

RECOMMITTED TO COMMITTEE

IV. APPROPRIATION

1. **APPRO-2023-27:** An Appropriation from Free Cash, account number 01-324001, in the amount of One Hundred Thousand Dollars (\$100,000) to the various accounts in the Workers Compensation budget (#912) as set forth herein, to meet current obligations related to Workers Compensation and for any unexpected Workers Compensation costs that may be incurred through the end of the fiscal year.

From: City Council

ASSIGNED TO COMMITTEE

2. **APPRO-2023-26:** An Appropriation from Free Cash in the amount of \$481,600 (Four Hundred Eighty One Thousand Six Hundred Dollars) to designated Public Works Account as set forth herein for the City share of the purchase of an Electric Trash Truck and Charging Infrastructure.

V. GRANTS

1. **GRANT-2023-11 :** Acceptance of Massachusetts Department of Environmental Protection DERA Electric Solicitation Grant for the Purchase of an Electric Refuse Vehicle and Charging Infrastructure in the amount of \$268,084.35 (Two Hundred Sixty Eight Thousand Eighty Four Dollars and Thirty Five Cents).

Offered by: Paul Brodeur, Mayor

VI. ADJOURNMENT



GREGORY SAMPSON
Chair

CITY OF MELROSE

PLANNING BOARD

City Hall, 562 Main Street
Melrose, Massachusetts 02176
Telephone - (781) 979-4190
Fax - (781) 979-4290

January 31, 2023

The Honorable Mayor Brodeur and
The Honorable City Council
of the City of Melrose, Massachusetts

RE: Proposed Zoning Amendments

To His Honor and the Members of the Council:

At its meetings on December 19, 2022 and January 23, 2023, the Planning Board voted to submit the attached zoning amendments to the City Council. These proposed changes seek to clarify sections of the code for easier interpretation and understanding, ensure compliance with Massachusetts General Laws, and reduce the number of variance requests for violations that are regularly approved by the Board of Appeals. The purpose and reasoning behind each proposed amendment will be described in detail below.

Corner Lot Setbacks

The purpose of this amendment is to allow properties on corner lots to have similar side yard setback requirements as those properties that are not at the intersection of streets. In the Board's extensive review of corner lot properties, allowing for side yard setback distances on corner lots by Variance has not been detrimental to the streetscape or to the abutting properties. Two yards often function as side yards and allowing for a side yard setback in these locations provides the Owner space to build a structure that is consistent with the use of the yard while not creating negative impacts to the rhythm of buildings on the block.

Changing the Ordinance to allow for side yard setbacks will remove the need for many cases to obtain a Variance for corner lot setback relief. Since 2017, 38 cases have been brought before the Board of Appeals for variances related to a hardship imposed by the corner lot setback requirements. Removing the need for this permit reduces the Owners' administrative work, uncertainty, cost and extended permitting time that is associated with construction on corner lots. This amendment is also identified as an action item in the Melrose Forward Master Plan.

Structure Definition

The Melrose Zoning Ordinance (MZO) currently defines retaining walls and fences as structures. MZO §235-24.B, Accessory Buildings and Other Structures, requires

accessory structures to be governed by regulations for an accessory building unless specifically exempted by a variance. Oftentimes fences and retaining walls are therefore required to have an accessory structure setback from property lines. Since it is a typical condition for a retaining wall or fence to be on or close to a property line, it was likely not the intent of the regulation for accessory structure setback to apply to them. Removing retaining wall and fence from the definition of structure will resolve this issue.

BA-2 Zoning District Line Change at 521-529 Franklin St.

521-529 Franklin Street (parcel B12 058) is split into two zoning districts. The front of the parcel facing Franklin Street is in BA-2, while most of the parking lot to the rear is in UR-A. The property owner requested that the entirety of the lot be brought into BA-2 explaining that refinancing and insuring the property is complicated by the split zoning and the best use of the property is in line with uses permitted in BA-2.

Definition of Retail Food Establishment

This amendment updates the definition of retail food establishment to allow for the sale of alcoholic beverages for off premise consumption, which reflects the recent change in the City's liquor laws.

Definition of In-law Apartment

The definition of in-law apartments in the MZO has been found to be overly restrictive and creates undue hardship for many applicants who wish to create a dwelling unit for a family member in their home or attached to their home. The provision requiring the unit to be located within the single-family dwelling as it existed on January 1, 1990, is limiting and prohibits additions to accommodate in-law apartments. The Board of Appeals has approved variances from this provision on several occasions to permit in-law apartments and allow for this reasonable use where all other provisions are met.

This amendment strikes paragraph F from the definition and modifies paragraph G to address this issue. Removing paragraph F will allow for alterations and additions to existing single-family houses to accommodate in-law apartments. Revising paragraph G would continue to restrict the size of the unit in relation to the existing single-family home; additions would need to conform to the dimensional regulations within the district; and a special permit from the ZBA is still required for all in-law apartment proposals. This amendment is also identified as an action item in the Melrose Forward Master Plan.

Votes for Special Permit Approval & Term

Votes for Approval

This amendment updates the MZO to be consistent with recent changes to MGL C.40A (the Zoning Act) and reflect State regulations. Chapter 358 of the Acts of 2020 made several amendments to Chapter 40A, including: (1) changes to section 5 to reduce the number of votes required to enact certain kinds of zoning ordinances and bylaws from a $\frac{2}{3}$ supermajority to a simple majority; and (2) changes to section 9 making similar changes to the voting thresholds for the issuance of certain kinds of special permits.

Changes to the MZO related to Zoning Amendment voting is not needed because the language just references Section 5 of the Zoning Act.

Special Permit Term

This amendment increases the time allowed to exercise a special permit, which reflects another recent change to the Zoning Act. Chapter 219 of the Acts of 2016 increased the timeframe to exercise a special permit from two to three years. Municipalities are not obligated to adopt the longer timeframe, however, increasing the special permit term is more accommodating while conforming to the MGL.

Site Lines and Fence Height in Front Yards On Corner and Non-Corner Lots

The language in Sections 235-25.K and 235-25.L of the Zoning Ordinance is confusing and unclear. The Office of Planning and Community Development has received calls from residents attempting to understand this section of the code, which is easily misinterpreted and difficult to follow. Councilor McMaster also requested that the language in sections §235-25.K & §235-25.L be revised prompting the proposed amendment which provides clearer and more manageable instruction.

Site Plan Review Criteria

In relation to the amendment above, in districts where no setback from the property line is required, attention should be given to the safety of travel around corner sites with relation to the location of buildings and driveway openings during the Site Plan Review process. While the preceding amendment regulates lots in residential districts, this amendment ensures that this issue is considered for all new development.

Vegetation Height for Corner Lots & in Yards along Streets - General Code Amendment

In amending §235-25.K & §235-25.L, vegetation was removed from these sections and inserted in the General Code shifting enforcement responsibility from the Building Commissioner to the Department of Public Works, which generally oversees vegetation maintenance throughout Melrose. Additionally, with the regulation removed from the zoning ordinance a hedge that exists today will not be deemed legally nonconforming. The general code allows enforcement of existing and new vegetation and discretion is provided to the Director of Public Works to determine if vegetation creates a safety hazard.

Unit Size

The MZO's restrictions on unit size as regulated in §235-25.I prevent the City from complying with the Department of Housing and Community Development's guidelines on the new multi-family zoning requirements for MBTA Communities. (See Section 3A of MGL c. 40A, that was part of the 2021 Economic Development Bill.) The regulations require that multi-family housing is suitable for families with children and that zoning cannot restrict the number of bedrooms, the size of bedrooms, or the number of occupants.

The proposed amendment strikes the minimum unit sizes from the zoning ordinance. Residential unit sizes are addressed in the State Sanitary Code, enforced by the Board of

Health, and the State Building Code, enforced by the Building Commissioner, which regulate minimum dwelling unit and bedroom sizes per occupant and other dimensional controls of residential units. In addition to the aforementioned codes, the City's zoning districts have different mechanisms that directly or indirectly control the size of residential units. Some districts regulate the number of units per lot based on lot area, and all control a building's size through Floor Area Ratio and/or height and setback regulations. Market demand is an additional control over unit size. Two recent developments downtown provide a few studio apartments/microunits of between 360 to 400 square feet in each; however, the market demand is generally for larger units.

By eliminating unit size from the MZO, the City will comply with MGL c. 40A s. 3A while still being able to regulate density using other provisions. In addition to needing to make this change to the Ordinance to comply with the new law, having a variety of housing types in terms of size and cost, is a goal of the City's Housing Production Plan and this change will allow for smaller units, which have been successful in a few recent developments.

Definition of Family & Dwelling Units

The amendment to the definitions of family and dwelling units is also needed to comply with DHCD's guidelines on the new Multi-family zoning requirements for MBTA Communities. It strikes the definition of family and replaces it with definitions for One-Family and Two-Family Dwelling Units. The MZO already defines Dwelling Unit and Multifamily Dwelling Units thereby organizing the code in a more logical and streamlined manner. The definition of dwelling unit establishes the primary intent of a residential unit being a space with complete living facilities (living, sleeping, eating, cooking and sanitation) occupied by people that share the use of that space together as a single housekeeping unit. Restricting occupancy based on biological or legal relationships does not address the purposes of zoning. A biological family can have the same, less, or more of an impact on zoning issues such as traffic, parking, overcrowding, public systems, etc., than a non-tradition family living together as a household. Regulating density through the current definition of family can be discriminatory and illegal in how it is enforced.

This amendment also seeks to strike the definition of Apartment House from the MZO and the Table of Use and Parking Regulations. The definition references family and the Multifamily Dwelling duplicates the apartment house use rendering it obsolete. Lastly, this amendment seeks to eliminate the references to apartment house and garden house from the definition of Multifamily Dwelling, which are repetitive and antiquated.

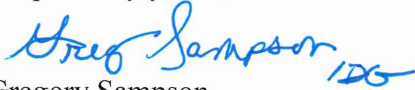
In accordance with M.G.L., Chapter 40A, Section 5, all proposed zoning amendments received by the City Council shall be submitted to the Planning Board within 14 days for review and to schedule a public hearing. The City Council and the Planning Board are required to hold public hearings within 65 days. The Planning Board would welcome a joint public hearing with the City Council. After the hearing, the Planning Board has 21 days to submit a report with recommendations to the City Council. The City Council

Proposed Zoning Amendments
January 31, 2023
Page 5 of 5

must wait until they receive a report from the Planning Board or wait for 21 days before holding a vote. Please forward the proposed amendments to us at your earliest convenience in order to begin the review process.

Thank you for your consideration. We look forward to discussing these important amendments with you.

Respectfully yours,



Gregory Sampson
Planning Board Chair

Attachment: Proposed Zoning Amendments dated January 31, 2023

cc: Shannon Phillips, City Solicitor
Rita Mercado, Chairwoman, Board of Appeals
Albert Talarico, Building Commissioner
Denise Gaffey, OPCD Director & City Planner
Members of the Planning Board

Corner Lot Setbacks Zoning Amendment

Amend ARTICLE II, Word Usage and Definitions, SECTION 235-5, definitions, as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

LOT, CORNER - A lot at the point of intersection of and abutting on two or more intersecting streets, the interior angle of intersection of the street lot lines or, in case of a curved street, extended lot lines, being not more than 135°. ~~For purpose of this chapter, each street frontage shall be considered a front yard and the remaining two yards shall be considered rear yards.~~

LOT LINE, REAR—The lot line opposite from the front lot line except as provided for in §235-25.C.

Amend ARTICLE VI, Dimensional and Density Regulations, SECTION 235-25, Additional dimensional and density provisions, as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

~~C. A corner lot shall have minimum street yards with the depths which shall be the same as the required front yard depths for the adjoining lots.~~

For a corner lot the street frontage that is used to access the main entrance (typically identified by street address) of the structure from the street shall be considered a front yard. The other street frontage shall be considered a side yard.

Of the remaining two yards, the yard with the shallower depth shall be considered a side yard and the yard with the deeper depth shall be considered the rear yard. If the remaining yards have the same depth, the owner can designate the side and rear yards.

Structure Definition Zoning Amendment

Amend ARTICLE II, Word Usage and Definitions, SECTION 235-5, definitions, as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

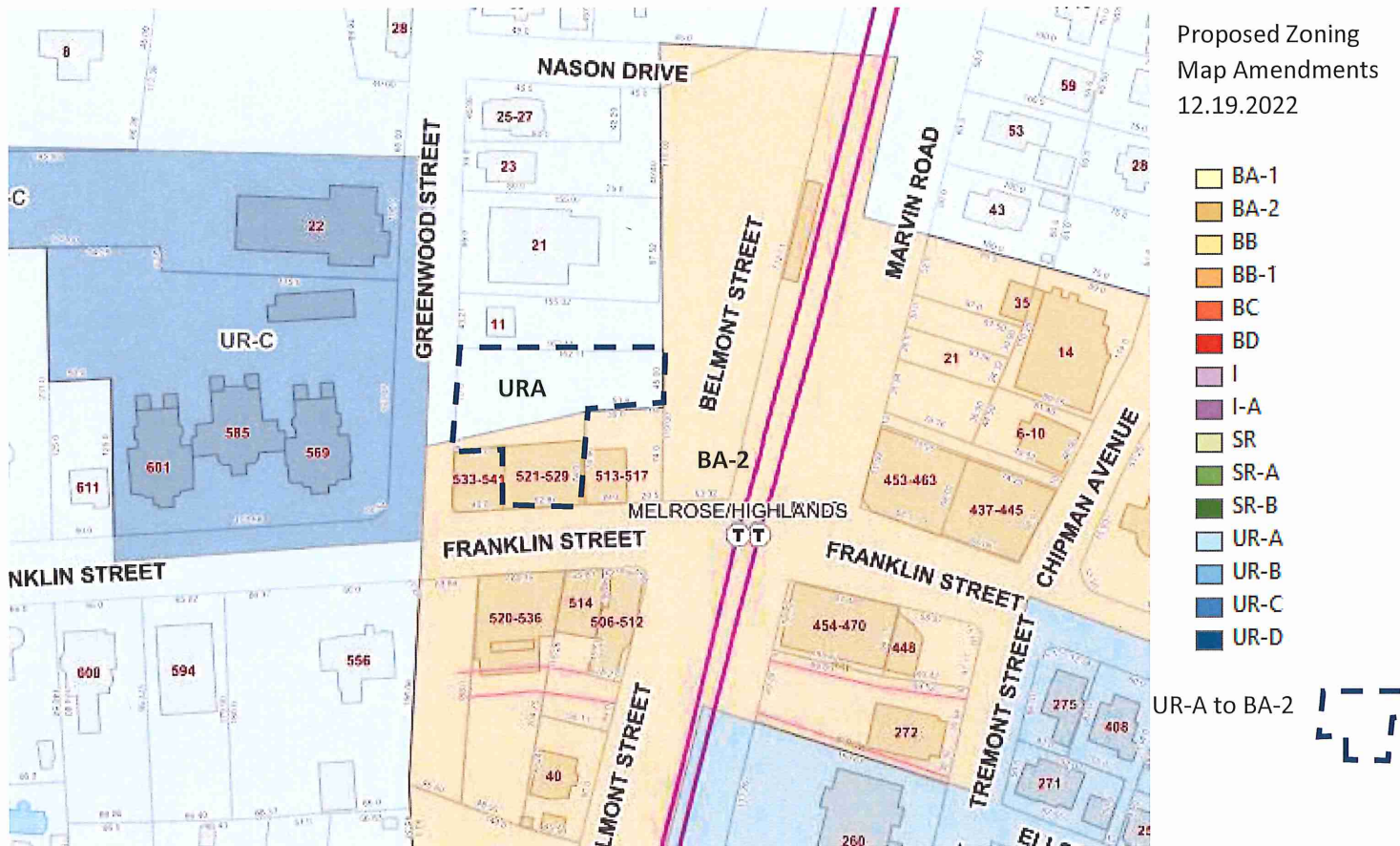
STRUCTURE - A combination of materials ~~for permanent or temporary occupancy or use~~ that are constructed or erected on the ground, such as but not limited to a building, bridge, trestle, tower, framework, ~~retaining wall~~, tank, tunnel, tent, stadium, reviewing stand, platform, swimming pool and equipment, shelters, piers, wharves, bin, ~~fence~~, and sign ~~or the like~~.

BA-2 Zoning District Line Change at 521-529 Franklin St.

Article III. Establishment of Districts

§235-8 Changes to map

The location and boundaries of the zoning districts are hereby amended as shown on a map titled “Zoning Map of the city of Melrose, Massachusetts,” dated ____.



Definition of Retail Food Establishment

Amend Chapter 235, ARTICLE II Word Usage and Definitions, SECTION 235-5, Definitions as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

RETAIL FOOD ESTABLISHMENT- A retail store selling food products, not to be consumed on the premises, which shall include but not be limited to one or more of the following: fresh cheese, fresh meat or delicatessen products, freshly prepared baked goods or confections, natural and organic food or beverages, and which may also sell, incidental to the sale of food products therein, ~~wines and malt beverages,~~ alcoholic beverages for off premises consumption; but not tobacco products, lottery tickets, pharmacy items, toiletries, personal care products or photographic supplies or services. The term "retail food establishment" as used herein shall further comport with the definition of "establishment" as defined in Chapter 327 of the Acts of 2008.

In-law Apartment Definition Zoning Amendment

Amend ARTICLE II, Word Usage and Definitions, SECTION §235-5, definitions, as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

IN-LAW APARTMENT

A dwelling unit either contained within an owner-occupied one-family ~~structure~~ dwelling (such as, but not limited to, a cellar or attic) or attached thereto (such as, but not limited to, a garage or barn) which constitutes separate living facilities for immediate members of the family, such as a mother and/or father or a son and/or daughter or their respective spouses. See "dwelling unit" as defined in this section.

A. An accessory in-law apartment is a separate, subordinate living area constructed as part of an existing owner-occupied one-family dwelling and built in a manner which maintains the appearance of a ~~single family structure~~ one-family dwelling.

B. There shall be no boarders or lodgers within either unit of a dwelling with an accessory in-law apartment.

C. No accessory in-law apartment shall be constructed without a building permit issued by the Building Inspector.

D. No use as an accessory in-law apartment shall be permitted prior to a certificate of occupancy by the Building Inspector.

E. A certificate of occupancy shall be issued for three years. Continued occupancy shall require issuance of a new certificate of occupancy.

F. ~~The dwelling unit shall be located within the single family dwelling as it existed on January 1, 1990.~~

G. The dwelling unit shall occupy no more than 1/3 of the structure's gross floor area ~~as of January 1, 1990.~~

Votes for Special Permit Approval & Term

Amend Chapter 235, ARTICLE XI, Special Permits and Conditions, SECTION 235-62, Special Permit Procedure as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

F. Vote. A concurring vote of all but one of the members of the Board of Appeals is required to grant a special permit or variance by said Board, and two-thirds concurring vote of the Planning Board is required to grant a special permit by said Board except when only a simple majority is required for multifamily housing, mixed-use development in centers of commercial activity within a municipality, and reduced parking space to residential unit ratio requirement, all pursuant to the specifications in Section 9 of the Zoning Act.

G. Certification and recording of special permit or variance. Any special permit or variance granted by a special permit granting authority shall be certified by said authority and show the name and address of the landowner or applicant if other than the owner. The notice of special permit shall identify the land affected, set forth compliance with statutory prerequisites and state that a special permit has been granted and certify that copies of the decision and all plans referred to in the decision have been filed with the City Clerk and the Planning Board. No variance or special permit, or any extension, modification or renewal thereof, shall take effect until a copy of the decision bearing the certification of the City Clerk that 20 days have elapsed and no appeal has been filed or, if such appeal has been filed, that it has been dismissed or denied is recorded in the Registry of Deeds with the date and time of such recording and indexed in the grantor index under the name of the owner of record or is recorded and noted on the owner's certificate of title. A special permit granted under this chapter shall lapse in ~~two~~ three years, which shall not include such time required to pursue or await the determination of an appeal, from the grant thereof, if a substantial use thereof has not sooner commenced except for good cause or, in the case of permit for construction, if construction has not begun by such date except for good cause.

Site Lines and Fence Height in Front Yards on Corner and Non-Corner Lots

Amend ARTICLE VI, Dimensional and Density Regulations, SECTION §235-25.K and §235-25.L, Additional dimensional and density provisions, as follows.

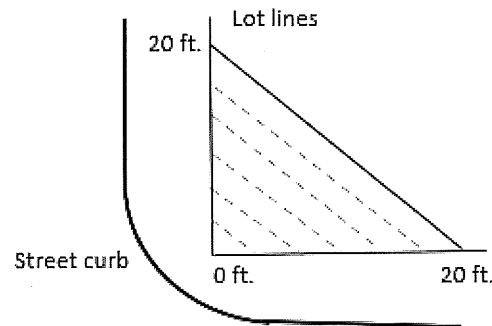
Text that is removed is ~~crossed out~~ and additions are underlined.

Section §235-25.K.

At no street intersection in any district shall any new or replacement organic material, excepting a lawn or ground cover, be planted or permitted to grow, nor any obstruction to vision exceeding the lesser of three feet in height above the plane established by the intersecting streets or 30 inches above the sidewalk be placed, nor shall existing organic material be permitted to grow above such height, on any lot within the triangular area formed by the intersecting curbs at a distance of 25 feet from the corner. Where curbs do not exist, measurement shall be made along edge of pavement.

K. For a corner lot in a district with a required front yard setback, a fence, wall, or other structure shall not exceed three feet in height above the plane of the intersecting streets herein (also see §202-4.1):

- a) Within the triangular area formed by measuring 20 ft. from the intersection of the property lot lines and bounded by a straight line connecting the two points.
- b) Notwithstanding §235-25.K(a), if a fence, wall, or similar structure is setback three feet from the lot line in the side yard as designated in §235-25.C they are exempt from the height restrictions in this section; and
- c) Otherwise, §235-25.L applies.



Section §235-25.L

A fence, hedge, wall, sign or other structure or vegetation may be maintained on any lot, provided that in the front yard area no such structure or vegetation shall be over three feet in height above the adjacent ground within five feet of the front lot line unless it can be shown that such vegetation will not restrict visibility in such a way as to hinder the safe entry of a vehicle from any driveway to the street.

L. For a non-corner lot, a fence, wall, or similar structure within the required front yard setback or from the front lot line to the line of the existing primary structure, whichever is less, shall not exceed three feet in height (also see §202-4.1(B)). Height is measured from the grade of land where the structure is installed. Existing retaining walls may be replaced in kind.

Site Plan Review Amendment

Amend ARTICLE V, Use Regulations, SECTION §235-16.1.E(5), Site plan review, as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

E.5 Convenience and safety of vehicular and pedestrian movement within and around the site and of the location of buildings, fences, walls, or other structures, and driveway openings, in relation to traffic and/or adjacent streets.

Vegetation Height for Corner Lots & in Yards along Streets - General Code Amendment

Insert ARTICLE I, General Provisions, SECTION §202-4.1 Vegetation Height, as follows.

Text that is removed is ~~crossed-out~~ and additions are underlined.

§202-4.1 Vegetation Height

A. For a corner lot, a hedge shall not exceed three feet in height above the plane of the intersecting streets, and/or any other leafy vegetation shall be maintained so as not to obstruct vision herein:

- i. Within the triangular area formed by measuring 20 ft. from the intersection of the property lot lines and bounded by a straight line connecting the two points.
- ii. Outside of the triangular area, §202-4.1(B) applies.

B. For all lots, a hedge shall not exceed three feet in height within three feet of the property line in the yard adjacent to the street and any other leafy vegetation shall be maintained so as not to obstruct vision of the public way. Height is measured from the grade of land where the vegetation is installed.

C. For existing vegetation, the determination regarding if vegetation is obstructing vision at an intersection or of the public way shall be at the discretion of the Director of Public Works,

Unit Size Amendment

Amend ARTICLE VI, Dimensional and Density Regulations, SECTION §235-25.I, Additional dimensional and density provisions, as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

Section §235-25.I

The gross floor area of each one family detached dwelling and per dwelling unit in a two family dwelling shall not be less than 768 square feet. The gross floor area in a multifamily dwelling shall not be less than 450 square feet for one bedroom dwelling units, 600 square feet for two bedroom units and 768 square feet for three bedroom or larger units.

Definitions of Family & Dwelling Amendment

Amend ARTICLE II, Word Usage and Definitions, SECTION §235-5, definitions, as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

Section §235-5

APARTMENT HOUSE

A building designed or intended or used as the home or residence of three or more families, each in a separate dwelling unit, living independently of each other, and who may have a common right in halls and stairways.

FAMILY

An individual or two or more persons related by blood or marriage living together as a single housekeeping unit and including necessary domestic help, such as nurses or servants, and further including, provided that the dwelling is owner occupied, not more than three lodgers or roomers taken for hire. A group of individuals (including necessary domestic help, such as nurses or servants, but excluding lodgers or roomers taken for hire) not related by blood or marriage but living together as a single housekeeping unit may constitute a family. For purposes of controlling residential density, each such group of four individuals shall constitute a single family.

DWELLING, ONE-FAMILY

A building containing one dwelling unit.

DWELLING, TWO-FAMILY

A building containing two dwelling units.

DWELLING, MULTIFAMILY

A building containing three or more dwelling units and including an apartment house, garden apartment house and multifamily dwellings

Amend Table of Use and Parking Regulations, SECTION 235 attachment 1, as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

Table of Use and Parking Regulations

Principal Use	Residential Districts						Business Districts					Industrial Districts		Parking Code (see § 235-32)
	SR	SR-A	SR-B	UR-A	UR-B	URC UR-D	BA BA-1	BA-2	BB BB-1	BC	BD	I	I-A	
5. Apartment house	—	—	—	—	S	P	—	—	—	—	P	—	—	B

Zoning Amendment Package 2023

Office of Planning and Community Development

March 6, 2023

Overview

The proposed changes seek to clarify sections of the zoning ordinance for:

1. Easier interpretation and understanding
2. Compliance with MA General Laws
3. Reduction in number of variance requests for violations regularly approved by the Board of Appeals

10 Proposed Zoning Amendments

- Corner Lot Setbacks
- Structure Definition
- BA-2 Zoning District Line Change at 521-529 Franklin St.
- Retail Food Establishment Definition
- In-law Apartment Definition
- Votes for Special Permit Approval & Term
- Sight Lines and Fence Height in Front Yards on Corner & Non-Corner Lots
- Site Plan Approval Criteria
- Unit Size
- Family & Dwelling Definitions

1 Proposed General Code Amendment

- Vegetation Height for Corner Lots & Yards along Streets

Corner Lot Setbacks

Proposal: Amend Sections 235-5 *LOT, CORNER* and *LOT LINE, REAR* Definitions & 235-25.C, Additional dimensional and density provisions relating to corner lots

Corner Lot Setbacks

- This amendment allows properties on corner lots to have similar side yard setback requirements as those properties that are not at the intersection of streets
- In the Planning Board’s review of corner lot properties, allowing for side yard setback distances by Variance has not been detrimental to the streetscape or abutting properties
- Two yards often function as side yards and changing the ordinance allows the Owner to build a structure consistent with the use of the yard
- Removing the need for a Variance eliminates a hardship for the Owner
- Identified as an action item in the Melrose Forward Master Plan

Year	Number of Related Variance Cases	% ZBA Approved
2017	1	100%
2018	6	83%*
2019	10	100%
2020	8	75%**
2021	12	83%***
2022	1	100%

* 1 case was withdrawn
** 1 case denied due to other relief requested & 1 withdrawn
*** 1 case denied due to rear yard issue & 1 withdrew

Corner Lot Setback Example— 101 Sycamore Rd.

Address: 101 Sycamore Road

Description: Remove side deck and build an attached garage in front & rear yard (Bow St. and yard opposite Sycamore Rd.)

Zone	Front	Side	Rear
SR-B	Yard Setback(ft)	Yard Setback (ft)	Yard Setback (ft)
Required	20	12	30
Existing	22	-	30
Proposed	12.3	-	25.6

Relief Required: Variance
As a result of amendment: If the front yard (Bow St.) is considered a side yard this proposal would be by-right.





Corner Lot Setback Example– 280 First St.

Description: Build 2-story addition in front & rear yards (Highview Ave and yards opposite Highview Ave and First St.)

Zone	Front	Side	Rear
UR-A	Yard Setback(ft)	Yard Setback (ft)	Yard Setback (ft)
Required	20	10	20
Existing	12.9 (Highview Ave)	-	9
Proposed	14	-	9

Relief Required: Variance

As a result of amendment:
Change to front yard: If the front yard is considered a side yard this proposal would be by-right.
Change to rear yard: If the yard with the shallower depth is considered a side yard & yard with the deeper depth shall be considered a rear yard, the proposal would be by-right if it was reduced by 1 ft.



Structure Definition

Proposal: Amend Section 235-5 *STRUCTURE* Definition

Structure Definition

- The Zoning Ordinance currently defines retaining walls and fences as structures triggering accessory building/structure setback requirements per Section 235-24.B unless exempted by variance

ACCESSORY BUILDINGS AND OTHER STRUCTURES DIMENSIONAL REGULATION

District	Maximum Coverage (percent of required rear yard area) ¹	Distance From Lot Line (feet)		Building Height (feet)
		Front	Side and Rear	
SR	25%	20	10	20
SR-A	25%	20	10	20
SR-B	40%	15	10	20
UR-A	50%	15	4 ²	20
UR-B	50%	15	4 ²	20
UR-C	50%	15	4 ²	20
UR-D	50%	15	4 ²	20

Structure Definition

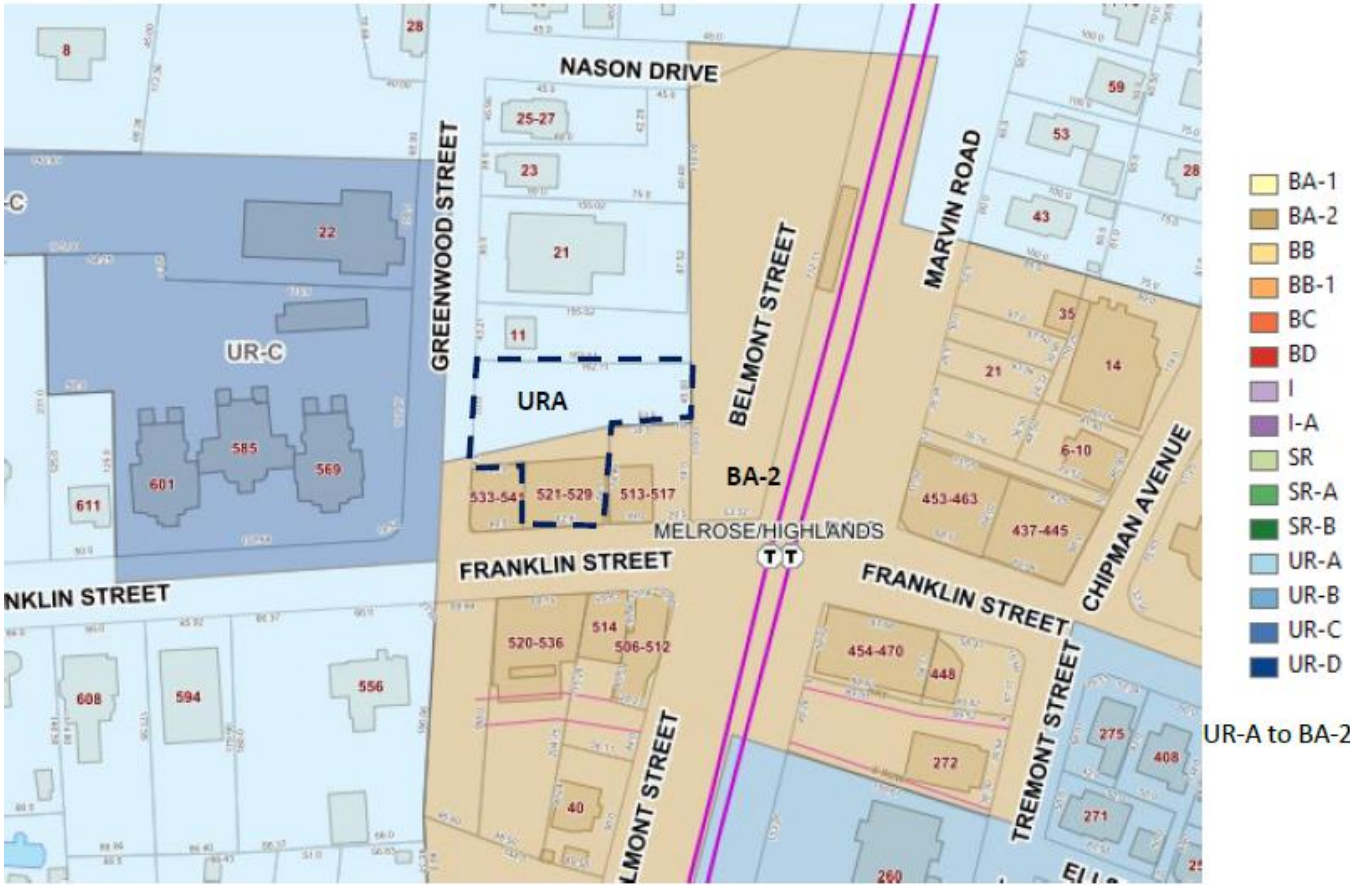
- Retaining walls & fences are often on or close to a property line and it was likely not the intent of the regulation for setbacks to apply
- Removing retaining wall and fence from the definition of structure will resolve this issue

BA-2 Zoning District Line Change at 521-529 Franklin St.

Proposal: Amend Section 235-8 Changes to map

BA-2 Zoning District Line Change at 521-529 Franklin St.

- 521-529 Franklin St. is split into two zoning districts: BA-2 and URA
- The split zoning complicates refinancing and insuring this property
- The best use of this property is in line with uses permitted in the BA-2



Retail Food Establishment Definition

Proposal: Amend Section 235-5 *RETAIL FOOD ESTABLISHMENT* Definition

Retail Food Establishment Definition

- This amendment updates the definition of retail food establishment to allow for the sale of alcoholic beverages for off premise consumption in line with the City's new liquor laws

In-law Apartment Definition

Proposal: Amend Section 235-5 *IN-LAW APARTMENT* Definition

In-law Apartment Definition

- The definition of in-law apartments is overly restrictive as it prohibits this use in houses that have had additions or alterations after January 1, 1990
- Removing Section F & revising Section G will allow for alterations and additions, while still restricting the size of the unit
- Additions would need to conform to dimensional regulations in the district & a special permit is still required for the use

SECTION 235-5

IN-LAW APARTMENT

~~F. The dwelling unit shall be located within the single-family dwelling as it existed on January 1, 1990.~~

G. The dwelling unit shall occupy no more than 1/3 of the structure's gross floor area ~~as of January 1, 1990.~~

In-law Apartment Definition

- The Board of Appeals has approved variances from this provision on several occasions to permit in-law apartments where all other provisions are met
- This amendment is also identified as an action item in the Melrose Forward Master Plan

Housing

Recommendations

Goal 1: Encourage the creation of housing units that are affordable to a broad range of incomes.

Strategy 1.1: Promote regulations that permit a variety of residential types, ensuring Melrose residents of all ages and incomes can remain in Melrose.

Action 1.1.1: Consider amending the Zoning Ordinance to decrease restrictions on in-law apartments.

Votes for Special Permit Approval & Term

Proposal: Amend Section 235-62 Special Permit Procedure

Votes for Special Permit Approval & Term

Votes for Approval

This amendment updates the zoning ordinance to be consistent with the recent changes to MGL Chapter 40A including:

- Reducing number of votes to grant zoning approvals related to multifamily housing, mixed-use development, and reduced parking, from 2/3 supermajority to simple majority

Special Permit Term

This amendment increases the time allowed to exercise a special permit reflecting an opt-in change to MGL Chapter 40A from 2 to 3 years

Sight Lines and Fence Height in Front Yard on Corner and Non-Corner Lots

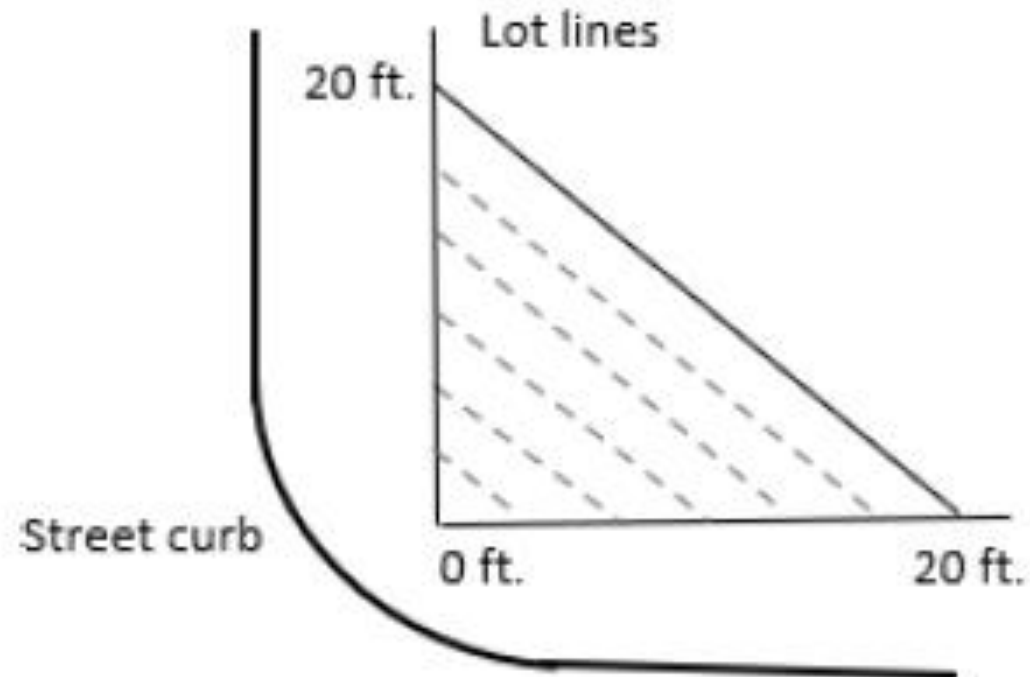
Proposal: Amend Section 235-25.K and 235-25.L

Sight Lines and Fence Height in Front Yard on Corner and Non-Corner Lots

- OPCD has received requests from the public and elected officials to clarify Sections 235-25.K &-25.L of the code which are confusing and easily misinterpreted
- The purpose of these regulations is to ensure visibility and safety by regulating the height of fences and other structures on corner lots and in front yards and to maintain an interesting streetscape

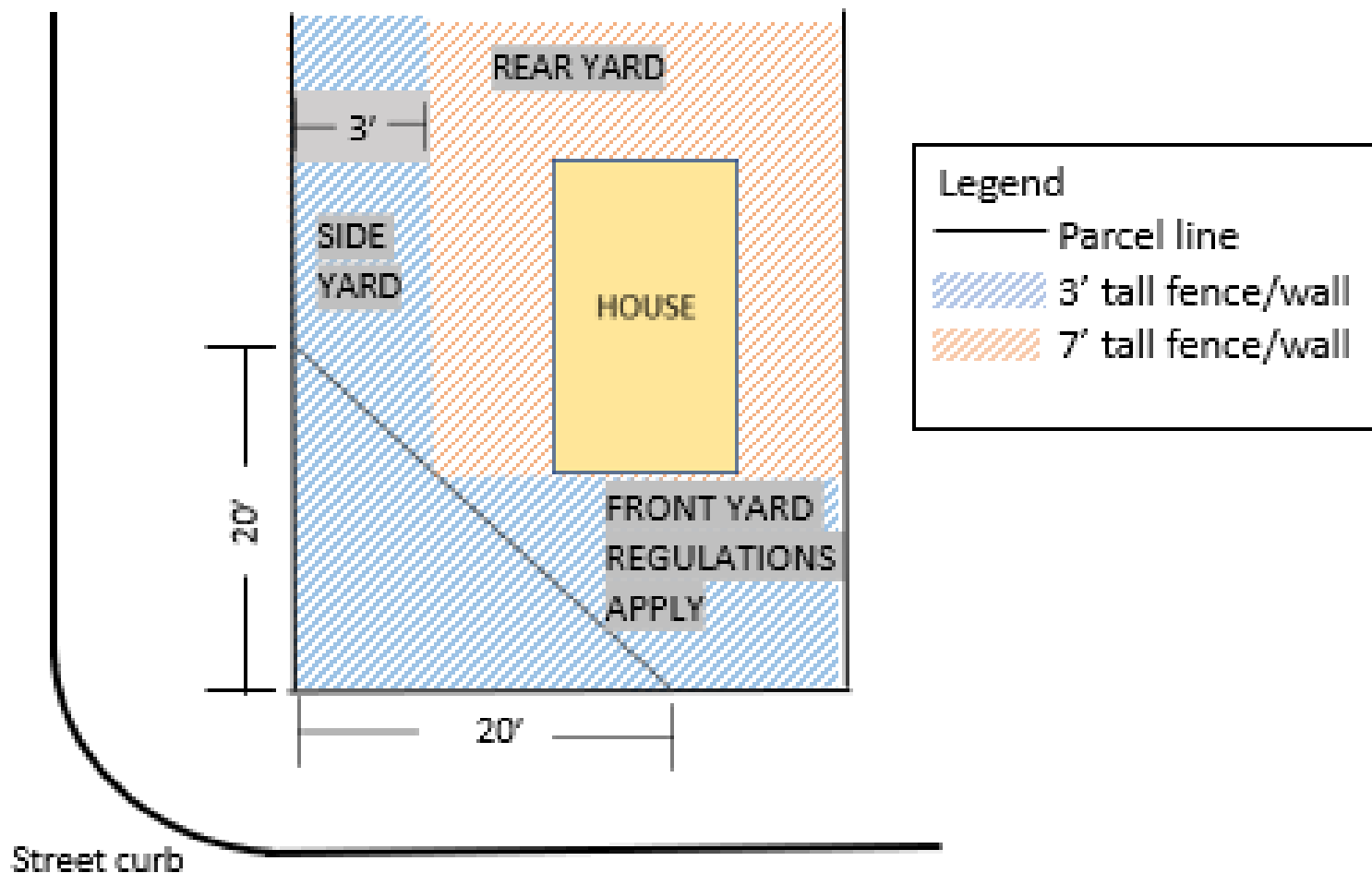
Sight Lines and Fence Height in Front Yard on Corner Lots

- The proposed measurements were carefully selected based on the existing code, codes in other cities and towns, traffic safety regulations, and a setback analysis conducted by OPCD Staff
- The amendment proposes that within a triangular area formed by measuring 20 ft. from the intersection of the property lot lines, a structure cannot exceed 3 ft. in height



Sight Lines and Fence Height in Front Yard on Corner Lots

- Beyond the triangular area
 - In the side yard structures may be taller if they are setback 3 ft. from the property line
 - In the front yard structures follow the front yard regulations

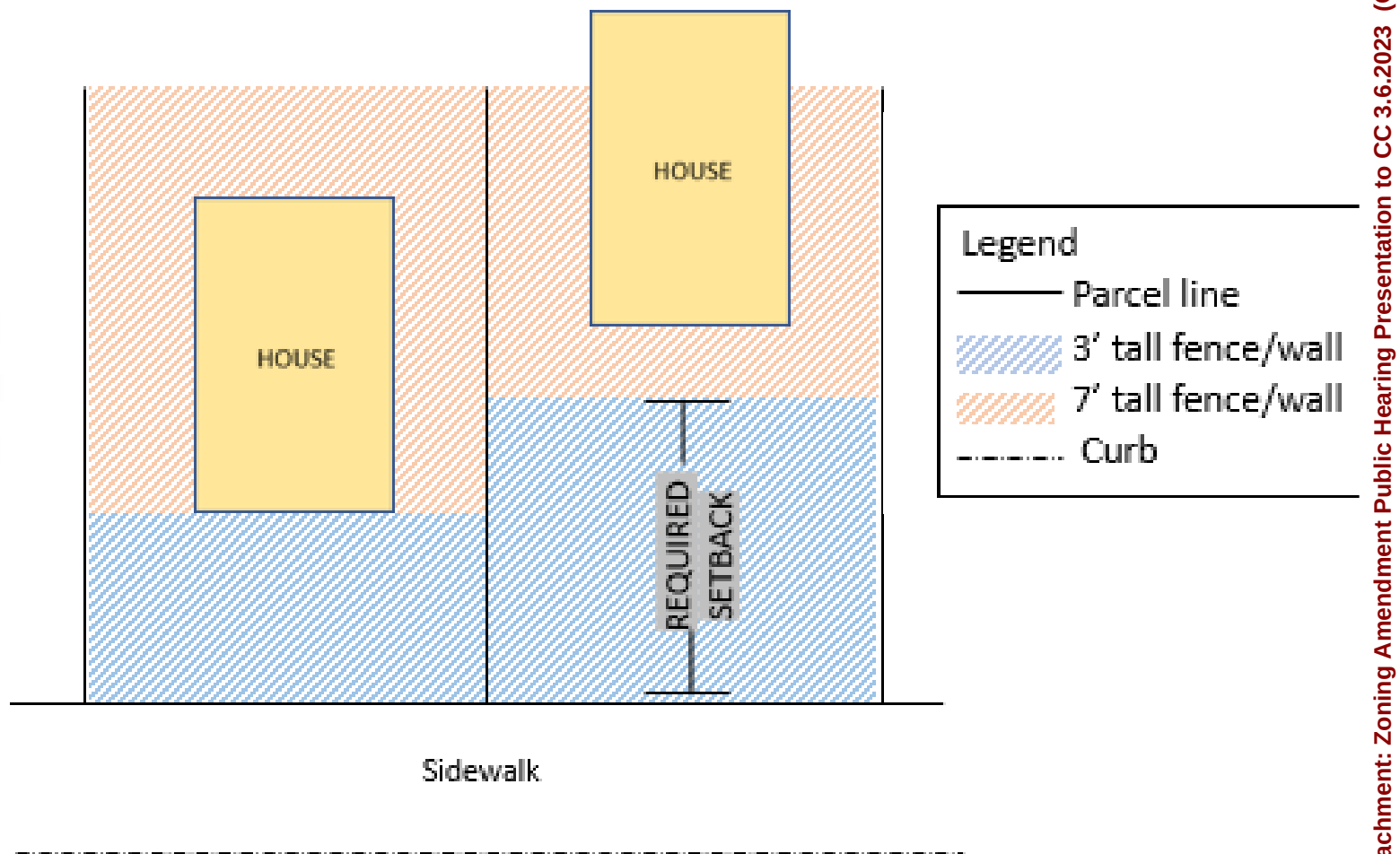


Sight Lines and Fence Height in Front Yard on Corner Lot-- Do's and Don'ts



Sight Lines and Fence Height in Front Yards on Non-Corner Lots

- For non-corner lots, the amendment proposes that within the front yard setback or from the line of the existing primary structure to the lot line (whichever is less), a fence, wall, or similar structure will not be taller than 3 ft.
- Beyond the setback or the line of the existing primary structure, fences and walls may be up to 7 ft. tall



Sight Lines and Fence Height in Front Yard -- Do's and Don'ts



Site Plan Review Criteria

Proposal: Amend Section 235-16.1.E(5) Site Plan Approval

Site Plan Approval Criteria

- In relation to Section 235-25.K & - 25.L, in districts where no setback from the property line is required, attention should be given to the safety of travel around corner sites during the Site Plan Review process

SECTION §235-16.1.E(5)

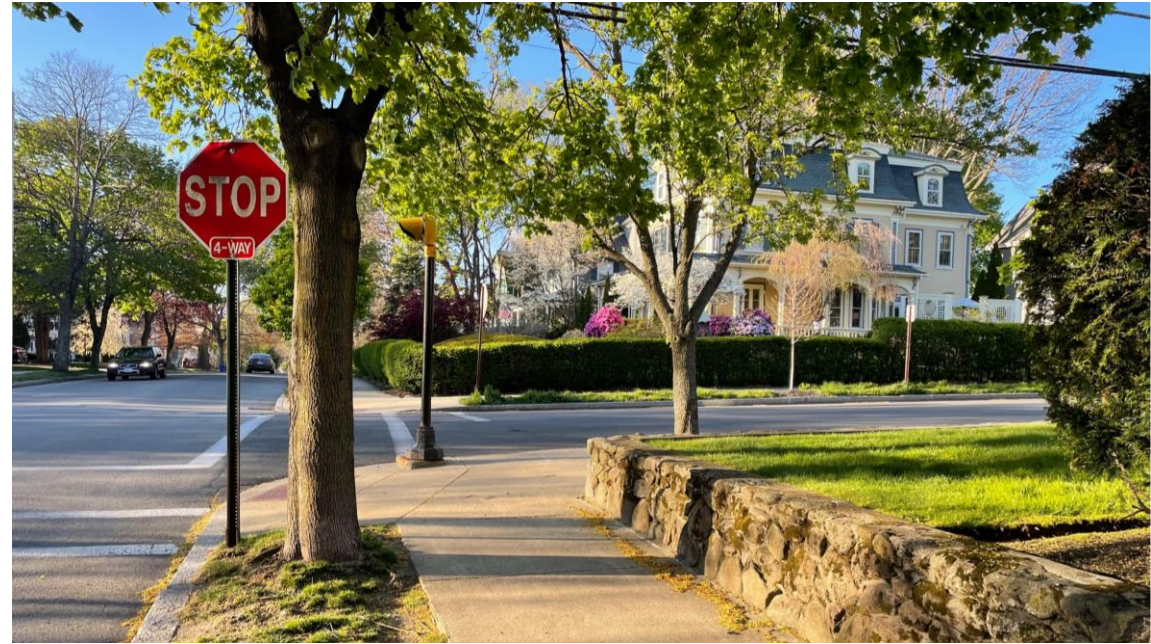
E.5 Convenience and safety of vehicular and pedestrian movement within and around the site and ~~of~~ the location of buildings, fences, walls, or other structures, and driveway openings, in relation to traffic and/or adjacent streets.

Vegetation Height for Corner Lots & in Yards along Streets

Proposal: Amend General Code to include vegetation height and shift enforcement from Building Inspector to Department of Public Works

Vegetation Height for Corner Lots & in Yards along Streets

- Vegetation is proposed to be moved from Sections 235-25.K & -25.L of the MZO to the General Code shifting enforcement responsibility from the Building Commissioner to the DPW, which oversees vegetation maintenance throughout the City
- In removing vegetation from the zoning ordinance, existing vegetation will not be deemed legally nonconforming, allowing for enforcement of new and existing vegetation
- The Director of Public Works may use discretion in determining if existing vegetation creates a safety hazard



Vegetation Height for Corner Lots & in Yards along Streets

- Hedges & any other leafy vegetation are regulated to:
 - Promote driver and pedestrian safety by ensuring no obstructions in the public way
 - Maintain an interesting, pedestrian friendly streetscape

Vegetation Height for Corner Lots & in Yards along Streets

- Hedges can be up to 3 ft tall and leafy vegetation cannot obstruct view within 3 feet of front yards or side yards
- This proposal also limits height following the same 20 ft. measurements for corner lots as Section 235-25.K



Unit Size

Proposal: Amend Section 235-25.1

Unit Size

- The zoning code's restrictions on dwelling unit size prevent the City from complying with DHCD's guidelines on the new multi-family zoning requirements for MBTA Communities (MGL Chapter 40A Section 3A)
- To comply, zoning cannot restrict the size of residential units
- The proposed amendment removes minimum unit sizes requirements from the code



City of Melrose, MA / Part II: General Legislation / Zoning
Article VI **Dimensional and Density Regulations**



§ 235-25 Additional dimensional and density provisions.

- I. The gross floor area of each one-family detached dwelling and per dwelling unit in a two-family dwelling shall not be less than 768 square feet. The gross floor area in a multifamily dwelling shall not be less than 450 square feet for one-bedroom dwelling units, 600 square feet for two-bedroom units and 768 square feet for three-bedroom or larger units.

Unit Size

There are several mechanisms that will be used to prevent overcrowding (a rare occurrence in Melrose):

- ✓ Health and State Building Code regulate minimum dwelling unit and bedroom sizes per occupant and other dimensional controls
- ✓ Zoning district regulations controlling the number of units include lot area, FAR, and/or height and setback restrictions
- ✓ Market demand controls unit size

235 Attachment 2

City of Melrose

Table of Dimensional and Density Regulations

[Adopted 4-6-2015 by Ord. No. 2015-90; 6-7-2021 by Order No. 2021-96]

District	Use	Minimum Lot Area (square feet or as noted)	Minimum Frontage and Lot Width (feet)	Minimum Lot Depth (feet)	Yards			Maximum Height (feet)	Maximum Stories	Maximum Coverage	Maximum Floor Area Ratio	Mini Op Sp
					Front (feet)	Side (feet)	Rear (feet)					
SR	Any permitted use	25,000	110	90	25	20	50	35	2 1/2	35%	None	50
SR-A	Any permitted use	15,000	100	90	25	15	40	35	2 1/2	35%	None	50
SR-B	Any permitted use	10,000	80	90	20	12	30	35	2 1/2	35%	None	40
UR-A	Townhouse	7,500 per dwelling unit	100	90	20	10 ¹	20	35	2 1/2	35%	None	35
	Two-family dwelling	13,500	100	90	20	10 ¹	20	35	2 1/2	35%	None	35
	Single-family dwelling	7,500	75	90	20	10	20	35	2 1/2	35%	None	35
	Any other permitted use	10,000	100	90	20	10	20	35	2 1/2	35%	None	35
UR-B	Single-family dwelling	7,500	75	90	20	10	15	35	2 1/2	50%	None	30
	Two-family and multifamily dwelling uses and townhouses	7,500 plus 3,000 for each dwelling unit more than 1	100	90	20	10 ¹	15	35	2 1/2	50% ²	None	30
	Any other permitted use	10,000	100	90	20	10 ¹	15	35	2 1/2	50%	None	20

Unit Size

- Eliminating unit size will allow the City to comply with MGL Chapter 40A Section 3A while still regulating density using other zoning provisions
- This will enable the City to have a variety of housing types in terms of size and cost, which is a goal of the Housing Production Plan

Housing Goals

MELROSEHPP

1. **Housing Mix.** Encourage a range of housing options and types to serve households with a variety of incomes and meet the diverse needs of current and future Melrose residents.
2. **Racial Equity.** Advance racial equity, promote inclusion, encourage wealth creation through housing access for people of color, and enrich the Melrose community through increased diversity.
3. **Affordable Housing.** Expand and preserve deed-restricted and subsidized Affordable Housing opportunities for low- and moderate-income households, including family households.
4. **Enhanced Neighborhoods.** Utilize housing as a tool to enhance existing Melrose neighborhoods, balancing development with other community priorities like open space, historic preservation, economic development, walkability, sustainability, and resilience.
5. **Community Engagement.** Promote an understanding of the role that housing plays in Melrose and the region through ongoing public engagement and discussion.

Family & Dwelling Unit Definition

Proposal: Amend Section 235-5 *APARTMENT HOUSE; FAMILY; DWELLING, ONE-FAMILY; DWELLING, TWO-FAMILY; DWELLING, MULTIFAMILY* Definitions & Amend Section 235 Attachment 1

Family & Dwelling Unit Definition

- To comply with DHCD's new multi-family zoning requirements for MBTA Communities, the definition of family needs to be amended as zoning cannot limit the number of occupants in a unit
- Restricting occupancy based on biological or legal relationships can be discriminatory and does not address the purposes of zoning
- Biological families can have the same, less, or more of an impact on traffic, parking, overcrowding, etc. than a non-traditional family living together as a household

← City of Melrose, MA / Part II: General Legislation / Zoning
Article II Word Usage and Definitions



§ 235-5 Definitions.

FAMILY

An individual or two or more persons related by blood or marriage living together as a single housekeeping unit and including necessary domestic help, such as nurses or servants, and further including, provided that the dwelling is owner-occupied, no more than three lodgers or roomers taken for hire. A group of individuals (including necessary domestic help, such as nurses or servants, but excluding lodgers or roomers taken for hire) not related by blood or marriage but living together as a single housekeeping unit may constitute a family. For purposes of controlling residential density, each such group of four individuals shall constitute a single family.

Family & Dwelling Unit Definition

- The zoning code already defines Dwelling Unit and Multifamily Dwelling Unit
- Defining One-family and Two-family Dwelling Units instead of defining Family organizes the code in a more streamlined manner
- The Dwelling Unit definition establishes the primary intent of a residential unit being a space with complete living facilities occupied by people who share use of the space as a single housekeeping unit

← City of Melrose, MA / Part II: General Legislation / Zoning
Article II Word Usage and Definitions →

☐ § 235-5 Definitions.

DWELLING, MULTIFAMILY

A building containing three or more dwelling units and including an apartment house, garden apartment house and multifamily dwellings.

DWELLING UNIT

One or more living and sleeping rooms providing complete living facilities for the use of one or more individuals constituting a single housekeeping unit, with permanent provisions for living, sleeping, eating, cooking and sanitation.

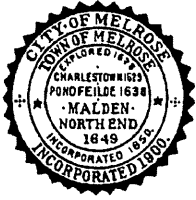
Family & Dwelling Unit Definition

- This amendment also strikes the definition of Apartment House from the zoning ordinance, the Table of Use and Parking Regulations, and the definition of Multifamily Dwelling
- The definition of Multifamily Dwelling duplicates the apartment house use rendering it obsolete
- The reference to garden apartment house is also eliminated from the definition of Multifamily Dwelling because it is no longer relevant

Amend Table of Use and Parking Regulations, SECTION 235 attachment 1, as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

Table of Use and Parking Regulations														
Principal Use	Residential Districts						Business Districts					Industrial Districts		Parking Code (see § 235-32)
	SR	SR-A	SR-B	UR-A	UR-B	URC UR-D	BA BA-1	BA-2	BB BB-1	BC	BD	I	I-A	
5. Apartment house	—	—	—	—	S	P	—	—	—	—	P	—	—	B



GREGORY SAMPSON
Chairman

CITY OF MELROSE

PLANNING BOARD

City Hall, 562 Main Street
Melrose, Massachusetts 02176
Telephone - (781) 979-4190
Fax - (781) 979-4290

March 27, 2023

The Honorable City Council
Of the City of Melrose, Massachusetts

Re: Report to City Council on Order 2023-59, Amending Melrose Revised Zoning Ordinance, Chapter 235, Various Provisions

To the Members of the City Council:

Pursuant to Massachusetts General Laws, Chapter 40A, Section 5, the City Council held a public hearing on the above-reference zoning amendments on March 6, 2023. The proposed amendments were initiated by the Planning Board to clarify sections of the code for easier interpretation and understanding, ensure compliance with Massachusetts General Laws, and reduce the number of variance requests for violations that are regularly approved by the Board of Appeals. City Councilors had questions and comments regarding the proposed amendments, which were discussed at the public hearing. No one from the public appeared to comment or submitted written comments.

The Planning Board held a public hearing on the above-referenced zoning amendments on March 13, 2023, at the request of the City Council to hold separate hearings. No one from the public appeared to comment or submitted written comments. Members discussed the questions and comments raised by the City Councilors and responded to the feedback as detailed below.

Deed Restrictions for Properties with In-Law Apartments

Members of the City Council questioned if there should be deed restrictions for properties with In-Law Apartments. It was clarified that to establish an In-Law Apartment, Applicants must apply to the Board of Appeals for a special permit. Applicant must record the Board of Appeals' decision at the Registry of Deeds, which would appear during a title search.

In-Law Apartments Special Permits and Variances

Members of the City Council inquired about the volume of requests for variances for In-Law Apartments. Planning Staff determined that there have been 14 applications for In-Law Apartments since 2010, 8 of which required variances from §235-5 Definition of In-Law Apartments Standards F & G. All but one application was approved. The number of requests for In-Law Apartments is, on average, approximately one application per year. The proposed amendment is not expected to increase the volume in any meaningful way.

BA-2 Zoning District Line Change at 521-529 Franklin Street

Members of the City Council questioned whether a proposal to change the lines of a zoning district should be included in this package of zoning amendments. The Planning Board noted that it is a best practice to have zoning districts follow parcel lines to avoid parcels being split into two different districts. In this instance, the direct abutters on either side of the property are commercial buildings and there are many other commercial and mixed uses in the direct vicinity, so the BA-2 designation for the entire parcel is logical and desirable. Furthermore, although not required by law, the Planning Office mailed notices with information about the amendments to abutters within 300 feet of the subject parcel. No comments from the public were received. The Planning Board continues to recommend including this district line change with the package of zoning amendments.

Translations for Proposed Amendments

The Planning Board discussed a comment by City Councilors regarding the accessibility of the zoning code and if the regulations were available in languages besides English. It was noted that the regulations are hosted on the Ecode360 website where the City Charter and most City Codes can be found. On the Ecode360 website there is a Google Translate tool available. Planning Staff suggested that the City could prepare written guidance for the public on specific provisions such as the updated fence and vegetation regulations and consider how best to offer the information in multiple languages.

Corner Lot Setbacks

Members of the City Council requested that the changes proposed for corner lots be reviewed for public safety. Planning Staff reviewed this amendment with the Police Chief and the Fire Chief and neither official expressed any concern. Both agreed that the recommended amendment is logical and will not create any safety hazards.

Differences Between a Lodging House/Unit and a Dwelling Unit

A member of the City Council inquired about the differences between lodging houses/units, and dwelling units. The Planning Board reviewed the definitions of “Dwelling” and “Dwelling Unit” in the Melrose Zoning Ordinance which are defined as follows:

- DWELLING: A privately or publicly owned permanent structure, whether owned by one or more persons or in condominium, which is occupied in whole or in part as the home residents or sleeping place of one or more persons. The term ‘one-family, two-family or multifamily dwelling’ shall not include a hotel, lodging house, hospital, membership club, mobile home or dormitory.
- DWELLING UNIT: One or more living and sleeping rooms providing complete living facilities for the use of one or more individuals constituting a single housekeeping unit, with permanent provisions for living, sleeping, eating, cooking and sanitation.

The definition of “Dwelling” specifically states that lodging houses are disparate from dwellings. Additionally, “Dwelling Units” are constituted by single housekeeping units.

The Planning Board also reviewed the definitions of “Lodging Unit” and “Lodging House” in the Melrose Zoning Ordinance which are defined as follows:

- LODGING UNIT: One or more rooms for the semi-permanent use of one, two or three individuals not living as a single housekeeping unit and not having cooking facilities. ‘Lodging unit’ shall include rooms in boardinghouses, lodging houses, tourist homes, or rooming houses. It

shall not include convalescent, nursing or rest homes; dormitories of charitable, educational or philanthropic institutions; or apartments or hotels.

- LODGING HOUSE: A building containing four or more lodging units.

Residents in “Lodging Units” are not living as single housekeeping units as they would be in a “Dwelling Unit.” Additionally, “Lodging Units” do not have cooking facilities whereas “Dwelling Units” must provide complete and permanent living facilities including provisions for cooking. Also, lodging houses require a license from the City Council and are only allowed in a few zoning districts. The Planning Board feels that the Melrose Zoning Ordinance clearly differentiates between lodging houses/units, and dwelling units and does not recommend any further changes.

Replacement of Existing Fences in Accordance with New Regulations

Members of the City Council wondered if property owners would be allowed to replace existing fences in-kind if they do not conform to the new regulations. The Planning Staff consulted with the Building Commissioner on this question. He explained that there are regulations on fence height and setbacks in the current code so fences that do not currently conform may be illegal. Fences that conformed to the old code and not the new code would be considered legally nonconforming and protected; however, if the fence was completely reconstructed it would need to comply with the new code. Repairing sections of a legally pre-existing nonconforming fence would be allowed by-right. The Building Commissioner confirmed that compliance with these regulations is primarily driven by complaints and that the City does not typically receive many fence complaints.

Front Yard Fence Height

A member of the City Council suggested that the proposed 3-foot front yard fence height may be too low for residents with pets. Pets that can jump over a 3-foot fence would either have to be kept in the side or rear yards or restrained by leash or other means. Alternatively, residents could request a variance from the proposed amendment in special cases where a taller front yard fence may be needed. The Planning Board continues to feel that the provision for 3-foot fence height in the front yard is reasonable and benefits the streetscape without limiting the use of pet owners’ properties.

Special Permit Timeline

Members of City Council questioned if it is beneficial to increase the special permit timeline to three years. The Planning Board discussed how once projects are approved by the Planning Board or Zoning Board of Appeals, it often takes time to gather and complete all the necessary materials to obtain a building permit. In some cases, extending the special permit timeline may result in the development moving forward more quickly because the Applicant may not have to return for a new hearing due to an expiration of the project’s permit.

This proposed amendment does not affect the timelines for variances or site plan approvals. Variances will still expire after one-year if unexercised, with the possibility of a six-month extension if requested prior to expiration. Site plan approvals are valid for two years with the possibility of an extension for good causes with a written request to the Planning Board.

Report to Members of the Council on Order 2023-59
March 27, 2023
Page 4 of 4

To summarize, the Planning Board does not recommend making any changes to the package of proposed zoning amendments originally submitted and reviewed during two separate public hearings. The Planning Board finds that the proposed zoning amendments are reasonable, fair and provide clarity. The amendments will create a more user-friendly code that complies with the Massachusetts General Laws and reduces the number of variance requests; this will in turn benefit both the Board of Appeals and residents by alleviating a significant financial and administrative burden. The Planning Board respectfully recommends that the City Council vote in favor of adopting the proposed zoning amendments as submitted and dated January 31, 2023.

If you have any further questions, or we can provide any additional information, please do not hesitate to contact us. We would be pleased to make ourselves available to you as you continue to deliberate on this issue.

Very truly yours,


Gregory Sampson
Chairman

Attachment: Proposed Zoning Amendments, January 31, 2023

cc: Mayor Paul Brodeur
Shannon Phillips, City Solicitor
Albert Talarico, Building Commissioner
Denise Gaffey, City Planner
Members of the Planning Board
Members of the Board of Appeals



GREGORY SAMPSON

Chair

CITY OF MELROSE

PLANNING BOARD

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January 31, 2023

The Honorable Mayor Brodeur and
The Honorable City Council
of the City of Melrose, Massachusetts

RE: Proposed Zoning Amendments

To His Honor and the Members of the Council:

At its meetings on December 19, 2022 and January 23, 2023, the Planning Board voted to submit the attached zoning amendments to the City Council. These proposed changes seek to clarify sections of the code for easier interpretation and understanding, ensure compliance with Massachusetts General Laws, and reduce the number of variance requests for violations that are regularly approved by the Board of Appeals. The purpose and reasoning behind each proposed amendment will be described in detail below.

Corner Lot Setbacks

The purpose of this amendment is to allow properties on corner lots to have similar side yard setback requirements as those properties that are not at the intersection of streets. In the Board's extensive review of corner lot properties, allowing for side yard setback distances on corner lots by Variance has not been detrimental to the streetscape or to the abutting properties. Two yards often function as side yards and allowing for a side yard setback in these locations provides the Owner space to build a structure that is consistent with the use of the yard while not creating negative impacts to the rhythm of buildings on the block.

Changing the Ordinance to allow for side yard setbacks will remove the need for many cases to obtain a Variance for corner lot setback relief. Since 2017, 38 cases have been brought before the Board of Appeals for variances related to a hardship imposed by the corner lot setback requirements. Removing the need for this permit reduces the Owners' administrative work, uncertainty, cost and extended permitting time that is associated with construction on corner lots. This amendment is also identified as an action item in the Melrose Forward Master Plan.

Structure Definition

The Melrose Zoning Ordinance (MZO) currently defines retaining walls and fences as structures. MZO §235-24.B, Accessory Buildings and Other Structures, requires

accessory structures to be governed by regulations for an accessory building unless specifically exempted by a variance. Oftentimes fences and retaining walls are therefore required to have an accessory structure setback from property lines. Since it is a typical condition for a retaining wall or fence to be on or close to a property line, it was likely not the intent of the regulation for accessory structure setback to apply to them. Removing retaining wall and fence from the definition of structure will resolve this issue.

BA-2 Zoning District Line Change at 521-529 Franklin St.

521-529 Franklin Street (parcel B12 058) is split into two zoning districts. The front of the parcel facing Franklin Street is in BA-2, while most of the parking lot to the rear is in UR-A. The property owner requested that the entirety of the lot be brought into BA-2 explaining that refinancing and insuring the property is complicated by the split zoning and the best use of the property is in line with uses permitted in BA-2.

Definition of Retail Food Establishment

This amendment updates the definition of retail food establishment to allow for the sale of alcoholic beverages for off premise consumption, which reflects the recent change in the City's liquor laws.

Definition of In-law Apartment

The definition of in-law apartments in the MZO has been found to be overly restrictive and creates undue hardship for many applicants who wish to create a dwelling unit for a family member in their home or attached to their home. The provision requiring the unit to be located within the single-family dwelling as it existed on January 1, 1990, is limiting and prohibits additions to accommodate in-law apartments. The Board of Appeals has approved variances from this provision on several occasions to permit in-law apartments and allow for this reasonable use where all other provisions are met.

This amendment strikes paragraph F from the definition and modifies paragraph G to address this issue. Removing paragraph F will allow for alterations and additions to existing single-family houses to accommodate in-law apartments. Revising paragraph G would continue to restrict the size of the unit in relation to the existing single-family home; additions would need to conform to the dimensional regulations within the district; and a special permit from the ZBA is still required for all in-law apartment proposals. This amendment is also identified as an action item in the Melrose Forward Master Plan.

Votes for Special Permit Approval & Term

Votes for Approval

This amendment updates the MZO to be consistent with recent changes to MGL C.40A (the Zoning Act) and reflect State regulations. Chapter 358 of the Acts of 2020 made several amendments to Chapter 40A, including: (1) changes to section 5 to reduce the number of votes required to enact certain kinds of zoning ordinances and bylaws from a $\frac{2}{3}$ supermajority to a simple majority; and (2) changes to section 9 making similar changes to the voting thresholds for the issuance of certain kinds of special permits.

Changes to the MZO related to Zoning Amendment voting is not needed because the language just references Section 5 of the Zoning Act.

Special Permit Term

This amendment increases the time allowed to exercise a special permit, which reflects another recent change to the Zoning Act. Chapter 219 of the Acts of 2016 increased the timeframe to exercise a special permit from two to three years. Municipalities are not obligated to adopt the longer timeframe, however, increasing the special permit term is more accommodating while conforming to the MGL.

Site Lines and Fence Height in Front Yards On Corner and Non-Corner Lots

The language in Sections 235-25.K and 235.25.L of the Zoning Ordinance is confusing and unclear. The Office of Planning and Community Development has received calls from residents attempting to understand this section of the code, which is easily misinterpreted and difficult to follow. Councilor McMaster also requested that the language in sections §235-25.K & §235-25.L be revised prompting the proposed amendment which provides clearer and more manageable instruction.

Site Plan Review Criteria

In relation to the amendment above, in districts where no setback from the property line is required, attention should be given to the safety of travel around corner sites with relation to the location of buildings and driveway openings during the Site Plan Review process. While the preceding amendment regulates lots in residential districts, this amendment ensures that this issue is considered for all new development.

Vegetation Height for Corner Lots & in Yards along Streets - General Code Amendment

In amending §235-25.K & §235-25.L, vegetation was removed from these sections and inserted in the General Code shifting enforcement responsibility from the Building Commissioner to the Department of Public Works, which generally oversees vegetation maintenance throughout Melrose. Additionally, with the regulation removed from the zoning ordinance a hedge that exists today will not be deemed legally nonconforming. The general code allows enforcement of existing and new vegetation and discretion is provided to the Director of Public Works to determine if vegetation creates a safety hazard.

Unit Size

The MZO's restrictions on unit size as regulated in §235-25.I prevent the City from complying with the Department of Housing and Community Development's guidelines on the new multi-family zoning requirements for MBTA Communities. (See Section 3A of MGL c. 40A, that was part of the 2021 Economic Development Bill.) The regulations require that multi-family housing is suitable for families with children and that zoning cannot restrict the number of bedrooms, the size of bedrooms, or the number of occupants.

The proposed amendment strikes the minimum unit sizes from the zoning ordinance. Residential unit sizes are addressed in the State Sanitary Code, enforced by the Board of

Health, and the State Building Code, enforced by the Building Commissioner, which regulate minimum dwelling unit and bedroom sizes per occupant and other dimensional controls of residential units. In addition to the aforementioned codes, the City's zoning districts have different mechanisms that directly or indirectly control the size of residential units. Some districts regulate the number of units per lot based on lot area, and all control a building's size through Floor Area Ratio and/or height and setback regulations. Market demand is an additional control over unit size. Two recent developments downtown provide a few studio apartments/microunits of between 360 to 400 square feet in each; however, the market demand is generally for larger units.

By eliminating unit size from the MZO, the City will comply with MGL c. 40A s. 3A while still being able to regulate density using other provisions. In addition to needing to make this change to the Ordinance to comply with the new law, having a variety of housing types in terms of size and cost, is a goal of the City's Housing Production Plan and this change will allow for smaller units, which have been successful in a few recent developments.

Definition of Family & Dwelling Units

The amendment to the definitions of family and dwelling units is also needed to comply with DHCD's guidelines on the new Multi-family zoning requirements for MBTA Communities. It strikes the definition of family and replaces it with definitions for One-Family and Two-Family Dwelling Units. The MZO already defines Dwelling Unit and Multifamily Dwelling Units thereby organizing the code in a more logical and streamlined manner. The definition of dwelling unit establishes the primary intent of a residential unit being a space with complete living facilities (living, sleeping, eating, cooking and sanitation) occupied by people that share the use of that space together as a single housekeeping unit. Restricting occupancy based on biological or legal relationships does not address the purposes of zoning. A biological family can have the same, less, or more of an impact on zoning issues such as traffic, parking, overcrowding, public systems, etc., than a non-tradition family living together as a household. Regulating density through the current definition of family can be discriminatory and illegal in how it is enforced.

This amendment also seeks to strike the definition of Apartment House from the MZO and the Table of Use and Parking Regulations. The definition references family and the Multifamily Dwelling duplicates the apartment house use rendering it obsolete. Lastly, this amendment seeks to eliminate the references to apartment house and garden house from the definition of Multifamily Dwelling, which are repetitive and antiquated.

In accordance with M.G.L., Chapter 40A, Section 5, all proposed zoning amendments received by the City Council shall be submitted to the Planning Board within 14 days for review and to schedule a public hearing. The City Council and the Planning Board are required to hold public hearings within 65 days. The Planning Board would welcome a joint public hearing with the City Council. After the hearing, the Planning Board has 21 days to submit a report with recommendations to the City Council. The City Council

must wait until they receive a report from the Planning Board or wait for 21 days before holding a vote. Please forward the proposed amendments to us at your earliest convenience in order to begin the review process.

Thank you for your consideration. We look forward to discussing these important amendments with you.

Respectfully yours,

Gregory Sampson
Planning Board Chair

Attachment: Proposed Zoning Amendments dated January 31, 2023

cc: Shannon Phillips, City Solicitor
Rita Mercado, Chairwoman, Board of Appeals
Albert Talarico, Building Commissioner
Denise Gaffey, OPCD Director & City Planner
Members of the Planning Board

Corner Lot Setbacks Zoning Amendment

Amend ARTICLE II, Word Usage and Definitions, SECTION 235-5, definitions, as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

LOT, CORNER - A lot at the point of intersection of and abutting on two or more intersecting streets, the interior angle of intersection of the street lot lines or, in case of a curved street, extended lot lines, being not more than 135°. ~~For purpose of this chapter, each street frontage shall be considered a front yard and the remaining two yards shall be considered rear yards.~~

LOT LINE, REAR—The lot line opposite from the front lot line except as provided for in §235-25.C.

Amend ARTICLE VI, Dimensional and Density Regulations, SECTION 235-25, Additional dimensional and density provisions, as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

~~C. A corner lot shall have minimum street yards with the depths which shall be the same as the required front yard depths for the adjoining lots.~~

For a corner lot the street frontage that is used to access the main entrance (typically identified by street address) of the structure from the street shall be considered a front yard. The other street frontage shall be considered a side yard.

Of the remaining two yards, the yard with the shallower depth shall be considered a side yard and the yard with the deeper depth shall be considered the rear yard. If the remaining yards have the same depth, the owner can designate the side and rear yards.

Structure Definition Zoning Amendment

Amend ARTICLE II, Word Usage and Definitions, SECTION 235-5, definitions, as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

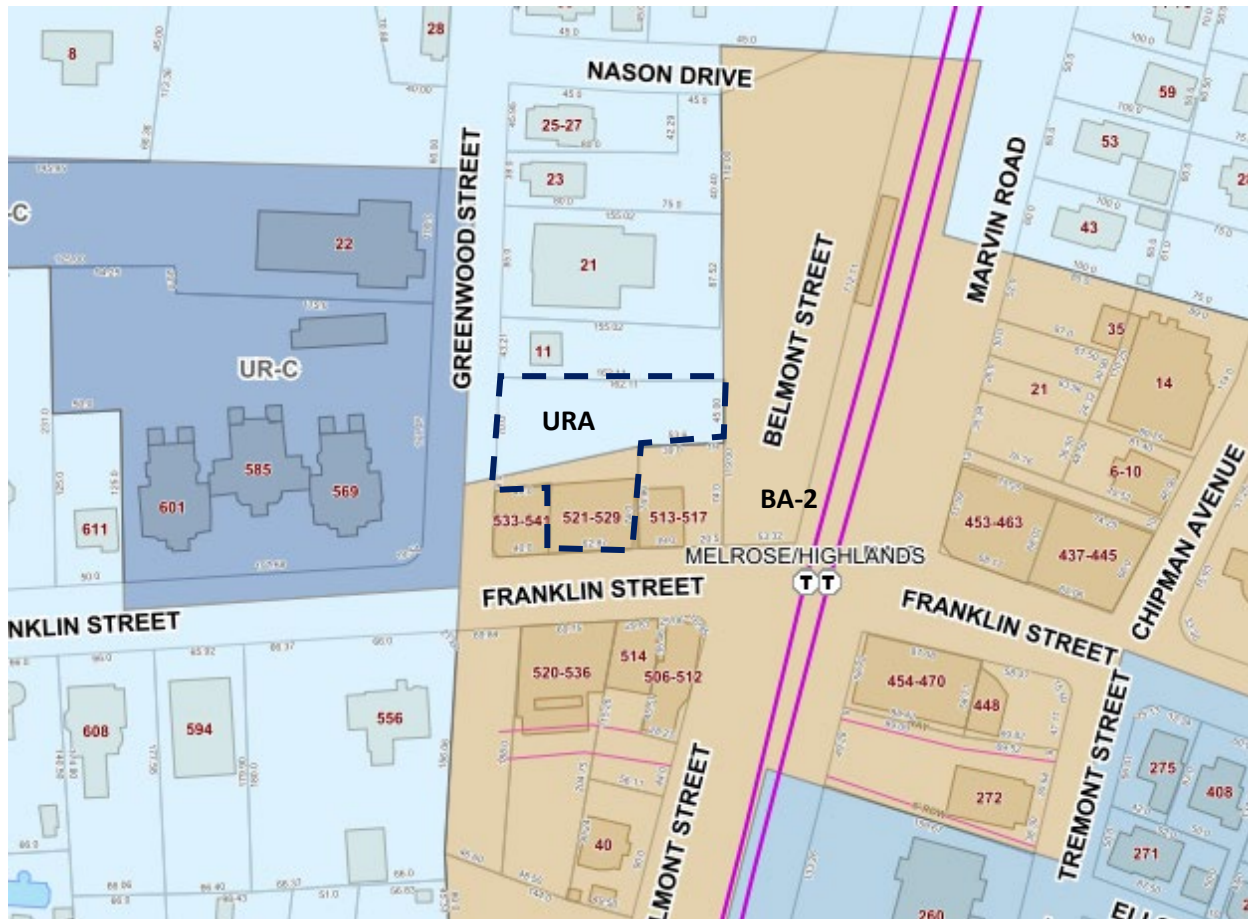
STRUCTURE - A combination of materials ~~for permanent or temporary occupancy or use~~ that are constructed or erected on the ground, such as but not limited to a building, bridge, trestle, tower, framework, ~~retaining wall~~, tank, tunnel, tent, stadium, reviewing stand, platform, swimming pool and equipment, shelters, piers, wharves, bin, ~~fence~~, and sign ~~or the like~~.

BA-2 Zoning District Line Change at 521-529 Franklin St.

Article III. Establishment of Districts

§235-8 Changes to map

The location and boundaries of the zoning districts are hereby amended as shown on a map titled “Zoning Map of the city of Melrose, Massachusetts,” dated __.



Proposed Zoning
Map Amendments
12.19.2022

- BA-1
- BA-2
- BB
- BB-1
- BC
- BD
- I
- I-A
- SR
- SR-A
- SR-B
- UR-A
- UR-B
- UR-C
- UR-D

UR-A to BA-2

Definition of Retail Food Establishment

Amend Chapter 235, ARTICLE II Word Usage and Definitions, SECTION 235-5, Definitions as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

RETAIL FOOD ESTABLISHMENT- A retail store selling food products, not to be consumed on the premises, which shall include but not be limited to one or more of the following: fresh cheese, fresh meat or delicatessen products, freshly prepared baked goods or confections, natural and organic food or beverages, and which may also sell, incidental to the sale of food products therein, ~~wines and malt beverages,~~ alcoholic beverages for off premises consumption; but not tobacco products, lottery tickets, pharmacy items, toiletries, personal care products or photographic supplies or services. The term "retail food establishment" as used herein shall further comport with the definition of "establishment" as defined in Chapter 327 of the Acts of 2008.

In-law Apartment Definition Zoning Amendment

Amend ARTICLE II, Word Usage and Definitions, SECTION §235-5, definitions, as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

IN-LAW APARTMENT

A dwelling unit either contained within an owner-occupied one-family ~~structure~~ dwelling (such as, but not limited to, a cellar or attic) or attached thereto (such as, but not limited to, a garage or barn) which constitutes separate living facilities for immediate members of the family, such as a mother and/or father or a son and/or daughter or their respective spouses. See "dwelling unit" as defined in this section.

A. An accessory in-law apartment is a separate, subordinate living area constructed as part of an existing owner-occupied one-family dwelling and built in a manner which maintains the appearance of a ~~single family structure~~ one-family dwelling.

B. There shall be no boarders or lodgers within either unit of a dwelling with an accessory in-law apartment.

C. No accessory in-law apartment shall be constructed without a building permit issued by the Building Inspector.

D. No use as an accessory in-law apartment shall be permitted prior to a certificate of occupancy by the Building Inspector.

E. A certificate of occupancy shall be issued for three years. Continued occupancy shall require issuance of a new certificate of occupancy.

~~F. The dwelling unit shall be located within the single family dwelling as it existed on January 1, 1990.~~

G. The dwelling unit shall occupy no more than 1/3 of the structure's gross floor area ~~as of January 1, 1990.~~

Votes for Special Permit Approval & Term

Amend Chapter 235, ARTICLE XI, Special Permits and Conditions, SECTION 235-62, Special Permit Procedure as follows.

Text that is removed is ~~crossed-out~~ and additions are underlined.

F. Vote. A concurring vote of all but one of the members of the Board of Appeals is required to grant a special permit or variance by said Board, and two-thirds concurring vote of the Planning Board is required to grant a special permit by said Board except when only a simple majority is required for multifamily housing, mixed-use development in centers of commercial activity within a municipality, and reduced parking space to residential unit ratio requirement, all pursuant to the specifications in Section 9 of the Zoning Act.

G. Certification and recording of special permit or variance. Any special permit or variance granted by a special permit granting authority shall be certified by said authority and show the name and address of the landowner or applicant if other than the owner. The notice of special permit shall identify the land affected, set forth compliance with statutory prerequisites and state that a special permit has been granted and certify that copies of the decision and all plans referred to in the decision have been filed with the City Clerk and the Planning Board. No variance or special permit, or any extension, modification or renewal thereof, shall take effect until a copy of the decision bearing the certification of the City Clerk that 20 days have elapsed and no appeal has been filed or, if such appeal has been filed, that it has been dismissed or denied is recorded in the Registry of Deeds with the date and time of such recording and indexed in the grantor index under the name of the owner of record or is recorded and noted on the owner's certificate of title. A special permit granted under this chapter shall lapse in ~~two~~ three years, which shall not include such time required to pursue or await the determination of an appeal, from the grant thereof, if a substantial use thereof has not sooner commenced except for good cause or, in the case of permit for construction, if construction has not begun by such date except for good cause.

Site Lines and Fence Height in Front Yards on Corner and Non-Corner Lots

Amend ARTICLE VI, Dimensional and Density Regulations, SECTION §235-25.K and §235-25.L, Additional dimensional and density provisions, as follows.

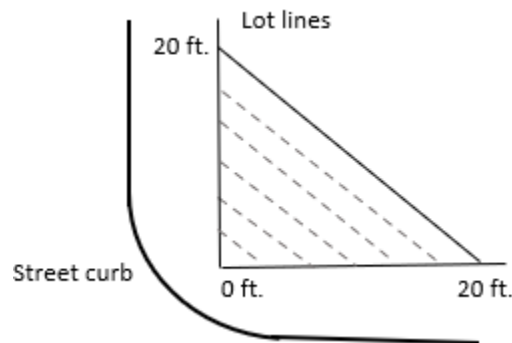
Text that is removed is ~~crossed out~~ and additions are underlined.

Section §235-25.K.

~~At no street intersection in any district shall any new or replacement organic material, excepting a lawn or ground cover, be planted or permitted to grow, nor any obstruction to vision exceeding the lesser of three feet in height above the plane established by the intersecting streets or 30 inches above the sidewalk be placed, nor shall existing organic material be permitted to grow above such height, on any lot within the triangular area formed by the intersecting curbs at a distance of 25 feet from the corner. Where curbs do not exist, measurement shall be made along edge of pavement.~~

K. For a corner lot in a district with a required front yard setback, a fence, wall, or other structure shall not exceed three feet in height above the plane of the intersecting streets herein (also see §202-4.1):

- a) Within the triangular area formed by measuring 20 ft. from the intersection of the property lot lines and bounded by a straight line connecting the two points.
- b) Notwithstanding §235-25.K(a), if a fence, wall, or similar structure is setback three feet from the lot line in the side yard as designated in §235-25.C they are exempt from the height restrictions in this section; and
- c) Otherwise, §235-25.L applies.



Section §235-25.L

~~A fence, hedge, wall, sign or other structure or vegetation may be maintained on any lot, provided that in the front yard area no such structure or vegetation shall be over three feet in height above the adjacent ground within five feet of the front lot line unless it can be shown that such vegetation will not restrict visibility in such a way as to hinder the safe entry of a vehicle from any driveway to the street.~~

L. For a non-corner lot, a fence, wall, or similar structure within the required front yard setback or from the front lot line to the line of the existing primary structure, whichever is less, shall not exceed three feet in height (also see §202-4.1(B)). Height is measured from the grade of land where the structure is installed. Existing retaining walls may be replaced in kind.

Site Plan Review Amendment

Amend ARTICLE V, Use Regulations, SECTION §235-16.1.E(5), Site plan review, as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

E.5 Convenience and safety of vehicular and pedestrian movement within and around the site and ~~of~~ the location of buildings, fences, walls, or other structures, and driveway openings, in relation to traffic and/or adjacent streets.

Vegetation Height for Corner Lots & in Yards along Streets - General Code Amendment

Insert ARTICLE I, General Provisions, SECTION §202-4.1 Vegetation Height, as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

§202-4.1 Vegetation Height

A. For a corner lot, a hedge shall not exceed three feet in height above the plane of the intersecting streets, and/or any other leafy vegetation shall be maintained so as not to obstruct vision herein:

- i. Within the triangular area formed by measuring 20 ft. from the intersection of the property lot lines and bounded by a straight line connecting the two points.
- ii. Outside of the triangular area, §202-4.1(B) applies.

B. For all lots, a hedge shall not exceed three feet in height within three feet of the property line in the yard adjacent to the street and any other leafy vegetation shall be maintained so as not to obstruct vision of the public way. Height is measured from the grade of land where the vegetation is installed.

C. For existing vegetation, the determination regarding if vegetation is obstructing vision at an intersection or of the public way shall be at the discretion of the Director of Public Works.

Unit Size Amendment

Amend ARTICLE VI, Dimensional and Density Regulations, SECTION §235-25.I, Additional dimensional and density provisions, as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

Section §235-25.I

~~The gross floor area of each one family detached dwelling and per dwelling unit in a two family dwelling shall not be less than 768 square feet. The gross floor area in a multifamily dwelling shall not be less than 450 square feet for one bedroom dwelling units, 600 square feet for two bedroom units and 768 square feet for three bedroom or larger units.~~

Definitions of Family & Dwelling Amendment

Amend ARTICLE II, Word Usage and Definitions, SECTION §235-5, definitions, as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

Section §235-5

APARTMENT HOUSE

~~A building designed or intended or used as the home or residence of three or more families, each in a separate dwelling unit, living independently of each other, and who may have a common right in halls and stairways.~~

FAMILY

~~An individual or two or more persons related by blood or marriage living together as a single housekeeping unit and including necessary domestic help, such as nurses or servants, and further including, provided that the dwelling is owner occupied, not more than three lodgers or roomers taken for hire. A group of individuals (including necessary domestic help, such as nurses or servants, but excluding lodgers or roomers taken for hire) not related by blood or marriage but living together as a single housekeeping unit may constitute a family. For purposes of controlling residential density, each such group of four individuals shall constitute a single family.~~

DWELLING, ONE-FAMILY

A building containing one dwelling unit.

DWELLING, TWO-FAMILY

A building containing two dwelling units.

DWELLING, MULTIFAMILY

~~A building containing three or more dwelling units and including an apartment house, garden apartment house and multifamily dwellings~~

Amend Table of Use and Parking Regulations, SECTION 235 attachment 1, as follows.

Text that is removed is ~~crossed out~~ and additions are underlined.

Table of Use and Parking Regulations

Principal Use	Residential Districts						Business Districts					Industrial Districts		Parking Code (see 235-32)
	SR	SR-A	SR-B	UR-A	UR-B	URC UR-D	BA BA-1	BA-2	BB BB-1	BC	BD	I	I-A	
5. Apartment house	—	—	—	—	S	P	—	—	—	—	P	—	—	B

Attachment: Final Package (ORDER-2023-81 : Zoning Amendment: BA-2 Zoning District Line Change at 521-529 Franklin St.)



CITY OF MELROSE

OFFICE OF THE CLERK OF COMMITTEES

ANDREW A. GHOBRIAL
Clerk of Committees

City Hall, 562 Main Street
Melrose, Massachusetts 02176
Telephone - (781) 979-4100

MEMORANDUM

TO: Melrose Honorable City Council

FROM: Andrew Ghobrial, Clerk of Committees

DATE: April 12, 2023

RE: Melrose Zoning Ordinance Votes

On Monday, April 10th a motion was made to divide the Melrose Zoning Ordinance Order 2023-59 into eleven parts: one for each of the contents of Zoning Ordinance Package. Accordingly, due to software limitations in Granicus, the order was duplicated ten times to reflect each vote taken. Come Tuesday, you will see a total of eleven orders encompassing each of the votes taken:

1. **Order 2023-59** - Corner Lot Setbacks: Recommended for passage (11 votes)
2. **Order 2023-83** - Structure Definition: Recommended for passage (11 votes)
3. **Order 2023-81** - BA-2 Zoning District Line Change at 521-529 Franklin St: Recommended ought not to pass (6-5 vote)
4. **Order 2023-84** - Definition of Retail Food Establishment: Recommended for passage (11 votes)
5. **Order 2023-85** - Definition of In-Law Apartment: Recommended for passage (9-2 vote)
6. **Order 2023-86** - Votes for Special Permit Approval & Term: Recommended for passage (11 votes)
7. **Order 2023-87** - Site Lines and Fence Height in Front Yards on Corner and Non-Corner Lots: Recommended for passage (11 votes)
8. **Order 2023-88** - Site Plan Review Criteria: Recommended for passage (11 votes)
9. **Order 2023-82** - Vegetation Height for Corner Lots & in Yards along Streets - General Code Amendment: Tabled (11 votes)
10. **Order 2023-89** - Unit Size: Recommended for passage (11 votes)
11. **Order 2023-90** - Definition of Family & Dwelling Units: Recommended for passage (11 votes)

Attachment: Zoning Orders Memo (ORDER-2023-81 : Zoning Amendment: BA-2 Zoning District Line Change at 521-529 Franklin St.)



CITY OF MELROSE

Human Resources Department

Polina Latta

Director

Platta@cityofmelrose.org

**City Hall, 562 Main Street
Melrose, Massachusetts 02176**

(P) 781-979-4146

(F) 781-979-4246

To: President Grigoraitis
Melrose City Council

From: Polina Latta, HR Director

Re: Transfer of Funds to Worker's Comp

Date: April 25, 2023

The Human Resources Department is requesting a transfer of funds from Free Cash, account number 01-324001, in the amount of One Hundred Thousand Dollars (\$100,000) to the various accounts in the Workers Compensation budget (#912) as set forth herein:

019122-543100:	\$30,000 WC Medicals
019122-543101:	\$10,000 WC Expenses
019122-543102:	\$60,000 WC Benefits

Of this amount, \$60,000 are required to indemnify current recipients of WC benefits through the end of the fiscal year. The City of Melrose currently has three long term and three short term recipients of benefits. \$17,000 is required for upcoming medical invoices.

The remainder of the funds will be used for any unexpected WC cost that the City may incur between now and the end of the fiscal year.

If I can answer any additional questions about this order, please do not hesitate to contact me.

Thank you for your consideration.

Attachment: WC Updated File (APPRO-2023-27 : An Appropriation from Free Cash to Workers Comp)

April 07, 2023
 Elena Proakis Ellis
 DPW Director
 City of Melrose - Office of Planning and Community Development
 562 Main Street, Melrose, MA 02176
 RE: DPW Refuse truck DCFC Charger

Quote 22323A

Voltrek is pleased to provide the following pricing and information to install (1) ABB HV150-C and (1) Depot charger box DC Fast Charging system at Melrose DPW. This modular configuration provides DC fast charging for (1) heavy vehicles up to 150kW, but can support (2) additional depot charger boxes. In addition, the service has been sized to support future addition of (2) ABB Terra 184 (180kW) units. See attached product brochure for ABB HV150-C.

Quote

Item	Unit Price	Qty	Amount
EVSE			
ABB HVC150-C Single outlet HVC150-C charging system is a 150 kW DC Fast Charger rated up to 850 VDC. Includes 1x 150 kW power cabinet & 1 x depot charge box with 23 foot CCS1 charging cables. The HVC-150 features a cellular modem, 2 year standard warranty and includes the HVC robustness package (redundant aux. power supply; low temperature option: integrated heating system for extension of the operating temperature to -35 °C to +50 °C; active temperature measurement and control; intelligent air filter system; intelligent fuse control) and the HVC long distance support package (increases allowable distance between equipment to 150 meters, provides a data communication enhancer module and an overvoltage protection system). Part # (1) 6AGC070558 (1) 6AGC076522	\$82,023.00	1	\$82,023.00
HVC-150 Depot Charge Box standalone pedestal TPEdestal for Depot Box. Depot Box could also be mounted on the ceiling without a pedestal. Priced per depot box. Part# 6AGC069024-R	\$2,735.00	1	\$2,735.00
Shipping Per station	\$2,500.00	1	\$2,500.00
Tax (exempt)	\$0.00	1	\$0.00
Commissioning & Installation			
ABB Activation Required remote activation. Priced per station. Part# ACTHP	\$1,027.35	1	\$1,027.35
ABB Charger Connect (for 2 years) Annual data connectivity for HV150-C stations, priced per station. Part# 6AGC064781	\$247.00	2	\$494.00

ABB Commissioning Remote commissioning of stations, required for warranty. Part #CSAHVC	\$1,917.50	1	\$1,917.50
Installation			
Electrical Labor and Materials Includes the cost of Switchgear @ \$60,858.00	\$154,496.00	1	\$154,496.00
Excavation Labor and Materials	\$66,286.00	1	\$66,286.00

Total Project Cost \$311,478.85

Scope of Work

All labor and material required to install EV chargers:

- Cut bituminous pavement from Utility Pole # 3160 at entrance to Salt Shed on Tremont St. to the Island, Parking Lot & Storage Areas and excavate for installation of 2- 4" primary conduits (encased in concrete) from Utility Pole to padmount Transformer. Trench to be plated until after inspections & concrete is placed. Patch excavated driveway areas with bituminous pavement.
- Excavate for National Grid transformer & ground grid, construct gravel base & provide properly sized precast transformer pad & protection bollards. Mandrill primary conduits with Trench Inspector and install mule tape.
- Provide trench & conduits from utility transformer to switchboard. Install 4" conduits from utility transformer to switchboard location.
- Install conduits from switchboard to 150 kW HVC Power Cabinet & distribution cabinet, Power Cabinet to Depot Box and stub out conduits for future EV Stations.
- Form & pour concrete pad for switchboard, provide precast concrete vault for HVC Power Cabinet & concrete pad for Depot Box and install protection bollards for switchboard, HVC Power Cabinet & Depot Box.
- Stub out conduits from switchboard to future Level 3 EV Stations.
- Furnish and install of 1200 amp 480-volt 3 phase 3 section NEMA 3R switchboard with 1200-amp 3 pole GFI protected main circuit breaker, TSS and branch circuit breakers.
- Install 150 kW Power Cabinet & Depot Box (provided by others), provide 480-volt conductors from switchboard to Power Cabinet and terminate DC cables.
- Interlock & Fiber CAN Cable from Power Cabinet to Depot Box conductors from switchboard to HVC Power Cabinet & DC Cables to Depot Box to be compression lugs.
- Furnish & Install a 75 kVA 480-to-120/208-volt transformer, NEMA 3R distribution cabinet & 225-amp 208 volt "mcb" panelboard for providing 208-volt power for future Level 2 EV Stations & 20-amp 120-volt circuit for Depot box.
- Install protection bollards for HVC Power Cabinet & Depot Box, backfill & grade area as required.
- Total of protection bollards for all equipment – 22 (various diameters, transformer bollards per N. Grid specs).
- Coordinate with National Grid for installation of utility company meter to be installed on padmount transformer.
- Provide "Field Test & Inspection" of 1200-amp GFI main circuit breaker in switchboard by certified vendor.

- Work with National Grid to energize the utility transformer & power to switchboard.
- Activate, program, and test station.

Scope of work exclusions:

- Precast bases for ABB 184 kW stations or equivalent and conduits from switchboard.
- Furnishing or installation of Signs and Posts if required.
- Painting of Parking Spaces.
- Removal of tree(s) currently on the Island, relocation of Jersey barriers and removal of chain link fences as required for construction and placement of all equipment.
- Any National Grid costs associated with providing the service to the site.

NOTES:

- This proposal & design is based upon acceptance and approval by National Grid that they can service the site from Utility Pole # 3160 and size of switchboard for current and future loads.
- Currently the estimated delivery schedule for the switchboard is 285 days from placement of order & approval of switchboard design.
- Due to the global supply chain challenges the pricing on the switchboard is valid for 60 days. Price adjustment/ update may be required past the validity period.

Warranty

ABB EVSE comes with a standard 2-year parts only warranty. This coverage can be extended by up to 3 years, and coverage for parts and labor can be added.

Communication Requirements

ABB stations rely on a cellular connection to communicate with ABB and EVConnect. A T-Mobile or ATT LTE/4G signal is required at the site.

Voltrek

Is a small business enterprise specializing in planning, installing, and servicing commercial charging station projects. We have been in business for 12 years and offer a full scope of turnkey services to meet your EV Charger needs. Voltrek has installed more than 3200 charging stations to date and is DBE & WBE certified. Voltrek is on State Contract VEH102.

Terms

- Hardware is billed NET 30 from date of shipment. Labor is billed NET 30 from date of completion.
- New customers are subject to a credit check; partial prepayment may be requested based on results.
- Quote is valid for 90 days.
- Due to Global supply chain issues there maybe production delays that are not within the control of Voltrek.

- Voltrek may agree to accept assignment of a grant award. In the event of a grant award payment being denied for any reason, customer is responsible for the Total Project Cost.
- It is the customer's responsibility to read and comply with all grant program terms and conditions

Please contact me with any questions and thank you for considering Voltrek.

Sincerely,
Mohammed Faiz
Account Manager
VOLTREK, LLC.
Tel: (978) 985-6883

TO ACCEPT CONTRACT PLEASE COMPLETE BELOW AND RETURN TO VOLTREK. IF YOU WANT TO MODIFY OR ADD ITEMS PLEASE REQUEST VIA EMAIL AND AN UPDATED QUOTE WILL BE SENT.

NAME:

DATE:

SIGNATURE:

PRODUCT LEAFLET

Electric Vehicle Infrastructure

HVC-C UL depot charging for electric fleets



—
HVC Depot Boxes and power cabinets, lined up at a depot site.

A practical solution for busy depots

ABB Heavy Vehicle Charger (HVC) products enable electric buses and trucks to charge at the depot ensuring flexibility and scale for every fleet operation that is transitioning to zero-emission transportation.

Key Benefits

- + Smart charging
- + Small infrastructure footprint at vehicle interface
- + Flexible design for roof and floor mounting
- + SAE J1772 CCS and OCPP 1.6 compliant
- + Remote diagnostics and management tools

Sequential Charging

Improving total cost of ownership is easy using the sequential charging feature offered by ABB's depot chargers. This feature allows connection of up to three depot charge boxes with a single power cabinet and vehicles are charged sequentially over time. The system can follow an embedded, predefined charging process or remote triggers sent by a fleet management system via OCPP 1.6.

- Vehicles are charged with high power, maximizing vehicle availability
- The required grid connection is smaller, reducing upfront investments and operational costs
- The compact depot box is easy to install at sites with space constraints
- Optimal utilization of installed infrastructure meaning lower investments in charging equipment.

ABB HVC-C UL Depot Charging systems offer a highly reliable, intelligent and cost-effective solution to charge large EV fleets such as buses, trucks and other commercial vehicles.

Buy America

ABB can offer the HVC-C Depot Charging Solution with compliance to the Buy America Act Rule 49 CFR Part 661.5.

Future-proof modular design

Power cabinets can be upgraded from 100 or 150 kW in the field, as well as add additional depot charge boxes, allowing operators to scale their operation and to spread investments over time.

Safe and reliable operation

ABB fast chargers are designed to the highest international electrical, safety, and quality standards and are certified by notified bodies - guaranteeing safe and reliable operation.

Connectivity and remote services

ABB chargers come with an extensive suite of connectivity features including remote services such as monitoring, management, diagnostics and software upgrades. These advanced services provide equipment owners with powerful insights into their charging operations while enabling high uptime.

ABB is your experienced partner

ABB HVC products are based on a decade of high power experience in EV charging solutions. ABB has installed over 13,000 fast charging systems in more than 80 countries – and is the leading EV infrastructure technology supplier globally.

Overnight charging 100 kW - 150 kW

A field upgradeable system with future proof reliability

HVC 100C



HVC 150C



Upgrade
→

HVC 150C*



* 150 kW overnight charging system with three depot charge boxes; shown mounted on pedestal option.

Upgrade can be done in the field by adding an extra power module.
No groundworks, digging and disturbance to the site required.

Technical specifications

Configurations		HVC 100C	HVC 150C
Maximum output power		100 kW	150 kW
Input AC connection		3P + GND	
UL Model		480 VAC +/-10% (60 Hz)	
Input voltage	Rated input power	117 kVA	170 kVA
	Rated input current	3 x 132 A	3 x 198 A
	Rated input current	3 x 108 A	3x168A
CSA Model		600 VAC +/-10% (60 Hz)	
Input voltage	Rated input power	117 kVA	170 kVA
	Rated input current	3 x 108 A	3x168A
	Rated input current	3 x 108 A	3x168A
Output voltage range		150 – 850 VDC	
Maximum DC output current		166 A	200 A
Vehicle connection interface		CCS/Combo Type 1 Connector	
Cable length		3.5m/11.5ft OR 7m/23ft (optional)	
DC connection standard		SAE J1772 - IEC 61851-23 / DIN 70121 - ISO 15118	
Environment		Indoor/Outdoor	
Operating temperature		Standard: -10 °C to +50 °C (de-rating characteristic applies) Optional: -35 °C to +50 °C	
Protection		Power Cabinet: IP54 – IK10 (equivalent to NEMA 3R) Depot Charge Box: IP65 - IK10	
Network connection		GSM/3G modem 10/100 base-T Ethernet	
Compliance and Safety		CSA No. 107.1-16 and UL 2202 certified by TUV BA Rule 49 CFR Part 661.5 (Optional)	
Dimensions			
Power Cabinet	Dimensions (H x W x D)	2030 x 1170 x 770 mm / 79.9 x 46.1 x 30.3 in	
	Weight	1340 kg / 2954 lbs	
Depot Charge Box (without pedestal)	Dimensions (H x W x D)	800 x 600 x 210 mm / 75.4 x 23.6 x 8.3 in	
	Weight	61 kg / 134.5 lbs (with 7m / 23ft cable)	
Depot Charge Box (with pedestal)	Dimensions (H x W x D)	1914 x 600 x 400 mm / 75.4 x 23.6 x 16.3 in	
	Weight	181 kg / 398 lbs (with 7m / 23ft cable)	

ABB Inc.

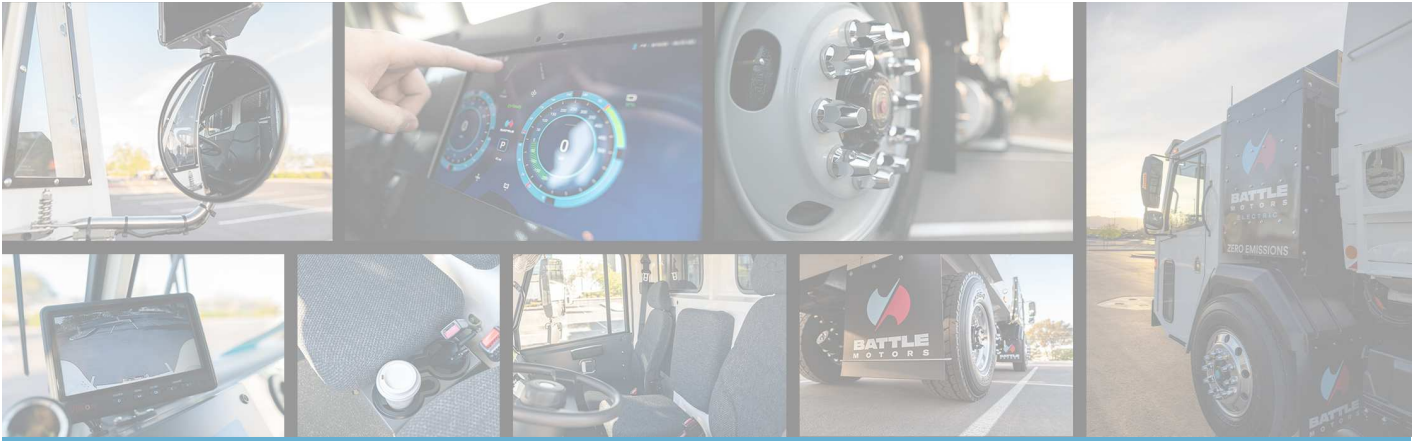
4050 E. Cotton Center Blvd
Phoenix, AZ 85040
United States
Phone: 800-435-7365
E-mail: US-evci@us.abb.com

abb.com/evcharging

ABB Inc.

800 Hymus Boulevard
Saint-Laurent, QC H4S 0B5
Canada
Phone: 800-435-7365
E-mail: CA-evci@abb.com

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MELROSE DIESEL LNT PROPOSAL



BATTLE
M O T O R S

Date

03/10/2023

Quote Information

202303091637-8137

2024 Sales LNT

Qty: 1

Prepared For

City of Melrose

562 Main St.

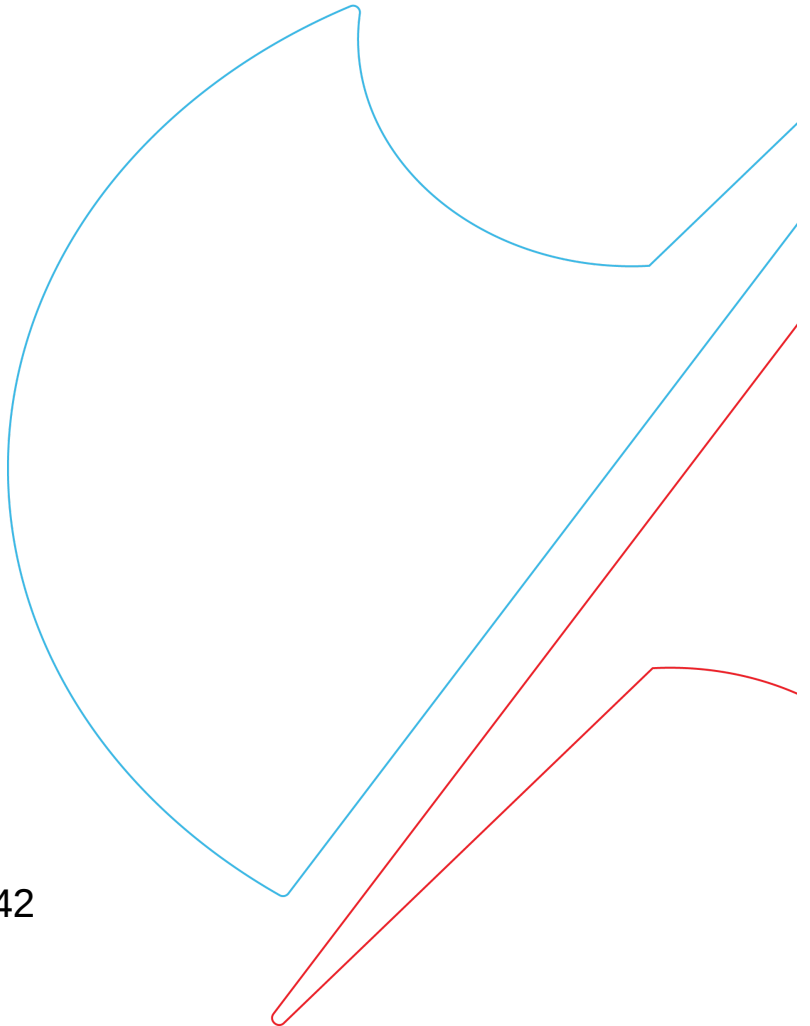
Melrose, Ma 02176

Elena Proakis Ellis 781-665-0142

Prepared By

Jeff Denesha

508-280-7411



MELROSE DIESEL LNT PROPOSAL

CUSTOM REQUESTED OPTIONS	NOTES
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11 YD REAR PACKER - AVERAGE COST USED FOR COMPARISON

CUSTOM OPTIONS	DESCRIPTION
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9999-CUSTOM-83331	CUSTOM OPTIONS	NO OPTION - CUSTOM OPTIONS
9999-CUSTOM-140540	FRAME (QUOTE ONLY)	NO-OPTION, FRAME AVAILABLE IN UPPER SELECTION
9999-CUSTOM-140539	PROP SHAFT (QUOTE ONLY)	NO OPTION - PROP SHAFT AVAILABLE IN UPPER SELECTION
9999-CUSTOM-141986	AIR PIPING, AIR DRYER (QUOTE ONLY)	NO OPTON (AVAILABLE IN UPPER SELECTION)
9999-CUSTOM-142066	BODY	NO OPTION - BODY

CAB	DESCRIPTION
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1800-1892-CAB	CAB MODEL	CAB ASSY, (2) REAR WINDOWS, NO ROOF VENTS, W/VISOR, LNT
1809-0177-CAB	CAB - OVERHEAD CONSOLE / RADIO	OVERHEAD CONSOLE, LHD/DUAL DRIVE, AM/FM/BLEETOOTH/HANDS FREE RADIO, HVAC CONTROLS, LNT
1809-0164-CAB	CAB - FLOOR GRIP TAPE	FLOOR COVERING INSTALLATION, LH / DUAL DRIVE, LNT
1001-0946-CAB	CAB - ACCELERATOR PEDAL	ACCELERATOR PEDAL, CUMMINS, SINGLE DRIVE
2100-3347-CAB	CAB - BASE ELECTRICAL	ELECTRICAL, BASE, 500K BUAD, AUTOCRAFT HEADLIGHT
9999-CUSTOM-82619	CAB - MODIFICATION (LH DOOR)	NO OPTION - CAB MODIFICAION (LH DOOR)
9999-CUSTOM-82620	CAB - MODIFICATION (RH DOOR)	NO OPTION - CAB MODIFICAION (RH DOOR)
2000-4561-CAB	CAB - GRAB HANDLES (LH)	LH GRAB HANDLE BLACK OUTSIDE, STANDARD DOORS
2000-4862-CAB	CAB - GRAB HANDLES (RH)	RH GRAB HANDLE BLACK OUTSIDE, STANDARD DOORS
9999-CUSTOM-		

MELROSE DIESEL LNT PROPOSAL

CAB		DESCRIPTION
82812	CAB, ELEC - DOOR WINDOWS - SWITCH COUNT	LH DRIVE, LH E/R, RH E/R
2100-3351-CAB	CAB, ELECTRICAL - DOOR WINDOWS	CAB, ELECTRICAL, POWER WINDOWS, 3 SWITCHES
9999-CUSTOM-139409	FUEL ACCESSORIES, CAB	NO OPTION - FUEL ACCESSORIES, CAB
9999-CUSTOM-82500	CAB - AIR HORN	NO OPTION - AIR HORN, CAB
9999-CUSTOM-83006	CAB - WHEEL DIFF LOCK CONTROLS	NO OPTION - AXLE DIFF LOCK CONTROLS, CAB
9999-CUSTOM-82623	CAB - ABS SYSTEM	NO OPTION - ABS ATC OPTION
9999-CUSTOM-82513	CAB AIR PIPING, REAR AXLE	NO AIR PIPING REQUIRED
2000-4808-CAB	DECALS - CAB INTERIOR	DECALS, INTERIOR, SINGLE DRIVE, DIESEL
9999-CUSTOM-83100	DECALS - CALIFORNIA PROPOSTION 65	NO OPTION - EPA / NON-CARB
1810-0043-CAB	CAB - MISC COMPONENTS	CAB MODIF - LET2 COMPONENTS, LH/RH STEEL PANELS
9999-CUSTOM-83327	PUSHER/TAG CAB CONTROLS	NO OPTION - PUSHER/TAG AXLE CAB CONTROLS

CHASSIS		DESCRIPTION
9999-CUSTOM-83061	CHASSIS, CAB INTERAXLE BUZZER	NO OPTION - INTERAXLE BUZZER, CHASSIS
9999-CUSTOM-82671	DECAL - ENGINE, 50 STATE CLEAN IDLE/CARB	NO OPTION - CLEAN IDLE DECAL
2000-4813	DECALS - CHASSIS EXTERIOR	DECALS, EXTERIOR, DIESEL,TRANSYND
2003-0618	HVAC - CHASSIS	HVAC, LNT CAB, B6.7, AURORA NON-BLENDING
2201-0118	WINDSHIELD WIPERS - CHASSIS	WINDSHIELD WIPERS, SINGLE DRIVE
1010-1226	AIR CLEANER	AIR CLEANER, CUMMINS B6.7, DONALDSON EPG 13" LNT
		STANDARD

MELROSE DIESEL LNT PROPOSAL

CHASSIS		DESCRIPTION
1006-1276	ENGINE MOUNTING	ENGINE MOUNTING, CUMMINS B6.7, 3000RDS, 4 DEG, NO LINER, LNT
9999-CUSTOM-82621	GAUGE - ENGINE OIL TEMP GAUGE	NO OPTION - ENGINE OIL TEMP GAUGE
1802-0076	CAB MOUNTING	CAB MOUNTING - LET2 STANDARD CAB
1503-2969	OVER ENGINE CROSSMEMBER	OVER ENGINE CROSSMEMBER, OFFSET RH SIDE RADIATOR, LNT
2100-3347	ELECTRICAL, BASE, CHASSIS	ELECTRICAL, BASE, CHASSIS, 500K BUAD, DIESEL/CNG
9999-CUSTOM-82834	AUTO NEUTRAL - CHASSIS	NO OPTION - AUTO NEUTRAL, CHASSIS
9999-CUSTOM-83070	AIR PIPING, RDS-209 TRACTION ASSIST	NO OPTION - RDS-209 TRACTION ASSIST
1908-0066	AIR PIPING, REAR AXLE	AIR PIPING, SINGLE REAR AXLE, REYCO SUSP
9999-CUSTOM-139490	REAR BUMP BLOCKS	NO OPTION - BUMP BLOCKS
1402-0624	POWER STEERING RESERVOIR	POWER STEERING RESERVOIR, 4 QT, 2022 B6.7, TRW PUMP, LNT
1401-0336	STEERING COLUMN CHASSIS (LH)	STRG COLUMN ASSY - LNT, LHD, TILT, W/CRUISE, 16" WHEEL
9999-CUSTOM-139406	STEERING COLUMN CHASSIS (RH)	NO OPTION - RH STEERING, CHASSIS
1400-0714	STEERING GEAR	STEERING GEAR, XD-120, LH DRIVE, STANDARD CAB, LNT ONLY
9999-CUSTOM-82837	ELECTRICAL, TRANSMISSION RETARDER	NO OPTION - TRANSMISSION RETARDER, CHASSIS
2501-1525	TRANSMISSION OIL PIPING	TRANSMISSION PIPING-L9/L9N/X12, 3000RDS/4000RDS
9999-CUSTOM-83008	GAUGES - MISC OPTIONS	NO OPTION - MISC GAUGES, CHASSIS
1503-3002	FRAME MODIF, CENTER BEARING DRILLING	FRAME MODIFICATION, CENTER BEARING DRILLING 1503-3002
9999-CUSTOM-142262	FRAME MODIF, REAR BUMPER ASSY	NO OPTION - FRAME MOD REAR BUMPER

MELROSE DIESEL LNT PROPOSAL

MODEL		DESCRIPTION
9999-CUSTOM-140231	SOURCEWELL	SOURCEWELL
9999-CUSTOM-139414	FUEL TYPE	DIESEL
9999-CUSTOM-82617	BODY APPLICATION	GENERIC CONFIGURATION
9999-CUSTOM-83335	PRODUCT AVAILABILITY	ORDER MAJOR COMPONENTS - LEAD TIME / AVAILABILITY
9999-CUSTOM-83099	CARB/EPA	EPA / NON-CARB
9999-CUSTOM-83019	FRAME - WHEELBASE	140 WHEELBASE
9999-CUSTOM-142098	FRAME SILLS	SINGLE SILLS - LNT
9999-CUSTOM-142335	FRAME SILL LENGTH	25' FRAME SILLS
9999-CUSTOM-83532	CAB STYLE	LNT CREW CAB WITH EXTERIOR SUNVISOR
9999-CUSTOM-83534	CAB / DOORS	LNT CREW CAB, W/VISOR, LH ELECTRIC ROLL-UP / RH ELECTRIC ROLL-UP DOORS
9999-CUSTOM-82491	DRIVE TYPE	LH DRIVE
9999-CUSTOM-83078	ENGINE MODEL	CUMMINS B6.7, LNT
9999-CUSTOM-139481	TRANSMISSION MODEL	ALLISON 3500RDS, LNT
1000-3228	ENGINE	CUMMINS 2021 B6.7, 300 HP, A/C, 2600RPM, 3000 SERIES TRANSMISSION, LNT
1007-1207	TRANSMISSION	TRANSMISSION ALLISON 3500RDS, TC413, SPL-170, B6.7, LNT
9999-CUSTOM-83068	REAR SUSPENSION MODEL	REYCO 102CC - REYCO SPRING SUSPENSION
9999-CUSTOM-83054	REAR DRIVE AXLE MODEL	S26-190 - REAR DRIVE AXLE
1200A-0238	REAR DRIVE AXLE	REAR AXLE, S26-190, 16.5 X 7.00, 5.57, STD DIFF, REYCO
1201-1407	REAR SUSPENSION	REAR SUSPENSION, REYCO 26K, 3 DEG, S26-190
9999-CUSTOM-83323	PUSHER AXLE	NO OPTION - PUSHER AXLE
9999-CUSTOM-83324	TAG AXLE	NO OPTION - TAG AXLE
1500-5509	FRAME	FRAME ASSMEBLY, 140 WB, 25' SILL, REYCO, STANDARD, LNT

MELROSE DIESEL LNT PROPOSAL

OPTIONS, CAB		DESCRIPTION
1803-0087-CAB	CAB - DOOR (LH)	STANDARD DOOR, LH, ELECTRIC ROLL UP
1804-0086-CAB	CAB - DOOR (RH)	STANDARD DOOR, RH, ELECTRIC ROLL UP
9999-CUSTOM-82515	CAB - DOOR SAFETY BELT	NO OPTION - DOOR SAFETY STRAP
9999-CUSTOM-82532	CAB - FLOOR GRATING (LH)	NO OPTION - LH FLOOR GRATE
9999-CUSTOM-82533	CAB - FLOOR GRATING (RH)	NO OPTION - RH FLOOR GRATE
1806-1264-CAB	CAB - MIRROR (LH)	WEST COAST MIRROR, LH STANDARD DOOR, 16 X 7 NON-HEATED
1808-0055-CAB	CAB - MIRROR (RH)	WEST COAST MIRROR, RH STANDARD DOOR, 16 X 7 NON-HEATED
9999-CUSTOM-82675	CAB - MIRROR, SPOT	NO OPTION - SPOT MIRRORS
9999-CUSTOM-82673	CAB - MIRROR, LH LOOK DOWN	NO OPTION - LH LOOK DOWN MIRROR
9999-CUSTOM-82674	CAB - MIRROR, RH LOOK DOWN	NO OPTION - RH LOOK DOWN MIRROR
1401-0336-CAB	STEERING COLUMN CAB (LH)	STRG COLUMN ASSY - LNT, LHD, TILT, W/CRUISE, 16" WHEEL
9999-CUSTOM-139404	STEERING COLUMN CAB (RH)	NO OPTION - RH STEERING, CAB
9999-CUSTOM-82609	RADIO OPTION - AM/FM/BLEETOOTH/HANDS FREE	RADIO - MOUNTED ON LH SIDE CAB, AM/FM/MP3/USB/BLEETOOTH/HANDS FREE
2003-0618-CAB	HVAC - CAB	HVAC, LNT CAB, B6.7, AURORA NON-BLENDING
2003-0369-CAB	CAB - DEFROST FANS	CAB DEFROST FANS, 2-SPD, DUAL FANS, LH & RH OVERHEAD CONSOLE
9999-CUSTOM-82530	CAB - ROOFTOP A/C OPTION	NO OPTION - ROOFTOP A/C
2100-3404-CAB	CAB, ELECTRICAL - IGNITION	CAB, IGNITION (2) KEYS D250, STD/BI-FOLD DOOR C250
2202-0085-CAB	CAB - DASH/INSTRUMENTATION	DIGITAL DASH, LH DRIVE, 8" SAMSUNG DISPLAY, MPH/KPH, 500K STEEL, DIESEL/CNG, LNT

MELROSE DIESEL LNT PROPOSAL

OPTIONS, CAB		DESCRIPTION
2100-3436-CAB	CAB, ADAS	ELECTRICAL, CAB, MOBILE EYE ADAS
9999-CUSTOM-82622	CAB - GAUGES - ENGINE OIL TEMPERATURE	NO OPTION - ENGINE OIL TEMP GAUGE - CAB
9999-CUSTOM-82625	CAB - GAUGES - TRANSMISSION TEMP	NO OPTION - TRANSMISSION TEMP GAUGE
9999-CUSTOM-82626	CAB - GAUGES - MISC OPTIONS	NO OPTION - MISC GAUGES
9999-CUSTOM-83007	CAB, ELECTRICAL, ENGINE BRAKE	NO OPTION - ENGINE BRAKE CONTROLS, CAB
9999-CUSTOM-83060	CAB - INTERAXLE BUZZER/ALARM	NO OPTION - INTERAXLE BUZZER, CAB
9999-CUSTOM-82517	CAB - FLASHER OPTIONS	NO OPTION - FLASHERS
9999-CUSTOM-82518	CAB - LIGHTING OPTIONS	NO OPTION - CAB LIGHTING
9999-CUSTOM-82522	CAB - 12V POWER OPTIONS	NO OPTION - 12V POWER OPTIONS
1907-0466-CAB	CAB - AIR PIPING	CAB AIR PIPING, LHD ONLY, RH SIT-DOWN, LNT
9999-CUSTOM-82498	CAB - FIRE EXTINGUISHER	NO OPTION - FIRE EXTINGUISHER
9999-CUSTOM-82508	CAB - FIRST AID KIT	NO OPTION - FIRST AID KIT
9999-CUSTOM-82507	CAB - TRIANGLE KIT	NO OPTION - TRIANGLE KIT
1810-0061-CAB	CAB GRILLE	BATTLE GRILLE, SMOOTH FLAT BLACK

OPTIONS, CAB SEATS		DESCRIPTION
9999-CUSTOM-82616	CAB - SEAT MATERIAL	SEAT - ASPHALT CLOTH
2001-0518-CAB	CAB - SEATS (LH)	SEAT AIR RIDE, SEARS C2, ASPHALT CLOTH, LH, LNT
2011-0306-CAB	CAB - SEATS (RH)	SEAT ASSY RH; SEARS C2 2-WAY ADJ., ASPHALT CONFETTI, LNT

MELROSE DIESEL LNT PROPOSAL

OPTIONS, CAB SEATS		DESCRIPTION
2011-0299-CAB	CAB - SEAT (CENTER BENCH)	SEAT CENTER BENCH ONLY, 1-MAN BENCH, ASPHALT CONFETTI, LNT
2000-4771-CAB	CAB - SEAT BELTS (LH)	SEAT BELT, BLACK, LH SIDE, AIR RIDE SEAT, LET2
2000-4859-CAB	CAB - SEAT BELTS (RH)	SEAT BELT, BLACK, RH SIDE, FIXED SEAT, LET2
9999-CUSTOM-82808	CAB - SEAT (LH), RH ARMREST	NO OPTION - RH ARMREST, LH SEAT
9999-CUSTOM-82809	CAB - SEAT (RH), LH ARMREST	NO OPTION - LH ARMREST, RH SEAT

OPTIONS, CHASSIS		DESCRIPTION
1100A-0057	FRONT STEER AXLE	FRONT STEER AXLE, D2000F, STD TRK, 24" CMBR, <190' WB, 16.5 X 7 ES 1100 BRAKES
1101-0651	FRONT SUSPENSION	FRONT SUSPENSION ASSY, CAST HANGERS, 14.6K, (2) TAPER LEAF, STD SHOCKS, 10.25" SILLS, LNT
2000-4749	LUBE, REAR DRIVE AXLE	LUBE, REAR AXLE, STANDARD, S21/23/26 AXLES 85W-140
9999-CUSTOM-83005	ELECTRICAL, AXLE DIFF LOCK CONTROLS	NO OPTION - AXLE DIFF LOCK CONTROLS, CHASSIS
1003-0969	FUEL TANK	DIESEL FUEL TANK, SINGLE 60 GAL ROUND, ALUMINUM, W/O DRAIN
9999-CUSTOM-82505	FUEL ACCESSORIES	NO OPTION - FUEL ACCESSORIES
2503-0883	FUEL PIPING / FILTER	FUEL PIPING, B6.7, F.T. RH 80/104, DEF TANK RH, LNT
9999-CUSTOM-139401	FUEL PIPING, CNG	NO OPTION - FUEL PIPING, CNG
1003A-0049	DEF TANK	DEF TANK, MTD RH BEHIND FENDER, RH 32/38, B6.7/L9
2101-0643	BATTERY BOX	BATTERY BOX, (2) 950 CCA BATTERIES, W/ DISCONNECT SWITCH, PLASTIC COVER
1503-2281	BATTERY BOX SPACERS	BATTERY BOX SPACERS, LOWERS 8.5" BELOW TOP OF FRAME
9999-CUSTOM-83002	ELECTRICAL, BATTERY DCS INDICATOR LIGHT	NO OPTION - BATTERY DCS LIGHTING
9999-CUSTOM-82614	ELECTRICAL, JUMP START	NO OPTION - JUMP START
2000-4853	ELECTRICAL, BATTERY CABLES	BATTERY/ALT CABLES, B6.7 ELEC FANS, BATT BOX LH 32/44, LNT

MELROSE DIESEL LNT PROPOSAL

OPTIONS, CHASSIS		DESCRIPTION
2100-2983	ELECTRICAL, POWER FEED HARNESS	ELECTRICAL, POWER FEED, L9/X12, LH UP TO STA. 50
1010A-0054	AIR CLEANER STACK	AIR CLNR STACK ASSY, 2017 B6.7, DONALDSON EPG, LNT
1004A-0053	EXHAUST STACK	FLARED ELBOW EXHAUST STACK, STAINLESS STEEL, 36" LONG
2100-3392	ENGINE, ALTERNATOR	ALTERNATOR, DELCO 40 SI, 12V, 320 AMP, B6.7
9999-CUSTOM-82504	ENGINE COOLING, OPTIONS	NO OPTION - ENGINE COOLING
2000-4701	ENGINE, DIPSTICK/OIL FILL	ENGINE DIPSTICK MTG ONLY, L9/L9N
9999-CUSTOM-83013	ENGINE OIL SAMPLE VALVE	NO OPTION - ENIGNE OIL SAMPLE VALVE
162X-0494	ENGINE PROGRAMMING PARAMETERS	ENGINE PRGM-B6.7/L9, A/C, NO IDLE SHUTDOWN, 1450 RPM TA, 65 MPH
2502-0837	AIR DRYER	AIR DRYER, BENDIX AD-IS, LH FRONT/RH REAR/RH INSIDE SILL FRONT, ICE
1910-0502	AIR PIPING, AIR DRYER	AIR PIPING, ENGINE, B6.7, AD-IS, RH STA. 68, MTD FRONT, LNT
9999-CUSTOM-82833	AUTO NEUTRAL	NO OPTION - AUTO NEUTRAL, CAB
2100-3398	ELECTRICAL, TCM	TCM-ALLISON, 3500RDS, SINGLE DRIVE, TC413, 5 SPD, 145 AG, B6.7, LNT
9999-CUSTOM-83012	TRANSMISSION OIL SAMPLE VALVE	NO OPTION - TRANS OIL SAMPLE VALVE
9999-CUSTOM-83003	TRANSMISSION SKID PAN	NO OPTION - TRANSMISSION SKID PAN
1502-0644	FRONT BUMPER	BUMPER ASSEMBLY - FORMED, HENDRICKSON, STEEL, PC BLACK, LNT
9999-CUSTOM-142046	REAR BUMPER	NO OPTION - REAR BUMPER
1801-0610	FENDERS, FRONT	FENDER, FRONT - LNT, BLACK PLASTIC, NARROW
9999-CUSTOM-82521	ENGINE, BLOCK HEATER	NO OPTION - ENGINE BLOCK HEATER
1600-5132	PROPSHAFT	PROPSHAFT, 140" WB, B6.7, 3500RDS, S-170/190, LNT
1503-2885	AIR PIPING, FRAME SUPPORTS	FRAME AIR PIPING SUPPORTS, <190" WB, SINGLE AXLE, SINGLE SILLS
1906-0865	AIR PIPING, FRAME	FRAME AIR PIPING; (2) STEEL TANKS IN FRAME, AD-IS AIR DRYER,

MELROSE DIESEL LNT PROPOSAL

OPTIONS, CHASSIS		DESCRIPTION
W/ CENTRALIZED DRAINS, LNT		
9999-CUSTOM-83325	AIR PIPING, PUSHER/TAG AXLE	NO OPTION - PUSHER/TAG AXLE AIR PIPING
9999-CUSTOM-82502	AIR PIPING, OPTIONAL AUTOMATIC DRAIN VALVES	NO OPTION - DRAIN VALVES
9999-CUSTOM-82670	AIR PIPING, OPTIONAL MANUAL DRAIN VALVES	NO OPTION - MANUAL DRAIN VALVES
9999-CUSTOM-82501	AIR PIPING, OPTIONAL CHARGE VALVE	NO OPTION - CHARGE VALVE
9999-CUSTOM-82503	AIR PIPING, OPTIONAL GLADHANDS	NO OPTION - GLADHANDS
9999-CUSTOM-82499	AIR HORN, CHASSIS	NO OPTION - AIR HORN
2000-2215	BACK-UP ALARM	BACK-UP ALARM, ECCO 575, 107DB
9999-CUSTOM-139179	RETAINER CABLES	NO OPTION-RETAINER CABLES
9999-CUSTOM-82514	ELECTRICAL, DRIVE AWAY KIT	NO OPTION - DRIVE AWAY KIT
9999-CUSTOM-139184	WHEEL TORQUE INDICATORS	NO OPTION - WHEEL TORQUE INDICATORS
2501-1563	OIL PIPING, CAB TILT	CAB TILT, LNT, ELEC PUMP, ELEC. FAN, NO PLOW
1005-1888	ENGINE COOLING	COOLING ASSY; CUMMINS 2017 B6.7, OFFSET RADIATOR LNT
1004-2087	EXHAUST	EXHAUST, 2021 CUMMINS B6.7, 280-360HP, LNT
9999-CUSTOM-140340	TRACTOR PROTECTION VALVE	NO OPTION - TRACTOR PROTECTION VALVE

PAINT		DESCRIPTION
356-0322	PAINT, CAB	PAINT, CAB, STANDARD WHITE, G2-3460715-A
9999-CUSTOM-140265	PAINT, CAB VISOR	NO OPTION - CAB VISOR SAME COLOR AS CAB
9999-CUSTOM-83308	PAINT, CAB STRIPES	NO OPTION - CAB STRIPES
9999-CUSTOM-		

MELROSE DIESEL LNT PROPOSAL

PAINT		DESCRIPTION
83309	PAINT, CLEAR COAT	NO OPTION - CAB CLEAR COAT
356-0323	PAINT, CHASSIS	PAINT, CHASSIS, STANDARD BLACK, G2-2B1738
356-0329	PAINT, BUMPER	PAINT, BUMPER - STANDARD BLACK, G2-2B1738

TIRES / WHEELS		DESCRIPTION
2-519-2863-0124	TIRES/WHEELS - FRONT STEER AXLE	TOYO M170, 11R22.5, 16/H, ACCURIDE, STEEL, PC WHITE
4-514-2863-0124	TIRES/WHEELS - DRIVE AXLE	BRIDGESTONE R250ED, 11R22.5, 16/H, ACCURIDE, STEEL, PC WHITE
9999-CUSTOM-83538	TIRES/WHEELS - 60/40 STEER AXLE	NO OPTION - RIDEWELL RDS-209 TIRES
9999-CUSTOM-83539	TIRES/WHEELS - PUSHER AXLE	NO OPTION - PUSHER TIRES/WHEELS
9999-CUSTOM-83531	TIRES/WHEELS - TAG AXLE	NO OPTION - TAG AXLE TIRE/WHEELS

WARRANTY		DESCRIPTION
306A-0001	WARRANTY, CHASSIS	WARRANTY, CHASSIS, STANDARD, 1 YEAR, COVERAGE
306A-0041	WARRANTY, ENGINE	WARRANTY, CUMMINS STANDARD, 2 YEAR
9999-CUSTOM-83306	WARRANTY, ENGINE MAJOR COMPONENTS	NO OPTION-WARRANTY, MAJOR COMPONENTS
9999-CUSTOM-83307	WARRANTY, AFTERTREATMENT	WARRANTY, CUMMINS STANDARD, 2 YEAR
306A-0013	WARRANTY, TRANSMISSION	WARRANTY, ALLISION, 3 YR EDGE II PARTNER STANDARD
306A-0022	WARRANTY, DRIVE AXLE	WARRANTY, DANA, STANDARD 2 YEAR

MELROSE DIESEL LNT PROPOSAL

VEHICLE SPECIFICATION SUMMARY		UNIT	DESCRIPTION
MODEL			SALES LNT
ENGINE			CUMMINS 2021 B6.7, 300 HP, A/C, 2600RPM, 3000 SERIES TRANSMISSION, LNT
PEAK POWER	HP	300	
PEAK TORQUE	NM	600 @ 1600	
TRANSMISSION			TRANSMISSION ALLISON 3500RDS, TC413, SPL-170, B6.7, LNT



MELROSE DIESEL LNT PROPOSAL

TOTAL SELLING PRICE (PER UNIT)**\$298,413**

CUSTOMER

BATTLE MOTORS, INC.

DATE

DATE

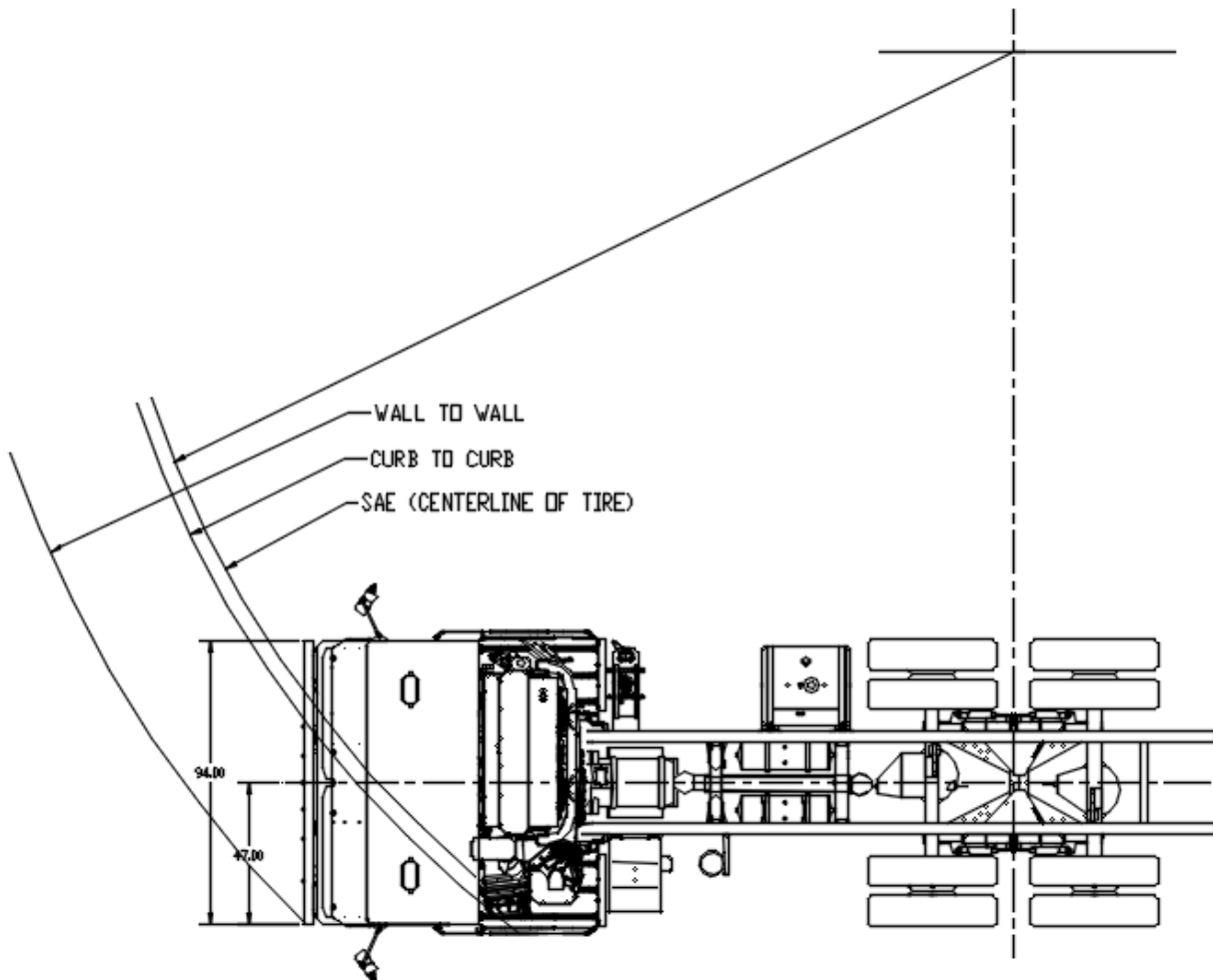
Attachment: Melrose Diesel LNT Spec-Quote (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and Infrastructure)

MELROSE DIESEL LNT PROPOSAL

AXLE POSITION	AXLE MODEL	AXLE/SUSP RATING (LBS)	SINGLE OR DUAL	WHEEL SIZE AND RATING (SIZE / LOAD @ PRESSURE)	TIRE SIZE AND RATING** (SIZE / LOAD @ PRESSURE / SPEED)	GAWR (LOAD @ PRESSURE / SPEED)
FRONT	D2000F	20,000	S	22.5 X 8.25 / 8,000 @ 120	11R22.5H/16 / 6,610 @ 120 / 75	13,220 @ 120 / 75
1ST INTERMEDIATE						
2ND INTERMEDIATE						
3RD INTERMEDIATE						
LAST	S26-190	26,000	D	22.5 X 8.25 / 8,000 @ 120	11R22.5H/16 / 6,005 @ 120 / 75	24,020 @ 120 / 75
DRIVETRAIN GVWR (LBS)						37,240
ENGINE APPLICATION GVWR (LBS)						33,000
TRANSMISSION APPLICATION GVWR (LBS)						60,000
CUSTOMER REQUESTED GVWR (LBS)						33,000
TRUCK GVWR (LBS)						33,000

MELROSE DIESEL LNT PROPOSAL

COMPONENT	LOCATION
AIR DRYER	LH STA. 68 / FRONT
AIR TANKS	80/98
BATTERY CABLES	LH STA. 32/44
DEF TANK	RH STA. 32/38
DIESEL FUEL TANK	RH STA. 80/104



ESTIMATED VEHICLE WEIGHT DISTRIBUTION (LBS) - FULLY WET WITH 200# DRIVER (+/- 5%)

FRONT AXLE GROUND LOAD (LBS)	9,351.17
REAR AXLE GROUND LOAD (LBS)	4,683.83
TOTAL VEHICLE WEIGHT (LBS)	14,035.00

MELROSE DIESEL LNT PROPOSAL

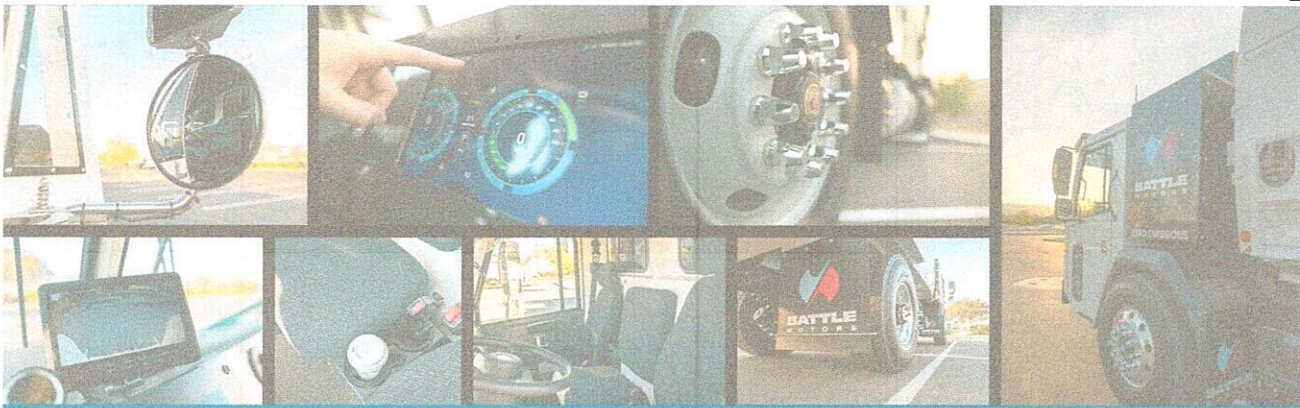
ESTIMATED VEHICLE TURNABILITY - TURN RADIUS (FEET) (+/- 5%)

SAE - TIRE CENTERLINE TO TIRE CENTERLINE (FT) 24.63

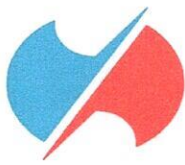
CURB-TO-CURB (FT) 25.55

WALL-TO-WALL (FT) 27.50

Attachment: Melrose Diesel LNT Spec-Quote (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and Infrastructure)



P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL



BATTLE
MOTORS

Date

03/8/2023

Quote Information

202209231750-A466

9000-0284B

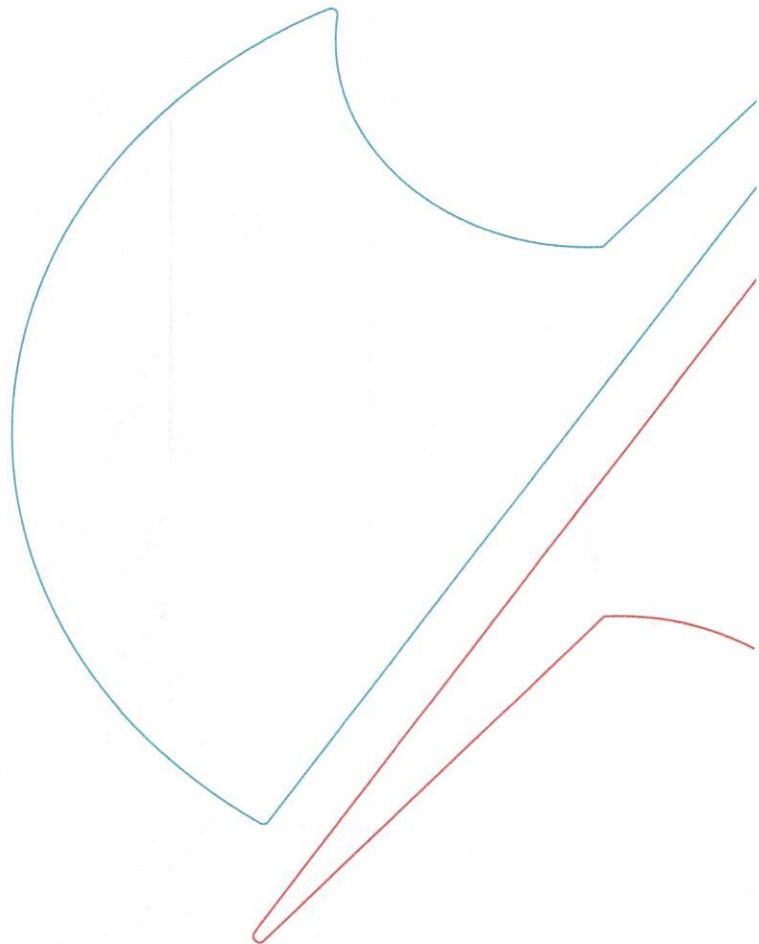
1001572-1001591

2024 Sales LNT BEV

Qty: 1

Prepared For
MELROSE

Prepared By
JEFF
DENESHA




**BATTLE
MOTORS**

TECHNICAL SPECIFICATIONS

P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL

CUSTOM OPTIONS	DESCRIPTION
9999-CUSTOM-83331	CUSTOM OPTIONS
	NO OPTION - CUSTOM OPTIONS
9999-CUSTOM-140347	BEV WALL CHARGER
	NO OPTION - BEV WALL CHARGER
9999-CUSTOM-140540	FRAME (QUOTE ONLY)
	NO-OPTION, FRAME AVAILABLE IN UPPER SELECTION
9999-CUSTOM-140539	PROP SHAFT (QUOTE ONLY)
	NO OPTION - PROP SHAFT AVAILABLE IN UPPER SELECTION
9999-CUSTOM-141986	AIR PIPING, AIR DRYER (QUOTE ONLY)
	NO OPTON (AVAILABLE IN UPPER SELECTION)
9999-CUSTOM-142066	BODY
	NO OPTION - BODY

CAB	DESCRIPTION
1800-1892-CAB	CAB MODEL
	CAB ASSY, (2) REAR WINDOWS, NO ROOF VENTS, W/VISOR, LNT
1809-0177-CAB	CAB - OVERHEAD CONSOLE / RADIO
	OVERHEAD CONSOLE, LHD/DUAL DRIVE, AM/FM/BLEETOOTH/HANDS FREE RADIO, HVAC CONTROLS, LNT
1809-0164-CAB	CAB - FLOOR GRIP TAPE
	FLOOR COVERING INSTALLATION, LH / DUAL DRIVE, LNT
1001-0960-CAB	CAB - ACCELERATOR PEDAL
	ACCELERATOR PEDAL, CUMMINS, DUAL DRIVE
2100-3420-CAB	CAB - BASE ELECTRICAL
	ELECTRICAL, BASE, CAB, 500K, AUTOCRAFT HEADLIGHT, BEV
9999-CUSTOM-82619	CAB - MODIFICATION (LH DOOR)
	NO OPTION - CAB MODIFICAION (LH DOOR)
9999-CUSTOM-82620	CAB - MODIFICATION (RH DOOR)
	NO OPTION - CAB MODIFICAION (RH DOOR)
2000-4561-CAB	CAB - GRAB HANDLES (LH)
	LH GRAB HANDLE BLACK OUTSIDE, STANDARD DOORS
2000-4862-CAB	CAB - GRAB HANDLES (RH)
	RH GRAB HANDLE BLACK OUTSIDE, STANDARD DOORS
9999-CUSTOM-82818	CAB, ELEC - DOOR WINDOWS - SWITCH COUNT
	DUAL DRIVE, LH E/R, RH E/R
2100-3352-CAB	CAB, ELECTRICAL - DOOR WINDOWS
	CAB, ELECTRICAL, POWER WINDOWS, 4 SWITCHES
2000-4582-CAB	CAB - AIR HORN
	AIR HORN, DUAL TONE, UNDER CAB
9999-CUSTOM-83006	CAB - WHEEL DIFF LOCK CONTROLS
	NO OPTION - AXLE DIFF LOCK CONTROLS, CAB
9999-CUSTOM-82623	CAB - ABS SYSTEM
	NO OPTION - ABS ATC OPTION


**BATTLE
MOTORS**
TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL

CAB	DESCRIPTION
9999-CUSTOM-82513	CAB AIR PIPING, REAR AXLE NO AIR PIPING REQUIRED
2000-4886-CAB	DECALS - CAB INTERIOR DECALS, INTERIOR, DUAL DRIVE, DIRECT DRIVE, BEV
2000-4797-CAB	DECALS - CALIFORNIA PROPOSTION 65 DECAL - CALIFORNIA PROPOSITION 65
1810-0043-CAB	CAB - MISC COMPONENTS CAB MODIF - LET2 COMPONENTS, LH/RH STEEL PANELS
9999-CUSTOM-83327	PUSHER/TAG CAB CONTROLS NO OPTION - PUSHER/TAG AXLE CAB CONTROLS

CHASSIS	DESCRIPTION
2000-4887	DECALS - CHASSIS EXTERIOR DECAL, EXTERIOR, BEV
2003-0604	HVAC - CHASSIS HVAC, A/C, COULOMB COMPRESSOR/WATER HEATER, LNT BEV
2201-0119	WINDSHIELD WIPERS - CHASSIS WINDSHIELD WIPERS, DUAL DRIVE
1005-1906	BEV COOLING, MANIFOLD CIRCUIT COOLING ASSY- MANIFOLD CIRCUIT LNT BEV
1006-1299	BEV MOTOR MOUNTING MOTOR MTG ASSY- 4 DEG, DIRECT DRIVE, LNT, BEV
1802-0076	CAB MOUNTING CAB MOUNTING - LET2 STANDARD CAB
9999-CUSTOM-83075	FRAME - FUEL TANK MTG, DROP FRAME NO OPTION - FUEL TANK MTG, DROP FRAME
2100-3420	ELECTRICAL, BASE, CHASSIS ELECTRICAL, BASE CHASSIS, 500K, AUTOCRAFT, BEV
1908-0096	AIR PIPING, REAR AXLE AIR PIPING, SINGLE AXLE - 2-SPEED, REYCO SUSP
9999-CUSTOM-139490	REAR BUMP BLOCKS NO OPTION - BUMP BLOCKS
1402-0640	POWER STEERING RESERVOIR POWER STEERING, 4 QT, COULOMB PS PUMP, LNT BEV
1401-0336	STEERING COLUMN CHASSIS (LH) STRG COLUMN ASSY - LNT, LHD, TILT, W/CRUISE, 16" WHEEL
1401-0337	STEERING COLUMN CHASSIS (RH) STEERING COLUMN, CAB - LNT, RHD, TILT, W/CRUISE, 16" WHEEL
1400-0715	STEERING GEAR STEERING GEAR, XD-120, RH/DUAL DRIVE, STANDARD CAB, LET2
9999-CUSTOM-83008	GAUGES - MISC OPTIONS NO OPTION - MISC GAUGES, CHASSIS
1000A-0002	MOTOR OIL PAN, BEV MOTOR ASSEMBLY, CASCADIA OIL PAN
2101-0666	BEV LOWER POWER SLED LOWER POWER SKID, 240 KWH, CATL, BEV
2100-3421	ELECTRICAL, BEV LOW VORAGE, POWER SLED ELECTRICAL LOWER POWR SLED, LOW VOLTAGE HARNESS, BEV


**BATTLE
MOTORS**
TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL

CHASSIS	DESCRIPTION
2100-3437	ELECTRICAL, BEV EPTO HV JUNCTION BOX ELECTRICAL ASSY - BEV HV COMPONENT CABLES
2100-3438	ELECTRICAL, BEV CHARGING INLET ELECTRICAL, CHARGING INLET, BEV
2100-3440	ELECTRICAL, BEV LV POWER FEED ELECTRICAL ASSY - LV CABLES, BEV
2100-3439	ELECTRICAL, BEV CHARGER JUNCTION BOX ELCTRICAL, CHARGER JUNCTION BOX, BEV
2500-0128	BATTERY COOLANT PLUMBING, BEV PIPING, BATTERY COOLANT CIRCUIT, BEV
2500-0129	COOLANT PIPING, CAB HEATER, BEV PIPING, CAB COOLANT CIRCUIT, BEV
2500-0130	BULKHEAD PLATE, BEV PIPIN, BULK HEAD PLATE, BEV
2501-1556	PIPING, MOTOR OIL COOLING, BEV PIPING, MOTOR OIL COOLING, BEV
1503-3002	FRAME MODIF, CENTER BEARING DRILLING FRAME MODIFICATION, CENTER BEARING DRILLING 1503-3002
9999-CUSTOM-142262	FRAME MODIF, REAR BUMPER ASSY NO OPTION - FRAME MOD REAR BUMPER
9999-CUSTOM-142330	FRAME MODIF, PUSHER AXLE NO OPTION - FRAME MOD PUSHER

MODEL	DESCRIPTION
9999-CUSTOM-140230	SOURCEWELL NON-SOURCEWELL
9999-CUSTOM-140179	FUEL TYPE BEV (ELECTRIC)
9999-CUSTOM-140243	BODY APPLICATION NEWWAY, RL, VIPER, SINGLE, 13 CY
9999-CUSTOM-83334	PRODUCT AVAILABILITY STOCKED MAJOR COMPONENTS
9999-CUSTOM-83098	CARB/EPA CARB / EPA - CLEAN IDLE COMPLIANT
9999-CUSTOM-83019	FRAME - WHEELBASE 140 WHEELBASE
9999-CUSTOM-83058	FRAME SILLS SINGLE SILL
9999-CUSTOM-83532	CAB STYLE LNT CREW CAB WITH EXTERIOR SUNVISOR
9999-CUSTOM-83534	CAB / DOORS LNT CREW CAB, W/VISOR, LH ELECTRIC ROLL-UP / RH ELECTRIC ROLL-UP DOORS
9999-CUSTOM-82516	DRIVE TYPE DUAL DRIVE, RH STAND-UP
1000A-0001	BEV MOTOR ELECTRIC MOTOR, CASCADIA, HVH410-150, 442 HP @ 1700 RPM, 1476 LB-FT TORQUE (0 TO 1700 RPM)


**BATTLE
MOTORS**
TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL

MODEL		DESCRIPTION
1007-1219	BEV TRANSMISSION	DIRECT DRIVE, SPL-140, OIL COOLED, BEV
9999-CUSTOM-83068	REAR SUSPENSION MODEL	REYCO 102CC - REYCO SPRING SUSPENSION
9999-CUSTOM-83048	REAR DRIVE AXLE MODEL	23082T - REAR DRIVE AXLE 23,000
1200A-0420	REAR DRIVE AXLE	REAR AXLE, 23082T, 6.17/8.40, BENDIX AIR DISC BRAKES, REYCO, SPL-140, LET2/LNT
1201-1254	REAR SUSPENSION	REAR SUSPENSION, REYCO 102CC 21K, 3 DEG, 23082T
9999-CUSTOM-83323	PUSHER AXLE	NO OPTION - PUSHER AXLE
1500-5630	FRAME	FRAME ASSEMBLY, 140" WB, REYCO 102CC, 10.25" SINGLE SILL, LNT BEV
2102-0132	ABS SYSTEM	ABS SYSTEM, BENDIX 4S/4M, 500K BAUD

OPTIONS, CAB		DESCRIPTION
1803-0087-CAB	CAB - DOOR (LH)	STANDARD DOOR, LH, ELECTRIC ROLL UP
1804-0086-CAB	CAB - DOOR (RH)	STANDARD DOOR, RH, ELECTRIC ROLL UP
9999-CUSTOM-82515	CAB - DOOR SAFETY BELT	NO OPTION - DOOR SAFETY STRAP
9999-CUSTOM-82532	CAB - FLOOR GRATING (LH)	NO OPTION - LH FLOOR GRATE
9999-CUSTOM-82533	CAB - FLOOR GRATING (RH)	NO OPTION - RH FLOOR GRATE
1806-1332-CAB	CAB - MIRROR (LH)	WEST COAST MIRROR, LH STANDARD DOOR, 16 X 7 HEATED
1808-0120-CAB	CAB - MIRROR (RH)	WEST COAST MIRROR, RH STANDARD DOOR, 16 X 7 HEATED
1806-1292-CAB	CAB - MIRROR, SPOT	MIRROR, SPOT - (1) LH / (1) RH, BOTTOM MIRROR ARMS, 8" ROUND, SS, HEATED
9999-CUSTOM-82673	CAB - MIRROR, LH LOOK DOWN	NO OPTION - LH LOOK DOWN MIRROR
9999-CUSTOM-82674	CAB - MIRROR, RH LOOK DOWN	NO OPTION - RH LOOK DOWN MIRROR
1401-0336-CAB	STEERING COLUMN CAB (LH)	STRG COLUMN ASSY - LNT, LHD, TILT, W/CRUISE, 16" WHEEL
1401-0337-CAB	STEERING COLUMN CAB (RH)	STRG COLUMN ASSY - LNT, RHD, TILT, W/CRUISE, 16" WHEEL
9999-CUSTOM-82609	RADIO OPTION - AM/FM/BLUETOOTH/HANDS FREE	RADIO - MOUNTED ON LH SIDE CAB, AM/FM/MP3/USB/BLUETOOTH/HANDS FREE



TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL

OPTIONS, CAB		DESCRIPTION
2003-0604-CAB	HVAC - CAB	HVAC, BEV A/C, COULOMB COMPRESSOR/WATER HEATER, LNT BEV
2003-0369-CAB	CAB - DEFROST FANS	CAB DEFROST FANS, 2-SPD, DUAL FANS, LH & RH OVERHEAD CONSOLE
2100-3404-CAB	CAB, ELECTRICAL - IGNITION	CAB, IGNITION (2) KEYS D250, STD/BI-FOLD DOOR C250
2202-0072-CAB	CAB - DASH/INSTRUMENTATION	DIGITAL DASH, DUAL DRIVE, 8" SAMSUNG DISPLAY, MPH/KPH, 500K STEEL, BEV, LNT
2100-3436-CAB	CAB, ADAS	ELECTRICAL, CAB, MOBILE EYE ADAS
9999-CUSTOM-83060	CAB - INTERAXLE BUZZER/ALARM	NO OPTION - INTERAXLE BUZZER, CAB
9999-CUSTOM-82517	CAB - FLASHER OPTIONS	NO OPTION - FLASHERS
9999-CUSTOM-82522	CAB - 12V POWER OPTIONS	NO OPTION - 12V POWER OPTIONS
1907-0480-CAB	CAB - AIR PIPING	CAB AIR PIPING, DUAL DRIVE, RH STAND-UP SEATING, LNT
9999-CUSTOM-82498	CAB - FIRE EXTINGUISHER	NO OPTION - FIRE EXTINGUISHER
9999-CUSTOM-82508	CAB - FIRST AID KIT	NO OPTION - FIRST AID KIT
9999-CUSTOM-82507	CAB - TRIANGLE KIT	NO OPTION - TRIANGLE KIT
1810-0061-CAB	CAB GRILLE	BATTLE GRILLE, SMOOTH FLAT BLACK

OPTIONS, CAB SEATS		DESCRIPTION
9999-CUSTOM-82616	CAB - SEAT MATERIAL	SEAT - ASPHALT CLOTH
2001-0518-CAB	CAB - SEATS (LH)	SEAT AIR RIDE, SEARS C2, ASPHALT CLOTH, LH, LNT
2011-0311-CAB	CAB - SEATS (RH)	SEAT FLIP-UP/FOLD-DOWN, ASPHALT CLOTH, RH, LNT
2011-0299-CAB	CAB - SEAT (CENTER BENCH)	SEAT CENTER BENCH ONLY, 1-MAN BENCH, ASPHALT CONFETTI, LNT
2000-4771-CAB	CAB - SEAT BELTS (LH)	SEAT BELT, BLACK, LH SIDE, AIR RIDE SEAT, LET2
2000-4859-CAB	CAB - SEAT BELTS (RH)	SEAT BELT, BLACK, RH SIDE, FIXED SEAT, LET2
9999-CUSTOM-82808	CAB - SEAT (LH), RH ARMREST	NO OPTION - RH ARMREST, LH SEAT
9999-CUSTOM-82809	CAB - SEAT (RH), LH ARMREST	NO OPTION - LH ARMREST, RH SEAT


BATTLE
MOTORS
TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL

OPTIONS, CHASSIS		DESCRIPTION
1100A-0052	FRONT STEER AXLE	FRONT STEER AXLE, D2000F, STD TRACK, 20" CMBR, ALL WB'S, AIR DISC BRAKES
1101-0659	FRONT SUSPENSION	FRONT SUSPENSION ASSY, CAST HANGERS, 17K TLS, (3) TAPER LEAF, STD SHOCKS, 10.25" SILLS, LNT
2000-4798	LUBE, REAR DRIVE AXLE	REAR AXLE LUBE, GEAR OIL 85W-140 FOR 23082T
9999-CUSTOM-83005	ELECTRICAL, AXLE DIFF LOCK CONTROLS	NO OPTION - AXLE DIFF LOCK CONTROLS, CHASSIS
2101-0675	BEV UPPER BATTERY RACK	BEV BATTERY UPPER RACK, ALUMINUM BLACK COVERS, 240KWH, CATL, BEV
2300-0712	BEV EPTO	EPTO, CASCADIA IM-225DZ-S;SAE "C" MNT/"C" SHAFT, BEV
2101-0643	BATTERY BOX	BATTERY BOX, (2) 950 CCA BATTERIES, W/ DISCONNECT SWITCH, PLASTIC COVER
1503-2281	BATTERY BOX SPACERS	BATTERY BOX SPACERS, LOWERS 8.5" BELOW TOP OF FRAME
9999-CUSTOM-83002	ELECTRICAL, BATTERY DCS INDICATOR LIGHT	NO OPTION - BATTERY DCS LIGHTING
2000-4854	ELECTRICAL, BATTERY CABLES	BATTERY / POWER FEED CABLES, BEV, LH 32/44
2502-0843	AIR DRYER	AIR DRYER, BENDIX AD-IS AIR DRYER W/BLOCK, BEV
1910-0507	AIR PIPING, AIR DRYER	AIR PIPING, 3.7KW COLUMB COMP, AD-IS, LH 68 / FRONT, LNT BEV
9999-CUSTOM-82833	AUTO NEUTRAL	NO OPTION - AUTO NEUTRAL, CAB
1502-0644	FRONT BUMPER	BUMPER ASSEMBLY - FORMED, HENDRICKSON, STEEL, PC BLACK, LNT
9999-CUSTOM-142046	REAR BUMPER	NO OPTION - REAR BUMPER
1801-0619	FENDERS, FRONT	FENDER, FRONT - LNT, BATTLE, BLACK PLASTIC, WIDE
1600-5213	PROPSHAFT	PROPSHAFT, 140"WB, EM/DD, REYCO,S26-S30, SPL140, LNT BEV
1503-2885	AIR PIPING, FRAME SUPPORTS	FRAME AIR PIPING SUPPORTS, <190" WB, SINGLE AXLE, SINGLE SILLS
1906-0850	AIR PIPING, FRAME	FRAME AIR PIPING; (2) STEEL AIR TANKS IN FRAME, AD-IS AIR DRYER, W/ CENTRALIZED DRAINS, LNT BEV
9999-CUSTOM-83325	AIR PIPING, PUSHER/TAG AXLE	NO OPTION - PUSHER/TAG AXLE AIR PIPING
1904-0073	AIR PIPING, OPTIONAL AUTOMATIC DRAIN VALVES	BENDIX DV-2 HEATED @ WET TANK ONLY
9999-CUSTOM-82670	AIR PIPING, OPTIONAL MANUAL DRAIN VALVES	NO OPTION - MANUAL DRAIN VALVES
9999-CUSTOM-82501	AIR PIPING, OPTIONAL CHARGE VALVE	NO OPTION - CHARGE VALVE
2000-4582	AIR HORN, CHASSIS	AIR HORN, DUAL TONE, UNDER CAB
2000-2215	BACK-UP ALARM	BACK-UP ALARM, ECCO 575, 107DB


**BATTLE
MOTORS**
TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL

OPTIONS, CHASSIS		DESCRIPTION
9999-CUSTOM-139179	RETAINER CABLES	NO OPTION-RETAINER CABLES
2104-0117	ELECTRICAL, DRIVE AWAY KIT	BODY STD TAILBOARD HARNESS ONLY
9999-CUSTOM-139184	WHEEL TORQUE INDICATORS	NO OPTION - WHEEL TORQUE INDICATORS
2501-1558	OIL PIPING, CAB TILT	PIPING ASSY - CAB TILT, ELECTRIC TILT PUMP, LNT BEV
1005-1905	BEV COOLING, SYSTEM	COOLING ASSY- EMP E-FAN COOLING SYS 2, LET2/LNT BEV
9999-CUSTOM-142003	ELECTRICAL, HIGH VOLTAGE, POWER SLED	NO OPTION - POWER SLED, HIGH VOLTALGE HARNESS, BEV
9999-CUSTOM-140335	BEV SKID PLATE	NO OPTION - MOTOR SKID PLATE BEV
9999-CUSTOM-140340	TRACTOR PROTECTION VALVE	NO OPTION - TRACTOR PROTECTION VALVE

PAINT		DESCRIPTION
356-0322	PAINT, CAB	PAINT, CAB, STANDARD WHITE, G2-3460715-A
9999-CUSTOM-140265	PAINT, CAB VISOR	NO OPTION - CAB VISOR SAME COLOR AS CAB
9999-CUSTOM-83308	PAINT, CAB STRIPES	NO OPTION - CAB STRIPES
9999-CUSTOM-83309	PAINT, CLEAR COAT	NO OPTION - CAB CLEAR COAT
356-0323	PAINT, CHASSIS	PAINT, CHASSIS, STANDARD BLACK, G2-2B1738
356-0329	PAINT, BUMPER	PAINT, BUMPER - STANDARD BLACK, G2-2B1738

TIRES / WHEELS		DESCRIPTION
2-519-4687-0140	TIRES/WHEELS - FRONT STEER AXLE	TOYO M153, 315/80R22.5, 20/L, ACCURIDE, ALUMINUM, XTRA POLISH FINISH, 7.00" OUTSET
4-519-2863-0141	TIRES/WHEELS - DRIVE AXLE	TOYO M170, 11R22.5, 16/H, ACCURIDE, ALUMINUM, XTRA POLISH FINISH
9999-CUSTOM-83539	TIRES/WHEELS - PUSHER AXLE	NO OPTION - PUSHER TIRES/WHEELS

WARRANTY		DESCRIPTION
306A-0010	WARRANTY, CHASSIS	WARRANTY, BEV CHASSIS, STANDARD 1 YEAR CHASSIS/5 YEAR EV
306A-0022	WARRANTY, DRIVE AXLE	WARRANTY, DANA, STANDARD 2 YEAR


BATTLE
 M O T O R S

TECHNICAL SPECIFICATIONS (CONT.)
**P1001572-P1001523 BR BEV LNT 11YD LOADMASTER
 PROPOSAL**

VEHICLE SPECIFICATION SUMMARY		UNIT	DESCRIPTION
MODEL			SALES LNT BEV
TRANSMISSION			DIRECT DRIVE, SPL-140, OIL COOLED, BEV

Attachment: Loadmaster Quote_0001 (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


BATTLE
 M O T O R S

PRICING SUMMARY (CONT.)
**P1001572-P1001523 BR BEV LNT 11YD LOADMASTER
 PROPOSAL**
TOTAL SELLING PRICE (PER UNIT)
\$498,500
CUSTOMER
BOSTON FREIGHTLINER
DATE
DATE

Attachment: Loadmaster Quote_0001 (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


BATTLE
 M O T O R S

PRICING SUMMARY
**P1001572-P1001523 BR BEV LNT 11YD LOADMASTER
 PROPOSAL**

DESCRIPTION	PRICE
BASE MSRP	\$461,314
DESTINATION	\$3,921
DEALER MSRP	\$465,235
BODY PACKAGE - LOADMASTER 11 YARD	\$123,450
TOTAL MSRP	\$588,685
DISCOUNT	\$92,067
WARRANTIES & OPTIONS	
NO OPTION - BEV WALL CHARGER	\$0
NON-SOURCEWELL	\$0
WARRANTY, BEV CHASSIS, STANDARD 1 YEAR CHASSIS/5 YEAR EV	\$1,882
WARRANTY, DANA, STANDARD 2 YEAR	\$0
SUBTOTAL	\$1,882
TOTAL SELLING PRICE (PER UNIT)	\$498,500

Attachment: Loadmaster Quote_0001 (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


BATTLE
 M O T O R S

GVWR

P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL

AXLE POSITION	AXLE MODEL	AXLE/SUSP RATING (LBS)	SINGLE OR DUAL	WHEEL SIZE AND RATING (SIZE / LOAD @ PRESSURE)	TIRE SIZE AND RATING** (SIZE / LOAD @ PRESSURE / SPEED)	GAWR (LOAD @ PRESSURE / SPEED)
FRONT	D2000F	20,000	S	22.5 X 9.00 / 10,000 @ 130	315/80R22.5L/20 / 10,000 @ 130 / 68	20,000 @ 130 / 68
1ST INTERMEDIATE						
2ND INTERMEDIATE						
3RD INTERMEDIATE						
LAST	23082T	23,000	D	22.5 X 8.25 / 7,400 @ 131	11R22.5H/16 / 6,005 @ 120 / 75	23,000 @ 120 / 75
DRIVETRAIN GVWR (LBS)						43,000
ENGINE APPLICATION GVWR (LBS)						66,000
TRANSMISSION APPLICATION GVWR (LBS)						33,000
TRUCK GVWR (LBS)						33,000

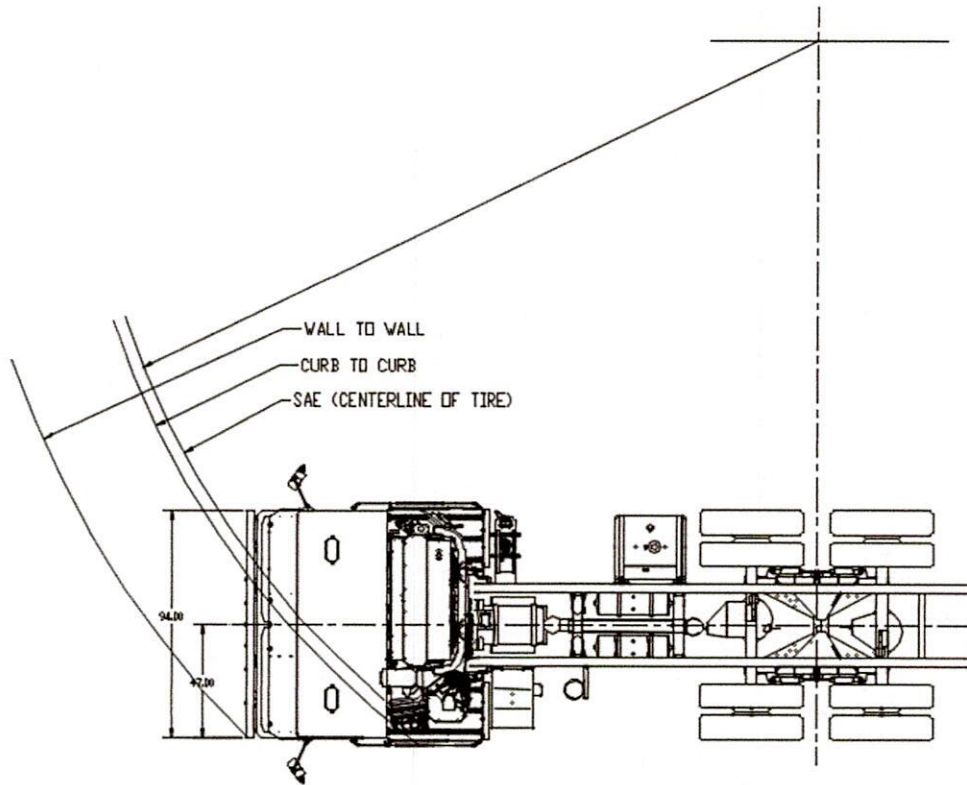
Attachment: Loadmaster Quote_0001 (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


BATTLE
 MOTORS

COMPONENT LOCATIONS

P1001572-P1001523 BR BEV LNT 11YD LOADMASTER PROPOSAL

COMPONENT	LOCATION
AIR DRYER	LH STA. 68 / FRONT
AIR TANKS	92/110
BATTERY CABLES	LH STA. 32/44



ESTIMATED VEHICLE WEIGHT DISTRIBUTION (LBS) - FULLY WET WITH 200# DRIVER (+/- 5%)

FRONT AXLE GROUND LOAD (LBS)	8,863.61
REAR AXLE GROUND LOAD (LBS)	3,392.39
TOTAL VEHICLE WEIGHT (LBS)	12,256.00

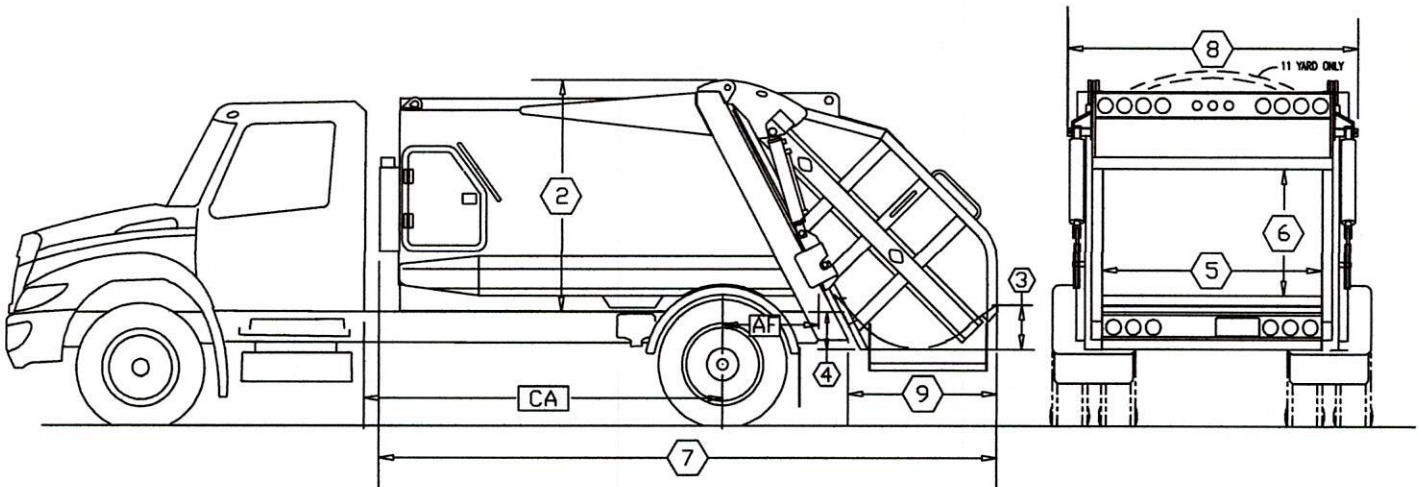
ESTIMATED VEHICLE TURNABILITY - TURN RADIUS (FEET) (+/- 5%)

SAE - TIRE CENTERLINE TO TIRE CENTERLINE (FT)	27.80
CURB-TO-CURB (FT)	28.84
WALL-TO-WALL (FT)	30.48

LOADMASTER

ELITE SERIES

"small" rear loader



DIMENSIONAL SPECIFICATIONS

1 AVAILABLE BODY VOLUMES →	6 YARD ³	8 YARD ³	10 YARD ³	11 YARD ³
2 HEIGHT ABOVE CHASSIS FRAME	69 3/4	69 3/4	69 3/4	73 1/4
3 DEPTH OF HOPPER	13	13	13	13
4 HOPPER BELOW CHASSIS FRAME	11	11	11	11
5 HOPPER INSIDE WIDTH	66	66	66	66
6 HOPPER OPENING HEIGHT	41	41	41	41
7 OVERALL LENGTH	161 3/4	185 3/4	209 3/4	209 3/4
8 OVERALL WIDTH	85 1/2	85 1/2	85 1/2	85 1/2
9 REAR OF BODY TO REAR OF TAILGATE	44 3/4	44 3/4	44 3/4	44 3/4
10 APPROX BODY WEIGHT	7,200 LBS	7,700 LBS	8,200 LBS	8,500 LBS
11 LOAD SILL ABOVE CHASSIS FRAME	2 INCHES	2 INCHES	2 INCHES	2 INCHES
12 HOPPER CAPACITY	1.0 YD ³	1.0 YD ³	1.0 YD ³	1.0 YD ³
13 HEIGHT ABOVE FRAME (WITH GATE RAISED)	118	118	118	118

CHASSIS RECOMMENDATIONS

Specify ELITE chassis to have 19.5 wheel size (not 22.5).
Consult factory IF intending 22.5 wheel size.

BODY SIZE	MINIMUM GVWR	CA	MINIMUM AF
6 YD ³	17,000	85"	34"
8 YD ³	21,000	108"	34"
10 YD ³	25,500	134"	34"
11 YD ³	25,500	134"	34"

ISUZU "NOTES":

FOR the ELITE 6 and ELITE 8...THE ISUZU "N-SERIES" CHASSIS IS "POPLUAR" CHOICE.

ISUZU "ONLY" OFFERS "AFT OF REAR AXLE" FUEL TANK. THIS TANK MUST BE "MOVED"

Aft of rear axle fuel tanks will require fuel tank "move" ... and will be Dealer's responsibility!!

FOR the ELITE 8...THE ISUZU WB = 132.5" IS THE "CORRECT" ISUZU WHEEL BASE ... AND ISUZU's "HORIZONTAL" EXHAUST IS NEEDED.

FOR the ELITE 6...THE ISUZU WB = 132.5" IS THE "WORKABLE" ISUZU WHEEL BASE ... AND EITHER THE "HORIZONTAL" EXHAUST or "VERTICAL" EXHAUST will WORK.

The ELITE 6 "CAN BE" ON ISUZU's WB = 109" BUT THEN "BOTH" THE FUEL TANK AND THE "BATT BOX" NEED RE-LOCATION. THE "HORIZONTAL" EXHAUST "MUST BE" SPEC'd for ELITE 6 on WB = 109"

LOADMASTER reserves the right to revise product specifications.

This "DATA SHEET" is "informational" only. Consult with your LOADMASTER dealer prior to ordering...for final specifications.

For "CT"...assure Clear & Useable per this info. (If EXHAUST stack is "consuming" space... then "account" for EXHAUST when you are "specing" Chassis.)

LOADMASTER

loadmaster@loadmaster.org

800-433-2768

100 west eleventh avenue
po box 186
Norway, Michigan 49870-0186
fax 906-563-9800 fax

JULY 01, 2018

ELITE BASE-PRODUCT SPECIFICATIONS**(JULY 2018)****Material Specifications-Body**

Body sides	10 ga. high tensile
Body rearward floor	3/16" high tensile
Body forward floor	1/8" high tensile
Body roof	10 ga. high tensile
Floor's longitudinals	tubular 3" x 8" x 3/16" wall
Ejector's track channel	1/4" high tensile
Body structural upgrade options available (thickness and alloy)	

Material Specifications-Tailgate

Lower tailgate Sides	3/16" T-1 alloy
Upper tailgate Sides	10 ga. high tensile
Hopper floor	3/16" T-1 alloy
Separator panel	3/16" abrasion-resistant grade235
Tailgate structural upgrade options available (thickness and alloy)	

Material Specifications-Blades

Ejector's face panel	10 ga. high tensile
Ejector's structure	tubular 2" x 3" x 3/16"
Ejector's tracking shoes	UHMW polyethylene
Sweep blade face	3/16" T-1 alloy
Sweep blade pusharms	1/2" high tensile
Slide blade face	7ga. high tensile
Blades wrist pin & axles	2 1/4" dia. med carb cold finish
Slider's shoeing	nylatron nsm & uhmw polyethylene

Hydraulic Specifications

Reservoir	20 gallon	Sweep Cylinders (2)	3 1/2" bore
Pump	cast iron gear-type (3 cubic inch per rev)	Pack (slider) Cylinders (2)	3 1/2" bore
Pump flow	18 gpm	Gate lift Cylinders (2)	3 1/2" bore
Max syst pressure	2,700 psi	Ejector Telescopic	2-stage (4.5/3.5)
Suction Filter	100 mesh	Body-mounted valve	2 function sectional
Return Filter	5 micron tank top	Tailgate-mounted valve	3 function sectional

Electrical Specifications

Wire	14 ga sxl	Switches	centralized,in-cab panel
Wire identifiers	color & function labelling	Lights	grommet-mounted
Harnessing	multi-section; braid covering		
Harness Connects	Deutsch aircraft type		
Wire connects	heat shrink sealed		

Some standard features

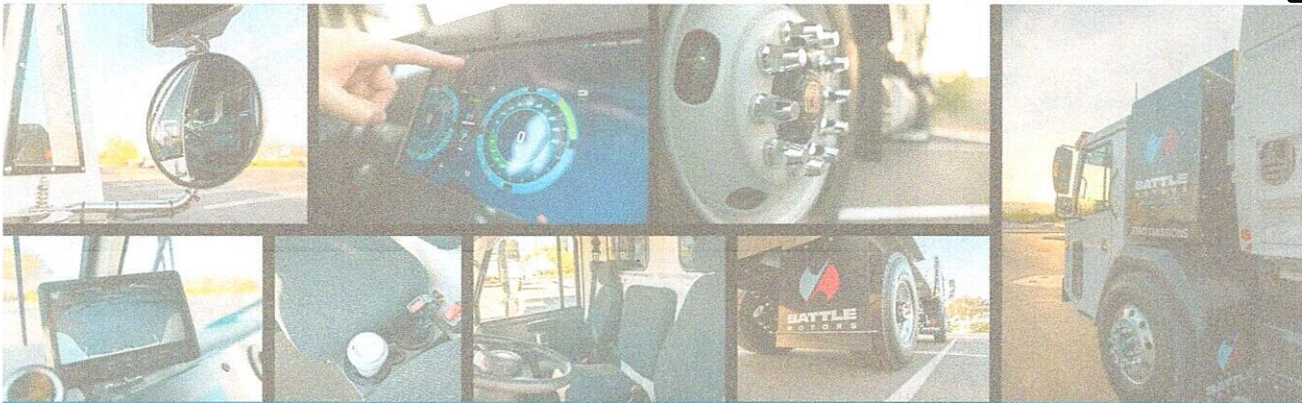
Epoxy primer paint
 Undercoated
 Automatic tailgate latches
 Body access door with ladder
 Full complement of lights
 Quick change shoeing

Some available options

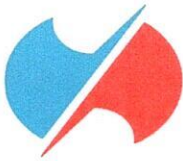
Hot-shift PTO or cable shift
 Work lights
 Strobe lights
 8k Drum winch (container handling)
 Cart Tipper/ Barrel Tipper

"Customer-preferred" choices





P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD PROPOSAL



BATTLE
MOTORS

Date

03/8/2023

Quote Information

202209231750-A466

9000-0284B

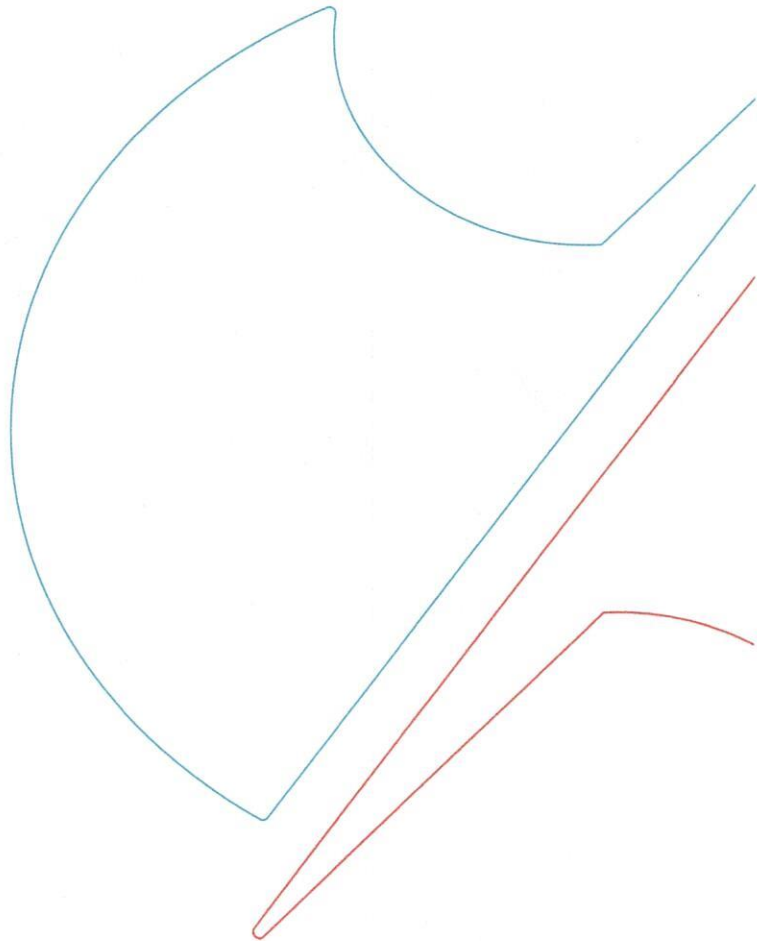
1001572-1001591

2024 Sales LNT BEV

Qty: 1

Prepared For
MELROSE

Prepared By
JEFF
DENESHA




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TECHNICAL SPECIFICATIONS

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD PROPOSAL

CUSTOM OPTIONS	DESCRIPTION
9999-CUSTOM-83331	CUSTOM OPTIONS
	NO OPTION - CUSTOM OPTIONS
9999-CUSTOM-140347	BEV WALL CHARGER
	NO OPTION - BEV WALL CHARGER
9999-CUSTOM-140540	FRAME (QUOTE ONLY)
	NO-OPTION, FRAME AVAILABLE IN UPPER SELECTION
9999-CUSTOM-140539	PROP SHAFT (QUOTE ONLY)
	NO OPTION - PROP SHAFT AVAILABLE IN UPPER SELECTION
9999-CUSTOM-141986	AIR PIPING, AIR DRYER (QUOTE ONLY)
	NO OPTON (AVAILABLE IN UPPER SELECTION)
9999-CUSTOM-142066	BODY
	NO OPTION - BODY

CAB	DESCRIPTION
1800-1892-CAB	CAB MODEL
	CAB ASSY, (2) REAR WINDOWS, NO ROOF VENTS, W/VISOR, LNT
1809-0177-CAB	CAB - OVERHEAD CONSOLE / RADIO
	OVERHEAD CONSOLE, LHD/DUAL DRIVE, AM/FM/BLEETOOTH/HANDS FREE RADIO, HVAC CONTROLS, LNT
1809-0164-CAB	CAB - FLOOR GRIP TAPE
	FLOOR COVERING INSTALLATION, LH / DUAL DRIVE, LNT
1001-0960-CAB	CAB - ACCELERATOR PEDAL
	ACCELERATOR PEDAL, CUMMINS, DUAL DRIVE
2100-3420-CAB	CAB - BASE ELECTRICAL
	ELECTRICAL, BASE, CAB, 500K, AUTOCRAFT HEADLIGHT, BEV
9999-CUSTOM-82619	CAB - MODIFICATION (LH DOOR)
	NO OPTION - CAB MODIFICAION (LH DOOR)
9999-CUSTOM-82620	CAB - MODIFICATION (RH DOOR)
	NO OPTION - CAB MODIFICAION (RH DOOR)
2000-4561-CAB	CAB - GRAB HANDLES (LH)
	LH GRAB HANDLE BLACK OUTSIDE, STANDARD DOORS
2000-4862-CAB	CAB - GRAB HANDLES (RH)
	RH GRAB HANDLE BLACK OUTSIDE, STANDARD DOORS
9999-CUSTOM-82818	CAB, ELEC - DOOR WINDOWS - SWITCH COUNT
	DUAL DRIVE, LH E/R, RH E/R
2100-3352-CAB	CAB, ELECTRICAL - DOOR WINDOWS
	CAB, ELECTRICAL, POWER WINDOWS, 4 SWITCHES
2000-4582-CAB	CAB - AIR HORN
	AIR HORN, DUAL TONE, UNDER CAB
9999-CUSTOM-83006	CAB - WHEEL DIFF LOCK CONTROLS
	NO OPTION - AXLE DIFF LOCK CONTROLS, CAB
9999-CUSTOM-82623	CAB - ABS SYSTEM
	NO OPTION - ABS ATC OPTION


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TECHNICAL SPECIFICATIONS (CONT.)
**P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD
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CAB	DESCRIPTION
9999-CUSTOM-82513	CAB AIR PIPING, REAR AXLE NO AIR PIPING REQUIRED
2000-4886-CAB	DECALS - CAB INTERIOR DECALS, INTERIOR, DUAL DRIVE, DIRECT DRIVE, BEV
2000-4797-CAB	DECALS - CALIFORNIA PROPOSITION 65 DECAL - CALIFORNIA PROPOSITION 65
1810-0043-CAB	CAB - MISC COMPONENTS CAB MODIF - LET2 COMPONENTS, LH/RH STEEL PANELS
9999-CUSTOM-83327	PUSHER/TAG CAB CONTROLS NO OPTION - PUSHER/TAG AXLE CAB CONTROLS

CHASSIS	DESCRIPTION
2000-4887	DECALS - CHASSIS EXTERIOR DECAL, EXTERIOR, BEV
2003-0604	HVAC - CHASSIS HVAC, A/C, COULOMB COMPRESSOR/WATER HEATER, LNT BEV
2201-0119	WINDSHIELD WIPERS - CHASSIS WINDSHIELD WIPERS, DUAL DRIVE
1005-1906	BEV COOLING, MANIFOLD CIRCUIT COOLING ASSY- MANIFOLD CIRCUIT LNT BEV
1006-1299	BEV MOTOR MOUNTING MOTOR MTG ASSY- 4 DEG, DIRECT DRIVE, LNT, BEV
1802-0076	CAB MOUNTING CAB MOUNTING - LET2 STANDARD CAB
9999-CUSTOM-83075	FRAME - FUEL TANK MTG, DROP FRAME NO OPTION - FUEL TANK MTG, DROP FRAME
2100-3420	ELECTRICAL, BASE, CHASSIS ELECTRICAL, BASE CHASSIS, 500K, AUTOCRAFT, BEV
1908-0096	AIR PIPING, REAR AXLE AIR PIPING, SINGLE AXLE - 2-SPEED, REYCO SUSP
9999-CUSTOM-139490	REAR BUMP BLOCKS NO OPTION - BUMP BLOCKS
1402-0640	POWER STEERING RESERVOIR POWER STEERING, 4 QT, COULOMB PS PUMP, LNT BEV
1401-0336	STEERING COLUMN CHASSIS (LH) STRG COLUMN ASSY - LNT, LHD, TILT, W/CRUISE, 16" WHEEL
1401-0337	STEERING COLUMN CHASSIS (RH) STEERING COLUMN, CAB - LNT, RHD, TILT, W/CRUISE, 16" WHEEL
1400-0715	STEERING GEAR STEERING GEAR, XD-120, RH/DUAL DRIVE, STANDARD CAB, LET2
9999-CUSTOM-83008	GAUGES - MISC OPTIONS NO OPTION - MISC GAUGES, CHASSIS
1000A-0002	MOTOR OIL PAN, BEV MOTOR ASSEMBLY, CASCADIA OIL PAN
2101-0666	BEV LOWER POWER SLED LOWER POWER SKID, 240 KWH, CATL, BEV
2100-3421	ELECTRICAL, BEV LOW VOLTAGE, POWER SLED ELECTRICAL LOWER POWR SLED, LOW VOLTAGE HARNESS, BEV



TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD PROPOSAL

CHASSIS	DESCRIPTION
2100-3437	ELECTRICAL, BEV EPTO HV JUNCTION BOX ELECTRICAL ASSY - BEV HV COMPONENT CABLES
2100-3438	ELECTRICAL, BEV CHARGING INLET ELECTRICAL, CHARGING INLET, BEV
2100-3440	ELECTRICAL, BEV LV POWER FEED ELECTRICAL ASSY - LV CABLES, BEV
2100-3439	ELECTRICAL, BEV CHARGER JUNCTION BOX ELECTRICAL, CHARGER JUNCTION BOX, BEV
2500-0128	BATTERY COOLANT PLUMBING, BEV PIPING, BATTERY COOLANT CIRCUIT, BEV
2500-0129	COOLANT PIPING, CAB HEATER, BEV PIPING, CAB COOLANT CIRCUIT, BEV
2500-0130	BULKHEAD PLATE, BEV PIPING, BULK HEAD PLATE, BEV
2501-1556	PIPING, MOTOR OIL COOLING, BEV PIPING, MOTOR OIL COOLING, BEV
1503-3002	FRAME MODIF, CENTER BEARING DRILLING FRAME MODIFICATION, CENTER BEARING DRILLING 1503-3002
9999-CUSTOM-142262	FRAME MODIF, REAR BUMPER ASSY NO OPTION - FRAME MOD REAR BUMPER
9999-CUSTOM-142330	FRAME MODIF, PUSHER AXLE NO OPTION - FRAME MOD PUSHER

MODEL	DESCRIPTION
9999-CUSTOM-140230	SOURCEWELL NON-SOURCEWELL
9999-CUSTOM-140179	FUEL TYPE BEV (ELECTRIC)
9999-CUSTOM-140243	BODY APPLICATION NEWWAY, RL, VIPER, SINGLE, 13 CY
9999-CUSTOM-83334	PRODUCT AVAILABILITY STOCKED MAJOR COMPONENTS
9999-CUSTOM-83098	CARB/EPA CARB / EPA - CLEAN IDLE COMPLIANT
9999-CUSTOM-83019	FRAME - WHEELBASE 140 WHEELBASE
9999-CUSTOM-83058	FRAME SILLS SINGLE SILL
9999-CUSTOM-83532	CAB STYLE LNT CREW CAB WITH EXTERIOR SUNVISOR
9999-CUSTOM-83534	CAB / DOORS LNT CREW CAB, W/VISOR, LH ELECTRIC ROLL-UP / RH ELECTRIC ROLL-UP DOORS
9999-CUSTOM-82516	DRIVE TYPE DUAL DRIVE, RH STAND-UP
1000A-0001	BEV MOTOR ELECTRIC MOTOR, CASCADIA, HVH410-150, 442 HP @ 1700 RPM, 1476 LB-FT TORQUE (0 TO 1700 RPM)


**BATTLE
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TECHNICAL SPECIFICATIONS (CONT.)
**P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD
PROPOSAL**

MODEL		DESCRIPTION
1007-1219	BEV TRANSMISSION	DIRECT DRIVE, SPL-140, OIL COOLED, BEV
9999-CUSTOM-83068	REAR SUSPENSION MODEL	REYCO 102CC - REYCO SPRING SUSPENSION
9999-CUSTOM-83048	REAR DRIVE AXLE MODEL	23082T - REAR DRIVE AXLE 23,000
1200A-0420	REAR DRIVE AXLE	REAR AXLE, 23082T, 6.17/8.40, BENDIX AIR DISC BRAKES, REYCO, SPL-140, LET2/LNT
1201-1254	REAR SUSPENSION	REAR SUSPENSION, REYCO 102CC 21K, 3 DEG, 23082T
9999-CUSTOM-83323	PUSHER AXLE	NO OPTION - PUSHER AXLE
1500-5630	FRAME	FRAME ASSEMBLY, 140" WB, REYCO 102CC, 10.25" SINGLE SILL, LNT BEV
2102-0132	ABS SYSTEM	ABS SYSTEM, BENDIX 4S/4M, 500K BAUD

OPTIONS, CAB		DESCRIPTION
1803-0087-CAB	CAB - DOOR (LH)	STANDARD DOOR, LH, ELECTRIC ROLL UP
1804-0086-CAB	CAB - DOOR (RH)	STANDARD DOOR, RH, ELECTRIC ROLL UP
9999-CUSTOM-82515	CAB - DOOR SAFETY BELT	NO OPTION - DOOR SAFETY STRAP
9999-CUSTOM-82532	CAB - FLOOR GRATING (LH)	NO OPTION - LH FLOOR GRATE
9999-CUSTOM-82533	CAB - FLOOR GRATING (RH)	NO OPTION - RH FLOOR GRATE
1806-1332-CAB	CAB - MIRROR (LH)	WEST COAST MIRROR, LH STANDARD DOOR, 16 X 7 HEATED
1808-0120-CAB	CAB - MIRROR (RH)	WEST COAST MIRROR, RH STANDARD DOOR, 16 X 7 HEATED
1806-1292-CAB	CAB - MIRROR, SPOT	MIRROR, SPOT - (1) LH / (1) RH, BOTTOM MIRROR ARMS, 8" ROUND, SS, HEATED
9999-CUSTOM-82673	CAB - MIRROR, LH LOOK DOWN	NO OPTION - LH LOOK DOWN MIRROR
9999-CUSTOM-82674	CAB - MIRROR, RH LOOK DOWN	NO OPTION - RH LOOK DOWN MIRROR
1401-0336-CAB	STEERING COLUMN CAB (LH)	STRG COLUMN ASSY - LNT, LHD, TILT, W/CRUISE, 16" WHEEL
1401-0337-CAB	STEERING COLUMN CAB (RH)	STRG COLUMN ASSY - LNT, RHD, TILT, W/CRUISE, 16" WHEEL
9999-CUSTOM-82609	RADIO OPTION - AM/FM/BLUETOOTH/HANDS FREE	RADIO - MOUNTED ON LH SIDE CAB, AM/FM/MP3/USB/BLUETOOTH/HANDS FREE


**BATTLE
MOTORS**
TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD PROPOSAL

OPTIONS, CAB		DESCRIPTION
2003-0604-CAB	HVAC - CAB	HVAC, BEV A/C, COULOMB COMPRESSOR/WATER HEATER, LNT BEV
2003-0369-CAB	CAB - DEFROST FANS	CAB DEFROST FANS, 2-SPD, DUAL FANS, LH & RH OVERHEAD CONSOLE
2100-3404-CAB	CAB, ELECTRICAL - IGNITION	CAB, IGNITION (2) KEYS D250, STD/BI-FOLD DOOR C250
2202-0072-CAB	CAB - DASH/INSTRUMENTATION	DIGITAL DASH, DUAL DRIVE, 8" SAMSUNG DISPLAY, MPH/KPH, 500K STEEL, BEV, LNT
2100-3436-CAB	CAB, ADAS	ELECTRICAL, CAB, MOBILE EYE ADAS
9999-CUSTOM-83060	CAB - INTERAXLE BUZZER/ALARM	NO OPTION - INTERAXLE BUZZER, CAB
9999-CUSTOM-82517	CAB - FLASHER OPTIONS	NO OPTION - FLASHERS
9999-CUSTOM-82522	CAB - 12V POWER OPTIONS	NO OPTION - 12V POWER OPTIONS
1907-0480-CAB	CAB - AIR PIPING	CAB AIR PIPING, DUAL DRIVE, RH STAND-UP SEATING, LNT
9999-CUSTOM-82498	CAB - FIRE EXTINGUISHER	NO OPTION - FIRE EXTINGUISHER
9999-CUSTOM-82508	CAB - FIRST AID KIT	NO OPTION - FIRST AID KIT
9999-CUSTOM-82507	CAB - TRIANGLE KIT	NO OPTION - TRIANGLE KIT
1810-0061-CAB	CAB GRILLE	BATTLE GRILLE, SMOOTH FLAT BLACK

OPTIONS, CAB SEATS		DESCRIPTION
9999-CUSTOM-82616	CAB - SEAT MATERIAL	SEAT - ASPHALT CLOTH
2001-0518-CAB	CAB - SEATS (LH)	SEAT AIR RIDE, SEARS C2, ASPHALT CLOTH, LH, LNT
2011-0311-CAB	CAB - SEATS (RH)	SEAT FLIP-UP/FOLD-DOWN, ASPHALT CLOTH, RH, LNT
2011-0299-CAB	CAB - SEAT (CENTER BENCH)	SEAT CENTER BENCH ONLY, 1-MAN BENCH, ASPHALT CONFETTI, LNT
2000-4771-CAB	CAB - SEAT BELTS (LH)	SEAT BELT, BLACK, LH SIDE, AIR RIDE SEAT, LET2
2000-4859-CAB	CAB - SEAT BELTS (RH)	SEAT BELT, BLACK, RH SIDE, FIXED SEAT, LET2
9999-CUSTOM-82808	CAB - SEAT (LH), RH ARMREST	NO OPTION - RH ARMREST, LH SEAT
9999-CUSTOM-82809	CAB - SEAT (RH), LH ARMREST	NO OPTION - LH ARMREST, RH SEAT



TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD PROPOSAL

OPTIONS, CHASSIS		DESCRIPTION
1100A-0052	FRONT STEER AXLE	FRONT STEER AXLE, D2000F, STD TRACK, 20" CMBR, ALL WB'S, AIR DISC BRAKES
1101-0659	FRONT SUSPENSION	FRONT SUSPENSION ASSY, CAST HANGERS, 17K TLS, (3) TAPER LEAF, STD SHOCKS, 10.25" SILLS, LNT
2000-4798	LUBE, REAR DRIVE AXLE	REAR AXLE LUBE, GEAR OIL 85W-140 FOR 23082T
9999-CUSTOM-83005	ELECTRICAL, AXLE DIFF LOCK CONTROLS	NO OPTION - AXLE DIFF LOCK CONTROLS, CHASSIS
2101-0675	BEV UPPER BATTERY RACK	BEV BATTERY UPPER RACK, ALUMINUM BLACK COVERS, 240KWH, CATL, BEV
2300-0712	BEV EPTO	EPTO, CASCADIA IM-225DZ-S;SAE "C" MNT/"C" SHAFT, BEV
2101-0643	BATTERY BOX	BATTERY BOX, (2) 950 CCA BATTERIES, W/ DISCONNECT SWITCH, PLASTIC COVER
1503-2281	BATTERY BOX SPACERS	BATTERY BOX SPACERS, LOWERS 8.5" BELOW TOP OF FRAME
9999-CUSTOM-83002	ELECTRICAL, BATTERY DCS INDICATOR LIGHT	NO OPTION - BATTERY DCS LIGHTING
2000-4854	ELECTRICAL, BATTERY CABLES	BATTERY / POWER FEED CABLES, BEV, LH 32/44
2502-0843	AIR DRYER	AIR DRYER, BENDIX AD-IS AIR DRYER W/BLOCK, BEV
1910-0507	AIR PIPING, AIR DRYER	AIR PIPING, 3.7KW COLUMB COMP, AD-IS, LH 68 / FRONT, LNT BEV
9999-CUSTOM-82833	AUTO NEUTRAL	NO OPTION - AUTO NEUTRAL, CAB
1502-0644	FRONT BUMPER	BUMPER ASSEMBLY - FORMED, HENDRICKSON, STEEL, PC BLACK, LNT
9999-CUSTOM-142046	REAR BUMPER	NO OPTION - REAR BUMPER
1801-0619	FENDERS, FRONT	FENDER, FRONT - LNT, BATTLE, BLACK PLASTIC, WIDE
1600-5213	PROPSHAFT	PROPSHAFT, 140"WB, EM/DD, REYCO,S26-S30, SPL140, LNT BEV
1503-2885	AIR PIPING, FRAME SUPPORTS	FRAME AIR PIPING SUPPORTS, <190" WB, SINGLE AXLE, SINGLE SILLS
1906-0850	AIR PIPING, FRAME	FRAME AIR PIPING; (2) STEEL AIR TANKS IN FRAME, AD-IS AIR DRYER, W/ CENTRALIZED DRAINS, LNT BEV
9999-CUSTOM-83325	AIR PIPING, PUSHER/TAG AXLE	NO OPTION - PUSHER/TAG AXLE AIR PIPING
1904-0073	AIR PIPING, OPTIONAL AUTOMATIC DRAIN VALVES	BENDIX DV-2 HEATED @ WET TANK ONLY
9999-CUSTOM-82670	AIR PIPING, OPTIONAL MANUAL DRAIN VALVES	NO OPTION - MANUAL DRAIN VALVES
9999-CUSTOM-82501	AIR PIPING, OPTIONAL CHARGE VALVE	NO OPTION - CHARGE VALVE
2000-4582	AIR HORN, CHASSIS	AIR HORN, DUAL TONE, UNDER CAB
2000-2215	BACK-UP ALARM	BACK-UP ALARM, ECCO 575, 107DB


**BATTLE
MOTORS**
TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD PROPOSAL

OPTIONS, CHASSIS		DESCRIPTION
9999-CUSTOM-139179	RETAINER CABLES	NO OPTION-RETAINER CABLES
2104-0117	ELECTRICAL, DRIVE AWAY KIT	BODY STD TAILBOARD HARNESS ONLY
9999-CUSTOM-139184	WHEEL TORQUE INDICATORS	NO OPTION - WHEEL TORQUE INDICATORS
2501-1558	OIL PIPING, CAB TILT	PIPING ASSY - CAB TILT, ELECTRIC TILT PUMP, LNT BEV
1005-1905	BEV COOLING, SYSTEM	COOLING ASSY- EMP E-FAN COOLING SYS 2, LET2/LNT BEV
9999-CUSTOM-142003	ELECTRICAL, HIGH VOLTAGE, POWER SLED	NO OPTION - POWER SLED, HIGH VOLTALGE HARNESS, BEV
9999-CUSTOM-140335	BEV SKID PLATE	NO OPTION - MOTOR SKID PLATE BEV
9999-CUSTOM-140340	TRACTOR PROTECTION VALVE	NO OPTION - TRACTOR PROTECTION VALVE

PAINT		DESCRIPTION
356-0322	PAINT, CAB	PAINT, CAB, STANDARD WHITE, G2-3460715-A
9999-CUSTOM-140265	PAINT, CAB VISOR	NO OPTION - CAB VISOR SAME COLOR AS CAB
9999-CUSTOM-83308	PAINT, CAB STRIPES	NO OPTION - CAB STRIPES
9999-CUSTOM-83309	PAINT, CLEAR COAT	NO OPTION - CAB CLEAR COAT
356-0323	PAINT, CHASSIS	PAINT, CHASSIS, STANDARD BLACK, G2-2B1738
356-0329	PAINT, BUMPER	PAINT, BUMPER - STANDARD BLACK, G2-2B1738

TIRES / WHEELS		DESCRIPTION
2-519-4687-0140	TIRES/WHEELS - FRONT STEER AXLE	TOYO M153, 315/80R22.5, 20/L, ACCURIDE, ALUMINUM, XTRA POLISH FINISH, 7.00" OUTSET
4-519-2863-0141	TIRES/WHEELS - DRIVE AXLE	TOYO M170, 11R22.5, 16/H, ACCURIDE, ALUMINUM, XTRA POLISH FINISH
9999-CUSTOM-83539	TIRES/WHEELS - PUSHER AXLE	NO OPTION - PUSHER TIRES/WHEELS

WARRANTY		DESCRIPTION
306A-0010	WARRANTY, CHASSIS	WARRANTY, BEV CHASSIS, STANDARD 1 YEAR CHASSIS/5 YEAR EV
306A-0022	WARRANTY, DRIVE AXLE	WARRANTY, DANA, STANDARD 2 YEAR


BATTLE
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TECHNICAL SPECIFICATIONS (CONT.)

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD
 PROPOSAL

VEHICLE SPECIFICATION SUMMARY	UNIT	DESCRIPTION
MODEL		SALES LNT BEV
TRANSMISSION		DIRECT DRIVE, SPL-140, OIL COOLED, BEV

Attachment: New Way Body Quote (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


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PRICING SUMMARY

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD
 PROPOSAL

DESCRIPTION	PRICE
BASE MSRP	\$461,314
DESTINATION	\$3,921
DEALER MSRP	\$465,235
BODY PACKAGE - NEWAY VIPER 13 YARD	\$108,979
TOTAL MSRP	\$574,214
DISCOUNT	\$-87,196
WARRANTIES & OPTIONS	
NO OPTION - BEV WALL CHARGER	\$0
NON-SOURCEWELL	\$0
WARRANTY, BEV CHASSIS, STANDARD 1 YEAR CHASSIS/5 YEAR EV	\$1,882
WARRANTY, DANA, STANDARD 2 YEAR	\$0
SUBTOTAL	\$1,882
TOTAL SELLING PRICE (PER UNIT)	\$488,900

Attachment: New Way Body Quote (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


BATTLE
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PRICING SUMMARY (CONT.)

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD
 PROPOSAL

TOTAL SELLING PRICE (PER UNIT)
\$488,900
CUSTOMER
BOSTON FREIGHTLINER
DATE
DATE

Attachment: New Way Body Quote (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and



P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD
PROPOSAL

AXLE POSITION	AXLE MODEL	AXLE/SUSP RATING (LBS)	SINGLE OR DUAL	WHEEL SIZE AND RATING (SIZE / LOAD @ PRESSURE)	TIRE SIZE AND RATING** (SIZE / LOAD @ PRESSURE / SPEED)	GAWR (LOAD @ PRESSURE / SPEED)
FRONT	D2000F	20,000	S	22.5 X 9.00 / 10,000 @ 130	315/80R22.5L/20 / 10,000 @ 130 / 68	20,000 @ 130 / 68
1ST INTERMEDIATE						
2ND INTERMEDIATE						
3RD INTERMEDIATE						
LAST	23082T	23,000	D	22.5 X 8.25 / 7,400 @ 131	11R22.5H/16 / 6,005 @ 120 / 75	23,000 @ 120 / 75
DRIVETRAIN GVWR (LBS)						43,000
ENGINE APPLICATION GVWR (LBS)						66,000
TRANSMISSION APPLICATION GVWR (LBS)						33,000
TRUCK GVWR (LBS)						33,000

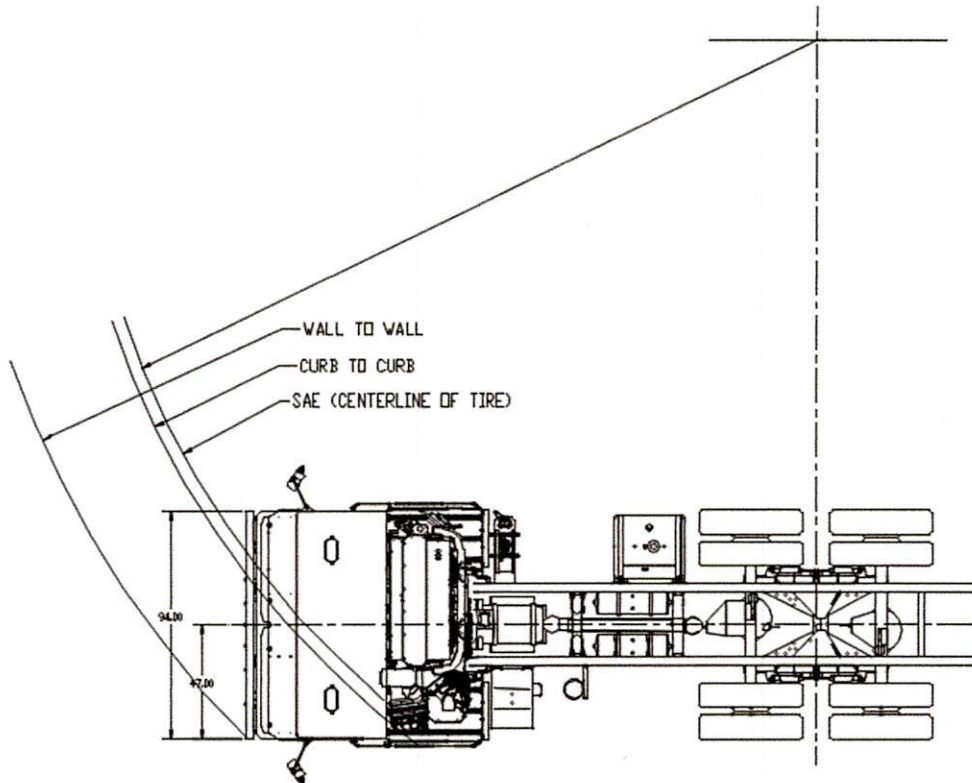
Attachment: New Way Body Quote (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


BATTLE
 MOTORS

COMPONENT LOCATIONS

P1001572-P1001591 BR BEV LNT 11YD NEW WAY EPTO RL DD
 PROPOSAL

COMPONENT	LOCATION
AIR DRYER	LH STA. 68 / FRONT
AIR TANKS	92/110
BATTERY CABLES	LH STA. 32/44



ESTIMATED VEHICLE WEIGHT DISTRIBUTION (LBS) - FULLY WET WITH 200# DRIVER (+/- 5%)

FRONT AXLE GROUND LOAD (LBS)	8,863.61
REAR AXLE GROUND LOAD (LBS)	3,392.39
TOTAL VEHICLE WEIGHT (LBS)	12,256.00

ESTIMATED VEHICLE TURNABILITY - TURN RADIUS (FEET) (+/- 5%)

SAE - TIRE CENTERLINE TO TIRE CENTERLINE (FT)	27.80
CURB-TO-CURB (FT)	28.84
WALL-TO-WALL (FT)	30.48

VIPER™

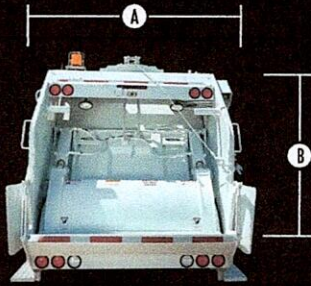
S E R I E S



PACKING A POWERFUL BITE

The New Way® Viper™ is one of the most popular 9 to 13 yd³ mid-compaction rear-loader bodies on the market today. Larger capacity Viper™ units are excellent for both residential and commercial work. With options including all varieties of residential cart tippers and commercial containers, a rear-view camera and a two-year cylinder warranty, this venomous Viper™ is sure to paralyze the competition.

VIPER™



GENERAL SPECIFICATIONS

Model	9 V ^{**}	11 V	13 V
Body Capacity	9 yd ³	11 yd ³	13 yd ³
Body Width (A)	82"	96"	96"
Body Height (B)	71"	72"	72"
Body Length (C)	191.5"	195"	211"
*Approx. Body Weight	9,290 lbs	9,650 lbs	10,012 lbs
Hopper Capacity	2 yd ³	2.7 yd ³	2.7 yd ³
Hopper Opening Width	60"	80"	80"
Loading Sill Height	Frame	Frame	Frame
Hopper Cycle Time	26-30 secs.	22-24 secs.	22-24 secs.

MINIMUM CHASSIS SPECIFICATIONS (STANDARD)

Model	9 V ^{**}	11 V	13 V
** Minimum GVWR	23,000 lbs	26,000 lbs	29,000 lbs
Cab to Trunnion	84"	84"	102"

HYDRAULIC CYLINDER SPECIFICATIONS (STANDARD)

Model	9 V ^{**}	11 V	13 V
Slide Cylinders (2)	4"	4"	4"
Sweep Cylinders (2)	5"	5"	5"
Tailgate Cylinders (2)	3.5"	3.5"	3.5"
Ejection Cylinder	3-Stage 5.5"	3-Stage 5.5"	4-Stage 6.5"

BODY CONSTRUCTION

Roof & Sides	10 gauge	80K GR
Floor (center)	1/4"	50K GR
Floor (sides)	10 gauge	80K GR
Ejection Panel	10 gauge	50K GR
Sweep Panel	1/4"	80K GR
Tailgate (upper & lower)	10 gauge	50K GR
Hopper Floor	1/4"	50K GR
Hopper Floor (back)	1/4"	100K GR
Side Panel	7 gauge	50K GR

HYDRAULIC SYSTEMS

Oil Reservoir	45 gal
Oil Flow w/std. pump	25 gpm
Min. Accept. Oil Flow	20 gpm
Operating Pressure	2,350 psi
Engine RPM for STD gpm	1,350-1,550
Hydraulic Hoses	4-to-1 burst
Return Filter	10 micron

STANDARD EQUIPMENT

- Semi automatic cycling
- Accelerator kit
- Auto-lock tailgate
- Back up alarm
- All LED lights
- Upper rear lights
- Sight gauge on oil tank
- Chrome cylinder rods
- Side access door
- Driver alert buzzer
- Tailgate ajar indicator
- Pump
- Adjustable riding step
- Imron elite productive paint
- Color rear vision camera system

OPTIONAL EQUIPMENT

- Special lighting
- PTO
- Container lifts (commercial & residential)
- Pack at low idle
- Hopper liners
- Upgraded body steel package
- Body scale systems
- CNG fueling system
- Axalta Imron Elite finish paint

^{**} 9 yd³ model will be built with external hydraulic cylinders.

* Approximate Body Weight empty and exclusive of options.

** Any Chassis sent to Scranton Manufacturing with less than the minimum guideline requirements will not be mounted. (Chassis must be capable of carrying the net weight of the body plus the weight of the refuse collected.)

AUTHORIZED NEW WAY DISTRIBUTOR

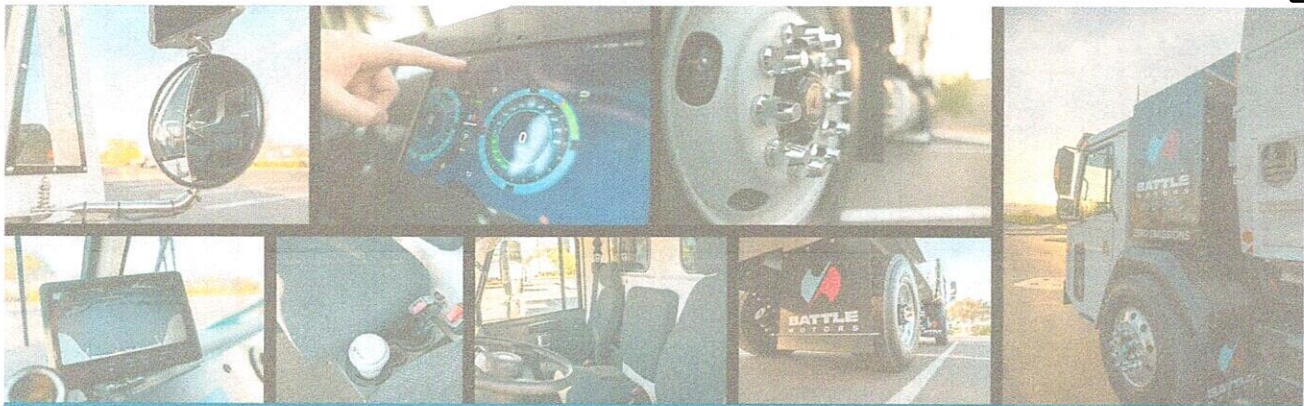


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PART 110

Packet Pg. 133



P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL



**BATTLE
MOTORS**

Date

03/8/2023

Quote Information

202208261721-196D

9000-0228B

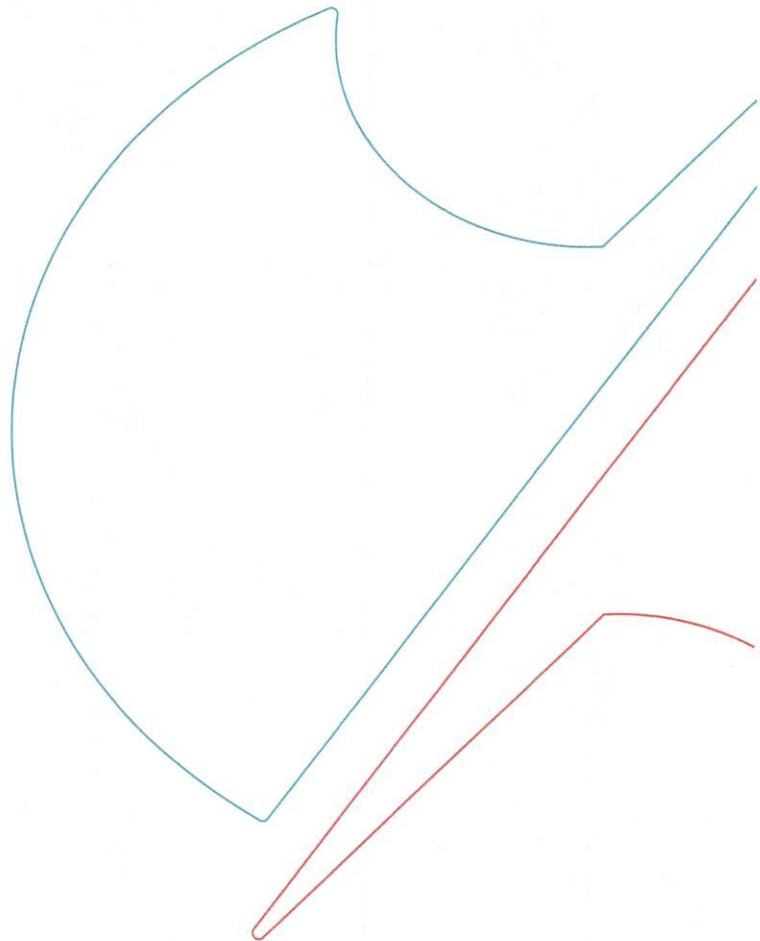
1000252-1000256

2024 Sales LNT BEV

Qty: 1

**Prepared For
MELROSE**

**Prepared By
JEFF
DENESHA**




**BATTLE
MOTORS**

TECHNICAL SPECIFICATIONS

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL

CUSTOM OPTIONS		DESCRIPTION
9999-CUSTOM-83331	CUSTOM OPTIONS	NO OPTION - CUSTOM OPTIONS
9999-CUSTOM-140347	BEV WALL CHARGER	NO OPTION - BEV WALL CHARGER
9999-CUSTOM-140540	FRAME (QUOTE ONLY)	NO-OPTION, FRAME AVAILABLE IN UPPER SELECTION
9999-CUSTOM-140539	PROP SHAFT (QUOTE ONLY)	NO OPTION - PROP SHAFT AVAILABLE IN UPPER SELECTION
9999-CUSTOM-141986	AIR PIPING, AIR DRYER (QUOTE ONLY)	NO OPTON (AVAILABLE IN UPPER SELECTION)
355H-0046	BODY	BODY PACKAGE - CURBTENDER EV 11 CY REAR LOADER, P1000252

CAB		DESCRIPTION
1800-1892-CAB	CAB MODEL	CAB ASSY, (2) REAR WINDOWS, NO ROOF VENTS, W/VISOR, LNT
1809-0177-CAB	CAB - OVERHEAD CONSOLE / RADIO	OVERHEAD CONSOLE, LHD/DUAL DRIVE, AM/FM/BLEETOOTH/HANDS FREE RADIO, HVAC CONTROLS, LNT
1809-0164-CAB	CAB - FLOOR GRIP TAPE	FLOOR COVERING INSTALLATION, LH / DUAL DRIVE, LNT
1001-0946-CAB	CAB - ACCELERATOR PEDAL	ACCELERATOR PEDAL, CUMMINS, SINGLE DRIVE
2100-3420-CAB	CAB - BASE ELECTRICAL	ELECTRICAL, BASE, CAB, 500K, AUTOCRAFT HEADLIGHT, BEV
9999-CUSTOM-82619	CAB - MODIFICATION (LH DOOR)	NO OPTION - CAB MODIFICAION (LH DOOR)
9999-CUSTOM-82620	CAB - MODIFICATION (RH DOOR)	NO OPTION - CAB MODIFICAION (RH DOOR)
2000-4561-CAB	CAB - GRAB HANDLES (LH)	LH GRAB HANDLE BLACK OUTSIDE, STANDARD DOORS
2000-4862-CAB	CAB - GRAB HANDLES (RH)	RH GRAB HANDLE BLACK OUTSIDE, STANDARD DOORS
9999-CUSTOM-82812	CAB, ELEC - DOOR WINDOWS - SWITCH COUNT	LH DRIVE, LH E/R, RH E/R
2100-3351-CAB	CAB, ELECTRICAL - DOOR WINDOWS	CAB, ELECTRICAL, POWER WINDOWS, 3 SWITCHES
2000-4582-CAB	CAB - AIR HORN	AIR HORN, DUAL TONE, UNDER CAB
9999-CUSTOM-83006	CAB - WHEEL DIFF LOCK CONTROLS	NO OPTION - AXLE DIFF LOCK CONTROLS, CAB
9999-CUSTOM-82623	CAB - ABS SYSTEM	NO OPTION - ABS ATC OPTION
9999-CUSTOM-82513	CAB AIR PIPING, REAR AXLE	NO AIR PIPING REQUIRED


**BATTLE
MOTORS**
TECHNICAL SPECIFICATIONS (CONT.)

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL

CAB	DESCRIPTION
2000-4884-CAB	DECALS - CAB INTERIOR DECALS, INTERIOR, SINGLE DRIVE, DIRECT DRIVE, BEV
2000-4797-CAB	DECALS - CALIFORNIA PROPOSITION 65 DECAL - CALIFORNIA PROPOSITION 65
1810-0043-CAB	CAB - MISC COMPONENTS CAB MODIF - LET2 COMPONENTS, LH/RH STEEL PANELS
9999-CUSTOM-83327	PUSHER/TAG CAB CONTROLS NO OPTION - PUSHER/TAG AXLE CAB CONTROLS

CHASSIS	DESCRIPTION
2000-4887	DECALS - CHASSIS EXTERIOR DECAL, EXTERIOR, BEV
2003-0604	HVAC - CHASSIS HVAC, A/C, COULOMB COMPRESSOR/WATER HEATER, LNT BEV
2201-0118	WINDSHIELD WIPERS - CHASSIS WINDSHIELD WIPERS, SINGLE DRIVE
1005-1906	BEV COOLING, MANIFOLD CIRCUIT COOLING ASSY- MANIFOLD CIRCUIT LNT BEV
1006-1299	BEV MOTOR MOUNTING MOTOR MTG ASSY- 4 DEG, DIRECT DRIVE, LNT, BEV
1802-0076	CAB MOUNTING CAB MOUNTING - LET2 STANDARD CAB
9999-CUSTOM-83075	FRAME - FUEL TANK MTG, DROP FRAME NO OPTION - FUEL TANK MTG, DROP FRAME
2100-3420	ELECTRICAL, BASE, CHASSIS ELECTRICAL, BASE CHASSIS, 500K, AUTOCRAFT, BEV
1908-0096	AIR PIPING, REAR AXLE AIR PIPING, SINGLE AXLE - 2-SPEED, REYCO SUSP
9999-CUSTOM-139490	REAR BUMP BLOCKS NO OPTION - BUMP BLOCKS
1402-0640	POWER STEERING RESERVOIR POWER STEERING, 4 QT, COULOMB PS PUMP, LNT BEV
1401-0336	STEERING COLUMN CHASSIS (LH) STRG COLUMN ASSY - LNT, LHD, TILT, W/CRUISE, 16" WHEEL
9999-CUSTOM-139406	STEERING COLUMN CHASSIS (RH) NO OPTION - RH STEERING, CHASSIS
1400-0714	STEERING GEAR STEERING GEAR, XD-120, LH DRIVE, STANDARD CAB, LET2
9999-CUSTOM-83008	GAUGES - MISC OPTIONS NO OPTION - MISC GAUGES, CHASSIS
1000A-0002	MOTOR OIL PAN, BEV MOTOR ASSEMBLY, CASCADIA OIL PAN
2101-0666	BEV LOWER POWER SLED LOWER POWER SKID, 240 KWH, CATL, BEV
2100-3421	ELECTRICAL, BEV LOW VOLTAGE, POWER SLED ELECTRICAL LOWER POWR SLED, LOW VOLTAGE HARNESS, BEV
2100-3443	ELECTRICAL, BEV EPTO HV JUNCTION BOX ELECTRICAL ASSY, BEV HV COMPONENT CABLES, NO EPTO


BATTLE
MOTORS
TECHNICAL SPECIFICATIONS (CONT.)

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL

CHASSIS	DESCRIPTION
2100-3438	ELECTRICAL, BEV CHARGING INLET ELECTRICAL, CHARGING INLET, BEV
2100-3440	ELECTRICAL, BEV LV POWER FEED ELECTRICAL ASSY - LV CABLES, BEV
2100-3439	ELECTRICAL, BEV CHARGER JUNCTION BOX ELCTRICAL, CHARGER JUNCTION BOX, BEV
2500-0128	BATTERY COOLANT PLUMBING, BEV PIPING, BATTERY COOLANT CIRCUIT, BEV
2500-0129	COOLANT PIPING, CAB HEATER, BEV PIPING, CAB COOLANT CIRCUIT, BEV
2500-0130	BULKHEAD PLATE, BEV PIPIN, BULK HEAD PLATE, BEV
2501-1556	PIPING, MOTOR OIL COOLING, BEV PIPING, MOTOR OIL COOLING, BEV
1503-3002	FRAME MODIF, CENTER BEARING DRILLING FRAME MODIFICATION, CENTER BEARING DRILLING 1503-3002
9999-CUSTOM-142262	FRAME MODIF, REAR BUMPER ASSY NO OPTION - FRAME MOD REAR BUMPER

MODEL	DESCRIPTION
9999-CUSTOM-140230	SOURCEWELL NON-SOURCEWELL
9999-CUSTOM-140179	FUEL TYPE BEV (ELECTRIC)
9999-CUSTOM-140312	BODY APPLICATION CURBTENDER, RL, QUANTUM MD, 11 CY, BEV
9999-CUSTOM-83335	PRODUCT AVAILABILITY ORDER MAJOR COMPONENTS - LEAD TIME / AVAILABILITY
9999-CUSTOM-83098	CARB/EPA CARB / EPA - CLEAN IDLE COMPLIANT
9999-CUSTOM-83019	FRAME - WHEELBASE 140 WHEELBASE
9999-CUSTOM-83058	FRAME SILLS SINGLE SILL
9999-CUSTOM-83532	CAB STYLE LNT CREW CAB WITH EXTERIOR SUNVISOR
9999-CUSTOM-83534	CAB / DOORS LNT CREW CAB, W/VISOR, LH ELECTRIC ROLL-UP / RH ELECTRIC ROLL-UP DOORS
9999-CUSTOM-82491	DRIVE TYPE LH DRIVE
1000A-0001	BEV MOTOR ELECTRIC MOTOR, CASCADIA, HVH410-150, 442 HP @ 1700 RPM, 1476 LB-FT TORQUE (0 TO 1700 RPM)
1007-1219	BEV TRANSMISSION DIRECT DRIVE, SPL-140, OIL COOLED, BEV
9999-CUSTOM-83068	REAR SUSPENSION MODEL REYCO 102CC - REYCO SPRING SUSPENSION



TECHNICAL SPECIFICATIONS (CONT.)

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL

MODEL	DESCRIPTION
9999-CUSTOM-83048	REAR DRIVE AXLE MODEL 23082T - REAR DRIVE AXLE 23,000
1200A-0420	REAR DRIVE AXLE REAR AXLE, 23082T, 6.17/8.40, BENDIX AIR DISC BRAKES, REYCO, SPL-140, LET2/LNT
1201-1254	REAR SUSPENSION REAR SUSPENSION, REYCO 102CC 21K, 3 DEG, 23082T
9999-CUSTOM-83323	PUSHER AXLE NO OPTION - PUSHER AXLE
1500-5630	FRAME FRAME ASSEMBLY, 140" WB, REYCO 102CC, 10.25" SINGLE SILL, LNT BEV
2102-0132	ABS SYSTEM ABS SYSTEM, BENDIX 4S/4M, 500K BAUD

OPTIONS, CAB	DESCRIPTION
1803-0087-CAB	CAB - DOOR (LH) STANDARD DOOR, LH, ELECTRIC ROLL UP
1804-0086-CAB	CAB - DOOR (RH) STANDARD DOOR, RH, ELECTRIC ROLL UP
9999-CUSTOM-82515	CAB - DOOR SAFETY BELT NO OPTION - DOOR SAFETY STRAP
9999-CUSTOM-82532	CAB - FLOOR GRATING (LH) NO OPTION - LH FLOOR GRATE
9999-CUSTOM-82533	CAB - FLOOR GRATING (RH) NO OPTION - RH FLOOR GRATE
1806-1332-CAB	CAB - MIRROR (LH) WEST COAST MIRROR, LH STANDARD DOOR, 16 X 7 HEATED
1808-0120-CAB	CAB - MIRROR (RH) WEST COAST MIRROR, RH STANDARD DOOR, 16 X 7 HEATED
1806-1292-CAB	CAB - MIRROR, SPOT MIRROR, SPOT - (1) LH / (1) RH, BOTTOM MIRROR ARMS, 8" ROUND, SS, HEATED
9999-CUSTOM-82673	CAB - MIRROR, LH LOOK DOWN NO OPTION - LH LOOK DOWN MIRROR
9999-CUSTOM-82674	CAB - MIRROR, RH LOOK DOWN NO OPTION - RH LOOK DOWN MIRROR
1401-0336-CAB	STEERING COLUMN CAB (LH) STRG COLUMN ASSY - LNT, LHD, TILT, W/CRUISE, 16" WHEEL
9999-CUSTOM-139404	STEERING COLUMN CAB (RH) NO OPTION - RH STEERING, CAB
9999-CUSTOM-82609	RADIO OPTION - AM/FM/BLUETOOTH/HANDS FREE RADIO - MOUNTED ON LH SIDE CAB, AM/FM/MP3/USB/BLUETOOTH/HANDS FREE
2003-0604-CAB	HVAC - CAB HVAC, BEV A/C, COULOMB COMPRESSOR/WATER HEATER, LNT BEV
2003-0369-CAB	CAB - DEFROST FANS CAB DEFROST FANS, 2-SPD, DUAL FANS, LH & RH OVERHEAD CONSOLE


**BATTLE
MOTORS**
TECHNICAL SPECIFICATIONS (CONT.)

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL

OPTIONS, CAB		DESCRIPTION
2100-3404-CAB	CAB, ELECTRICAL - IGNITION	CAB, IGNITION (2) KEYS D250, STD/BI-FOLD DOOR C250
2202-0070-CAB	CAB - DASH/INSTRUMENTATION	DIGITAL DASH, LH DRIVE, 8" SAMSUNG DISPLAY, MPH/KPH, 500K STEEL, BEV, LNT
2100-3436-CAB	CAB, ADAS	ELECTRICAL, CAB, MOBILE EYE ADAS
9999-CUSTOM-83060	CAB - INTERAXLE BUZZER/ALARM	NO OPTION - INTERAXLE BUZZER, CAB
9999-CUSTOM-82517	CAB - FLASHER OPTIONS	NO OPTION - FLASHERS
9999-CUSTOM-82522	CAB - 12V POWER OPTIONS	NO OPTION - 12V POWER OPTIONS
1907-0466-CAB	CAB - AIR PIPING	CAB AIR PIPING, LHD ONLY, RH SIT-DOWN, LNT
9999-CUSTOM-82498	CAB - FIRE EXTINGUISHER	NO OPTION - FIRE EXTINGUISHER
9999-CUSTOM-82508	CAB - FIRST AID KIT	NO OPTION - FIRST AID KIT
9999-CUSTOM-82507	CAB - TRIANGLE KIT	NO OPTION - TRIANGLE KIT
1810-0061-CAB	CAB GRILLE	BATTLE GRILLE, SMOOTH FLAT BLACK

OPTIONS, CAB SEATS		DESCRIPTION
9999-CUSTOM-82616	CAB - SEAT MATERIAL	SEAT - ASPHALT CLOTH
2001-0518-CAB	CAB - SEATS (LH)	SEAT AIR RIDE, SEARS C2, ASPHALT CLOTH, LH, LNT
2011-0300-CAB	CAB - SEATS (RH)	SEAT ASSY RH; SEARS C2 AIR RIDE FIXED LUMBAR, ASPHALT CONFETTI, LNT
2011-0299-CAB	CAB - SEAT (CENTER BENCH)	SEAT CENTER BENCH ONLY, 1-MAN BENCH, ASPHALT CONFETTI, LNT
2000-4771-CAB	CAB - SEAT BELTS (LH)	SEAT BELT, BLACK, LH SIDE, AIR RIDE SEAT, LET2
2000-4856-CAB	CAB - SEAT BELTS (RH)	SEAT BELT, BLACK, RH SIDE, AIR RIDE SEAT, LET2
9999-CUSTOM-82808	CAB - SEAT (LH), RH ARMREST	NO OPTION - RH ARMREST, LH SEAT
9999-CUSTOM-82809	CAB - SEAT (RH), LH ARMREST	NO OPTION - LH ARMREST, RH SEAT

OPTIONS, CHASSIS		DESCRIPTION
1100A-0052	FRONT STEER AXLE	FRONT STEER AXLE, D2000F, STD TRACK, 20" CMBR, ALL WB'S, AIR DISC BRAKES


BATTLE
MOTORS
TECHNICAL SPECIFICATIONS (CONT.)
**P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD
 PROPOSAL**

OPTIONS, CHASSIS		DESCRIPTION
1101-0654	FRONT SUSPENSION	FRONT SUSPENSION ASSY, CAST HANGERS, 20K, (4) TAPER LEAF, STD SHOCKS, 10.25" SILLS, LNT
2000-4798	LUBE, REAR DRIVE AXLE	REAR AXLE LUBE, GEAR OIL 85W-140 FOR 23082T
9999-CUSTOM-83005	ELECTRICAL, AXLE DIFF LOCK CONTROLS	NO OPTION - AXLE DIFF LOCK CONTROLS, CHASSIS
2101-0675	BEV UPPER BATTERY RACK	BEV BATTERY UPPER RACK, ALUMINUM BLACK COVERS, 240KWH, CATL, BEV
9999-CUSTOM-139559	BEV EPTO	NO OPTION - BEV EPTO
2101-0645	BATTERY BOX	BATTERY BOX, (3) 950 CCA BATTERIES, W/ DISCONNECT SWITCH, PLASTIC COVER
1503-2281	BATTERY BOX SPACERS	BATTERY BOX SPACERS, LOWERS 8.5" BELOW TOP OF FRAME
9999-CUSTOM-83002	ELECTRICAL, BATTERY DCS INDICATOR LIGHT	NO OPTION - BATTERY DCS LIGHTING
2000-4854	ELECTRICAL, BATTERY CABLES	BATTERY / POWER FEED CABLES, BEV, LH 32/44
2502-0802	AIR DRYER	AIR DRYER, BENDIX, AD9EP, LH FRONT/RH REAR/RH INSIDE SILL FRONT
1910-0530	AIR PIPING, AIR DRYER	AIR PIPING, 3.7KW COLUMB COMP AD9EP/AD-IP, LH STA. 68/FRT, LNT BEV
2502-0827-CAB	AUTO NEUTRAL	PARK BRAKE AUTO NEUTRAL
1502-0644	FRONT BUMPER	BUMPER ASSEMBLY - FORMED, HENDRICKSON, STEEL, PC BLACK, LNT
9999-CUSTOM-142046	REAR BUMPER	NO OPTION - REAR BUMPER
1801-0619	FENDERS, FRONT	FENDER, FRONT - LNT, BATTLE, BLACK PLASTIC, WIDE
1600-5213	PROPSHAFT	PROPSHAFT, 140"WB, EM/DD, REYCO,S26-S30, SPL140, LNT BEV
1503-2885	AIR PIPING, FRAME SUPPORTS	FRAME AIR PIPING SUPPORTS, <190" WB, SINGLE AXLE, SINGLE SILLS
1906-0859	AIR PIPING, FRAME	FRAME AIR PIPING; (3) STEEL AIR TANKS IN FRAME, W/ CENTRALIZED DRAINS, LNT BEV
9999-CUSTOM-83325	AIR PIPING, PUSHER/TAG AXLE	NO OPTION - PUSHER/TAG AXLE AIR PIPING
1904-0073	AIR PIPING, OPTIONAL AUTOMATIC DRAIN VALVES	BENDIX DV-2 HEATED @ WET TANK ONLY
9999-CUSTOM-82670	AIR PIPING, OPTIONAL MANUAL DRAIN VALVES	NO OPTION - MANUAL DRAIN VALVES
9999-CUSTOM-82501	AIR PIPING, OPTIONAL CHARGE VALVE	NO OPTION - CHARGE VALVE
2000-4582	AIR HORN, CHASSIS	AIR HORN, DUAL TONE, UNDER CAB
2000-2215	BACK-UP ALARM	BACK-UP ALARM, ECCO 575, 107DB


**BATTLE
MOTORS**
TECHNICAL SPECIFICATIONS (CONT.)

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL

OPTIONS, CHASSIS		DESCRIPTION
9999-CUSTOM-139179	RETAINER CABLES	NO OPTION-RETAINER CABLES
2104-0117	ELECTRICAL, DRIVE AWAY KIT	BODY STD TAILBOARD HARNESS ONLY
9999-CUSTOM-139184	WHEEL TORQUE INDICATORS	NO OPTION - WHEEL TORQUE INDICATORS
2501-1558	OIL PIPING, CAB TILT	PIPING ASSY - CAB TILT, ELECTRIC TILT PUMP, LNT BEV
1005-1905	BEV COOLING, SYSTEM	COOLING ASSY- EMP E-FAN COOLING SYS 2, LET2/LNT BEV
9999-CUSTOM-142003	ELECTRICAL, HIGH VOLTAGE, POWER SLED	NO OPTION - POWER SLED, HIGH VOLTALGE HARNESS, BEV
9999-CUSTOM-140335	BEV SKID PLATE	NO OPTION - MOTOR SKID PLATE BEV
9999-CUSTOM-140340	TRACTOR PROTECTION VALVE	NO OPTION - TRACTOR PROTECTION VALVE

PAINT		DESCRIPTION
356-0322	PAINT, CAB	PAINT, CAB, STANDARD WHITE, G2-3460715-A
9999-CUSTOM-140265	PAINT, CAB VISOR	NO OPTION - CAB VISOR SAME COLOR AS CAB
9999-CUSTOM-83308	PAINT, CAB STRIPES	NO OPTION - CAB STRIPES
9999-CUSTOM-83309	PAINT, CLEAR COAT	NO OPTION - CAB CLEAR COAT
356-0323	PAINT, CHASSIS	PAINT, CHASSIS, STANDARD BLACK, G2-2B1738
356-0329	PAINT, BUMPER	PAINT, BUMPER - STANDARD BLACK, G2-2B1738

TIRES / WHEELS		DESCRIPTION
2-519-4687-0140	TIRES/WHEELS - FRONT STEER AXLE	TOYO M153, 315/80R22.5, 20/L, ACCURIDE, ALUMINUM, XTRA POLISH FINISH, 7.00" OUTSET
4-519-2863-0141	TIRES/WHEELS - DRIVE AXLE	TOYO M170, 11R22.5, 16/H, ACCURIDE, ALUMINUM, XTRA POLISH FINISH
9999-CUSTOM-83539	TIRES/WHEELS - PUSHER AXLE	NO OPTION - PUSHER TIRES/WHEELS

WARRANTY		DESCRIPTION
306A-0010	WARRANTY, CHASSIS	WARRANTY, BEV CHASSIS, STANDARD 1 YEAR CHASSIS/5 YEAR EV
306A-0022	WARRANTY, DRIVE AXLE	WARRANTY, DANA, STANDARD 2 YEAR


BATTLE
 M O T O R S

TECHNICAL SPECIFICATIONS (CONT.)

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD
 PROPOSAL

VEHICLE SPECIFICATION SUMMARY	UNIT	DESCRIPTION
MODEL		SALES LNT BEV
TRANSMISSION		DIRECT DRIVE, SPL-140, OIL COOLED, BEV

Attachment: Curbtender Quote_0001 (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


BATTLE
 M O T O R S

PRICING SUMMARY
**P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD
 PROPOSAL**

DESCRIPTION	PRICE
BASE MSRP	\$439,159
DESTINATION	\$3,921
DEALER MSRP	\$443,080
BODY PACKAGE - CURBTENDER EV 11 CY REAR LOADER, P1000252	\$89,291
TOTAL	\$532,371
DISCOUNT	\$-81,953
WARRANTIES & OPTIONS	
NO OPTION - BEV WALL CHARGER	\$0
NON-SOURCEWELL	\$0
WARRANTY, BEV CHASSIS, STANDARD 1 YEAR CHASSIS/5 YEAR EV	\$1,882
WARRANTY, DANA, STANDARD 2 YEAR	\$0
SUBTOTAL	\$1,882
TOTAL SELLING PRICE (PER UNIT)	\$452,300

Attachment: Curbtender Quote_0001 (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


BATTLE
 M O T O R S

PRICING SUMMARY (CONT.)

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD
 PROPOSAL

TOTAL SELLING PRICE (PER UNIT)
\$452,300
CUSTOMER
BOSTON FREIGHTLINER
DATE
DATE

Attachment: Curbtender Quote_0001 (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and


BATTLE
MOTORS
GVWR

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL

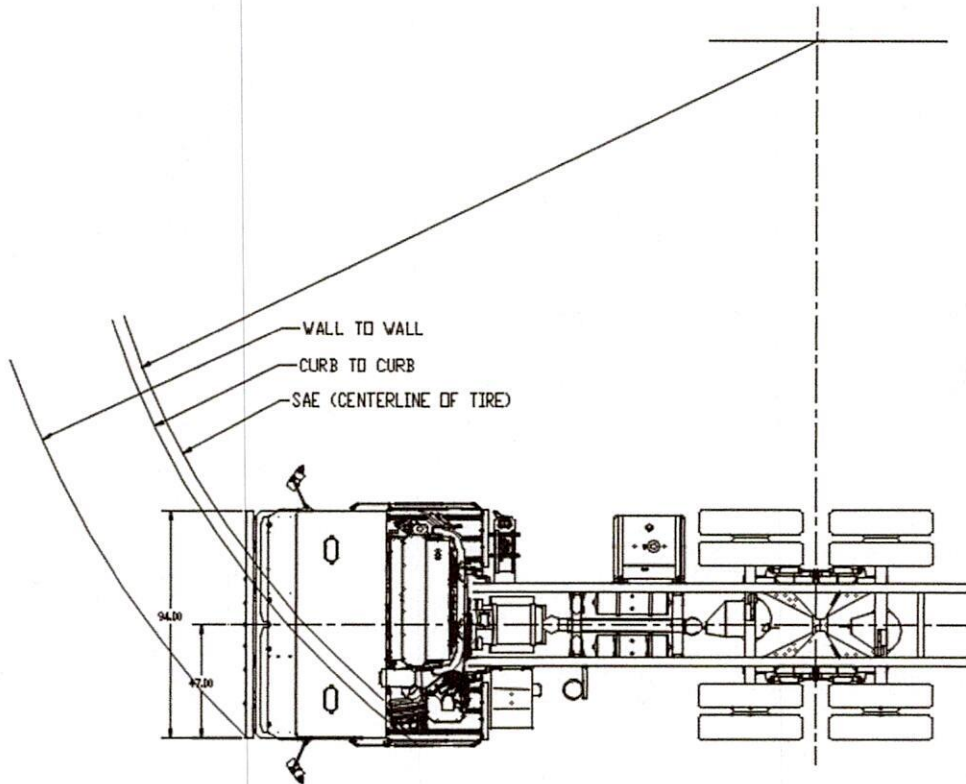
AXLE POSITION	AXLE MODEL	AXLE/SUSP RATING (LBS)	SINGLE OR DUAL	WHEEL SIZE AND RATING (SIZE / LOAD @ PRESSURE)	TIRE SIZE AND RATING** (SIZE / LOAD @ PRESSURE / SPEED)	GAWR (LOAD @ PRESSURE / SPEED)
FRONT	D2000F	20,000	S	22.5 X 9.00 / 10,000 @ 130	315/80R22.5L/20 / 10,000 @ 130 / 68	20,000 @ 130 / 68
1ST INTERMEDIATE						
2ND INTERMEDIATE						
3RD INTERMEDIATE						
LAST	23082T	23,000	D	22.5 X 8.25 / 7,400 @ 131	11R22.5H/16 / 6,005 @ 120 / 75	23,000 @ 120 / 75
DRIVETRAIN GVWR (LBS)						43,000
ENGINE APPLICATION GVWR (LBS)						66,000
TRANSMISSION APPLICATION GVWR (LBS)						33,000
TRUCK GVWR (LBS)						33,000


BATTLE
 M O T O R S

COMPONENT LOCATIONS

P1000252-256 BR BEV LNT 11YD CURBTENDER RL DD PROPOSAL

COMPONENT	LOCATION
AIR DRYER	LH STA. 68 / FRONT
AIR TANKS	92/110
BATTERY CABLES	LH STA. 32/44



ESTIMATED VEHICLE WEIGHT DISTRIBUTION (LBS) - FULLY WET WITH 200# DRIVER (+/- 5%)

FRONT AXLE GROUND LOAD (LBS)	8,972.04
REAR AXLE GROUND LOAD (LBS)	3,454.96
TOTAL VEHICLE WEIGHT (LBS)	12,427.00

ESTIMATED VEHICLE TURNABILITY - TURN RADIUS (FEET) (+/- 5%)

SAE - TIRE CENTERLINE TO TIRE CENTERLINE (FT)	27.80
CURB-TO-CURB (FT)	28.84
WALL-TO-WALL (FT)	30.48

QUANTUM MD



**America's Favorite Small Rear Loader
Residential and Medium Duty**

Attachment: Curbtender Quote 0001 (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and



CURBTENDER

www.curbtender.com

701 PERFORMANCE DRIVE | CEDAR FALLS, IA 50613

PHONE: (319) 266-1721 | FAX: (319) 266-8207

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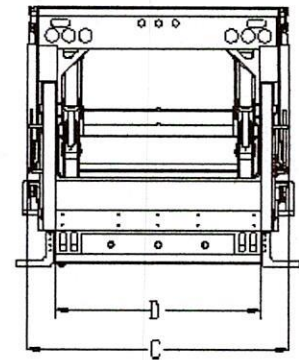
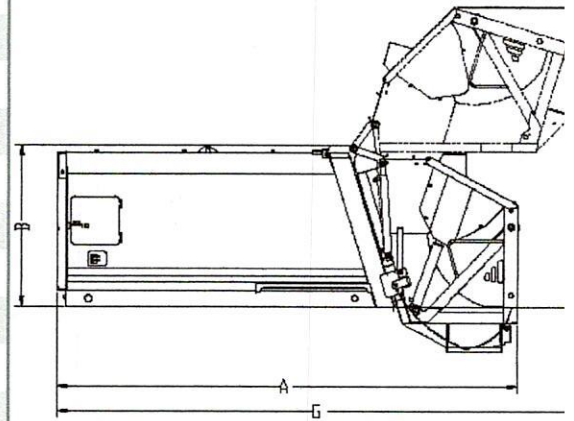
Packet Pg. 147

QUANTUM MD

REAR LOADER

BODY SPECIFICATIONS

Body Capacity	11yd ³	13yd ³
A. Body Length	191"	209"
B. Height Of Body Above Chassis	74"	74"
C. Body Width	94"	94"
D. Hopper Opening Width	74"	74"
E. Loading Sill Below Chassis Frame	0"	0"
F. Hopper Opening Height	58"	58"
F. Height Of Tailgate Above Chassis Frame (Tailgate Raised)	191"	191"
G. Length Of Body (Tailgate Raised)	221"	239"
CA. Cab To Axle Minimum	108"	126"
CF. Minimum Usable Cab To End Of Frame	140"	158"
Hopper Capacity	1.75yd ³	1.75yd ³
Dynamic Hopper Capacity (yd ³ /minute)	7yd ³	7yd ³
Body Weight	8,400 LBS.	8,750 LBS.



MINIMUM CHASSIS REQUIREMENTS

Minimum GVWR	29,000 LBS.*	33,000 LBS.
Front Axle	10,000 LBS.	10,000 LBS.
Rear Axle	19,000 LBS.	23,000 LBS.
Required Frame Height	38" – 40"	38" – 40"
Chassis Frame Height	36" – 39"	36" – 39" 210"

*11yd Quantum can be configured for under CDL with a 26,000 LBS. min. GVWR (10,000 LBS. front axle & 16,000 LBS. rear axle). However, this configuration reduces the allowed LBS./yd³ by 30% to remain at or below min. GVWR.

Body Construction

- Body Sides: 11 Gauge GR50
- Body Roof: 11 Gauge GR50
- Body Floor: 11 Gauge GR50
- Ejection Panel: 11 Gauge GR50
- Sweep Face: 3/16 GR100
- Tailgate Side Wall: 11 Gauge GR50
- Upper, 7 Gauge GR50 Lower
- Tailgate Floor: 3/16 AR400

Features

- High Strength Curved Shell Body
- Patented Packing Mechanism
- Rear Fenders Standard
- Curved Floor Provides Liquid Sump
- Low Body Height
- Easy to Maintain
- Pack Cycle Time of 15 Seconds

Hydraulics

- Oil Reservoir: 25 Gal. (94.6 Liters)
- Oil Flow w/ Standard Pump: 25 GPM
- Operating Pressure: 3,000 PSI
- Engine RPM: 1,300 RPM
- Hose Burst Ratio: 4 to 1
- Return Filter: 10 Micron
- Pack Cylinders: 4.0"
- Sweep Cylinders: 4.0"
- Eject Cylinders
 - 11yd³: 4.5", 2 Stage Telescopic
 - 13yd³: 5.0", 3 Stage Telescopic
- Tailgate Lift: 3"

Optional Features

- Container Roll Bar with Lip-and-Latch
- Container Lip-And-Latch with 8,000 LBS. Drum Winch
- Single & Dual Tipper(s)
- Cart Tipper Tap-In-Kits
- Work Lights
- Strobe Lights
- Broom and Shovel Holder
- Rear View Color Camera System



CITY OF MELROSE

DEPARTMENT OF PUBLIC WORKS

Administration–Engineering–Water–Sewer–Facilities
Parks–Forestry–Highway–Sanitation–Cemetery–Fleet

Elena Proakis Ellis, P.E., BCEE
Director of Public Works

City Yard, 72 Tremont Street
Melrose, Massachusetts 02176
Telephone – (781) 665-0142
E-mail: eproakis@cityofmelrose.org

MEMORANDUM

Date: April 24, 2023

To: Mayor Paul Brodeur

From: Elena Proakis Ellis, Director of Public Works

cc: Patrick Dello Russo, CFO/Auditor
James Troup, Deputy Director Admin & Finance
Martha Grover, Sustainability Manager

Subject: DERA Grant Match Component Free Cash Request

In August 2022, Melrose DPW, working with Sustainability Manager Martha Grover, submitted an application to the Massachusetts Department of Environmental Protection for a Diesel Emissions Reduction Act (DERA) grant. These grants provide up to 45% of the cost of heavy duty electric vehicles and the associated charging infrastructure. In February 2023, we were informed that the City was awarded \$268,000 from this grant program. A separate Order requests the acceptance of this grant. This memo describes the associated free cash request to fund the City's portion of the project costs.

We are hereby requesting the allocation of \$481,600 of free cash to fund the City's portion of the purchase of one electric refuse truck and the infrastructure upgrades and equipment necessary to have a Level 3 charging station at the DPW City Yard.

Melrose Electric Vehicle First Policy

Shortly after adopting the Melrose Net Zero Action Plan in April 2022, the City put in place an Electric Vehicle First Fleet Policy which requires that we replace our existing fleet vehicles with electric vehicles when it is feasible and cost effective. Melrose receives support for fleet electrification initiatives from National Grid's Fleet Advisory Services Program (FASP) consultants who provide ongoing advice and analysis. In addition, the City coordinates closely with National Grid on infrastructure planning and installations related to electric vehicle charging. Our FASP program partners identified our smaller refuse truck (Truck #18) as cost-effective for replacement with a full electric option. This is a great opportunity for Melrose to lead by example, and we are excited to present this project to the City Council for funding consideration.

DERA Grant Match Component Free Cash Request

Page 2

April 24, 2023

Electric Refuse Truck

Melrose DPW currently has two diesel refuse trucks – one standard size (Truck #26) and one smaller (approximately 13 yard) truck (#18). The larger Truck #26 is used predominately for seasonal curbside yard waste collection, while Truck #18 is used for collection of the following items:

- Solid waste from approximately 100 barrels on municipal properties, three days/week
- Solid waste from select municipal barrels seasonally on Sunday mornings to divert heavy weekend loads from the barrels
- Residential metal goods on Tuesdays
- School dumpsters on approximately a daily basis
- Residential solid waste from a handful of neighborhoods on dead ends or other streets that are difficult for our contracted vendor to access

After evaluating options, the DPW determined it was most advantageous for the City to replace Truck #18 at this time, given its extensive use for a myriad of services and its need for costly repairs in recent years. Truck #18 is a 2010 International with over 130,000 miles. The DERA grant requires for a vehicle to have three years of useful life remaining and requires for the vehicle to be taken off the road when the replacement EV begins to be used. We are able to achieve both of these requirements with Truck #18.

Attached to this memo are quotes for four different Class 7 (33,000 gross vehicle weight rating) EV trucks with refuse bodies of a comparable size to Truck 18. These quotes range from \$452,000 to \$498,500. All of the proposed trucks are from known, trusted manufacturers, along with four different refuse bodies. The DPW decided early on that we would only consider companies who have been manufacturing comparable diesel trucks for many years, to ensure that the non-EV parts would be tested and accessible for repairs. The attached four quotes are for the following vehicles:

- Peterbilt EV with a Heil refuse body
- Crane Carrier EV with a Curbtender refuse body
- Crane Carrier EV with a Loadmaster refuse body
- Crane Carrier EV with a NewWay refuse body (most similar to the existing Truck #18 body)

The grant was awarded with the assumption of a \$492,000 price for the truck. With the DERA grant covering 45% of the vehicle cost, this equates to \$221,400 of grant funding, and a City match component of \$270,600 for the truck.

In order to compare pricing, the City obtained a quote to purchase a diesel truck meeting the same specifications. The quote, also attached hereto, is for \$298,000. Thus the purchase of the EV considering the grant component results in a savings to the City for the vehicle purchase of \$27,400. These savings do not factor in the additional savings of operating an EV rather than paying for gas. Over the last 12 months, Truck #18 has used 1,716 gallons of diesel fuel.

Charging Infrastructure

The original grant submission was based on a cost proposal for Level 3 charging infrastructure for approximately \$105,000. It was later determined that the electrical service at the City Yard does not have the capacity for this charging infrastructure and would require an upgrade. The new quote to

DERA Grant Match Component Free Cash Request

Page 3

April 24, 2023

bring in a new electrical service from the street, and furnish and install both the associated transformer and the Level 3 charging station, is approximately \$311,000.

Given the City's EV-first vehicle policy, charging will be required at the City Yard in order to manage an increasing number of EVs. We presently have two EV Ford Focuses, and we have one Ford Lightning pickup truck on order. The two existing EVs charge in an outlet on the front of the Administration Building which only has the capacity to charge one of the two cars at a time. With the future arrival of the Ford Lightning, the need for better charging infrastructure is imminent. This project affords the City the opportunity to take advantage of a combination of the DERA grant and National Grid incentives to install Level 3 charging. The DERA grant portion of the costs is \$46,600. National Grid incentives account for another \$60,000 per port for the infrastructure to power the charging station and an additional \$40,000 per port for the charging station equipment. We are awaiting confirmation from National Grid whether the DERA-funded portion would be subtracted by National Grid before the incentive is provided, which would result in a National Grid incentive of \$53,400. This has been assumed herein to arrive at a conservative City match estimate. This leaves a City-funded portion of the charging infrastructure of \$211,000.

Note that the charging infrastructure may also be eligible for additional tax credits, which may fund up to 30% of the cost. Furthermore, National Grid has indicated that each additional port would result in another \$100,000 of incentive payments. It is possible that the cost of an additional port may be less than \$100,000, so we may opt to add ports to bring the total costs down while providing additional benefits. These details would be worked out in the coming months, so the costs shown here are presented to conservatively reflect the high end of the City's share.

Summary

The total project costs are summarized as follows:

	Total Cost	City Portion	DERA Portion	NGRID Incentives
Electric Refuse Truck	\$492,000	\$270,600	\$221,400	N/A
Electrical Service and Charging Infrastructure	\$311,000	\$211,000	\$46,600	\$53,400*
Grand Total	\$803,000	\$481,600	\$268,000	\$53,400*

*Could be \$100,000 if National Grid does not subtract out the DERA-funded portion of the charging infrastructure

If the level of conservatism in these estimates ultimately results in cost savings compared to the free cash allocation, any remaining free cash will be put toward additional charging ports.

We respectfully request your consideration of a free cash allocation of \$481,600 to allow us to proceed with this important initiative to meet both our current and future fleet electrification and Net Zero goals.

Ghobrial, Andrew

From: Ellen Katz <[REDACTED]>
Sent: Monday, May 8, 2023 9:55 AM
To: City Council
Cc: Grover, Martha; Fleischman, Margot; Gaffey, Denise; Proakis Ellis, Elena
Subject: Appropriation Orders May 8, 2023

Dear City Councilors,

On behalf of Melrose Energy and Climate (aka Melrose Energy Commission), I'm writing to support the appropriation request for the Electric Trash truck and charging infrastructure.

Electrifying vehicles is an important step toward reducing the impacts of climate change. While a lot of focus has been on purchasing electric passenger vehicles, heavy duty diesel trucks have a greater impact. Trash trucks move slowly from location to location, stopping and idling along the route, emitting pollutants that contribute to asthma and other respiratory diseases in addition to greenhouse gas emissions.

By purchasing this vehicle Melrose is taking a significant step toward reducing air pollution and emissions that contribute to climate change. Please support this request.

Sincerely,

Ellen Katz

[REDACTED]

****CITY OF MELROSE PUBLIC RECORDS NOTICE: Please be advised that the Massachusetts Attorney General has determined that email is a public record unless the content of the email falls within one of the stated exemptions under the Massachusetts Public Records Laws.****

Attachment: Katz_Redacted (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and Infrastructure)

Ghobrial, Andrew

From: Irina Sidorenko <[REDACTED]>
Sent: Monday, May 8, 2023 1:21 PM
To: City Council
Cc: Grover, Martha
Subject: Appropriation Orders May 8, 2023

Dear City Councilors,

I'm writing to support the appropriation request for the Electric Trash truck and charging infrastructure. My husband and I recently moved to Melrose and we were pleasantly surprised by all the efforts Melrose is taking to combat climate change. By purchasing this vehicle Melrose is taking a significant step toward reducing air pollution and emissions that contribute to climate change. Please support this request.

Sincerely,
Irina Sidorenko
[REDACTED]

****CITY OF MELROSE PUBLIC RECORDS NOTICE: Please be advised that the Massachusetts Attorney General has determined that email is a public record unless the content of the email falls within one of the stated exemptions under the Massachusetts Public Records Laws.****

Attachment: Sidorenko_Redacted (APPRO-2023-26 : An Appropriation from Free Cash for the City Share of Grant Funded EV and Infrastructure)

COMMONWEALTH OF MASSACHUSETTS
CONTRACTOR AUTHORIZED SIGNATORY LISTING FORM



CONTRACTOR LEGAL NAME: CITY OF MELROSE
CONTRACTOR VENDOR/CUSTOMER CODE: VC6000192115

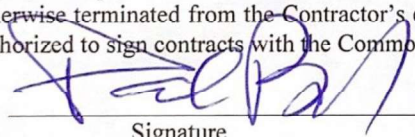
INSTRUCTIONS: Any Contractor (other than a sole-proprietor or an individual contractor) must provide a listing of individuals who are authorized as legal representatives of the Contractor who can sign contracts and other legally binding documents related to the contract on the Contractor's behalf. In addition to this listing, any state department may require additional proof of authority to sign contracts on behalf of the Contractor, or proof of authenticity of signature (a notarized signature that the Department can use to verify that the signature and date that appear on the Contract or other legal document was actually made by the Contractor's authorized signatory, and not by a representative, designee or other individual.)

NOTICE: *Acceptance of any payment under a Contract or Grant shall operate as a waiver of any defense by the Contractor challenging the existence of a valid Contract due to an alleged lack of actual authority to execute the document by the signatory.*

For privacy purposes **DO NOT ATTACH** any documentation containing personal information, such as bank account numbers, social security numbers, driver's licenses, home addresses, social security cards or any other personally identifiable information that you do not want released as part of a public record. The Commonwealth reserves the right to publish the names and titles of authorized signatories of contractors.

AUTHORIZED SIGNATORY NAME	TITLE
Paul Brodeur	Mayor
Elena Proakis Ellis	Director of Public Works
James Troup	Asst DPW Director - Admin + Finance

I certify that I am the President, Chief Executive Officer, Chief Fiscal Officer, Corporate Clerk or Legal Counsel for the Contractor and as an authorized officer of the Contractor I certify that the names of the individuals identified on this listing are current as of the date of execution below and that these individuals are authorized to sign contracts and other legally binding documents related to contracts with the Commonwealth of Massachusetts on behalf of the Contractor. I understand and agree that the Contractor has a duty to ensure that this listing is immediately updated and communicated to any state department with which the Contractor does business whenever the authorized signatories above retire, are otherwise terminated from the Contractor's employ, have their responsibilities changed resulting in their no longer being authorized to sign contracts with the Commonwealth or whenever new signatories are designated.


 Signature

Date: 4/28/2022

Title: Mayor

Telephone: 781-979-4440

Fax: -

Email: pbrodeur@cityofmelrose.org

[Listing can not be accepted without all of this information completed.]

A copy of this listing must be attached to the "record copy" of a contract filed with the department.

COMMONWEALTH OF MASSACHUSETTS
CONTRACTOR AUTHORIZED SIGNATORY LISTING

Issued
 May
 2004



CONTRACTOR LEGAL NAME : CITY OF MELROSE
 CONTRACTOR VENDOR/CUSTOMER CODE: VC6000192115

PROOF OF AUTHENTICATION OF SIGNATURE

This Section **MUST** be completed by the Contractor Authorized Signatory in presence of notary.

Signatory's full legal name (print or type): Paul Brodeur

Title: Mayor

X

Signature as it will appear on contract or other document (Complete only in presence of notary):

AUTHENTICATED BY NOTARY OR CORPORATE CLERK (PICK ONLY ONE) AS FOLLOWS:

I, Kelly Cogavin (NOTARY) as a notary public certify that I witnessed the signature of the aforementioned signatory above and I verified the individual's identity on this date:

April 28, 20 22.

My commission expires on: September 9, 2027



Kelly B. Cogavin
 NOTARY PUBLIC
 Commonwealth of
 Massachusetts
 My Commission Expires
 September 9, 2027

AFFIX NOTARY SEAL

I, _____ (CORPORATE CLERK) certify that I witnessed the signature of the aforementioned signatory above, that I verified the individual's identity and confirm the individual's authority as an authorized signatory for the Contractor on this date:

_____, 20 ____.

AFFIX CORPORATE SEAL



COMMONWEALTH TERMS AND CONDITIONS

This Commonwealth Terms and Conditions form is jointly issued by the Executive Office for Administration and Finance (ANF), the Office of the Comptroller (CTR) and the Operational Services Division (OSD) for use by all Commonwealth of Massachusetts ("State") Departments and Contractors. ***Any changes or electronic alterations by either the Department or the Contractor to the official version of this form, as jointly published by ANF, CTR and OSD, shall be void.*** Upon execution of the Standard Contract Form these Commonwealth Terms and Conditions will be incorporated by reference. Performance shall include services rendered, obligations due, costs incurred, commodities and deliverables provided and accepted by the Department, programs provided or other commitments authorized under a Contract. A deliverable shall include any tangible product to be delivered as an element of performance under a Contract. The Commonwealth is entitled to ownership and possession of all deliverables purchased or developed with State funds. Contract shall mean the Standard Contract Form issued jointly by ANF, CTR and OSD.

1. Contract Effective Start Date. Notwithstanding verbal or other representations by the parties, the effective start date of performance under a Contract shall be the later of the date the Contract was executed by an authorized signatory of the Contractor, the date the Contract was executed by an authorized signatory of the Department, the date specified in the Contract, or the date of any approvals required by law or regulation.

2. Payments And Compensation. The Contractor shall only be compensated for performance delivered and accepted by the Department in accordance with the specific terms and conditions of a Contract. All Contract payments are subject to appropriation pursuant to [M.G.L. c. 29, § 26](#), or the availability of sufficient non-appropriated funds for the purposes of a Contract, and shall be subject to intercept pursuant to [M.G.L. c. 7A, § 3](#) and [815 CMR 9.00](#). Overpayments shall be reimbursed by the Contractor or may be offset by the Department from future payments in accordance with state finance law. Acceptance by the Contractor of any payment or partial payment, without any written objection by the Contractor, shall in each instance operate as a release and discharge of the State from all claims, liabilities or other obligations relating to the performance of a Contract.

3. Contractor Payment Mechanism. All Contractors will be paid using the Comptroller's payment system unless a different payment mechanism is required. The Contractor shall timely submit invoices and supporting documentation as prescribed in a Contract. The Department shall review and return rejected invoices within fifteen (15) days of receipt with a written explanation for rejection. Payments shall be made in accordance with the bill paying policy issued by the Office of the Comptroller and [815 CMR 4.00](#), provided that payment periods listed in a Contract of less than forty-five (45) days from the date of receipt of an invoice shall be effective only to enable a Department to take advantage of early payment incentives and shall not subject any payment made within the forty-five (45) day period to a penalty. The Contractor Payroll System shall be used only for Individual Contractors who have been determined to be Contract Employees as a result of the Department's completion of an Internal Revenue Service SS-8 form in accordance with the Omnibus Budget Reconciliation Act (OBRA) 1990, and shall automatically process all state and federal mandated payroll, tax and retirement deductions.

4. Contract Termination Or Suspension. A Contract shall terminate on the date specified in a Contract, unless this date is properly amended in accordance with all applicable laws and regulations prior to this date, or unless terminated or suspended under this Section upon prior written notice to the Contractor. The Department may terminate a Contract without cause and without penalty, or may terminate or suspend a Contract if the Contractor breaches any material term or condition or fails to perform or fulfill any material obligation required by a Contract, or in the event of an elimination of an appropriation or availability of sufficient funds for the purposes of a Contract, or in the event of an unforeseen

public emergency mandating immediate Department action. Upon immediate notification to the other party, neither the Department nor the Contractor shall be deemed to be in breach for failure or delay in performance due to Acts of God or other causes factually beyond their control and without their fault or negligence. Subcontractor failure to perform or price increases due to market fluctuations or product availability will not be deemed factually beyond the Contractor's control.

5. Written Notice. Any notice shall be deemed delivered and received when submitted in writing in person or when delivered by any other appropriate method evidencing actual receipt by the Department or the Contractor. Any written notice of termination or suspension delivered to the Contractor shall state the effective date and period of the notice, the reasons for the termination or suspension, if applicable, any alleged breach or failure to perform, a reasonable period to cure any alleged breach or failure to perform, if applicable, and any instructions or restrictions concerning allowable activities, costs or expenditures by the Contractor during the notice period.

6. Confidentiality. The Contractor shall comply with [M.G.L. c. 66A](#) if the Contractor becomes a "holder" of "personal data". The Contractor shall also protect the physical security and restrict any access to personal or other Department data in the Contractor's possession, or used by the Contractor in the performance of a Contract, which shall include, but is not limited to, the Department's public records, documents, files, software, equipment or systems.

7. Record-keeping And Retention, Inspection Of Records. The Contractor shall maintain records, books, files and other data as specified in a Contract and in such detail as shall properly substantiate claims for payment under a Contract, for a minimum retention period of six (6) years beginning on the first day after the final payment under a Contract, or such longer period as is necessary for the resolution of any litigation, claim, negotiation, audit or other inquiry involving a Contract. The Department shall have access, as well as any parties identified under [Executive Order 195](#), during the Contractor's regular business hours and upon reasonable prior notice, to such records, including on-site reviews and reproduction of such records at a reasonable expense.

8. Assignment. The Contractor may not assign or delegate, in whole or in part, or otherwise transfer any liability, responsibility, obligation, duty or interest under a Contract, with the exception that the Contractor shall be authorized to assign present and prospective claims for money due to the Contractor pursuant to a Contract in accordance with [M.G.L. c. 106, § 9-318](#). The Contractor must provide sufficient notice of assignment and supporting documentation to enable the Department to verify and implement the assignment. Payments to third party assignees will be processed as if such payments were being made directly to the Contractor and these payments will be subject to intercept, offset, counter claims or any other Department rights which are available to the Department or the State against the Contractor.

9. Subcontracting By Contractor. Any subcontract entered into by the Contractor for the purposes of fulfilling the obligations under a Contract must be in writing, authorized in advance by the Department and shall be consistent with and subject to the provisions of these Commonwealth Terms and Conditions and a Contract. Subcontracts will not relieve or discharge the Contractor from any duty, obligation, responsibility or liability arising under a Contract. The Department is entitled to copies of all subcontracts and shall not be bound by any provisions contained in a subcontract to which it is not a party.

10. Affirmative Action, Non-Discrimination In Hiring And Employment. The Contractor shall comply with all federal and state laws, rules and regulations promoting fair employment practices or prohibiting employment discrimination and unfair labor practices and shall not discriminate in the hiring of any applicant for employment nor shall any qualified employee be demoted, discharged or otherwise subject to discrimination in the tenure, position, promotional opportunities, wages, benefits or terms and conditions of their employment because of race, color, national origin, ancestry, age, sex, religion, disability,



COMMONWEALTH TERMS AND CONDITIONS

handicap, sexual orientation or for exercising any rights afforded by law. The Contractor commits to purchasing supplies and services from certified minority or women-owned businesses, small businesses or businesses owned by socially or economically disadvantaged persons or persons with disabilities.

11. Indemnification. Unless otherwise exempted by law, the Contractor shall indemnify and hold harmless the State, including the Department, its agents, officers and employees against any and all claims, liabilities and costs for any personal injury or property damages, patent or copyright infringement or other damages that the State may sustain which arise out of or in connection with the Contractor's performance of a Contract, including but not limited to the negligence, reckless or intentional conduct of the Contractor, its agents, officers, employees or subcontractors. The Contractor shall at no time be considered an agent or representative of the Department or the State. After prompt notification of a claim by the State, the Contractor shall have an opportunity to participate in the defense of such claim and any negotiated settlement agreement or judgment. The State shall not be liable for any costs incurred by the Contractor arising under this paragraph. Any indemnification of the Contractor shall be subject to appropriation and applicable law.

12. Waivers. Forbearance or indulgence in any form or manner by a party shall not be construed as a waiver, nor in any way limit the legal or equitable remedies available to that party. No waiver by either party of any default or breach shall constitute a waiver of any subsequent default or breach.

13. Risk Of Loss. The Contractor shall bear the risk of loss for any Contractor materials used for a Contract and for all deliverables, Department personal or other data which is in the possession of the Contractor or used by the Contractor in the performance of a Contract, until possession, ownership and full legal title to the deliverables are transferred to and accepted by the Department.

14. Forum, Choice of Law And Mediation. Any actions arising out of a Contract shall be governed by the laws of Massachusetts, and shall be brought and maintained in a state or federal court in Massachusetts which shall have exclusive jurisdiction thereof. The Department, with the approval of the Attorney General's Office, and the Contractor may agree to voluntary mediation through the Massachusetts Office of Dispute Resolution (MODR) of any Contract dispute and will share the costs of such mediation. No legal or equitable rights of the parties shall be limited by this Section.

15. Contract Boilerplate Interpretation, Severability, Conflicts With Law, Integration. Any amendment or attachment to any Contract which contains conflicting language or has the effect of a deleting, replacing or modifying any printed language of these Commonwealth Terms and Conditions, as officially published by ANF, CTR and OSD, shall be interpreted as superseded by the official printed language. If any provision of a Contract is found to be superseded by state or federal law or regulation, in whole or in part, then both parties shall be relieved of all obligations under that provision only to the extent necessary to comply with the superseding law; provided however, that the remaining provisions of the Contract, or portions thereof, shall be enforced to the fullest extent permitted by law. All amendments must be executed by the parties in accordance with Section 1 of these Commonwealth Terms and Conditions and filed with the original record copy of a Contract as prescribed by CTR. The printed language of the Standard Contract Form, as officially published by ANF, CTR and OSD, which incorporates by reference these Commonwealth Terms and Conditions, shall supersede any conflicting verbal or written agreements relating to the performance of a Contract, or attached thereto, including contract forms, purchase orders or invoices of the Contractor. The order of priority of documents to interpret a Contract shall be as follows: the printed language of the Commonwealth Terms and Conditions, the Standard Contract Form, the Department's Request for Response (RFR) solicitation document and the Contractor's Response to the RFR solicitation, excluding any language stricken by a Department as unacceptable and including any negotiated terms and conditions allowable pursuant to law or regulation.

IN WITNESS WHEREOF, the Contractor certifies under the pains and penalties of perjury that it shall comply with these Commonwealth Terms and Conditions for any applicable Contract executed with the Commonwealth as certified by their authorized signatory signing the Standard Contract Form.



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

100 Cambridge Street 9th Floor Boston, MA 02114 • 617-292-5500

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Bethany A. Card
Secretary

Martin Suuberg
Commissioner

1/4/23

Martha Grover
72 Tremont Street
Melrose, MA 02176

Dear Martha Grover,

The Commonwealth of Massachusetts is pleased to announce that the City of Melrose has been awarded a grant of \$268,084.35 to purchase and install one electric rubbish packer and charging station under the Massachusetts Diesel Emissions Reduction Act (DERA) Electric Solicitation. The new electric rubbish packer will replace the refuse truck you are agreeing to scrap, which is listed in Attachment A to the *End User Agreement*.

To accept this grant, you must return the attached contract documents that require signatures within **15** business days of receipt. The Grantee is authorized to proceed with ordering of the vehicles/engines/equipment with the receipt of this approval letter, but no funds are guaranteed until a MassDEP has signed the contract, see below for details. The contract documents include:

- *Commonwealth of Massachusetts - Standard Contract Form*, **to be signed** by an authorized signatory listed on the Contractor Authorized Signatory Listing.
- *Commonwealth Terms and Conditions*, no signature required.
- *Contractor Authorized Signatory Listing* that is currently on file with the Commonwealth. A blank *Contractor Authorized Signatory Listing* is also attached in case you need to update your signatories.
- *End User Agreement*, no signature required.

Please email scanned copies of documents requiring signature to cayla.paulding@mass.gov.

MassDEP will execute the *Commonwealth of Massachusetts - Standard Contract Form* and email you a scanned copy for your records.

You have until **September 30, 2023**, to complete this project. This includes the purchase and installation of the new electric rubbish packer and charging station, and the scrapping of the existing one. If you fail to scrap the replaced vehicle you will not be eligible to receive the grant funds.

You may request payment by completing and submitting the MassDEP-provided *Payment Request Form* and *Certificate of Vehicle Scrappage* and required attachments.

This information is available in alternate format. Please contact Melixza Esenyie at 617-626-1282.

TTY# MassRelay Service 1-800-439-2370

MassDEP Website: www.mass.gov/dep

Printed on Recycled Paper

You may begin to move forward with your project by ordering equipment or hiring a contractor; however, no grant funding can be issued for equipment received or installation begun prior to the date of MassDEP's signature on the contract. Any work begun prior to the date of MassDEP's signature on the contract will be performed at your own risk.

The state's fiscal year (FY) begins on July 1st and ends on June 30th. Payment requests for any equipment that was delivered and/or installation work that occurred on or before June 30th must be submitted for payment no later than July 15th for payment to be processed - even if the entire project is not yet complete and the EV charging station is not yet operational.

No payment for equipment delivered or installation work completed through June 30 can be made if the payment request is received after July 15. All payments will be made directly to the grantee.

I want to congratulate City of Melrose for taking this important step towards improving air quality in Massachusetts and helping the Commonwealth achieve its ambitious climate goals.

If you have any questions regarding the awarded grant, please contact Cayla Paulding at cayla.paulding@mass.gov or Haidee Janak at haidee.janak@mass.gov.

Sincerely,



Christine Kirby
Assistant Commissioner
Bureau of Air and Waste

Attachments: *Commonwealth of Massachusetts - Standard Contract Form*
Commonwealth Terms and Conditions
Contractor Authorized Signatory Listing
End User Agreement

COMMONWEALTH OF MASSACHUSETTS ~ STANDARD CONTRACT FORM



5.1.d

This form is jointly issued and published by the Office of the Comptroller (CTR), the Executive Office for Administration and Finance (ANF), and the Operational Services Division (OSD) as the default contract for all Commonwealth Departments when another form is not prescribed by regulation or policy. The Commonwealth deems void any changes made on or by attachment (in the form of addendum, engagement letters, contract forms or invoice terms) to the terms in this published form or to the [Standard Contract Form Instructions and Contractor Certifications](#), the [Commonwealth Terms and Conditions for Human and Social Services](#) or the [Commonwealth IT Terms and Conditions](#) which are incorporated by reference herein. Additional non-conflicting terms may be added by Attachment. Contractors are required to access published forms at CTR Forms: <https://www.macomptroller.org/forms>. Forms are also posted at OSD Forms: <https://www.mass.gov/lists/osd-forms>.

CONTRACTOR LEGAL NAME: CITY OF MELROSE (and d/b/a):		COMMONWEALTH DEPARTMENT NAME: Department of Environmental Protection MMARS Department Code: EQE	
Legal Address: (W-9, W-4): 562 MAIN ST, MELROSE, MA 02176-3142		Business Mailing Address: 100 CAMBRIDGE STREET, BOSTON, MA 02114	
Contract Manager:	Phone:	Billing Address (if different):	
E-Mail:	Fax:	Contract Manager: Winifred Prendergast	Phone: (617) 292-5596
Contractor Vendor Code: VC6000192116		E-Mail: winifred.prendergast@mass.gov	Fax: N/A
Vendor Code Address ID (e.g. "AD001"): AD____ (Note: The Address ID must be set up for EFT payments.)		MMARS Doc ID(s):	
		RFR/Procurement or Other ID Number: GRANT	
☒ NEW CONTRACT PROCUREMENT OR EXCEPTION TYPE: (Check one option only) ☐ Statewide Contract (OSD or an OSD-designated Department) ☐ Collective Purchase (Attach OSD approval, scope, budget) ☒ Department Procurement (includes all Grants - 815 CMR 2.00) (Solicitation Notice or RFR, and Response or other procurement supporting documentation) ☐ Emergency Contract (Attach justification for emergency, scope, budget) ☐ Contract Employee (Attach Employment Status Form, scope, budget) ☐ Other Procurement Exception (Attach authorizing language, legislation with specific exemption or earmark, and exception justification, scope and budget)		☐ CONTRACT AMENDMENT Enter Current Contract End Date <u>Prior</u> to Amendment: _____, 20____. Enter Amendment Amount: \$ _____. (or "no change") AMENDMENT TYPE: (Check one option only. Attach details of amendment changes.) ☐ Amendment to Date, Scope or Budget (Attach updated scope and budget) ☐ Interim Contract (Attach justification for Interim Contract and updated scope/budget) ☐ Contract Employee (Attach any updates to scope or budget) ☐ Other Procurement Exception (Attach authorizing language/justification and updated scope and budget)	
The Standard Contract Form Instructions and Contractor Certifications and the following Commonwealth Terms and Conditions document are incorporated by reference into this Contract and are legally binding: (Check ONE option): ☒ Commonwealth Terms and Conditions ☐ Commonwealth Terms and Conditions For Human and Social Services ☐ Commonwealth IT Terms and Conditions			
COMPENSATION: (Check ONE option): The Department certifies that payments for authorized performance accepted in accordance with the terms of this Contract will be supported in the state accounting system by sufficient appropriations or other non-appropriated funds, subject to intercept for Commonwealth owed debts under 815 CMR 9.00 . ☐ Rate Contract. (No Maximum Obligation) Attach details of all rates, units, calculations, conditions or terms and any changes if rates or terms are being amended.) ☒ Maximum Obligation Contract. Enter total maximum obligation for total duration of this contract (or new total if Contract is being amended). \$ 268,084.35			
PROMPT PAYMENT DISCOUNTS (PPD): Commonwealth payments are issued through EFT 45 days from invoice receipt. Contractors requesting accelerated payments must identify a PPD as follows: Payment issued within 10 days ___ % PPD; Payment issued within 15 days ___ % PPD; Payment issued within 20 days ___ % PPD; Payment issued within 30 days ___ % PPD. If PPD percentages are left blank, identify reason: ☒ agree to standard 45 day cycle ___ statutory/legal or Ready Payments (M.G.L. c. 29, § 23A); ___ only initial payment (subsequent payments scheduled to support standard EFT 45 day payment cycle. See Prompt Pay Discounts Policy.)			
BRIEF DESCRIPTION OF CONTRACT PERFORMANCE or REASON FOR AMENDMENT: (Enter the Contract title, purpose, fiscal year(s) and a detailed description of the scope of performance or what is being amended for a Contract Amendment. Attach all supporting documentation and justifications.) The MassDEP Diesel Emissions Reduction Act (DERA) Program offers funding to reduce diesel emissions and improve air quality in the Commonwealth.			
ANTICIPATED START DATE: (Complete ONE option only) The Department and Contractor certify for this Contract, or Contract Amendment, that Contract obligations: ☒ 1. may be incurred as of the Effective Date (latest signature date below) and no obligations have been incurred prior to the Effective Date. ☐ 2. may be incurred as of _____, 20____, a date LATER than the Effective Date below and no obligations have been incurred prior to the Effective Date. ☐ 3. were incurred as of _____, 20____, a date PRIOR to the Effective Date below, and the parties agree that payments for any obligations incurred prior to the Effective Date are authorized to be made either as settlement payments or as authorized reimbursement payments, and that the details and circumstances of all obligations under this Contract are attached and incorporated into this Contract. Acceptance of payments forever releases the Commonwealth from further claims related to these obligations.			
CONTRACT END DATE: Contract performance shall terminate as of <u>June 30, 2026</u> , with no new obligations being incurred after this date unless the Contract is properly amended, provided that the terms of this Contract and performance expectations and obligations shall survive its termination for the purpose of resolving any claim or dispute, for completing any negotiated terms and warranties, to allow any close out or transition performance, reporting, invoicing or final payments, or during any lapse between amendments.			
CERTIFICATIONS: Notwithstanding verbal or other representations by the parties, the "Effective Date" of this Contract or Amendment shall be the latest date that this Contract or Amendment has been executed by an authorized signatory of the Contractor, the Department, or a later Contract or Amendment Start Date specified above, subject to any required approvals. The Contractor certifies that they have accessed and reviewed all documents incorporated by reference as electronically published and the Contractor makes all certifications required under the Standard Contract Form Instructions and Contractor Certifications under the pains and penalties of perjury, and further agrees to provide any required documentation upon request to support compliance, and agrees that all terms governing performance of this Contract and doing business in Massachusetts are attached or incorporated by reference herein according to the following hierarchy of document precedence, the applicable Commonwealth Terms and Conditions, this Standard Contract Form, the Standard Contract Form Instructions and Contractor Certifications, the Request for Response (RFR) or other solicitation, the Contractor's Response (excluding any language stricken by a Department as unacceptable, and additional negotiated terms, provided that additional negotiated terms will take precedence over the relevant terms in the RFR and the Contractor's Response only if made using the process outlined in 801 CMR 21.07 , incorporated herein, provided that any amended RFR or Response terms result in best value, lower costs, or a more cost effective Contract.			
AUTHORIZING SIGNATURE FOR THE CONTRACTOR: X: _____ Date: _____ (Signature and Date Must Be Captured At Time of Signature) Print Name: _____ Print Title: _____		AUTHORIZING SIGNATURE FOR THE COMMONWEALTH: X: _____ Date: _____ (Signature and Date Must Be Captured At Time of Signature) Print Name: <u>Bawa Wavezwa</u> Print Title: <u>Dir. COM Fiscal Management Division</u>	



CITY OF MELROSE

DEPARTMENT OF PUBLIC WORKS

*Administration-Engineering-Water-Sewer-Facilities
Parks-Forestry-Highway-Sanitation-Cemetery-Fleet*

James Troup

Assistant Director – Administration & Finance

**City Yard, 72 Tremont Street
Melrose, Massachusetts 02176**

Telephone – (781) 665-0142

E-mail: jtroup@cityofmelrose.org

April 24, 2023

To: Paul Brodeur, Mayor
Margot Fleishman, Director of Strategic Initiatives and Communications
From: James Troup, DPW Deputy Director Administration and Finance
CC: Elena Proakis Ellis, DPW Director
Martha Grover, Sustainability Manager

RE: Massachusetts Diesel Emissions Reduction Act (DERA) Electric Solicitation Grant

The Department of Public Works eagerly anticipates the acceptance of the Massachusetts Diesel Emissions Reduction Act (DERA) Electric Solicitation Grant in the amount of \$268,084.35. Since being informed of this award, a collaborative effort has been performed to identify a possible Electric Refuse Truck and the proper Charging Infrastructure. Once identified, the City share of this purchase will be requested for consideration and from a proper funding source. There is no financial obligation required to accept this Grant and the City may withdraw our application should it be determined that solutions are not feasible.

With the input from Sustainability Manager Martha Grover, Representatives from National Grid, and electric charging infrastructure providers, the City of Melrose DPW is confident that an electric refuse truck will possess the ability to continue to deliver expected services without compromise. The technology is proven in our environment and will endure the weather conditions typical of our Massachusetts climate. We are also excited to take the necessary steps to improve our infrastructure and to have the ability to evolve with increased electric vehicle charging capabilities.

Timing of this award is especially important as the City recently adopted an EV First Policy and as we move to electrify our fleet and expand our EV Charging Network. Accepting this opportunity is a tremendous next step in our evolution and significantly impacts the directions we may be able to go.

Thank you for your consideration and support of this matter. Feel welcome to contact us with any questions you may have.

Attachment: Grant Acceptance - DERA Grant (GRANT-2023-11 : Acceptance of Massachusetts Department of Environmental Protection DERA