

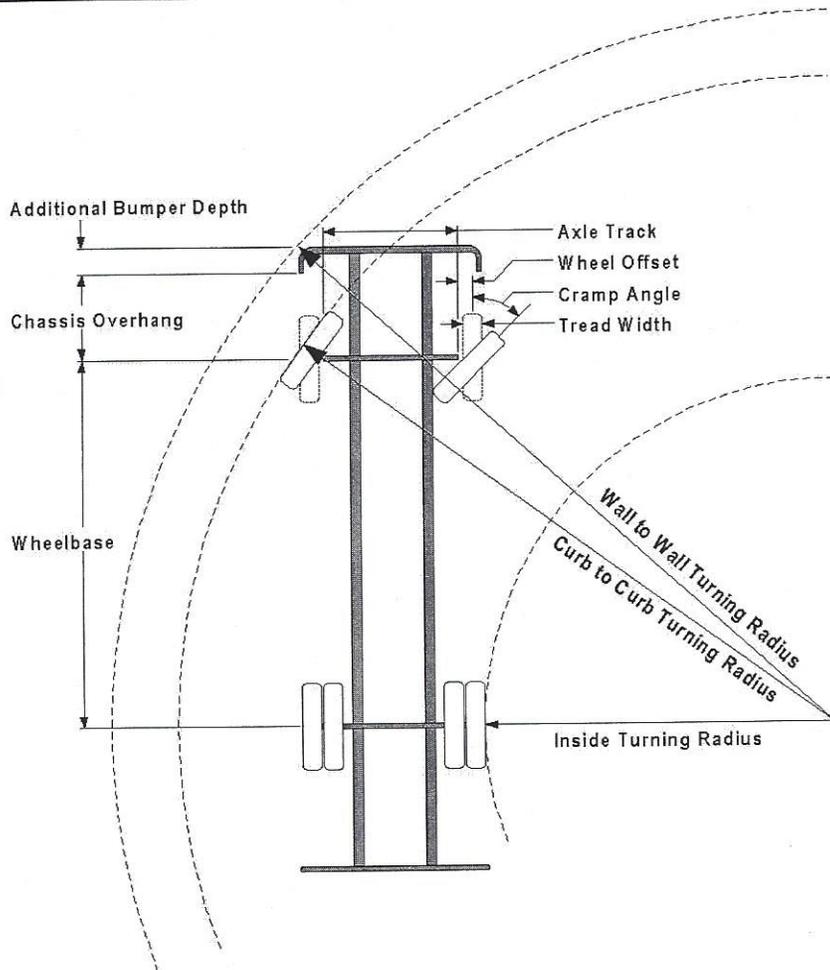


# Turning Performance Analysis

5/4/2009

**Bid Number:** City of Groton Fire Department  
**Department:** 5010

**Chassis:** Arrow-XT Chassis, PAP/SkyArm/Midmount MUX  
**Body:** Aerial, Platform, 95', Mid-Mount, Alum Body



**Parameters:**

Inside Cramp Angle:	40°
Axle Track:	82.92 in.
Wheel Offset:	5.30 in.
Tread Width:	13.50 in.
Chassis Overhang:	68.99 in.
Additional Bumper Depth:	7.00 in.
Front Overhang:	75.99 in.
Wheelbase:	270.00 in.

**Calculated Turning Radii:**

Inside Turn:	25 ft. 10 in.
Curb to Curb:	41 ft. 7 in.
Wall to Wall:	45 ft. 2 in.

**Comments:**

Overall length of apparatus:  
 46'3" (555")  
 Angle of departure: 9 degrees

Components	PRIDE #	Description
Wheels, Front	0019618	Wheels, Frt, Alum, Alcoa, 22.50" x 13.00" (425/445)
Aerial Devices	0009233	Aerial, 95' Pierce PAP, Mid Mount
Axle, Front, Custom	0090913	Axle, Front, Oshkosh TAK-4, Non Drive, 24,000 lb, DLX/Qtm/AXT
Bumpers	0550026	Bumper, Non-extended, AXT
Tires, Front	0553003	Tires, Goodyear, 445/65R22.50 20 ply G286 SS (24K "IS") AXT MUX

**Notes:**

Actual Inside Cramp Angle may be less due to highly specialized options.

Curb to Curb turning radius calculated for a 9.00 inch curb.



# Turning Performance Analysis

5/4/2009

**Bid Number:** City of Groton Fire Department  
**Department:** 5010

**Chassis:** Arrow-XT Chassis, PAP/SkyArm/Midmount MUX  
**Body:** Aerial, Platform, 95', Mid-Mount, Alum Body

## Definitions:

---

Inside Cramp Angle	Maximum turning angle of the front inside tire.
Axle Track	King-pin to king-pin distance of the front axle.
Wheel Offset	Offset from the center-line of the wheel to the king-pin.
Tread Width	Width of the tire tread.
Chassis Overhang	Distance from the center-line of the front axle to the front edge of the cab. This does not include the bumper depth.
Additional Bumper Depth	Depth that the bumper assembly adds to the front overhang.
Wheelbase	Distance between the center lines of the vehicle's front and rear axles.
Inside Turning Radius	Radius of the smallest circle around which the vehicle can turn.
Curb to Curb Turning Radius	Radius of the smallest circle inside of which the vehicle's tires can turn. This measurement assumes a curb height of 9 inches.
Wall to Wall Turning Radius	Radius of the smallest circle inside of which the entire vehicle can turn. This measurement takes into account any front overhang due to the chassis, bumper extensions and/or aerial devices.