# **City Council**

# **Staff Agenda Report**

single-family "SF" res		ing a Zone Change Application requesting a rezone from e zoning with a mixed-use "MU" overlay for properties Dalworthington Gardens.
<b>Meeting Date:</b>	Financial Considerations:	Strategic Vision Pillar:
October 19, 2023		☐ Financial Stability
	<b>Budgeted:</b>	<ul><li>☐ Appearance of City</li><li>☐ Operations Excellence</li></ul>
	⊠Yes □No □N/A	<ul> <li>□ Operations Executive</li> <li>□ Infrastructure Improvements/Upgrade</li> <li>□ Building Positive Image</li> </ul>
		<ul> <li>☑ Economic Development</li> <li>☑ Educational Excellence</li> </ul>

Agenda Item: 8c.

**Background Information:** The Planning and Zoning Commission took no action and continued this item to their October 23 meeting. Thus, the City Council cannot take action on this item. It will come back to council at the November 19, 2023 meeting. **Council's action should be to "continue the item to the November 16, 2023 Council Meeting at 7pm."** 

A Zone Change Application was received for properties located at 2500 California Lane and 2512 California Lane for a change from single family "SF" residential to garden home "GH" base zoning with a mixed-use "MU" overlay. Per Local Government Code, Chapter 211, zone changes must comply with the City's Comprehensive Plan as follows:

Sec. 211.004. COMPLIANCE WITH COMPREHENSIVE PLAN. (a) Zoning regulations must be adopted in accordance with a comprehensive plan and must be designed to:

- (1) lessen congestion in the streets;
- (2) secure safety from fire, panic, and other dangers;
- (3) promote health and the general welfare;
- (4) provide adequate light and air;
- (5) prevent the overcrowding of land;
- (6) avoid undue concentration of population; or
- (7) facilitate the adequate provision of transportation, water, sewers, schools, parks, and other public requirements.

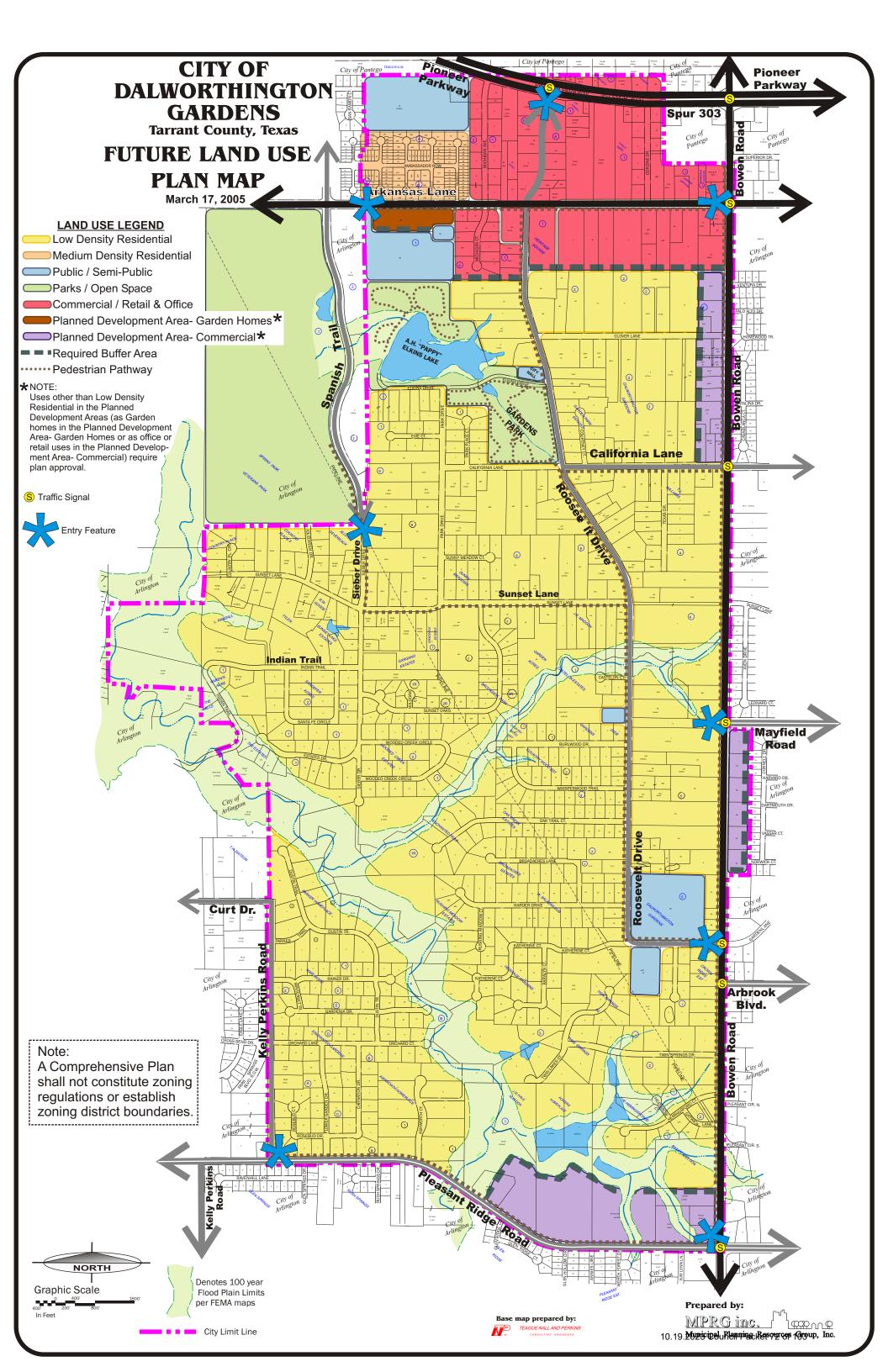
The Future Land Use Map from the current 2005 adopted Plan shows these properties to remain as single family residential. However, in the latest Plan draft amendment from June 2023 includes changes to proposed Bowen Road future land uses as described below. The full description can be found in your packet.

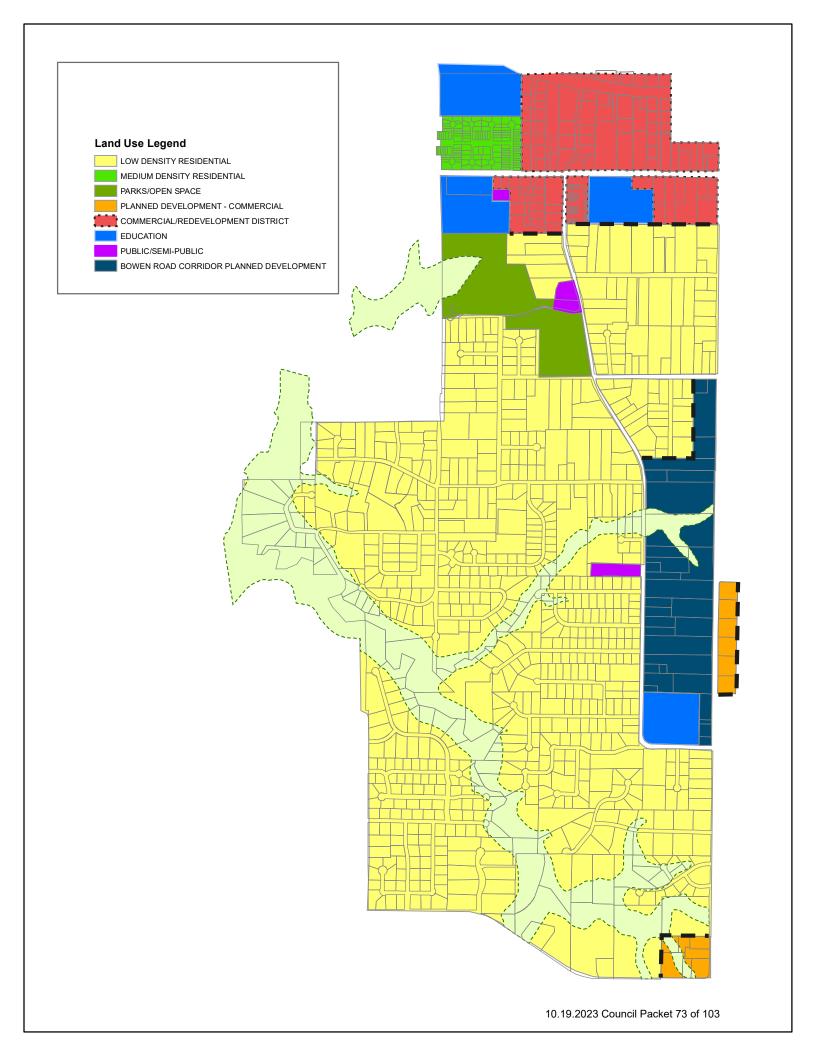
The Bowen Road Planned Development Overlay may include Large Lot Residential uses but may also include a mixture of Medium Density Single Family Garden Homes, and Commercial Uses with a preference toward agricultural related businesses (vegetable and meat markets, farm and ranch supply, etc.) and restaurants. Garden Home developments shall include 10 percent open space for parks and community gardens. The Planned Development shall provide an orderly transition from commercial uses to the large lot Residential uses and incorporate suitable separation barriers with a preference to vegetated barriers in lieu of hardened barriers such as fences. Uses other than large lot residential uses shall be planned development. The applicant has communicated to the City he desires to build garden homes with a few small foot print restaurants on the south end of the development.

**Recommended Action/Motion**: Required action is shown at the top of the staff report.

# Zone Change Application (cont.)

3.	f approved, a zone change is applied to the property, not the property owner.	
4.	The Planning & Zoning Commission makes recommendations to City Council. If the Planning & Zoning Commecommends approval of a zone change request, the case must still go before City Council for final action.	ission
5.	Certain minimum building setbacks from some or all property lines must be maintained, and room for a minimum of parking spaces must be reserved on a subject property, based on that property's zoning classification and the rests proposed use. A privacy fence may also be required between residential and non-residential zoning districts. The equirements are outlined in the City of Dalworthington Garden's Ordinances. It is the applicant's benefit to ensure proposed development will fit onto the subject property, in compliance with these and other applicable requirem City's Code of Ordinances.	nature of These ure that an
6.	The City is required to mail letters to owners of property within 200 feet of the subject property of the zone chan	nge reques
7.	The applicant or an authorized representative should attend public hearings pertaining to the request and be preporesent the case and answer any relevant questions from the Planning & Zoning Commission and City Council n	
ce pr Si	reby certify that I am the owner or duly authorized agent of the owner for the purposes of this application. I fur ify that I have read and examined this application and know the same to be true and correct. If any of the informatided on this application is incorrect, the permit or approval may be revoked.  Date: 07/17/23	
0	FICE USE ONLY	
C	e Number: Date of Application: Date Paid:	
A	idavit attached?:Yes No P&Z Meeting Date:	





# **Bowen Road Corridor Area (Planned Development Overlay)**

The Bowen Road corridor will have a multi-use purpose. Its future development will focus on commercial as well as residential development. Existing large residential lots that have both Bowen and Roosevelt access may be subdivided to allow commercial development on the Bowen Corridor only. These said lots shall remain residential on the Roosevelt side with no vehicular traffic connection between them.

One Planned Development Area of higher intensity use is designated along Bowen Road. The area on the east side of Bowen Road, south of Mayfield, would be an ideal location for an office or retail development.

The west side of the Bowen Road corridor between Roosevelt Drive and Bowen Road from the Roosevelt Drive intersection to the California Lane intersection shall be designated as a Planned Development Overlay Area.

Such a community shall be defined as an organized mixed-use community that integrates agricultural and food service commercial businesses, with residential uses, and open spaces that might be used as parks or community gardens.

Most of the west side of the Bowen Road corridor between Roosevelt Drive and Bowen Road from the Roosevelt Drive intersection to the California Lane intersection shall be designated as a Planned Development. The exception to including all of the land between Roosevelt Drive and Bowen Road begins at the California Lane intersection. Here the Planned Development shall only extend approximately 290 feet to the west from the Bowen Road right-of-way line for a distance of approximately 1,042 feet south along Bowen Road. (See the Future Land Use Map.)

The Bowen Road Planned Development Overlay may include Large Lot Residential uses but may also include a mixture of Medium Density Single Family Garden Homes, and Commercial Uses with a preference toward agricultural related businesses (vegetable and meat markets, farm and ranch supply, etc.) and restaurants. Garden Home developments shall include 10 percent open space for parks and community gardens. The Planned Development shall provide an orderly transition from commercial uses to the large lot Residential uses and incorporate suitable separation barriers with a preference to vegetated barriers in lieu of hardened barriers such as fences. Uses other than large lot residential uses shall be planned development.

The decisions made now by the City as to the type of uses permitted along Bowen Road as it passes the core of the City are surely critical to the future of Dalworthington Gardens. Although it may be possible to attract some limited retail uses to this corridor, it is believed that such development would likely not be of a character clearly compatible with the residential development along Roosevelt Drive and would almost certainly tend toward the sort of intermittent strip development seen along Pioneer Parkway. The most promising area is at the intersection of Mayfield/Bowen between the Rush Creek tributaries. The light there affords good traffic flow in all directions. It is also highly probable that indecisiveness in the land use designation for Bowen Road will inhibit the build-out of the area between Bowen and Roosevelt south of California Lane as large lot residential developments. Dalworthington Gardens is a very small city surrounded by a very large one. Build-out of the area within Bowen Road, Roosevelt Drive, and California Lane as large lot residential properties is highly desirable in order to maintain a critical mass of large lot residential properties and identity of DWG as having such attractive land use. This is the surest path to maintaining the property values of the residential property in the City.

# **City Council**

# **Staff Agenda Report**

		egarding an amendment to the City of Dalworthingtor changes to garden home "GH" regulations.
<b>Meeting Date:</b>	Financial Considerations:	Strategic Vision Pillar:
October 19, 2023	Budgeted: □Yes□No ⊠N/A	<ul> <li>☑ Financial Stability</li> <li>☑ Appearance of City</li> <li>☑ Operations Excellence</li> <li>☑ Infrastructure Improvements/Upgrade</li> <li>☑ Building Positive Image</li> <li>☑ Economic Development</li> <li>☐ Educational Excellence</li> </ul>

Agenda Item: 8d.

**Background Information:** Staff is presenting the final version of the Garden Home Ordinance for approval. Planning and Zoning has recommended approval.

**Recommended Action/Motion:** Motion to approve Ordinance No. 2023-21 approving an amendment to the City of Dalworthington Gardens Code of Ordinances, Chapter 14, Zoning, making changes to garden home "GH" regulations.

**Attachments: Proposed Ordinance Redlines** 

**Proposed Comp Plan Redlines** 

**Adopting Ordinance** 

### 14.02.174"GH" residential district.

A building or premises in this district shall be used only for the following purposes under the standards herein contained:

- (1) In this district there shall be only garden homes and accessory buildings as elsewhere herein regulated.
- (2) Any building in this district shall meet the following design standards:
  - (A) The building shall be not less than 85% masonry. As used in this subsection, "masonry" includes: brick, stone or tile, hand laid unit by unit; veneer simulations of the materials having the appearance of hand laid units, when approved by the city; and, stucco when applied in accordance with building code standards therefor.
  - (BA) The building shall have a minimum 8/12 4/12 roof pitch and not less than a 40 year 30-year quality architectural profile shingle.
  - (B) The building shall not have a front facing garage
- (3) Any development in the GH district shall be developed in accordance with a site plan meeting the requirements of developments having a PD overlay.
- (4) Uses allowed in GH and in other zoning classifications may be developed under a common PD plan meeting the procedural requirements of division 7 of this article.
- (5) Mobile food units are permitted upon the following conditions:
  - (A) The property owner has requested the services of the mobile food unit;
  - **(B)** The mobile food unit may only provide goods and services to the property owner or the property owner's guests at the property owner's expense. No sales will be made to the general public.
  - (C) Mobile food units may not obstruct traffic movement, or impair visibility or safety to the site.
  - (D) Mobile food units must have valid health permit and comply with chapter 228 of the Texas Administrative Code related to mobile food unit operations.

(2005 Code, sec. 17.5.04; Ordinance 2018-01, sec. 4, adopted 2/15/18)

# 14.02.171 General provisions.

# (a) Table of standards.

The standards contained in the following table shall govern the height, area, yard and parking requirements of residential and permitted nonresidential uses in the residential districts.

TABLE 14.02.1	71								
	Districts								
	SF		MF						
Regulations	Residential	Nonresidential	Residential	Nonresidential					
HEIGHT (max. in ft.)	35 (n-1)	45 (n-1)	35 (n-1)	45 (n-1)	<del>35</del> <u>30</u>				
AREA (n-2)									
Lot area (min. per dwelling unit in sq. ft.)		None		None	6000				
Single-family	21780		21780						
Multifamily			7200						
Living area (min. per dwelling unit in sq. ft.)									
	1250		800		<del>2000</del> <u>1800</u>				
LOT									
Width (min. in ft.)	80	None	60	None	50				
Coverage, building (max. % of lot area) 25		25	40	40	50				
Coverage, impervious surface (max. % of lot area)	40	40	40	40	70				
YARDS (n-3) (min. in ft.)									
Front	50	50	25	25	15				
Side - interior lot	25	25	5	_	5				
Side - corner lot	35	35	15	15	15				
Rear (n-4)	25	25	10	10	15				
Rear - double frontage	35	35	20	20	_				

<b>TABLE 14.02.1</b>	71				
	Districts				
	SF		MF	GH	
Regulations	Residential	Nonresidential	Residential	Nonresidential	
PARKING (min. spaces per dwelling unit)	2	n-5	2.25	n-5	Garage-2 Guests-2
SPACE - Landscaped open space (min. % of lot area)	_	20	_	20	

### Notes to table 14.02.171:

- 1. In addition to the minimum yard requirements contained herein, each side and rear yard shall be increased an additional foot for each foot (or fraction thereof) the structure exceeds 35 feet in height; provided, that in no event shall the height of a building exceed by ten (10) feet the maximum height prescribed for such structure and district in table 14.02.171.
- 2. Lot area shall be exclusive of the means of vehicular access thereto, whether by public or private street or other access easement or way. Lots of 14,500 square feet or more but less than 21,780 square feet created by plat or deed and recorded in the office of the county clerk of Tarrant County before April 13, 1981, the effective date of this amendment, shall not be deemed nonconforming as to lot area.
- 3. Any single-family residential lot which on February 18, 1991, was classified "SF-2," shall not be deemed nonconforming as to front and side yards if the lot has a front yard of not less than 35 feet and side yards of not less than 15 feet each (25 feet, if a corner lot). Lots platted and zoned for residential use which are "panhandle" lots, as herein defined, shall comply with the provisions of this table or section **14.02.171(d)**, whichever is more restrictive.
- 4. Any single-family residence constructed on a lot which was created by plat or replat recorded in the office of the county clerk of Tarrant County before March 1, 2002, shall not be deemed nonconforming as to minimum rear yard if such yard is not less than 15 feet.
- 5. Nonresidential parking is regulated by division 9 of this article.

# **Comp Plan Changes**

# **Medium Density Single Family Garden Homes**

Medium density single family garden homes can be a component of the Bowen Road Planned Development Overlay District. Garden home development is intended to refer to high-quality residential units on smaller individually platted lots that provide common area open space or other amenities for the residents. These common areas should be designed to buffer the garden homes from the adjacent thoroughfare and even higher intensity uses and also to buffer any large lot residential lots near the development. A secondary private access drive or private street should be provided to minimize the access points to the public street. Such residential units should be clustered to facilitate buffering and to allow common area open space within the garden home development.

To assure appropriate high-quality developments, garden home developments must be subject to appropriate standards and an approved development plan. It is believed that density should be limited to a maximum of 56 units per acre with dwelling units each containing a minimum of 1800 square feet of living space. Additional stringent design standards should be adopted covering both building standards (such as approved masonry exteriors, garage layouts, and similar requirements) and development layout.

### ORDINANCE NO. 2023-21

AN ORDINANCE AMENDING CHAPTER 14, "ZONING," OF THE CODE OF ORDINANCES, CITY OF DALWORTHINGTON GARDENS, TEXAS, BY AMENDING SECTION 14.02.174, "GH' RESIDENTIAL DISTRICT," OF DIVISION 5, "RESIDENTIAL DISTRICT REGULATIONS," TO CHANGE REQUIREMENTS FOR GARDEN HOMES; AMENDING CHAPTER 14, "ZONING," OF THE CODE OF ORDINANCES, CITY OF DALWORTHINGTON GARDENS, TEXAS, AMENDING TABLE 14.02.171 OF SECTION 14.02.171, "GENERAL PROVISIONS," OF DIVISION 5 "RESIDENTIAL DISTRICT REGULATIONS," TO CHANGE THE SIZE REQUIREMENTS AND MAX HEIGHT FOR GARDEN HOMES; PROVIDING THAT THIS ORDINANCE SHALL BE CUMULATIVE OF ALL ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY; PROVIDING FOR PUBLICATION IN THE OFFICIAL NEWSPAPER; AND PROVIDING AN EFFECTIVE DATE.

**WHEREAS**, the City of Dalworthington Gardens is a Type-A general law municipality located in Tarrant County, created in accordance with the provisions of Chapter 6 of the Texas Local Government Code and operating pursuant to the enabling legislation of the State of Texas; and

**WHEREAS**, the City Council of the City of Dalworthington Gardens desires to amend Chapter 14 of its zoning regulations to change requirements for garden homes in Dalworthington Gardens; and

**WHEREAS**, the Planning and Zoning Commission of the City of Dalworthington Gardens, Texas held a public hearing on September 25, 2023, and the City Council of the City of Dalworthington Gardens, Texas, held a public hearing on October 19, 2023, with respect to the proposed rezoning as described herein; and

**WHEREAS**, the City Council finds and determines that the adoption of this Ordinance is in the best interests of and necessary to protect the health, safety, and welfare of the public; and

**WHEREAS**, the City Council has determined that the proposed ordinance amendment to the zoning ordinance is in the best interest of the citizens of the City.

# NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DALWORTHINGTON GARDENS, TEXAS:

### **SECTION 1.**

Subsection (2)(B) of Section 14.02.174, 'GH' Residential District," of Division 5, "Residential District Regulations," of Chapter 14 "Zoning" of the Code of Ordinances, City of Dalworthington Gardens, Texas is hereby amended to read as follows:

### "Sec. 14.02.174 "GH" residential district.

A building or premises in this district shall be used only for the following purposes under the standards herein contained:

(1) In this district there shall be only garden homes and accessory buildings as elsewhere herein regulated.

- (2) Any building in this district shall meet the following design standards:
  - (A) The building shall have a minimum 4/12 roof pitch and not less than a 30-year quality architectural profile shingle.
  - (B) The building shall not have a front facing garage
- (3) Any development in the GH district shall be developed in accordance with a site plan meeting the requirements of developments having a PD overlay.
- (4) Uses allowed in GH and in other zoning classifications may be developed under a common PD plan meeting the procedural requirements of division 7 of this article.
- (5) Mobile food units are permitted upon the following conditions:
  - (A) The property owner has requested the services of the mobile food unit;
  - (B) The mobile food unit may only provide goods and services to the property owner or the property owner's guests at the property owner's expense. No sales will be made to the general public.
  - (C) Mobile food units may not obstruct traffic movement, or impair visibility or safety to the site.
  - (D) Mobile food units must have valid health permit and comply with chapter 228 of the Texas Administrative Code related to mobile food unit operations."

### **SECTION 2.**

Row 6, "Living area (min. per dwelling unit in sq. ft.)," of Table 14.02.171 of Section 14.02.171, "General provisions," of Division 5, "Residential District Regulations," of Chapter 14, "Zoning," of the Code of Ordinances, City of Dalworthington Gardens, Texas, is hereby amended to read as follows:

Living area (min. per	1250	800	1800
dwelling unit in sq.			
ft.)			

### **SECTION 3.**

Row 1, "Height (max in ft.)," of Table 14.02.171 of Section 14.02.171, "General provisions", of Division 5, "Residential District Regulations," of Chapter 14, "Zoning," of the Code of Ordinances, City of Dalworthington Gardens, Texas, is hereby amended to read as follows:

HEIGHT (max. in ft.)	35 (n-1)	45 (n-1)	35 (n-1)	45 (n-1)	30
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### **SECTION 4.**

This Ordinance shall be cumulative of all provisions of ordinances and on the Code of Ordinances, City of Dalworthington Gardens, Texas as amended, except where the provisions are in direct conflict with the provisions of other ordinances, in which event the conflicting provisions of the other ordinances are hereby repealed.

### **SECTION 5.**

It is hereby declared to be the intention of the City Council that the phrases, clauses, sentences, paragraphs, and sections of this Ordinance are severable, and if any phrase, clause, sentence, paragraph, or section of this Ordinance shall be declared unconstitutional by the valid judgment or degree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections of this Ordinance, since the same would have been enacted by the City Council without incorporation in this Ordinance of any such unconstitutional phrase, clause, sentence, paragraph, or section.

### **SECTION 6.**

Any person, firm or corporation who violates, disobeys, omits, neglects or refuses to comply with or who resists the enforcement of any of the provisions of this Ordinance shall be fined not more than Two Thousand Dollars (\$2,000.00) for each offense. Each day that a violation is permitted to exist shall constitute a separate offense.

### **SECTION 7.**

All rights and remedies of the City of Dalworthington Gardens are expressly saved as to any and all violations of the provisions of the Code of Ordinances, City of Dalworthington Gardens, Texas, as amended or revised herein, or any other ordinances affecting the matters regulated herein which have accrued at the time of the effective date of this Ordinance; and, as to such accrued violations and all pending litigation, both civil and criminal, whether pending in court or not, under such ordinances, same shall not be affected by this Ordinance but may be prosecuted until final disposition by the courts.

### **SECTION 8.**

The City Secretary of the City of Dalworthington Gardens is hereby directed to publish in the official newspaper of the City of Dalworthington, the caption, publication clause, and effective date clause of this ordinance in accordance with Section 52.011 of the Texas Local Government Code.

### SECTION 9.

provid	This Ordinance ed by law, and it i		force and	effect	from	and a	after	its	passage	and	publication	a
	PASSED AND	APPROVED ON	N THIS	D	AY OF	7			_, 2023.			

ATTEST:	Laurie Bianco, Mayor
Lola Smith, City Secretary	

# **City Council**

# **Staff Agenda Report**

Age	enda	Sul	bjec	et: I	Discu	ssion	and	poss	ible	actio	on t	o a	ppro	ve th	ie pi	ırcha	ase o	f a l	KASC	CO	Γank :	Mixe	r ins	tallec	l by	Axis	j
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IN	Yes ⊠No □N/A	□ Operations Excellence				
	ies Milo Milor	☐ Infrastructure Improvements/Upgrade				
		☐ Building Positive Image				
		☐ Economic Development				
		☐ Educational Excellence				

Agenda Item: 8e.

**Background Information:** Staff is requesting the mixer to be installed to help the water tank integrity by reducing interior headspace temperature and reducing steel corrosion, as well as overall water quality. This will help the chlorine residuals stay balance throughout the tank. We have had issue's in the past keeping the residual above the minimum amount causing us to flush excessive amounts of water to bring the residual above the minimum level.

Recommended Action/Motion: Direct staff on which way to proceed with elevated tank mixer

Attachments: Proposal from Axis Construction, L.P.

**2 Pages sent via email to:** gary.parker@cityofdwg.net

Axis Construction, L.P. P.O. Box 77916 Fort Worth, Texas 76177 ACLP #22155

October 10, 2023

**BUY BOARD CONTRACT #662 -22** 

# UPDATED PROPOSAL

City of Dalworthington Gardens 2600 Roosevelt Drive Dalworthington Gardens, Texas 76016

Attn: Gary Parker – Director of Public Works

Re: Furnish & Install One (1) 1/2 HP KASCO Tank Mixing System at 300,000 Gallon Multi-Leg EST

# **KASCO EQUIPMENT DETAILS**

Axis Construction, LP in conjunction with Kasco Marine is pleased to present a Proposal for one (1) Submersible mixer on above mentioned project. Below you will find a brief description of your application, our recommended equipment and product sheets.

Tank Description: (1) Existing 300,000 Gallon PS #1 Multileg EST at 3214 Arkansas Ln.

#### Recommendation

Kasco recommends one (1) 2400C61 CertiSafe NSF 61/372 mixer for this application. Pricing includes the cable length of 50ft. The mixers can be operated with a Suspended mount for elevated tank for easy wet tank installation. Kasco recommends the Suspended Mount SM-100 in the Elevated Storage Tank. Kasco offers a SCADA model CS-150 which is a 120Vac, 60hz, single phase UL listed control panel engineered to operate Kasco C61 CertiSafe™tank mixers. Designed for easy installation and operation, H-O-A control

# switch, indicator LEDs, Low water inhibit, and SCADA I/O for remote operation and monitoring. Scope of Material furnished by Axis Construction, LP & KASCO Qty Description Kasco Municipal mixer complete package #24C61050SM-CS150 EST @ \$11,400.00 Kasco 2400C61 CertiSafe Potable Tank Mixer (120V) with 50ft Freight @ \$300.00 UL power cord. Order part #2400C61 1- Kasco Suspended Mount #SM100 Kasco SCADA CS-150 is a 120Vac, 60hz, single phase UL listed control panel engineered to operate Kasco C61 CertiSafeTM tank mixers. Designed for easy installation and operation, H-O-A control switch, indicator LEDs, Low water inhibit, and SCADA I/O for remote operation and monitoring. Order part #176371 Standard 3-year Manufacturer's warranty included. Optional 5-Year Warranty can be purchased with Mixer, Mount and Control Panel for an addition \$700 per mixer. Axis labor warranty is 12 months from date of install. Axis has included freight to site as noted above \$11,700.00 Total price includes equipment as stated & Freight to Jobsite.

# **Installation**

We are pleased to provide a Proposal to furnish labor, equipment and materials required to install and startup mixers. Please note the following details:

- 1. We will install all conduit & wire from the top of the tank mixer connection junction box, down to mixer panel mounted at the base of the tank. We will install conduit between the mixer panel and Main Electric Panel at the base of the tank.
- 2. Conduit will be rigid aluminum and will be secured with galvanized right-angle clamps on the ladder.
- 3. We will start-up the mixers once the **power is connected by your electrician**.

Total Cost for Install & Start-up of Kasco Mixer = \$13,240.00

# **Total Cost for Equipment and Installation** = \$24,940.00

### Notes:

- 1. BUY BOARD- We are approved/listed on Contract 662-22 for Tank Mixers.
- 2. Installation as detailed above is included in this Proposal. Install can be done by others if you prefer.
- 3. Proposal is firm for 60 days and subject to change unless a PO is received.
- 4. Terms are Net 30 upon invoice.
- 5. Mixer will take approx. 1 week for delivery from KASCO. Lead time for our install is approximately 3-5 days after receipt of mixer. Time On-Site will be approx. 1.5 days.
- 6. We recommend installation of a lightning arrestor/surge protector be added to the electric panels to protect the mixer and other components. Warranty on mixer will not cover damage from lightning or power surges.

If you have any questions on the above information, please contact me at (817) 439-0709 or via e-mail address joeswinnea@hotmail.com. I look forward to an opportunity to work for you on this project.

Respectfully Submitted,





# **CertiSafe™ Mixers**



# BENEFITS OF A POWERFUL, ACTIVE MIXER

- Improves water quality
- Eliminates ice formation
- · Minimizes residual loss
- Reduces thermal and chemical stratification
- Reduces differences in water taste and odor
- · Reduces nitrification risk in chloraminated water
- Lowers the rate of disinfection by-product (DBP)
- Lowers the rate of sediment accumulation







# **UNIT SPECIFICATIONS**

Sizes Available	1/2HP, 3/4HP, 1HP and 2HP						
Electrical Requirements	120V, single phase, 60Hz (1/2HP, 3/4HP and 1 HP) 208-240V, single phase, 60Hz (3/4HP, 1HP and 2HP)						
Lubrication	Food-grade mineral oil						
Cord Lengths	Stub (32 in.), 50 ft., 100 ft., 200 ft.						
Amps	1/2HP - 5.7 3/4HP 208-240V - 3.5 1HP 208-240V - 4.5 3/4HP - 7 1HP - 9.1 2HP 208-240V - 9						
Warranty	3 years (applies to mixer, mount & control panel) Optional extended warranty available						

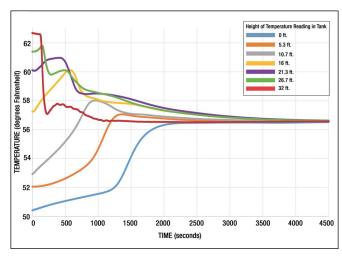
# **UNIT DIMENSIONS**

# Unit Top Unit Side 17 1/2 in. Height 9.5 in. diameter

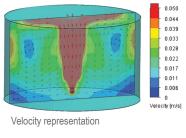
# 2HP Dimensions Unit Top Unit Side 16 3/8 in. Height 11.8 in. diameter

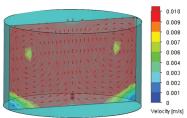
# **MIXING CAPABILITIES**

Computational fluid dynamics (CFD) and test results using a 3400C61 CertiSafe  $^{\text{TM}}$  mixer to mix a .5 million gallon tank



Results from thermal testing shows all layers of the tank converged within 40 minutes





CFD indicating tank can be thoroughly mixed over time

# **MOUNTING**

Install Kasco's CertiSafe™ mixer in elevated and ground storage tanks with the available floor mount, pipe mount and suspended mounting options.



Pipe Mount Floor Mount

# CONTROL & MONITORING

UL LISTED CS-100 (120Volt) and CS-200 (240Volt) control panels are designed for easy installation and operation. Both include an H-O-A operator switch, LED indicator lights, SCADA I/O for remote control and monitoring, and automatic shut off feature if tank level drops below operating level.

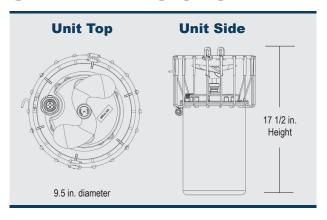




Moving Water Forward, Since 1968 kascomarine.com

0.19.2023**© Kasco-Marine**; ind 04/2019

# **UNIT DIMENSIONS**



# **UNIT SPECIFICATIONS**

Sizes Available	1/2, 3/4, 1 and 2HP
Electrical Requirements	<ul> <li>120V, single phase, 60Hz (1/2 - 1 HP)</li> <li>208-240V, single phase, 60Hz (3/4 - 2HP)</li> <li>Solar powered option, contact for details</li> </ul>
120V AMPS	• 1/2HP - 5.7 • 3/4HP - 7 • 1HP - 9.1
208-240V AMPS	• 3/4HP - 3.5 • 1HP - 4.5 • 2HP - 9
Lubrication	Food-grade mineral oil
Cord Lengths	Stub (32 in.), 50 ft., 100 ft., 200 ft.
Warranty	3 years (mixer, mount & control panel) Optional extended warranty available









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# **CertiSafe™ Mixers**

# **Increase Water Quality & Protect Your Tanks**

The CertiSafe™ Tank Mixer for potable water is certified and tested to strict NSF/ANSI 61 & 372 standards and designed for use in municipal water storage tanks and reservoirs, 20,000 gallons and larger. This tank mixer is easy to install, and can be mounted using a floor, suspension, or pipe mount. CertiSafe Mixers are ETL Listed to UL and CSA standards.

The tank mixer features a durable, stainless steel body combined with a domed stainless steel top, ensuring it will withstand continual use in your tank environments. It includes top safety features with a food grade mineral oil lubricant and a double mechanical seal.

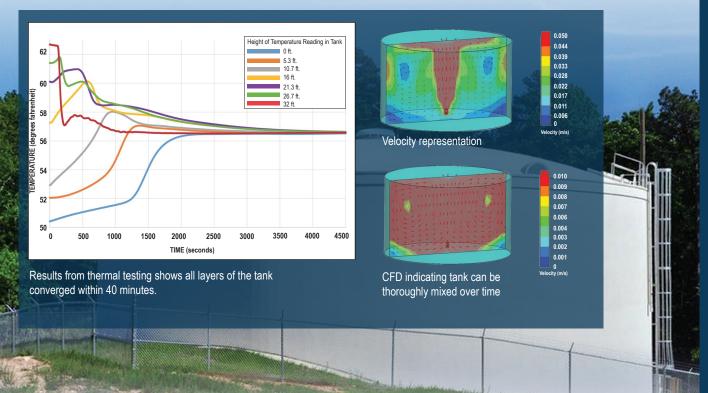
- Improves water quality
- Eliminates ice formation
- · Minimizes residual loss
- Reduces thermal and chemical stratification
- · Reduces occurrences of taste and odor problems
- Reduces nitrification risk in chloraminated water
- · Lowers the rate of disinfection by-product (DBP)
- Lowers the rate of sediment accumulation





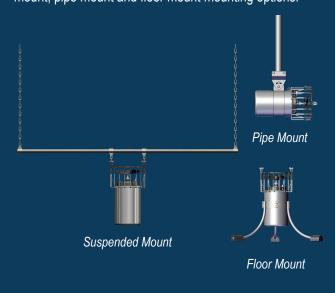
# **MIXING CAPABILITIES**

Computational fluid dynamics (CFD) and test results using a 3400C61 (3/4HP) CertiSafe™ mixer to mix a .5 million gallon tank.



# **MOUNTING**

Install Kasco CertiSafe™ mixers in elevated and ground storage tanks with the available suspended mount, pipe mount and floor mount mounting options.





# CONTROL & MONITORING

Easily control and monitor your mixer with the available control panels. Designed for easy installation and operation, all panels include an H-O-A operator switch, LED indicator lights, SCADA I/O for remote control and monitoring, and automatic shut off feature if tank level drops below operating level.





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# **CertiSafe Tank Mixer Series C61**

Models 2400, 3400, 4400 and 8400







### BENEFITS OF A POWERFUL ACTIVE MIXER

- Reduces thermal & chemical stratification
- Minimizes residual loss
- Reduces differences in water taste/odor
- Reduces nitrification risk in chloraminated water
- Lowers rate of disinfection by-product (DBP)
- Prevents ice damage and corrosion inside tanks
- Lowers the rate of sediment accumulation

#### Features

- NSF 61 / ANSI 372 certified
- ETL Listed to UL and CSA standards
- Shippable by FedEx
- Operates to a depth of 50ft
- 3 year warranty on all models, mounts and control panels
- Optional 5 year warranty

### Motor Unit

- Available in 120V and 240V, 60Hz, single phase, 1750 RPM
- Two long life bearings
- Thermal overload protection
- Two, fully unitized carbon ceramic mechanical seals
- 300 series austenitic stainless steel housing with domed stainless-steel motor top, and protective coated cage / prop guard

### Power Cord

- SJTOW or SJTOOW UL, CSA and NEC approved underwater rated cable
- 3 wire cable
- Available in 50 ft., 100 ft., or 200 ft. cable lengths
- IP68 submersible quick disconnect on 12AWG and larger cords

### **Control Panel Options**

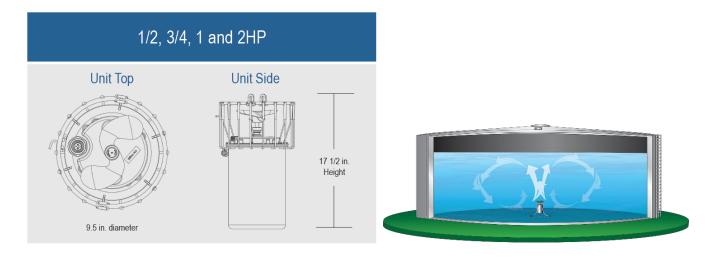
- UL listed for US and Canada
- UL type 3R/4X weatherproof enclosure
- SCADA I/O for motor control and monitor
- For more detail, reference the CS-100 and CS-200 specification sheet

### **Mounting Options**

- Floor, pipe and suspended mount options developed for elevated and ground potable water applications
- For more detail, reference the mount specification sheet



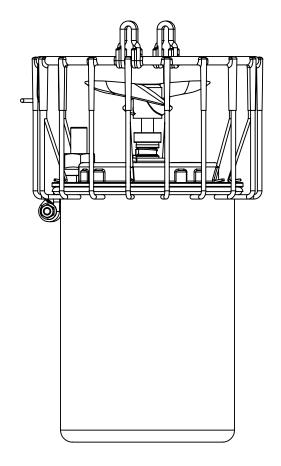
# **UNIT DIMENSIONS**

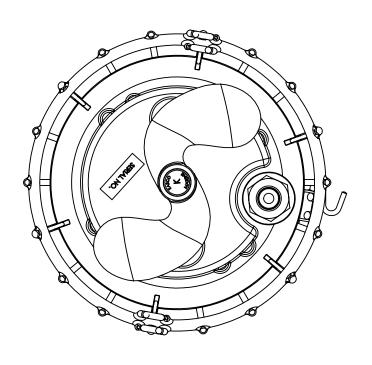


# KASCO CERTISAFE MIXER SPECIFICATIONS

TANK SIZE	SUPPLY VOLTAGE/ PHASE/Hz	HP	MIXER MODEL	CON- TROL CENTER	CABLE LENGTH (FT.)	CABLE GAUGE	MOUNTING	AMPS	LOCK ROTOR AMPS	THRUST (LBS.)	PART NUMBER	SHIPPING WEIGHT
The second	Up to .5MG 120/1/60 1/2		2400	Optional	50	16	Optional	5.7	12	29	2400C61050	41
		1/2	Municipal Series		100	14					2400C61100	47
					200	12					2400C61200	69
			3400	Optional	50	16		7	18		3400C61050	45
	120/1/60	3/4	Municipal Series		100	14	Optional			36	3400C61100	51
Up to					200	12					3400C61200	73
2MG	240/1/60	3/4	3400 Municipal Series	Optional	50	16	Optional	3.5	9	36	3400HC61050	44
					100	14					3400C61100	51
					200	12					3400C61200	72
		1	4400 Municipal Series	Optional	50	16	Optional	9.1	40	41	4400C61050	45
	120/1/60 Up to				100	14					4400C61100	51
Up to					200	12					4400C61200	73
4MG	208-240 1/60	1	4400 Municipal Series	Optional	50	16	Optional	4.5	20	41	4400HC61050	44
					100	14					4400HC61100	51
					200	12					4400HC61200	72
	208-240 1/60	2	8400 Municipal Series	l Optional	50	16	Optional	9	40	56	8400C61050	61
Over 4MG					100	14					8400C61100	74
					200	12					8400C61200	88

			DWG. NO.	24	400C6	1
REV.	ECO#	DESCRIPTION	DR'N BY	DATE	DES ENG	CH'K BY
1 INITIAL RELEASE						





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.X ± .02 [.508] .XX ± .010 [.254]

.XXX ± .005 [.127] ANGULAR ± 0.5°

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# **RM-100 FIXED VERTICAL MOUNT**



### **OVERVIEW**

The RM-100 is a vertical orientation, stationary floor mount.

### **INCLUDED**

- 3-piece mixer base unit
- 316 stainless steel retrieval chain
- 316 stainless chain lifting bail with spring
- Stainless tank penetration for power cord
- Cable strain relief
- Stainless retrieval chain mounting point
- Stainless connecting link
- EPDM rubber feet

### **REQUIRED**

• Electrical service to exterior junction box



Rev. 01/2019



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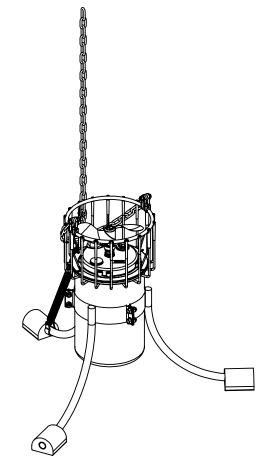
### **REQUIRED**

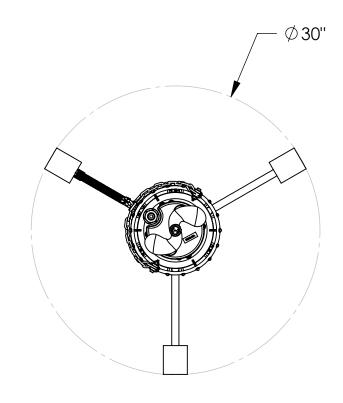
Electrical service to exterior junction box



Rev. 08/2019

			DWG. NO.	R	2M-100	)
REV.	ECO#	DESCRIPTION	DR'N BY	DATE	DES ENG	CH'K BY
1		INITIAL RELEASE				





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TITLE:

Certisafe Floor Mount

Kasco

800 DEERE ROAD PRESCOTT, WI 54021-1241

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SHEET 1 OF 1

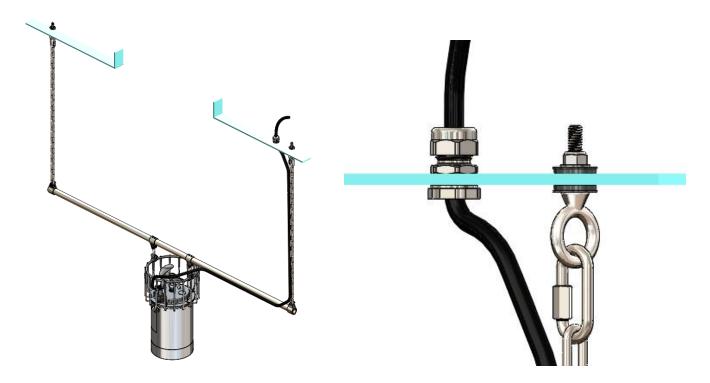
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# **SM-100 SUSPENDED VERTICAL MOUNT**

For 2400C61, 3400C61, 4400C61 Mixers



## **OVERVIEW**

The SM-100 is a vertically oriented, suspended mount. Wet or dry installation.

## **INCLUDED**

- 1- 316 stainless stretcher with hardware.
- 2- 25' 316 stainless chains.
- 2- Stainless eye bolts with sealing hardware.

### **REQUIRED**

Electrical service to exterior junction box.

 1- Stainless cord-grip fitting with support and hardware.

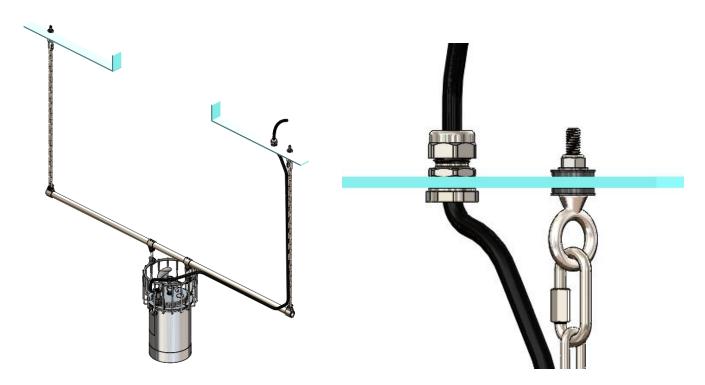




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