





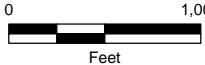


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**LEGEND**

-  Proposed Buoy Installation
-  Location of Historic Shipwreck
-  Shipwreck 100ft Buffer





0 1,000  
Feet

**SOURCE:** Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community  
**HORIZONTAL DATUM:** Washington State

PURPOSE: DEMARCAT A LANDING ZONE FOR SAFE INGRESS AND EGRESS OF FLOATPLANES


DATUM: MLLW 0.0'  
 LATITUDE: 47°38'04"N  
 LONGITUDE: -122°20'06"W

NAME: SOUTH LAKE UNION BUOY INSTALLATION  
 SEATTLE, WASHINGTON 98109  
 ADJACENT PROPERTY OWNERS:  
 1 - WASHINGTON STATE DNR  
 2 - KENMORE AIR  
 3 - ASSOCIATED GENERAL CONTRACTORS OF WASHINGTON  
 4 - WATERMARK ESTATE MANAGEMENT SERVICES  
 5 - CITY INVESTORS X LLC

PROPOSED: INSTALLATION OF FIVE NAVIGATIONAL BUOYS AND ASSOCIATED ANCHORS

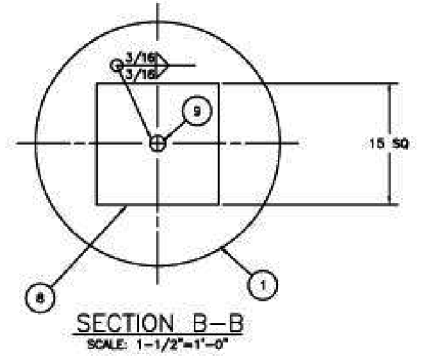
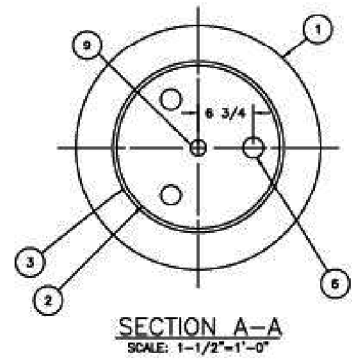
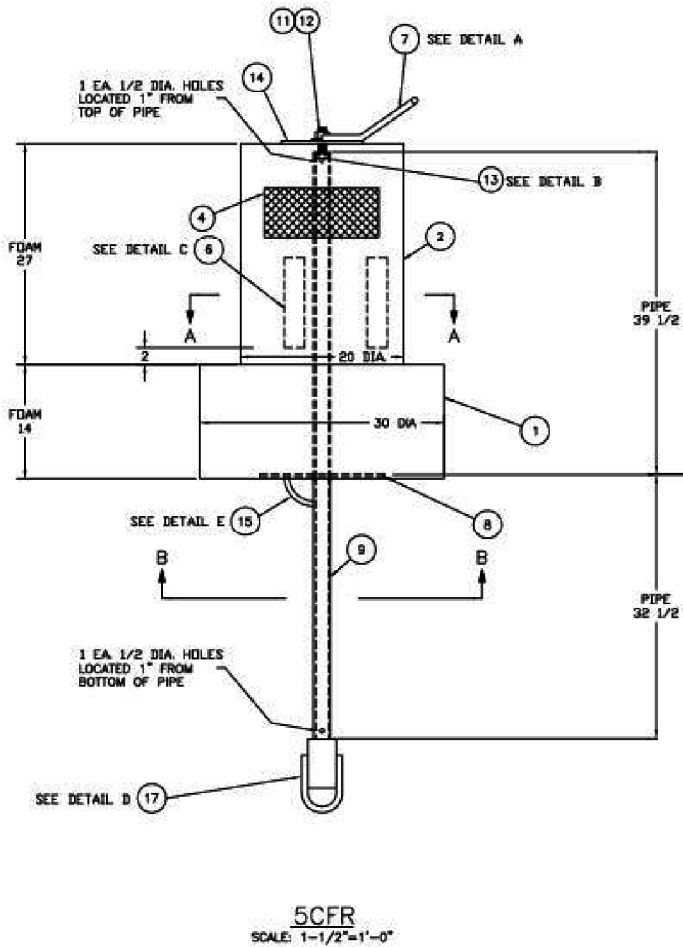
IN: LAKE UNION  
 NEAR/AT: CITY OF SEATTLE  
 COUNTY OF: KING  
 STATE: WASHINGTON

DATE: APRIL 2016



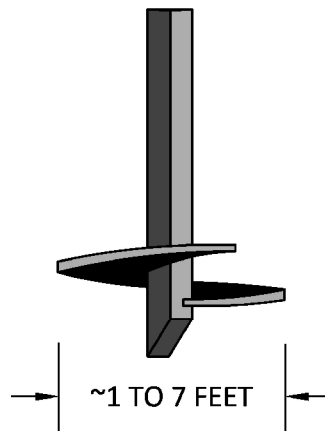
720 Olive Way  
 Suite 1900  
 Seattle, WA 98101  
 206-287-9130

SHEET: 2 OF 4



**NOTES:**

1. The dimensions are in inches.
2. The USCG 5CFR Buoy is 25% smaller than the previously submitted USCG 4CFR Buoy.



**TYPICAL ANCHOR: HELICAL ANCHOR**

PURPOSE: DEMARCATATE A LANDING ZONE FOR SAFE INGRESS AND EGRESS OF FLOATPLANES

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PROPOSED: INSTALLATION OF EIGHT NAVIGATIONAL BUOYS AND ASSOCIATED ANCHORS

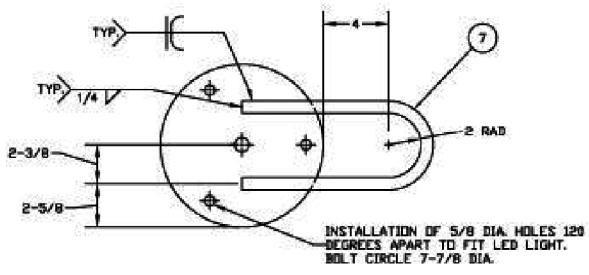
IN: LAKE UNION  
NEAR/AT: CITY OF SEATTLE  
COUNTY OF: KING  
STATE: WASHINGTON

DATE: JANUARY 2017

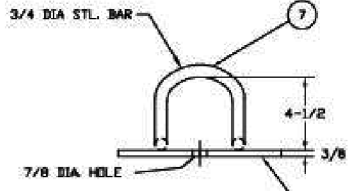


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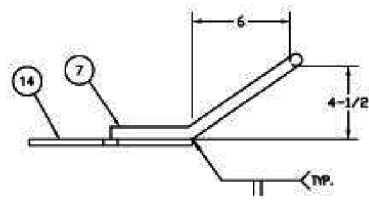
SHEET: 3a OF 4



TOP VIEW

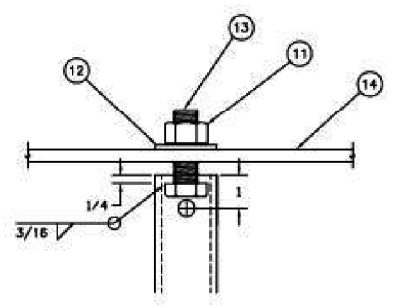


FRONT VIEW

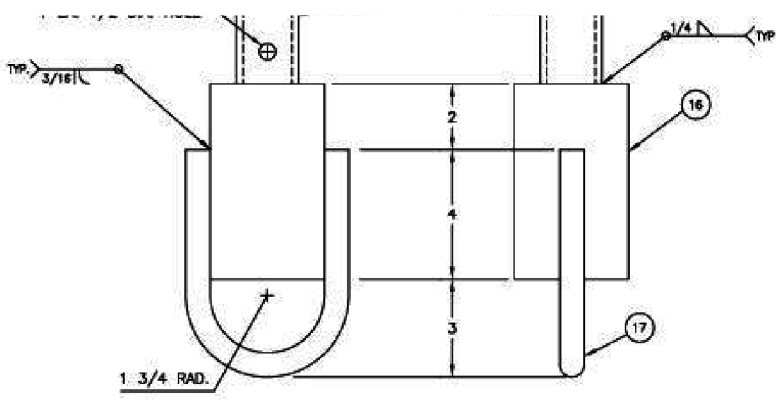


SIDE VIEW

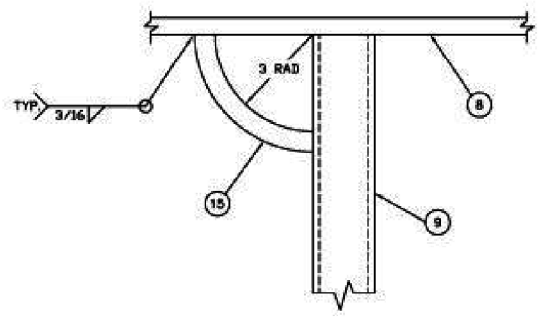
DETAIL A  
LIFTING EYE  
3"=1'-0"



DETAIL B  
ASSEMBLY BOLT  
5"=1'-0"



DETAIL D  
6"=1'-0"



DETAIL E  
MOORING BAR  
6"=1'-0"

ITEM NO.	CFR NO.	NFR NO.	REQ.	BILL OF MATERIALS		
				DESCRIPTION	MATL	REMARKS
1	1	1		BUOY BODY	FOAM	4 PCF SEE NOTE 1
2	1	-		BUOY TOP (CFR)	FOAM	4 PCF SEE NOTES 1 & 2
3	-	1		BUOY TOP (NFR)	FOAM	4 PCF SEE NOTES 1 & 2
4	3	-		RETROREFLECTIVE MATERIAL	----	6x14 SEE NOTE 4
5	-	3		RETROREFLECTIVE MATERIAL	----	6x12 SEE NOTE 4
6	3	3		RADAR REFLECTOR ASSEMBLY	----	MOBR M2 SEE NOTE 3
7	1	1		LIFTING EYE	STEEL	3/4 BAR, SEE DET. A
8	1	1		BOTTOM PLATE	STEEL	1/2 THK.
9	1	1		CENTER PIPE	STEEL	1-1/2 SCH-80 PIPE x 72 LG
11	1	1		NYLOCK NUT	STAINLESS STEEL	3/4-10 UNC-2B
12	1	1		WASHER	STAINLESS STEEL	3/4
13	1	1		FULL THREAD HEX HEAD BOLT	STAINLESS STEEL	3/4-10UNC-2Bx3 LG SEE NOTE 5
14	1	1		TOP PLATE	STEEL	10 DIA. x 3/8 THK.
15	1	1		MOORING BAR	STEEL	5/8 BAR, SEE DET. E
16	1	1		COUNTERWEIGHT	STEEL	3 1/2 x 3 1/2 x 6 LG.
17	1	1		MOORING ROD	STEEL	3/4 DIA. ROD

NOTES:

- SEE LATEST REVISION OF U.S.C.G. CIVIL ENGINEERING SPECIFICATION No. 490 FOR FABRICATION REQUIREMENTS.
- CUT HOLES IN ITEMS 2 & 3 TO PERMIT A TIGHT FIT WITH ITEM 6. FILL VOID WITH IONOMER FOAM PLUGS.
- INSTALL ITEM 6 120 DEGREES APART.
- INSTALL ITEMS 4 & 5, 120 DEGREES APART AND 8 INCHES FROM THE TOP ON THE BUOY BODY.
- ITEMS 7, 8, 9, 14, 15, 16, & 17 SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH THE SPECIFICATION.

NOTES:

- The dimensions are in inches.

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