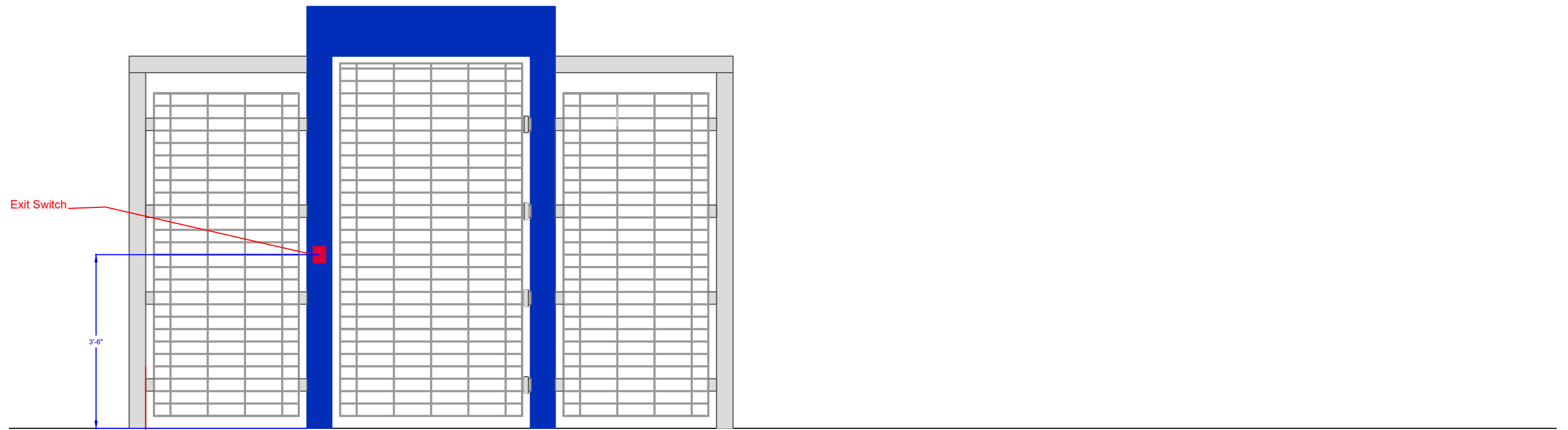


WESTREC MARINA MANAGEMENT, INC.  
ON BEHALF OF THE CHICAGO PARK DISTRICT

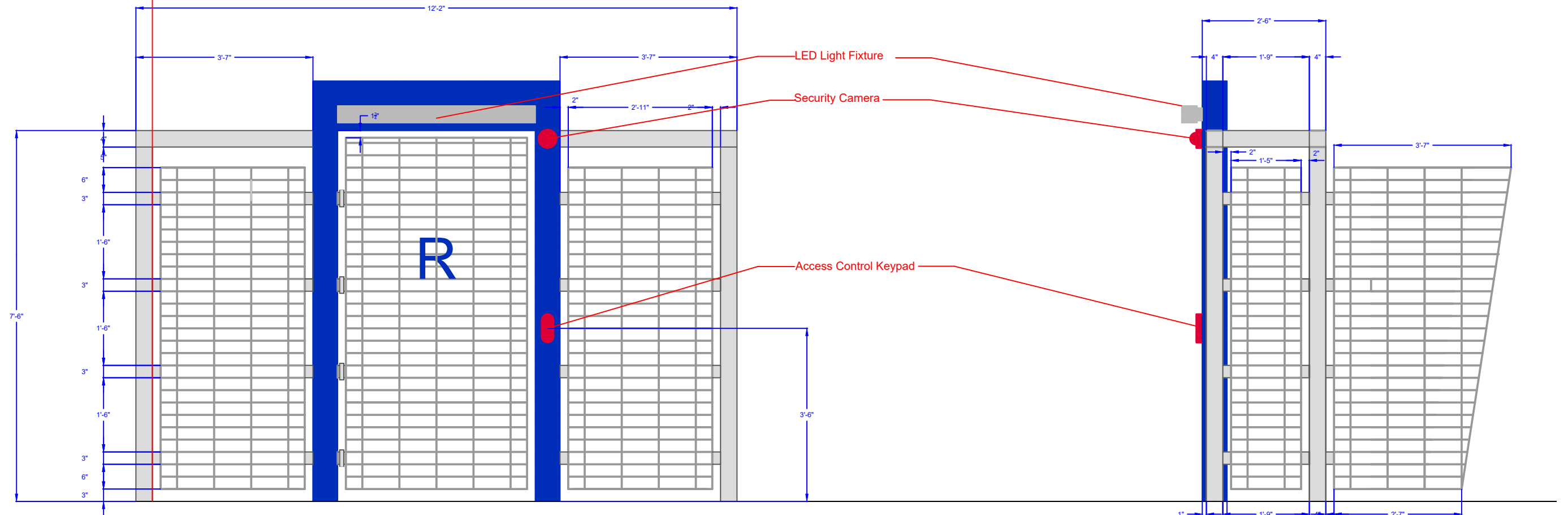
---

**TECHNICAL SPECIFICATIONS  
FOR  
CONSTRUCTION OF DOCK GATES  
INVITATION FOR BID  
W-19001**

---



REAR VIEW



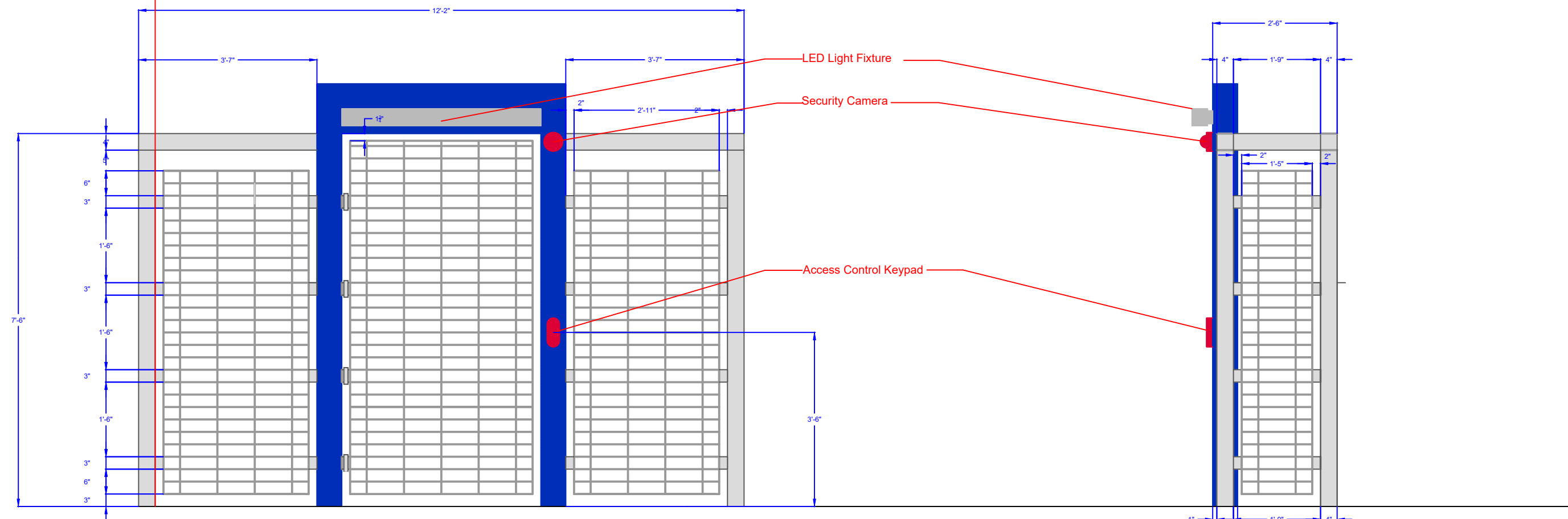
FRONT VIEW

SIDE VIEW



# BATHROOM GATE

REAR VIEW



FRONT VIEW

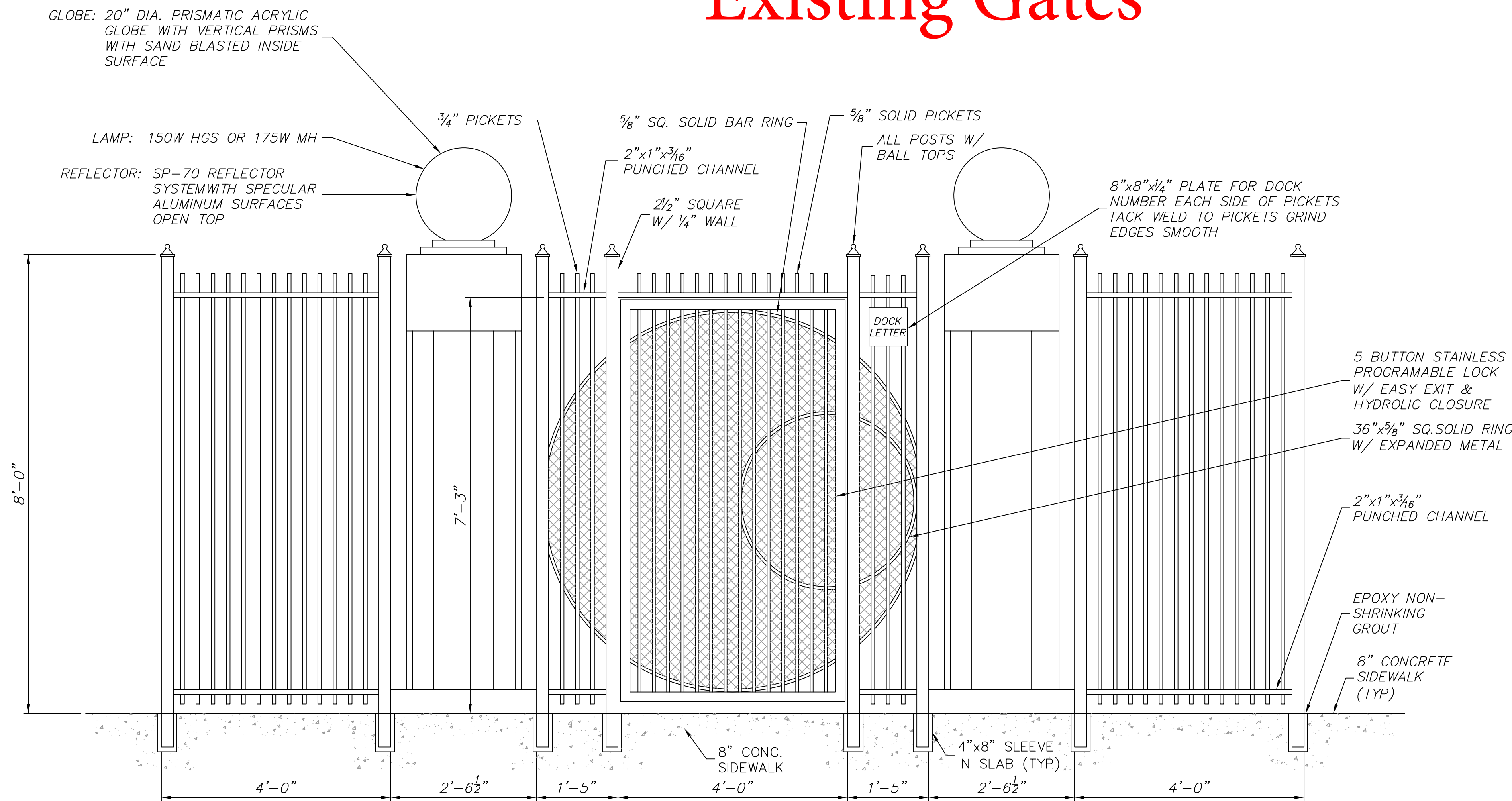
SIDE VIEW



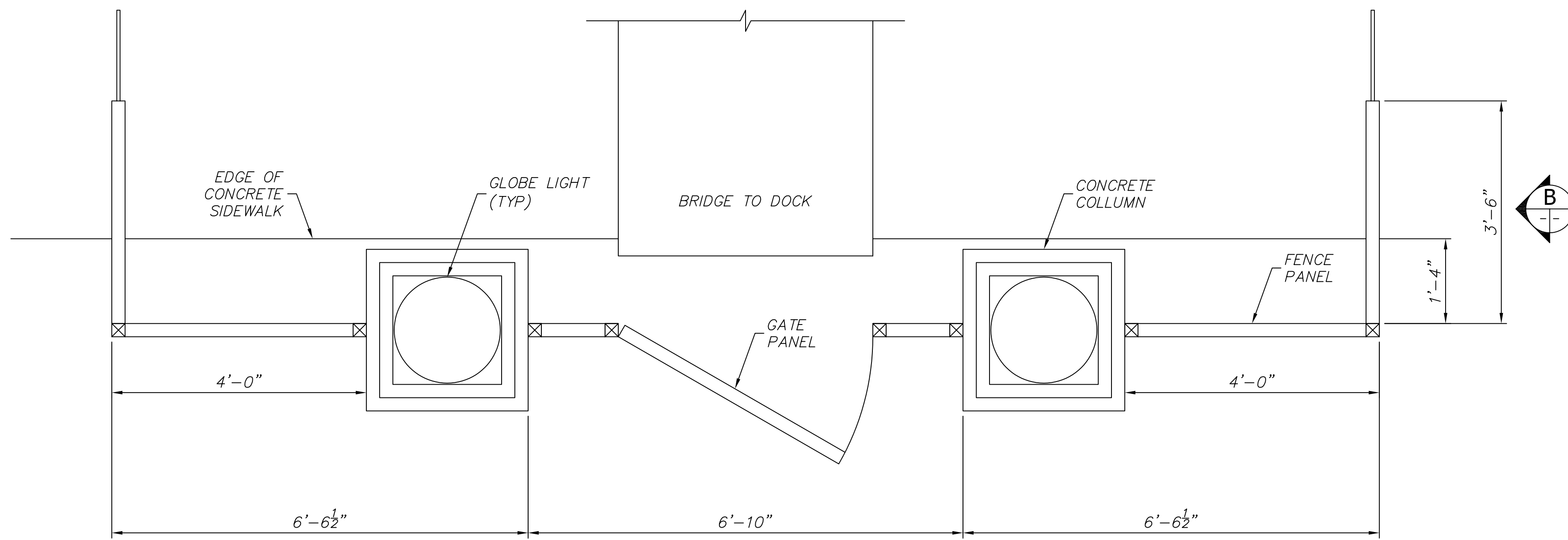




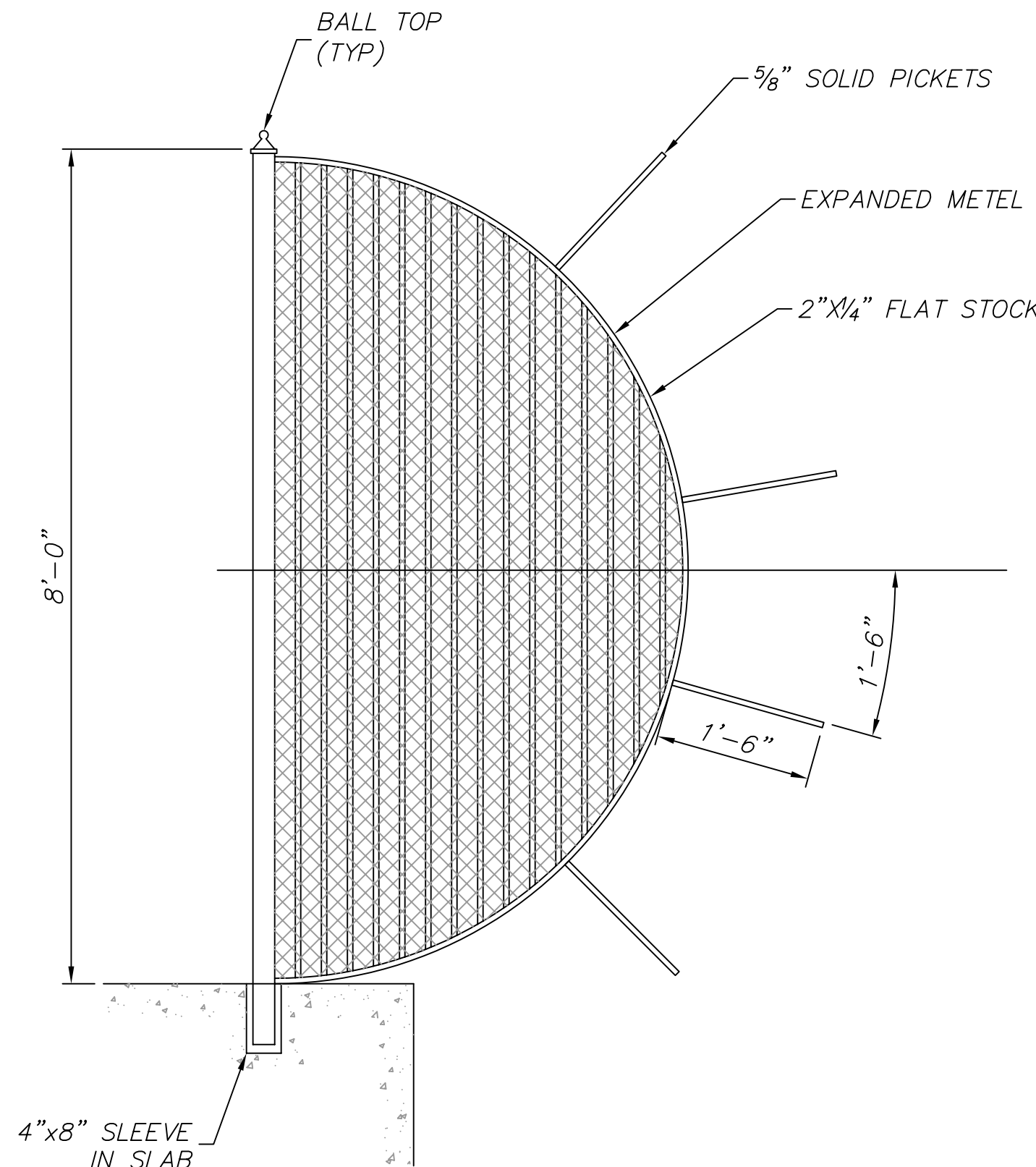
Existing Gates



ELEVATION 'A'  
SCALE: 3/4" = 1'-0"



GATE PLAN  
SCALE: 3/4" = 1'-0"



ELEVATION 'B'  
SCALE: 3/4" = 1'-0"



CHICAGO  
PARK  
DISTRICT

541 N. Fairbanks Ct.  
Chicago, Illinois 60611  
Ph. 312-742-8520

E	
D	
C	
B	
A	
REVISIONS	DATE

PROJECT MANAGER:  
WESTREC MARINA  
MANAGEMENT, INC.  
541 N. FAIRBANKS CT.,  
SUITE 1020  
CHICAGO, IL 60611  
(312) 747-0737  
westrec  
@westrecchicago.com

DRAWN:
CHECKED:
SCALE: SEE DWG
DATE:
SPEC. NO.:
W.O. NO.:
SHEET INFORMATION

BURNHAM  
HARBOR  
MARINA  
EXTENSIONS

PARK NO./PROJECT NO.

G-1.0

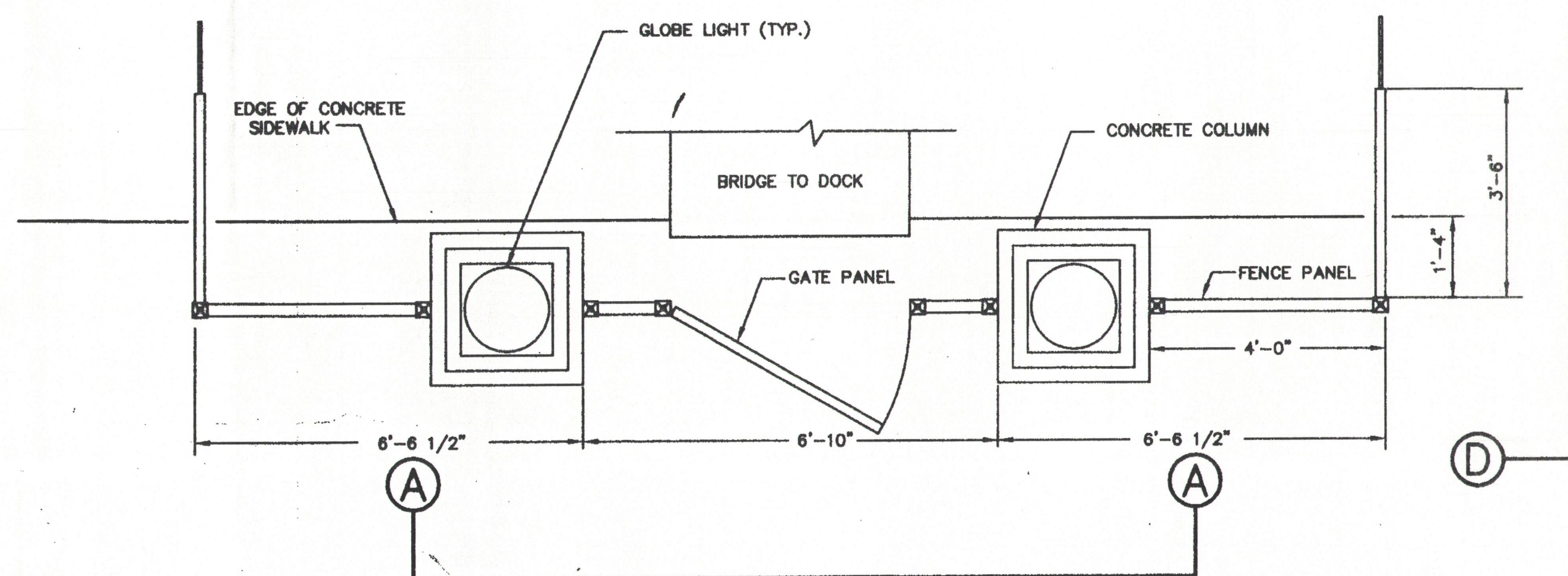
DRAWING NO.

© CHICAGO PARK DISTRICT

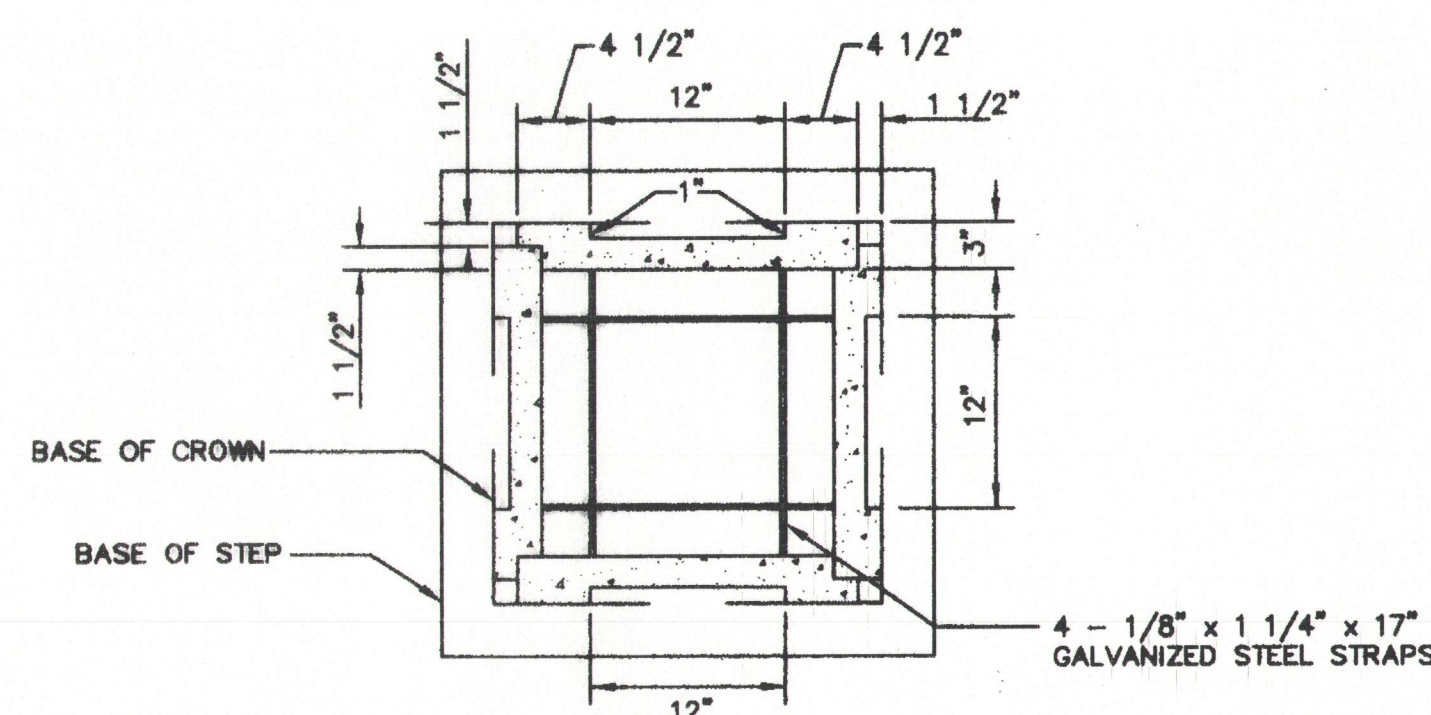
1 GATE DETAILS  
SCALE: 3/4"=1'-0"



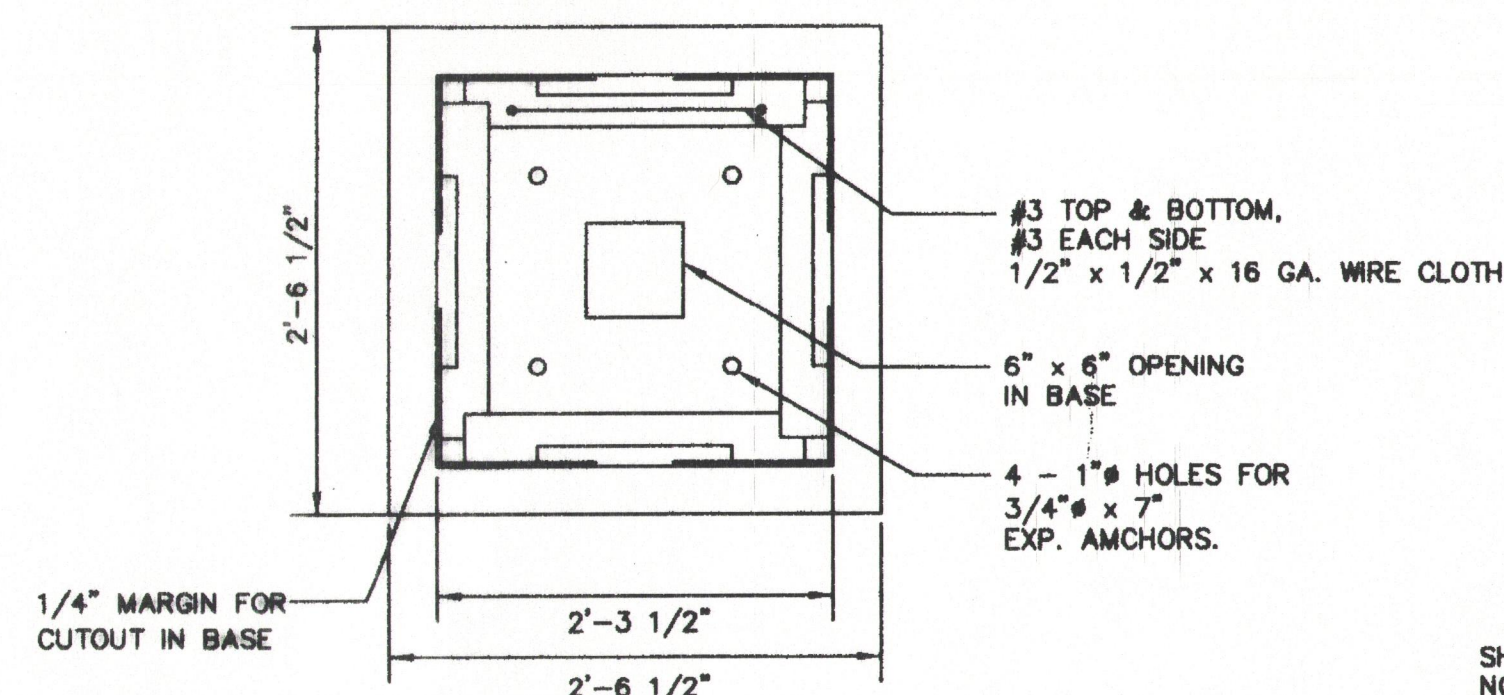
# Existing Gates



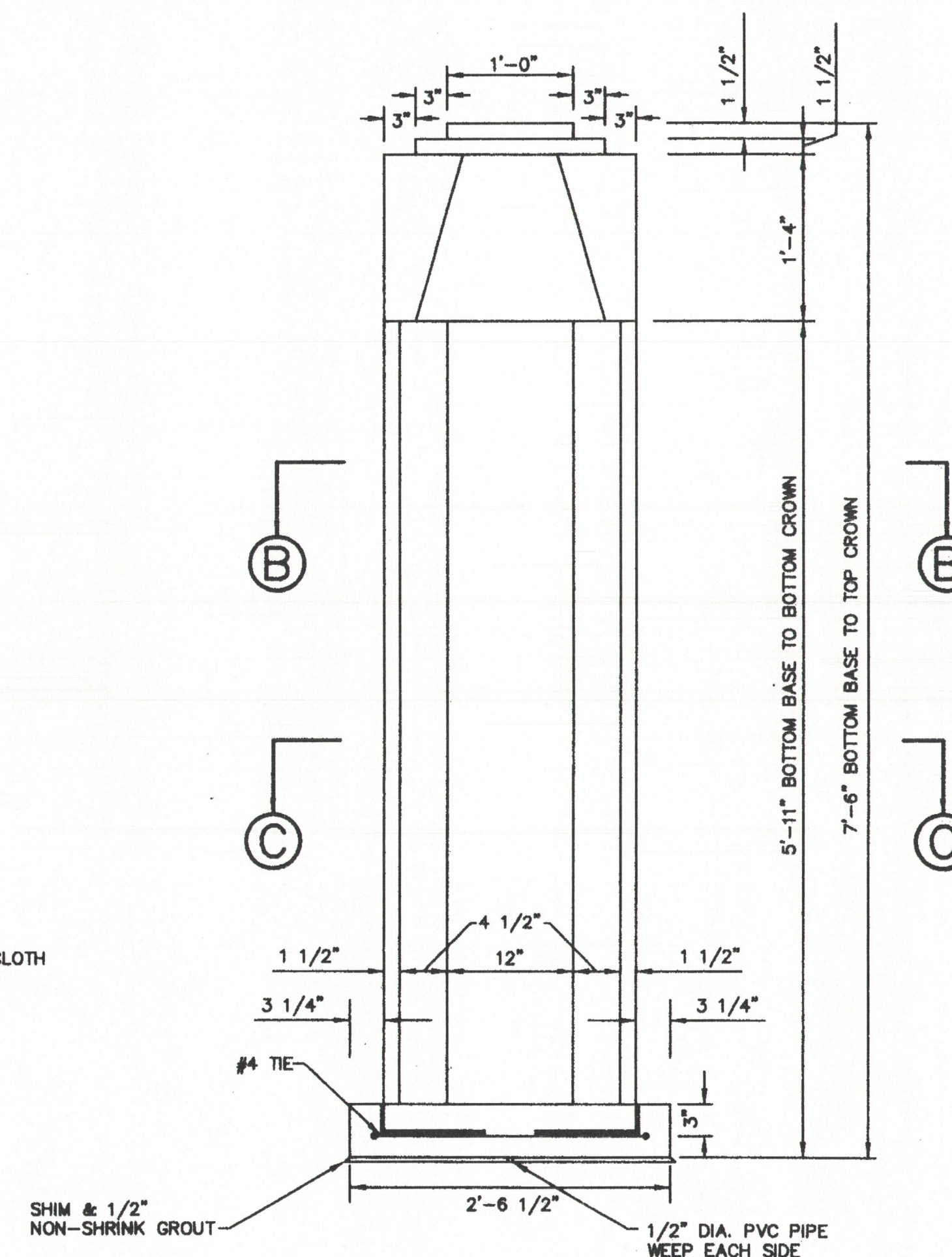
① PLAN VIEW - HARBOR GATE  
SCALE: 1/2" = 1'-0"



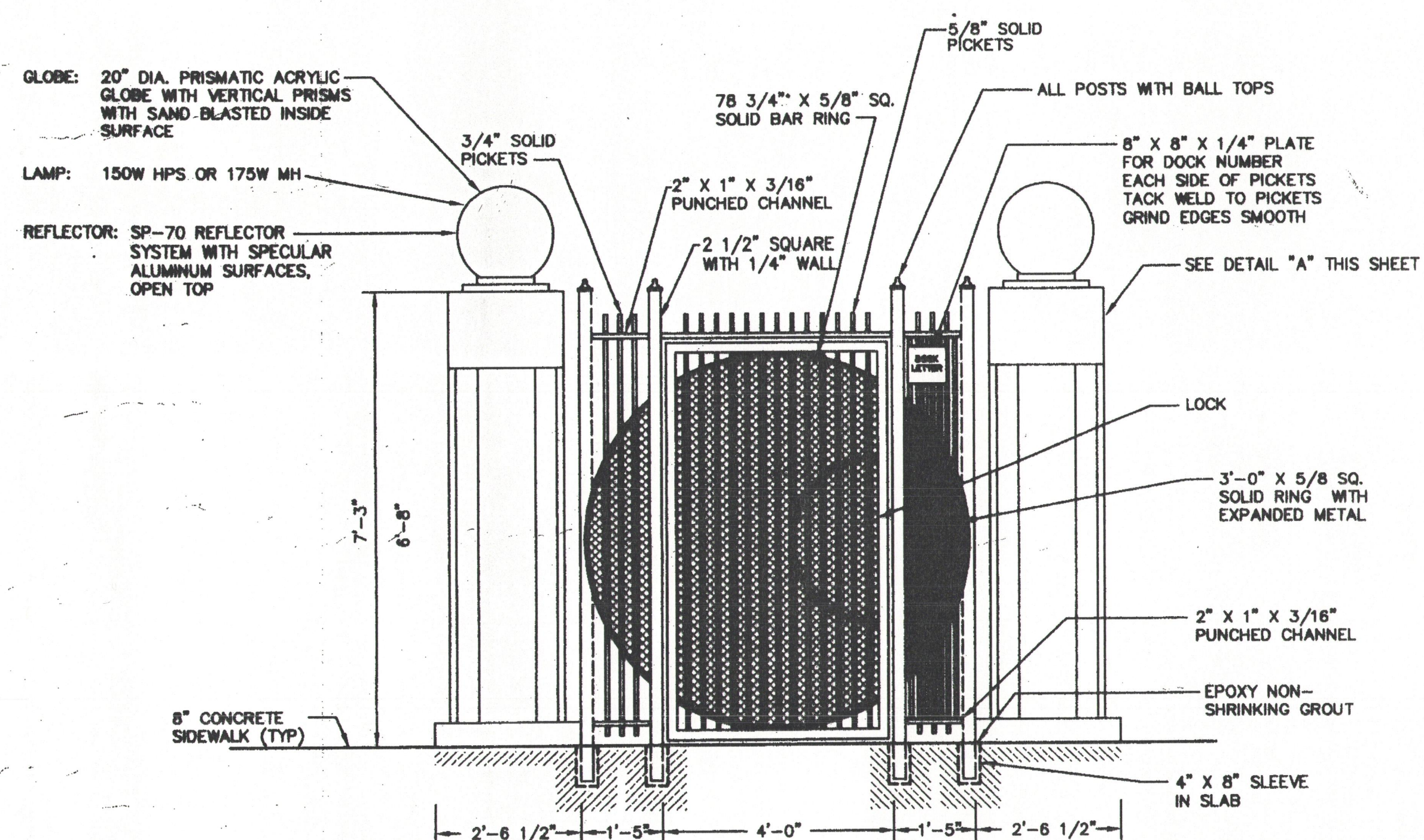
SECTION B-B  
SCALE: 1/4" = 1'-0"



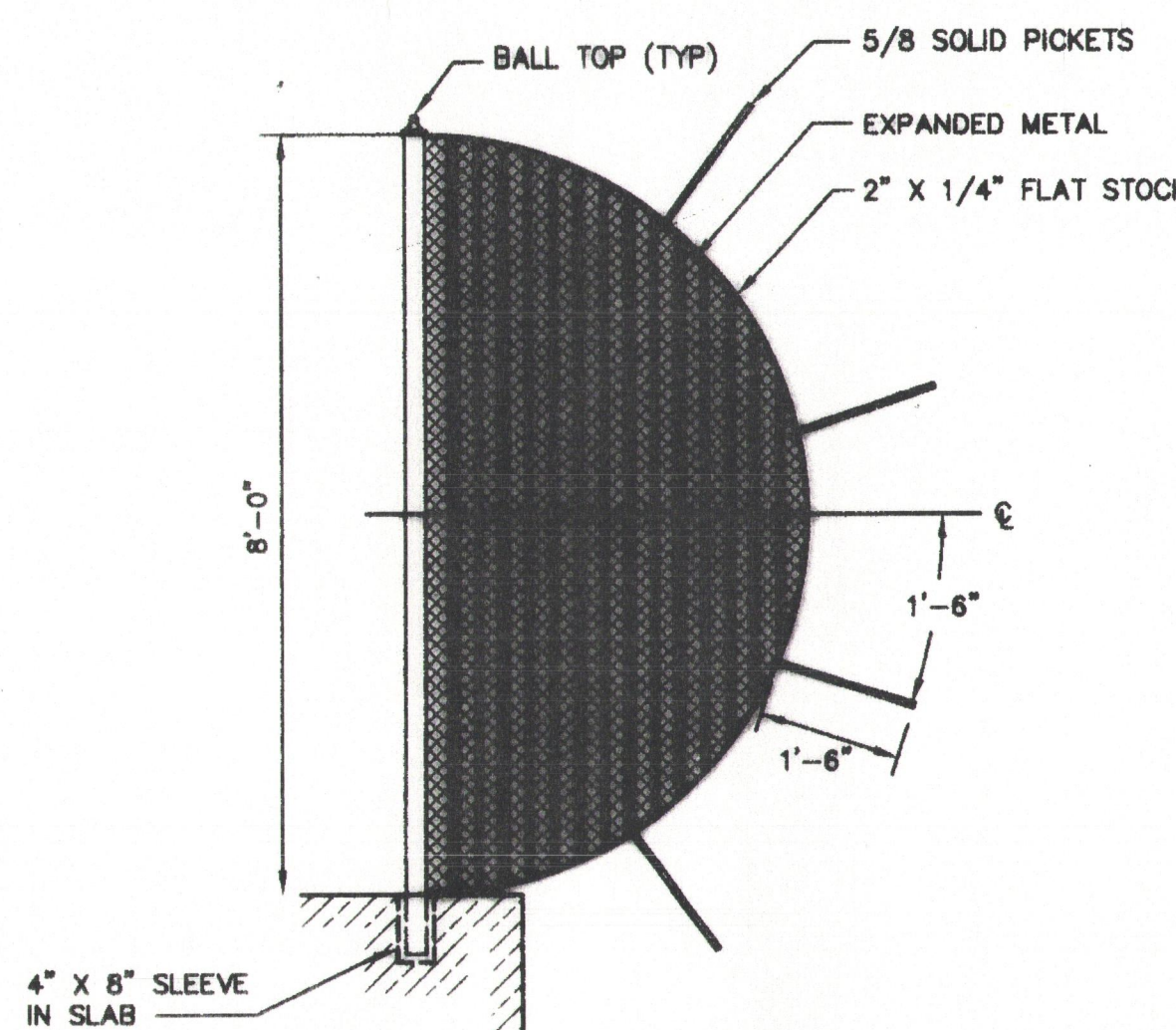
SECTION C-C  
SCALE: 1/4" = 1'-0"



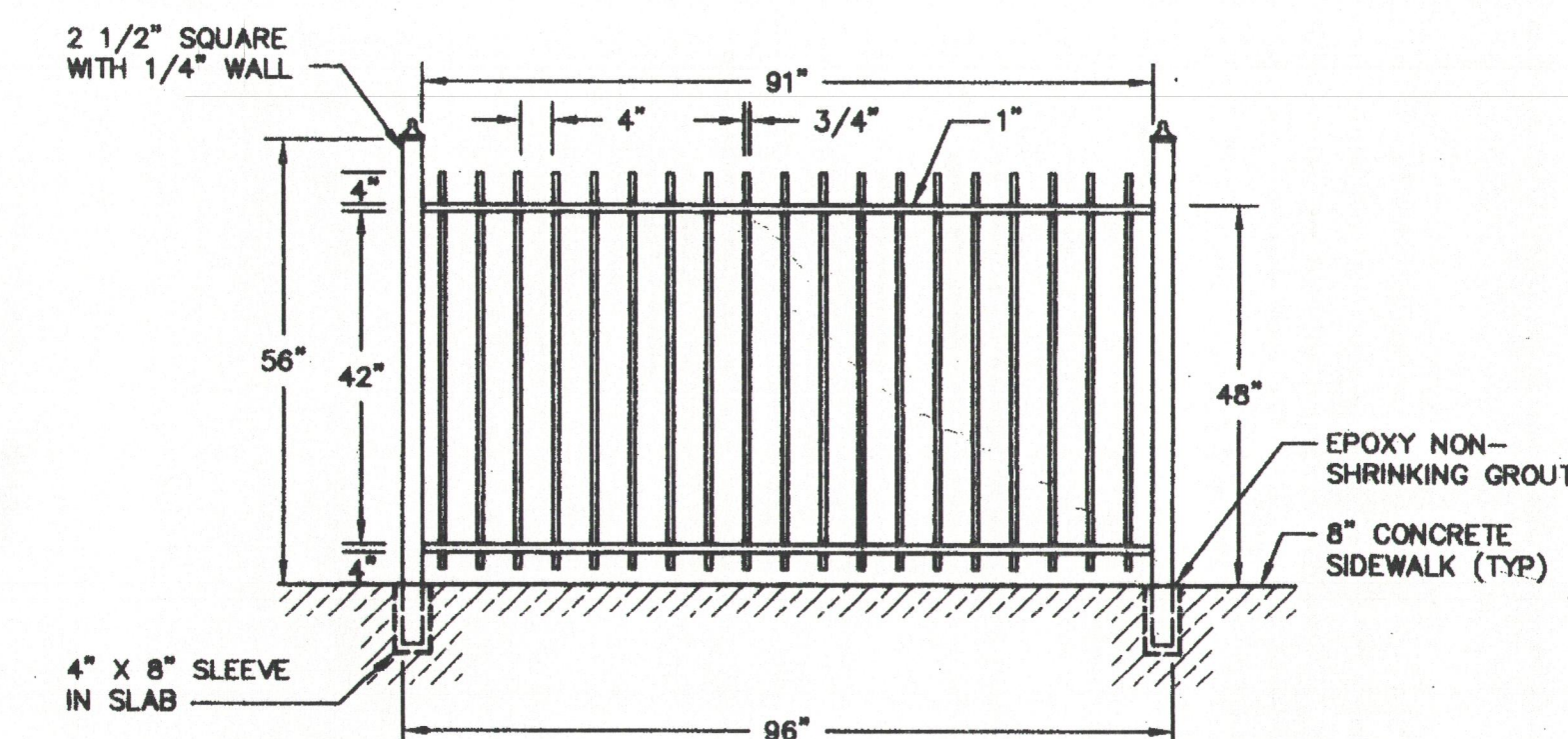
② CONCRETE COLUMN  
SCALE: 1/4" = 1'-0"



SECTION A-A  
SCALE: 1/2" = 1'-0"



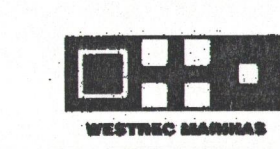
SECTION D-D  
SCALE: 1/2" = 1'-0"



③ FENCE PANEL 4' HIGH X 8" WIDE  
SCALE: 1/2" = 1'-0"

1	11/30/00	FOR CONSTRUCTION	AWM
A	10/12/00	FOR BIDDING	AWM
NO.	DATE	DESCRIPTION	BY
ISSUES / REVISIONS			

CHICAGO PARK DISTRICT



**McCURR, Ltd.**  
consulting engineers  
951-955 West Liberty Drive  
Wheaton, IL 60187-4848 630-665-1170

**DOCK GATES AND FENCE**  
BURNHAM HARBOR  
Chicago, Illinois

JOB NO.	161.0010	DRAWN BY	JG
SCALE	AS NOTED	REVIEWED BY	AWM
		DWG. NO.	.../A/GATE_FENCE
		SHEET	

C7

C:\Land Projects\161.0010\dwg\01\GATE\_FENCE.dwg Thu Nov 30 17:03:06 2000



**Application**  
The LED wall mounted luminaire has light output on one side. Arranged individually or in groups, this is a great design element for a host of lighting applications. For downlight applications only.

**Materials**  
Luminaire housing constructed of die-cast and extruded marine grade, copper free (≤0.3% copper content) A360.0 aluminum alloy  
Matte safety glass  
High temperature silicone gasket  
Mechanically captive stainless steel fasteners

**NRTL** listed to North American Standards, suitable for wet locations  
Protection class IP 65  
Weight: 20.9lbs

**Electrical**  
Operating voltage 120-277V AC  
Minimum start temperature -30° C  
LED module wattage 23 W  
System wattage 27 W  
Controllability 0-10V dimmable  
Color rendering index Ra > 80  
Luminaire lumens 1228 lumens (3000K)  
Lifetime at Ta = 15° C >500,000 h (L70)  
Lifetime at Ta = 50° C 182,000 h (L70)

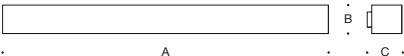
**LED color temperature**  
4000K - Product number + **K4**  
3500K - Product number + **K35**  
3000K - Product number + **K3**  
2700K - Product number + **K27**

**BEGA** can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

**Finish**  
All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

Available colors	Black (BLK)	White (WHT)	RAL:
	Bronze (BRZ)	Silver (SLV)	CUS:

Type:  
BEGA Product:  
Project:  
Modified:



LED wall luminaire · light output on one side					Required wiring box
	LED	A	B	C	
44 418	23 W	48	4 1/8	5	19 537





**Tools Required:**

Philips medium screwdriver  
4mm hex key  
6mm hex key



**Dimensions**

**A:** 48"  
**B:** 4-1/8"  
**C:** 5"



**Protection Class:** IP65

**Weight:** 18.7 lbs.

**Notice to Installer for 44 418:**

1. For attachment to wall over separate small opening linear wiring box (19 537 provided by BEGA).
2. For downlight applications only.
3. Wiring box needs to be recessed into wall and must be flush with the finished surface.
4. In conformance with UL Standard 1598, a silicone based sealant **MUST** be used between luminaire and supporting wall.
5. **WARNING:** LEDs are high quality electrical components. Please avoid touching them directly during installation.

**19 537 - wiring box installation:**

**Hollow (stud) wall construction** - Secure wiring box to wood or metal horizontal blocking as shown in Fig 1. Connect conduit to wiring box (if needed) and pull wires for electrical connections to be made later.

**Poured concrete construction** - Attach wiring box to the concrete form. Connect conduit to wiring box (if needed) and pull wires for electrical connections to be made later. Pour concrete and remove form.

**IMPORTANT: Do not pour concrete directly on to box!**

**44 418 - Luminaire Installation:**

1. Loosen (2) 6mm set screws and remove luminaire main casting off of mounting plate.
2. Feed luminaire wires through rear opening of luminaire and through mounting plate wireway hole.
3. Make supply wiring and luminaire wiring connections inside the small opening linear wiring box:

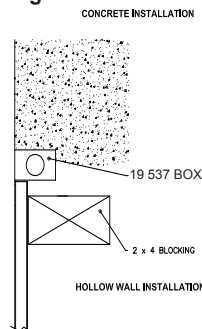
MAIN VOLTAGE SUPPLY WIRE TO BLACK LUMINAIRE WIRE  
NEUTRAL (COMMON) SUPPLY WIRE TO WHITE LUMINAIRE WIRE  
GREEN GROUND WIRE TO GREEN LUMINAIRE WIRE.

Dimming (if applicable):

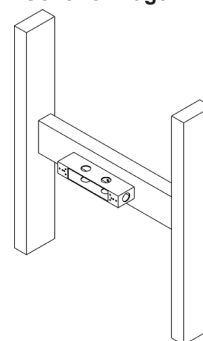
DIMMING CONTROL WIRE (+) TO POSITIVE DRIVER DIM CONTROL WIRE  
DIMMING CONTROL WIRE (-) TO NEGATIVE DRIVER DIM CONTROL WIRE

4. Place a small bead of silicone around the back side of the luminaire base that will come in contact with the finished wall (exterior applications only).
5. Attach and secure mounting plate to wall using hardware by others (minimum screw size 8-32 screws). Orient to make sure down arrow is pointing down.
6. Mount luminaire to mounting plate using (2) 6mm hex screws. Tighten screws evenly.

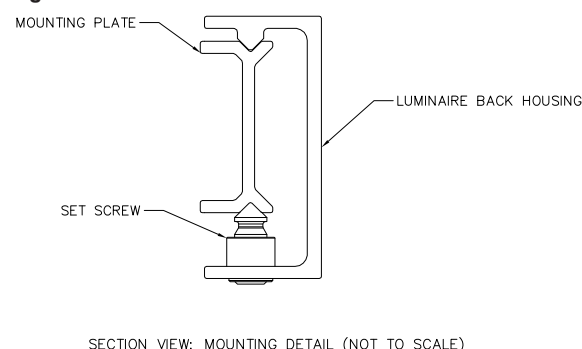
**Fig 1**



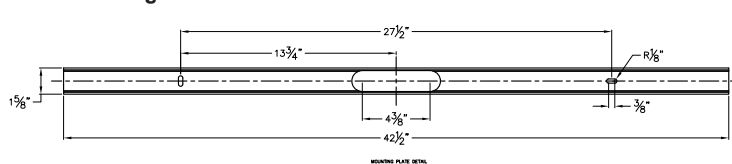
**Fig 2: Generic Image**



**Fig 3**



**Fig 4**



**Relamping/Maintenance**

No relamping necessary.

**Accessories**

Please refer to the appropriate accessory installation sheet for further instruction when applicable.

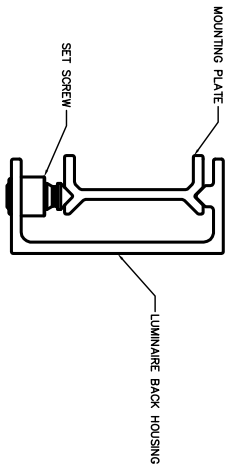
Linear wiring box 19 537

**Replacement Parts**

Description	Part No
Face Plate	FP4418
LED Driver (120-277V)	75989-03
LED replacement (3000K)	LED-0377/830
LED replacement (4000K)	LED-0377/840

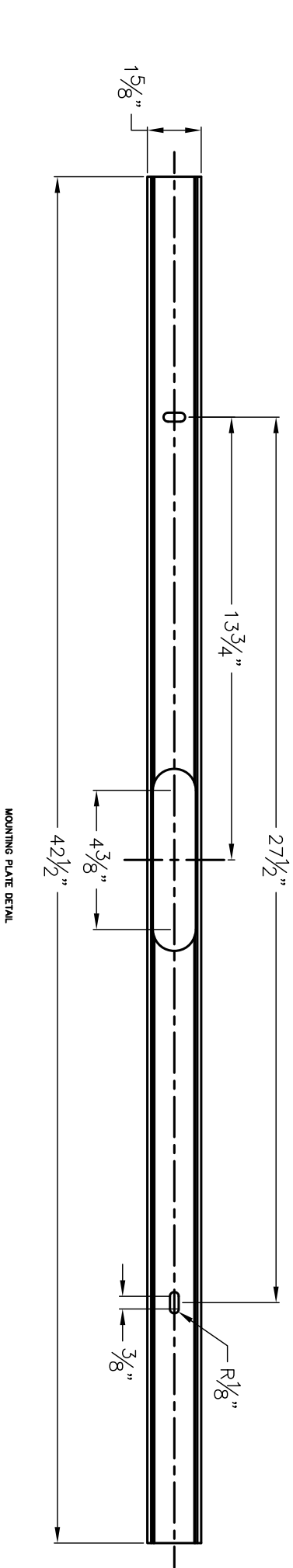
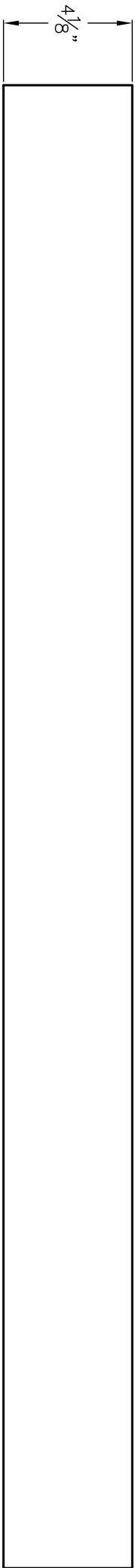
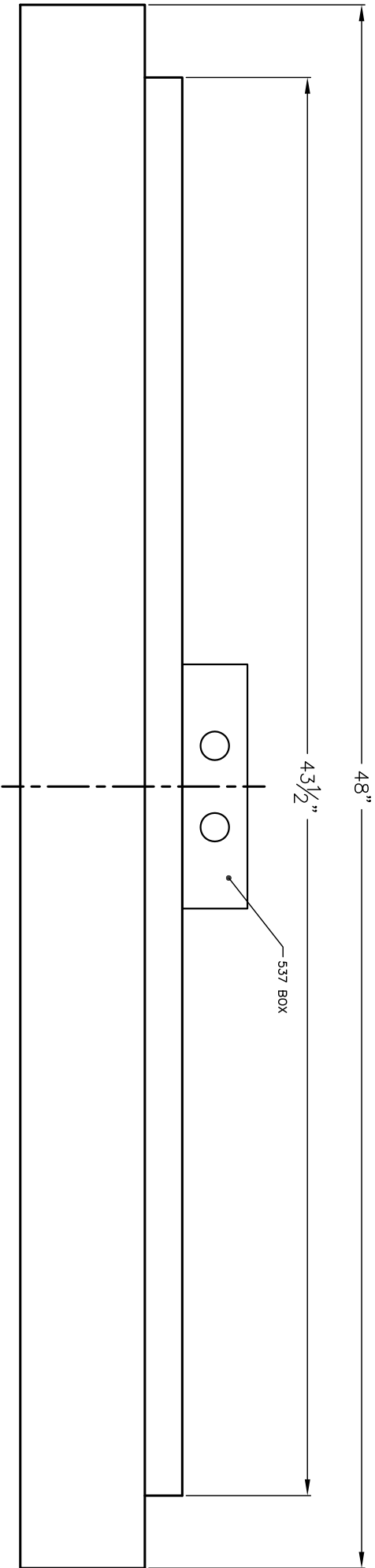
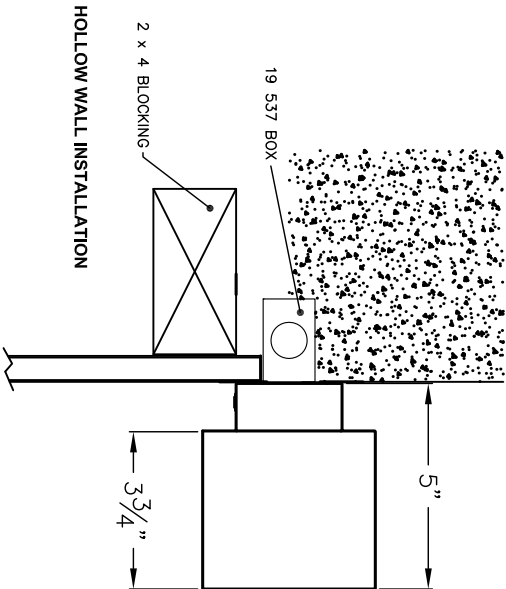
**Lamp:** 39.6W LED

NOTES:  
1. LUMINAIRE # 44 418 – SEE SPECIFICATIONS



SECTION VIEW: MOUNTING DETAIL (NOT TO SCALE)

CONCRETE INSTALLATION



TYPE: \_\_\_\_\_

<b>SUBMITTAL APPROVAL</b>			CAT NO.: 44 418		<b>BEGA</b>
			PROJECT: -		
APPROVED BY: _____		LOCATION: -		1000 Bega Way Carpinteria, Ca. 93013 (805) 684-0533	
SIGNED: _____		DATE: _____			
REV.	DATE	DESCRIPTION	DRAWN: AV      DATE: 7/23/15      File Name: 44418.dxf		

This print contains confidential information which is the property of BEGA U.S. By acception this information, the borrower agrees that it will not be used for any other purpose other than that which is was loaned.

### EK4036S

#### Fix Mount Button Electronic Photo Control



The EK4036S is an electronic photo control that fits in a standard outlet box, post lamp or light fixture. It is made within dimensional guidelines in ANSI C136-24 to assure fit within a large variety of fixtures and features a silicon light sensor with zero-crossing circuit to provide a long service life.

#### Features

- Dusk-to-dawn control of outdoor lighting
- Floodlights and security lighting
- Ideal for LED fixtures totaling 1650 W @ 277 VAC
- Non-drifting silicon light sensor IR filtered for human eye response
- Zero-cross technology helps device withstand severe inrush current and extends relay life
- Exceeds 10,000 ON/OFF operations at full load to match life expectancy of LED fixtures
- All components meet 15-year life requirements

#### Regulatory Listings

- ANSI C136.24 compliant
- UL certified to U.S. (UL773A) & CSA certified to Canadian (C22.2 No. 55-M1986/ TIL A-15) safety standards

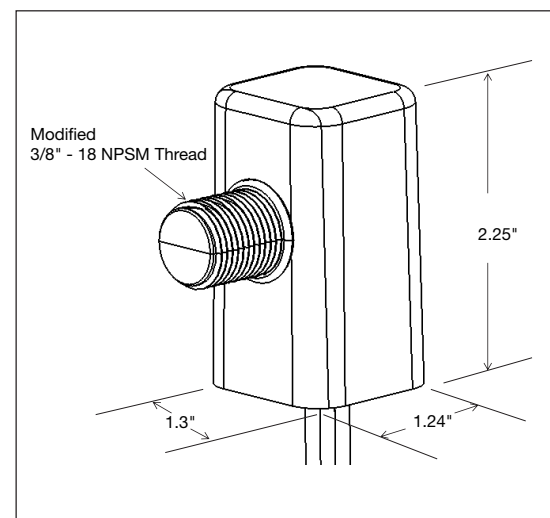
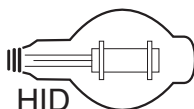
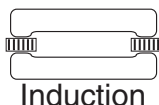
#### Operating Specifications

- Voltage: 105-305 VAC, 50/60Hz
- Dielectric strength: 2500 VAC
- Operating ambient temperature range: -40°F to 158°F (-40°C to 70°C)
- Instant turn ON light level 1.5 fc
- OFF light level: 2.25 fc
- Turn OFF to ON ratio 1.5:1 with 2-5 second delay
- Fail mode: ON
- Power consumption <.5W @ 277 VAC
- 255 Joule MOV surge protection component
- 9" long, 18 awg wire leads

#### Warranty

- Limited 8-year manufacturer's warranty

#### Compatible with



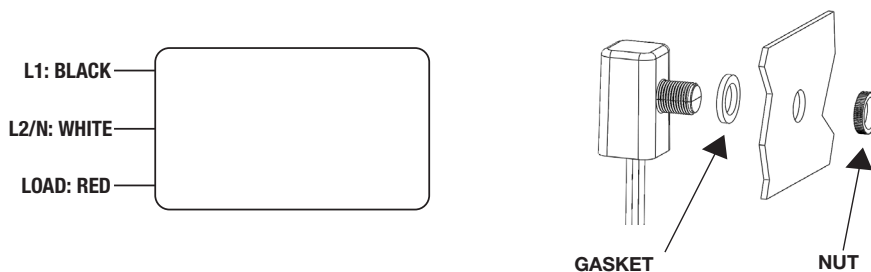
Model Number	Max VAC	Tungsten (Watts)	Ballast (VA)	Electronic Ballast (LED)	Turn ON Foot Candles (fc)	Turn OFF to ON Ratio	Fail Mode
EK4036S	105-305	1000	1800	6 Amps	1.5	1.5:1 with 2-5 second delay (2.25 fc OFF)	ON



## Specification

The photo control shall be an electronic control based on a solid-state photo sensor and relay switch circuit. Switch operation shall have a rating of 1000 Watts tungsten and 1800 Watts ballast at 105-305 VAC. For high inrush LED type fixtures, the photo control switch operation shall have a 6 Amp Electronic Ballast rating at 105-305 VAC. The photo control shall fail in an ON state. The photo control operating voltage shall be clearly identified on the control housing. The photo control shall be equipped with inherent delay action eliminating activation by light flashes. The photo control overall dimensions should meet guidelines in ANSI C136.24 and have 9" long, 18 awg wire leads. The photo control shall consist of industrial grade electronic components; 255 Joule MOV, solid state light sensor, and silver alloy relay contacts. The photo control shall be 100% factory tested and function within specified light levels. The photo control shall be agency certified and tested accordingly. The photo control shall meet agency standards and all other requirements of ANSI C136.24. The photo control shall operate over a temperature range of -40°F to 158°F (-40°C to 70°C). The photo control shall have a manufacturer's limited warranty of 8 years minimum. The photo control shall be the electronic dusk-to-dawn type, Intermatic model EK4036S.

## Diagrams



## Limited Product Warranty

### (1) What is Covered By This Limited Warranty?

Intermatic Incorporated ("Intermatic") warrants Intermatic's EK4036S ("Product") to be free from defects in material or workmanship for a period of eight (8) years from date of purchase. This warranty is extended to the owner of the light fixture on which the photo control is installed only and it is not transferable ("purchaser"). If the purchaser discovers a defect in material or workmanship, the purchaser must promptly submit a warranty claim. Upon a determination by Intermatic that the Product is defective, Intermatic shall correct any defect in material or workmanship by replacing the Defective Product. Any repair to Product, including both parts and labor, shall be at Intermatic's expense. The foregoing remedy is the purchaser's exclusive remedy for a breach of warranty. The product must be installed in the appropriate application in complete accordance with the installation instructions. The Product must not be opened, modified, exposed to extreme heat or cold, submerged or subjected to abnormal use or service. Product failures due to damage by accident, dropping, or abuse in handling, acts of God, or any negligent use, are not covered by this warranty. Intermatic shall determine, in its sole discretion, whether any Product returned by a purchaser has been used in accordance with its instructions, is an appropriate model for the purchaser's use thereof, and whether the Product is defective.

### (2) Disclaimer of Warranty

THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER EXPRESSED WARRANTIES. TO THE EXTENT ALLOWED BY LAW, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION OF THIS LIMITED WARRANTY.

### (3) Limitation of Remedies

IN NO CASE SHALL INTERMATIC BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES BASED UPON BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT TORT, OR ANY OTHER LEGAL THEORY. SUCH EXCLUDED DAMAGES INCLUDE, BUT ARE NOT LIMITED TO, DAMAGE TO SOFTWARE, LOSS OF DATA, LOSS OF PROFITS, LOSS OF SAVINGS OR REVENUE, LOSS OF USE OF THE PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF ANY SUBSTITUTE EQUIPMENT, FACILITIES OR SERVICES, DOWNTIME, THE CLAIMS OF THIRD PARTIES INCLUDING CUSTOMERS, DAMAGE TO PROPERTY AND PERSONAL INJURY. SOME STATES DO NOT ALLOW LIMITS ON WARRANTIES OR ON REMEDIES FOR BREACH IN CERTAIN TRANSACTIONS, IN SUCH STATES, THE LIMITS IN THIS PARAGRAPH AND IN PARAGRAPH (2) MAY NOT APPLY.

### (4) Time Limit for Bringing Suit

No action arising out of any claimed breach of warranty may be brought more than one year after the cause of action has occurred.

### (5) No Other Warranties

Unless modified in writing signed by both parties, this agreement is understood to be the complete and exclusive agreement between the parties, superseding all prior agreements, oral or written, and all other communications between the parties relating to the subject matter of this agreement. No employee of Intermatic or any other party is authorized to make any warranty in addition to those made in this agreement. This warranty is made by: Intermatic Incorporated/After Sales Service, 7777 Winn Rd., Spring Grove, IL. 60081-9698/815-675-7000 <http://www.intermatic.com>

### (6) Claim Procedure

The warranty service is available by either (a) returning the product to the dealer from whom the unit was purchased, or (b) mailing the product, along with proof of purchase, postage prepaid, to the authorized service center listed below.

Address all communications and products returns to:

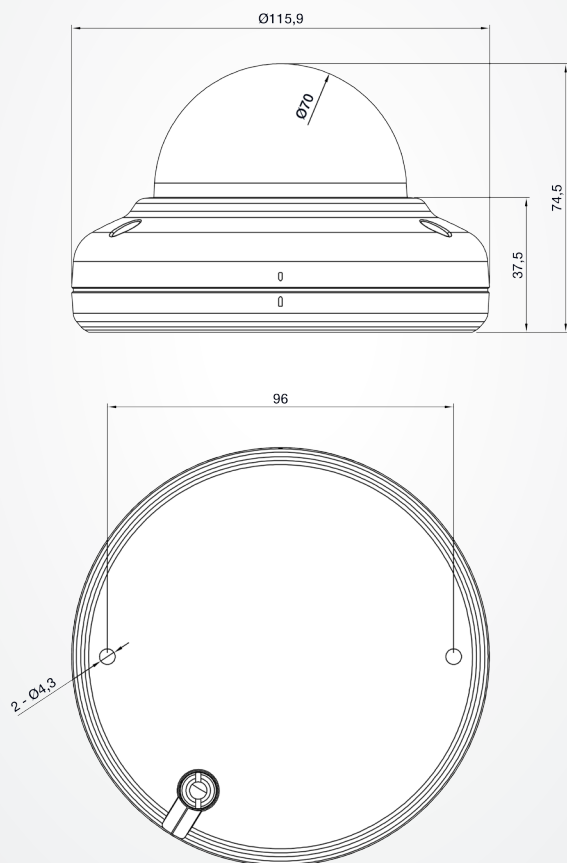
Intermatic Warranty Coordinator

7777 Winn Road Spring Grove, Illinois 60081-9698, Fax: 815-675-7055

# 1080p HD IR Compact Camera

## 2.1 Megapixel IP Micro Dome with IR

## Video Security



Amano reserves the right to change specifications without prior notice. Revision 1012

### WARRANTY:

Amano warrants this product against defects in material and workmanship under normal use and service for 36 months from the date of shipment. Full warranty statement available on request.

## SPECIFICATIONS

### CAMERA

Image Sensor	SONY EXMOR 1/2.9" 1080p CMOS
Effective Pixels	1920 x 1080
AGC Control	Auto
Minimum Illumination	Color: 0.5 Lux / B/W: 0 Lux (IR LED On)
Lens	3.6mm, F2.0
Field of View	Horizontal: approx. 87°; Vertical: approx. 47°
Shutter Time	1/10,000s to 1/2s
Noise Filter	Supported (0 - 3)
Day & Night	True day & night (removable IR-cut filter)
Focus Assist	Supported
BLC	On (possible to designate zone) / off
Wide Dynamic Range	Digital WDR
Exposure Adjustment	+1.0, +0.6, +0.3, 0, -0.3, -0.6, -1.0 EV
IR LEDs	IR LED x 8 (850nm)
IR Range	10m (30IRE)
SMART IR	Supported
ONVIF Compliance	Profile S, Profile G

### VIDEO

Compression Format	H.264 baseline, main, high profile (MPEG-4 Part 10/AVC), MJPEG (Motion JPEG)
Number of Streams	Dual stream, configurable streams in H.264, MJPEG
Resolution 16:9 mode	1920 x 1080, 1280 x 720, 1120 x 630, 960 x 540, 800 x 450, 640 x 360, 480 x 270, 320 x 180
Resolution 4:3 mode	SXGA(1280x960), XGA(1024x768), SVGA(800x600), PAL(720x576), NTSC(720x480), VGA(620x480), QVGA(320x240)
Frame Rate	Max 30fps in all resolution
Smart Bitrate Control	Supported (works in VBR mode)
Orientation Control	Flip/mirror/corridor mode(-90°, +90°)
Burnt-in Text (Digital)	Time stamp and text caption overlay
Privacy Mask	4 configurable regions
Flicker Control	Normal, 50Hz, 60Hz
Analog Output	None

### AUDIO

Input/Output	None
--------------	------

### PERIPHERAL

Digital Input/Output	None
Ethernet Standard	10/100 BaseT
IP	IPv4, IPv6
Protocol	QoS Layer 3 DiffServ, TCP/IP, UDP/IP, HTTP, HTTPS, FTP, RTSP, RTP, RTCP, RTP/UDP, RTP/TCP, mDNS, UPnP™, SMTP, DHCP, DNS, DynDNS, NTP, SNMPv1/v2c/v3(MIB-II), IGMP, ICMP, SSLv2/v3, TLSv1, SRTP, RTM
Security	HTTPS(SSL), IP filtering, multi-level access with password protection

### EDGE STORAGE

Storage	1x MicroSD/MicroSDHC memory card slot (card not included)*
Recording Types	Continuous recording; instant recording; search & download Event recording: search of event logs; playback; download

### ELECTRICAL

Power Source	DC 12V, PoE
Power Consumption	4.2W @ DC 12V

### ENVIRONMENTAL

Operating Temperature	-20°C - 50°C (-4°F - 122°F)
Operating Humidity	Up to 85% RH (non-condensing)

### MECHANICAL

Material	Aluminum Die-Casting
Color	Ivory
Weight	300g (0.66 lbs)

### VIDEO ANALYTICS (INCLUDED)

Analytics Engine	VCA Technology's advanced tracking algorithm with rich library of detection behaviors; some engines require additional licensing
User Interface	Web browser interface
Detection Zones	40 zones, multi-segment polygons and lines, 60 rules in total

### ORDERING INFORMATION

CAO-EDH-62-11IR	1080p HD IR Compact Dome Camera
-----------------	---------------------------------

### MOUNTING HARDWARE OPTIONS

PMC-362	Pendant Mount Cap
WMB-3000P	Wall Mount Bracket
CMP-3000P	Ceiling Mount Bracket

# 1080p HD IR Compact Camera

2.1 Megapixel IP Micro Dome with IR

## Video Security

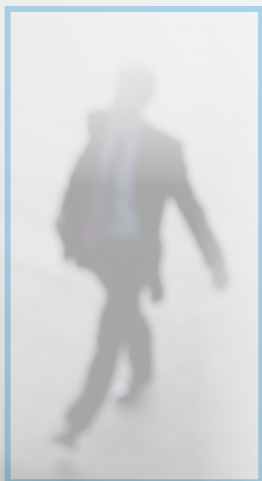


Amano high-definition indoor cameras offer a superior solution to every day surveillance needs.

The latest design with an advanced feature set, embedded Video Analytics and infrared illumination in a small form factor provide uncompromised security in a reliable and cost-effective package.

### Features

- Full HD 1080p 30fps
- H.264 and MJPEG compression
- True day/night and WDR
- Built-in IR illuminator with 10m (33ft) viewing distance
- Embedded VCA technology Video Analytics
- MicroSD/SDHC memory card slot
- Power over Ethernet (IEEE 802.3af)





# Amano WMK

## Wiegand Metal Keypad Reader

### KEY FEATURES

- ◆ Communications distance of up to 500 feet (150 m).
- ◆ Suitable for OEM developments.
- ◆ Multiple Wiegand output formats (26-bit and 44-bit).
- ◆ Read capability from various tag types: Slim Tags, Omega Tags, Amano Trinary Tags (1074 and 2074) and HID Tags (H10301, H10302 and H10304).
- ◆ A single tri-colored Red, Green or Amber Status LED.
- ◆ A 4 kHz piezo-electric Buzzer.
- ◆ 12-Button alphanumeric keypad
- ◆ An external Wiegand communications bus interface.
- ◆ Dual input voltage types supported (5 V DC and 12 V DC).
- ◆ Programmable facility code for use with PIN-code entry.



**Amano WMK Metal Keypad Reader**

### PHYSICAL SPECIFICATIONS

Dimensions (H x W x D)	5.59" x 2.99" x 1.06" (142mm x 76mm x 27mm)
Weight	18 oz (513g)
Housing Material	Die-cast Zinc Alloy.
Color	Satin Nickel powder coated

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-13°F to +140°F (-25°C to +60°C)
Storage Temperature	-40°F to +176°F (-40°C to +80°C)
Humidity Range	0 to 95% relative humidity at +104°F (+40°C) non-condensing.
CE Approval	EN301 489-3, EN301 489-1 and EN300 330-1.
FCC Approval	Pending.
Dust & Splash Resistance	Designed to work in harsh (industrial) indoor or outdoor environments similar to IP53.

# AMANO®

## ELECTRICAL SPECIFICATIONS

### POWER

Input Voltage Rating	5 V DC to 16 V DC, polarity sensitive.	
Power Requirements	Current (mA)	Power (W)
Supply Voltage 5 V DC all indicators on	50	0.25
Supply Voltage 12 V DC all indicators on	50	0.60
Permissible Input Supply Ripple Voltage (Max)	1 V pp at 50 Hz	
Power Input Protection	Reverse polarity protection is provided on the Reader.	

### PIN-CODES

Type	5 Digit codes in the range 00000 to 65535. 4 Digit codes in the range 0000# to 9999#.
------	--

### WIEGAND BUS

Electrical Interface	'0' and '1' data streams.
Tag Information Data Format	44-bit Wiegand or 26-bit Wiegand.
Key Information Data Format	26-bit Wiegand only.

### INPUTS

Quantity	4
Type	Dry Contact.
Function	Operation of the Buzzer, LED and Scanner Inhibit.

## USER INTERFACES

### BUZZER

Volume & Tone	4 kHz piezo-electric, single volume, single tone.
---------------	---

### KEYPAD

Keys	12 Alphanumeric keys.
------	-----------------------

### STATUS INDICATOR

Status LED	Tri-colored Red, Green or Amber (Default) (externally visible).
------------	---

## ORDERING INFORMATION

WMK900-1-0-AC Amano Metal Keypad Proximity Card Reader (Multi-mode)

Amano reserves the right to change specifications without prior notice.



AMANO WMK-900 Mounting Plate





# Magnetic Lock







# Magnetic Lock



# Wiring Access

