

# Product Catalog 2012 Bollards • Cleats • Cleat Seat Bench • Trash Receptacle Bollard



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### MOORING BOLLARDS

## To Engineers/Architects -

A complete specification section for inclusion into your contract documents can be provided upon <u>request</u>.

## PART 2 – PRODUCTS

2.1 Mooring bollards to be provided by: J.C. MacElroy Company, Inc.,

Phone: (732) 572-7100, Fax: (732) 572-7112, E-mail: info@macelroy.com,

Website: <a href="www.macelroy.com">www.macelroy.com</a>

## 2.2 MATERIALS

## A. Model – CSB-1:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

### B. Model – CSB-2A:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

## C. Model – CSB-3J:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

## D. Model – CSB-4:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

## E. Model – CSB-4A:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

## F. Model – CSB-5:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

### G. Model – CSB-6:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

## H. Model – CSB-7:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

## I. Model – CSB-8:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

## J. Model – CSB-9:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

## K. Model – CSB-10A:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

### L. Model – CSB-12:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

## M. Model – CSB-14:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

### N. Model – CSB-18:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

## O. Model – CSB-39:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

### P. Model – CSB-68:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

## Q. Model – CSB-69:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

## R. Model - CSB-70:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

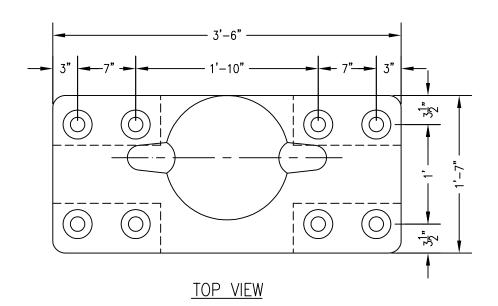
### S. Model – CSB-101:

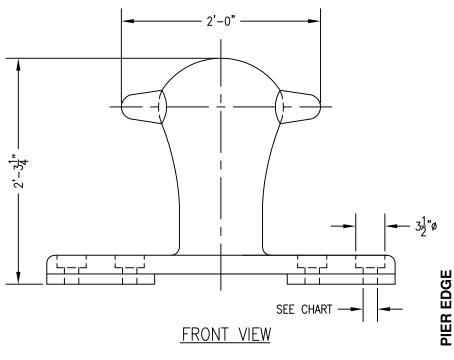
- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

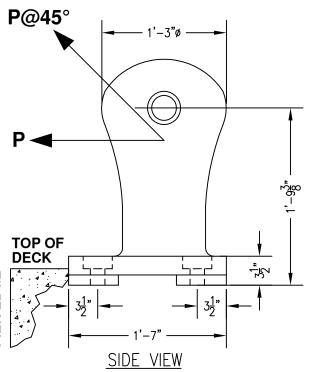
## 2.3 FINISH

- A. Standard finish is one coat of metal primer unless specified otherwise.
- B. Where mooring bollard is required by Engineer to be painted, painting of bollard shall be performed in conformity with the specification.

	DESIGN CRITERIA								
BOLLARD TYPE	BOLLARD CASTING COMPRESSIVE STRENGTH GRADE DIA. CORE MAX. CASTING MAX. BOLT DESIGN LOADING @45° CONCRETE GRADE DIA. CORE MAX. CASTING MAX. BOLT DESIGN LOADING @45° CITICAL DESIGN LOADING @45° CITICAL DESIGN ELEMENT								
CSB-1	65/35	f 'c =4 ksi	A307	1.50"	1.75"	68.0 TONS	43.7 TONS	43.7 TONS	BOLTS







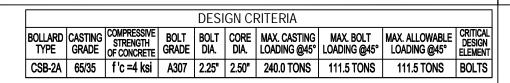
J. C. MacElroy Co. Inc. 91 ETHEL ROAD WEST, PISCATAWAY, N.J. 08855

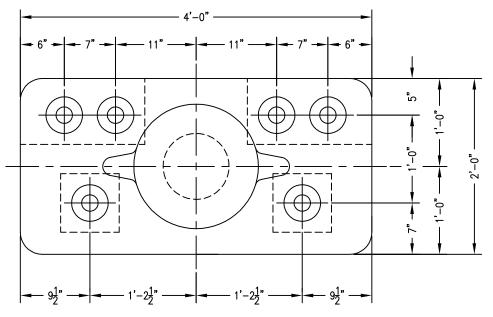
Website: WWW.Macelroy.com - E-mail: info@Macelroy.com Phone: (800) 622-3576

TITLE

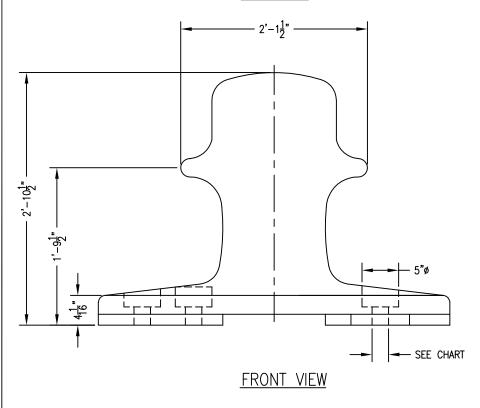
CAST STEEL BOLLARD CSB-1

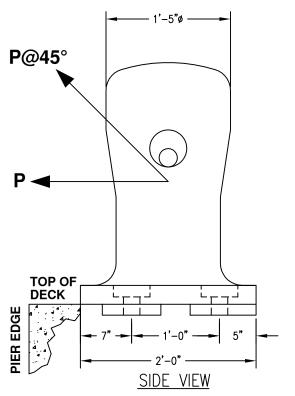
ENGINEER BS DRAWN BY EK снк'ед ву МЈМ DWG. NO. A-00-1459 🕜  $_{\text{DATE}} 1/8/04$ SCALE N.T.S.





## TOP VIEW





## **MacElroy**

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Website: WWW.Macelroy.com - E-mail: info@Macelroy.com Phone: (800) 622-3576

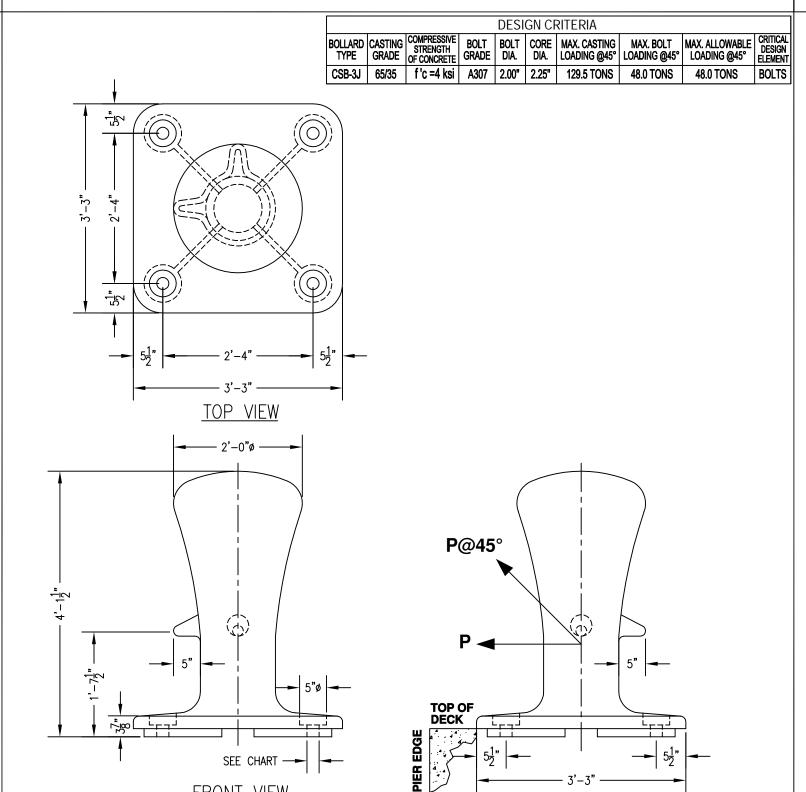
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CAST STEEL BOLLARD CSB-2A

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 CHK'ED BY
 MJM
 ENGINEER
 BS

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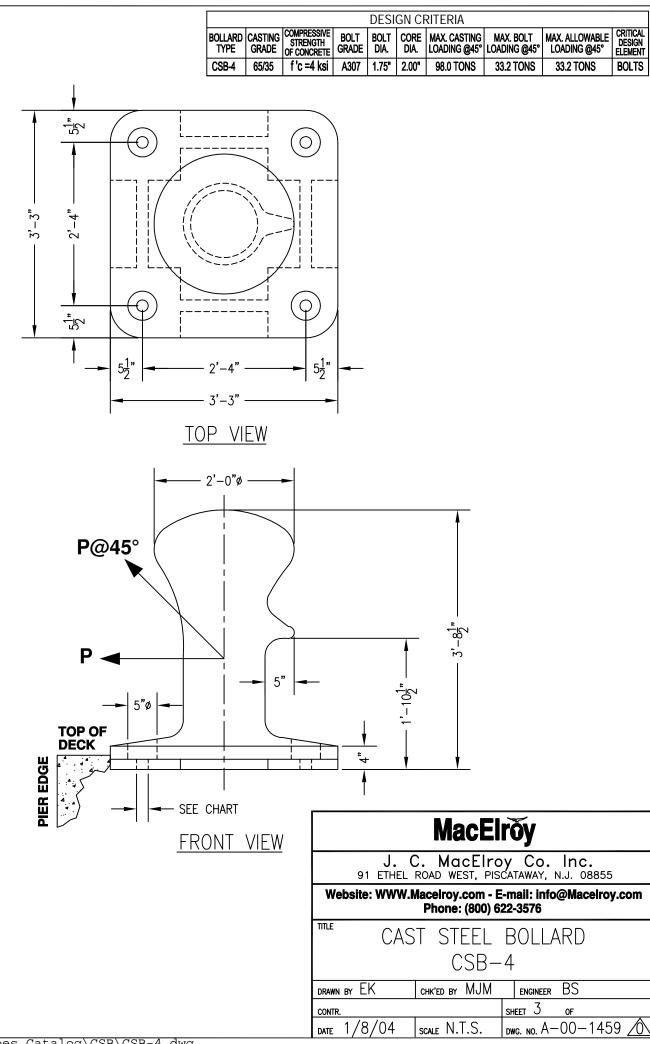
FRONT VIEW SIDE VIEW **MacElroy** 

> J. C. MacElroy Co. Inc. 91 ETHEL ROAD WEST, PISCATAWAY, N.J. 08855 Website: WWW.Macelroy.com - E-mail: info@Macelroy.com Phone: (800) 622-3576 TITLE CAST STEEL BOLLARD

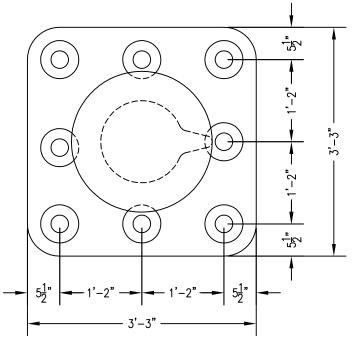
- 3'-3" -

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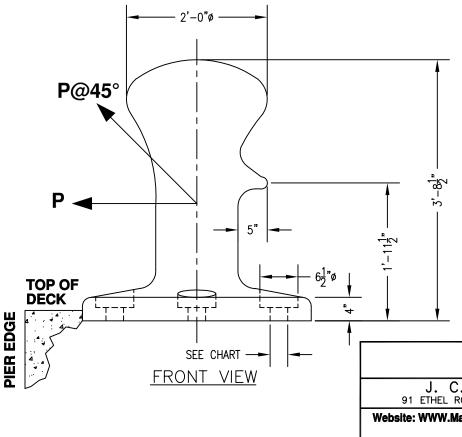
SEE CHART -



	DESIGN CRITERIA								
BOLLARD CASTING STRENGTH BOLL BOLL CORE MAX. CASTING MAX. BOLL MAX. ALLOWABLE DESIGN							CRITICAL DESIGN ELEMENT		
CSB-4A									



TOP VIEW



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CAST STEEL BOLLARD
CSB-4A

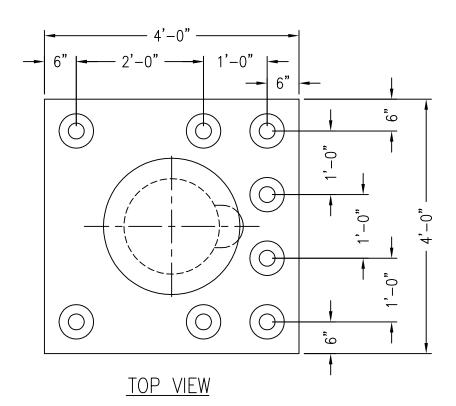
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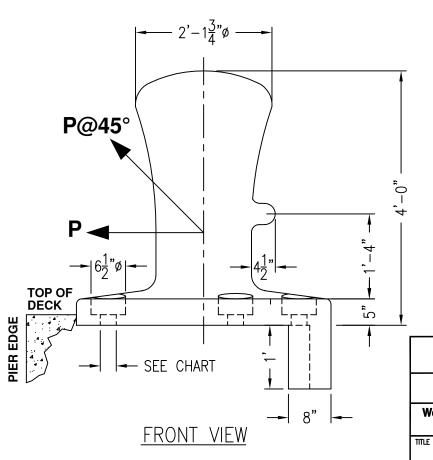
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 DWG. NO. A - 00 - 1459 \( \sqrt{0} \)

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	DESIGN CRITERIA								
BOLLARD TYPE	BOLLARD CASTING COMPRESSIVE STRENGTH GRADE DIA. DIA. CORE LOADING @45° LOADING @45° LOADING @45° CRITICAL DESIGN ELEMENT								
CSB-5	0.00.00.00								





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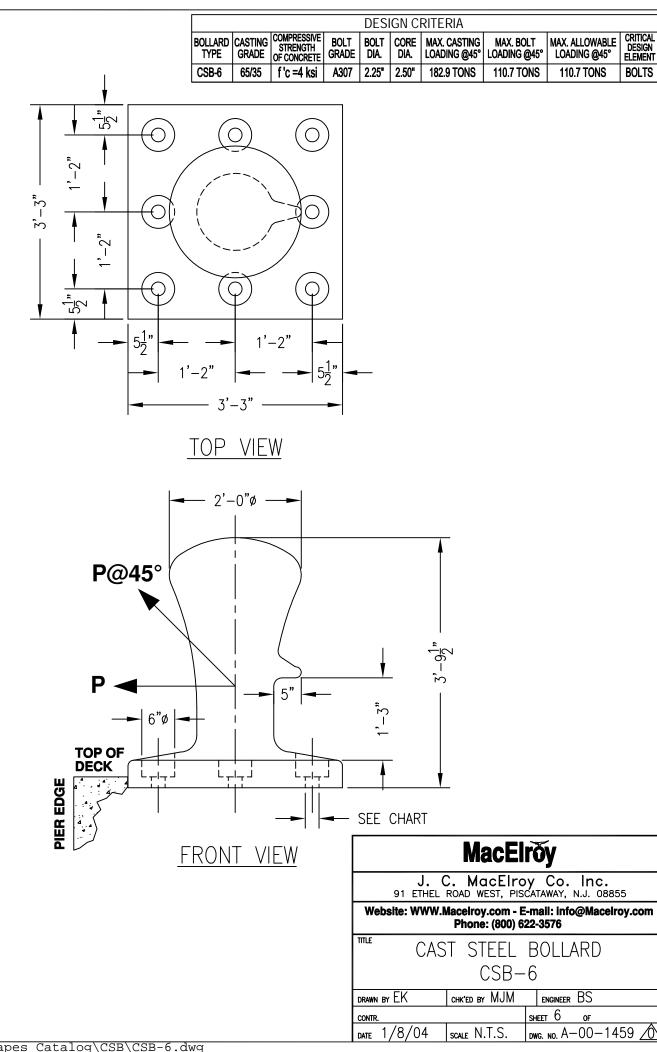
Website: WWW.Macelroy.com - E-mail: info@Macelroy.com Phone: (800) 622-3576

CAST STEEL BOLLARD
CSB-5

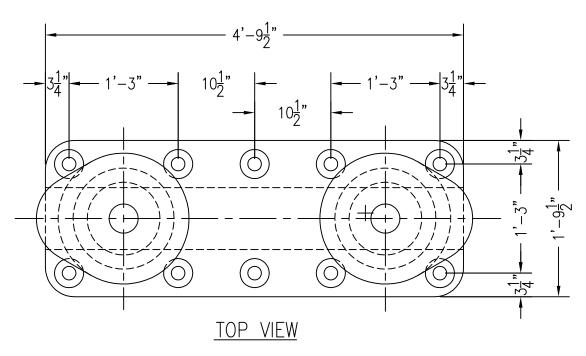
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 ENGINEER
 BS

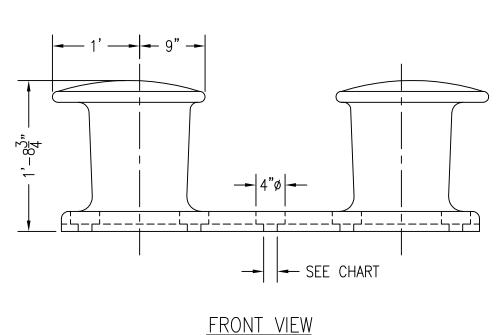
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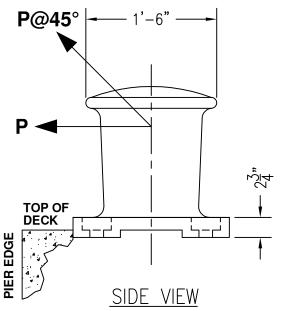
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 SCALE N.T.S.
 DWG. NO. A-00-1459



	DESIGN CRITERIA								
BOLLARD TYPE	CRATING	COMPRESSIVE STRENGTH OF CONCRETE	BOLT GRADE	BOLT DIA.	CORE DIA.	MAX. CASTING LOADING @45°	MAX. BOLT LOADING @45°	MAX. ALLOWABLE LOADING @45°	CRITICAL DESIGN ELEMENT
CSB-7	65/35	f'c =4 ksi	A307	1.625"	1.875"	67.4 TONS	26.8 TONS	26.8 TONS	BOLTS







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TITLE

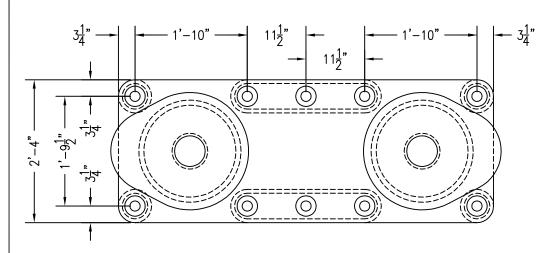
CAST STEEL BOLLARD CSB-7

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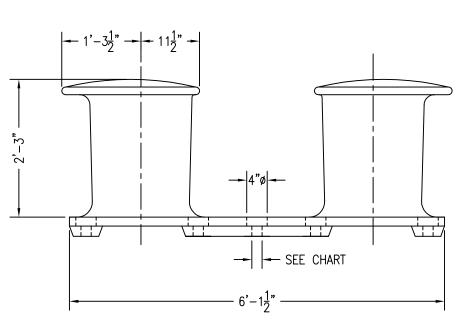
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	DESIGN CRITERIA								
BOLLARD TYPE	CDADE	COMPRESSIVE STRENGTH OF CONCRETE	BOLT GRADE	BOLT DIA.	CORE DIA.	MAX. CASTING LOADING @45°	MAX. BOLT LOADING @45°	MAX. ALLOWABLE LOADING @45°	CRITICAL DESIGN ELEMENT
CSB-8	65/35	f'c =4 ksi	A307	1.75"	2.00"	121.2 TONS	30.0 TONS	30.0 TONS	BOLTS

P@45°



TOP VIEW



TOP OF DECK
SIDE VIEW

FRONT VIEW

## **MacElroy**

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TITLE

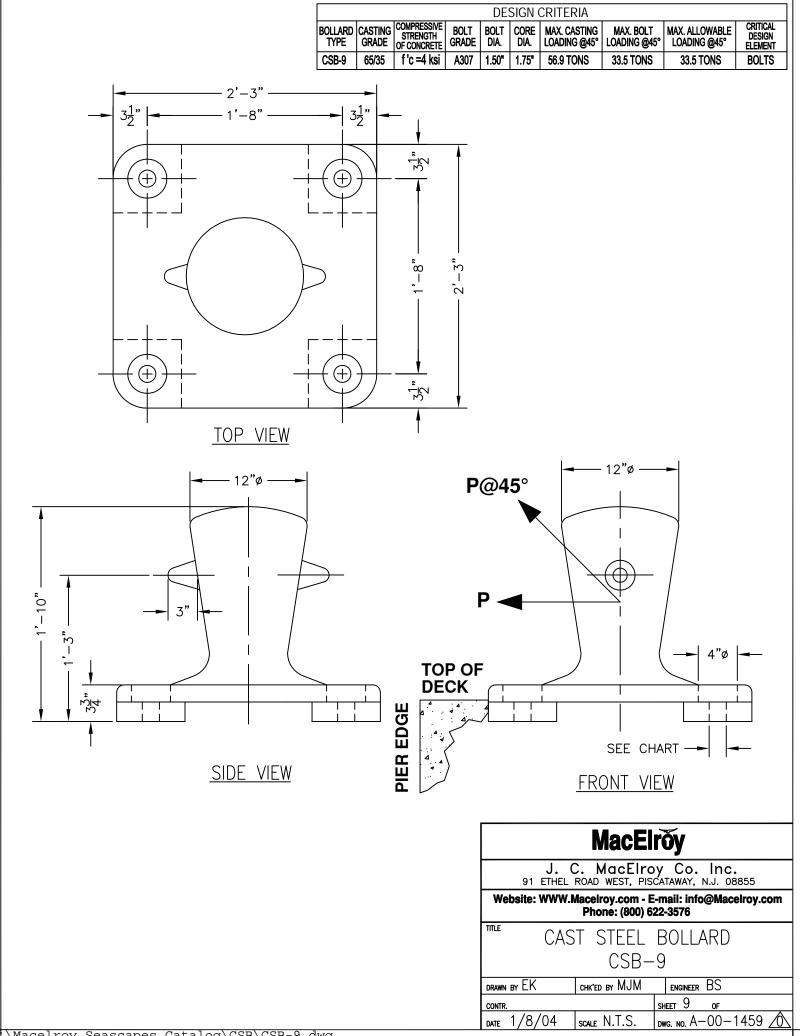
CAST STEEL BOLLARD CSB-8

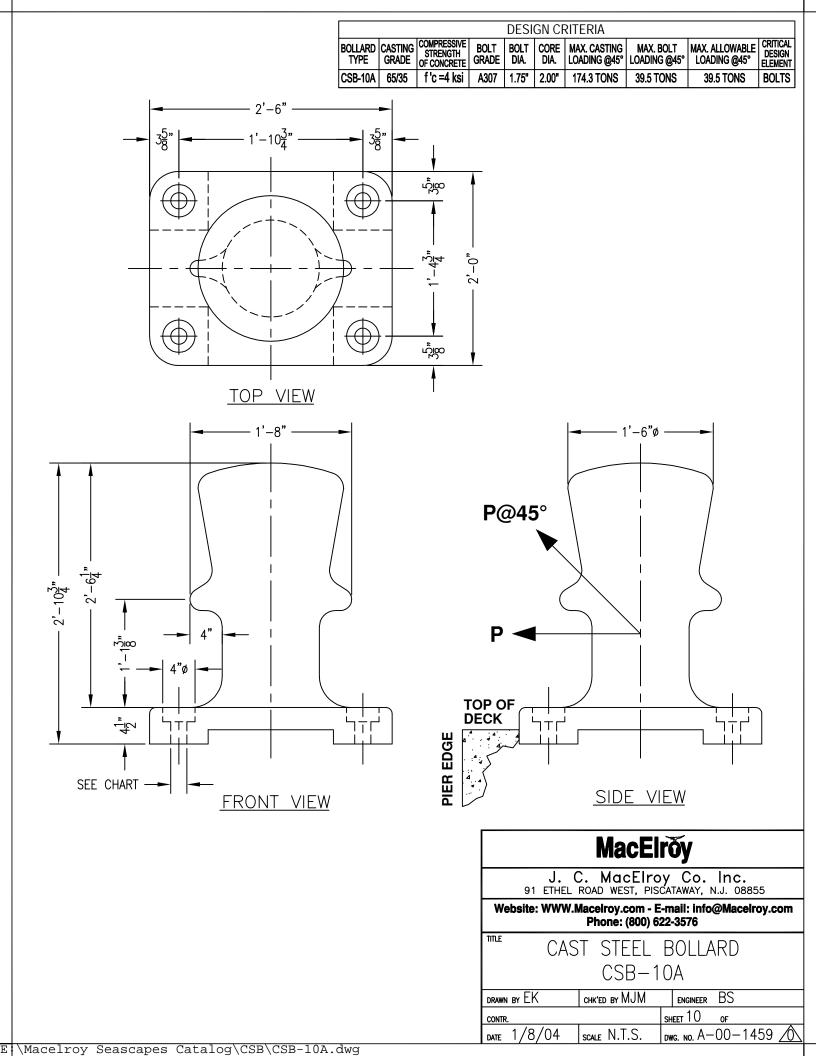
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 ENGINEER BS

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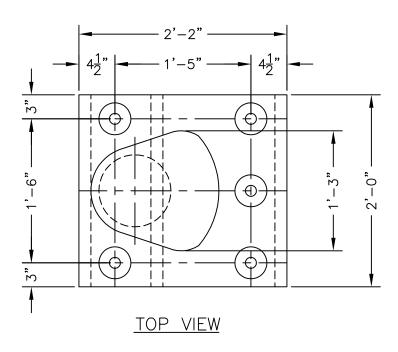
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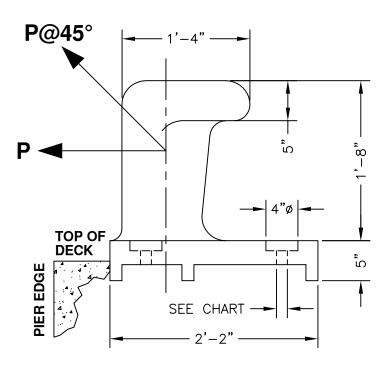
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	DESIGN CRITERIA									
BOLLARD TYPE	CASTING	COMPRESSIVE STRENGTH OF CONCRETE	BOLT GRADE	BOLT DIA.	CORE DIA.	MAX. CASTING LOADING @45°		MAX. ALLOWABLE LOADING @45°	CRITICAL DESIGN ELEMENT	
CSB-12	65/35	f'c =4 ksi	A307	1.25"	1.50"	93.8 TONS	33.9 TONS	33.9 TONS	BOLTS	





FRONT VIEW

## **MacElroy**

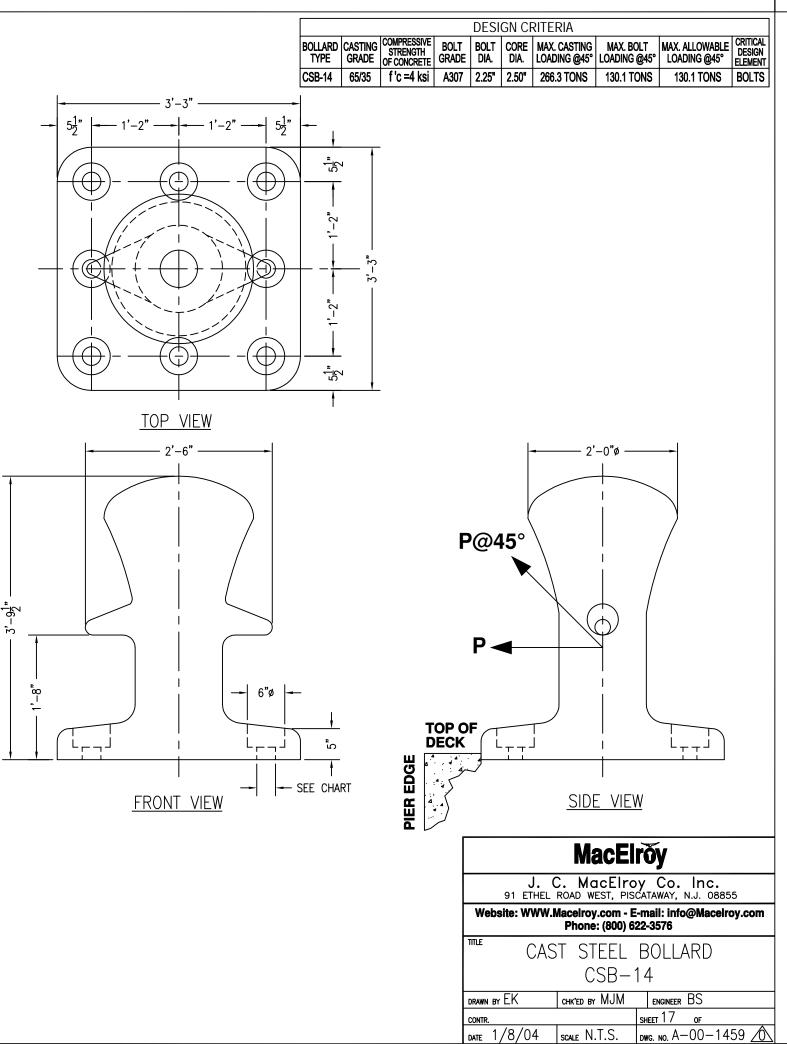
J. C. MacElroy Co. Inc. 91 ETHEL ROAD WEST, PISCATAWAY, N.J. 08855

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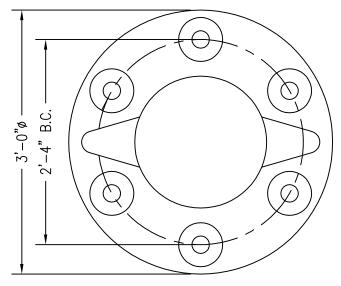
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CAST STEEL BOLLARD CSB-12

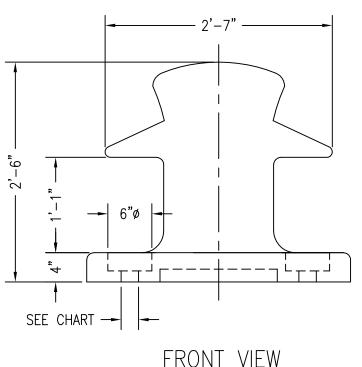
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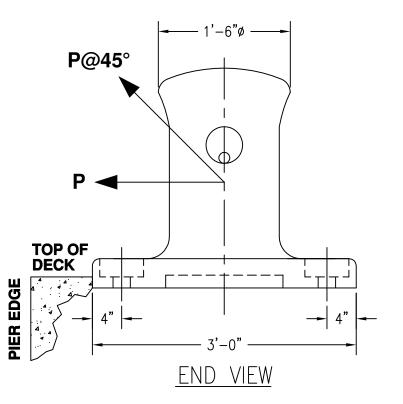
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BOLLARD TYPE	CASTING	COMPRESSIVE STRENGTH OF CONCRETE	BOLT GRADE	BOLT DIA.	CORE DIA.	MAX. CASTING LOADING @45°		MAX. ALLOWABLE LOADING @45°	CRITICAL DESIGN ELEMENT
CSB-18	65/35	f'c =4 ksi	A307	2.25"	2.50"	223.4 TONS	92.7 TONS	92.7 TONS	BOLTS



TOP VIEW



FRONT VIEW



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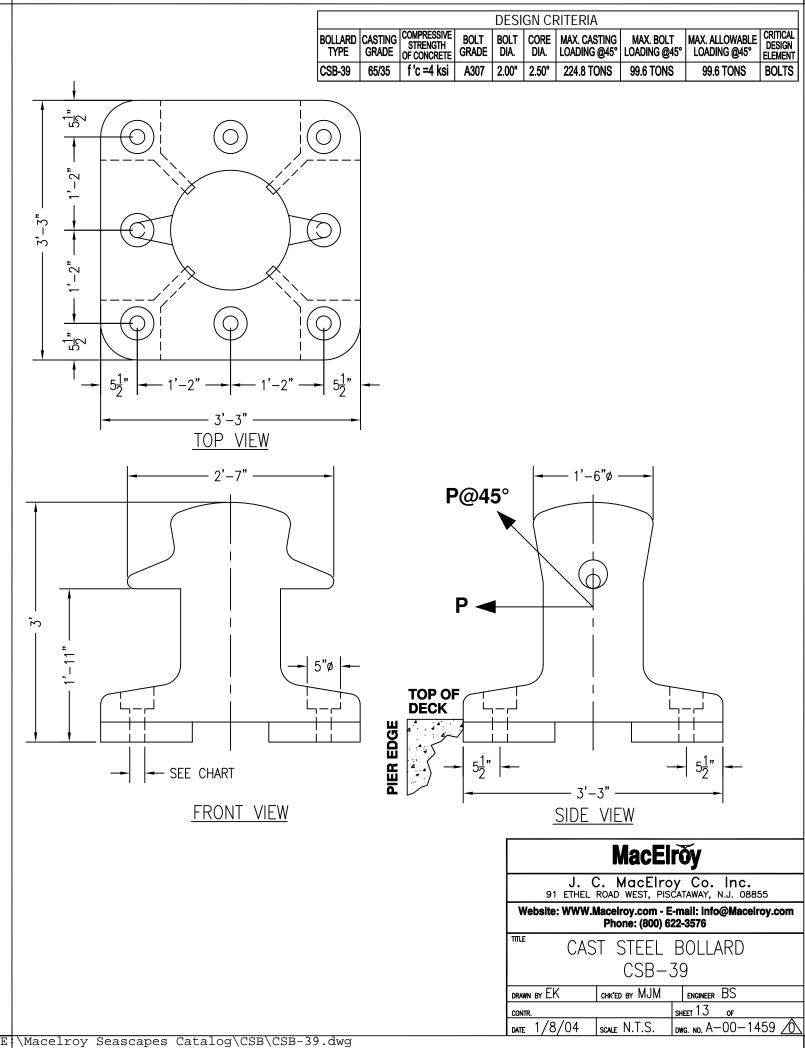
Website: WWW.Macelroy.com - E-mail: info@Macelroy.com Phone: (800) 622-3576

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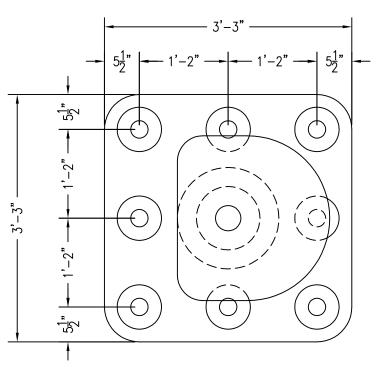
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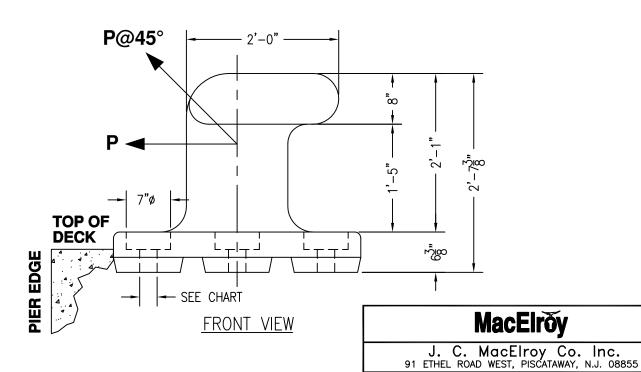
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	DESIGN CRITERIA								
BOLLARD GASTING STRENGTH BULL BULL CORE MAX. CASTING MAX. BULL MAX. ALLOWABLE DES						CRITICAL DESIGN ELEMENT			
CSB-68	65/35	f'c =4 ksi	A307	2.50"	2.75"	286.3 TONS	181.9 TONS	181.9 TONS	BOLTS





TOP VIEW

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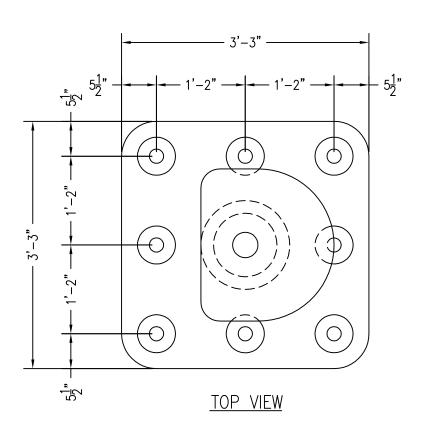
Website: WWW.Macelroy.com - E-mail: info@Macelroy.com Phone: (800) 622-3576

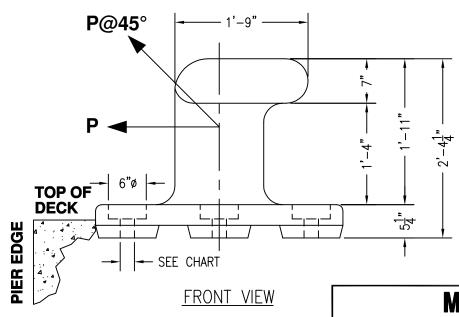
> CAST STEEL BOLLARD CSB-68

> > ENGINEER BS

SHEET 14

	DESIGN CRITERIA								
BOLLARD CASTING STRENGTH BOLL BOLL CORE MAX. SOSTING MAX. BOLL MAX. ALLOWAGE DE						CRITICAL DESIGN ELEMENT			
CSB-69	CSB-69 65/35 f'c = 4 ksi A307 2.00" 2.25" 166.2 TONS 115.6 TONS 115.6 TONS BOLT								





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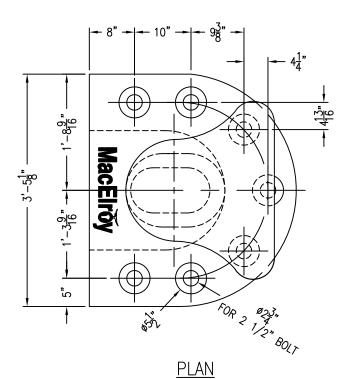
Website: WWW.Macelroy.com - E-mail: info@Macelroy.com Phone: (800) 622-3576

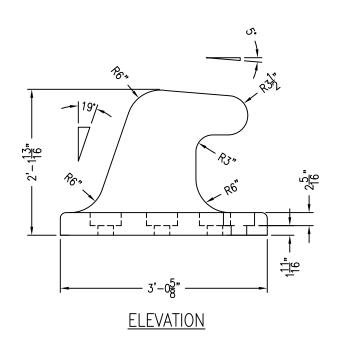
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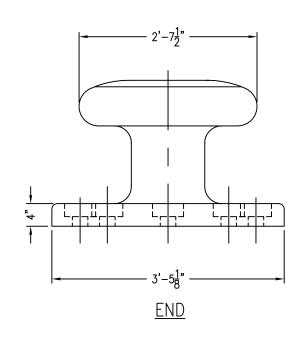
CAST STEEL BOLLARD CSB-69

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REV. NO.	ZONE	DESCRIPTION	DATE	BY





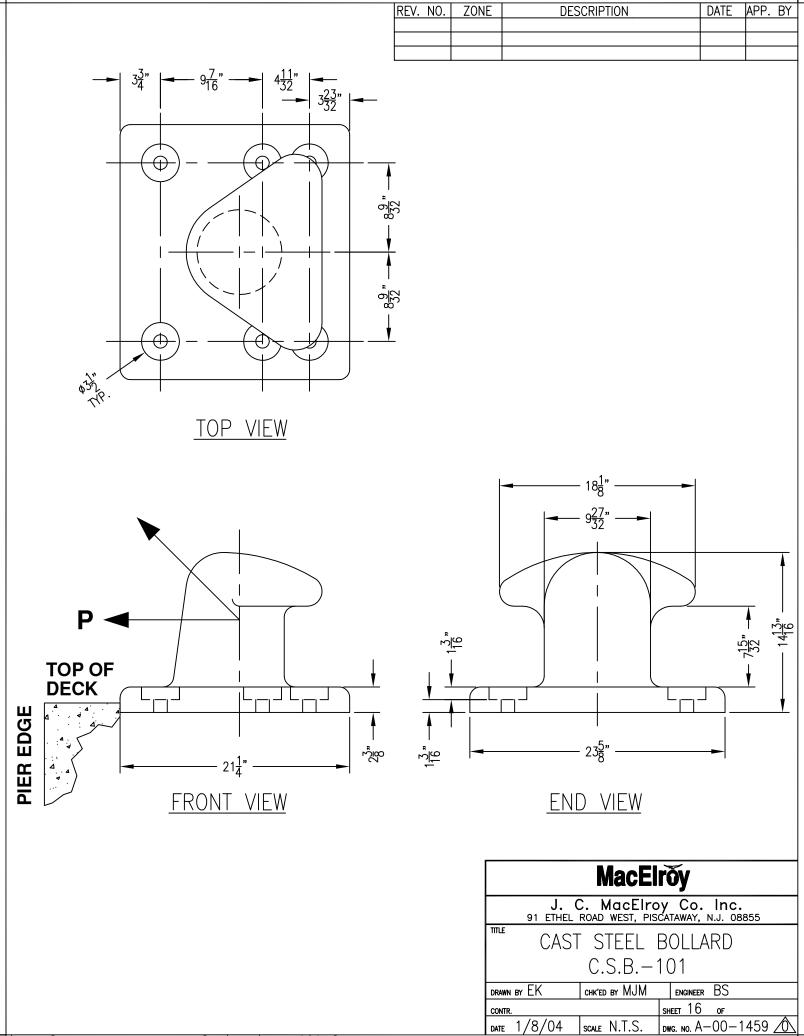


J. C. MacElroy Co. Inc. 91 ETHEL ROAD WEST, PISCATAWAY, N.J. 08855

TITLE

CAST STEEL BOLLARD CSB-70

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date 3/8/07	scale 3/4"=1'	DWG. NO. A-07-1937	⚠	



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#### **CLEATS**

## To Engineers/Architects –

A complete specification section for inclusion into your contract documents can be provided upon request.

## PART 2 – PRODUCTS

2.1 Cleats to be provided by: J.C. MacElroy Company, Inc., Phone: (732) 572-7100, Fax: (732) 572-7112, E-mail: <a href="mailto:info@macelroy.com">info@macelroy.com</a>, Website: <a href="www.macelroy.com">www.macelroy.com</a>

### 2.2 MATERIALS

- A. Model CSC-2A:
  - 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
  - 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.
- B. Model CSC-3:
  - 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
  - 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.
- C. Model CSC-4:
  - 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
  - 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.
- D. Model CSC-6:
  - 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
  - 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.
- E. Model CSC-6B:
  - 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
  - 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

### F. Model – CSC-9C:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

## G. Model – CSC-24:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

## H. Model – CSC-45:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

## I. Model – CSC-51:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

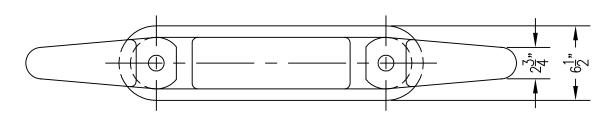
## J. Model – CSC-72:

- 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
- 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.

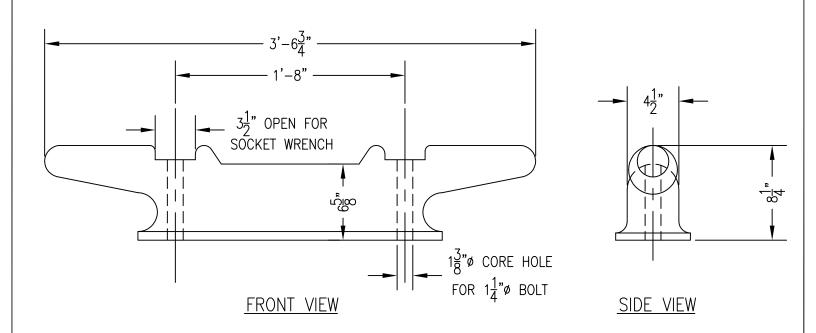
## 2.3 FINISH

- A. Standard finish is one coat of metal primer unless specified otherwise.
- B. Where cleat is required by Engineer to be painted, painting of cleat shall be performed in conformity with the specification.

REV. NO.	ZONE	DESCRIPTION	DATE	APP. BY



TOP VIEW



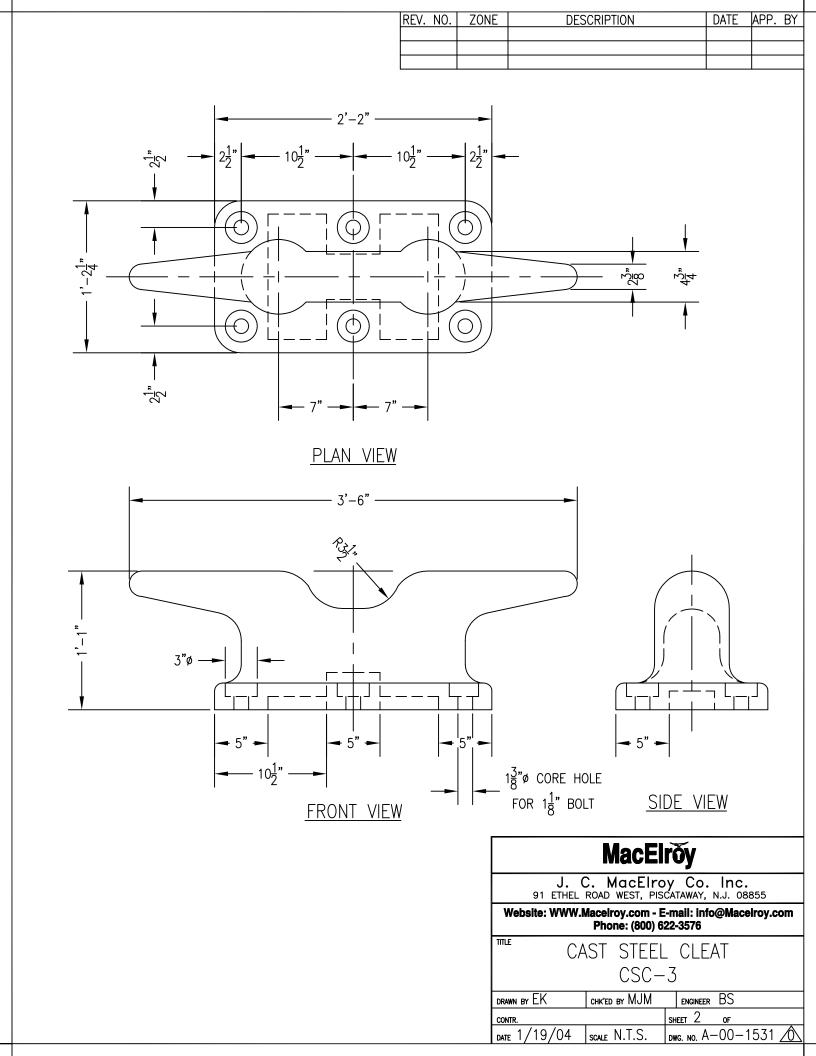
J. C. MacElroy Co. Inc. 91 ETHEL ROAD WEST, PISCATAWAY, N.J. 08855

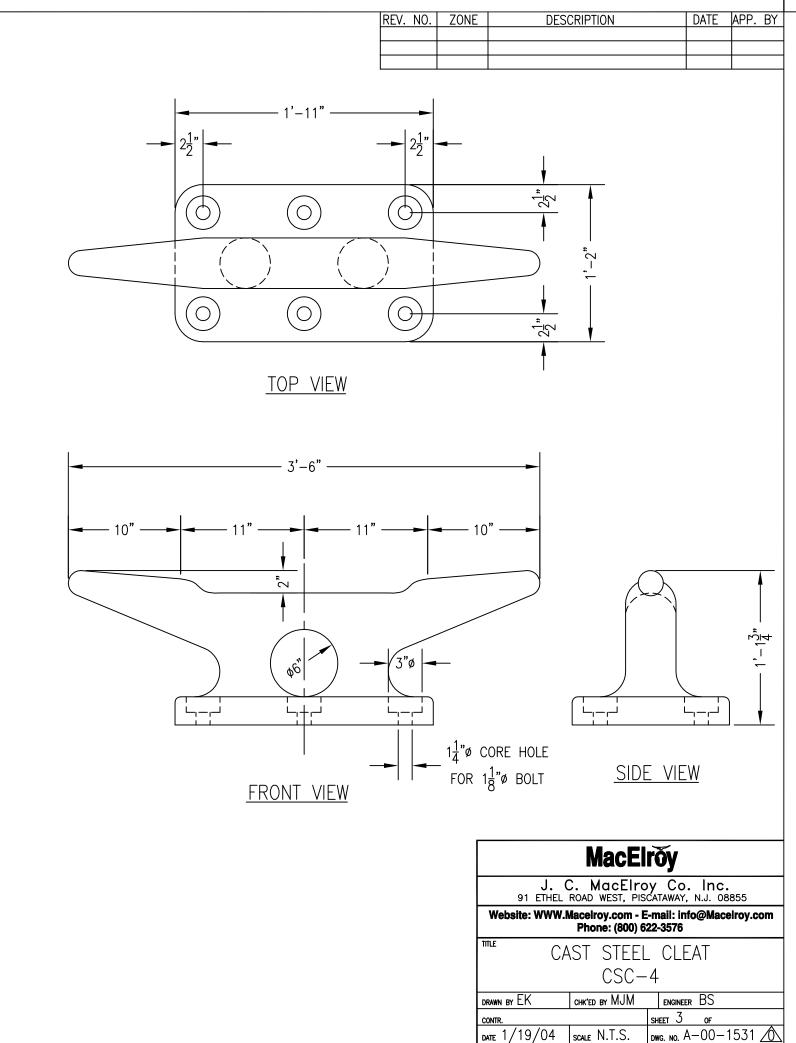
Website: WWW.Macelroy.com - E-mail: info@Macelroy.com Phone: (800) 622-3576

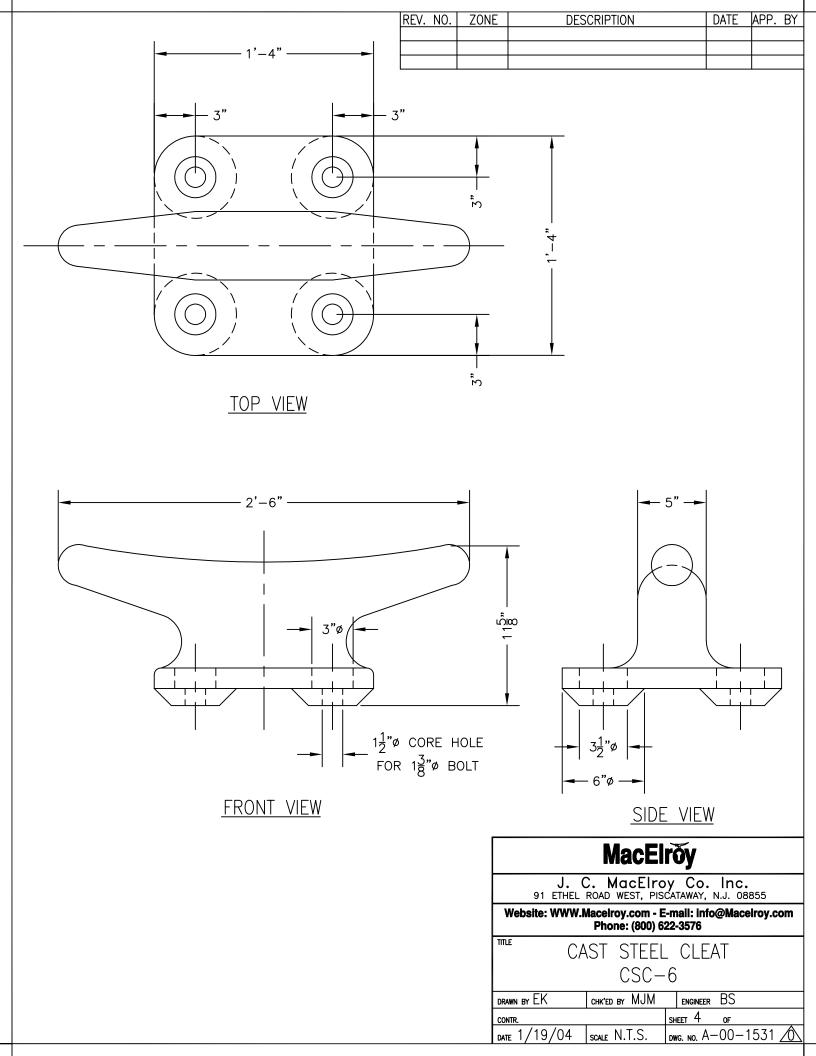
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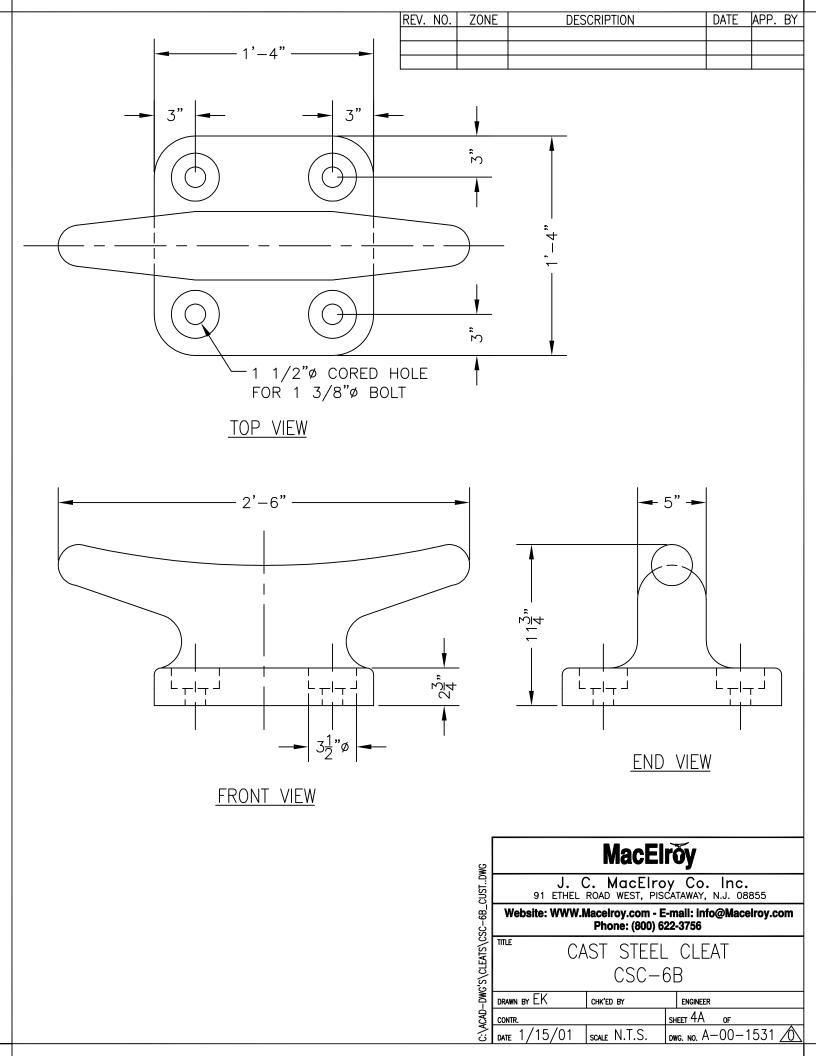
CAST STEEL CLEAT CSC-2A

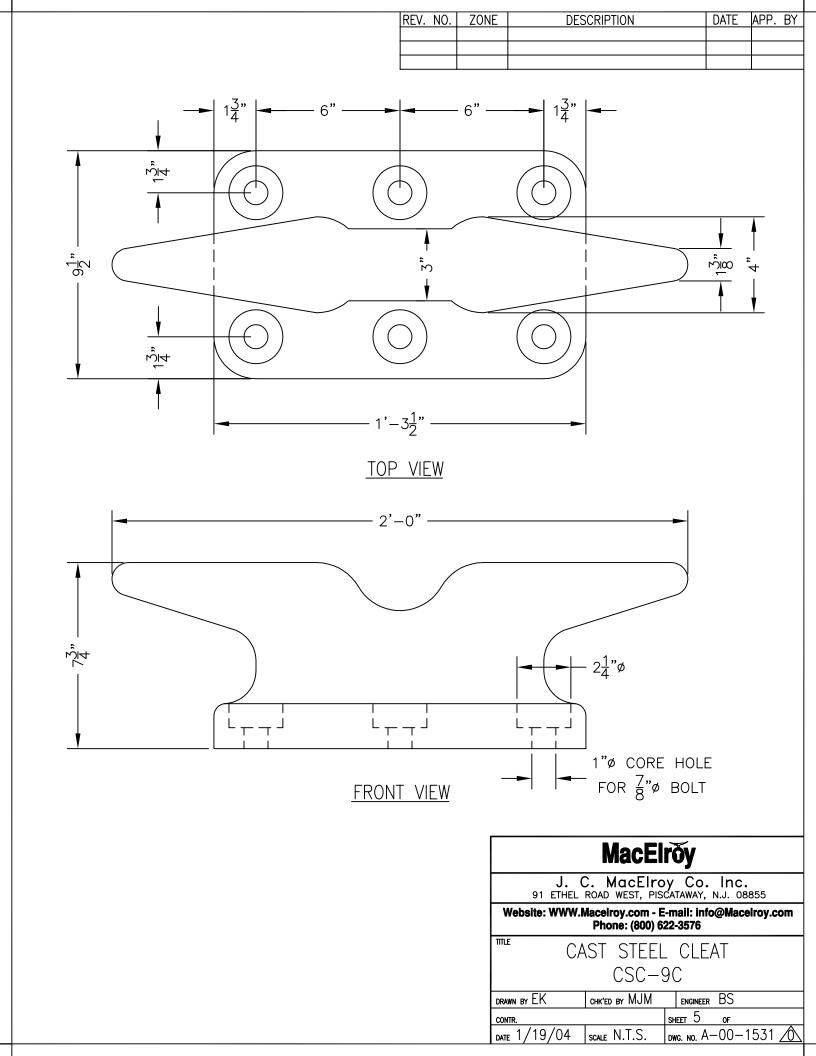
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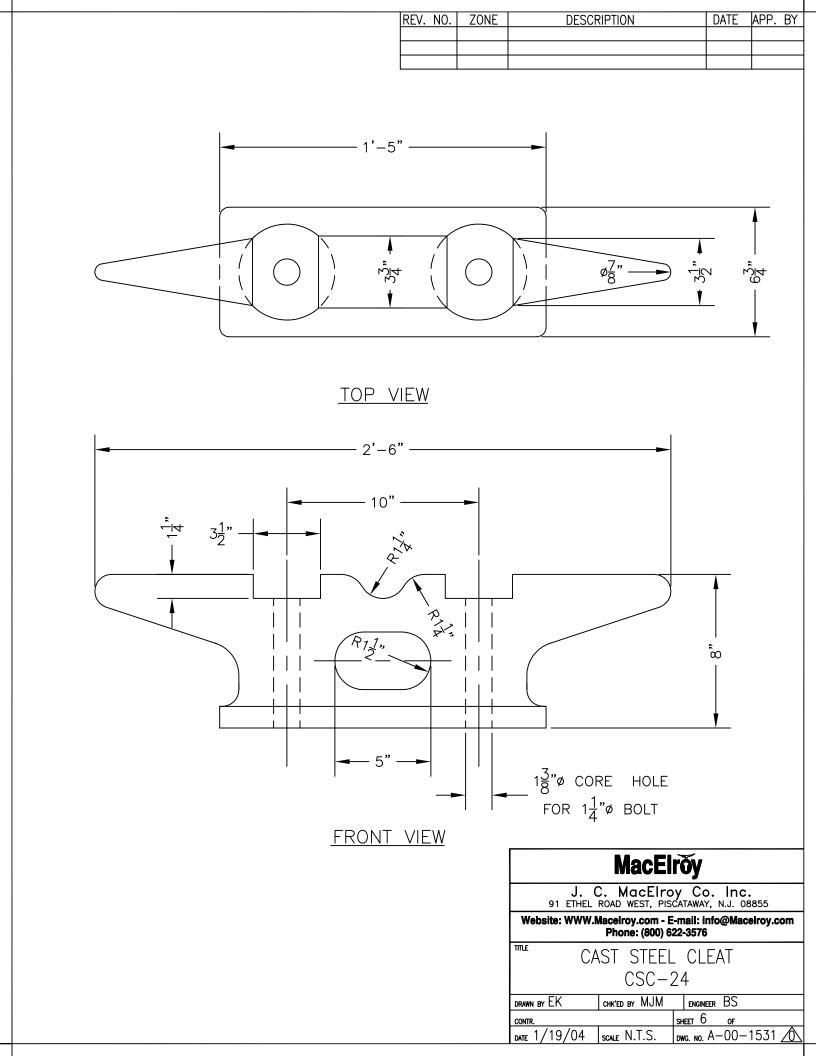


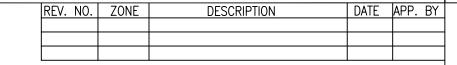


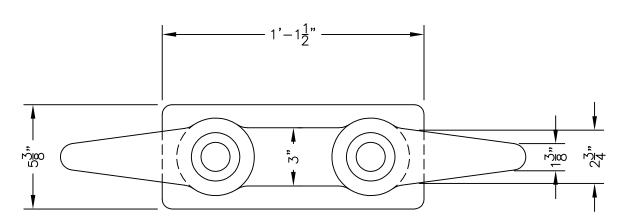




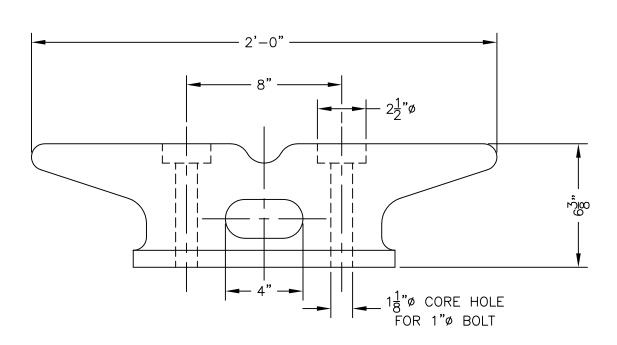








TOP VIEW



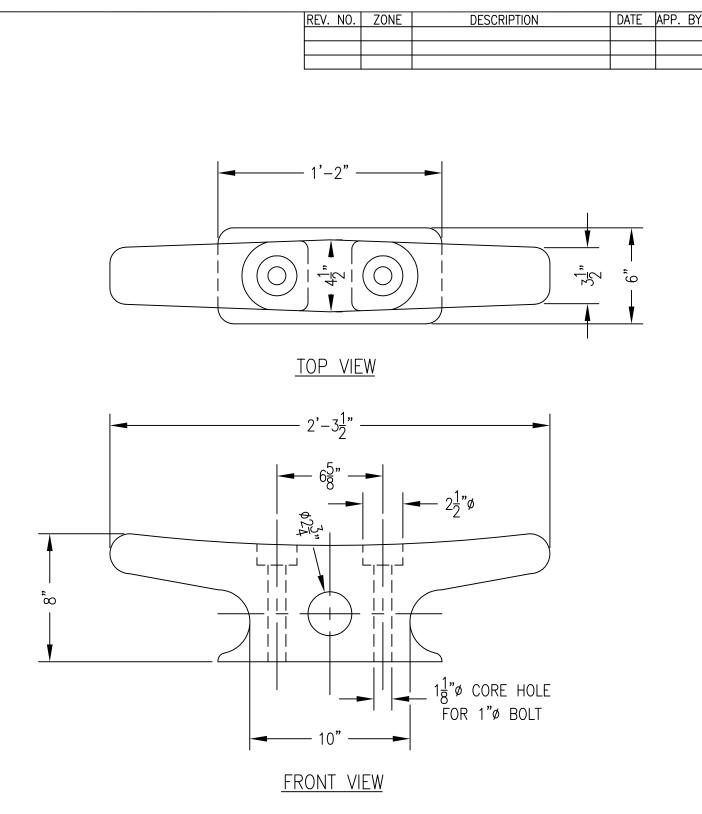
FRONT VIEW

J. C. MacElroy Co. Inc. 91 ETHEL ROAD WEST, PISCATAWAY, N.J. 08855

Website: WWW.Macelroy.com - E-mail: info@Macelroy.com Phone: (800) 622-3576

CAST STEEL CLEAT CSC-45

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date 1/19/04	SCALE N.T.S.	DWG. NO. A-00-1531 🛕

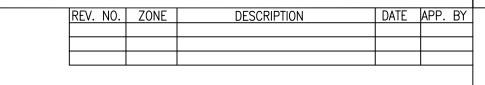


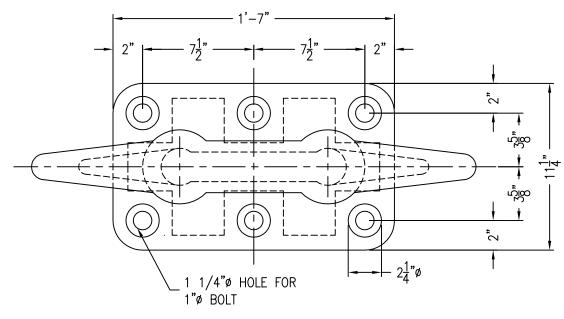
J. C. MacElroy Co. Inc. 91 ETHEL ROAD WEST, PISCATAWAY, N.J. 08855

Website: WWW.Macelroy.com - E-mail: info@Macelroy.com Phone: (800) 622-3576

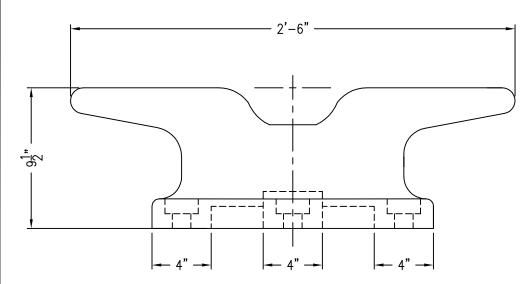
CAST STEEL CLEAT CSC-51

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CONTR.		SHEET 8 OF		
date 1/19/04	SCALE N.T.S.	DWG. NO. A-00-1531 🛕		

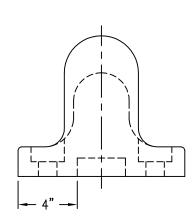




<u>PLAN VIEW</u>



PART ELEVATION SECT.



J. C. MacElroy Co. Inc. 91 ETHEL ROAD WEST, PISCATAWAY, N.J. 08855

Website: WWW.Macelroy.com - E-mail: info@Macelroy.com Phone: (800) 622-3756

TITLE

CAST STEEL CLEAT CSB-72

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CONTR.		SHEET 9 OF
DATE 4/24/00	scale N.T.S.	DWG. NO. A-00-1531 🛕

FILE: E:\MACELROY SEASCAPES CATALOG\CSC\CSC-72.DWG DATE: DEC 22, 2005 - 9:23AM

#### SECURITY BOLLARDS

To Engineers/Architects –

A complete specification section for inclusion into your contract documents can be provided upon request.

### PART 2 – PRODUCTS

2.1 Security bollards to be provided by: J.C. MacElroy Company, Inc.,

Phone: (732) 572-7100, Fax: (732) 572-7112, E-mail: info@macelroy.com,

Website: www.macelroy.com

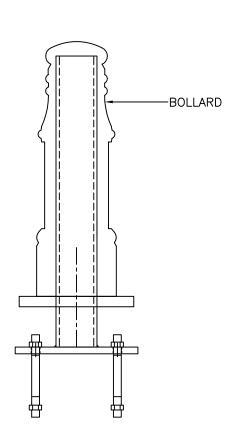
#### 2.2 MATERIALS

- A. Security bollard:
  - 1. Material: Cast Iron, ASTM A48/A48M, Class 30B
  - 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.
  - 3. Provide optional internal 6" steel pipe in accordance with ASTM A53, Grade B if shown on the contract drawings.
- B. Security bollard with link connection:
  - 1. Chain link: Material as shown on the contract drawings. Provide sufficient lengths to drape as shown on drawings.

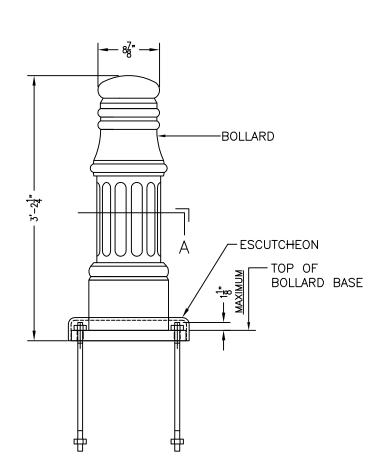
### 2.3 FINISH

- A. Where security bollard is required by Engineer to be painted, painting of bollard shall be performed in conformity with the specification.
- B. Anchor bolts and internal pipe support are to be hot dipped galvanized or as otherwise specified.

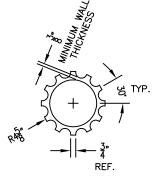
REV. NO.	ZONE	DESCRIPTION	DATE	BY



PIPE-BASE BOLT DETAIL



BOLLARD BOLT DETAIL



SECTION "A"

J. C. MacElroy Co. Inc. 91 ETHEL ROAD WEST, PISCATAWAY, N.J. 08855

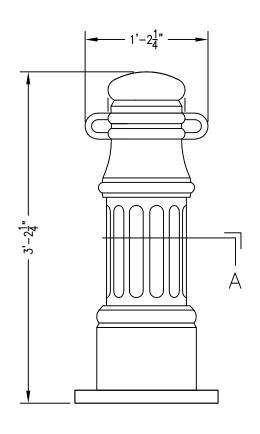
Website: WWW.Macelroy.com - E-mail: info@Macelroy.com Phone: (800) 622-3576

TITLE

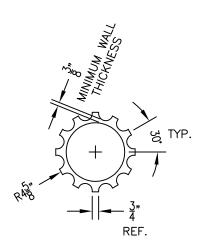
SECURITY BOLLARD

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CONTR.		SHEET 7 OF				
DATE 1/12/04	SCALE N.T.S.	DW	g. no. A-	-03-	1655	$\triangle$

REV. NO.	ZONE	DESCRIPTION	DATE	BY



BOLLARD DETAIL



SECTION "A"

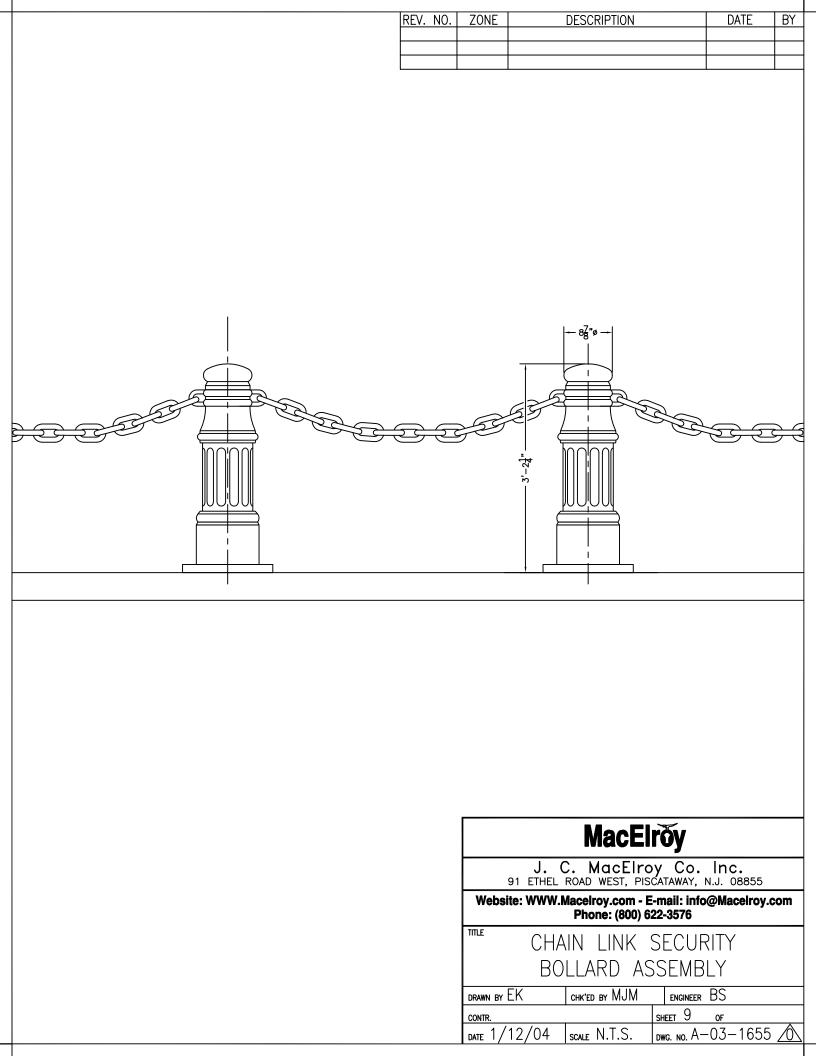
J. C. MacElroy Co. Inc. 91 ETHEL ROAD WEST, PISCATAWAY, N.J. 08855

Website: WWW.Macelroy.com - E-mail: info@Macelroy.com Phone: (800) 622-3576

TITLE

SECURITY BOLLARD W/LINK CONNECTION

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DRAWN BY EK CHK'ED BY MJM		ENGINEER BS		
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DATE 1/12/04	scale N.T.S.	dwg. №. A−03−1655 🛕		



#### ORNAMENTAL BOLLARDS

To Engineers/Architects -

A complete specification section for inclusion into your contract documents can be provided upon <u>request</u>.

### PART 2 – PRODUCTS

2.1 Ornamental bollards to be provided by: J.C. MacElroy Company, Inc., Phone: (732) 572-7100, Fax: (732) 572-7112, E-mail: info@macelroy.com,

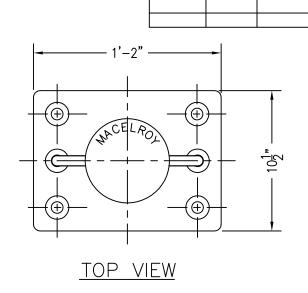
Website: www.macelroy.com

#### 2.2 MATERIALS

- A. 22 inch ornamental bollard:
  - 1. Material: Cast Iron, ASTM A48/A48M, Class 30B
  - 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.
- B. 22 inch ornamental bollard with link connection:
  - 1. Chain link: Material as shown on the contract drawings. Provide sufficient lengths to drape as shown on drawings.
- C. 40 inch ornamental bollard:
  - 1. Material: Cast Iron, ASTM A48/A48M, Class 30B
  - 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.
- D. 40 inch ornamental bollard with link connection:
  - 1. Chain link: Material as shown on the contract drawings. Provide sufficient lengths to drape as shown on drawings.
- E. 42 inch ornamental bollard:
  - 1. Material: Cast Iron, ASTM A48/A48M, Class 30B
  - 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307 and associated plates to comply with ASTM A36/A36M.
- F. 42 inch ornamental bollard with link connection:
  - 1. Chain link: Material as shown on the contract drawings. Provide sufficient lengths to drape as shown on drawings.

# 2.3 FINISH

A. Where ornamental bollard is required by Engineer to be painted, painting of bollard shall be performed in conformity with the specification.



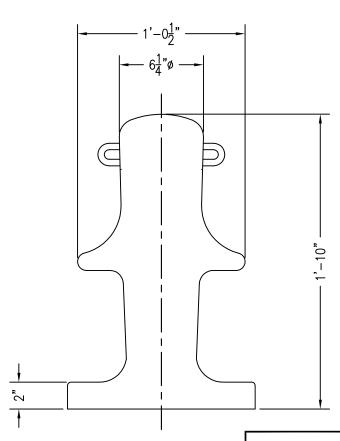
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PLAN VIEW

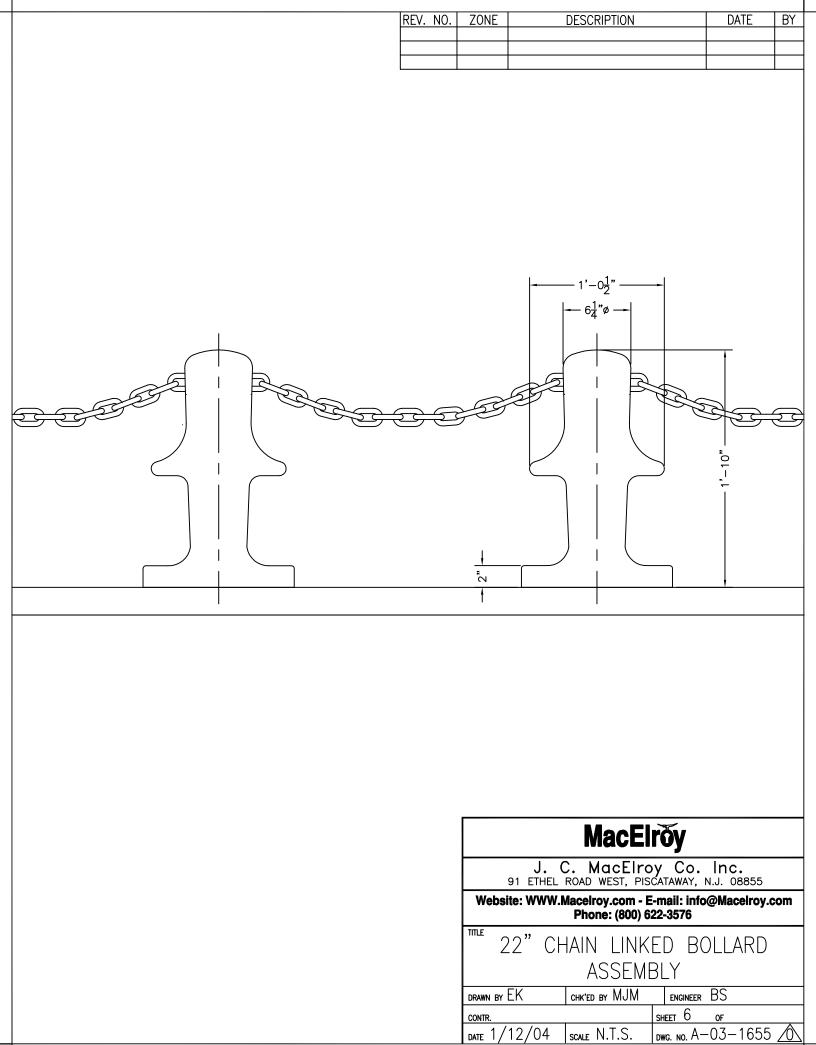
# **MacElroy**

J. C. MacElroy Co. Inc. 91 ETHEL ROAD WEST, PISCATAWAY, N.J. 08855

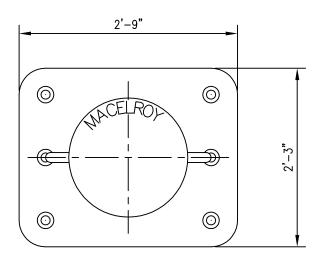
Website: WWW.Macelroy.com - E-mail: info@Macelroy.com Phone: (800) 622-3576

22 INCH ORNAMENTAL BOLLARD WITH LINK CONNECTION

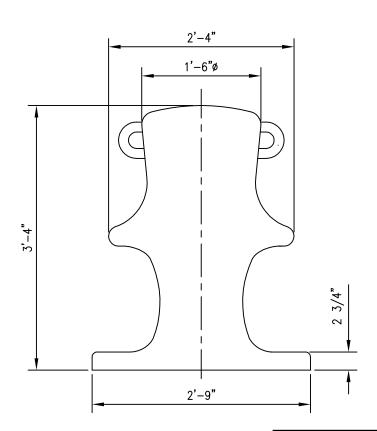
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# TOP VIEW



# FRONT VIEW

# MacElroy

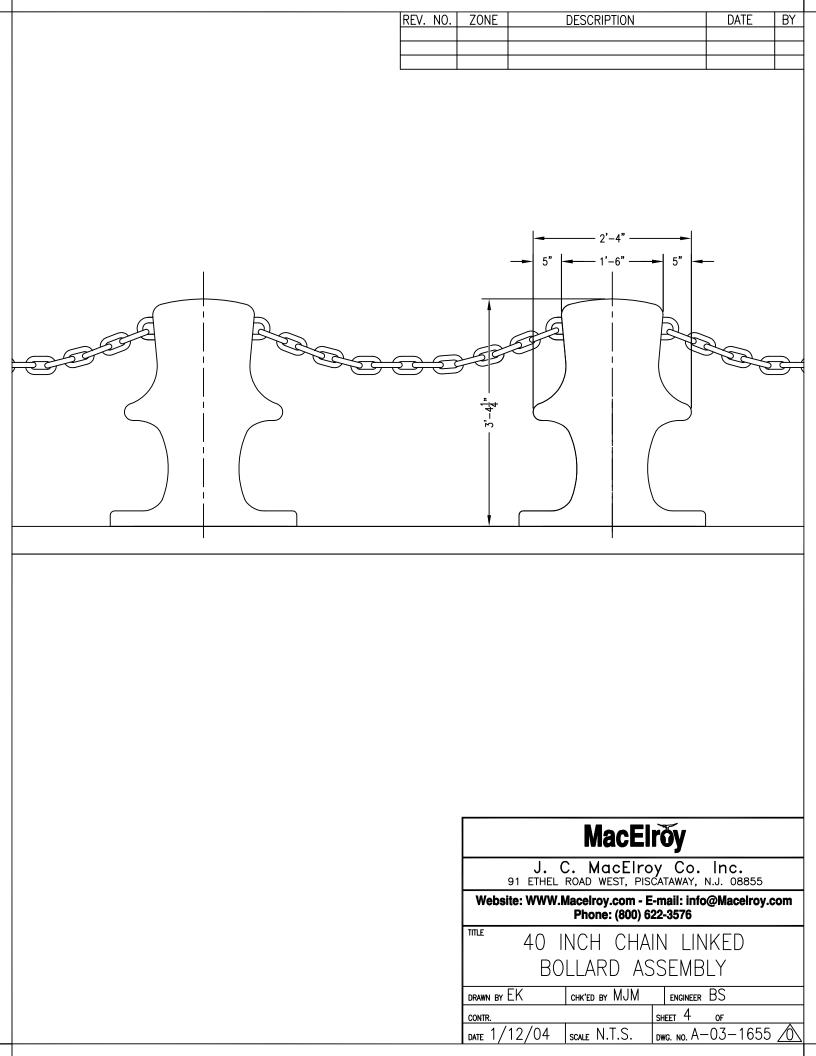
J. C. MacElroy Co. Inc. 91 ETHEL ROAD WEST, PISCATAWAY, N.J. 08855

Website: WWW.Macelroy.com - E-mail: info@Macelroy.com Phone: (800) 622-3576

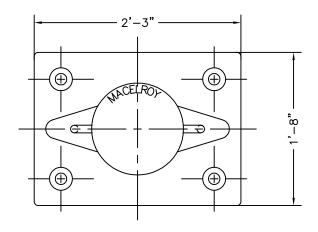
TITLE

40 INCH ORNAMENTAL BOLLARD WITH LINK CONNECTION

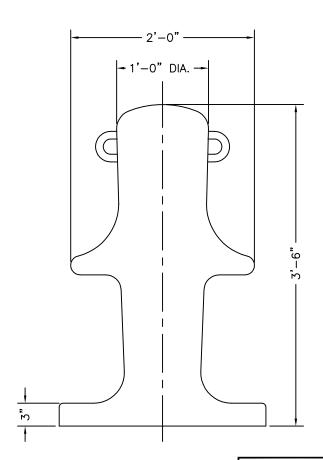
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REV. NO.	ZONE	DESCRIPTION	DATE	BY



TOP VIEW



# PLAN VIEW

# **MacElroy**

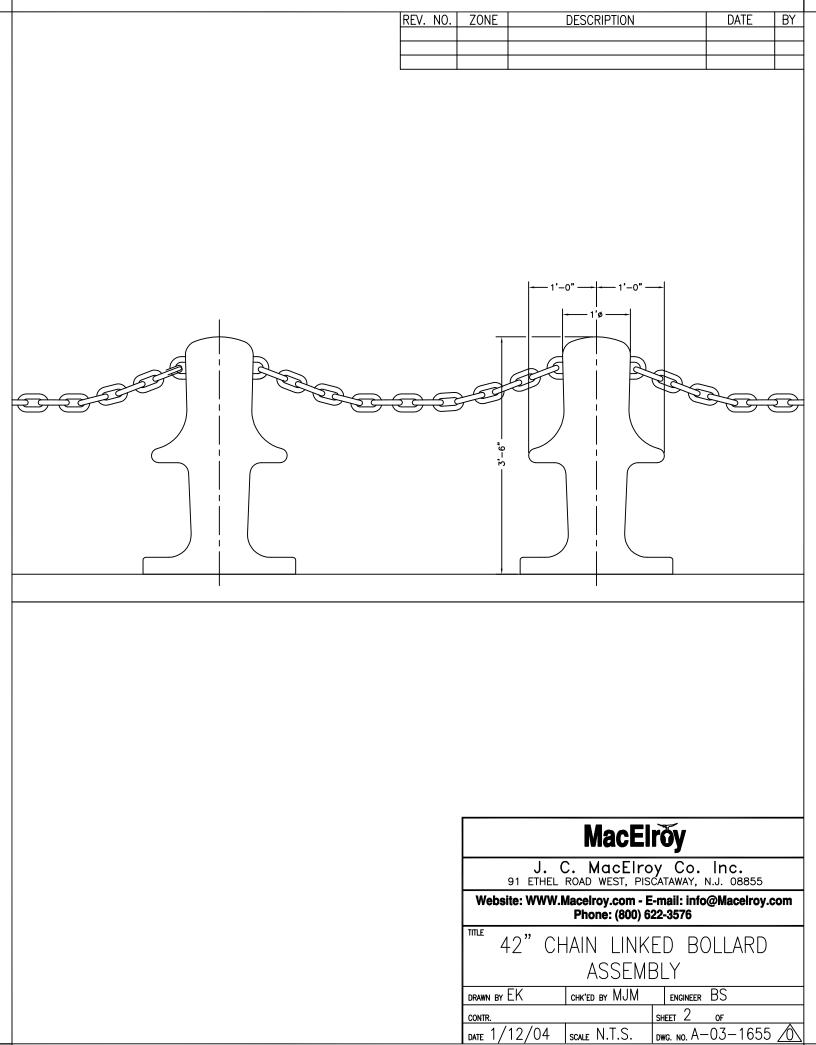
J. C. MacElroy Co. Inc. 91 ETHEL ROAD WEST, PISCATAWAY, N.J. 08855

Website: WWW.Macelroy.com - E-mail: info@Macelroy.com Phone: (800) 622-3576

THE 40 INCL. ODNAMENTA

42 INCH ORNAMENTAL BOLLARD WITH LINK CONNECTION

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 $_{\text{DATE}} 1/12/04$ 

SCALE N.T.S.

#### TRASH BOLLARD

# To Engineers/Architects -

A complete specification section for inclusion into your contract documents can be provided upon request.

### PART 2 – PRODUCTS

2.1 Trash bollard to be provided by: J.C. MacElroy Company, Inc.,

Phone: (732) 572-7100, Fax: (732) 572-7112, E-mail: info@macelroy.com,

Website: <a href="https://www.macelroy.com">www.macelroy.com</a>

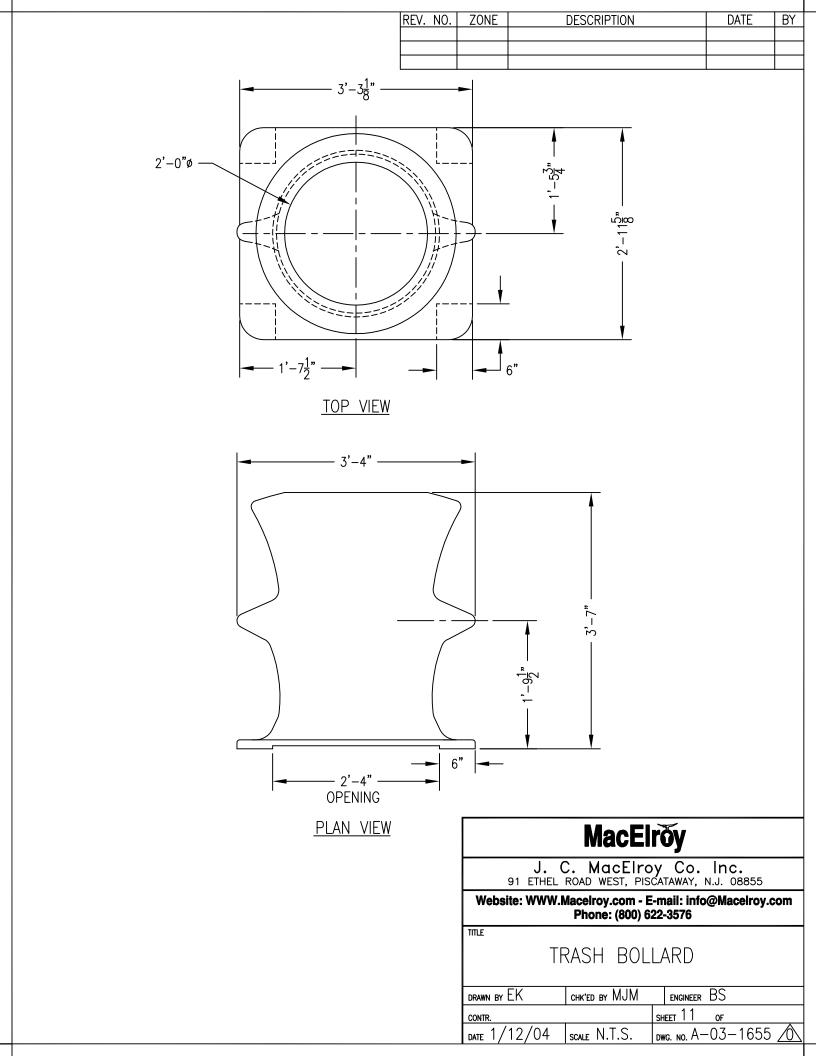
### 2.2 MATERIALS

A. Trash Bollard:

1. Material: Cast Iron, ASTM A48/A48M, Class 30B

#### 2.3 FINISH

A. Where trash bollard is required by Engineer to be painted, painting of trash bollard shall be performed in conformity with the specification.



#### **CLEAT SEAT BENCH**

# To Engineers/Architects -

A complete specification section for inclusion into your contract documents can be provided upon <u>request</u>.

### PART 2 – PRODUCTS

2.1 Cleat seat bench to be provided by: J.C. MacElroy Company, Inc.,

Phone: (732) 572-7100, Fax: (732) 572-7112, E-mail: info@macelroy.com,

Website: www.macelroy.com

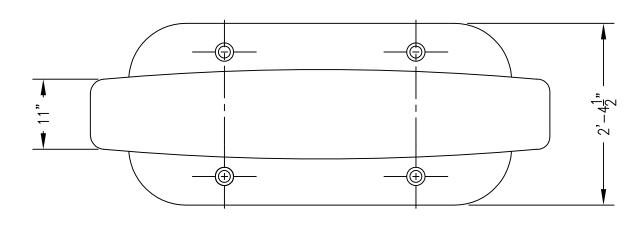
### 2.2 MATERIALS

- A. Cleat Seat Bench:
  - 1. Material: Cast Steel, ASTM A27/A27M, Grade 65-35
  - 2. Provide anchor bolts to ensure proper installation. Anchor bolts shall comply with ASTM A307.

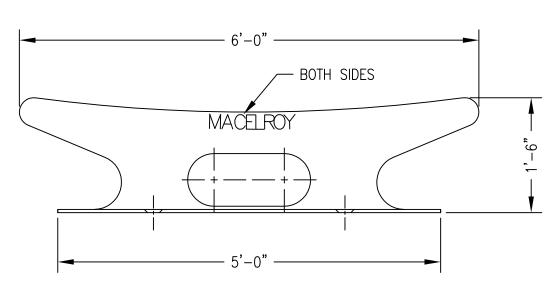
### 2.3 FINISH

A. Where cleat seat bench is required by Engineer to be painted, painting of bench shall be performed in conformity with the specification.

REV. NO.	ZONE	DESCRIPTION	DATE	BY



TOP VIEW



<u>PLAN VIEW</u>

J. C. MacElroy Co. Inc. 91 ETHEL ROAD WEST, PISCATAWAY, N.J. 08855

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TITLE

CLEAT SEAT BENCH

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	DATE 1/12/04	SCALE N.T.S.	DW	vg. no. A—03—1655 🛕
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J.C. MacElroy Company, Inc. provides practical and attractive solutions for waterfronts, landscapes, streetscapes, and any site under development. As an AISC certified metal fabricator, we offer custom fabrication, historic restoration, and custom casting services to architects, engineers, and owners looking to enhance a site or community. Our approach applies the highest standards of excellence to ensure total customer satisfaction, adding value to each project by providing superior service and the highest quality products. Please contact our sales team today to request a quote.

## J.C. MacElroy Company, Inc.

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United States info@macelroy.com



