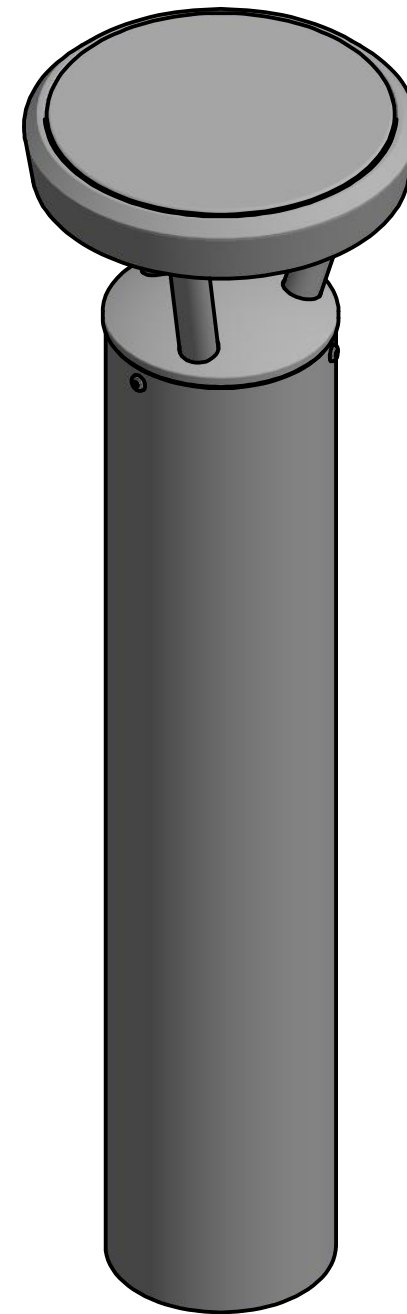
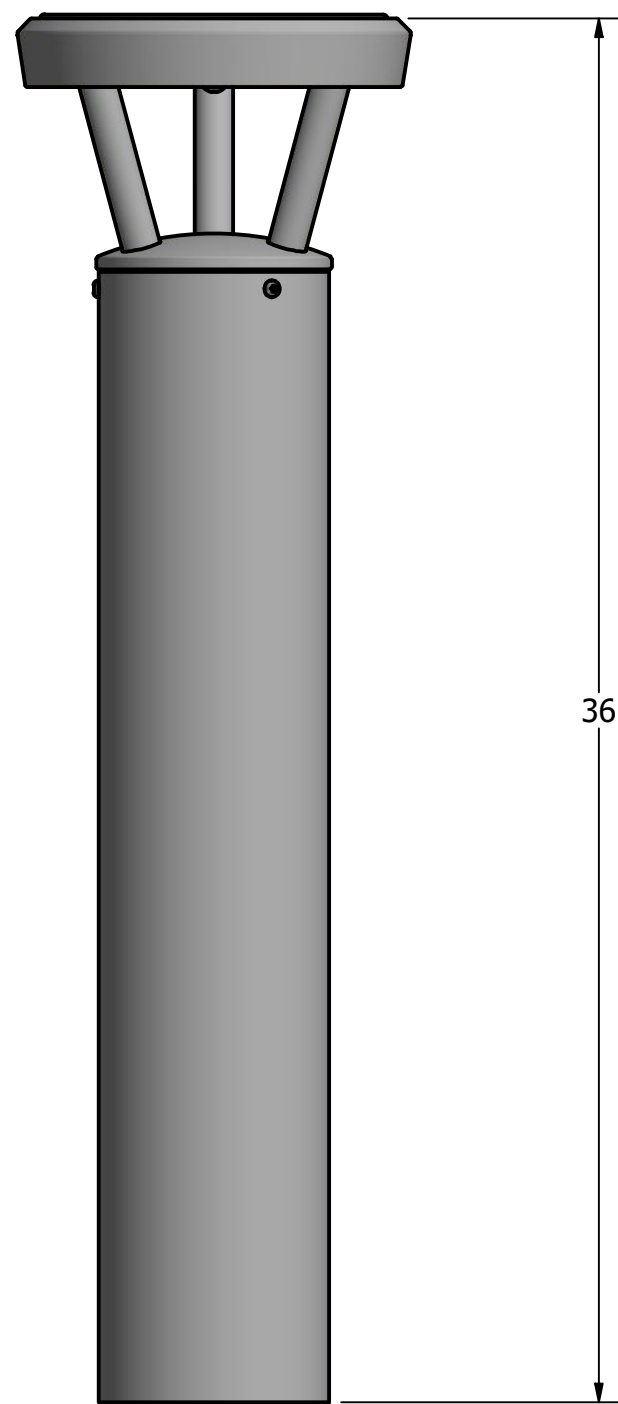
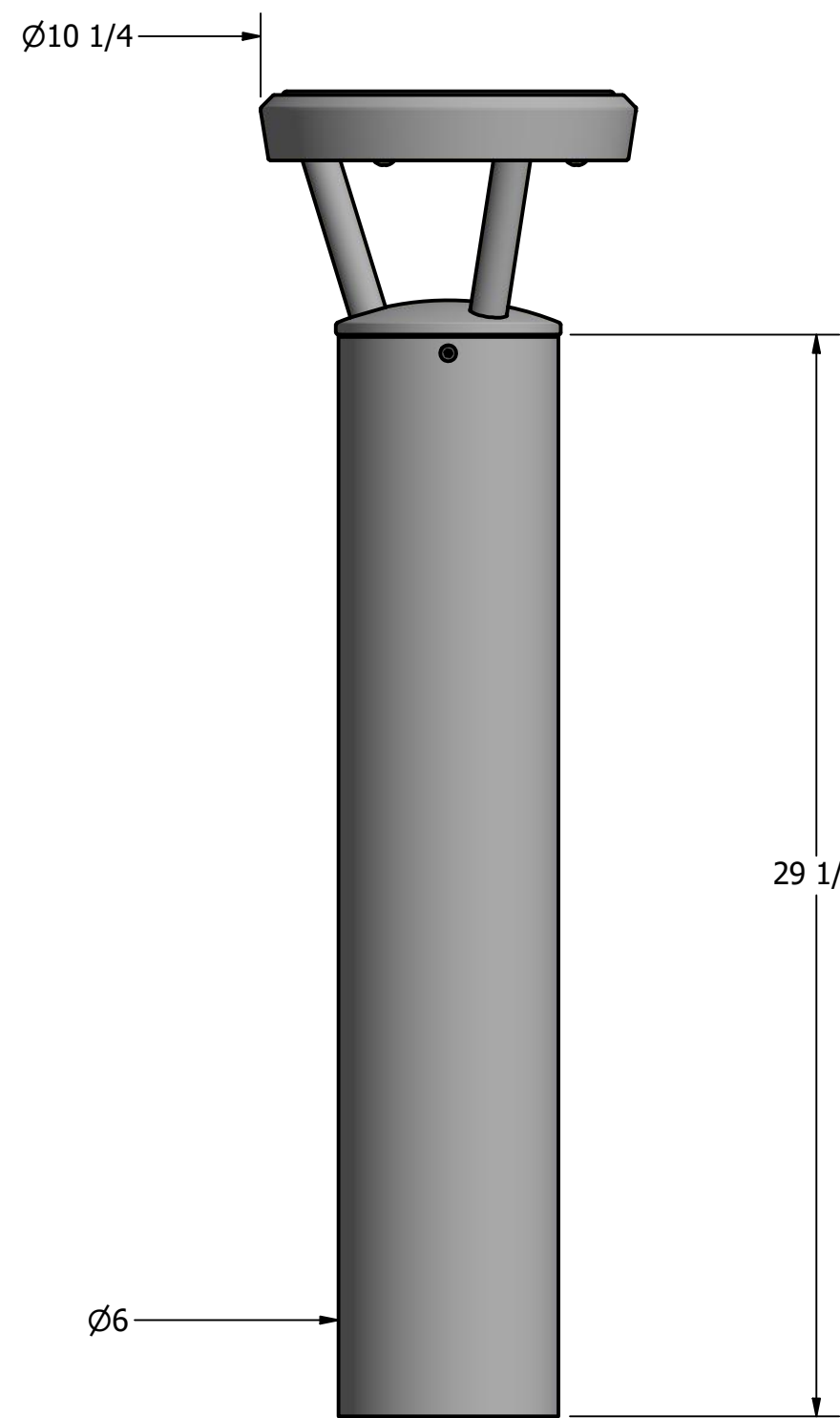


Bollard R-9811

D
C
B
A



General Description:

R-9811 Solar Light Bollards increase safety and visibility for vehicles and pedestrians-ideal for parking lots, walkways and plazas. Intelligent energy management systems ensure maximum outputs based on weather and time of year. High-capacity batteries allow lights to operate for 14 days without direct sunlight. Lighting systems are fully contained, requiring no additional hardwiring or underground conduits. Choose from a range of custom lighting colors, distribution areas and scheduling options. Powder coatings are available in 1 of 6 colors.

Specifications:

Height: 36"
Base Diameter: 6"
Weight: 51 lbs (Bollard Only)
Material: Steel Base with Aluminum Cap
Max. Interior Security Post Size:
4 1/2" x 20" (Diameter x Height)

Finish Options:

○ Polyester Powdercoated

See Reliance Foundry's standard color options at:
www.reliance-foundry.com/bollard/colors-bollards

Installation Options:

- Fixed - Anchor Casting in New Concrete (see sheet 2 of 6)
- Fixed - Concrete Insert Anchor in Existing Concrete (see sheet 3 of 6)
- Fixed - Adhesive Anchor in Existing Concrete (see sheet 4 of 6)
- Post Cover - New Post in New Concrete (see sheet 5 of 6)
- Post Cover - Existing Post with Adhesive Anchor (see sheet 6 of 6)

For more information on bollard post installation, please visit:
www.reliance-foundry.com/bollard/installation-bollards

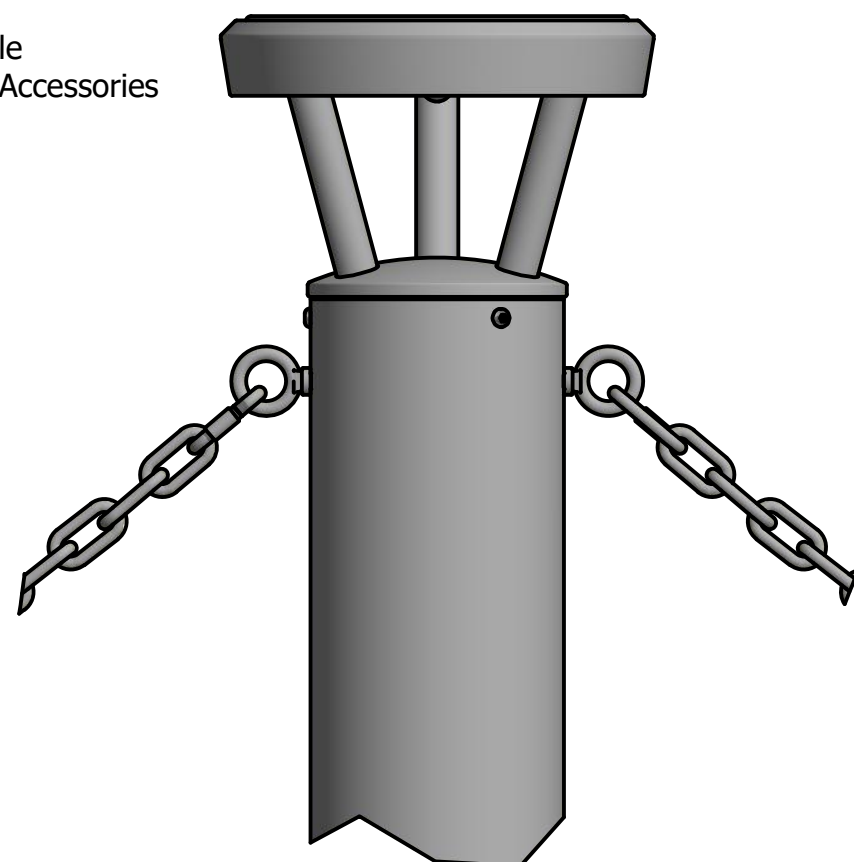
Light Color Options:

- 4500K Neutral White
- 3000K Warm White

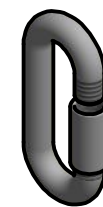
On-Off Program Options:

- Dim to 30% @ 5 hours
- Off @ dawn
- Off @ 6 hours
- Dim to 30% @ 6 hours
- Off @ 5 hours

Installation Sample with 5/16" Chain Accessories



Bollard Chain Eye 3/8"
(Powder Coated)



Quick Link Connector 5/16"
(Powder Coated)



Bollard Chain 5/16"
(Powder Coated)

Optional Accessories:

- Chain Eye
- Quick link
- Chain (5/16")
- Padlock, Brass (1 3/4")
- Padlock, Stainless Steel (2")

See Reliance Foundry's optional accessories at:
www.reliance-foundry.com/bollard/accessories-bollards

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TITLE

Bollard R-9811

SIZE	DWG NO	REV
C	R9811	C2

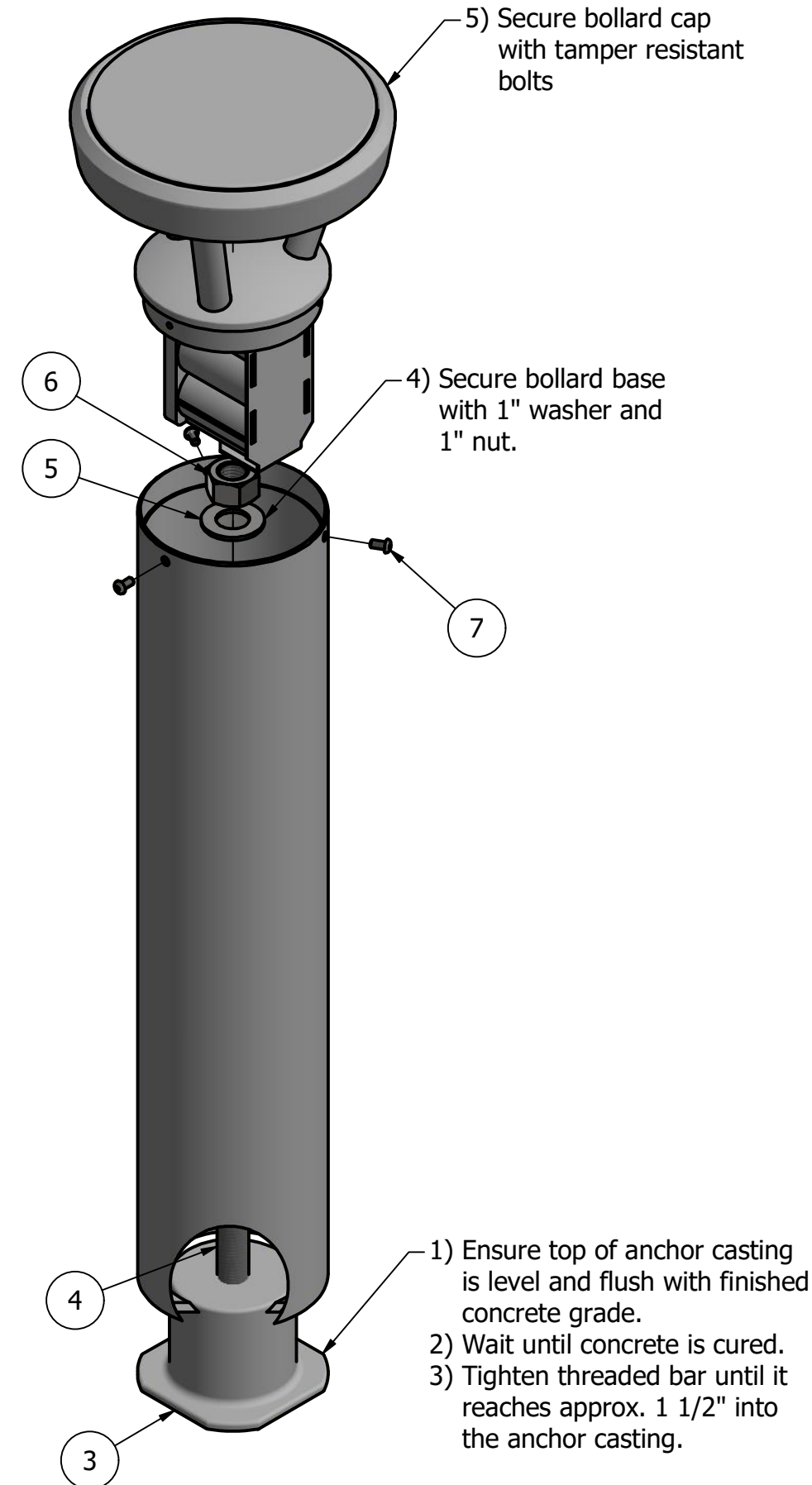
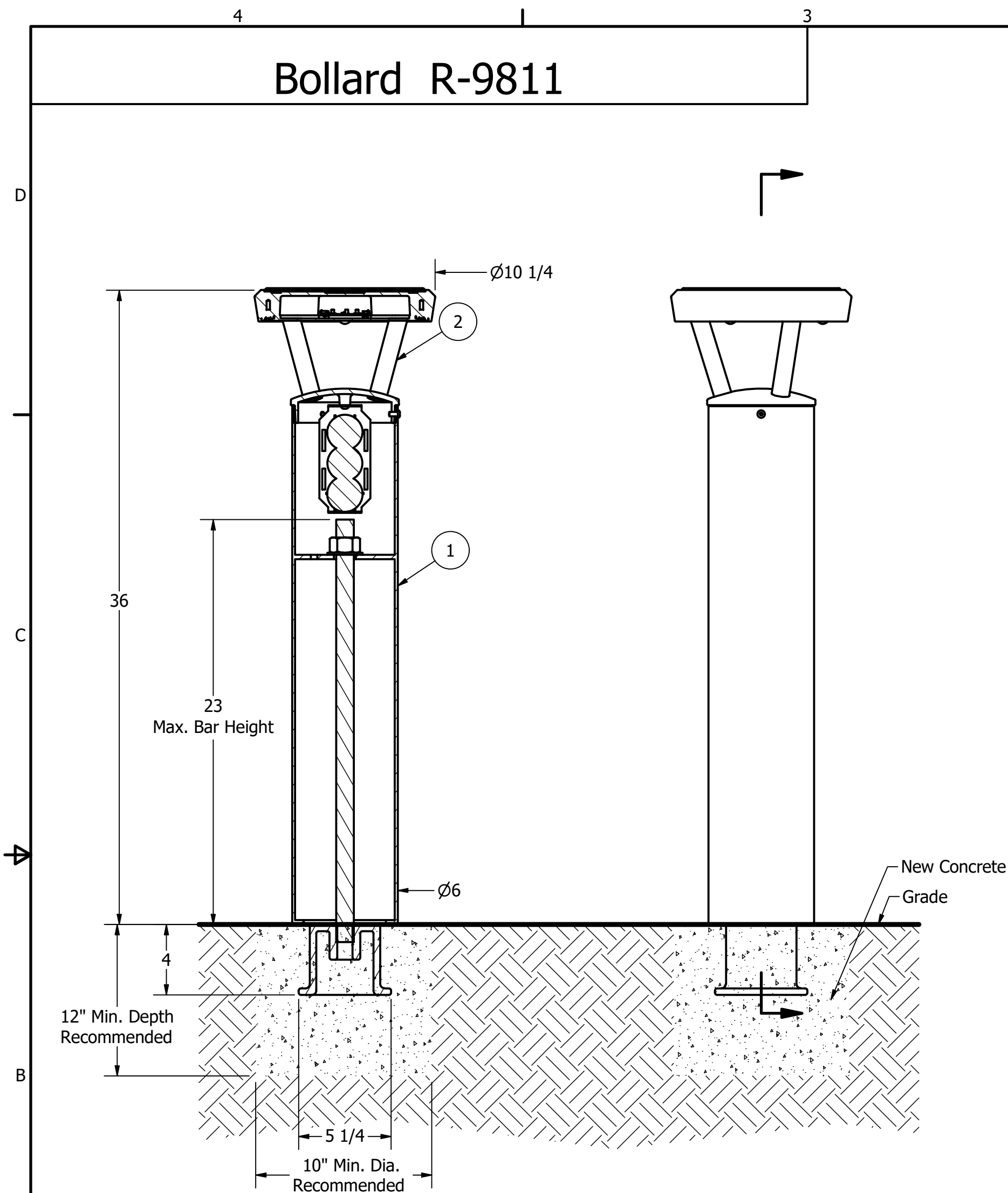
4

3

2

1

Bollard R-9811



General Description:

R-9811 Solar Light Bollards increase safety and visibility for vehicles and pedestrians-ideal for parking lots, walkways and plazas. Intelligent energy management systems ensure maximum outputs based on weather and time of year. High-capacity batteries allow lights to operate for 14 days without direct sunlight. Lighting systems are fully contained, requiring no additional hardwiring or underground conduits. Choose from a range of custom lighting colors, distribution areas and scheduling options. Powder coatings are available in 1 of 6 colors.

Specifications:

Height: 36"
 Base Diameter: 6"
 Weight: 51 lbs (Bollard Only)
 Material: Steel Base with Aluminum Cap
 Max. Interior Security Post Size:
 4 1/2" x 20" (Diameter x Height)

Finish Options:

○ Polyester Powdercoated

See Reliance Foundry's standard color options at:
www.reliance-foundry.com/bollard/colors-bollards

Installation Options:

- Fixed - Anchor Casting in New Concrete (see sheet 2 of 6)
- Fixed - Concrete Insert Anchor in Existing Concrete (see sheet 3 of 6)
- Fixed - Adhesive Anchor in Existing Concrete (see sheet 4 of 6)
- Post Cover - New Post in New Concrete (see sheet 5 of 6)
- Post Cover - Existing Post with Adhesive Anchor (see sheet 6 of 6)

For more information on bollard post installation, please visit:
www.reliance-foundry.com/bollard/installation-bollards

Light Color Options:

- 4500K Neutral White
- 3000K Warm White

On-Off Program Options:

- Dim to 30% @ 5 hours
- Off @ dawn
- Off @ 6 hours
- Dim to 30% @ 6 hours
- Off @ 5 hours

Notes:

- 1) Bollard post is provided as shown. Concrete, foundation and/or installation ordered separately or provided by others.
- 2) Minimum foundation sizes depend on local soil conditions, weather conditions, and engineering requirements.
- 3) Dimensions provided herein is for reference only. Please consult Reliance Foundry sales professionals if any dimension is critical to your particular installation.
- 4) Reliance Foundry reserves the right to amend design and specifications without prior notice for product improvement.

Tools needed:

- 1) Measuring tape
- 2) 1 1/2" wrench
- 3) Special hex key

PARTS LIST

ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	WEIGHT
1	1	R9811B	R9811 Bollard Base	Steel Powder Coated	32 lbs
2	1	R9811C	R9811 Bollard Solar Light Cap (Option of SYM or ASYM)	Cast Aluminum Powder Coated	19 lbs
3	1	R7500AN 1"	R7500 Anchor Casting 1"	Ductile Iron Hot Dip Galvanized	8 3/8 lbs
4	1	R7500BAR 1"	R7500 Threaded Bar 1" x 24"	Steel Plated	4 1/2 lbs
5	1	Washer 1" OD 2"	Washer 1" OD 2" Thick 1/8"	Steel Plated	1/8 lbs
6	1	Hex Nut 1"	Hex Nut 1" - requires 1 1/2" wrench	Steel Plated	1/4 lbs
7	3	Button Head Bolt TR 1/4" x 1/2"	Hexagon Socket Button Head Cap Bolt Tamper Resistant 1/4" x 1/2" - requires special hex key	Stainless Steel	

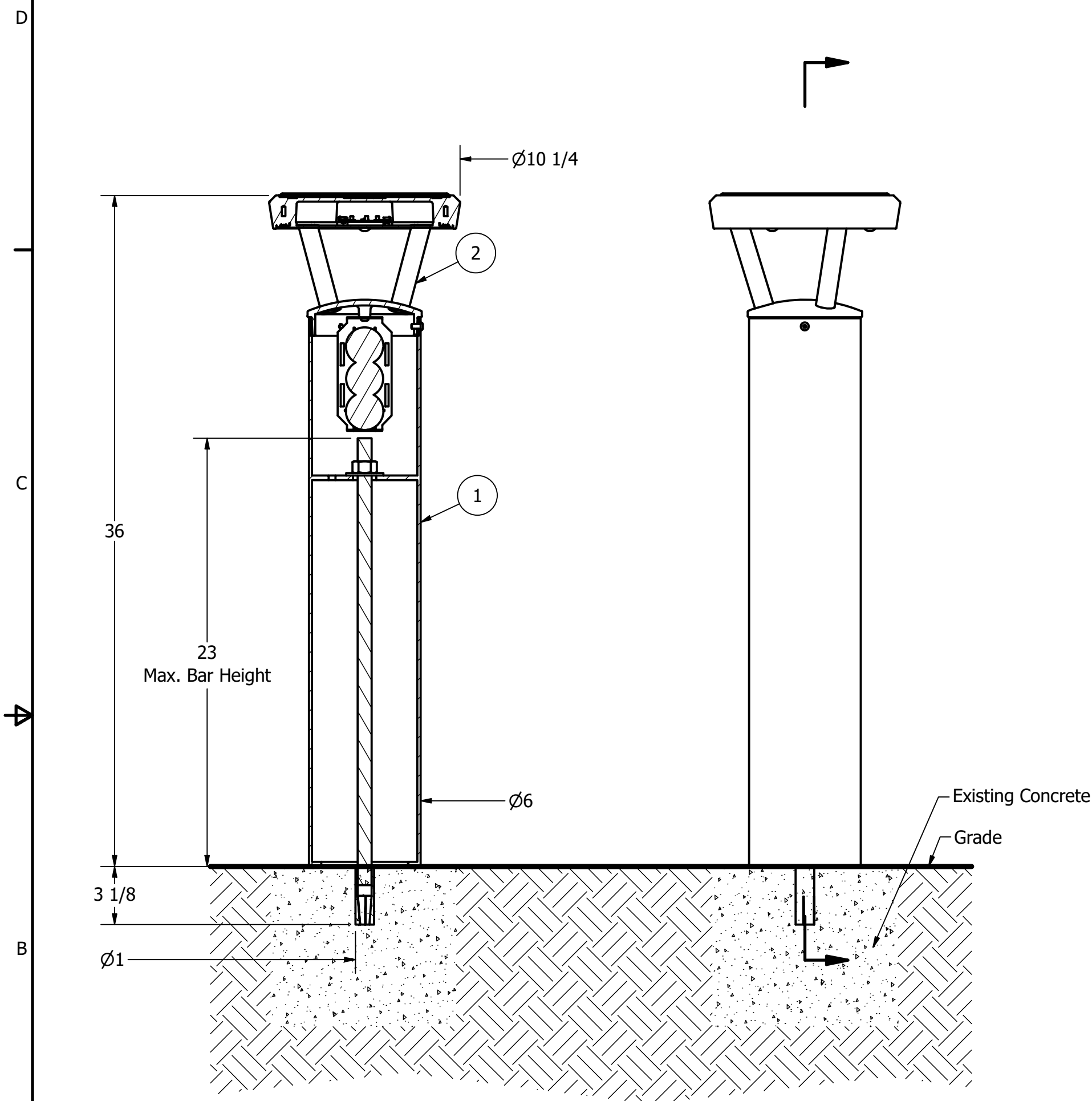
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Bollard R-9811

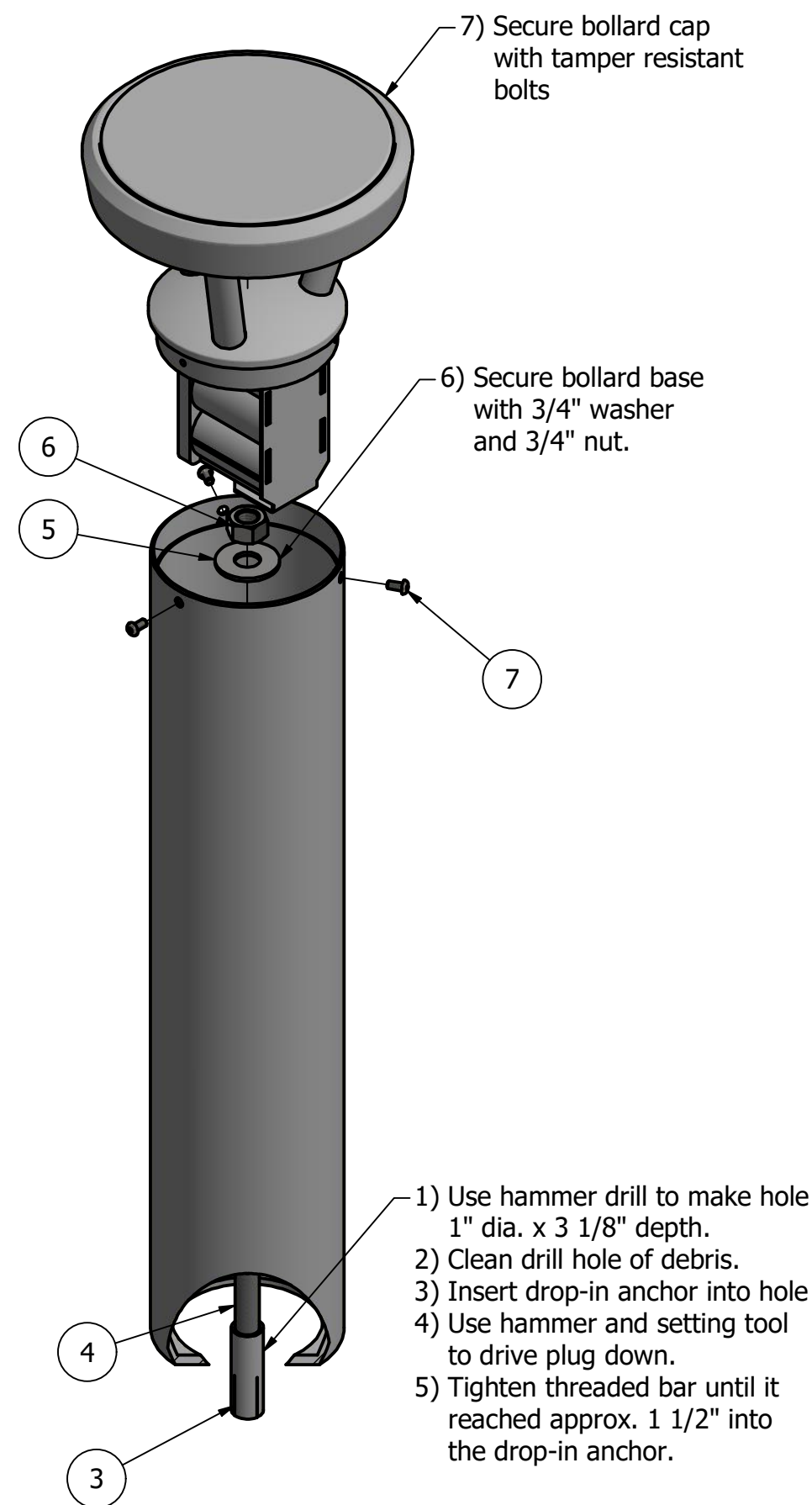
SIZE	DWG NO	REV
C	R9811	C2

Bollard R-9811



Notes:

- 1) Bollard post is provided as shown. Concrete, foundation and/or installation ordered separately or provided by others.
- 2) Minimum foundation sizes depend on local soil conditions, weather conditions, and engineering requirements.
- 3) Dimensions provided herein is for reference only. Please consult Reliance Foundry sales professionals if any dimension is critical to your particular installation.
- 4) Reliance Foundry reserves the right to amend design and specifications without prior notice for product improvement.



Tools needed:

- 1) Measuring tape
- 2) 1 1/8 inch wrench
- 3) Special hex key
- 4) Hammer drill
- 5) 1 inch Masonry drill bit
- 6) Hammer
- 7) Drop-in concrete insert setting tool

General Description:

R-9811 Solar Light Bollards increase safety and visibility for vehicles and pedestrians-ideal for parking lots, walkways and plazas. Intelligent energy management systems ensure maximum outputs based on weather and time of year. High-capacity batteries allow lights to operate for 14 days without direct sunlight. Lighting systems are fully contained, requiring no additional hardwiring or underground conduits. Choose from a range of custom lighting colors, distribution areas and scheduling options. Powder coatings are available in 1 of 6 colors.

Specifications:

Height: 36"
 Base Diameter: 6"
 Weight: 51 lbs (Bollard Only)
 Material: Steel Base with Aluminum Cap
 Max. Interior Security Post Size:
 4 1/2" x 20" (Diameter x Height)

Finish Options:

- Polyester Powdercoated

See Reliance Foundry's standard color options at:
www.reliance-foundry.com/bollard/colors-bollards

Installation Options:

- Fixed - Anchor Casting in New Concrete (see sheet 2 of 6)
- Fixed - Concrete Insert Anchor in Existing Concrete (see sheet 3 of 6)
- Fixed - Adhesive Anchor in Existing Concrete (see sheet 4 of 6)
- Post Cover - New Post in New Concrete (see sheet 5 of 6)
- Post Cover - Existing Post with Adhesive Anchor (see sheet 6 of 6)

For more information on bollard post installation, please visit:
www.reliance-foundry.com/bollard/installation-bollards

Light Color Options:

- 4500K Neutral White
- 3000K Warm White

On-Off Program Options:

- Dim to 30% @ 5 hours
- Off @ dawn
- Off @ 6 hours
- Dim to 30% @ 6 hours
- Off @ 5 hours

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TITLE

Bollard R-9811

SIZE
C

DWG NO
R9811

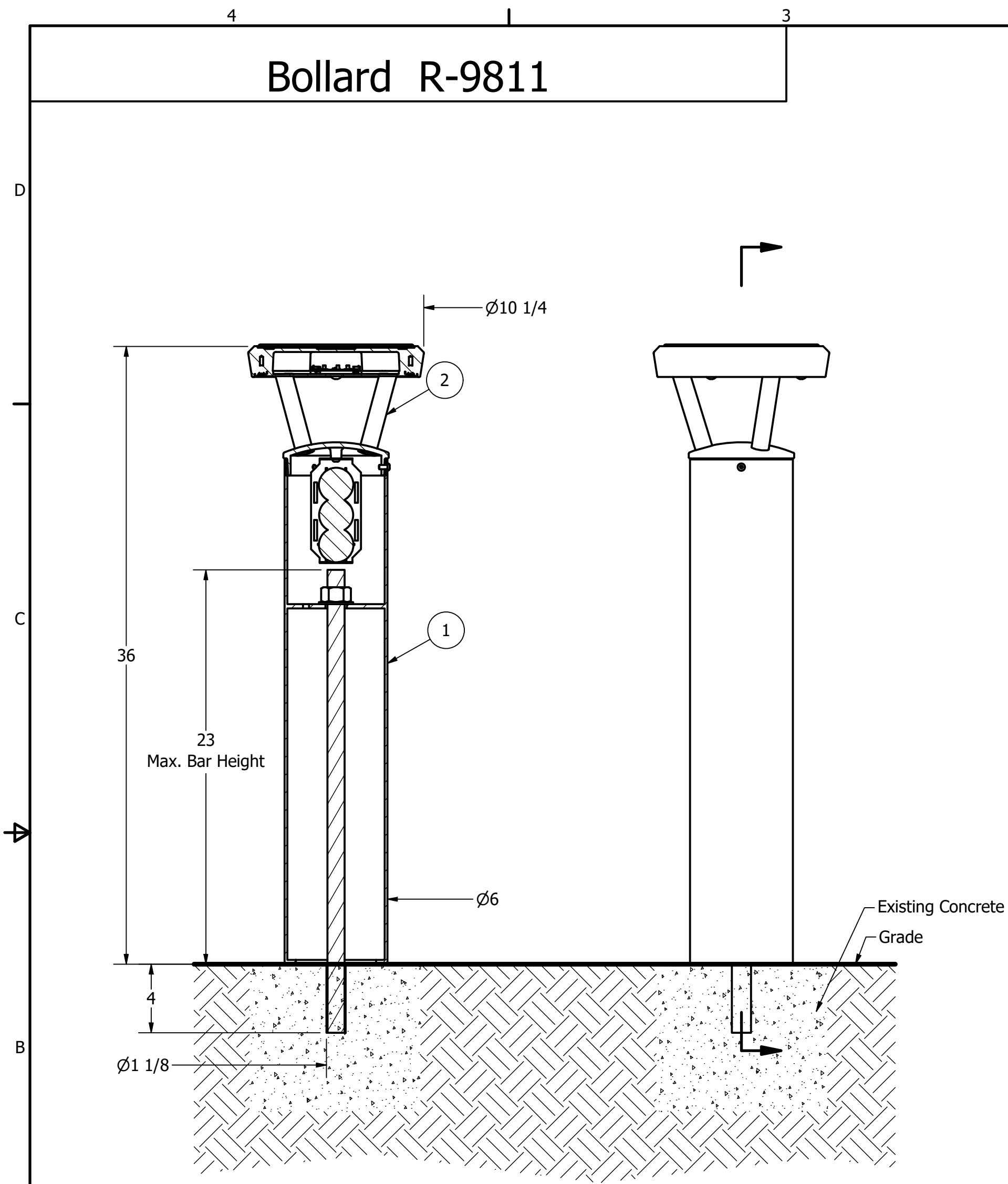
REV
C2

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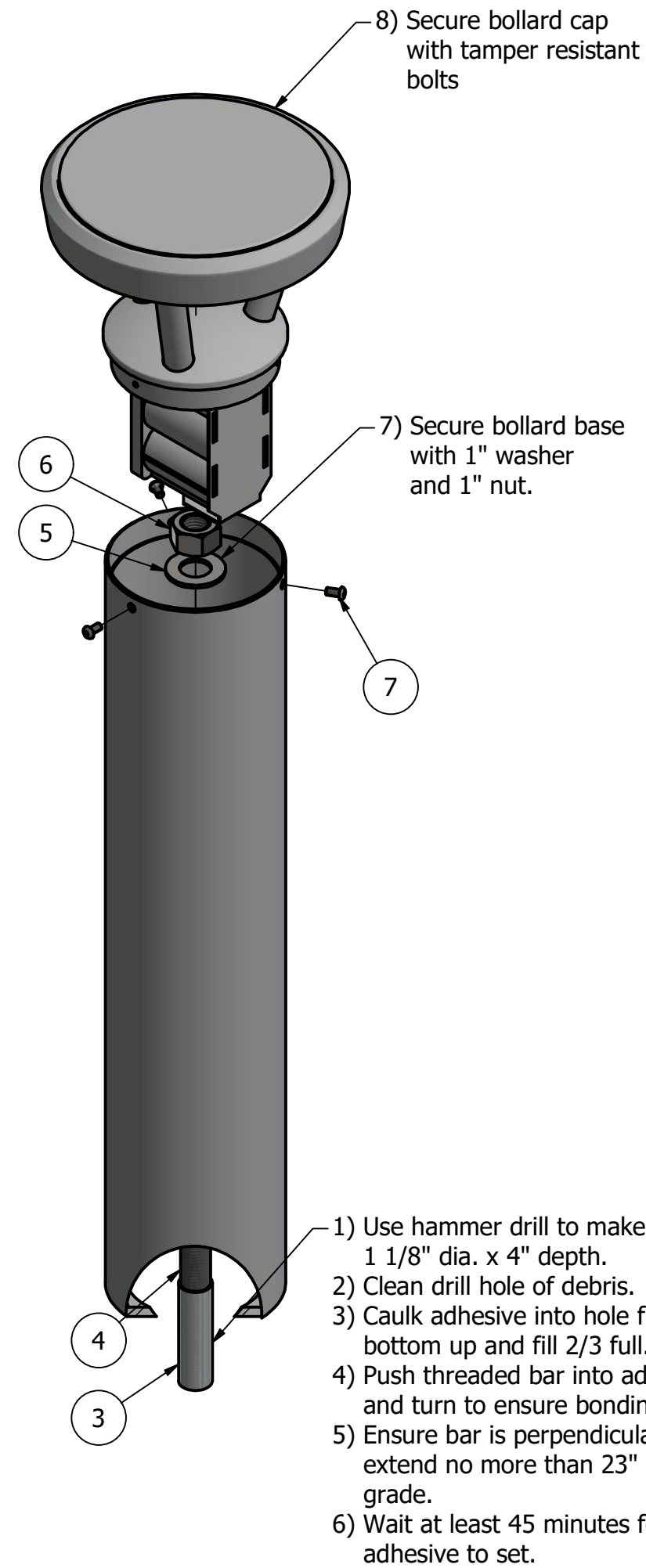
NOT TO SCALE

SHEET 3 OF 6

Bollard R-9811



- Notes:**
- 1) Bollard post is provided as shown. Concrete, foundation and/or installation ordered separately or provided by others.
 - 2) Minimum foundation sizes depend on local soil conditions, weather conditions, and engineering requirements.
 - 3) Dimensions provided herein is for reference only. Please consult Reliance Foundry sales professionals if any dimension is critical to your particular installation.
 - 4) Reliance Foundry reserves the right to amend design and specifications without prior notice for product improvement.



- Tools needed:**
- 1) Measuring tape
 - 2) 1 1/2" wrench
 - 3) Special hex key
 - 4) Hammer drill
 - 5) 1 1/8" Masonry drill bit
 - 6) Caulking gun and utility knife

General Description:

R-9811 Solar Light Bollards increase safety and visibility for vehicles and pedestrians-ideal for parking lots, walkways and plazas. Intelligent energy management systems ensure maximum outputs based on weather and time of year. High-capacity batteries allow lights to operate for 14 days without direct sunlight. Lighting systems are fully contained, requiring no additional hardwiring or underground conduits. Choose from a range of custom lighting colors, distribution areas and scheduling options. Powder coatings are available in 1 of 6 colors.

Specifications:

Height: 36"
 Base Diameter: 6"
 Weight: 51 lbs (Bollard Only)
 Material: Steel Base with Aluminum Cap
 Max. Interior Security Post Size:
 4 1/2" x 20" (Diameter x Height)

Finish Options:

○ Polyester Powdercoated

See Reliance Foundry's standard color options at:
www.reliance-foundry.com/bollard/colors-bollards

Installation Options:

- Fixed - Anchor Casting in New Concrete (see sheet 2 of 6)
- Fixed - Concrete Insert Anchor in Existing Concrete (see sheet 3 of 6)
- Fixed - Adhesive Anchor in Existing Concrete (see sheet 4 of 6)
- Post Cover - New Post in New Concrete (see sheet 5 of 6)
- Post Cover - Existing Post with Adhesive Anchor (see sheet 6 of 6)

For more information on bollard post installation, please visit:
www.reliance-foundry.com/bollard/installation-bollards

Light Color Options:

- 4500K Neutral White
- 3000K Warm White

On-Off Program Options:

- Dim to 30% @ 5 hours
- Off @ dawn
- Off @ 6 hours
- Dim to 30% @ 6 hours
- Off @ 5 hours

PARTS LIST

ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	WEIGHT
1	1	R9811B	R9811 Bollard Base	Steel Powder Coated	32 lbs
2	1	R9811C	R9811 Bollard Solar Light Cap (Option of SYM or ASYM)	Cast Aluminum Powder Coated	19 lbs
3	1	Adhesive Anchor	AC100+ Gold Adhesive Anchoring System	Vinylester Adhesive Mortar	5/8 lbs
4	1	R7500BAR 1"	R7500 Threaded Bar 1" x 27"	Steel Plated	5 lbs
5	1	Washer 1" OD 2"	Washer 1" OD 2" Thick 1/8"	Steel Plated	1/8 lbs
6	1	Hex Nut 1"	Hex Nut 1" - requires 1 1/2" wrench	Steel Plated	1/4 lbs
7	3	Button Head Bolt TR 1/4" x 1/2"	Hexagon Socket Button Head Cap Bolt Tamper Resistant 1/4" x 1/2" - requires special hex key	Stainless Steel	

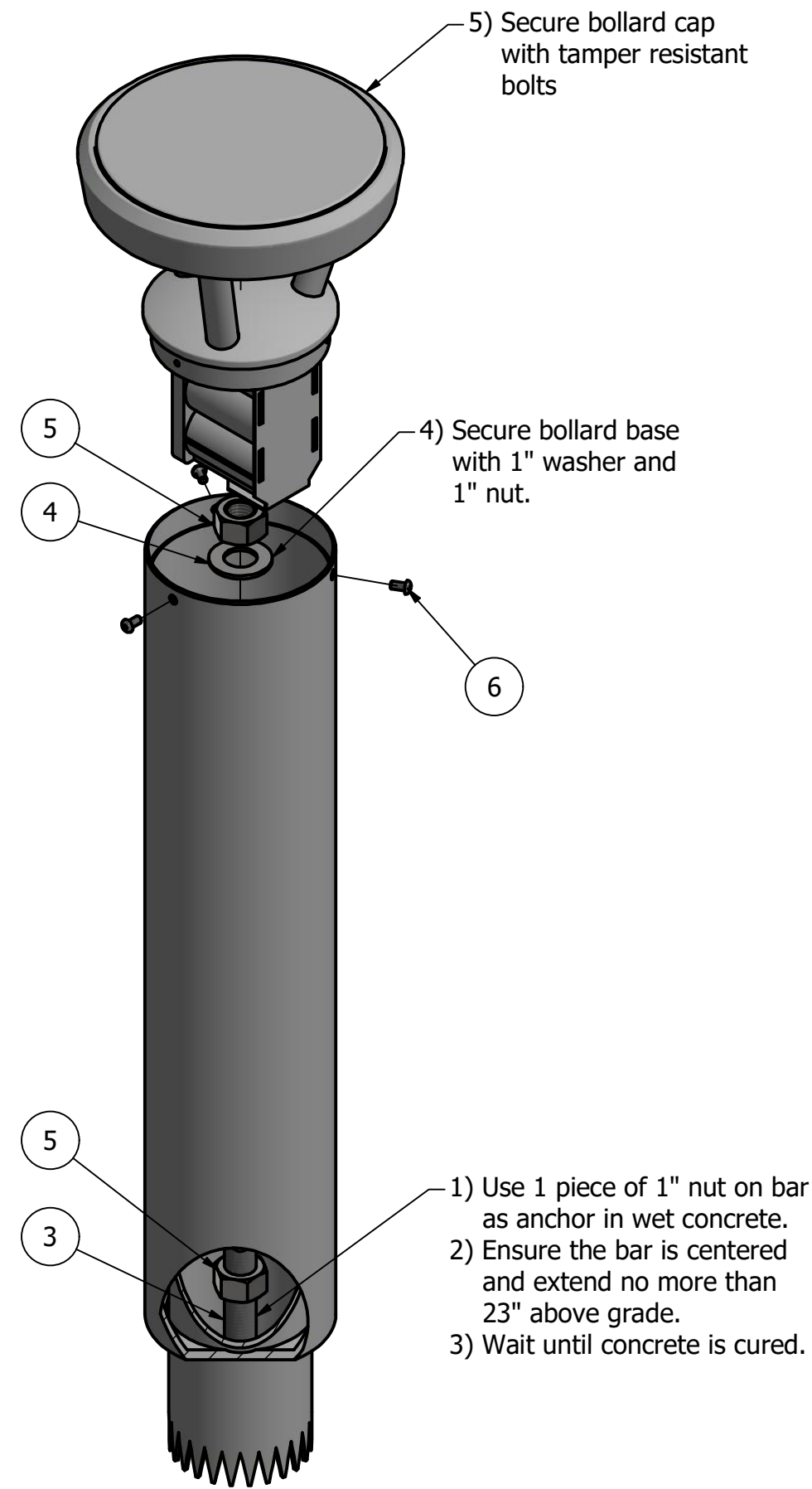
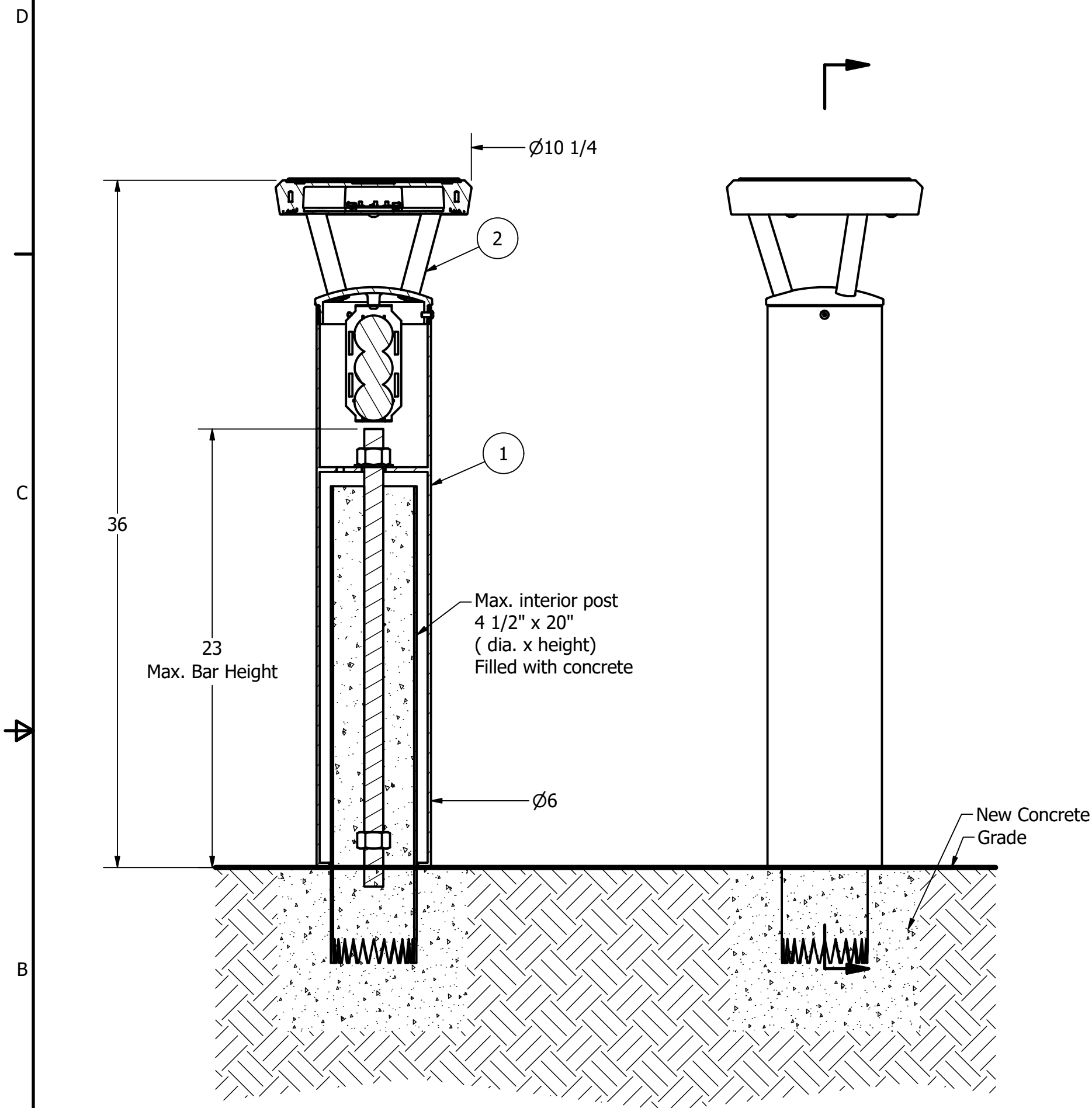
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Bollard R-9811

SIZE C	DWG NO R9811	REV C2
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Bollard R-9811



General Description:

R-9811 Solar Light Bollards increase safety and visibility for vehicles and pedestrians-ideal for parking lots, walkways and plazas. Intelligent energy management systems ensure maximum outputs based on weather and time of year. High-capacity batteries allow lights to operate for 14 days without direct sunlight. Lighting systems are fully contained, requiring no additional hardwiring or underground conduits. Choose from a range of custom lighting colors, distribution areas and scheduling options. Powder coatings are available in 1 of 6 colors.

Specifications:

Height: 36"
 Base Diameter: 6"
 Weight: 51 lbs (Bollard Only)
 Material: Steel Base with Aluminum Cap
 Max. Interior Security Post Size:
 4 1/2" x 20" (Diameter x Height)

Finish Options:

○ Polyester Powdercoated

See Reliance Foundry's standard color options at:
www.reliance-foundry.com/bollard/colors-bollards

Installation Options:

- Fixed - Anchor Casting in New Concrete (see sheet 2 of 6)
- Fixed - Concrete Insert Anchor in Existing Concrete (see sheet 3 of 6)
- Fixed - Adhesive Anchor in Existing Concrete (see sheet 4 of 6)
- Post Cover - New Post in New Concrete (see sheet 5 of 6)
- Post Cover - Existing Post with Adhesive Anchor (see sheet 6 of 6)

For more information on bollard post installation, please visit:
www.reliance-foundry.com/bollard/installation-bollards

Light Color Options:

- 4500K Neutral White
- 3000K Warm White

On-Off Program Options:

- Dim to 30% @ 5 hours
- Off @ dawn
- Off @ 6 hours
- Dim to 30% @ 6 hours
- Off @ 5 hours

Notes:

- 1) Bollard post is provided as shown. Concrete, foundation and/or installation ordered separately or provided by others.
- 2) Minimum foundation sizes depend on local soil conditions, weather conditions, and engineering requirements.
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- 4) Reliance Foundry reserves the right to amend design and specifications without prior notice for product improvement.

Tools needed:
 1) Measuring tape
 2) 1 1/2" wrench
 3) Special hex key

PARTS LIST

ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	WEIGHT
1	1	R9811B	R9811 Bollard Base	Steel Powder Coated	32 lbs
2	1	R9811C	R9811 Bollard Solar Light Cap (Option of SYM or ASYM)	Cast Aluminum Powder Coated	19 lbs
3	1	R7500BAR 1"	R7500 Threaded Bar 1" x 24"	Steel Plated	4 1/2 lbs
4	1	Washer 1" OD 2"	Washer 1" OD 2" Thick 1/8"	Steel Plated	1/8 lbs
5	2	Hex Nut 1"	Hex Nut 1" - requires 1 1/2" wrench	Steel Plated	1/4 lbs
6	3	Button Head Bolt TR 1/4" x 1/2"	Hexagon Socket Button Head Cap Bolt Tamper Resistant 1/4" x 1/2" - requires special hex key	Stainless Steel	

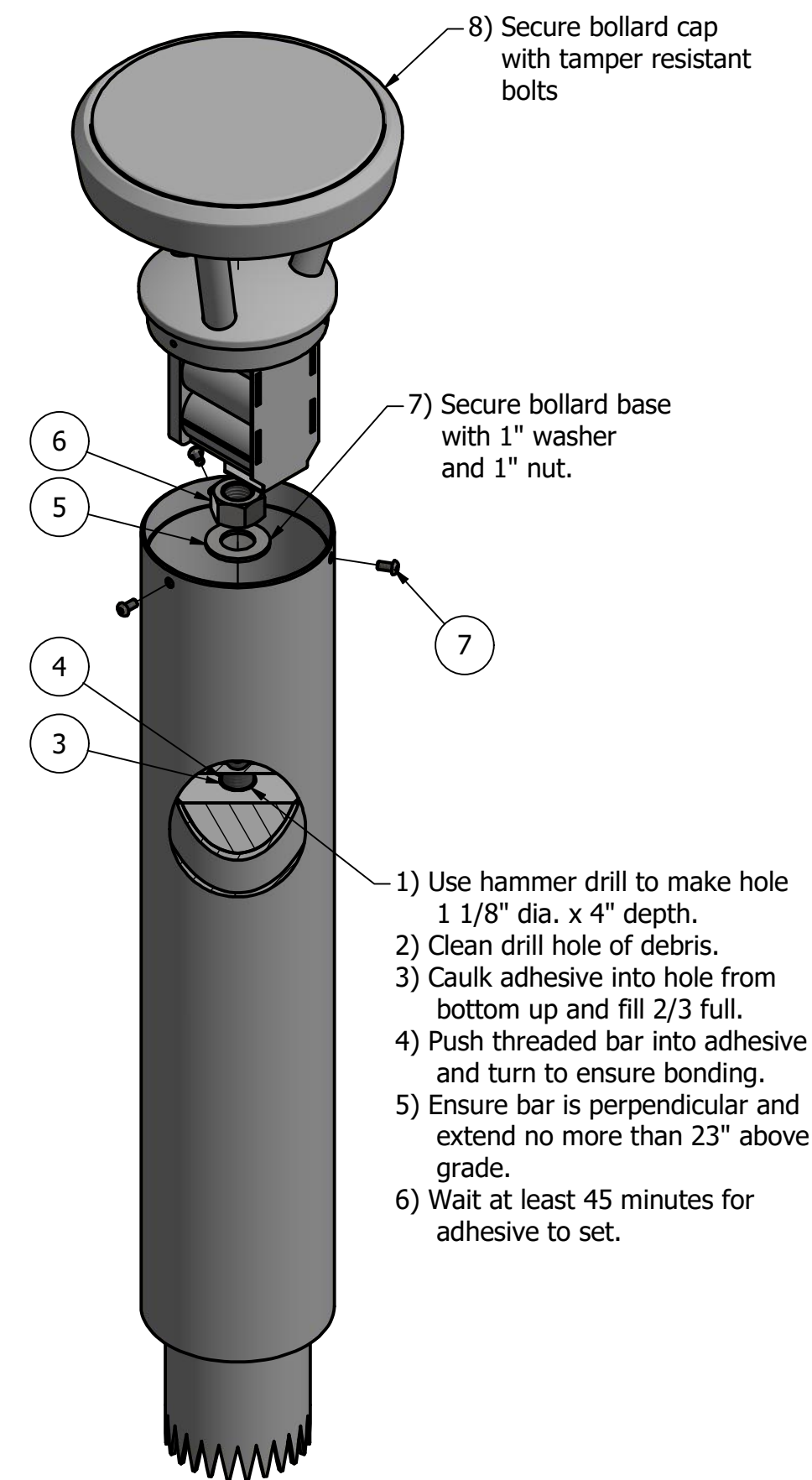
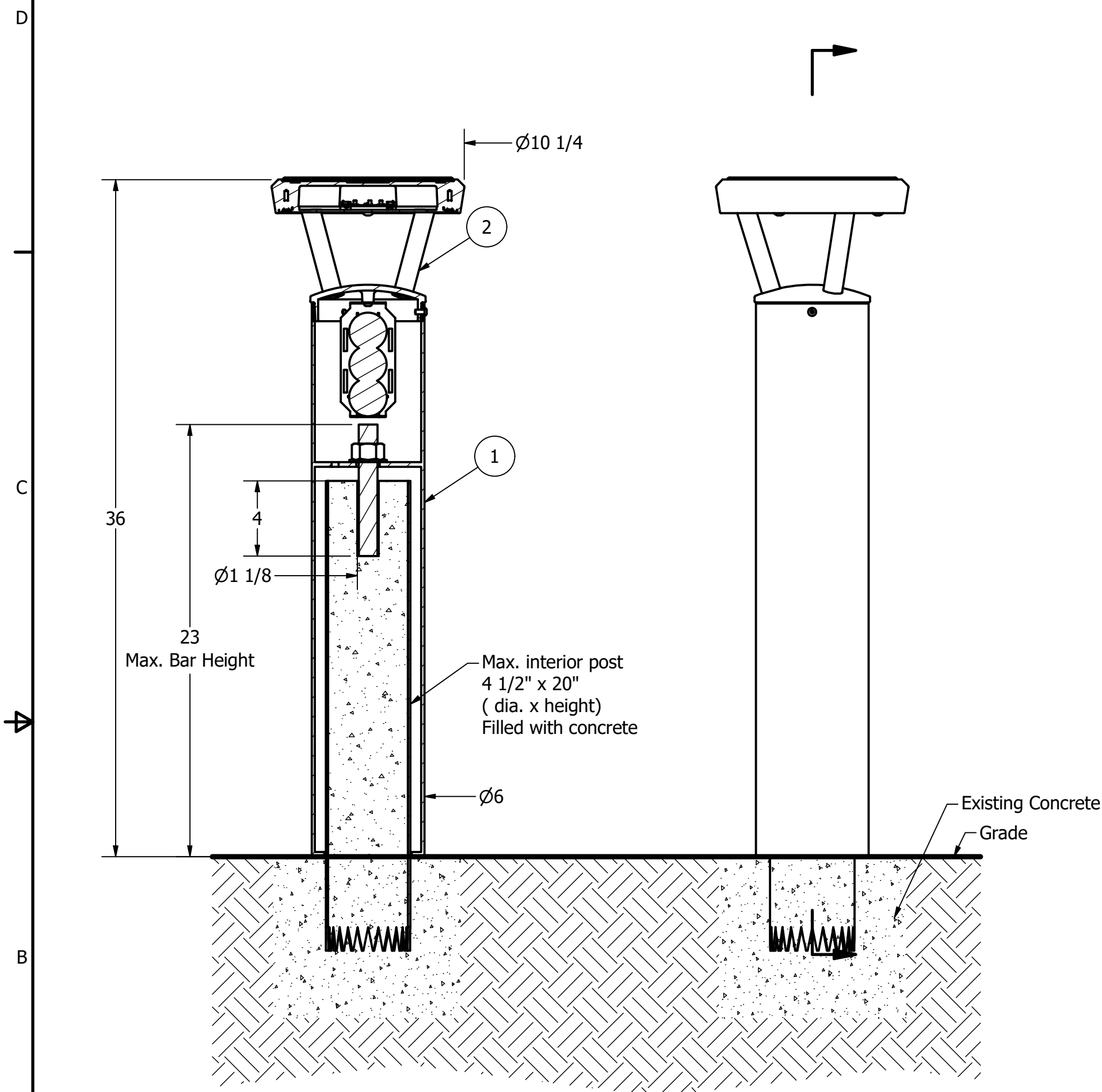
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Bollard R-9811

SIZE C	DWG NO R9811	REV C2
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Bollard R-9811



General Description:

R-9811 Solar Light Bollards increase safety and visibility for vehicles and pedestrians-ideal for parking lots, walkways and plazas. Intelligent energy management systems ensure maximum outputs based on weather and time of year. High-capacity batteries allow lights to operate for 14 days without direct sunlight. Lighting systems are fully contained, requiring no additional hardwiring or underground conduits. Choose from a range of custom lighting colors, distribution areas and scheduling options. Powder coatings are available in 1 of 6 colors.

Specifications:

Height: 36"
 Base Diameter: 6"
 Weight: 51 lbs (Bollard Only)
 Material: Steel Base with Aluminum Cap
 Max. Interior Security Post Size:
 4 1/2" x 20" (Diameter x Height)

Finish Options:

☉ Polyester Powdercoated

See Reliance Foundry's standard color options at:
www.reliance-foundry.com/bollard/colors-bollards

Installation Options:

- Fixed - Anchor Casting in New Concrete (see sheet 2 of 6)
- Fixed - Concrete Insert Anchor in Existing Concrete (see sheet 3 of 6)
- Fixed - Adhesive Anchor in Existing Concrete (see sheet 4 of 6)
- Post Cover - New Post in New Concrete (see sheet 5 of 6)
- ☉ Post Cover - Existing Post with Adhesive Anchor (see sheet 6 of 6)

For more information on bollard post installation, please visit:
www.reliance-foundry.com/bollard/installation-bollards

Light Color Options:

- 4500K Neutral White
- 3000K Warm White

On-Off Program Options:

- Dim to 30% @ 5 hours
- Off @ dawn
- Off @ 6 hours
- Dim to 30% @ 6 hours
- Off @ 5 hours

Notes:

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Tools needed:

- 1) Measuring tape
- 2) 1 1/2" wrench
- 3) Special hex key
- 4) Hammer drill
- 5) 1 1/8" Masonry drill bit
- 6) Caulking gun and utility knife

PARTS LIST

ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	WEIGHT
1	1	R9811B	R9811 Bollard Base	Steel Powder Coated	32 lbs
2	1	R9811C	R9811 Bollard Solar Light Cap (Option of SYM or ASYM)	Cast Aluminum Powder Coated	19 lbs
3	1	Adhesive Anchor	AC100+ Gold Adhesive Anchoring System	Vinylester Adhesive Mortar	5/8 lbs
4	1	R7500BAR 1"	R7500 Threaded Bar 1" Custom Order Length	Steel Plated	TBD
5	1	Washer 1" OD 2"	Washer 1" OD 2" Thick 1/8"	Steel Plated	1/8 lbs
6	1	Hex Nut 1"	Hex Nut 1" - requires 1 1/2" wrench	Steel Plated	1/4 lbs
7	3	Button Head Bolt TR 1/4" x 1/2"	Hexagon Socket Button Head Cap Bolt Tamper Resistant 1/4" x 1/2" - requires special hex key	Stainless Steel	

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Bollard R-9811

SIZE C	DWG NO R9811	REV C2
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