



Bollard Chain 5/16" (Powder Coated)

2

### **General Description:**

The R-7591 Decorative Bollard features a classic design, suitable for traditional and contemporary environments. R-7591 bollards are made from a versatile ductile iron, featuring decorative fluting and corniced top casting for simple but elegant stature. Bollard surfaces are protected by a durable powder coating, available in 6 standard colors, to prevent wear and corrosion. Use as fixed, stand-alone bollards or cover impact-resistant security posts.

### **Specifications:**

Height: 31 3/4" Base Diameter: 10 1/4" Weight: 79 lbs ( Bollard Only ) Material: Ductile Iron Max. Interior Security Post Size: 4 1/2" x 25" (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 12)
- O Fixed Concrete Insert Anchor in Existing Concrete (see sheet 3 of 12)
- O Fixed Adhesive Anchor in Existing Concrete (see sheet 4 of 12)
- Fixed Anchor Casting with Concrete Form (see sheet 5 of 12)
- Post Cover New Post in New Concrete (see sheet 6 of 12)
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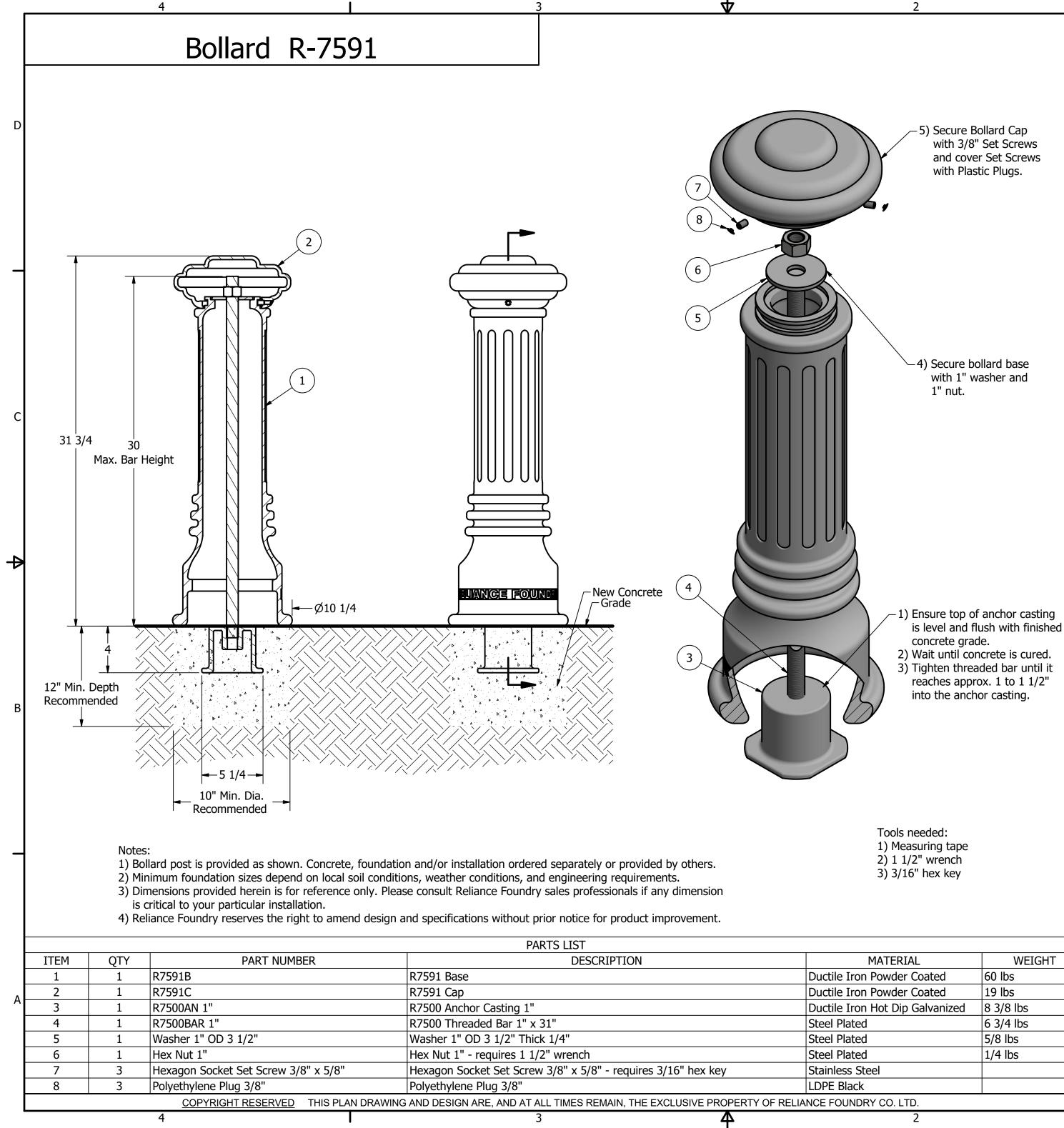
O Removable - Premium Retractable in New Concrete (see sheet 12 of 12)

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# **Care and Maintenance:**

Reliance's line of bollards are finished with a long-lasting powder-coating. Proper care and maintenance are required. Regularly-performed inspections and routine cleaning will ensure that a bollard retains its aesthetic appeal and does not become damaged by the elements.

RELIANCE FOUNDRY									
Unit 207, 6450 - 148 Street, Surrey, BC V3S 7G7, Canada 1-877-789-3245 info@reliance-foundry.com www.reliance-foundry.com									
TITLE									
	Bollard	R-7	591						
SIZE	DWG NO			REV					
C	R7591			C4					
 NOT TO SCALE		s	HEET 1 OF 12						
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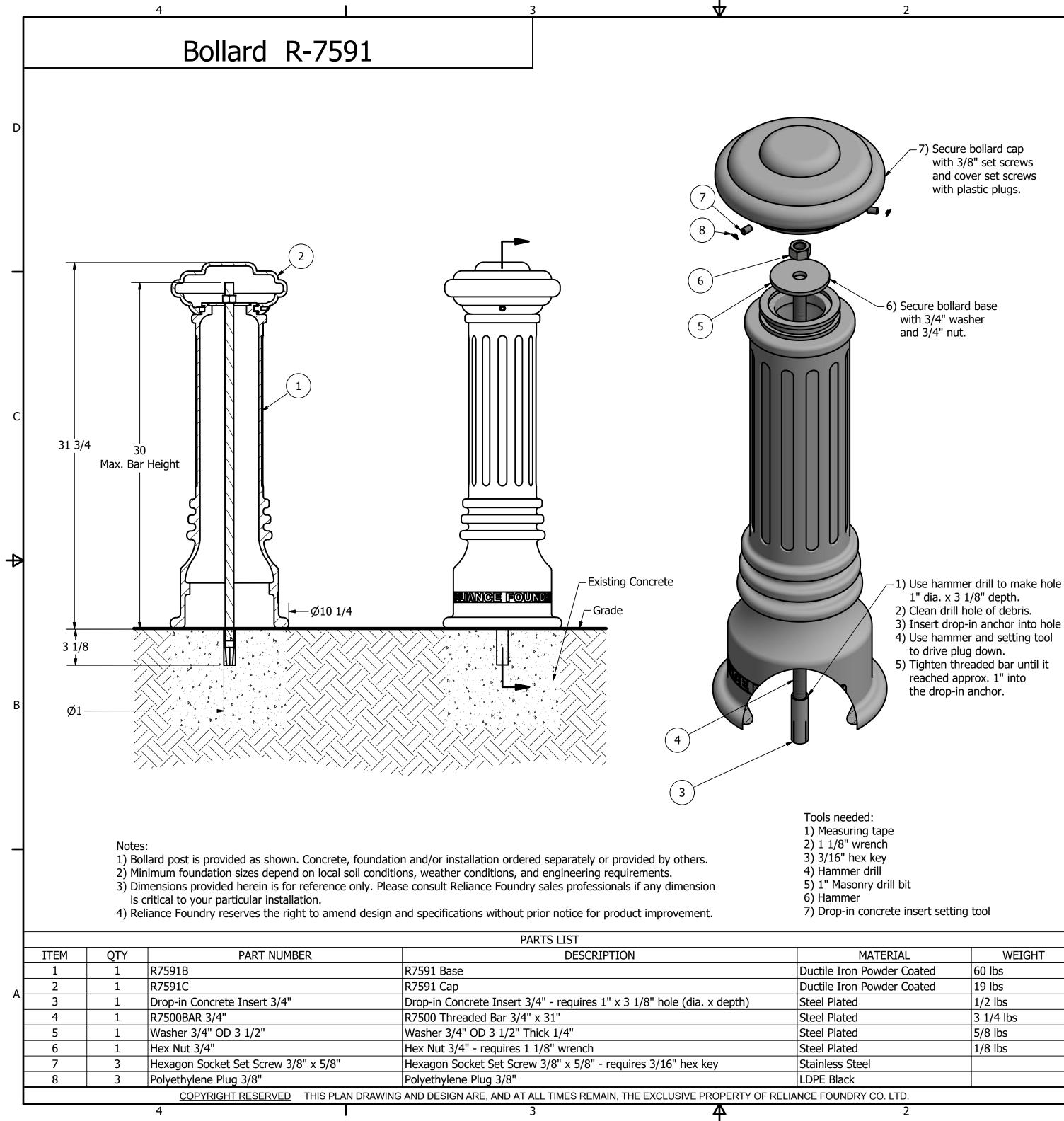
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ted	60 lbs		www.reliance-foundry.com							
ted	19 lbs	TITLE								
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	6 3/4 lbs		Bollard R-7591							
	5/8 lbs									
	1/4 lbs									
		SIZE			DWG NO			REV		
		- C			R7591			C4		
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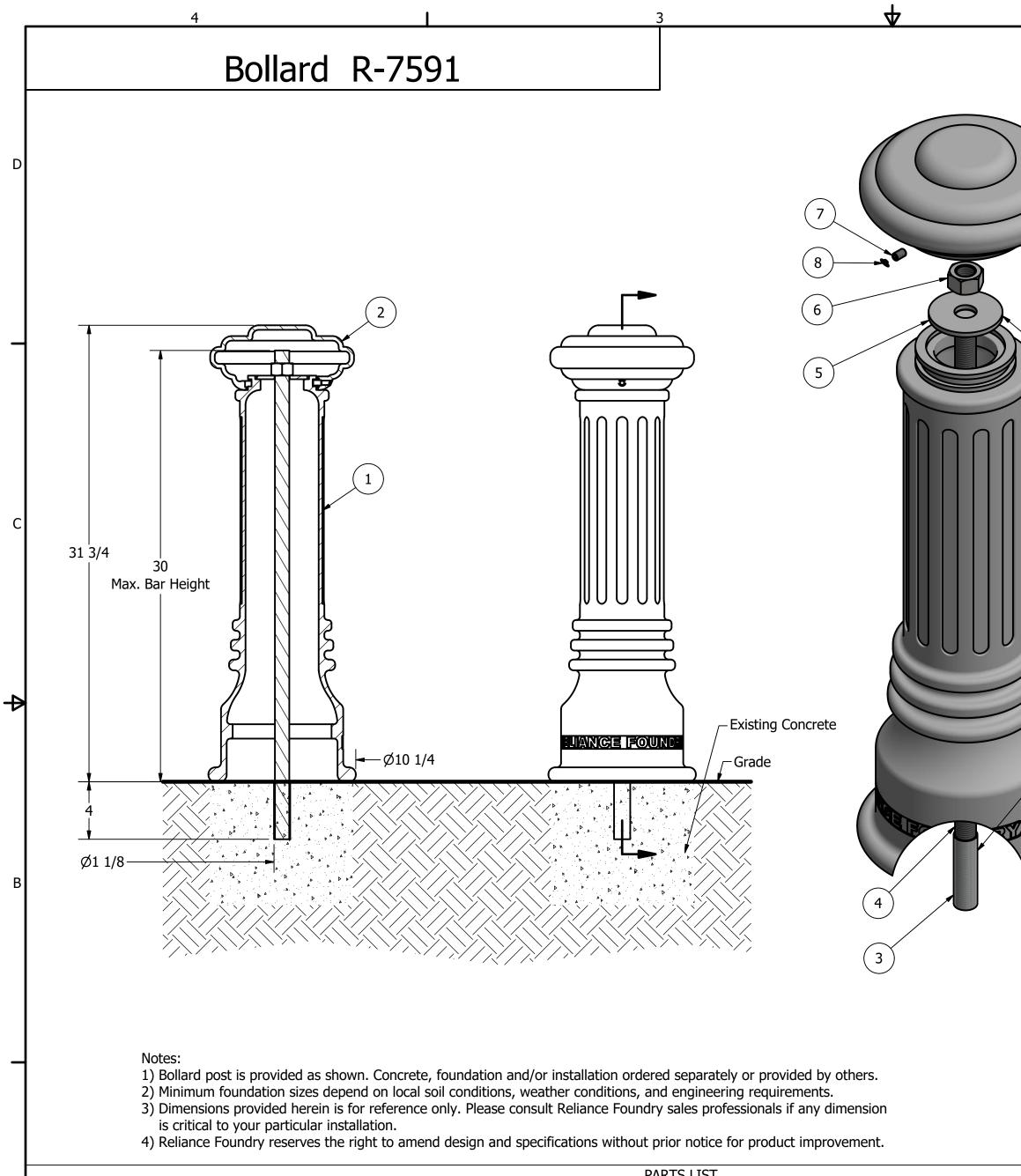
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MATERIAL	WEIGHT		1-877-78		@reliance-foundry.com		
ron Powder Coated	60 lbs			www.reliance	-foundry.com		
ron Powder Coated	19 lbs	TITLE					A
ted	1/2 lbs						
ted	3 1/4 lbs		Bollard R-7591				
ted	5/8 lbs		_				
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Steel		SIZE		DWG NO		REV	
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				PARTS LIST	
	ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL
	1	1	R7591B	R7591 Base	Ductile Iron Powder Coated
	2	1	R7591C	R7591 Cap	Ductile Iron Powder Coated
	3	1	Adhesive Anchor	AC100+ Gold Adhesive Anchoring System	Vinylester Adhesive Mortar
	4	1	R7500BAR 1"	R7500 Threaded Bar 1" x 34"	Steel Plated
	5	1	Washer 1" OD 3 1/2"	Washer 1" OD 3 1/2" Thick 1/4"	Steel Plated
	6	1	Hex Nut 1"	Hex Nut 1" - requires 1 1/2" wrench	Steel Plated
	7	3	Hexagon Socket Set Screw 3/8" x 5/8"	Hexagon Socket Set Screw 3/8" x 5/8" - requires 3/16" hex key	Stainless Steel
	8	3	Polyethylene Plug 3/8"	Polyethylene Plug 3/8"	LDPE Black
			COPYRIGHT RESERVED THIS PLAN DRAW	ING AND DESIGN ARE, AND AT ALL TIMES REMAIN, THE EXCLUSIVE PROPERTY C	F RELIANCE FOUNDRY CO. LTD.
-			4	3 4	2

8) Secure bollard cap with 3/8" set screws and cover set screws with plastic plugs.

7) Secure bollard base with 1" washer and 1" nut.

- 1) Use hammer drill to make hole 1 1/8" dia. x 4" depth.
- 2) Clean drill hole of debris.
- 3) Caulk adhesive into hole from bottom up and fill 1/4 full.
- 4) Push threaded bar into adhesive and turn to ensure bonding.
- 5) Ensure bar is perpendicular and extend no more than 30" above grade.
- 6) Wait at least 45 minutes for adhesive to set.
- Tools needed:
- 1) Measuring tape
- 2) 1 1/2" wrench
- 3) 3/16" hex key
- 4) Hammer drill

- 5) 1 1/8" Masonry drill
- 6) Caulking gun and util

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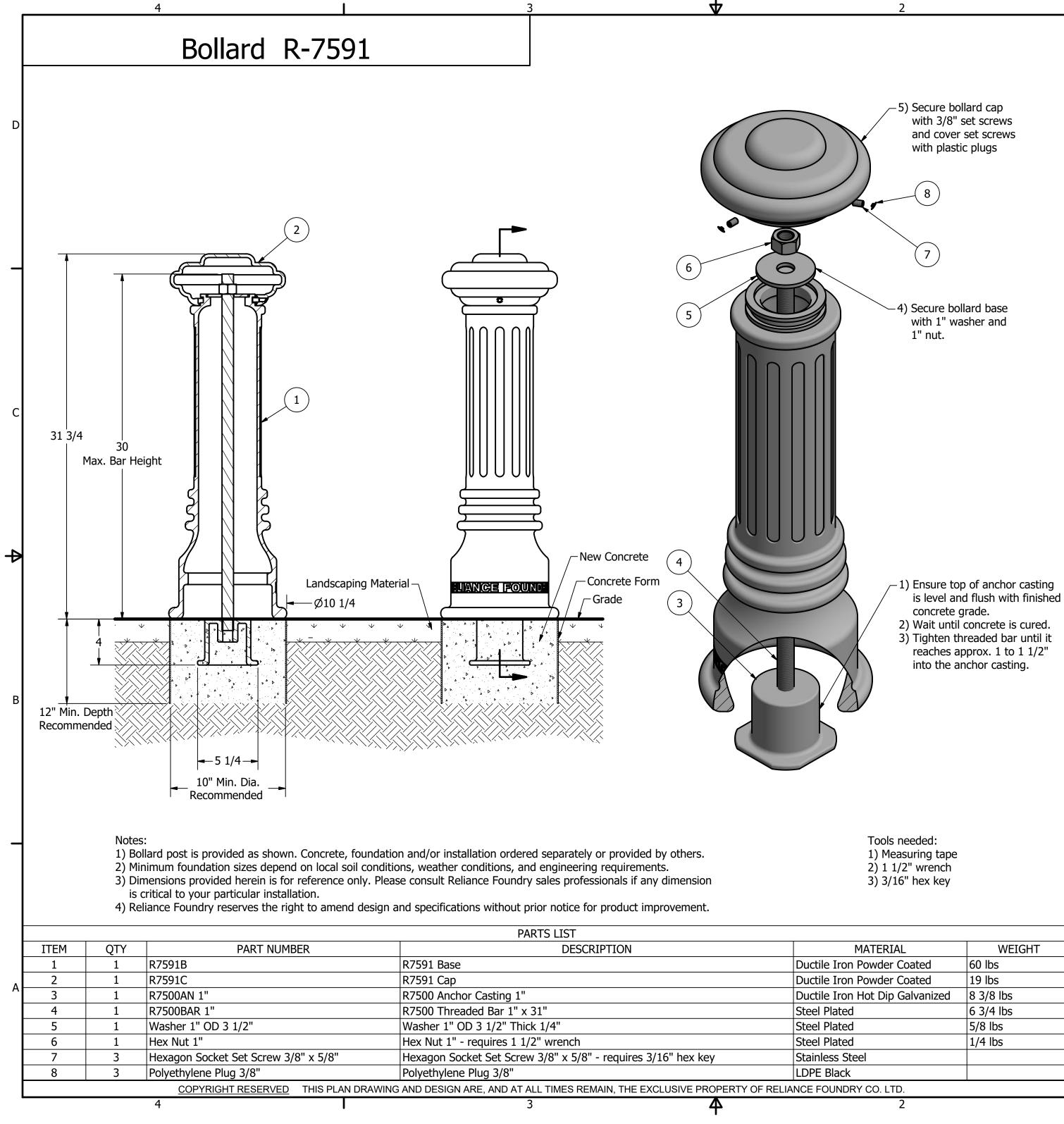
nry drill bit and utility knife		RELIANCE FOUNDRY		
	U	nit 207, 6450 - 148 Street, Surrey, BC V3S 7G7, Canad	a	
WEIGHT		1-877-789-3245 info@reliance-foundry.com		
60 lbs		www.reliance-foundry.com		
19 lbs	TITLE			
5/8 lbs				A
6 1/4 lbs		Bollard R-7591		
5/8 lbs				
1/4 lbs	ļ			
	SIZE	DWG NO	REV	
	C	R7591	C4	

SHEET 4 OF 12

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Tools needed:
1) Measuring tape
2) 1 1/2" wrench

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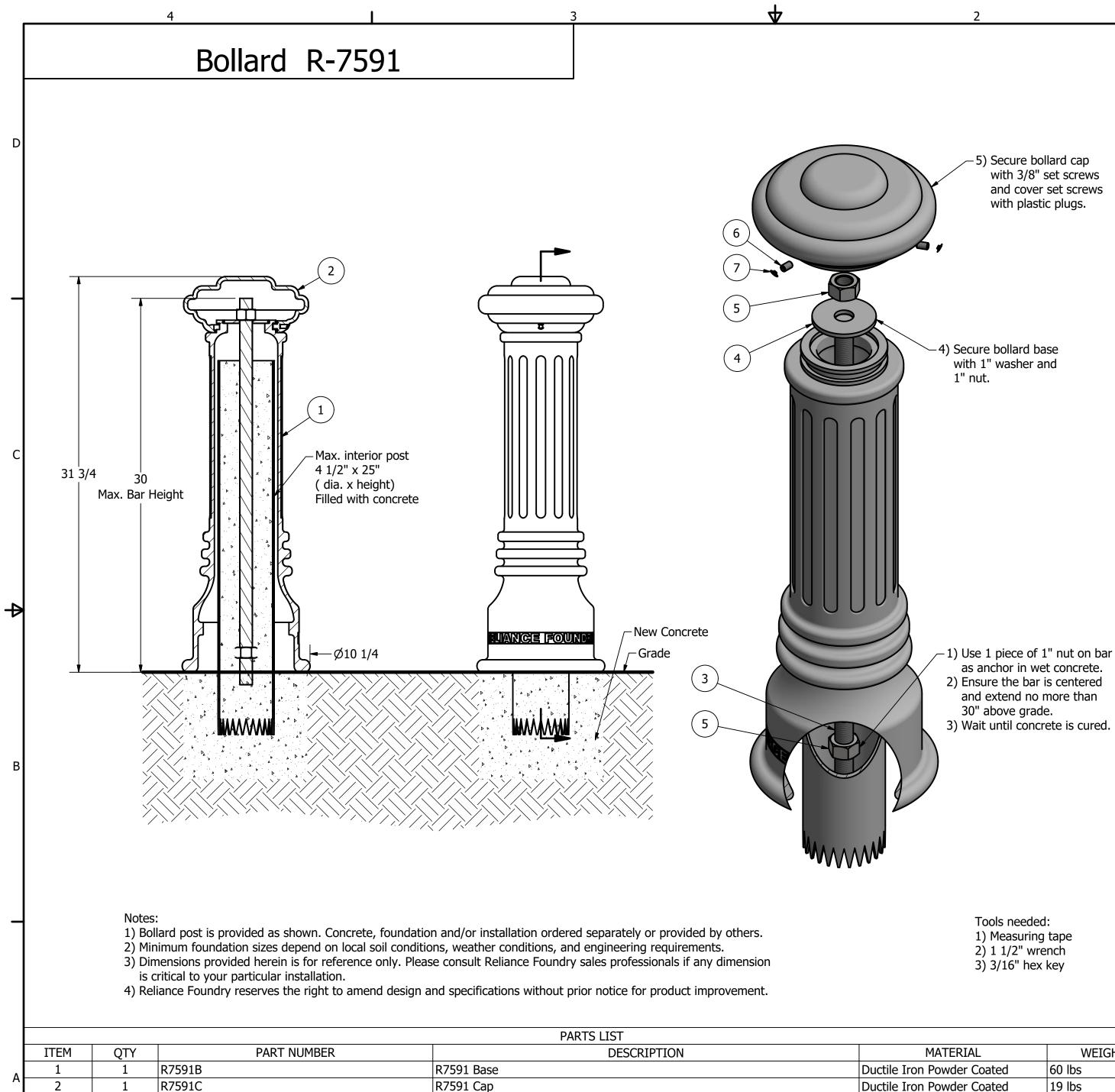
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2) 1 1/2" wrench 3) 3/16" hex key			RELIANCE FOUNDRY							
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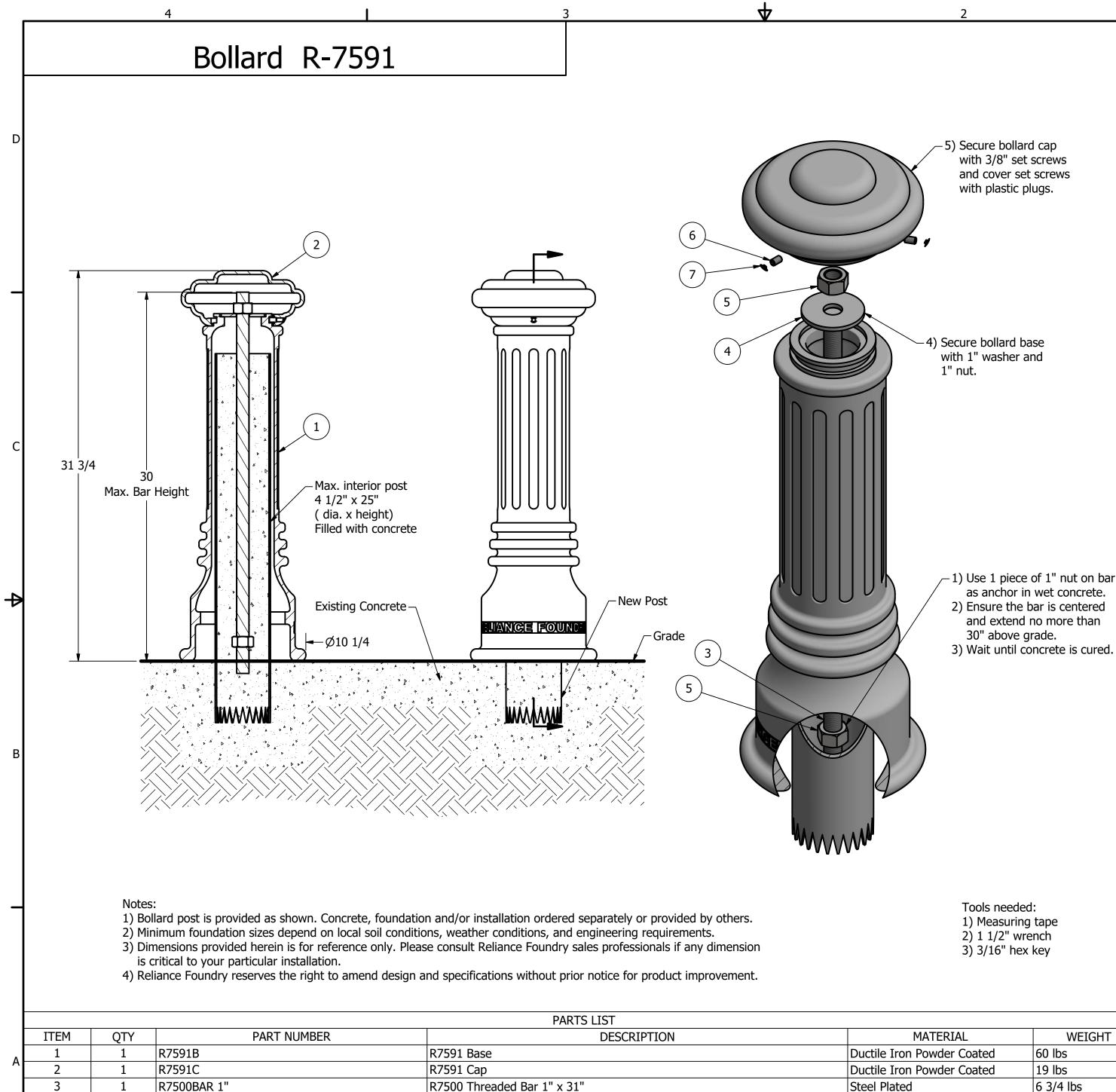
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	5/8 lbs								
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Washer 1" OD 3 1/2"

Polyethylene Plug 3/8"

Hexagon Socket Set Screw 3/8" x 5/8"

Hex Nut 1"

Polyethylene Plug 3/8"

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Steel Plated

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LDPE Black

4

Stainless Steel

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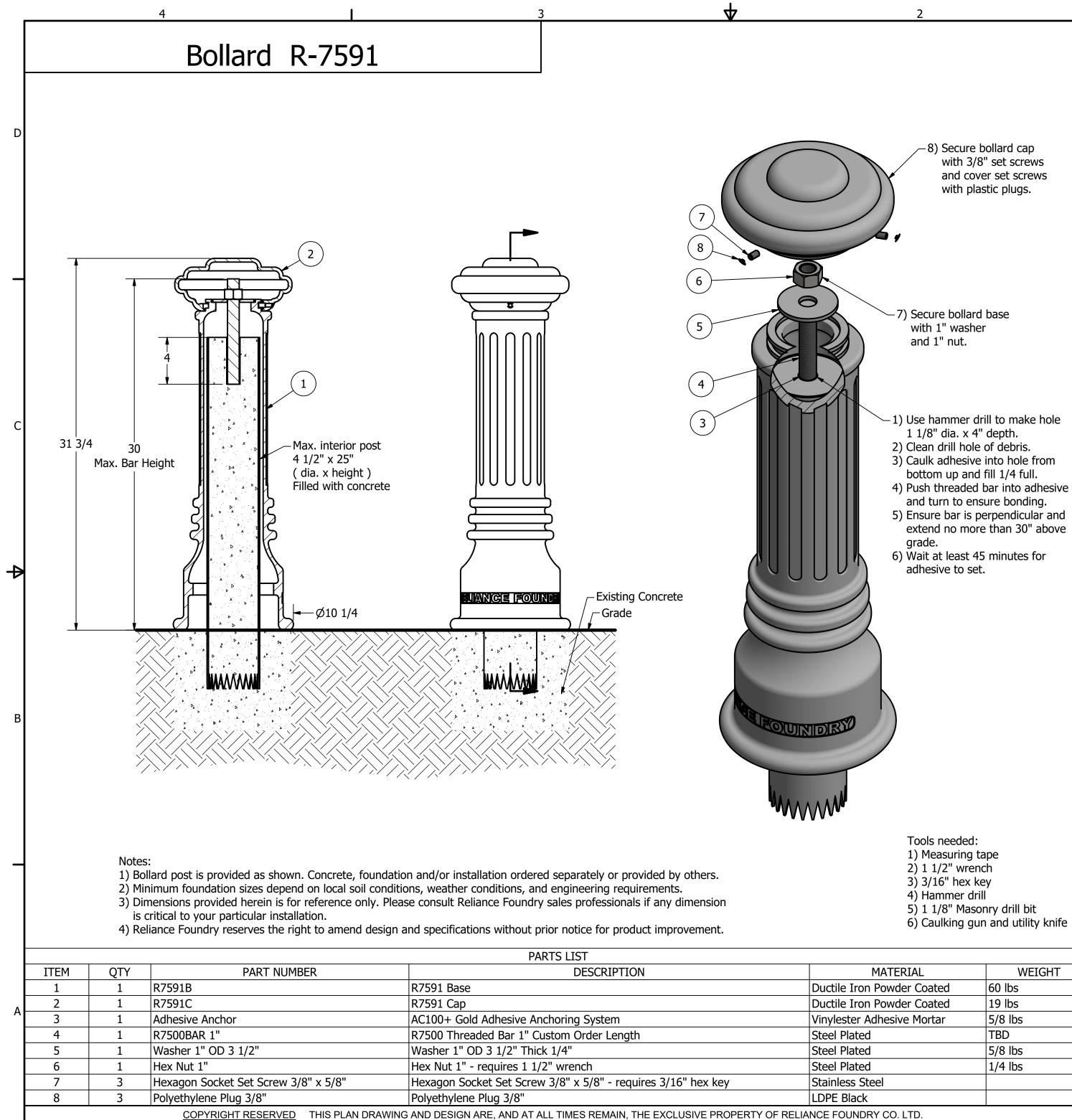
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		1-8	77-78	9-3245 info@relia				
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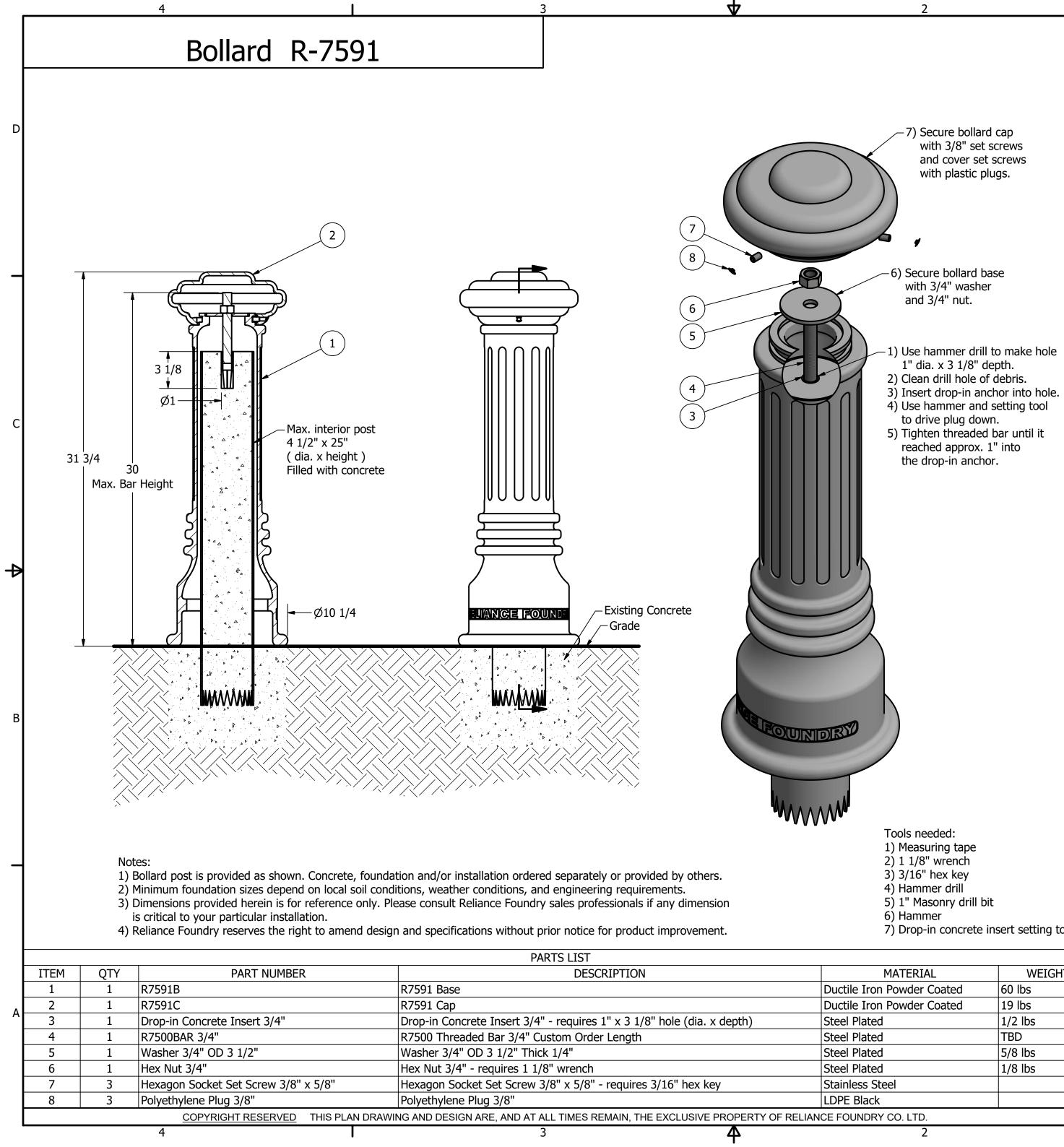
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	drill asonry drill bit gun and utility knife		F	REL •	JANCE FO	UNDRY			
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7)	Drop-in	concret	e insert	setting	tool
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Ductile Iron Powder Coated	19 lbs	TITLE				
Steel Plated	1/2 lbs					_
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Steel Plated	1/8 lbs					
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For more information on bollard post installation, please visit: www.reliance-foundry.com/bollard/installation-bollards

# **Care and Maintenance:**

Reliance's line of bollards are finished with a long-lasting powder-coating. Proper care and maintenance are required. Regularly-performed inspections and routine cleaning will ensure that a bollard retains its aesthetic appeal and does not become damaged by the elements.

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

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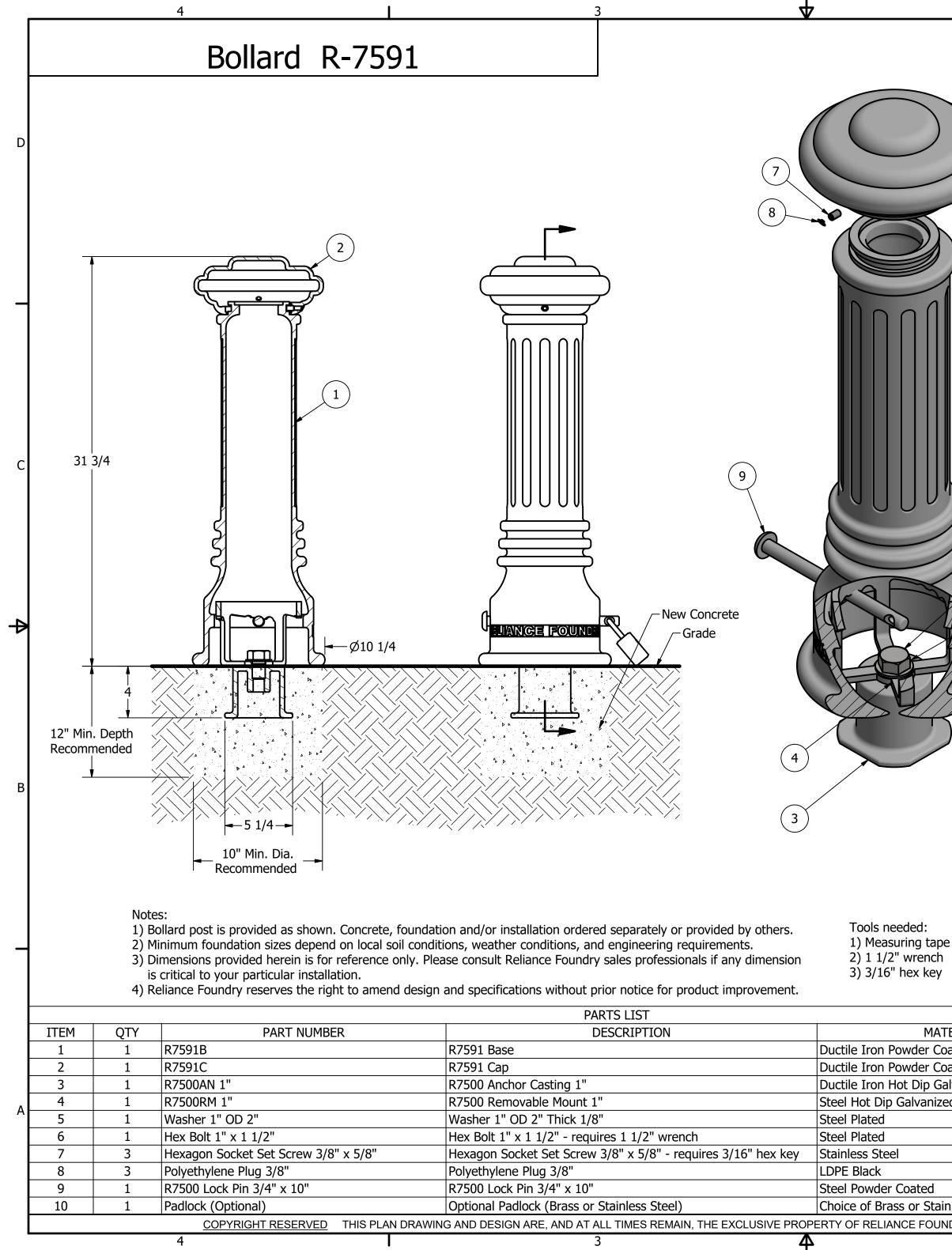
et, Surrey, BC V3S 7G7, Canada nfo@reliance-foundry.com ce-foundry.com

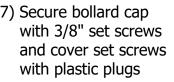
Bollar	d R-	7591

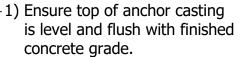
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SHEET 9 OF 12

C4







- 3) Tighten removable mount with 1" washer and 1" bolt.
- bollard base.
- tighten it into position.

'	is level and flush with finished	
	concrete grade.	
)	Wait until concrete is cured.	

- 4) Align and insert lock pin through
- 5) Turn bollard base clockwise to
- 6) Fasten the padlock.

6

5

# **General Description:**

The R-7591 Decorative Bollard features a classic design, suitable for traditional and contemporary environments. R-7591 bollards are made from a versatile ductile iron, featuring decorative fluting and corniced top casting for simple but elegant stature. Bollard surfaces are protected by a durable powder coating, available in 6 standard colors, to prevent wear and corrosion. Use as fixed, stand-alone bollards or cover impact-resistant security posts.

# **Specifications:**

Height: 31 3/4" Base Diameter: 10 1/4" Weight: 79 lbs ( Bollard Only ) Material: Ductile Iron Max. Interior Security Post Size: 4 1/2" x 25" (Diameter x Height)

# **Finish Options:**

⊙ Polyester Powdercoated

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

# **Installation Options:**

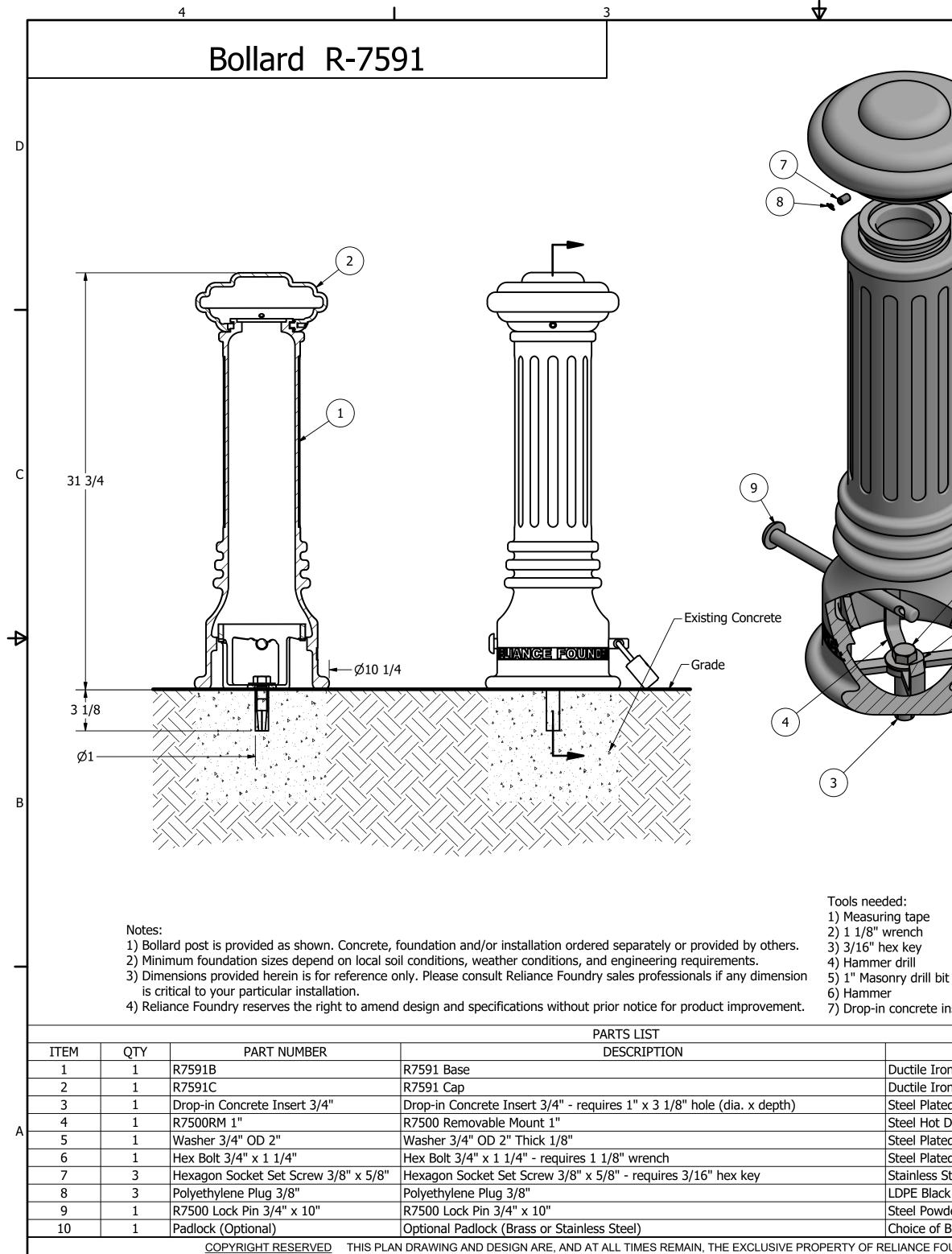
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# **Care and Maintenance:**

Reliance's line of bollards are finished with a long-lasting powder-coating. Proper care and maintenance are required. Regularly-performed inspections and routine cleaning will ensure that a bollard retains its aesthetic appeal and does not become damaged by the elements.

ATERIAL Coated	WEIGHT 60 lbs	Unit 207, 6450 - 148 Street, Surrey, BC V3S 7G7, Canada
Coated Galvanized	19 lbs 8 3/8 lbs	1-877-789-3245 info@reliance-foundry.com www.reliance-foundry.com
ized	4 5/8 lbs	TITLE
	1/8 lbs	
	5/8 lbs	Bollard R-7591
	1 1/2 lbs	SIZE DWG NO REV
ainless Steel	5/8 lbs	C   R7591   C4
UNDRY CO. LTD.	·	NOT TO SCALE SHEET 10 OF 12
2		1



4

2

•9) Secure bollard cap with 3/8" set screws and cover set screws with plastic plugs.



6

5

1) Use hammer drill to make hole 1" dia. x 3 1/8" depth.

10

- 2) Clean drill hole of debris.
- 3) Insert drop-in anchor into hole
- 4) Use hammer and setting tool
- to drive plug down. 5) Tighten removable mount with
- 3/4" washer and 3/4" bolt.6) Align and insert lock pin through
- bollard base.
- 7) Turn bollard base clockwise to tighten it into position.
- 8) Fasten the padlock.

# **General Description:**

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# **Finish Options:**

⊙ Polyester Powdercoated

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

# **Installation Options:**

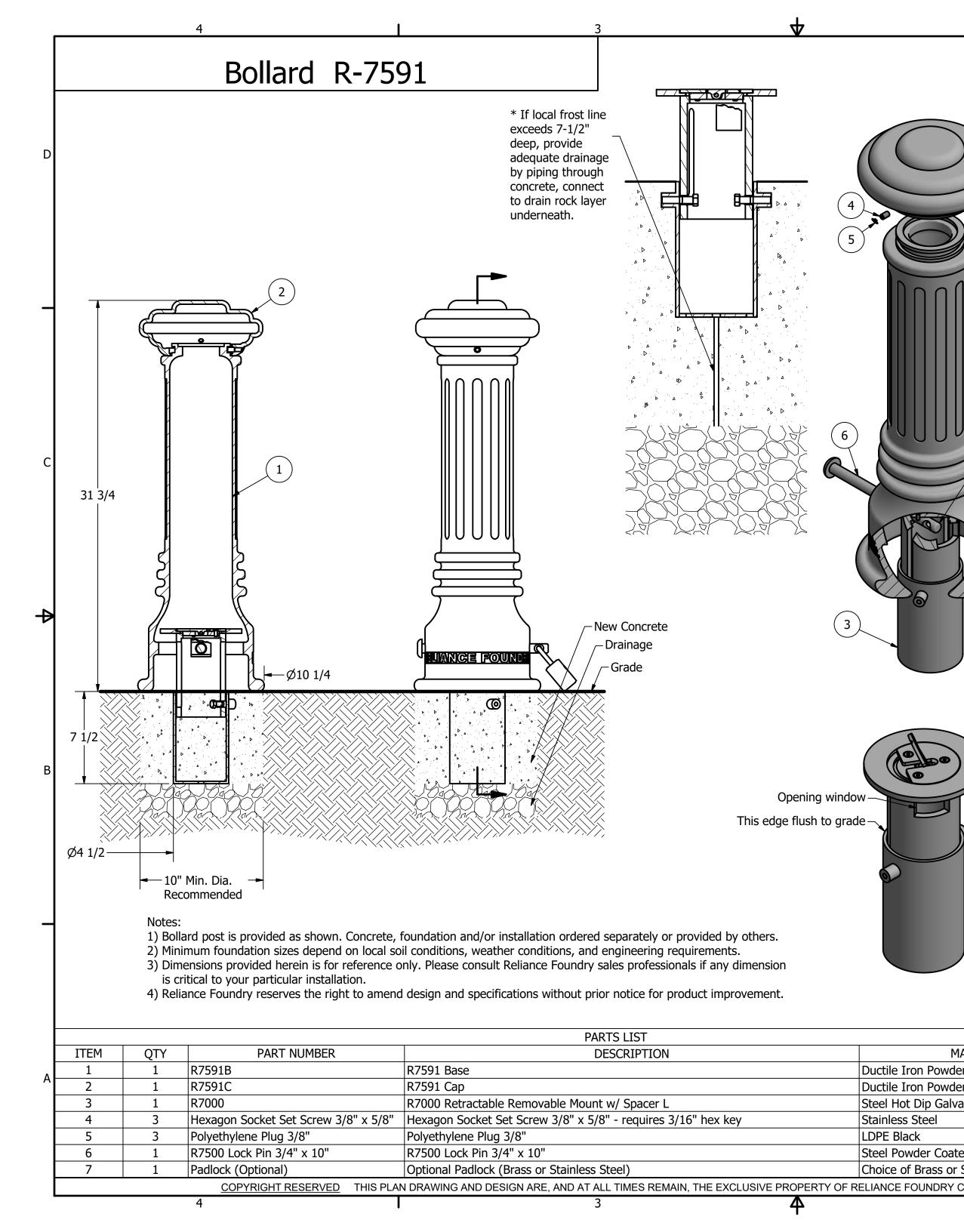
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e insert setting tool	RELIANCE FOUNDRY					
MATERIAL	WEIGHT	- [		CE 1925	→	
ron Powder Coated	60 lbs	Unit 20	07, 6450 - 148 Street	, Surrey, BC V3S	7G7, Canad	а
ron Powder Coated	19 lbs		L-877-789-3245 infe	• • •	•	
ited	1/2 lbs		www.relianc	e-foundry.com		
t Dip Galvanized	4 5/8 lbs	TITLE				
ited	1/8 lbs					
ited	1/4 lbs		Bollard R-7591			
Steel						
ack						
wder Coated	1 1/2 lbs	SIZE	DWG NO			REV
f Brass or Stainless Steel	5/8 lbs		R7591			C4
FOUNDRY CO. LTD.		NOT TO SCALE	Ξ	SHEET 11	. OF 12	
2				1		



-10) Secure bollard cap with 3/8" set screws and cover set screws with plastic plugs.
-7) Align and insert lock pin through bollard base.
8) Turn bollard base clockw

bollard base.Turn bollard base clockwise to tighten it into position.Fasten the padlock.

9) Fasten the patiock.

 1) Ensure adequate drainage underneath

- 2) Ensure top edge of outer housing flush to grade
- 3) Lift handle raise inner housing, turn and rest on UP position
- 4) Observe and orient opening window to desired Lock Pin direction
- 5) Rest inner housing on DOWN position
- 6) Pour concrete and wait for concrete to cure

2

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# **Finish Options:**

 $\odot$  Polyester Powdercoated

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

# **Installation Options:**

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1

Tools needed: 1) Measuring tape 2) 3/16" allen key	Unit 207, 6450 - 148 Street, Surrey, BC V3S 7G7, Canada							
					,	,	nce-foundry.com	Ia
ATERIAL	WEIGHT				www.reliance	e-found	lry.com	
r Coated	60 lbs	TITLE						
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				_				
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ed	1 1/2 lbs	SIZE			DWG NO			REV
Stainless Steel	5/8 lbs	C			R7591			C4
O. LTD.		NOT TO	SCALE				SHEFT 12 OF 12	