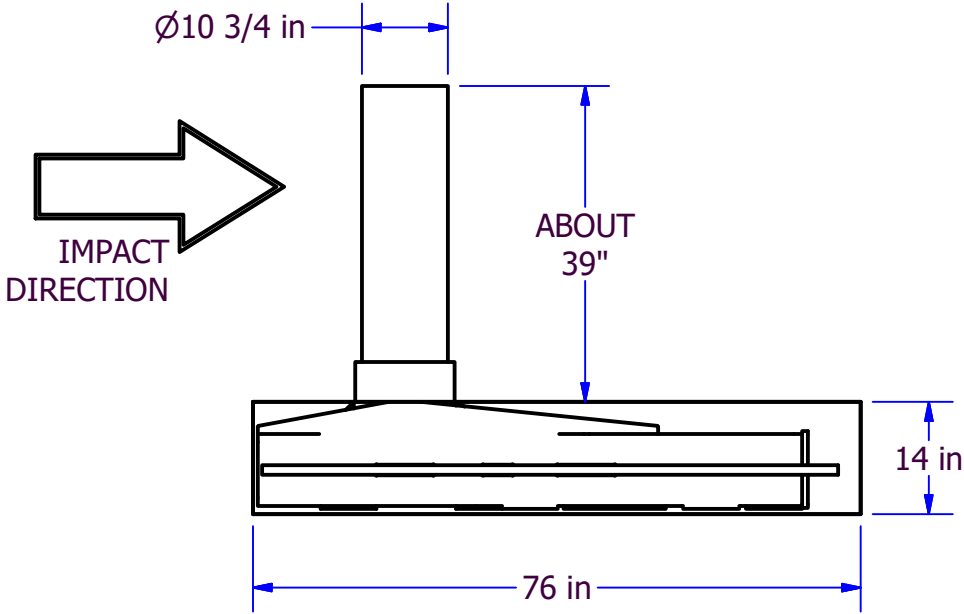
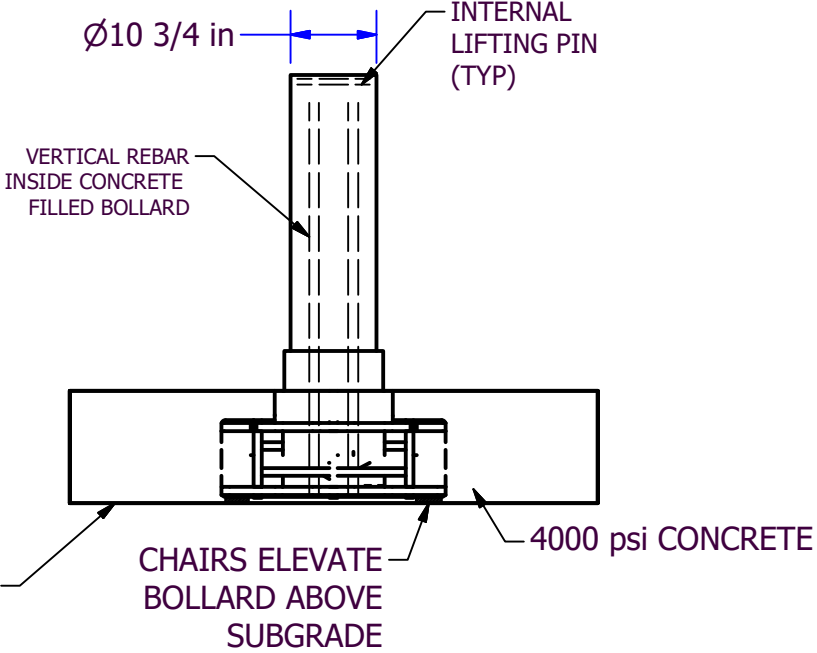
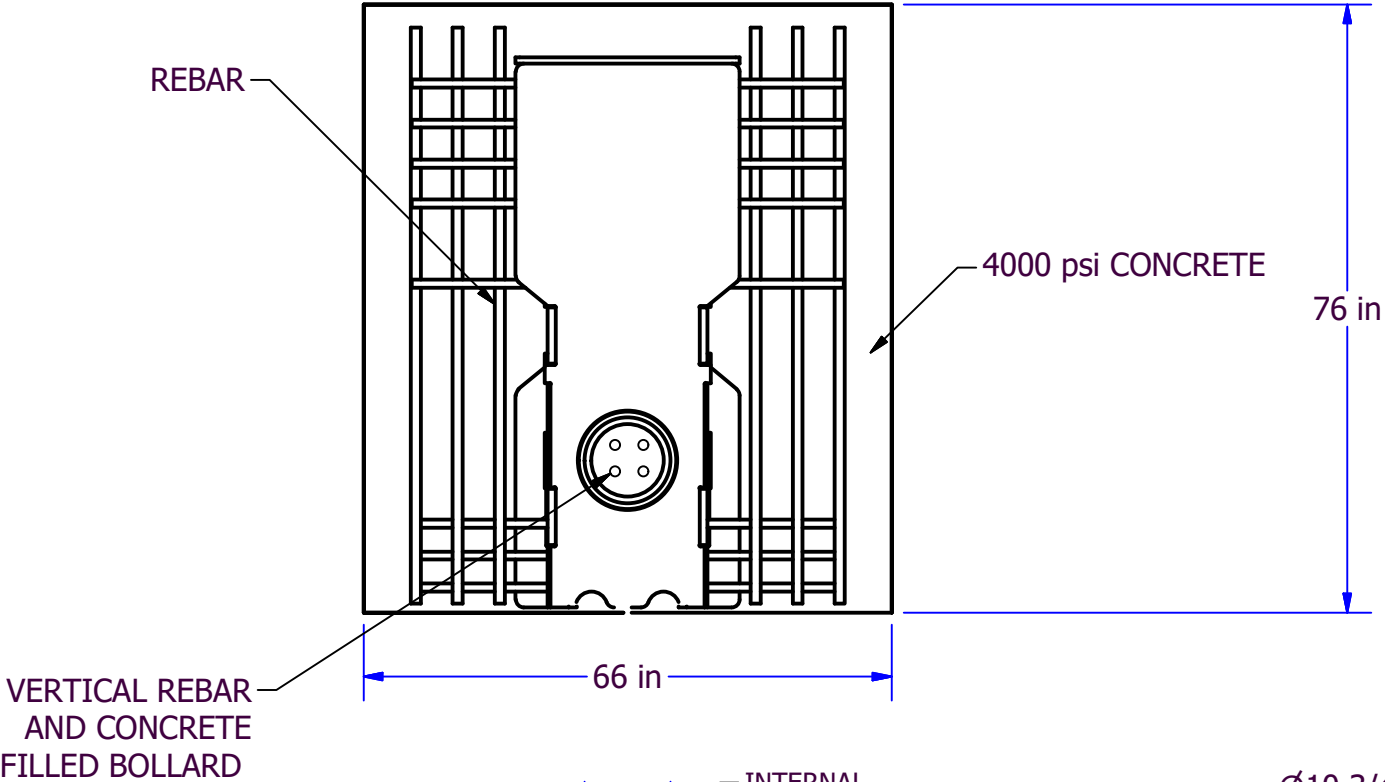


SHALLOW FOUNDATION BOLLARD - MODEL SMB-1200 SA  
STOPS 15,000 lb VEHICLE AT 50 mph IMPACT WITHIN 1 METER - ASTM F2656-07 M50 P1 (K12)  
ONE (1) SINGLE STAND ALONE BOLLARD STOPPED IMPACT

SINGLE BOLLARD LAYOUT

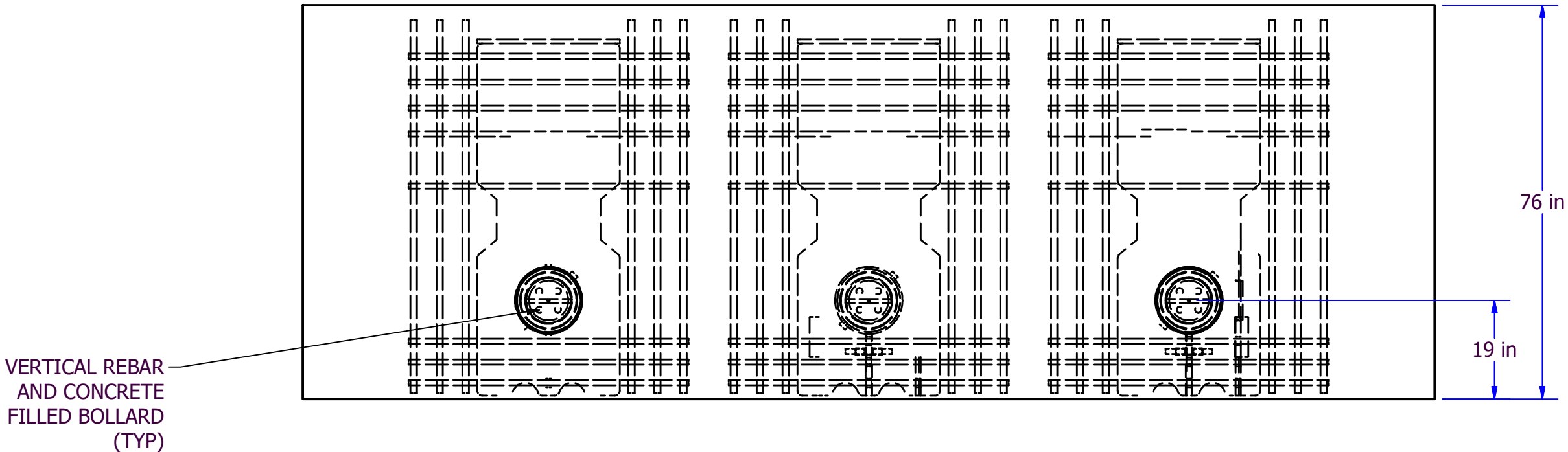


- KEY ADVANTAGES**
- 1. SINGLE STAND ALONE BOLLARD STOPS MASSIVE IMPACT
  - 2. UNRESTRICTED SPACING BETWEEN BOLLARDS
  - 3. EASY INSTALLATION. BOLLARD IS 1 PREFABRICATED UNIT AND SIMPLY SET IN EXCAVATION
  - 4. NO FIELD WELDING OR BOLTING
  - 5. ALLOWS FOR FIELD ADJUSTMENTS AND FIELD CHANGES TO BOLLARD SPACING
  - 6. EASILY ACCOMODATES TURNS AND GRADE CHANGES
  - 7. REQUIRES ONLY 1.65 CUBIC YARDS OF 4000 psi CONCRETE PER BOLLARD (AVERAGE)

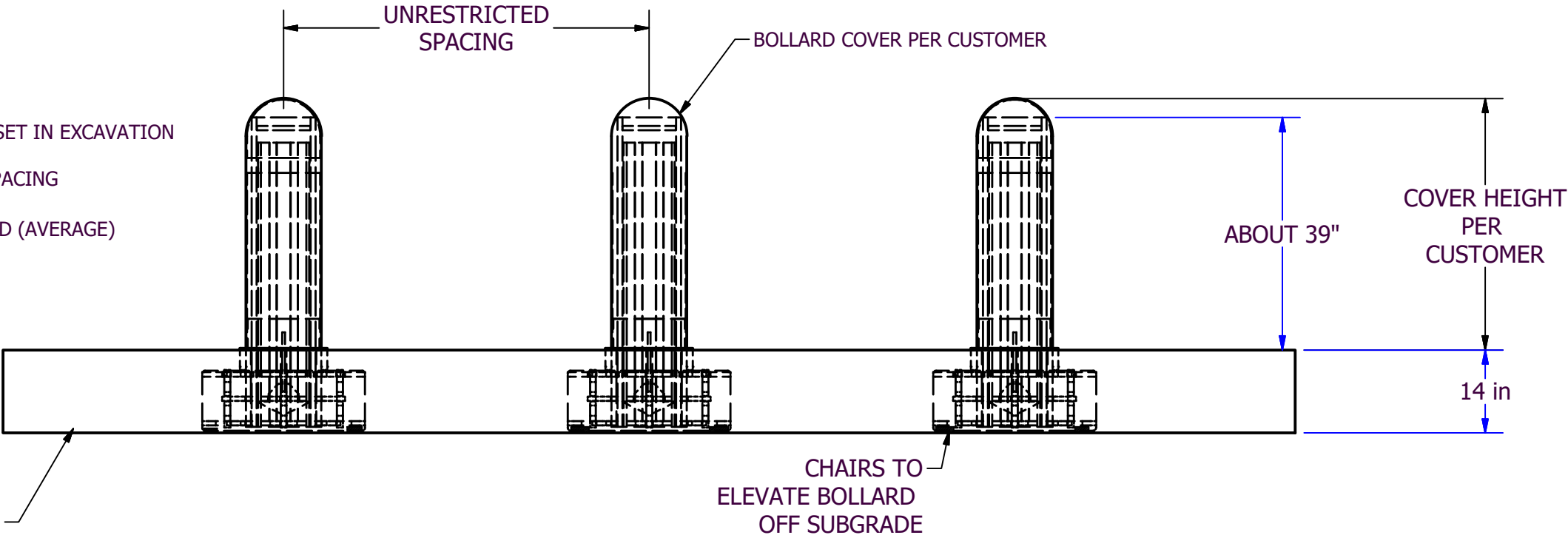
SMB-M50-100V075H INSTALL		REV:		
	BARRIER1 SYSTEMS, INC. 8015 THORNDIKE ROAD GREENSBORO, NC 27409 (336) 617-8478 (336) 617-471 FAX mlamore@barrier1.us www.barrier1.us	PATENT PENDING THE DRAWINGS AND INFORMATION CONTAINED HEREIN ARE PROPRIETARY AND CONFIDENTIAL AND FOR USE ONLY BY PERSONS WORKING ON PROJECT WITH BARRIER1 SYSTEMS, INC. DO NOT COPY OR REPRODUCE. ALL RIGHTS RESERVED	SHALLOW FOUNDATION BOLLARD	ITEM / PAGE 1 OF 6
				JUNE 29, 2020
				SCALE 1/2"=1'

SHALLOW FOUNDATION BOLLARD - MODEL SMB-1200 SA  
STOPS 15,000 lb VEHICLE AT 50 mph IMPACT WITHIN 1 METER - ASTM F2656-07 M50 P1 (K12)  
ONE (1) SINGLE STAND ALONE BOLLARD STOPPED IMPACT

BOLLARD ARRAY LAYOUT



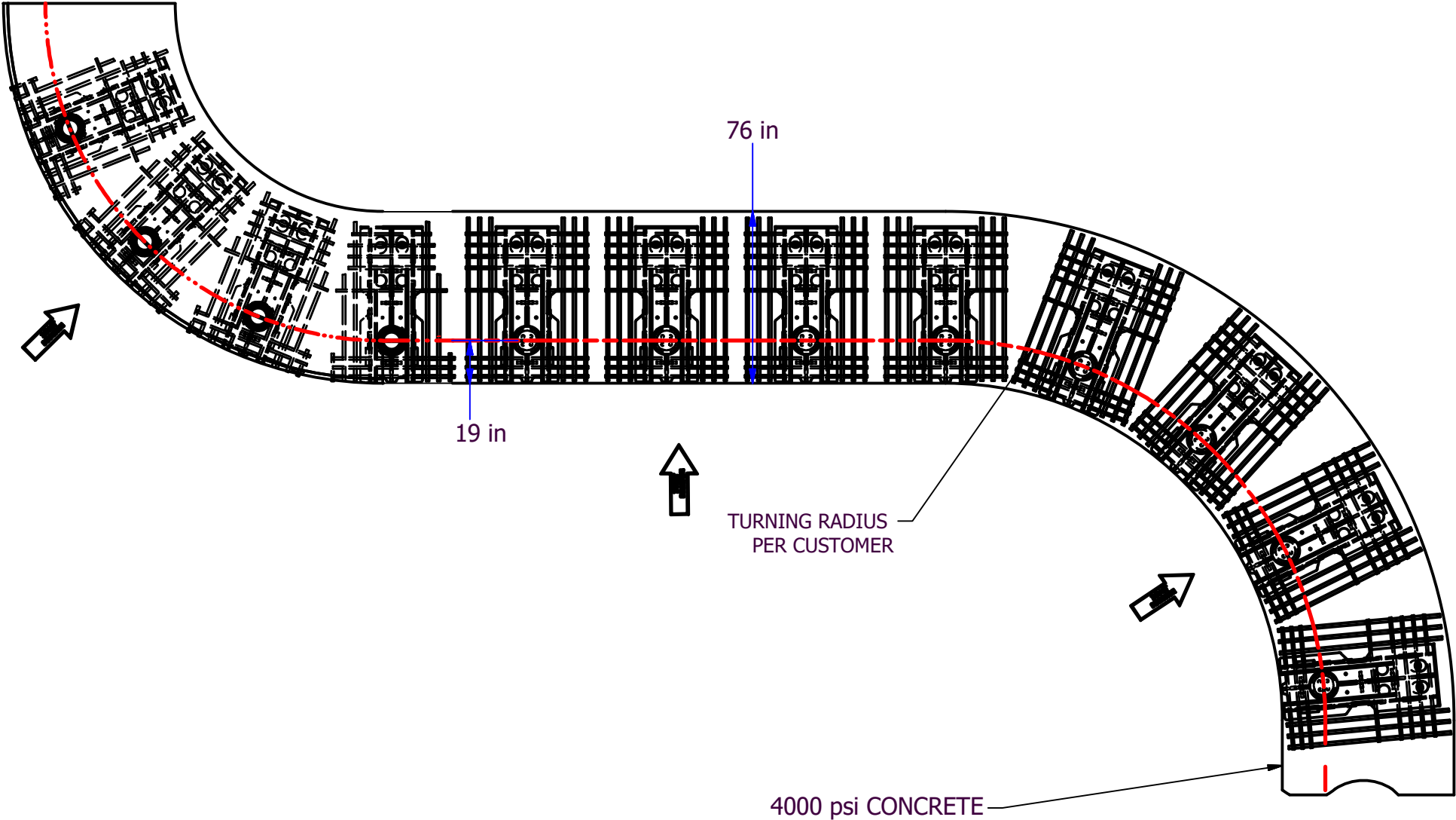
- KEY ADVANTAGES**
- 1. SINGLE STAND ALONE BOLLARD STOPS MASSIVE IMPACT
  - 2. UNRESTRICTED SPACING BETWEEN BOLLARDS
  - 3. EASY INSTALLATION. BOLLARD IS 1 PREFABRICATED UNIT AND SIMPLY SET IN EXCAVATION
  - 4. NO FIELD WELDING OR BOLTING
  - 5. ALLOWS FOR FIELD ADJUSTMENTS AND FIELD CHANGES TO BOLLARD SPACING
  - 6. EASILY ACCOMODATES TURNS AND GRADE CHANGES
  - 7. REQUIRES ONLY 1.65 CUBIC YARDS OF 4000 psi CONCRETE PER BOLLARD (AVERAGE)




SMB-M50-100V075H INSTALL ARRAY		REV:		SHALLOW FOUNDATION BOLLARD		ITEM / PAGE 2 OF 6	
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			SCALE 1/2"=1'				

SHALLOW FOUNDATION BOLLARD - MODEL SMB-1200 SA  
STOPS 15,000 lb VEHICLE AT 50 mph IMPACT WITHIN 1 METER - ASTM F2656-07 M50 P1 (K12)  
ONE (1) SINGLE STAND ALONE BOLLARD STOPPED IMPACT

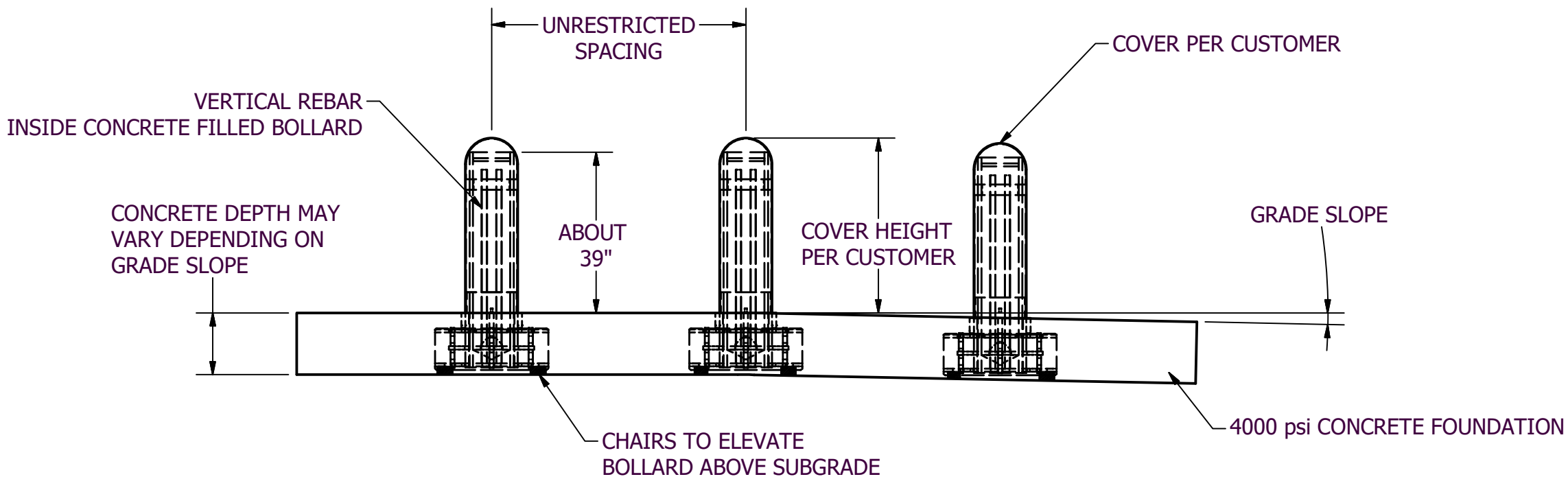
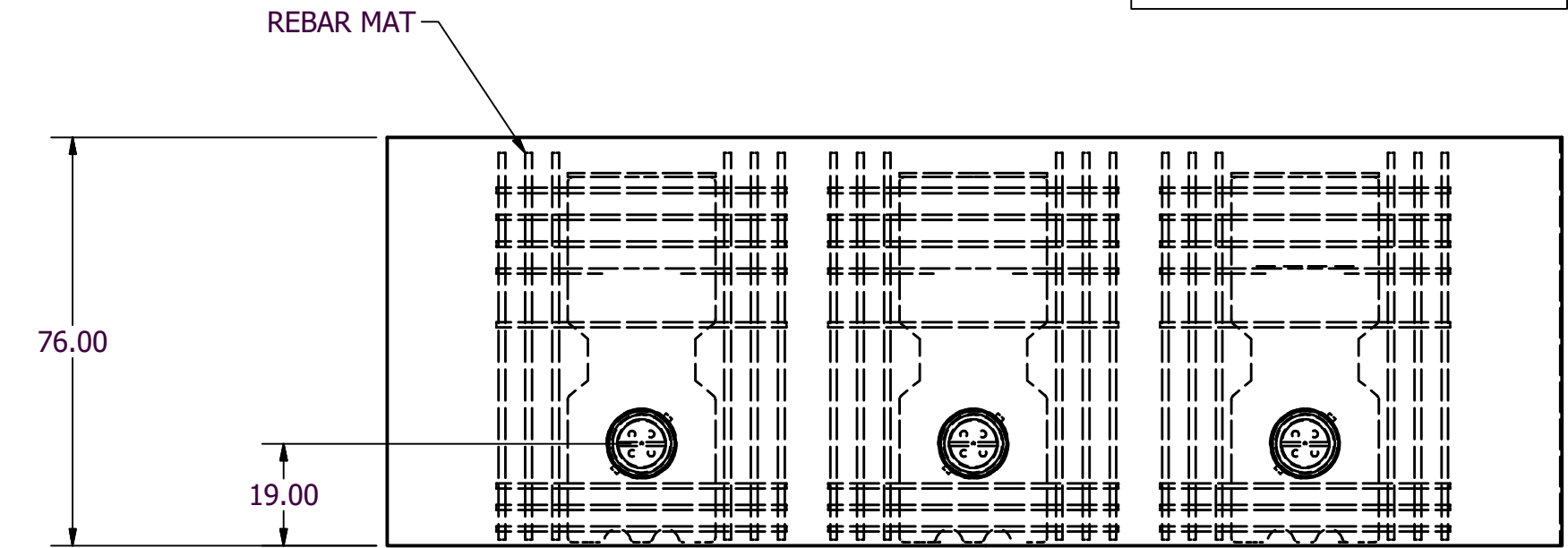
ACCOMMODATES  
INSTALLATION ACROSS  
CURVES



SMB1200SA CURVE		REV:			
	BARRIER1 SYSTEMS, INC. 8015 THORNDIKE ROAD GREENSBORO, NC 27409 (336) 617-8478 (336) 617-471 FAX mlamore@barrier1.us www.barrier1.us	PATENT PENDING THE DRAWINGS AND INFORMATION CONTAINED HEREIN ARE PROPRIETARY AND CONFIDENTIAL AND FOR USE ONLY BY PERSONS WORKING ON PROJECT WITH BARRIER1 SYSTEMS, INC. DO NOT COPY OR REPRODUCE. ALL RIGHTS RESERVED	SHALLOW FOUNDATION BOLLARD	ITEM / PAGE 3 OF 6	
				JUNE 29, 2020	
				SCALE 3/16"=1'	

SHALLOW FOUNDATION BOLLARD - MODEL SMB-1200 SA  
STOPS 15,000 lb VEHICLE AT 50 mph IMPACT WITHIN 1 METER - ASTM F2656-07 M50 P1 (K12)  
ONE (1) SINGLE STAND ALONE BOLLARD STOPPED IMPACT

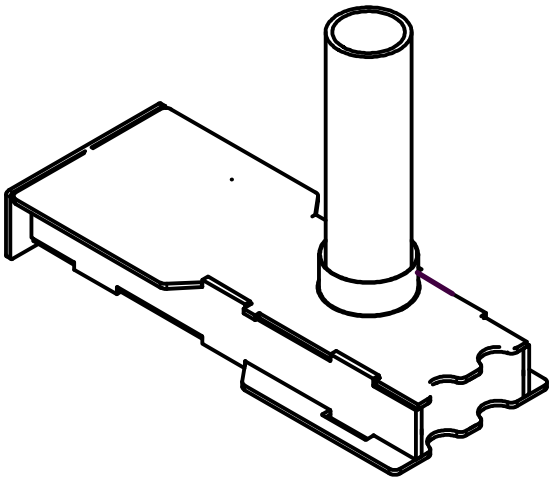
ACCOMODATES INSTALLATION  
ACROSS GRADE CHANGES



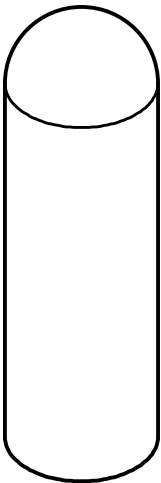
SMB1200SA ON SLOPE		REV:		
	BARRIER1 SYSTEMS, INC. 8015 THORNDIKE ROAD GREENSBORO, NC 27409 (336) 617-8478 (336) 617-471 FAX mlamore@barrier1.us www.barrier1.us	PATENT PENDING THE DRAWINGS AND INFORMATION CONTAINED HEREIN ARE PROPRIETARY AND CONFIDENTIAL AND FOR USE ONLY BY PERSONS WORKING ON PROJECT WITH BARRIER1 SYSTEMS, INC. DO NOT COPY OR REPRODUCE. ALL RIGHTS RESERVED	SHALLOW	ITEM / PAGE 4 OF 6
			FOUNDATION	JUNE 29, 2020
			BOLLARD	SCALE 3/8"=1'

SHALLOW FOUNDATION BOLLARD - MODEL SMB-1200 SA  
STOPS 15,000 lb VEHICLE AT 50 mph IMPACT WITHIN 1 METER - ASTM F2656-07 M50 P1 (K12)  
ONE (1) SINGLE STAND ALONE BOLLARD STOPPED IMPACT

BARRIER1 SYSTEMS TO PROVIDE



ONE (1) EACH  
PREFABRICATED  
BOLLARD UNIT



ONE (1) EACH (OPTIONAL)  
BOLLARD COVER  
CHOSEN BY CUSTOMER  
(OPTIONAL)

INSTALLER TO PROVIDE

- 1.) ABOUT 1.65 CUBIC YARDS OF 4000 psi CONCRETE PER BOLLARD
- 2.) REBAR

SMB-M50-100V075H



BARRIER1 SYSTEMS, INC.  
8015 THORNDIKE ROAD  
GREENSBORO, NC 27409  
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REV: B

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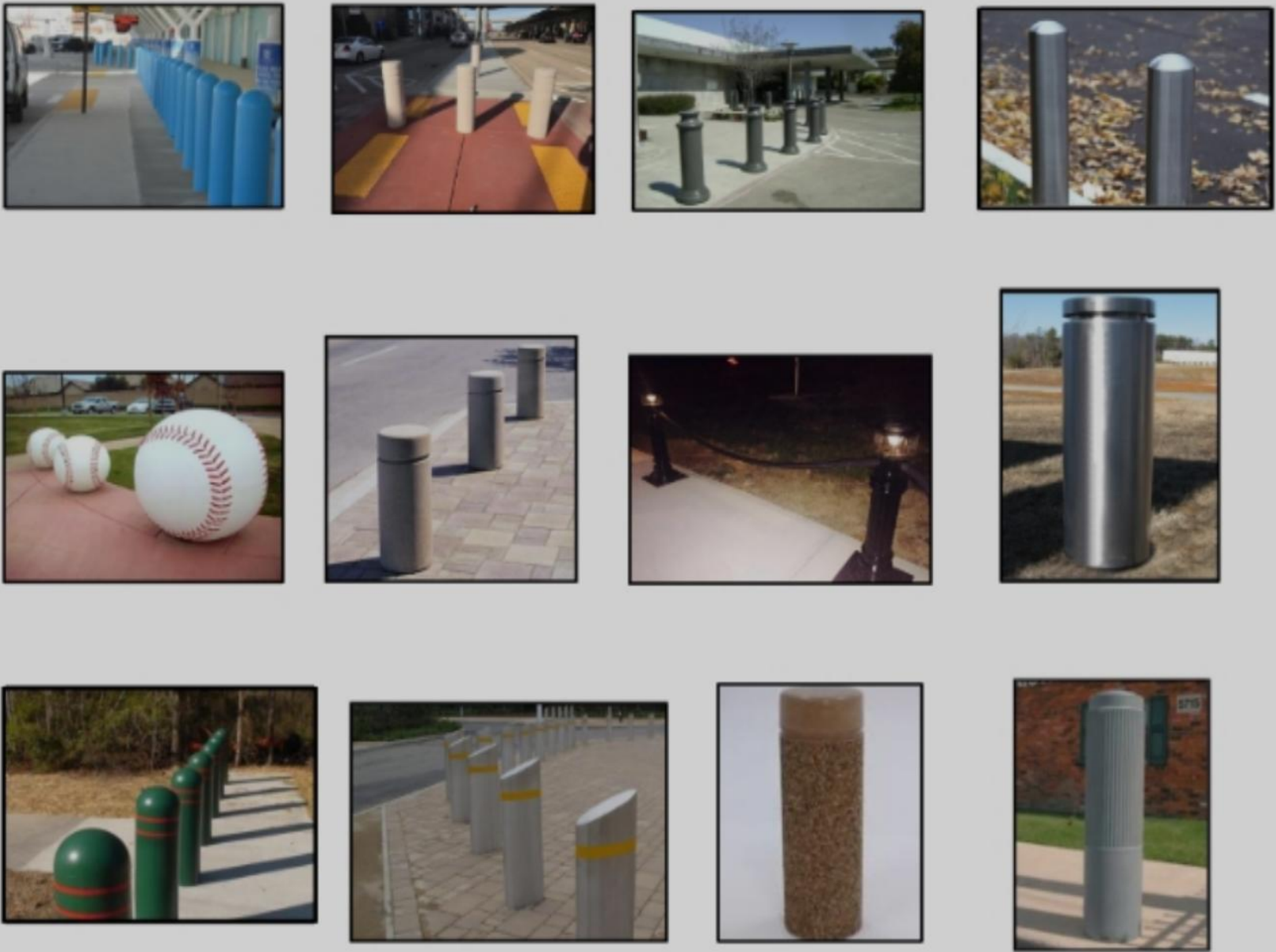
SHALLOW  
FOUNDATION  
BOLLARD

ITEM / PAGE 5 OF 6  
JUNE 29, 2020  
SCALE 1/2"=1'



SHALLOW FOUNDATION BOLLARD - MODEL SMB-1200 SA  
STOPS 15,000 lb VEHICLE AT 50 mph IMPACT WITHIN 1 METER - ASTM F2656-07 M50 P1 (K12)  
ONE (1) SINGLE STAND ALONE BOLLARD STOPPED IMPACT

SAMPLES OF BOLLARD COVER OPTIONS



BOLLARD COVER IMAGES



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SHALLOW  
FOUNDATION  
BOLLARD

ITEM / PAGE 6 OF 6  
JUNE 29, 2020  
SCALE 1 / 2