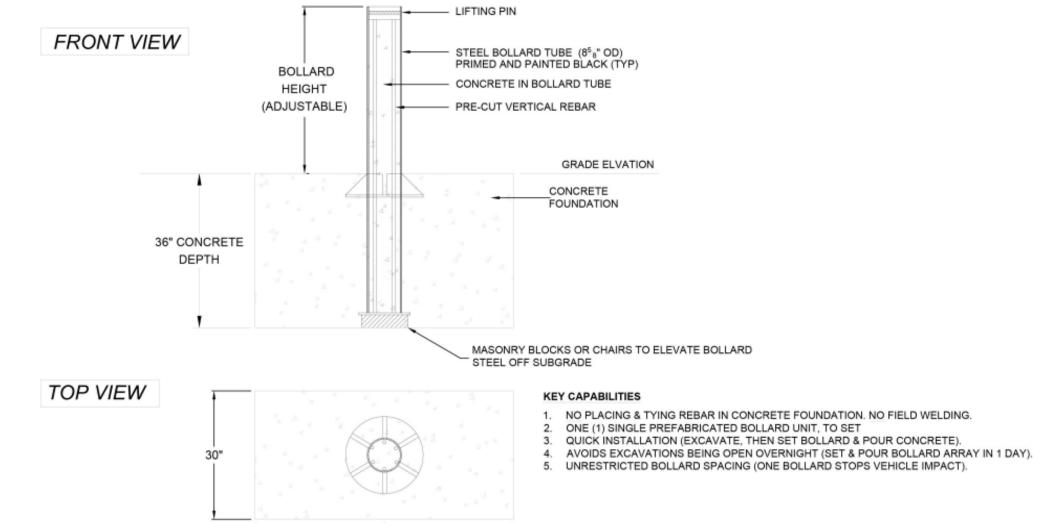
STOPS 15,000 LB. VEHICLE AT 30 MPH IMPACT (BOLLARD SPACING IS UNRESTRICTED)
ASTM F2656-07 M30(K4) CERTIFIED, APPROVED BY DoD AND ON ANTI-RAM LIST





30"

THE DRAWINGS AND INFORMATION CONTAINED HEREIN ARE
THE PROPERTARY AND CONFIDENTIAL AND FOR USE BY
ONLY PERSONS WORKING ON PROJECT WITH BOLLARD
CANADA OR THEIR ASSOCIATED. ALL RIGHT RESERVED

DETAILS ASTM M30 (K4) SET & POUR BOLLARD

SAMPLE DRAWINGS

SHEET: 1 OF 9

20180302-01-PD

STOPS 15,000 LB. VEHICLE AT 30 MPH IMPACT (BOLLARD SPACING IS UNRESTRICTED)
ASTM F2656-07 M30(K4) CERTIFIED, APPROVED BY DoD AND ON ANTI-RAM LIST

TYPICAL BOLLARD ARRAY INSTALLATION UNRESTRICTED FRONT VIEW SPACING UNRESTRICTED CLEAR 30* SPACING BOLLARD HEIGHT (ADJUSTABLE) 36" CONCRETE DEPTH MASONRY BLOCKS OR CHAIRS CONCRETE FOUNDATION TOP VIEW TO ELEVATE BOLLARD STEEL OFF OF SUBGRADE 30* UNRESTRICTED

KEY CAPABILITIES

- NO PLACING & TYING REBAR IN CONCRETE FOUNDATION. NO FIELD WELDING.
- 2. ONE (1) SINGLE PREFABRICATED BOLLARD UNIT.
- QUICK INSTALLATION (EXCAVATE, THEN SET BOLLARD & POUR CONCRETE).
- AVOIDS EXCAVATIONS BEING OPEN OVERNIGHT (SET & POUR BOLLARD ARRAY IN 1 DAY).
- UNRESTRICTED BOLLARD SPACING (ONE BOLLARD STOPS VEHICLE IMPACT).



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SPACING

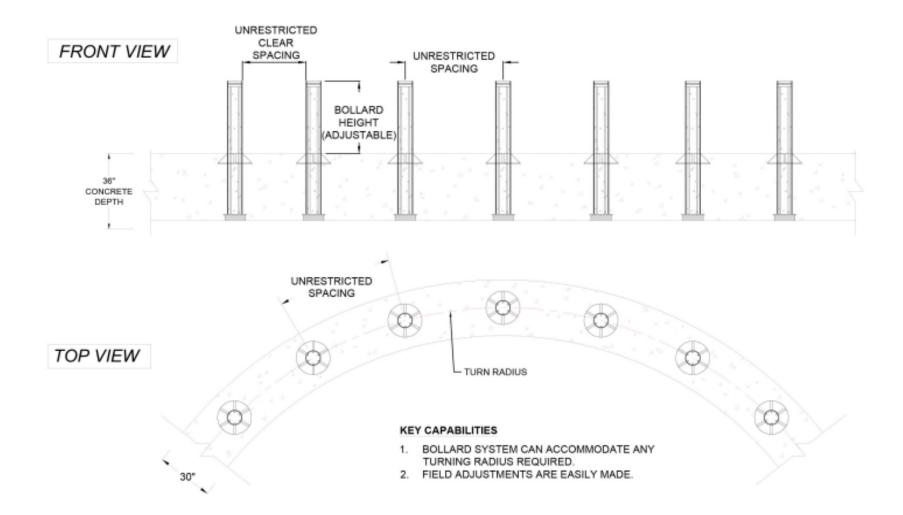
TYPICAL ARRAY ASTM M30(K4) SET & POUR BOLLARD

SAMPLE DRAWINGS

SHEET: 2 OF 9 20180302-01-PD

SET AND POUR BOLLARD - MODEL BCRAMK4
STOPS 15,000 LB. VEHICLE AT 30 MPH IMPACT (BOLLARD SPACING IS UNRESTRICTED) ASTM F2656-07 M30(K4) CERTIFIED, APPROVED BY DoD AND ON ANTI-RAM LIST

BOLLARD INSTALLATION WITH TURN





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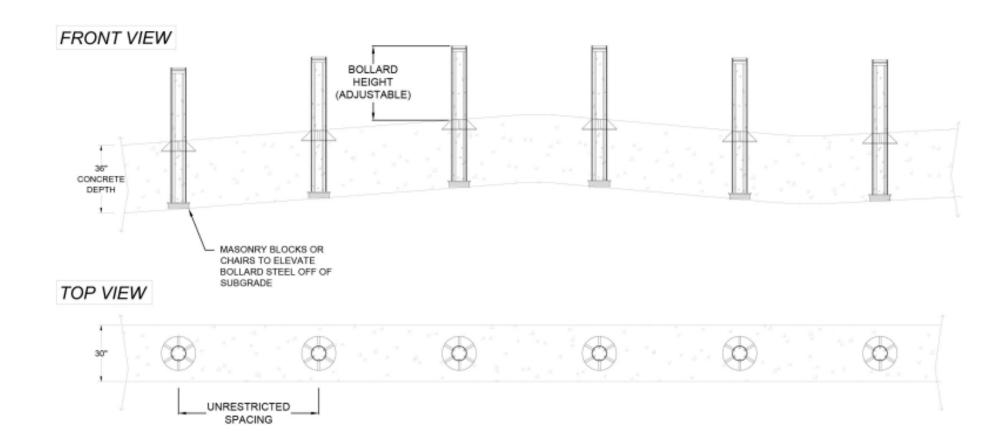
ARRAY ON CURVE ASTM M30(K4) SET & POUR BOLLARD

SAMPLE DRAWINGS

SHEET: 3 OF 9 20180302-01-PD

STOPS 15,000 LB. VEHICLE AT 30 MPH IMPACT (BOLLARD SPACING IS UNRESTRICTED) ASTM F2656-07 M30(K4) CERTIFIED, APPROVED BY DoD AND ON ANTI-RAM LIST

BOLLARD INSTALLATION ACROSS GRADE CHANGES





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SAMPLE DRAWINGS SET & POUR BOLLARD

ARRAY ON SLOPE

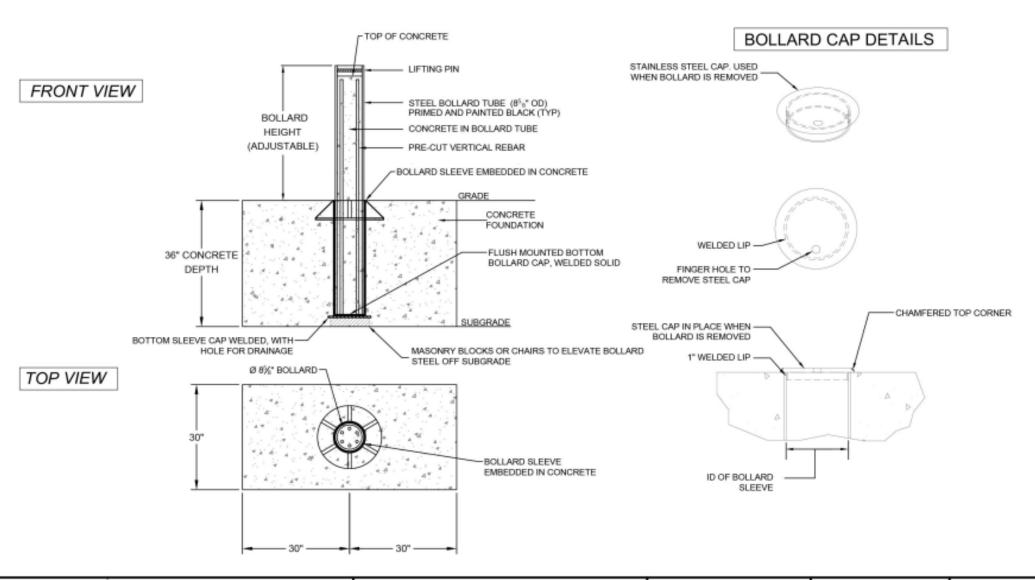
ASTM M30(K4)

SHEET: 4 OF 9

20180302-01-PD

STOPS 15,000 LB. VEHICLE AT 30 MPH IMPACT (BOLLARD SPACING IS UNRESTRICTED)
ASTM F2656-07 M30(K4) CERTIFIED, APPROVED BY DoD AND ON ANTI-RAM LIST

REMOVABLE BOLLARD OPTION





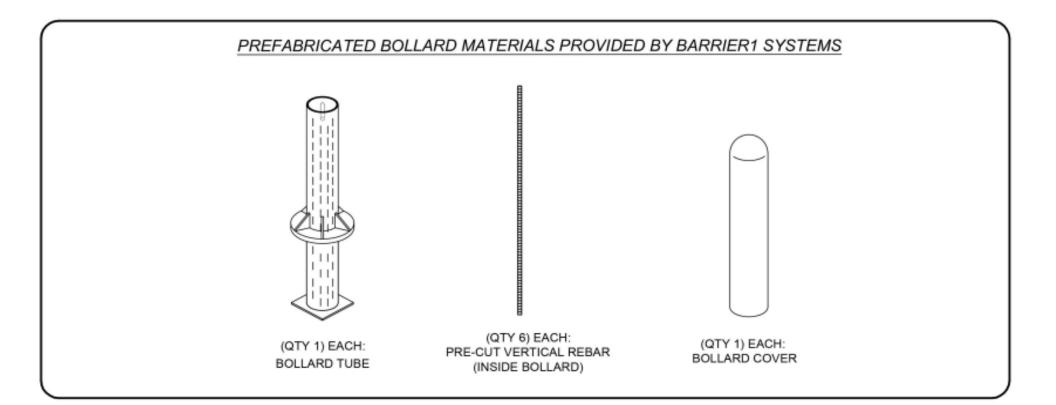
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DETAILS ASTM M30 (K4) SET & POUR BOLLARD

SAMPLE DRAWINGS

SHEET: 5 OF 9

STOPS 15,000 LB. VEHICLE AT 30 MPH IMPACT (BOLLARD SPACING IS UNRESTRICTED)
ASTM F2656-07 M30(K4) CERTIFIED, APPROVED BY DoD AND ON ANTI-RAM LIST



MATERIALS PROVIDED BY INSTALLER

- CONCRETE, 1.5 CUBIC YARDS PER BOLLARD
- 2. CHAIRS TO ELEVATE BOLLARDS ABOVE SUBGRADE



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MATERIALS PROVIDED (FIXED BOLLARDS)

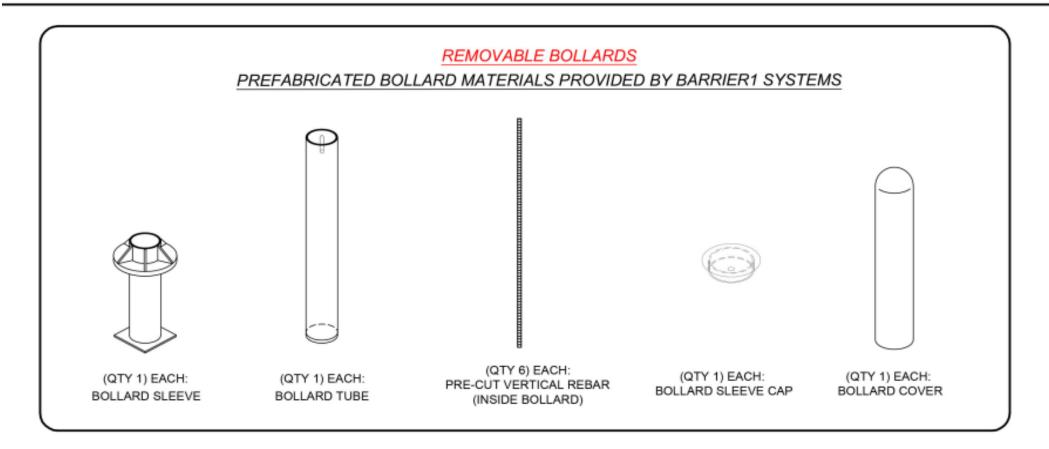
SAMPLE DRAWINGS

SHEET: 6 OF 9

20180302-01-PD

SET AND POUR BOLLARD - MODEL BCK4REMFIX036

STOPS 15,000 LB. VEHICLE AT 30 MPH IMPACT (BOLLARD SPACING IS UNRESTRICTED) ASTM F2656-07 M30(K4) CERTIFIED, APPROVED BY DoD AND ON ANTI-RAM LIST



MATERIALS PROVIDED BY INSTALLER

PROPERTARY AND CONFIDENTIAL AND FOR USE BY ONLY

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- CONCRETE. 1.5 CUBIC YARDS PER BOLLARD.
- 2. CHAIRS TO ELEVATE BOLLARD ABOVE SUBGRADE

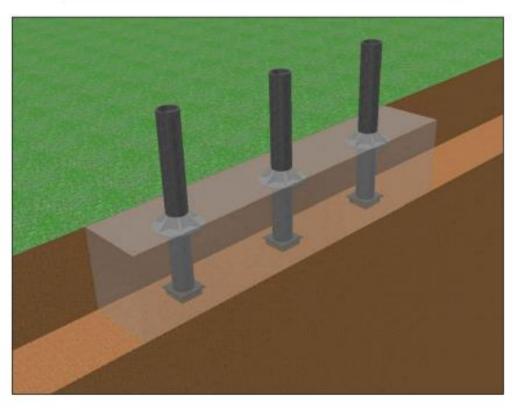


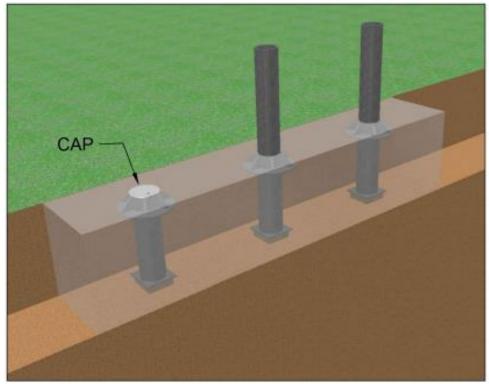
SET AND POUR BOLLARD - MODEL BCRAMK4 - BCK4REMFIX036

STOPS 15,000 LB. VEHICLE AT 30 MPH IMPACT (BOLLARD SPACING IS UNRESTRICTED)
ASTM F2656-07 M30(K4) CERTIFIED, APPROVED BY DoD AND ON ANTI-RAM LIST

FIXED BOLLARDS IN ARRAY









SHEET: 8 OF 9

STOPS 15,000 LB. VEHICLE AT 30 MPH IMPACT (BOLLARD SPACING IS UNRESTRICTED)
ASTM F2656-07 M30(K4) CERTIFIED, APPROVED BY DoD AND ON ANTI-RAM LIST

BOLLARD COVER EXAMPLES - CUSTOM TYPES, SHAPES, SIZES AND COLORS ARE AVAILABLE



























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BOLLARD COVER EXAMPLES SAMPLE DRAWINGS

SHEET: 9 OF 9 20180302-01-PD