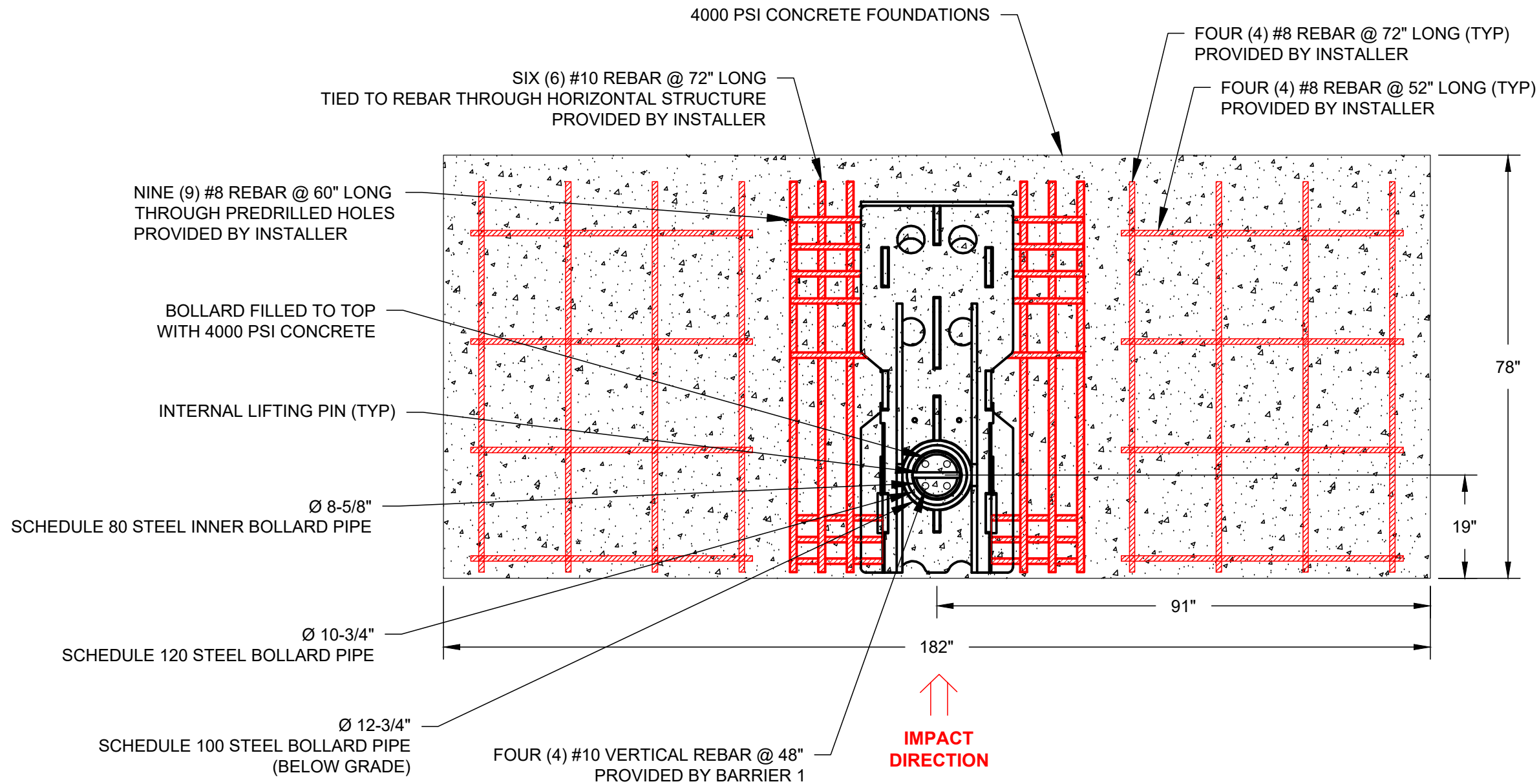


B1 TOMAHAWK M50

SHALLOW MOUNT BOLLARD - MODEL SMB-1200-SA

CRASH TESTED TO ASTM F2656-07 - M50/P1 RATED - STOPS 15,000 LB. VEHICLE AT 50 MPH IMPACT

TYPICAL SINGLE BOLLARD INSTALLATION



BARRIER1 SYSTEMS, LLC

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(336) 617-8478 www.barrier1.com
sales@barrier1.com

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PLAN VIEW AND
ELEVATION (STAND-ALONE)

SMB-1200-SA
WEBSITE DRAWING

SHEET: 1 OF 6

20240422-10-W

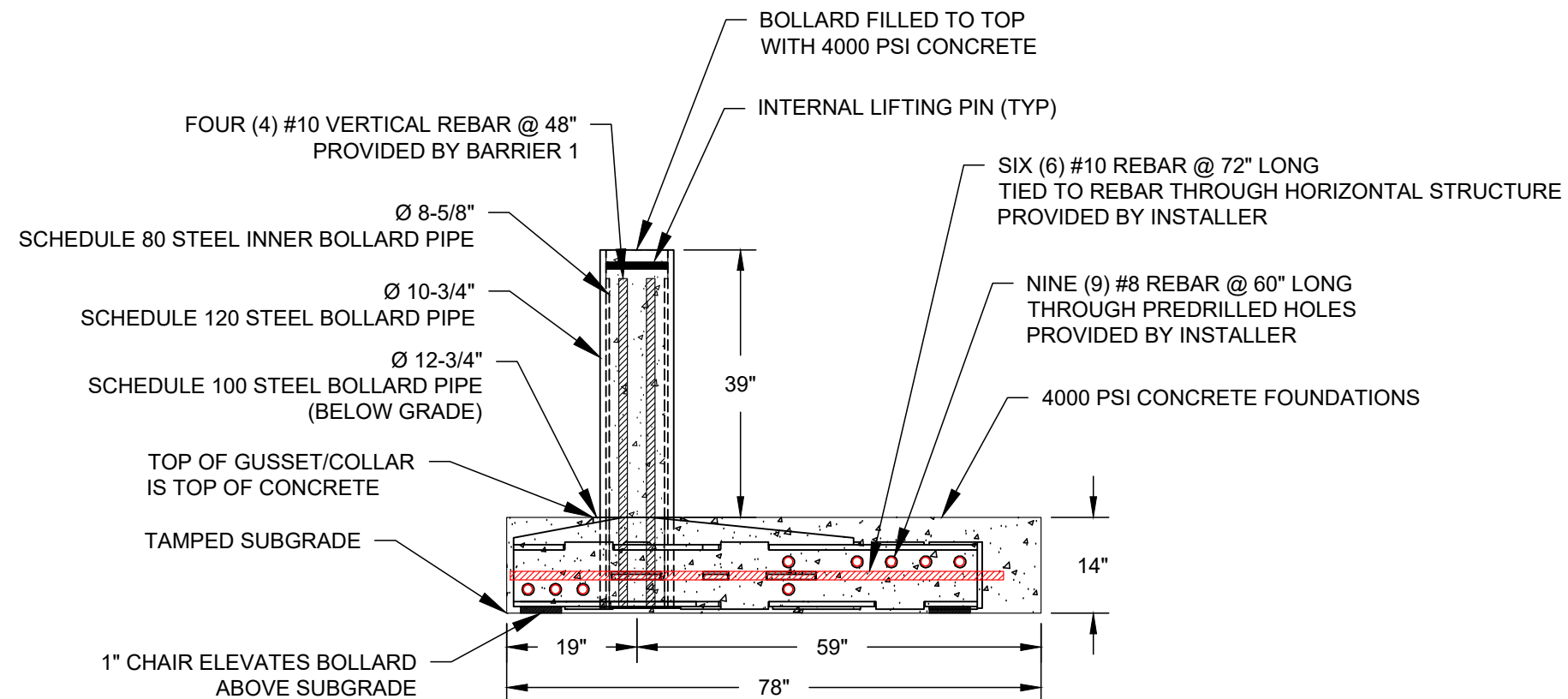
SCALE: N.T.S.

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PLAN VIEW AND
 ELEVATION (STAND-ALONE)

SMB-1200-SA
 WEBSITE DRAWING

SHEET: 2 OF 6

20240422-10-W

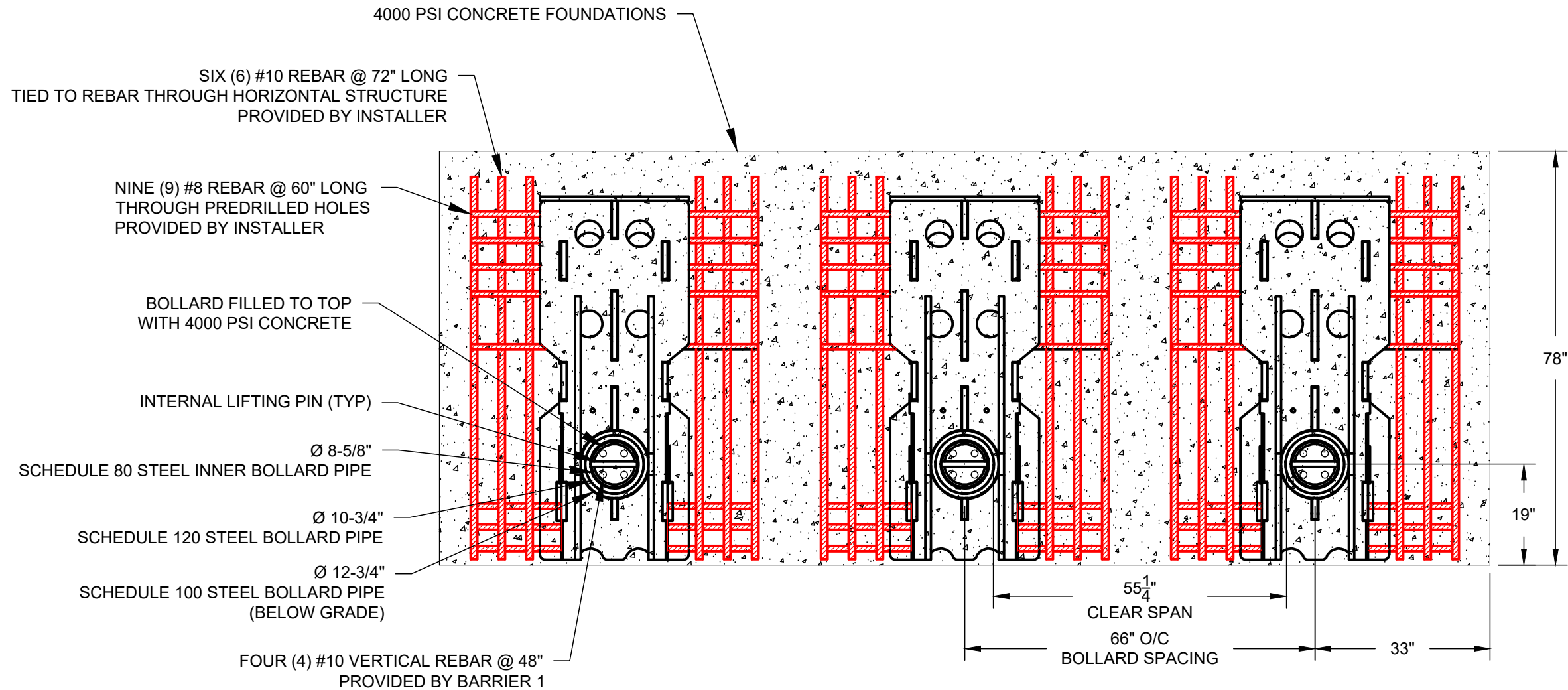
SCALE: N.T.S.

B1 TOMAHAWK M50

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TYPICAL BOLLARD ARRAY INSTALLATION



NOTE:

1. MODIFIED SPACING FOR SITE SPECIFIC CONDITIONS AVAILABLE



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PLAN VIEW
AND ELEVATION (ARRAY)

SMB-1200-SA
WEBSITE DRAWING

SHEET: 3 OF 6

20240422-10-W

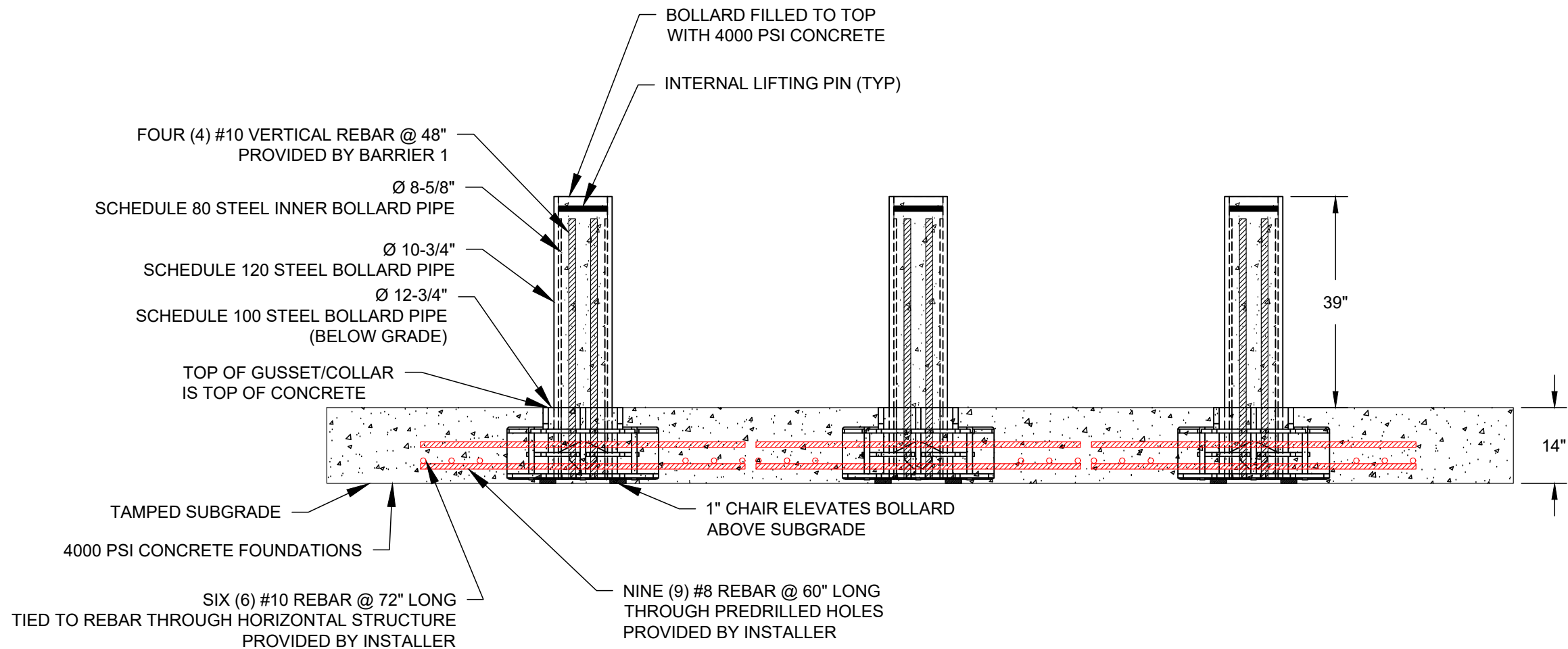
SCALE: N.T.S.

B1 TOMAHAWK M50

SHALLOW MOUNT BOLLARD - MODEL SMB-1200-SA

CRASH TESTED TO ASTM F2656-07 - M50/P1 RATED - STOPS 15,000 LB. VEHICLE AT 50 MPH IMPACT

TYPICAL SINGLE BOLLARD INSTALLATION



NOTE:

1. MODIFIED SPACING FOR SITE SPECIFIC CONDITIONS AVAILABLE



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PLAN VIEW AND
 ELEVATION (ARRAY)

SMB-1200-SA
 WEBSITE DRAWING

SHEET: 4 OF 6

20240422-10-W

SCALE: N.T.S.

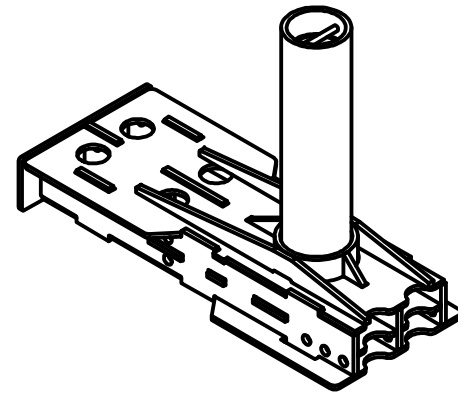
B1 TOMAHAWK M50

SHALLOW MOUNT BOLLARD - MODEL SMB-1200-SA

CRASH TESTED TO ASTM F2656-07 - M50/P1 RATED - STOPS 15,000 LB. VEHICLE AT 50 MPH IMPACT

PRODUCTS PROVIDED BY BARRIER1

STANDARD FINISH:
GLOSS BLACK PAINT



ONE (1) EACH
PREFABRICATED
BOLLARD UNIT



PRE-CUT #10 REBAR
@ 48" LONG
QTY: FOUR (4) PER BOLLARD
(INSIDE BOLLARD)

MATERIALS PROVIDED BY INSTALLATION CONTRACTOR:

1. ABOUT 1.65 CUBIC YARDS OF 4000 PSI CONCRETE PER BOLLARD FOR ARRAY
ABOUT 4.5 CUBIC YARDS OF 4000 PSI CONCRETE PER BOLLARD FOR STANDALONE
2. NINE (9) #8 REBAR @60"
3. SIX (6) #10 REBAR @72"
4. MASONRY BRICKS OR CHAIRS TO ELEVATE BOLLARD STEEL OFF SUBGRADE



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MATERIALS
PROVIDED

SMB-1200-SA
WEBSITE DRAWING

SHEET: 5 OF 6

20240422-10-W

SCALE: N.T.S.

B1 TOMAHAWK M50

SHALLOW MOUNT BOLLARD - MODEL SMB-1200-SA

CRASH TESTED TO ASTM F2656-07 - M50/P1 RATED - STOPS 15,000 LB. VEHICLE AT 50 MPH IMPACT

INSTALLATION STEPS

① EXCAVATE THEN TAMP SUBGRADE WITH PLATE TAMPER.

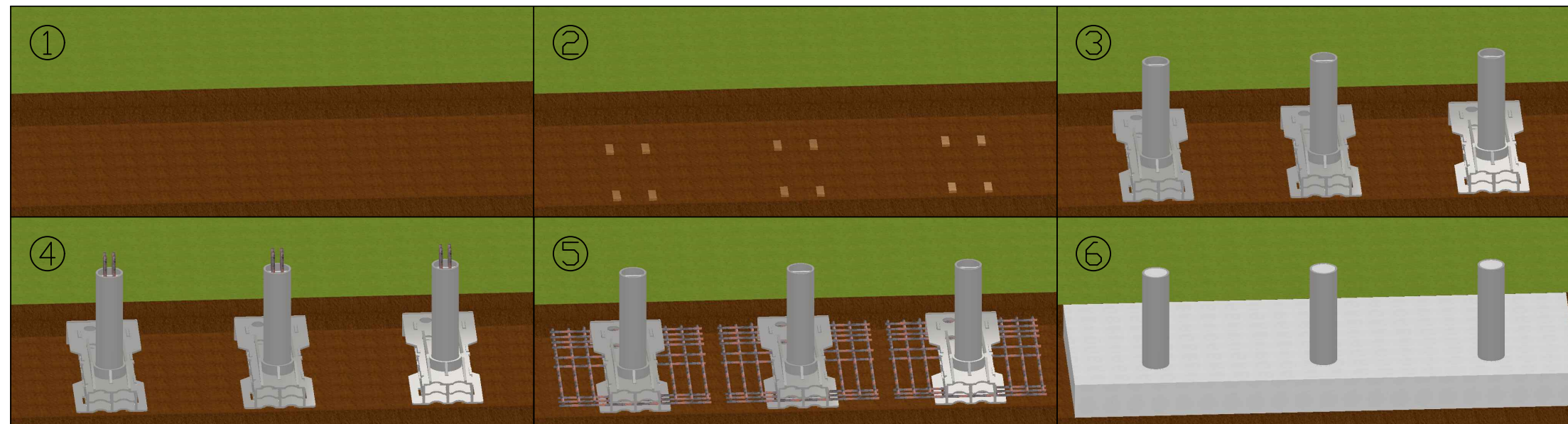
② USE MASONRY BLOCK OR CHAIRS TO ELEVATE BOLLARD OFF SUBGRADE, SO THAT TOP OF GUSSET / SLEEVE IS SAME HEIGHT AS TOP OF CONCRETE.

③ PLACE PREFABRICATED BOLLARDS INTO EXCAVATION.

④ INSERT #10 VERTICAL REBAR INTO BOLLARD TUBE.

⑤ INSERT #8 REBAR THROUGH PREFABRICATED HOLES IN BOLLARD AND TIE TO PERPENDICULAR #8 REBAR.

⑥ FILL BOLLARD TUBE AND FOUNDATION WITH CONCRETE.



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INSTALLATION DETAILS

SMB-1200-SA
WEBSITE DRAWING

SHEET: 6 OF 6

20240422-10-W

SCALE: N.T.S.