

ANCHOR BOLT PROVIDE
1-1/2" PROJECTION
ABOVE THE CONCRETE PIER

BOLLARD BASE
(LEVELING BOLT AND OTHER
BASE DETAILS NOT SHOWN)

BOLLARD
BASE

FOUR 15"Ø #3 REBAR
HOOP TIES WITH 12"
LAP. ONE AT BOTTOM,
ONE AT MIDDLE,
AND TWO AT TOP.

CONCRETE
FOUNDATION
(TYP) F'_c=4,000
PSI @ 28 DAYS

(OPTIONAL) CAGE
SUPPORT REBAR

(OPTIONAL) INSTALL #3 REBAR THRU
THE FORM FOR SUPPORT (TYP)

(OPTIONAL)
CARDBOARD
FORM 18"Ø

ANCHOR BOLT

FOUR # 4 REBAR
AT 37" LONG

FRONT ELEVATION
SECTION

USE CARDBOARD FORM
TUBE AT NEEDED LENGTH
TO SECURE EARTH

INSTALL FOUR VERTICAL
#4 REBAR 37" LONG AT
1 1/2" CLEAR AT TOP

INSTALL FOUR 15"Ø #3 REBAR
HOOP TIES AT LOCATIONS
SHOWN WITH 12" MIN LAP

CPAS12 COLLAPSIBLE POST
ANCHOR SYSTEM ASSEMBLY

18"Ø CONCRETE PIER TO 42"
BELOW GRADE

VERTICAL REBAR
HOOP REBAR TIES
CONCRETE
FOUNDATION

BOLLARD BASE

FLAT WASHER (TYP)

HEX NUT (TYP)

CARDBOARD FORM

SUPPORT REBAR
(OPTIONAL)

PLAN SECTION "A-A"

LEGEND:

- ① Ø3/4" x 12" TYPE L ANCHOR BOLT-H.D.G.
- ② Ø3/4" TYPE A FLAT NARROW WASHER GALVANIZED STEEL
- ③ Ø3/4" HEX NUT GALVANIZED STEEL

NOTES:

1. PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS, MIN. 6 SACKS OF CEMENT PER CUBIC YARD WITH MAX. WATER-CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6% ±1.5%, SLUMP AT 1 TO 4 INCHES. MIX DESIGN SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337 OF STANDARD SPECIFICATIONS OF PUBLIC WORKS CONSTRUCTION (SSPWC), AS ADOPTED BY CITY COUNCIL. CEMENT SHALL BE TYPE II. ALL CEMENT CONCRETE SHALL HAVE A COARSE AGGREGATE GRADATION CONFORMING TO SIZE NO. 67. POLYPROPYLENE OR CELLULOSE FIBERS SHALL BE ADDED TO THE P.C.C. AT 1.5 LBS. PER CUBIC YARD. ALL MATERIALS SHALL CONFORM TO SSPWC, AS ADOPTED BY CITY COUNCIL.
2. ALL WELDS AND BENDS SHALL BE SMOOTH, EVEN AND PAINTED.
3. THE CITY OF SPARKS SHALL PROVIDE THE PADLOCK AND MAINTAIN THE KEYS.

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION

DRAWING No.



COLLAPSIBLE
BOLLARD

S-413

APPROVED BY: JE DATE: 1/2020