



#### NOTES:

1. BOLLARDS SHALL BE OF SUFFICIENT NUMBER TO PROTECT THE HYDRANT, MINIMUM 2 AND UP TO 4. BOLLARDS TO BE INSTALLED AS SHOWN ON DRAWINGS OR AS DIRECTED BY DISTRICT.
2. LOCATE BOLLARDS A MINIMUM OF 18" IN FRONT OF HYDRANT, 5' APART. DO NOT BLOCK ACCESS TO PORTS.
3. BOLLARDS TO BE 6" DIAMETER DUCTILE IRON PIPE SET IN 30" OF CONCRETE AT LEAST 16" IN DIAMETER. INSIDE OF THE PIPE SHALL BE FILLED WITH CONCRETE WITH SMOOTH CONCRETE MOUND AS TOP CAP.
4. BOLLARDS SHALL EXTEND ABOVE GRADE TO A MINIMUM OF 3'. BOLLARDS ARE TO BE PLUMB AND TOP OF BOLLARDS TO BE AT SAME ELEVATION.
5. ABOVE GROUND PORTION OF BOLLARDS TO BE PRIME COATED FOLLOWED BY 2 TOP COATS OF SHERWIN WILLIAMS WHITE INDUSTRIAL ENAMEL #B54W101, TO MATCH HYDRANT.
6. BOLLARDS ARE INTENDED TO PROTECT HYDRANT FROM SPEEDS LESS THAN 25MPH, SUCH AS RESIDENTIAL STREETS AND PARKING LOTS.
7. ALTERNATIVE OPTION: 4 1/2" OD SCHEDULE 40 GALVANIZED STEEL PIPE FILLED WITH CONCRETE MAY BE SUBSTITUTED FOR THE DUCTILE IRON PIPE. CONCRETE BOLLARD ANCHOR, HEIGHTS, AND DISTANCES SHALL MATCH THOSE FOR THE DUCTILE IRON PIPE. SMOOTH, YELLOW BOLLARD COVER WITH TWO REFLECTIVE RED STRIPES, POST GUARD PART NUMBER CL1385D OR APPROVED EQUAL, REQUIRED FOR GALVANIZED STEEL PIPE BOLLARDS.

## FIRE HYDRANT BOLLARDS

NOT TO SCALE

#### DETAIL APPROVALS

EDITOR *TMC*

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## NORTHSHORE UTILITY DISTRICT

### 2025 STANDARD WATER DETAILS

**3a**

LAST UPDATED  
MAY 2025