EZ SEE HYDRANT MARKER (72610 W-R 10501) W/RED REFLECTIVE TAPE 65” OVERALL LENGTH.

APPROVED MATERIALS:

FITTINGS - ALL FITTINGS SHALL BE EPOXY COATED DUCTILE IRON AND BOLTED WITH EPOXY COATED STAINLESS STEEL OR COR-BLUE BOLTS AND NUTS.

HYDRANTS - AVK DRY BARREL SERIES 2700 OR APPROVED EQUAL (THREADS - NATIONAL STANDARD ON 2 1/2” BUTTS AND MINNEAPOLIS ON 4 1/2” STEAMER NOZZLE). HYDRANTS SHALL BE PAINTED IN AVK YELLOW.

PIPE - CL 52 DIP (MINIMUM).

GATE VALVE BOX - SIZE G DUCTILE IRON, TYLER 6860, WITH 5” DROP LID HAVING THE WORD “WATER” CAST THEREON AND #6 ROUND BASE. THE BOXES SHALL EXTEND NOT LESS THAN 12” UPWARD FROM INITIAL INSTALLED POSITION AND INCLUDE A POWER SEAL MODEL 5000 VALVE BOX ALIGNER, EPOXY COATED 1/4” STEEL PER ASTM A53/A512.

GATE VALVE - AVK VALVE SERIES 65 WITH EXTERIOR EPOXY COATING.

INSTALL 2 - 3/4” THREADED RODS AT SPRING LINE OF EACH SECTION OF PIPE. COVER ALL RODS WITH POLY ENCASEMENT OR APPROVED CORROSION INHIBITOR. MEGALUG GLANDS MAY BE SUBSTITUTED FOR RODS (RODDING IS REQUIRED IF MORE THAN ONE PIPE LENGTH IS USED BETWEEN THE VALVE AND THE TEE).

SET HYDRANT ON 16”x16”x5” CONCRETE BLOCK.

CUT 6” DIA. NIPPLE TO GET 12” FLANGE TO FLANGE.

MIN. 1 CY DRAIN PIT USING 1 1/2” CLEAR RIVER ROCK. FILL TO ABOVE DRAIN OPENING AND PLACE GEOTEXTILE FABRIC OVER TOP.

TYPICAL HYDRANT INSTALLATION

CITY ENGINEER REG 23110

APPROVED JANUARY 1, 2018

City of Golden Valley
GV-WM-010
EZ SEE HYDRANT MARKER (72610 W-R 10501) W/RED REFLECTIVE TAPE 65" OVERALL LENGTH.

APPROVED MATERIALS:

FITTINGS – ALL FITTINGS SHALL BE EPOXY COATED DUCTILE IRON AND BOLTED WITH EPOXY COATED STAINLESS STEEL OR COR-BLUE BOLTS AND NUTS.

HYDRANTS – AVK DRY BARREL SERIES 2700 (27M/PNN-14) OR APPROVED EQUAL (THREADS – NATIONAL STANDARD ON 2 1/2" BUTS AND MINNEAPOLIS ON 4 1/2" STEAMER NOZZLE). HYDRANTS SHALL BE PAINTED IN AVK YELLOW.

PIPE – CL 52 DIP (MINIMUM).

GATE VALVE BOX – SIZE G DUCTILE IRON, TYLER 6860, WITH 5" DROP LID HAVING THE WORD "WATER" CAST THEREON AND #6 ROUND BASE. THE BOXES SHALL EXTEND NOT LESS THAN 12" UPWARD FROM INITIAL INSTALLED POSITION AND INCLUDE A POWER SEAL MODEL 5000 VALVE BOX ALIGNER, EPOXY COATED 1/4" STEEL PER ASTM A53/A512.

GATE VALVE – AVK VALVE SERIES 65/MFN MJ/FL, VALVE INSTALLED DIRECTLY TO HYDRANT.

INSTALL 1 – 3/4" THREADED RODS AT SPRING LINE OF EACH SECTION OF PIPE. COVER ALL RODS WITH POLY ENCASEMENT OR APPROVED CORROSION INHIBITOR. MEGALUG GLANDS MAY BE SUBSTITUTED FOR RODS (RODDING IS REQUIRED IF MORE THAN ONE PIPE LENGTH IS USED BETWEEN THE VALVE AND THE TEE).

AVK GATE VALVE WITH FLANGE ON ONE END, MECHANICAL JOINT ON THE OTHER.

SET HYDRANT AND VALVE ON 16"x16"x5" CONCRETE BLOCK.

MIN. 1 CY DRAIN PIT USING 1 1/2" CLEAR RIVER ROCK. FILL TO ABOVE DRAIN OPENING AND PLACE GEOTEXTILE FABRIC OVER TOP.

APPROVED JANUARY 1, 2018

CITY ENGINEER REG 23110

TYPICAL HYDRANT INSTALLATION

City of Golden Valley
GV-WM-015
NOTE:
FORM GOOSENECK 6” ABOVE TAP TO ALLOW FOR SETTLEMENT
MAINTAIN A MINIMUM OF 8’ OF COVER OVER SERVICE.

ANY SERVICE LARGER THAN 1” TO BE 1.5”/2” C–900 SDR 7 OR (4”STUB) TO PROPERTY
LINE WITH 4” GATE VALVE AND FLANGEDReducer.

FINISHED GRADE

1 1/2” STEEL PIPE

TRACER WIRE

MAGNESIUM GROUNDING AS SHOWN

NOTE: NO MAGNESIUM GROUND ROD
NEEDED AT MAIN CONNECTION IF MAIN
LINE WIRE IS PRESENT AND CONNECTION
IS MADE WITH APPROVED 3 WAY
CONNECTOR.

8”x8”x2” CONCRETE BLOCK

APPROVED MATERIALS FOR COPPER & (PLASTIC) PIPING:

CURB STOP – 1” CURB STOP AY MCDONALD 76104 OR (PLASTIC 76104–33)

CURB BOX – AY MCDONALD SERIES 5622A 8 CURB BOX COMPLETE W/5623LTW LID– NO EXTENSION

CORPORATION STOP – 1” AY MCDONALD 74701B OR (PLASTIC 74701B–33)

TAPS – 1” SMITH-BLAIR SERIES 372 STAINLESS STEEL SERVICE SADDLE

WATER SERVICE – COPPER TYPE K OR C900 (PLASTIC W/ 1” SS INSERT AY MCDONALD 6136)
W/TRACER WIRE AS SHOWN OR MINNESOTA RURAL WATER ASSOCIATION STANDARDS.
NOTE:
FOR TRACER WIRE INSTALLATION REQUIREMENTS, REFERENCE THE MINNESOTA RURAL WATER ASSOCIATION STANDARD DETAILS.

FINISHED GRADE

TRACER WIRE ACCESS BOX

11/2” STEEL PIPE

COPPERHEAD INDUSTRIES SP-BRACKET

MINIMUM 8’

TRACER WIRE

TO WATER MAIN

8”x8”x2” CONCRETE BLOCK

NOTE:
TRACER WIRE REQUIRES MAGNESIUM GROUNDING ANODE AT FOUNDATION WALL AND CURB BOX.

APPROVED MATERIALS FOR COPPER & (PLASTIC) PIPING:

CURB STOP – 1” CURB STOP AY MCDONALD 76104 OR (PLASTIC 76104–33)
CURB BOX – CURB BOX AY MCDONALD SERIES 5622A 8 CURB BOX COMPLETE W/ 5623LTW LID
PIPE MATERIAL – ACCORDING TO STATE PLUMBING CODE: COPPER AND PLASTIC (PLASTIC PIPE REQUIRES 1” STAINLESS STEEL INSERT AY MCDONALD 6136)
TRACER BOX ACCESS BOX – SHALL INCLUDE SNAKEPIT BRACKET BY COPPERHEAD

APPROVED JANUARY 16, 2020

CITY ENGINEER REG 23110

TYPICAL WATER SERVICE
PROPERTY LINE TO HOUSE

GV-WM-030
MUST BE GREATER THAN SLEEVE LENGTH TO ALLOW FOR REMOVAL OF SLEEVE AND VALVE.

NEENAH R–1733 SERIES SOLID COVER, ESS BROS. 301, OR APPROVED EQUAL WITH "WATER" ON IT

PLASTIC HDPE ADJUSTING RINGS (MIN. 2 MAX. 5)

WALL SHALL BE PRECAST CONCRETE

NOTE:
THE MANHOLE SHALL BE SET SO THE OPERATING NUT IS CENTERED ON THE OPENING IN THE COVER.

THE WALL OPENING FOR PIPE SHALL HAVE A 2" MIN. CLEARANCE ALL AROUND.

PRECAST CONCRETE MANHOLE PIPE SHALL CONFORM TO A.S.T.M. C–478.

TOP VIEW

SLEEVE LENGTH

CENTER VALVE IN COVER HOLE

TOP VIEW

PLASTIC HDPE ADJUSTING RINGS (MIN. 2 MAX. 5)

WALL SHALL BE PRECAST CONCRETE

NOTE:
THE MANHOLE SHALL BE SET SO THE OPERATING NUT IS CENTERED ON THE OPENING IN THE COVER.

THE WALL OPENING FOR PIPE SHALL HAVE A 2" MIN. CLEARANCE ALL AROUND.

PRECAST CONCRETE MANHOLE PIPE SHALL CONFORM TO A.S.T.M. C–478.

SLEEVE LENGTH

CENTER VALVE IN COVER HOLE

PLASTIC HDPE ADJUSTING RINGS (MIN. 2 MAX. 5)

WALL SHALL BE PRECAST CONCRETE

NOTE:
THE MANHOLE SHALL BE SET SO THE OPERATING NUT IS CENTERED ON THE OPENING IN THE COVER.

THE WALL OPENING FOR PIPE SHALL HAVE A 2" MIN. CLEARANCE ALL AROUND.

PRECAST CONCRETE MANHOLE PIPE SHALL CONFORM TO A.S.T.M. C–478.

POURED OR PRECAST CONCRETE BASE

PLACE ON MIN. 18" DEEP 1 1/2" ROCK SUMP

CONCRETE BLOCK

27"

WATERMAIN VALVE MANHOLE

APPROVED JANUARY 1, 2018

CITY ENGINEER REG 23110

GV-WM-040
NOTE:
MINIMUM 2" PER FOOT UNDER 8’ OF COVER – 2” THICK HIGH DENSITY POLYSTYRENE INSULATION (MINIMUM TOTAL R VALUE OF 20) LAYERS WITH JOINTS STAGGERED AND EXTENDING A MINIMUM OF 2’ EACH WAY FROM WATERMAIN C/L OR AS DIRECTED BY THE ENGINEER.
FITTINGS – ALL FITTINGS SHALL BE EPOXY COATED DUCTILE IRON AND BOLTED WITH EPOXY COATED STAINLESS STEEL OR COR-BLUE BOLTS AND NUTS.

GATE VALVE – AVK VALVE SERIES 65 WITH EXTERIOR EPOXY COATING.

GATE VALVE BOX – SIZE G DUCTILE IRON, TYLER 6860, WITH 5” DROP LID HAVING THE WORD “WATER” CAST THEREON AND #6 ROUND BASE. THE BOXES SHALL EXTEND NOT LESS THAN 12” UPWARD FROM INITIAL INSTALLED POSITION AND INCLUDE A POWER SEAL MODEL 5000 VALVE BOX ALIGNER, EPOXY COATED 1/4” STEEL PER ASTM A53/A512.
NOTES:
1. WIRE SHOWN AWAY FROM PIPE FOR CLARITY. WIRE SHALL BE INSTALLED ON THE BOTTOM SIDE OF THE PIPE BELOW THE SPRING LINE. THE WIRE SHALL BE FASTENED TO THE PIPE WITH TAPE OR PLASTIC TIES AT 5' INTERVALS.
TYPICAL SECTION

3/4" DIA 1325 BOLTS PER PILE (1 EACH SIDE OF BEAM)

LONGITUDINAL BRACE ANGLE 4" X 4" X 3/8" CONTINUOUS BETWEEN CAPS

HELICAL PILES

SECTION A–A

NOTE:
HELICAL PILE – SEE SPECIFICATIONS FOR DIMENSIONS, LENGTH & LOADS.
STEEL CAP, ANGLES AND RODS SHALL BE COVERED WITH AN APPROVED CORROSION INHIBITOR.
ELEVATION

ALL BOLTS AND RODS SHALL BE COVERED WITH AN APPROVED CORROSION INHIBITOR.

ELEVATION AT MANHOLE

NOT TO SCALE

PIPE SUPPORT PILING
(2 OF 2)

CITY ENGINEER REG 23110

APPROVED JANUARY 1, 2018