FINISHED GRADE
METHOD A
(SEE NOTE A)

18" 4" MIN.

METHOD B
(SEE NOTE B)

18" 4" MIN.

ELEVATIONS

PLAN VIEW

PLAN

ELEVATION

SECTION

SECTION

PLAN

PROFILE

SIDE

NO. DESCRIPTION
1. WATER MAIN
2. BUTTERFLY VALVE
3. WASHED # 87 OR # 67 STONE - MINIMUM 6 FEET EACH SIDE OF VALVE
4. PRECAST CONCRETE BEAM, (REINFORCED)
5. 12-INCH (MIN.) OR (6-INCH PVC CRIP) RISER PIPE 20-INCH MAXIMUM
6. PRECAST CONCRETE FLOOR, (REINFORCED)
7. 120-INCH EXPANSION MATERIAL, (CONSTRUCTION JOINT)
8. STANDARD VALVE BOX TOP SECTION (WIDOW), CAST IN CONCRETE FLOOR # 4,
9. 24" PVC FIP, C90S OR CRIP, OR DI - CAST
10. PRECAST CONCRETE PAD, (REINFORCED)
11. FRAME AND COVER - SEE DETAILS
12. VALVE LOCKOUT ASSEMBLY - SEE DETAILS
13. EXTENSION STEM ASSEMBLY - SEE DETAILS
14. 20" PVC FIP, C90S OR CRIP, DI OR CRIP
15. WELDED WIRE FABRIC 1-WARP 6X6, 6X6, 16GAUGE (MIN.)
16. OR 5/8" REBAR AS SHOWN
17. # 2 OR # 3 REBAR AS SHOWN
18. ANGULAR GAUGE COPPER TRACKER WIRE, (TYP)
19. WITH BLUE INSULATION, TERMINATE WITH 24 INCH EXCESS WIRE, (COILED) IN VALVE BOX, TYP.
20. 1/2" OR 3/8" ID COUPLING - SEE 6 X 6 PEX TUBING - ASTM F1967
21. GRADE / SLOPE ADJUSTMENT RING - PRECAST CONCRETE OR RECYCLED RUBBER

NOTES:
A. METHOD A SHALL BE REQUIRED IN WATER MAIN EASEMENTS, OR WHEN VALVE IS BACK OF ROAD DITCH.
B. METHOD B SHALL BE REQUIRED WHEN VALVE IS IN MAINTAINED LAWNS, ON ROAD SHOULDER, IN PERMANENT DRIVEWAYS OR SIDEWALKS
C. DIAMETER OF RISER MAY VARY AS REQUIRED BY VALVE ACTUATOR, AS APPROVED BY CMUD.
D. FOR 24" AND SMALLER VALVES - WHEN OPERATING NUT DEPTH EXCEEDS 7-1/2" BELOW FINISHED GRADE, PROVIDE EXTENSION STEM WITH 2" NUT IN TOP SECTION AS SHOWN, SEE EXTENSION STEM DETAIL
E. FOR 30" AND LARGER VALVES, EXTENSION STEM REQUIRED REGARDLESS OF DEPTH - SEE EXTENSION STEM DETAIL
F. PROVIDE 2" CLEARANCE IN ALL DIRECTIONS BETWEEN RISER AND VALVE ACTUATOR (SEE NOTE C)

DESIGN REQUIREMENTS:
A. CONCRETE - (1) = 6000 PSI (MIN.)
B. REBAR - GRADE 60, ASTM A 416
C. WELDED WIRE FABRIC - ASTM A 156, A 62