TRENCH BACKFILL REQUIREMENTS:

1. PROPOSED STREETS—REFER TO DETAIL TB-1 OF SECTION 31 FOR BACKFILL REQUIREMENTS ABOVE THE PIPE ZONE.

2. EXISTING STREETS—REFER TO DETAIL TB-1 AND TB-3 OF SECTION 31 FOR BACKFILL REQUIREMENTS ABOVE THE PIPE ZONE.

NOTE: BACKFILL SHALL BE MECHANICALLY CONSOLIDATED OR SHOVEL SLICED UNDER THE HAUNCHES OF THE PIPE.

A.C.

A.B.

SUBGRADE

IMPORTED MATERIAL 1/2" OR 3/4" CRUSHED ROCK PER SECTION 71-SL. OF THIS STANDARD

3" FOR UNDER 12" PIPE
4" FOR 12" OR LARGER PIPE (ADD 4" TO THE EXCAVATION IN ROCKY OR UNYIELDING SOIL)

6" MIN.

D.D. + 12" MIN.

CRUSHED ROCK TO 1/2 PIPE DIAMETER

GEOTEXTILE FILTER FABRIC (OVERLAP TOP HALF OF PIPE)

<SEE TRENCH DETAIL>
NOTES

MANHOLE LIDS SHALL BE SEALED WITH AN APPROVED RUBBER GASKET.
JOWST SHALL BE MORTARED INSIDE AND OUT.

UNUSED CHANNELS SHALL BE COMPLETELY FILLED WITH GROUT.

STUBS SHALL BE PLUGGED AND END MARKED ABOVE FINISHED GRADE WITH A REDWOOD 4 BY 4 POST PAINTED GREEN.

IF AN ECCENTRIC CONE IS USED, PLACE SUCH THAT THE OPENING IS OVER THE UPSTREAM INVERT.

NO CAULDER OR REPAIR COUPLINGS SHALL BE USED ON NEW CONSTRUCTION.

FLOW LINES SHALL HAVE A 1/10 DROP OR AS INDICATED ON PLANS.

MANHOLE WITH DROPS SHALL BE EPOXY COATED. THE COATING SHALL BE APPLIED PER SEC. 91-10K OF THESE STANDARDS.

* 60" & 72" MANHOLE SHALL USE A 36" COMPOSITE LID AND FRAME.

6" IN LANDSCAPED AREA
12" IN UNIMPROVED AREA

12" MINIMUM
FINISH GRADE
3" PAVEMENT **

CONCRETE COLLAR DETAIL

** NOTE: CONCRETE COLLAR MAY BE PLACED FLUSH TO FINISHED SURFACE WITH MEDIUM BROOM FINISH PERPENDICULAR TO VEHICLE TRAVEL DIRECTION.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE
CALIFORNIA

SEWER MANHOLE
STANDARD 48 INCH

SCALE: NONE
REvised: JANUARY 2018
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

SS-2
GENERAL NOTES:
1. All service lines shall be 4" for residential and 6" for commercial unless otherwise noted.
2. Services shall have same bedding and backfill as lateral sewer.
3. Contractor shall use the most appropriate type of connection (A or B) for the particular situation encountered.
4. Service sewer shall have minimum 3'-0" cover over property line when very lateral depth and service sewer slope of 1/4" per foot (minimum) permit. See note 10.
5. When the lateral sewer depth is such that minimum cover at property line cannot be met, the minimum slope of 1/4" per foot shall govern the cover.
6. Min. specified cover at the property line shall be measured from existing ground surface or edge of adjacent roadway, whichever is lower.
7. A specific elevation at the property line, when shown on the plans or designated by the engineer, shall govern.
8. Miter fitting shall be max. 45°.
9. Minimum depth of cover shall be increased to 4'-6" where a water main is to be installed at back of sidewalk as part of the subdivision improvements. In such cases, the service shall be extended to a minimum of 1' back of sidewalk cleanout to grade shall remain within 3' of back of sidewalk.
10. Sewer services originating from sewer mains 14 ft and greater in depth shall have the crotch of the wye fitting filled with concrete.
11. Underground contractor shall end sewer service 2'-3' upstream of sewer cleanout. See standard detail SS-5.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

SEWER SERVICE

CITY OF ROSEVILLE
CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

SCALE: NONE
REVISED: JANUARY 2017
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

SS-4
1. Install round non-traffic type concrete valve box & cover marked "sewer" in a non-traffic area. Install metal lid marked "sewer" in areas with potential traffic. A CS box shall be installed in traffic areas.
2. Three foot VCP stub shall be installed upstream of cleanout. 2" VCP shall be installed where sewer service enters over joint utility trench.
3. Cleanout box to be free of all dirt and ready at time of pre-final inspection.
4. Services over 100' long and commercial services require a min. 6" cleanout with 6" fittings. The cleanout box shall be a 1-1/2 box for 4" - 6" risers and a 0-12 box for 6" risers; construct per V-16.
5. Connection to main shall be with a factory WYE or at a manhole.
6. The cleanout riser shall be installed 12" above grade prior to building construction.
7. Building contractor shall set box to finish grade and install an ABS plug set 6" below the surface prior to building pre-final.
8. Backwater valve if required shall be installed by the building contractor.

9. 2" VCP shall be installed where sewer service enters over joint utility trench.
10. Trees are to be placed 7 1/2' from clean out.
11. Install a city cleanout at a minimum 5' from commercial buildings.

Signed:
RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CTY OF ROSEVILLE
ENVIRONMENTAL UTILITIES DEPARTMENT

SEWER SERVICE CLEANOUT

SCALE: NONE
REVISED: JANUARY 2019
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

SS-5
**NOTE:** THE PRECAST CONCRETE UNITS SHALL BE PLACED ON LEVEL UNDISTURBED SOIL, W/1/2" CRUSHED ROCK 12" DEEP. TWO 2x6 REDWOOD GRADE BOARDS SHALL BE PLACED BELOW THE TANK SIDE WALLS ALONG THE LONG DIMENSION PER THE MANUFACTURERS GUIDELINES.

**NOTE:** PRIOR TO BACKFILL, INTERCEPTOR SHALL BE FILLED WITH WATER AND HELD FOR 24HRS WITH NO VISIBLE LEAKAGE.
**NOTE:** THE PRECAST CONCRETE UNITS SHALL BE PLACED ON LEVEL UNDISTURBED SOIL, W/1/2” CRUSHED ROCK 12” DEEP. TWO 2x6 REDWOOD GRADE BOARDS SHALL BE PLACED BELOW THE TANK SIDE WALLS ALONG THE LONG DIMENSION PER THR MANUFACTURERS GUIDELINES.

SIZING SHALL BE BASED ON CALIFORNIA PLUMBING CODE

**NOTE:** PRIOR TO BACKFILL, INTERCEPTOR SHALL BE FILLED WITH WATER AND HELD FOR 24HRS WITH NO VISIBLE LEAKAGE.

**NOTE:** IF SIZE IS <1000 GAL, INTERCEPTOR DOES NOT HAVE MIDDLE MANHOLE
NOTE:
TRENCH DAM SHALL BE CONSTRUCTED OF CLEAN CLAY MATERIAL OR CONTROLLED DENSITY FILL.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

ENVIRONMENTAL UTILITIES DEPARTMENT

SCALE: NONE
REVISED: JANUARY 2016
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER
PIPE SUPPORT DETAIL

MTRL. NOTES:
1. STRUCTURAL STL. SHALL BE A36 (Fy=36ksi)
2. WELDING RODS SHALL BE E70 (Fy=70ksi)

DESIGN NOTES:
1. PILES SHALL BE 10' ON CENTER BEGINNING AND ENDING AT CREEK BOTH SIDES ‘TOP OF BANK’ AND AS NOTED ON THE PROJECT PLANS.

CREEK CROSSING SUPPORT

SCALE: NONE
REVISED: JANUARY 2016
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR
NOTES
1. MANHOLE LID SHALL BE SEALED WITH AN APPROVED RUBBER GASKET.
2. JOINTS SHALL BE MORTARED INSIDE AND OUT.
3. APPLY EPOXY COATING TO INTERIOR SURFACES OF MANHOLE IN ACCORDANCE WITH CITY STANDARDS 85-10-A.
4. PROVIDE SPARK TEST OVER ENTIRE PROTECTIVE COATINGS AFTER INSTALLATION.
5. SEE STANDARD DETAIL S5-2 FOR ADDITIONAL REQUIREMENTS.

PROFILE

PLAN

2-#5 EW EF

CONCRETE BASE (POUR AGAINST UNDISTURBED EARTH)
NOTES

1. INSIDE DROP PIPING SHALL BE P.V.C. PIPE, SCHEDULE 40.
2. PRIME AND CEMENT ALL JOINTS AS RECOMMENDED BY THE MANUFACTURER.
3. DROP CONNECTION PIPE & FITTINGS TO BE SAME SIZE AS ENTERING PIPE.
4. USE ECCENTRIC CONE WITH OPENING ALIGNED ABOVE DROP CONNECTION.
5. INSIDE DROP CONNECTION SHALL USE DROP BOWL AS PRODUCED BY
REINER DURAN, INC.
53 MT ARCHER RD.
LYME CT. 06371
(860)434-0277 FAX: (860)434-3195 OR APPROVED EQUAL
6. ATTACH DROP BOWL & EACH CLAMMING BRACKET TO THE MANHOLE WALL
   WITH STAINLESS STEEL 3/8 X 3/4 RAMSET/RED HEAD BOLTS. PRE-ROTO DRILL
   AND SET BOLTS IN PLACE WITH EPOXY PASTE. EPOXY PASTE SHALL MEET THE
   FOLLOWING REQUIREMENTS:
   A. EPOXY PASTE SHALL BE A TWO COMPONENT TOOK SOLID SYSTEM. EPOXY
      SHALL BE SKADOR 31 HI-MOD GEL BY SIKA CORPORATION
      PHONE (502) 941-0231 OR EQUAL.
   B. THE EPOXY PASTE SHALL DEVELOP A MINIMUM COMPRASSIVE STRENGTH OF
      5,000 PSI IN 28 DAYS WHEN TESTED IN ACCORDANCE WITH ASTM 0695 AT
      73 DEGREES.
   C. THE EPOXY PASTE SHALL DEVELOP A MINIMUM TENSIILE STRENGTH OF 3,000
      PSI IN 14 DAYS WHEN TESTED IN ACCORDANCE WITH ASTM D635.
   D. THE EPOXY PASTE SHALL DEVELOP A MINIMUM BOND STRENGTH OF 2,000 PSI
      IN 2 DAYS WHEN TESTED IN ACCORDANCE WITH ASTM CB82 (HARDENED
      CONCRETE TO HARDENED CONCRETE).
   E. MANUFACTURER'S INSTRUCTIONS SHALL BE PRINTED ON EACH CONTAINER IN
      WHICH THE MATERIALS ARE PACKAGED.
   F. DROP BOWL MODEL "A-4" SHALL BE USED FOR ALL LINES UP THROUGH FULL
      6" INLETS. DROP BOWL MODEL "A-8" SHALL BE USED FOR ALL 8" INLETS.
   G. DROP BOWL MODEL "B-8" SHALL BE USED FOR ALL 10" INLETS. DROP BOWL
      MODEL "B-10" SHALL BE USED FOR ALL 12" INLETS.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE
CALIFORNIA

ENVIRONMENTAL UTILITIES
DEPARTMENT

INSIDE DROP
CONNECTION

SCALE: NONE
REVISED: JANUARY 2018
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

SS-12