

UNION SANITARY DISTRICT 2017 STANDARD SANITARY SEWER NOTES

1. **MANHOLE ENTRY IS PROHIBITED – DUE TO POTENTIAL HAZARDS, CONTRACTORS SHALL NOT ENTER EXISTING USD MANHOLES IN THE COURSE OF THEIR WORK.** AN ENCROACHMENT PERMIT THAT SPECIFICALLY ALLOWS ENTRY INTO IDENTIFIED MANHOLES MUST FIRST BE OBTAINED FROM UNION SANITARY DISTRICT (USD).
2. **ACCESS TO EXISTING USD MANHOLES MUST BE MAINTAINED** – CONTRACTOR SHALL MAINTAIN ACCESS TO USD MANHOLES AT ALL TIMES. IF CONTRACTOR'S ACTIVITIES WILL LIMIT OR PREVENT USD MAINTENANCE PERSONNEL FROM ACCESSING A MANHOLE, THE USD INSPECTOR MUST IMMEDIATELY BE NOTIFIED. IF THE SITUATION OF LIMITED OR NO ACCESS TO A USD MANHOLE WILL PERSIST FOR MORE THAN THREE (3) WORKING DAYS WRITTEN AUTHORIZATION MUST BE REQUESTED FROM USD.
3. **HAZARD IDENTIFICATION** – CONTRACTORS ARE HEREBY ADVISED THAT THEY MAY BE EXPOSED TO HAZARDOUS CONDITIONS WHEN INSTALLING OR MODIFYING SANITARY SEWER PIPELINES AND STRUCTURES. SOME OF THESE HAZARDS INCLUDE BUT ARE NOT LIMITED TO: EXPOSURES TO HAZARDOUS GASSES COMMONLY FOUND IN SEWER SYSTEMS SUCH AS HYDROGEN SULFIDE, CARBON DIOXIDE, METHANE, OXYGEN DEFICIENT ENVIRONMENTS, AND OTHER FLAMMABLE OR EXPLOSIVE GASSES; EXPOSURE TO SEWAGE WHICH MAY CONTAIN BACTERIOLOGICAL, CHEMICAL AND OTHER CONSTITUENTS HARMFUL TO HUMANS; AND EXPOSURE TO AREAS WHICH HAVE LIMITED OR RESTRICTED ACCESS AND EGRESS, WHICH MAY BE CONSIDERED PERMITTED CONFINED SPACES BY STATE AND FEDERAL OSHA REQUIREMENTS.
4. **USA NOTIFICATION** – AT LEAST TWO WORKING DAYS BEFORE EXCAVATING, CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA NORTH) AT 811 OR 1-800-642-2444.
5. **COST OF INSTALLATION** – THE PRIVATE OR PUBLIC SANITARY SEWER SYSTEM TO SERVE THE DEVELOPMENT SHALL BE DESIGNED AND INSTALLED AT DEVELOPER'S EXPENSE IN ACCORDANCE WITH THE 2017 USD STANDARD SPECIFICATIONS AND DETAILS.
6. **USD JURISDICTION** – USD WILL PERMIT AND INSPECT ALL MAIN AND BUILDING SEWER INSTALLATIONS AND BEDDING IN ALL AREAS OUTSIDE OF THE BUILDING FOOTPRINT AT DEVELOPER'S EXPENSE.
7. **INDEMNIFICATION** – IN CONSIDERATION OF ISSUANCE OF THE PERMIT, DEVELOPER, OWNER OR CONTRACTOR SEEKING SUCH PERMIT HEREBY AGREES TO HOLD HARMLESS AND INDEMNIFY USD AND EMPLOYEES AGAINST ANY AND ALL CLAIMS, DEMANDS, CAUSE OF ACTION, COSTS INCLUDING ATTORNEY'S FEES, EXPENSES INCLUDING CONSULTANT'S FEES, OBLIGATIONS, LIABILITIES, DAMAGES, AND JUDGMENTS ARISING FROM ANY AND ALL BODILY INJURIES INCLUDING DEATH OF AN EMPLOYEE OF DEVELOPER, OWNER OR CONTRACTOR OR ANY OTHER PERSON, AND ANY AND ALL DAMAGES TO PROPERTY INCLUDING LOSS OF USE THAT RESULTS IN ANY WAY FROM THE PERMIT ISSUED BY USD.
8. **REMOVAL, ABANDONMENT, AND CAPPING** – ANY EXISTING SANITARY SEWER MAINS, LATERALS, MANHOLES AND APPURTENANCES, INCLUDING GREASE TRAPS/INTERCEPTORS/SEPARATORS, WITHIN THE SITE TO BE REMOVED, ABANDONED, OR CAPPED (TO BE REUSED OR NOT) SHALL BE CLEARLY NOTED ON THE PLANS AND ALL WORK PERFORMED IN ACCORDANCE WITH USD SPECIFICATIONS AND PERMIT CONDITIONS. FOR WORK ON SEWER LATERALS, A SEPARATE SEWER LATERAL DEMOLITION/CAPPING PERMIT MUST BE OBTAINED FROM USD PRIOR TO THE START OF ANY DEMOLITION OR GRADING OPERATIONS AND USD SHALL INSPECT THE WORK. USD WILL NOT ISSUE A SEWER CONSTRUCTION PERMIT UNTIL SUCH PERMIT IS CLOSED AND THE WORK ACCEPTED.
9. **SEWER CONSTRUCTION PERMIT & INSPECTION REQUIRED** – A SEWER CONSTRUCTION PERMIT MUST BE OBTAINED FROM USD PRIOR TO ANY EXCAVATION TO CONSTRUCT A SANITARY SEWER LATERAL, MAIN, MANHOLE, CLEANOUT OR APPURTENANCE AT ANY LOCATION TWO (2) FEET OR MORE OUTSIDE OF A BUILDING. ALL SANITARY SEWER CONSTRUCTION OUTSIDE OF A BUILDING MUST BE INSPECTED BY USD AND COMPLY WITH THE 2017 USD STANDARD SPECIFICATIONS AND DETAILS.
10. **NOTIFICATION FOR INSPECTION** – USD SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO START OF ANY SEWER CONSTRUCTION AND A REQUEST MADE FOR INSPECTION OF WORK (CALL YOUR ASSIGNED USD INSPECTOR OR 510-477-7500). THIS NOTIFICATION APPLIES NOT ONLY TO STARTING WORK, BUT ALSO TO RESTARTING WORK WHICH HAS BEEN TEMPORARILY HALTED.
11. **WORK BY USD FORCES** – ALL WORK TO BE DONE BY USD SHALL BE DONE AT DEVELOPER'S EXPENSE UNLESS OTHERWISE SPECIFIED. CONTRACTOR SHALL CALL USD TO SCHEDULE THIS WORK A MINIMUM OF 48 HOURS IN ADVANCE (CALL YOUR USD INSPECTOR OR 510-477-7500).

12. ACCEPTABLE PIPE MATERIALS – SANITARY SEWER MAINS AND LATERALS SHALL BE LIMITED TO THE FOLLOWING PIPE MATERIALS (SUBJECT TO MINIMUM COVER REQUIREMENTS) UNLESS OTHERWISE SPECIFIED (SEE 2017 USD STANDARD SPECIFICATIONS SECTION 5 FOR ADDITIONAL REQUIREMENTS, HIGHER GRADE/PRESSURE CLASS MATERIALS MAY BE SUBSTITUTED):

- DUCTILE IRON PIPE (DIP), ANSI/AWWA C151/A21.51
- ABS SOLID WALL PIPE, SCH 40/SDR 26, ASTM D-2661 (LATERALS ONLY)
- PVC SOLID WALL PIPE, SDR 26/PS-115, ASTM D-3034/F-679
- PVC PRESSURE PIPE, AWWA C-900, CLASS 150
- HDPE, AWWA C906, ASTM D-3035 (SUBJECT TO PRIOR APPROVAL BY USD)

13. SEWER SURVEY CUT SHEETS – CUT SHEETS (STAKEOUT, GRADE SHEETS, ETC.) ARE REQUIRED BEFORE THE START OF SEWER CONSTRUCTION INVOLVING A PIPELINE 100 FEET LONG OR MORE, A PIPELINE WITH A SLOPE OF LESS THAN ONE PERCENT (<1%), OR WHEN REQUIRED BY USD. THREE (3) HARD COPIES OR ONE (1) DIGITAL COPY OF CUT SHEETS ON STANDARD USD FORM MUST BE SUBMITTED TO USD. A REGISTERED CIVIL ENGINEER OR LAND SURVEYOR ENGAGED BY DEVELOPER WILL BE RESPONSIBLE FOR SETTING STAKES AND PREPARING CUT SHEETS. CUT SHEETS WILL BE CHECKED BY USD, AND ONE (1) APPROVED COPY WILL BE FURNISHED TO CONTRACTOR FOR USE IN CONSTRUCTION. STAKES MUST NOT BE MARKED WITH CUTS PRIOR TO USD CUT SHEET APPROVAL.

WHERE A CONNECTION IS TO BE MADE TO AN EXISTING SEWER OR STRUCTURE, SAID EXISTING SEWER OR STRUCTURE SHALL BE UNCOVERED AND CHECKED FOR LOCATION AND ELEVATION PRIOR TO SUBMITTING CUT SHEETS. ANY DISCREPANCY BETWEEN THE PLANS AND FIELD INFORMATION SHALL BE REPORTED IMMEDIATELY TO THE USD INSPECTOR.

14. SEWER LATERAL (BUILDING SEWER) REQUIREMENTS – ALL SANITARY SEWER LATERALS SHALL BE INSTALLED AS SHOWN ON THE PLANS.

- THE LOCATION OF ALL SEWER LATERALS SHALL BE MARKED BY DEVELOPER'S ENGINEER.
- ALL BUILDING LATERALS SHALL BE MINIMUM 4" DIAMETER AND HAVE A MINIMUM SLOPE OF TWO PERCENT (2%), EXCEPT AS NOTED ON THE APPROVED PLANS.
- CONTRACTOR SHALL PLACE AN "S" MARKING ON THE CURB FACE AT EACH LATERAL LOCATION.
- ALL SEWER CLEANOUTS SHALL BE THE SAME SIZE AS THE LATERAL, INSTALLED IN AN APPROVED CLEANOUT BOX, AND SET FLUSH WITH THE FINISH GRADE.

15. CONNECTION TO BUILDING DRAIN (PLUMBING KICK-OUT) – AFTER A PERMIT FOR SEWER CONSTRUCTION HAS BEEN ISSUED, BUILDING SEWERS MAY BE CONSTRUCTED UP TO A POINT 5 FEET FROM THE BUILDING WALL. ACTUAL CONNECTION OF THE BUILDING SEWER TO THE BUILDING DRAIN WILL NOT BE PERMITTED UNTIL THE MAIN SEWER OR BUILDING SEWER TO WHICH IT CONNECTS HAS BEEN TESTED IN ACCORDANCE WITH USD'S SPECIFICATIONS AND ACCEPTED BY USD. DO NOT EXTEND BUILDING PLUMBING MORE THAN A FEW FEET BEYOND BUILDING WALL. THE ACTUAL CONNECTION MUST BE DONE BY A SEWER CONTRACTOR WITH A SEWER CONSTRUCTION PERMIT ISSUED BY USD THAT SPECIFIES THE BUILDING(S) BEING CONNECTED TO THE SEWER.

16. CONNECTION TO EXISTING SEWERS – WHERE A BUILDING SEWER/LATERAL CONNECTION IS TO BE MADE TO A MAIN SEWER, THE INVERT ELEVATION OF THE LATERAL SHALL BE EQUAL TO THE INSIDE TOP ELEVATION OF THE MAIN SEWER. 4" LATERAL TO 8" OR LARGER MAIN, AND 6" LATERAL TO 10" OR LARGER MAIN CONNECTIONS SHALL BE MADE WITH A WYE OR TAPPED WITH A "TAP-TITE" FITTING (OR APPROVED EQUAL) BY A USD APPROVED INSTALLER. 4" LATERAL TO 6" MAIN AND 6" LATERAL TO 8" MAIN CONNECTIONS SHALL BE MADE WITH A WYE. ALL WYES AND TAPS SHALL BE INSTALLED AT 22.5° TO 45° FROM HORIZONTAL (SEE USD DETAIL #14A). ONLY USD PERSONNEL SHALL MAKE CONNECTIONS TO LIVE SEWER MAINS UNLESS OTHERWISE NOTED ON THE PLANS OR SPECIFICALLY AUTHORIZED BY THE USD INSPECTOR.

WHERE CONNECTION IS TO BE MADE TO A TERMINAL/DEAD-END MANHOLE, THE INSIDE TOP ELEVATIONS OF ALL THE PIPES IN THE MANHOLE BASE SHALL BE EQUAL (SEE USD DETAIL #4).

17. OVERFLOW/BACKFLOW PREVENTION DEVICE – CONTRACTOR SHALL INSTALL AN APPROVED OVERFLOW/BACKFLOW PREVENTION DEVICE WHERE THE FLOOR ELEVATION IS 6" OR LESS ABOVE THE NEAREST UPSTREAM MANHOLE RIM ELEVATION.