SIERRA LAKES COUNTY WATER DISTRICT

P.O. Box 1039, Soda Springs, CA 95728-1039
(7305 Short Road, Serene Lakes)

Maintenance Office
530-426-7802

Administrative Office
530-426-7800

INSTRUCTIONS TO APPLICANT FOR CONSTRUCTION OF WATER AND SEWER SERVICES

Before connecting to the District's facilities, modifying and/or testing existing water and sewer services, be certain you and your contractor are familiar with the requirements contained herein. Some of these requirements are supplemental to the Uniform Plumbing Code (adopted by Placer County) due to conditions specific to the Serene Lakes area. The District has primary responsibility for the inspection of water and sewer laterals from the point of connection at the property line to the building foundation. The procedures for obtaining water and sewer service are described below:

APPLICATIONS AND PERMITS

Prior to commencing any clearing or groundwork on the lot or interior remodel improvements, the applicant is required to submit the following information to the District:

- SLCWD *Application for Water/Sewer Connection Permit* (new construction);
- Placer County *Confirmation of Water/Sewer Service and Intent to Serve* (new construction);
- A Site Plan showing proposed improvements, existing utilities, easements and topography (required for all new and remodel construction activities requiring a Placer County Building Permit);
- Building Floor Plans showing proposed and existing plumbing fixtures and living space (required for all new and remodel construction activities requiring a Placer County Building Permit); and
- Fire Sprinkler plan prepared by a licensed professional showing meter and lateral size and backflow protection (new construction).

Following the payment of Facility Fees (new construction) the District will complete the plan check process, issue the *Permit* , return the signed *Intent to Serve* to the Placer County Health Department (new construction) and notify the Placer County Building Department that all District requirements have been met and the Building Permit may be issued. The applicant is required to provide a copy of the Placer County Building Permit to the District within 90 days of issuance. After Placer County issues the Building Permit, but prior to any clearing or ground disturbance, the Applicant must install erosion control devices as required by the Placer County Stormwater Ordinance. District Staff may conduct a visual inspection of the lot and surrounding area to confirm that all required erosion control devices have been installed and are functional.

This inspection does not relieve the property owner or his contractor from the requirement to meet all regulatory stormwater requirements during the course of construction. If the required erosion control devices are not installed and/or functional, the District may refuse to perform any inspections until erosion control device deficiencies are corrected. In the event the District incurs costs to enforce installation of control measures, or installs such measures as it deems necessary to protect lake water quality, the applicant shall reimburse the District for all costs within 30 days of receipt of an invoice from the District and prior to the District performing the next inspection.

Prior to any excavation the Contractor must notify all utility providers of his intent to excavate. Call Underground Service Alert (800-227-2600 or 811) at least two working days in advance of all excavation activity. Only after all utility providers have identified the location of their respective infrastructure can work to expose the District's water and sewer laterals begin.

Because of the danger of contamination of the District's water supply, the installation of new underground storage tanks containing gasoline, diesel fuel or heating oil is prohibited. Buried propane tanks are allowed with sufficient clearance (minimum 12-inch horizontally, and not above/below) from water and sewer services. All above ground storage tanks containing a hazardous substance shall include secondary containment and comply with Section 6.05 of District Ordinance 18.01 and Section 31142.50) of Chapter 1 of Part 5 of Division 12 of the California Water Code

WATER SERVICE REQUIREMENTS

Use of Type K copper pipe or polyethylene tubing (AWWA C901, PE 3408, copper tube size, Pressure Class 200) for the water service pipeline is required, pipe joints shall be compression type fittings and the diameter based on fixture units and/or fire sprinkler requirements. If the District's lateral and the applicant's service are metallic and not of the same material, a dielectric union (plastic or other approved insulator) must be installed at the connection point to the District's lateral. If the installation of a meter pit is required, a dielectric union is not required unless dis-similar materials are used to connect the meter pit to the lateral or service. A 12 gage tracer wire shall be attached to the service, one end shall "daylight" at the foundation or Stop & Drain and the other at the meter box. For adequate frost protection, a minimum of thirty-six (36) inches of cover is required above the top of the water service (Figure 1).

A Stop & Drain Valve to drain the house plumbing, and portions of the service not protected from freezing, shall be installed either in the crawl space or the garage floor. The installation must be in accordance with the Uniform Plumbing Code and meet Placer County Building Department requirements. If the valve is installed in the garage floor, it must be properly boxed, protected from damage and drain in accordance with Placer County requirements.

State law requires the installation of a water meter (Badger E-Series Ultrasonic Stainless Steel, size based on fixture units and/or fire sprinkler requirements) on all new construction; Section 10.15 of District Ordinance 18.01 requires the installation of a meter pit, but not a meter, for

building additions and/or remodels under certain conditions and prior to a change in ownership. All materials required for the installation of the water service and meter pit including the meter, shall be supplied by the applicant.

Water service lines under construction shall not be left exposed overnight from October 16th to April 30th. The cost of repairing damages to District facilities due to exposed pipelines and freezing will be charged to the property owner.

All buildings located within the District shall be equipped with water-conserving fixtures as required by the California Building Code, Placer County and Division XI of District Ordinance 18.01:

- all new construction;
- when the home is remodeled, defined as:
    - an increase in the building's conditioned space by 50% or more;
    - installation of additional plumbing fixtures;
    - change in the use of the structure;
    - upon repair or replacement of any portion of the water service line; and
    - upon the addition of living space, construction of a guest house or installation of plumbing in a garage.
- prior to the close of escrow for the sale of the property.

If your home has, or will have, a boiler/hydronic heating system or a fire sprinkler system, installation of a Reduced Pressure Assembly is required to prevent contamination of the District's water distribution system. Testing of the RPA by a certified tester is required prior to final inspection by the District and issuance of a Certificate of Occupancy by Placer County. The results, along with the tester's certification criteria, must be submitted to the District electronically. Annual testing of the assembly will be required going forward. Testing of backflow devices is required prior to close of escrow if the one-year test due date is within 60 days of the scheduled close.

Your home's electric system shall not rely on the house plumbing or service lateral to provide the system ground required by the National Electric Code.

Your water will be turned on after installation of the service and water meter. If you desire water for construction purposes prior to the completion of the service, contact the District.

DO NOT turn on the water or operate any District Valve or Fire Hydrant

SEWER SERVICE REQUIREMENTS

Verify the elevation and location of the sewer service to your lot before finalizing your building plan. The service shall be constructed at a minimum slope of 1/4 inch per foot (2%) which may require adjustment of your building pad elevation. On difficult building sites, a slope of 1/8 inch

per foot (1%) may be considered upon written request to, and approval by, the General Manager **prior** to construction of the pipeline (Figure 2). Residential sewer pumps are not allowed except when no feasible alternative exists and the installation has been approved in advance by the Board of Directors as described in Section 22.13 of Ordinance 18.01.

Use four (4) inch SDR-35 polyvinylchloride (PVC) pipe with rubber gasket fittings; Cast Iron Pipe, ABS pipe materials and glued fittings are not allowed except at the connection to the backwater valve (if required) and house plumbing in the crawl space. The minimum cover over the service in non-traffic areas shall be 30-inches; within three (3) feet of any driveway or parking area the minimum cover is 48-inches. As an alternative, C900 PVC pipe may be used in traffic areas with a minimum cover of 30-inches (Figure 3). A 12 gage tracer wire shall be attached to the pipe and terminate in cleanout boxes. A Fernco RC1000 coupling or other approved connector shall be used to connect different types of sewer pipeline material at the house foundation and connection to the District(s) system.

At least two (2) cleanouts must be brought to the ground surface and properly boxed. One cleanout shall be installed a maximum of five (5) feet from the building foundation or in the garage area; the other shall be installed adjacent to the street right-of-way in accordance with Figures 2 and 4. Additional cleanouts are required on services exceeding 75-feet in length and on the upstream side within eight-feet (8') of any change of direction of 45 degrees or more. No single fitting shall exceed 45-degrees. All cleanout boxes shall be concrete construction with a metal lid.

If your lot is listed below, an approved Backflow Prevention Device (BPD) utilizing a bronze flapper valve must be installed on the sewer service between the building foundation and adjacent cleanout at the time of construction (new home) or when modification of the existing lateral is required by Section 22.17 of District Ordinance 18.01. The BPD will help prevent the backup of sewage into your home through your plumbing facilities in the event of a clogged or overloaded main sewer pipeline. The District will not be responsible for damages caused by a backup. The District will relieve a backup condition as soon as possible following notification of such a condition. Cleaning or unclogging a building sewer service pipeline between the building and the property line clean-out is the responsibility of the property owner.

STREET	ADDRESS
Allen Drive	5173, 5435, 5445, 5465, 5475
Bales Road	5418, 5428, 5438, 5448, 5458, 5468, 5478, 5488
Hemlock Drive	4400, 4407, 4410, 4417, 4420, 4427, 4437, 4447, 4457, 4467, 5416, 5425, 5426, 5436, 5446, 5477, 5485, 5487, 5495, 5497, 5499, 5503, 5513
Island Way	1101, 1102, 1122, 1132, 1142, 1152, 1182, 1192

Lake Drive	1131, 1142, 1145, 1151, 1161, 1162, 2209, 2216, 2217, 2219, 2226, 2229, 2236, 2239, 2246, 2249, 2279, 4254, 4260, 4280, 4290
Palisade Road	5208, 5212, 5222, 5228, 5232, 5238, 5241, 5242, 5245, 5248, 5251, 5252, 5258, 5262, 5272, 5282
Serene Road	1012, 1022, 1032, 2042, 2052, 2062, 2132, 2142, 2152, 2162, 2172, 2182, 2192, 3002, 3012, 3022, 3032, 3042, 4002, 4022, 4032, 6192
Soda Springs Rd.	1121, 5161, 5169
Spruce Road	5504, 5514, 5507
Westshore Drive	4114, 4124, 4134, 4144
Yuba Drive	5606, 5609, 8608, 8618, 8628, 8638, 8648

WATER AND SEWER SERVICE INSTALLATION REQUIREMENTS

Install the water and sewer services and the water meter pit in accordance with the requirements and details herein.

Water and sewer services may be placed in a common trench if the top of the sewer pipeline is at least twelve (12) inches below the bottom of the water pipeline **and** the two pipelines are separated a minimum of twelve (12) inches horizontally. No power, telephone, CATV, or propane conduits or piping are allowed within twelve (12) inches of the water or sewer services except when crossing at a 90-degree angle (Figure 5). In the event the required horizontal and vertical separations cannot be maintained in the common trench, the pipes must be separated by at a minimum of twenty-four (24) inches of compacted material or in a separate trench. When the water and sewer pipes cross at a 90-degree angle the minimum vertical separation between pipes shall be 12-inches and no joints or fittings are allowed within twenty-four (24) inches of the crossing. The separation requirements begin no more than five (5) feet from the point(s) of connection to the District's system and continue to the house foundation.

The pipelines shall be placed on a compacted bed of sand (100% passing 1/2-inch sieve, 35-100% passing #4 sieve, sand equivalent >20), free from construction materials, debris and other deleterious materials. The substitution of job-excavated material conforming to these requirements is permitted. The bedding shall be a minimum of three (3) inches deep under the pipe, six (6) inches between the pipe and the trench wall and compacted to 95% Relative Compaction (ASTM D1557).

Pipezone backfill material shall be sand (100% passing 1/2-inch sieve, 35-100% passing #4 sieve, sand equivalent >20), free from organic matter, construction materials, debris and other deleterious materials. The substitution of job-excavated materials conforming to these requirements is permitted. Pipezone backfill shall be placed to a minimum depth of twelve (12)

inches over the top of the pipe and compacted to 95% Relative Compaction (ASTM D1557) using suitable mechanical equipment. Where the longitudinal slope of the sewer line exceeds 20 percent (20%), the pipezone backfill shall be interrupted at twenty (20) foot intervals by ditch plugs of fine-grained material (silt or clay) to minimize piping and seepage along the trench backfill.

The trench backfill above the pipezone backfill may consist of job-excavated material in non-traffic areas. It shall be free from deleterious and organic material and shall not contain any particles larger than three (3) inches diameter. The backfill shall be compacted to 90% Relative Compaction (ASTM D1557). The backfill above the pipezone in traffic areas shall meet Placer County requirements for Class 2 Aggregate Base and be compacted to 95% Relative Compaction (ASTM D1557).

INSPECTIONS

The District Inspector will not conduct any inspections for which a Placer County Building Permit has not been issued unless the testing/repair is required as part of the sale of an existing house. You must contact the District Administrative Office (530-426-7800) 24-hours in advance (weekdays only) to schedule inspections. Inspections will only occur from 8:00 am until noon, Monday through Friday. A minimum of two inspections are required:

Visual Inspection (before backfilling the water and sewer service trenches): The inspection shall include verification of water and sewer pipe materials, fittings, water meter pit location, cleanout locations, backflow prevention device (if required), trench backfill under pipes, water service pressure test, sewer pipe slope, required separation between utilities and sufficient pipe bedding on site to complete the trench backfill.

Sewer Service Pressure Test and Final: After backfill, the sewer service (house waste piping shall be considered part of the building service) shall be pressure tested for leakage. The pipe and fittings will be tested using either air or water:

- The air test shall consist of plugging each end of the building service and applying a pressure of four pounds per square inch (4.0 psi) to the section under test. The line shall be allowed a maximum loss in pressure of one-half (1/2) psi in five (5) minutes. If the loss exceeds one-half (1/2) psi, the test may be attempted one additional time. A second loss of pressure constitutes a failure of the line. When prevailing ground water is above the sewer being tested, air pressure shall be increased 0.43 psi for each additional foot the water table is above the flow line of the sewer. The pressure gauge shall be supplied by the Contractor, shall have minimum divisions of 0.10 psi and shall have an accuracy of 0.04 psi. Accuracy and calibration of the gauge shall be certified by a reliable testing firm at six month intervals or when requested by the District. In addition, the District may compare the Contractor's gauge with a District owned gauge at any time.
- The water test shall consist of plugging the downstream end of the building service, placing a section(s) of pipe in the vertical branch of the building cleanout and filling the test section

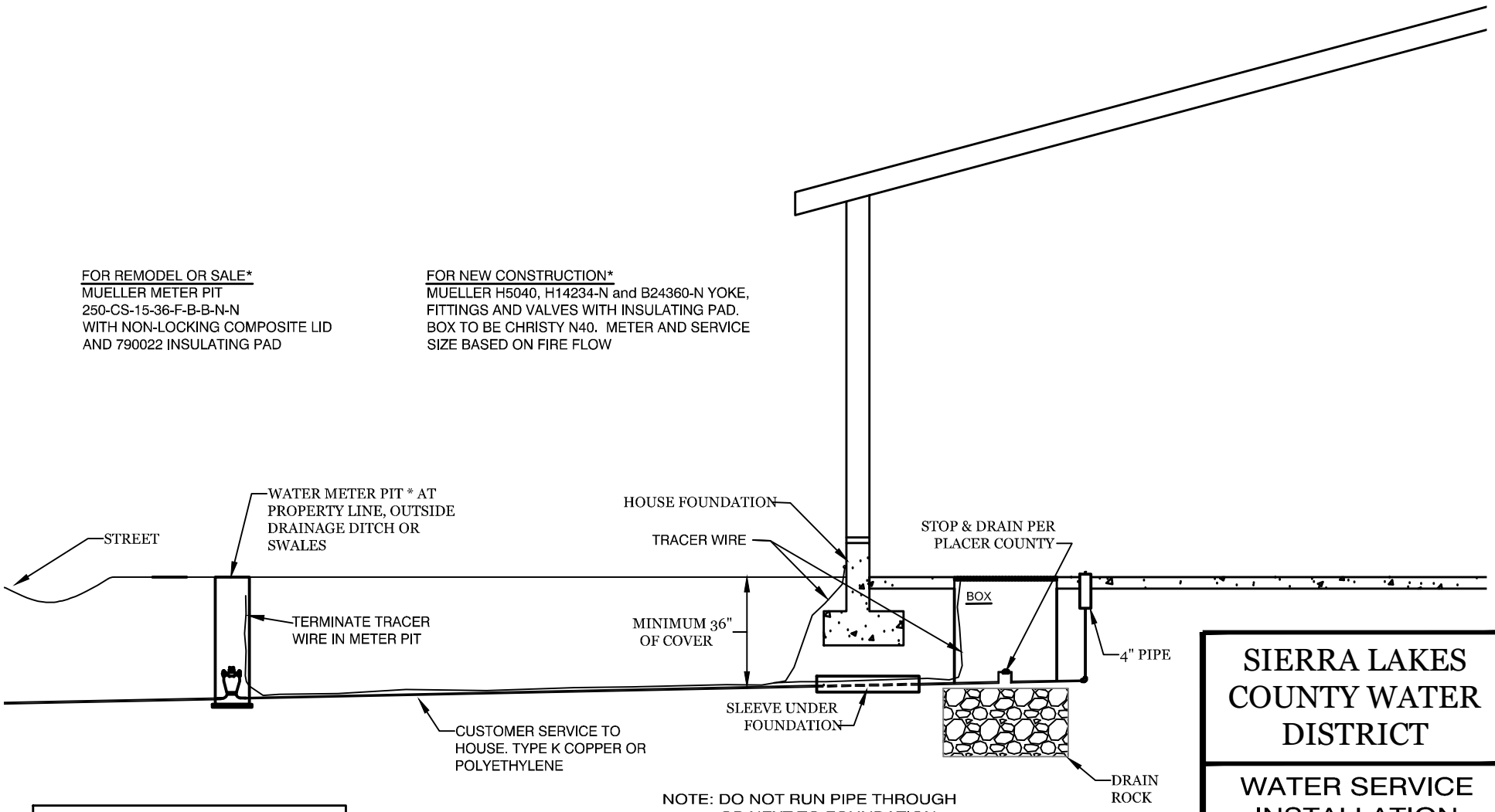
with water such that the depth of water is eight (8) feet to the highest point on the service. Additional cleanouts may have to be installed in steep lines and the line tested in sections. In no case shall the total depth of water exceed fifteen (15') feet to any point in the line. The water level shall remain constant in the pipe for a minimum of five (5) minutes. If the water level drops, the line may be retested one additional time. A drop in the level during the retest constitutes a failure of the line.

After a second failure, the owner shall cause to be performed corrective work, retesting and any necessary cleaning to be performed and completed within thirty (30) days from the date of the second failure.

Upon satisfactory completion of the sewer and water pressure tests, the final inspection will verify: cleanouts and meter pit set to appropriate grade, compaction of trench backfill and observance of trench settlement. The District reserves the right to have compaction tests performed by a licensed geotechnical testing firm in order to verify compaction of the pipezone or trench backfill section. The initial test by the District will be performed in such a manner as to not unnecessarily delay the work. The Applicant shall not be required to reimburse the District for the initial test; however the Contractor shall pay for all subsequent compaction tests if the initial test fails. The District will notify the Placer County Building Department when all work is completed to District requirements.

FOR REMODEL OR SALE*
MUELLER METER PIT
250-CS-15-36-F-B-B-N-N
WITH NON-LOCKING COMPOSITE LID
AND 790022 INSULATING PAD

FOR NEW CONSTRUCTION*
MUELLER H5040, H14234-N and B24360-N YOKE,
FITTINGS AND VALVES WITH INSULATING PAD.
BOX TO BE CHRISTY N40. METER AND SERVICE
SIZE BASED ON FIRE FLOW



NOTE: DO NOT RUN PIPE THROUGH OR NEXT TO FOUNDATION

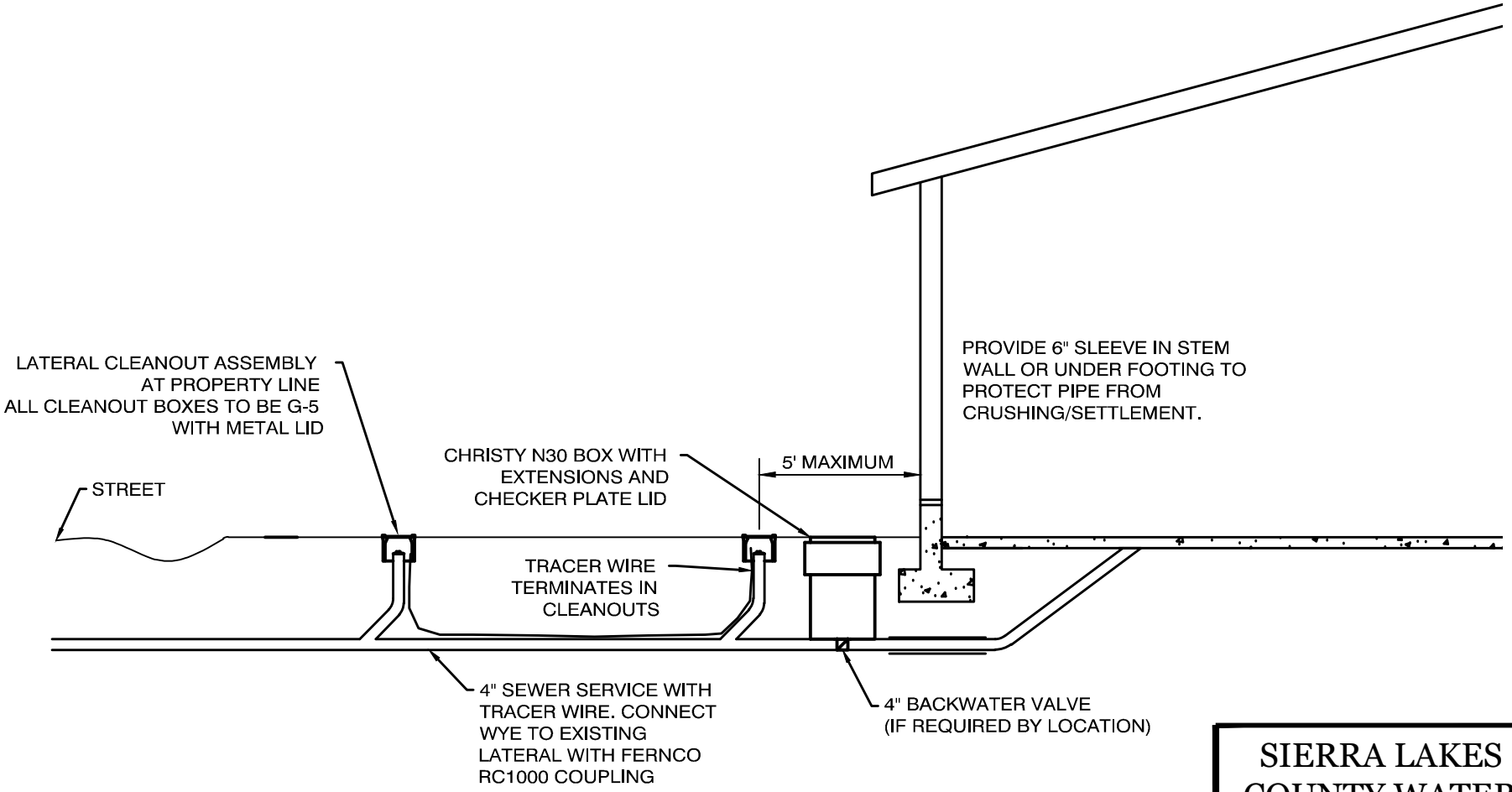
NOTE: WITHIN 36-INCHES OF PAVEMENT PLACE PIT OR METER YOKE IN CHRISTY B2436 TRAFFIC RATED BOX AND B2436-62JH LID

SIERRA LAKES COUNTY WATER DISTRICT

WATER SERVICE INSTALLATION

JUNE 14, 2018

FIGURE 1



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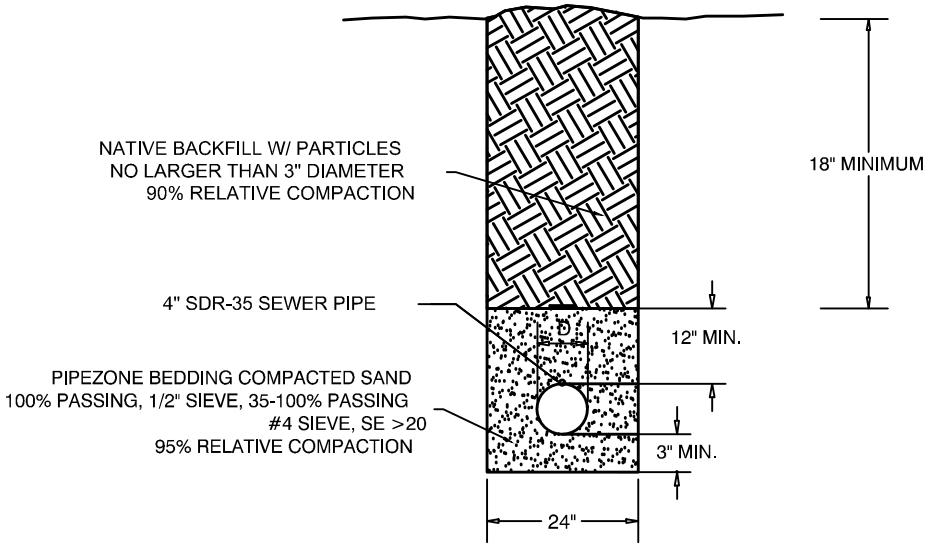
SANITARY SEWER SERVICE INSTALLATION

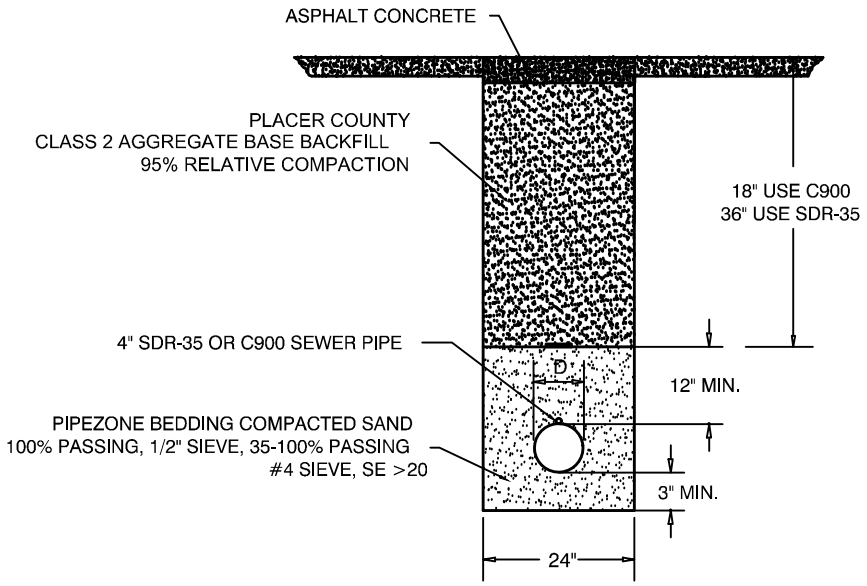
JUNE 14, 2018

FIGURE 2

NON-TRAFFIC AREAS



PAVED AREAS

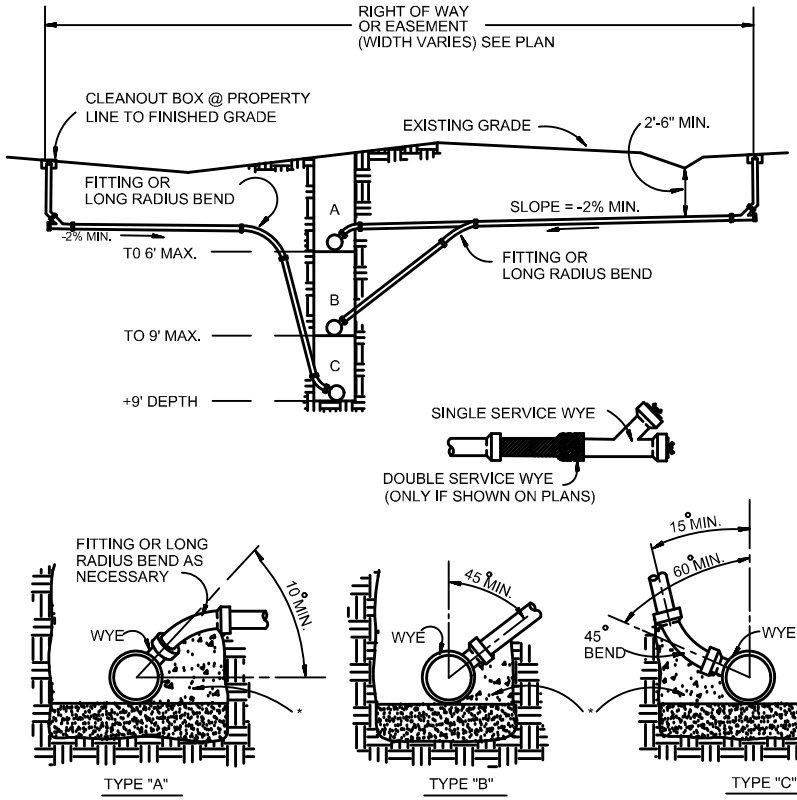


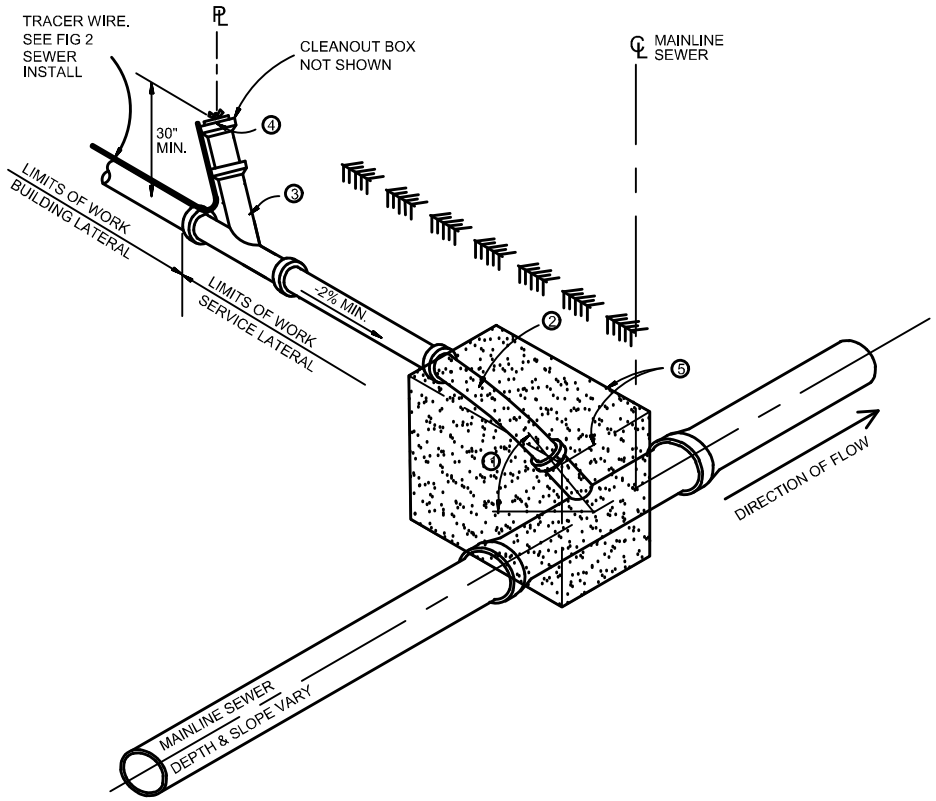
SIERRA LAKES COUNTY WATER DISTRICT

RESIDENTIAL SEWER TRENCH

JUNE 14, 2018

FIGURE 3





NOTES:

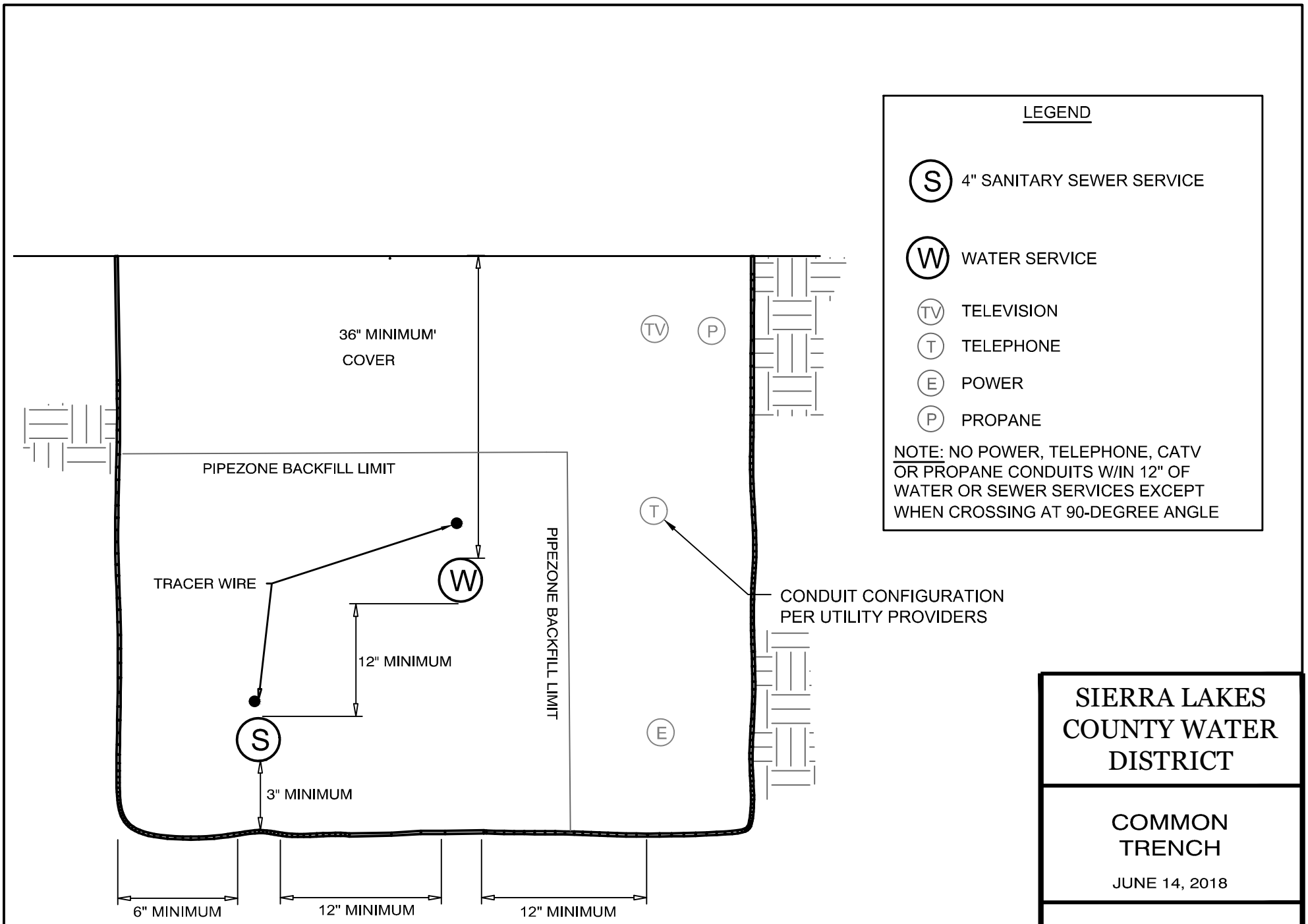
① 10° MIN. FOR WYE LATERAL CONNECTION
② FITTING OR LONG RADIUS BEND
③ SERVICE WYE WITH PIPE EXTENSION TO GRADE
④ WATERTIGHT END PLUG (EASILY REMOVABLE)
⑤ PLACE WELL COMPACTED BEDDING MATERIAL 18" UNDER WYE BRANCH, FITTING, AND UNSUPPORTED PIPE. WHEN BEDDING MATERIAL IS USED, PLACE ADDITIONAL MATERIAL TO TOP OF BEND, THE FULL WIDTH OF TRENCH.

SIERRA LAKES COUNTY WATER DISTRICT

LATERAL AND CLEANOUT ASSEMBLY

JUNE 14, 2018

FIGURE 4



SIERRA LAKES COUNTY WATER DISTRICT

COMMON TRENCH

JUNE 14, 2018

FIGURE 5