2014

Bonded Side Sewer Contractor Application Packet

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Lake Whatcom Water and Sewer District
Application for Certification as Sewer Services Contractor

Name of Firm	Contact Person
Street Address of Firm	City, State, Zip Code
WA State Contractor's License Number	Years in Business

Contact Information:

Phone Number	Cellular Phone Number
FAX Number	E-mail Address

Hereby applies for certification to do business as a Sewer Services Contractor in Lake Whatcom Water and Sewer District. It is understood that bond and proof of insurance must be provided, as set forth in certification agreement, prior to approval of certification.

The following information is provided for consideration:

References: Engineers, Water & Sewer Districts, Cities

Previous Experience

Equipment Owned

Lake Whatcom Water and Sewer District
SEWER SERVICES CONTRACTOR'S CERTIFICATION AGREEMENT

This is an agreement between the undersigned contractor, a licensed contractor in the State of Washington, and Lake Whatcom Water and Sewer District, a municipal corporation, entered into this _____day of _____, 20____. Lake Whatcom Water and Sewer District is a Water District under RCW Ch. 57, and a Sewer District under RCW Ch. 56. Said contractor, as a condition precedent to soliciting and entering into contracts with property owners in said District for the installation of side-sewers and/or stub sewers connecting with sewer laterals or mains installed by the District therein, agrees to the following terms and conditions:

Definitions:

A ***sewer main*** includes the laterals and main sewer "backbone" that receives and conveys sanitary sewage from District Customers. Sewer mains exist only in a public right-of-way and/or in an easement(s) benefiting the District.

A building ***sewer service*** may consist of two segments defined as follows:

a) The ***side-sewer*** segment extending from the cleanout adjacent to the structure to the property line, and
b) The ***stub sewer*** segment extending from the property line across a right-of-way or easement to the public sewer main.

2. The Contractor shall execute and deliver a surety bond in the amount of $10,000.00 in favor of Lake Whatcom Water and Sewer District conditioned on his performing the obligations of this agreement.

3. The Contractor shall furnish the District satisfactory proof of carriage of Commercial General Liability Insurance in an amount not less than one million dollars ($1,000,000.00) per occurrence and one million dollars ($1,000,000.00) in the aggregate in any one year.

4. The Contractor shall obtain and abide by encroachment permits or other permissions which may be required from the County, State Highway Department, Sudden Valley Community Association, or other entity having jurisdiction over roads and streets, prior to commencing sewer service work. Restoration shall be done in a manner approved by the appropriate jurisdiction.

5. The Contractor will do no sewer service work of any kind on any property except the property to be served unless appropriate easements and rights-of-way have been obtained and recorded.

6. The Contractor will do no sewer service work of any kind on any property in said District until a valid sewer permit has been obtained for that property and the Contractor has been accepted in writing as a qualified Sewer Services Contractor by said District.

7. The Contractor shall develop and use a standard form of contract between Contractor and Property Owner which must be approved by the District. Only this approved form shall be used in contracting with owners for construction of sewer services. The contract shall cover the following conditions:
   a. A clear description, including sketch, of work to be performed and material to be used.

b. The exact cost of work to be performed and method of payment.
c. Workmanship shall be guaranteed for a period of one year after installation. Materials shall be guaranteed for a period of one year after installation and contractor shall assign to property owner any longer written warranty that manufacturer or supplier has provided.

Contract shall be executed in at least two (2) copies, one of which shall be furnished to the owner.

8. No sewer service connection shall be made to a District sewer main until the main is approved for connections by the District.

9. The contractor shall comply with the requirements set forth in the District's most current Design & Construction Standards (attached by reference) and the current Standard Specifications for Road, Bridge and Municipal Construction (DOT/APWA) as prepared by Washington State Department of Transportation and the Washington State Chapter of the American Public Works Association.

10. The sewer main and tee shall not be under-cut without the prior written approval of the District. The Contractor must receive District approval, in writing, prior to the installation of a tapping sleeve or saddle.

11. The Contractor shall conduct his trenching operations so as to minimize the possibility of damage to the sewer main or stub sewer (if existing). The Contractor shall notify the District prior to repairing any such damage. In the event that the District must repair such damage, the Contractor shall be liable for costs incurred, and such liability shall not be confined to the one-year warranty period defined by contract between Contractor and Property Owner.

12. Side-sewers and stub sewers may only be bedded to the mid-line of the pipe before District representative is present. District representative must witness, inspect and approve the remainder of the bedding before any backfilling is done. Backfilling of the stub sewer must be witnessed and approved by the representative. Sewer service lines shall be tested ***after*** backfilling. Testing must be witnessed and approved by District representative.

13. This agreement shall be in effect for the period of time covered by the performance bond and subsequent renewals, unless revoked at an earlier date at the option of the District. This license may be revoked for any of the following causes:
    - Failure to observe District requirements governing the construction of side sewers,
    - Material misrepresentation in obtaining a Sewer Services Contractor's License,
    - Failure to pay for labor or material used in the construction of a side-sewer or stub sewer,
    - Material misrepresentation to the owner, agent or occupant of a building for the purpose of obtaining a contract for the construction of a side-sewer or stub sewer,
    - Non-payment for work performed by the District for which the Sewer Services Contractor is liable.

Approved for Lake Whatcom Water and Sewer District:

_____

General Manager

_____

Date

Signed by:

_____

Side-Sewer Contractor

_____

Date

SEWER SERVICES CONTRACTOR SURETY BOND

Bond No.: _____

KNOW ALL PEOPLE BY THESE PRESENTS, that _____

the CONTRACTOR, hereinafter known as PRINCIPAL, and _____

hereinafter known as SURETY, are held and firmly bound to Lake Whatcom Water and Sewer District, hereinafter known as OWNER, in the penal sum of Ten Thousand Dollars ($10,000.00) for the payment of which sum well and truly to be made, we do jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the PRINCIPAL entered into a certain contract with the OWNER dated the _____ day of _____, 20___ to **Install Sewer Services**, and which agreement is on file at the OWNER's office and by this reference is made a part hereof.

WHEREAS, said PRINCIPAL is required under the terms of said agreement to furnish a bond for the faithful performance of said agreement:

NOW, THEREFORE, if the Principal shall well, truly, and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, the duly authorized officers of PRINCIPAL and of SURETY execute this instrument in three counterparts, each one of which shall be deemed an original, this the _____ day of _____, 20____.

_____	_____
PRINCIPAL	SURETY
_____	_____
By	By
_____	_____
Title	Title
_____	_____
Address of PRINCIPAL	Address of SURETY

Note: Date of Bond must not be prior to date of Contract. If PRINCIPAL is Partnership, all Partners should execute bond. Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Washington.

GENERAL NOTES

1. All work and materials shall conform to the most current edition of the Standard Specifications for Road, Bridge and Municipal Construction (WSDOT) as prepared by Washington State Department of Transportation and the Washington State Chapter of the American Public Works Association, Lake Whatcom Water and Sewer District Design and Construction Standards, and the instructions and recommendations of the Manufacturer of the material concerned. In case of a conflict between the above standards, the more stringent shall apply. All work and materials shall be subject to the approval of the District Engineer.

2. Contractor shall obtain encroachment permits or other permissions which may be required from the County, State Highway Department, Sudden Valley Community Association, or other entity having jurisdiction over roads and streets, prior to commencing work.

3. Backfill under pavement shall consist of material conforming to WSDOT 9–03.19. Backfilling of trenches shall be in accordance with WSDOT 7.08.3(3). Backfill shall be compacted to 95% modified Proctor within traffic areas, 90% modified Proctor in landscape and open areas.

4. Tracer wire installation is required on all District owned pipe and communication lines. Tracer wire is also required on private side sewers. Install tracer wire per District Standard Detail E5. In addition to tracer wire, install 2–inch wide detectable marking tape 8 to 12 inches below the finish surface. Detectable marking tape shall meet WSDOT 9–15.18 and be color coded blue for water and green for sewer.

5. All pipe shall be bedded in bedding material meeting WSDOT 9–03.12(3). The bedding cross–section shall be blocked with impervious material (i.e. clay or concrete) a minimum of every 800 feet and the trench drained to daylight or to a storm drain.

6. Water mains crossing over sewers stub service line with less than 18–inches of vertical clearance shall be stabilized with Control Density Fill (CDF) per WSDOT 2–09.3(1)E.

7. From the main to the property line, sewer laterals and water service lines shall maintain a minimum horizontal separation of 5–feet. Separation may be reduced to 1–foot if water service line is a minimum of 12–inches above the top of the sewer lateral.

8. Contractor shall remove all debris and excess excavation; repair all damage, and restore the site, public or private, to pre–construction conditions.

UNPAVED AREAS

RESTORE SURFACE MATERIAL TO EXISTING CONDITIONS.

BACKFILL TRENCH WITH NATIVE MATERIAL PER WSDOT 9-03.15 COMPACTED TO 90% MODIFIED PROCTOR.

EXISTING PAVED AREAS

CLASS 'B' ASPHALT PVMT MIN 2" (MATCH EXIST) PER WSDOT 5-04.2

SAW CUT

EXISTING PAVEMENT SECTION

2" CSTC PER WSDOT 9-03.9(3)

MIN 8" (MATCH EXIST PVMT)

9"

36" MINIMUM COVER (WATER & SEWER MAINS)

BANK RUN GRAVEL FOR TRENCH BACKFILL PER WSDOT 9-03.19 COMPACTED 95% MODIFIED PROCTOR.

2" METALLIC DETECTOR TAPE 8" TO 12" BELOW FINISH GRADE.

6"

O.D

6"

#10 TRACER WIRE ON ALL WATER & SEWER MAINS (IN ADDITION TO 2" DETECTOR TAPE). USE SILICONE FILLED WIRE NUTS.

GRAVEL BACKFILL FOR PIPE ZONE BEDDING PER WSDOT 9-03.12(3). COMPACT TO 95% MODIFIED PROCTOR.

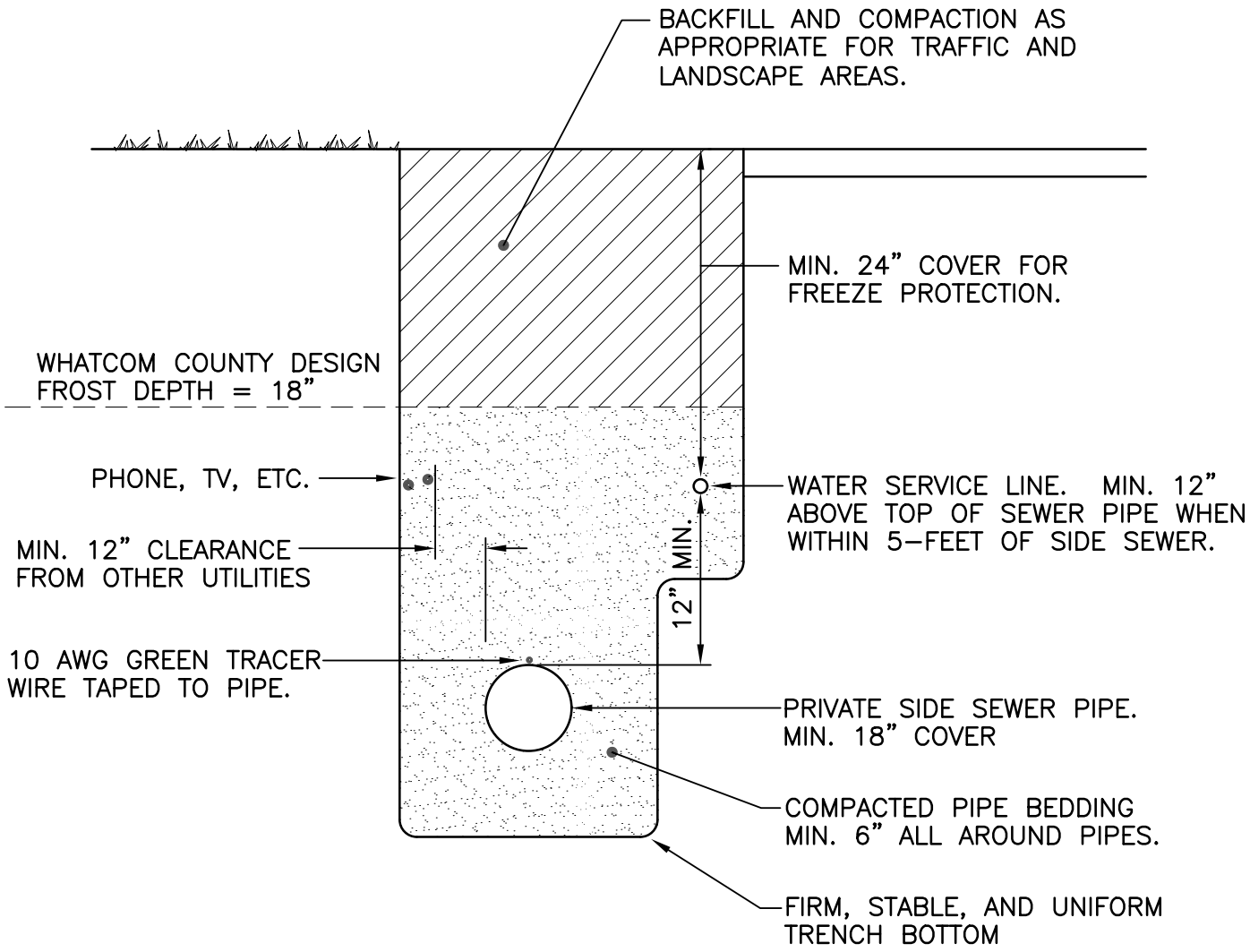
LAKE WHATCOM WATER & SEWER DISTRICT

TYPICAL TRENCH AND BACKFILL DETAIL

STANDARD DETAIL

G2

3/13/2014



NOTES:

1. District side sewer pipe material standards (PVC ASTM D3034 SDR 35) comply with 2012 International Plumbing Code (IPC) Table 702.3 Building Sewer Pipe. Separation of water service and side sewer as detailed above complies with IPC 603.2 requirements.

2. Water service lines and side sewers shall be bedded in material meeting WSDOT 9-03.12(3) Gravel Backfill for Pipe Zone Bedding as shown in following table:

Sieve Size	Percent Passing by Weight
1.5"	99-100
1"	75-100
5/8"	50-100
U.S. No. 4	20-80
U.S. No. 40	3-24
U.S. No 200	10.0 max
Sand Equivalent	35 min.

LAKE WHATCOM WATER & SEWER DISTRICT

PRIVATE WATER SERVICE LINE AND SIDE SEWER TRENCH DETAIL

STANDARD DETAIL

G7

3/13/2014

SEWER SYSTEM NOTES

1. Sewer system materials, trenching, bedding, installation, backfilling, and testing shall conform to WSDOT 7–05 and 7–17.

2. Gravity sewer pipe shall be ASTM D3034–SDR 35 PVC per WSDOT 9–05.12(1). In certain applications, the District may require class 52 ductile iron pipe, per WSDOT 9–30.1(1) encased in polyethylene encasement per WSDOT 9–30.1(2).

3. Pressure sewer pipe shall be class 52 ductile iron pipe per WSDOT 9–30.1(1) encased in polyethylene encasement per WSDOT 9–30.1(2) or PVC C900 class 150 per WSDOT 9–30.1(5). HDPE may be substituted with the approval of the District Engineer and the pipe rating shall be based on the specific design conditions.

4. Side sewers, from main to private property line, shall be installed per WSDOT 7–18. Side sewers shall have a minimum slope of 2%. Side sewer shall maintain a minimum cover of 30 inches under ditches. Side sewers and cleanout/test tee at property line shall be minimum 6–inches in diameter. Inspection prior to backfill.

5. Sewer cleanouts shall be installed per WSDOT 7–19.

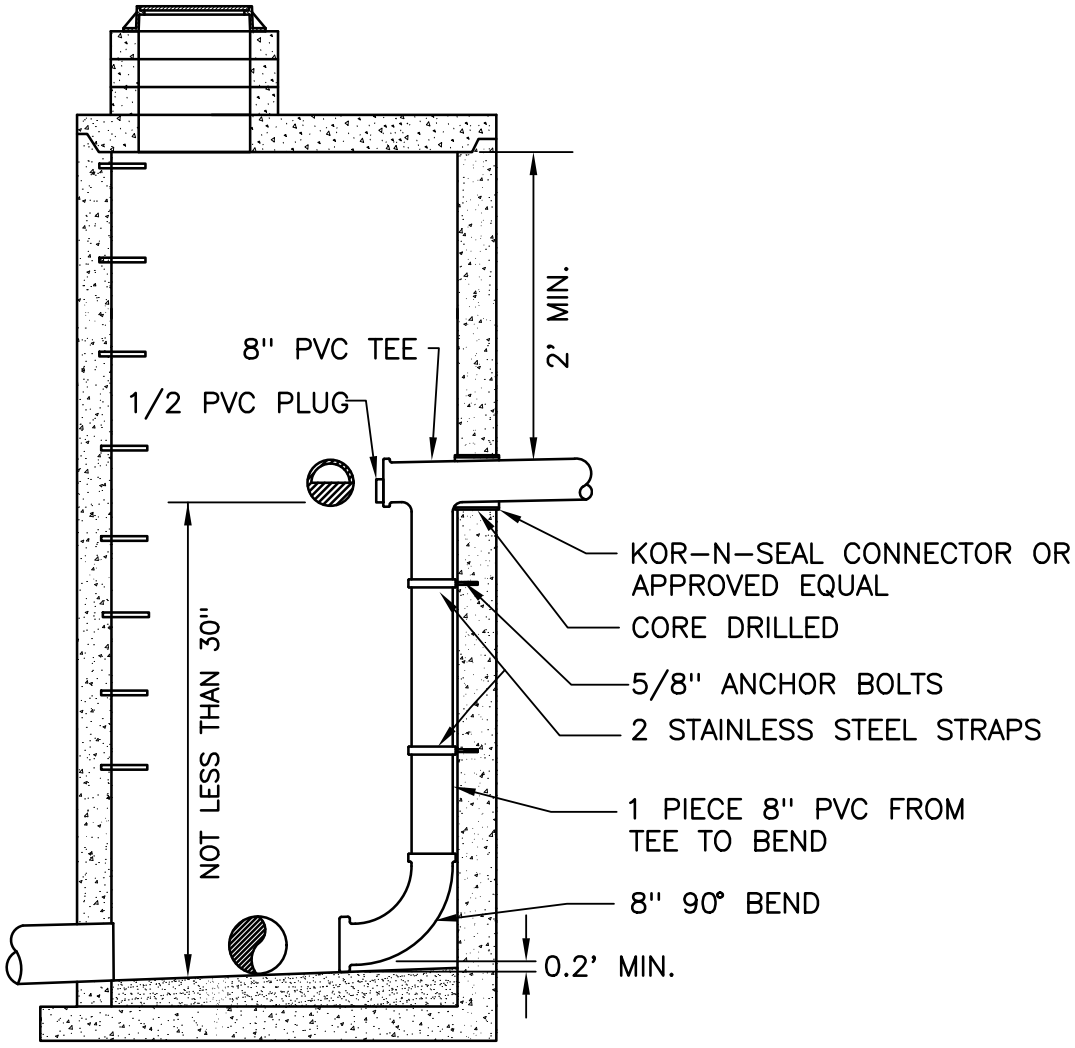
6. Grout for manholes shall be a non–shrinking cementitious grout, containing no gypsum or calcium sulfate Di–hydrate ($CaSO_4 2H_2O$), conforming to WSDOT 9–04.3, such as Blueline Speedcrete (Pacific Concrete), Rapid Set Cement All, or approved equivalent. Grout shall be installed according to manufacturer's instructions. JET SET AND QUICKCRETE ARE NOT ALLOWED!

7. All sewer pipe and appurtenances shall be flushed and cleaned prior to being put into service. Debris shall not be allowed into the existing sewer system.

8. District Engineer or their appointed representative shall witness testing. Contractor shall provide the District Engineer 48 hours notice prior to conducting tests or sampling.

9. Pipe shall be tested after backfill by the low–pressure air test method per WSDOT 7–17.3(2)F. PVC pipe shall have a mandrel passed through it to check for any deflections in the pipe per WSDOT 7–17.3(2)G. The District at their option may require any or all sewers to be inspected by the use the District television camera before final acceptance. The costs incurred in making the inspection shall be borne by the Contractor. Connection to the existing system is not permitted until final acceptance.

10. Downspouts, foundation/crawl space sump pumps, yard drains, or any outside drains shall not be connected to sanitary sewer mains or services.



NOTES:

1. Drop tee to be installed minimum of 2' below ceiling.

2. Inside drop manhole shall be installed only where approved the District.

3. Size of manhole will increase with larger diameter pipe and shall be approved by the District Engineer.

4. Channel to outlet.

BASED ON CITY OF BELLINGHAM
DRAWING SS-715 DATED 11/29/04.

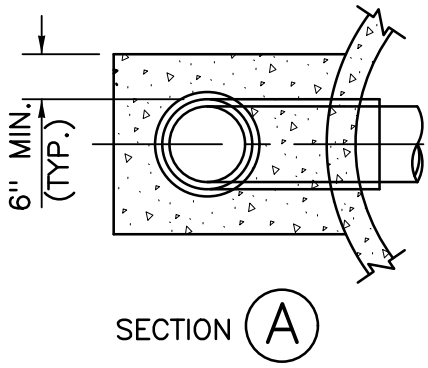
LAKE WHATCOM WATER & SEWER DISTRICT

INSIDE DROP SEWER MANHOLE CONNECTION

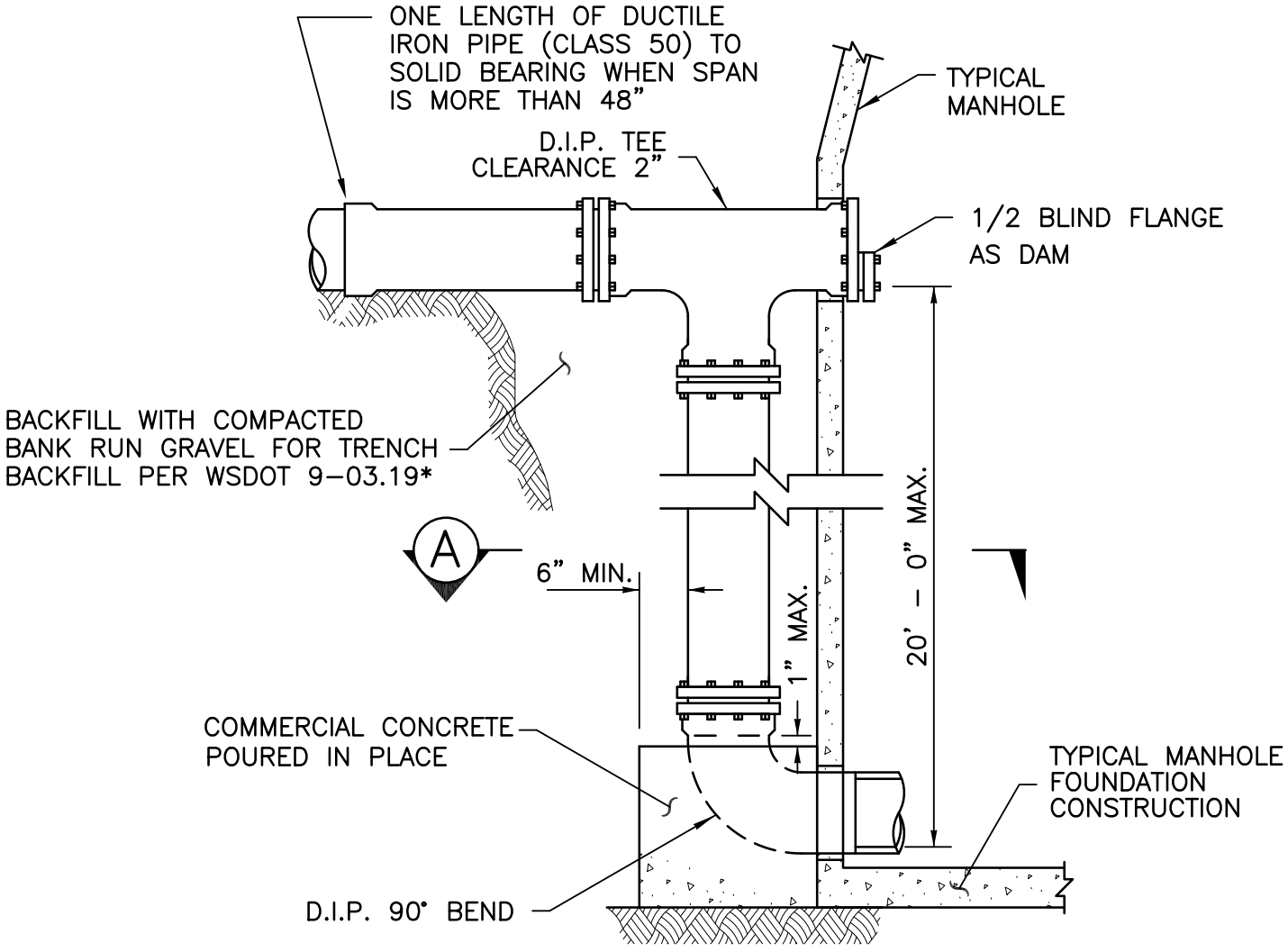
STANDARD DETAIL

S3

3/13/2014



SECTION A



NOTES:

1. * Differs from WSDOT Std. Plan B-85.50-01

BASED ON WSDOT STANDARD PLAN B-85.50-01 DATED 6/10/08.

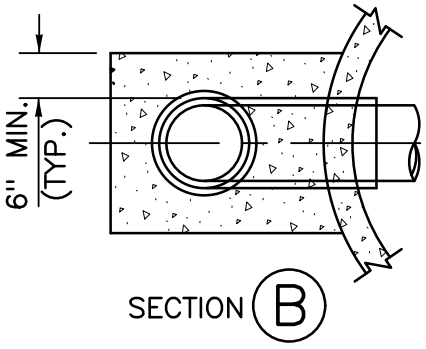
LAKE WHATCOM WATER & SEWER DISTRICT

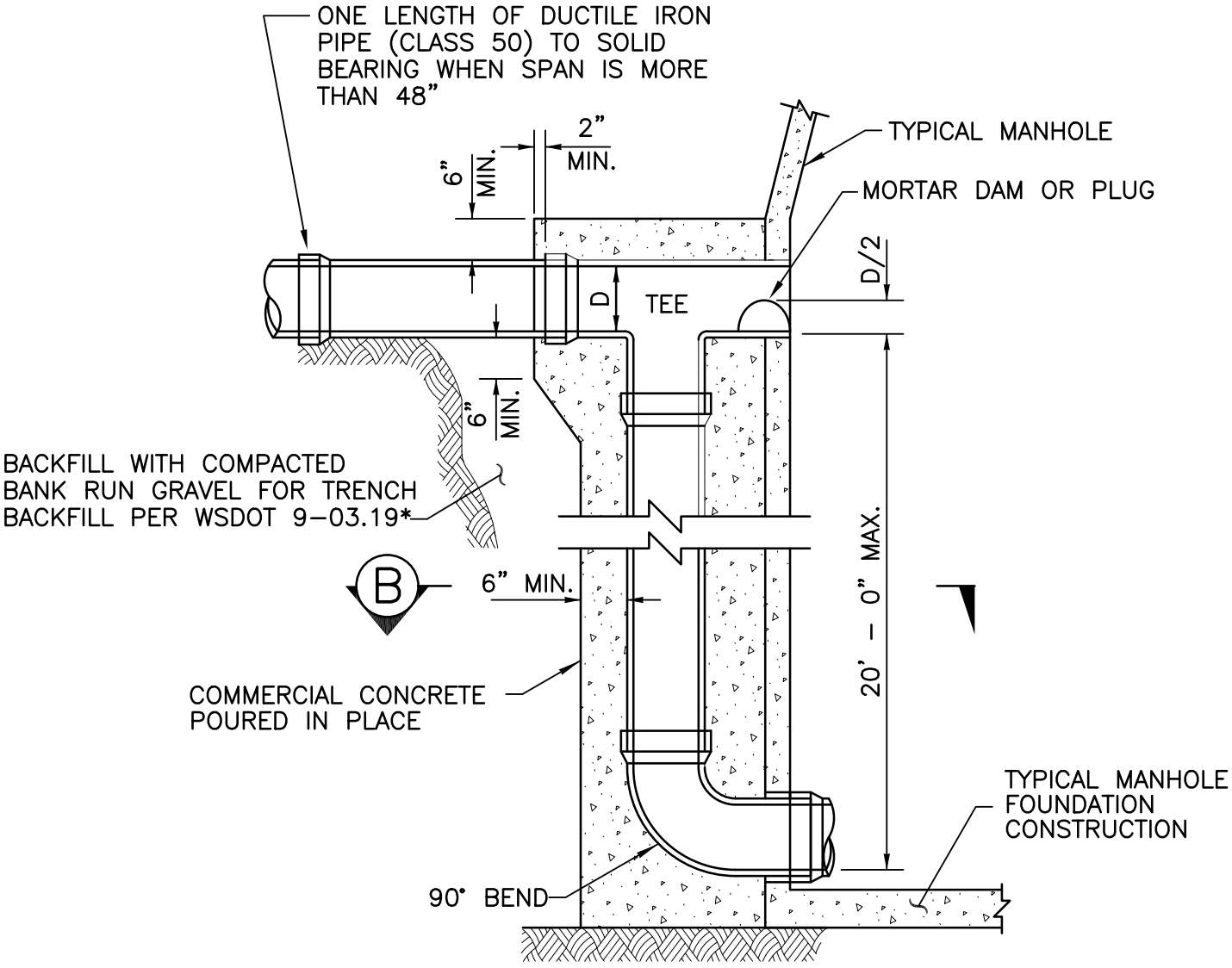
OUTSIDE DROP SEWER MANHOLE CONNECTION
Sheet 1 of 2

STANDARD DETAIL

S4

3/13/2014





NOTES:

1. All pipe, except ductile iron pipe, shall be concrete encased.

2. Inside drop manhole shall be installed only where approved by the district.

3. * Differs from WSDOT Std. Plan B-85.50-01.

BASED ON WSDOT STANDARD PLAN B-85.50-01 DATED 6/10/08.

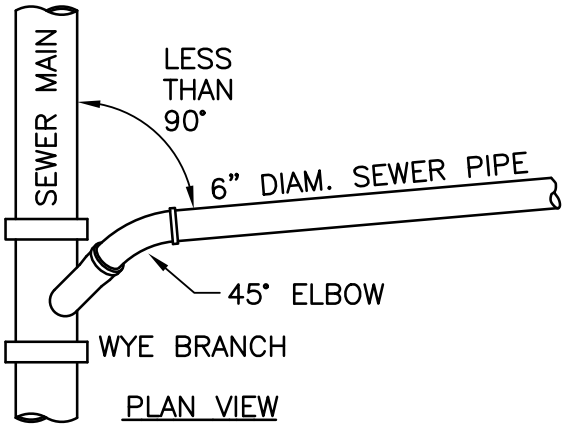
LAKE WHATCOM WATER & SEWER DISTRICT

OUTSIDE DROP SEWER MANHOLE CONNECTION
Sheet 2 of 2

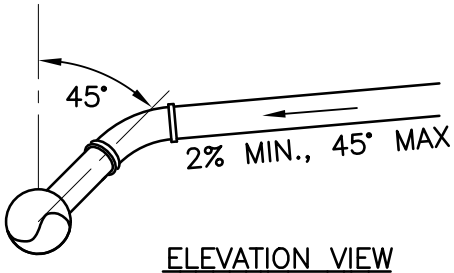
STANDARD DETAIL

S4

3/13/2014

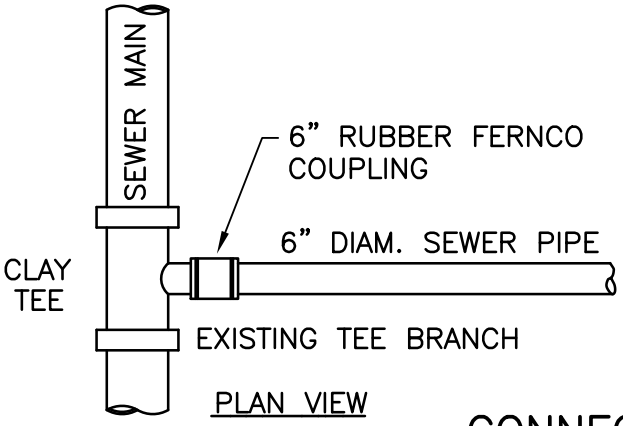


PLAN VIEW

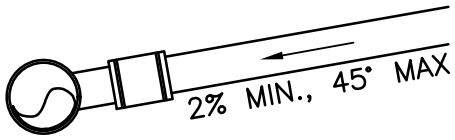


ELEVATION VIEW

SERVICE LATERAL INSTALLED WITH NEW MAINS

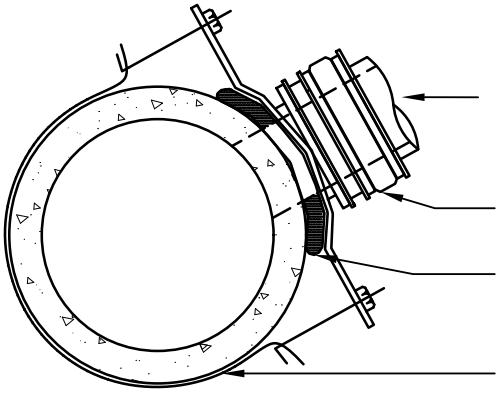


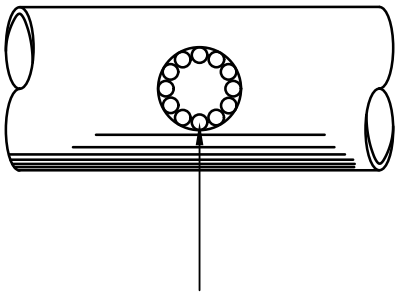
PLAN VIEW



ELEVATION VIEW

CONNECTION TO EXISTING TEE





MIN 20, ¾"ø BORE HOLES FOR TAPPING SANITARY SEWER MAIN

NOTES;

1. Install wye fitting with gaskets for new sewer installations
2. Pipe bedding shall be sand or pea gravel 6" all around.
3. Minimum cover to finish grade is 30".
4. Drill multiple 3/4' holes (20 min for 6") then break out

CONNECTION TO EXISTING SEWER (TAP)

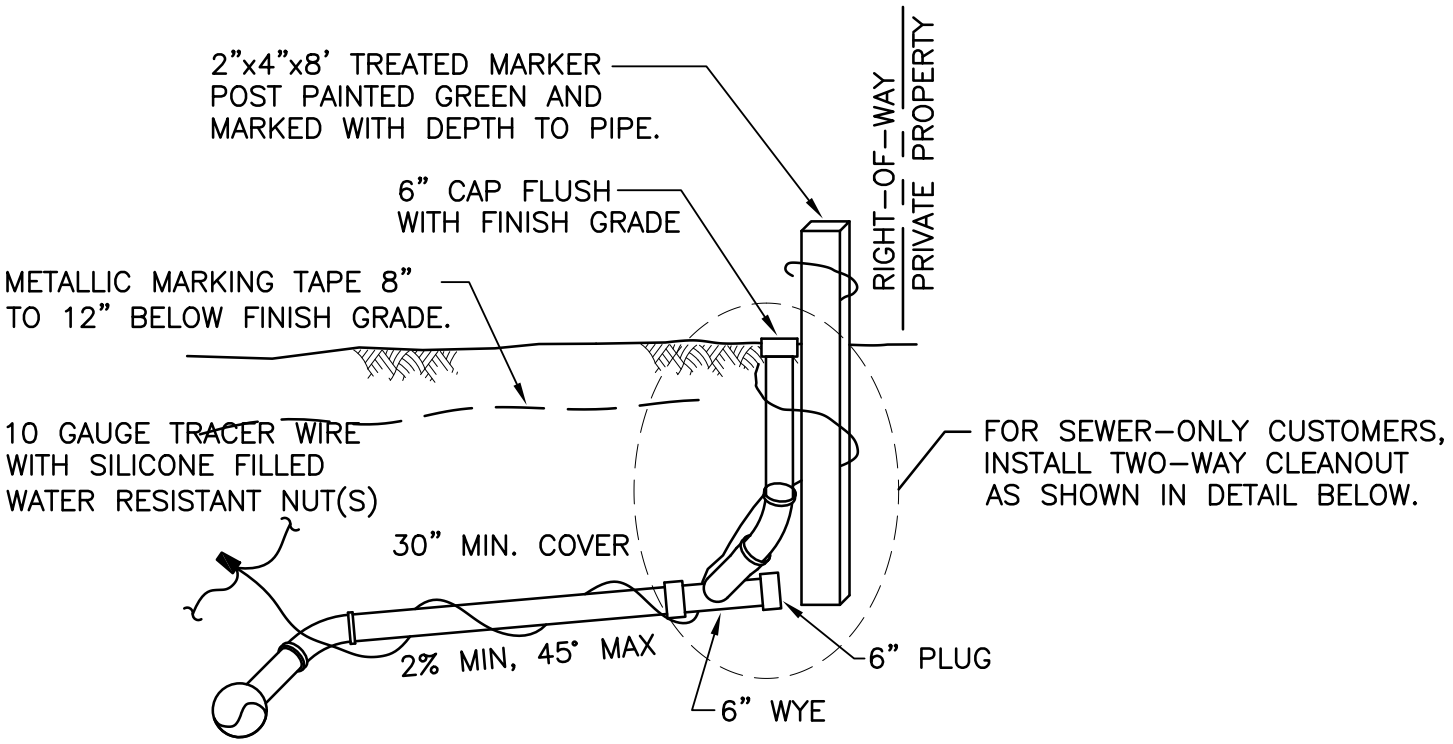
LAKE WHATCOM WATER & SEWER DISTRICT

SEWER LATERAL CONNECTION TO MAIN

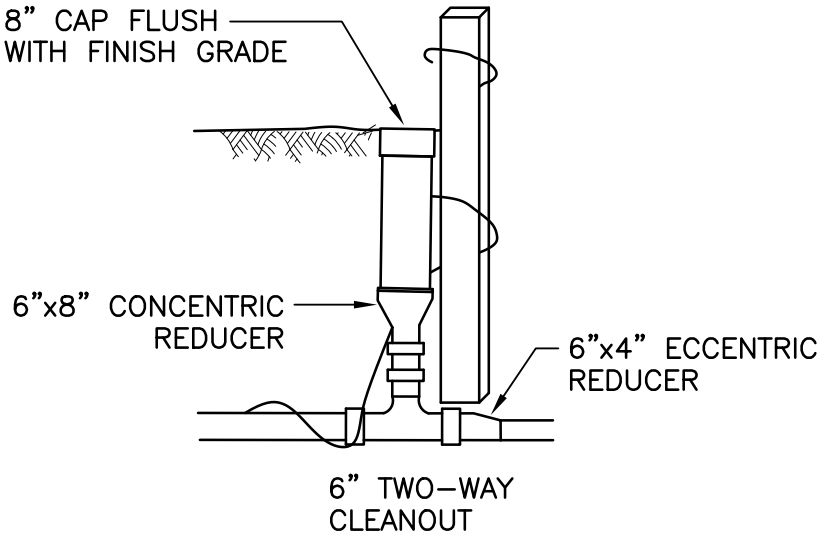
STANDARD DETAIL

S6

3/13/2014



TYPICAL SEWER LATERAL & CLEANOUT



CLEANOUT FOR SEWER-ONLY CUSTOMERS.

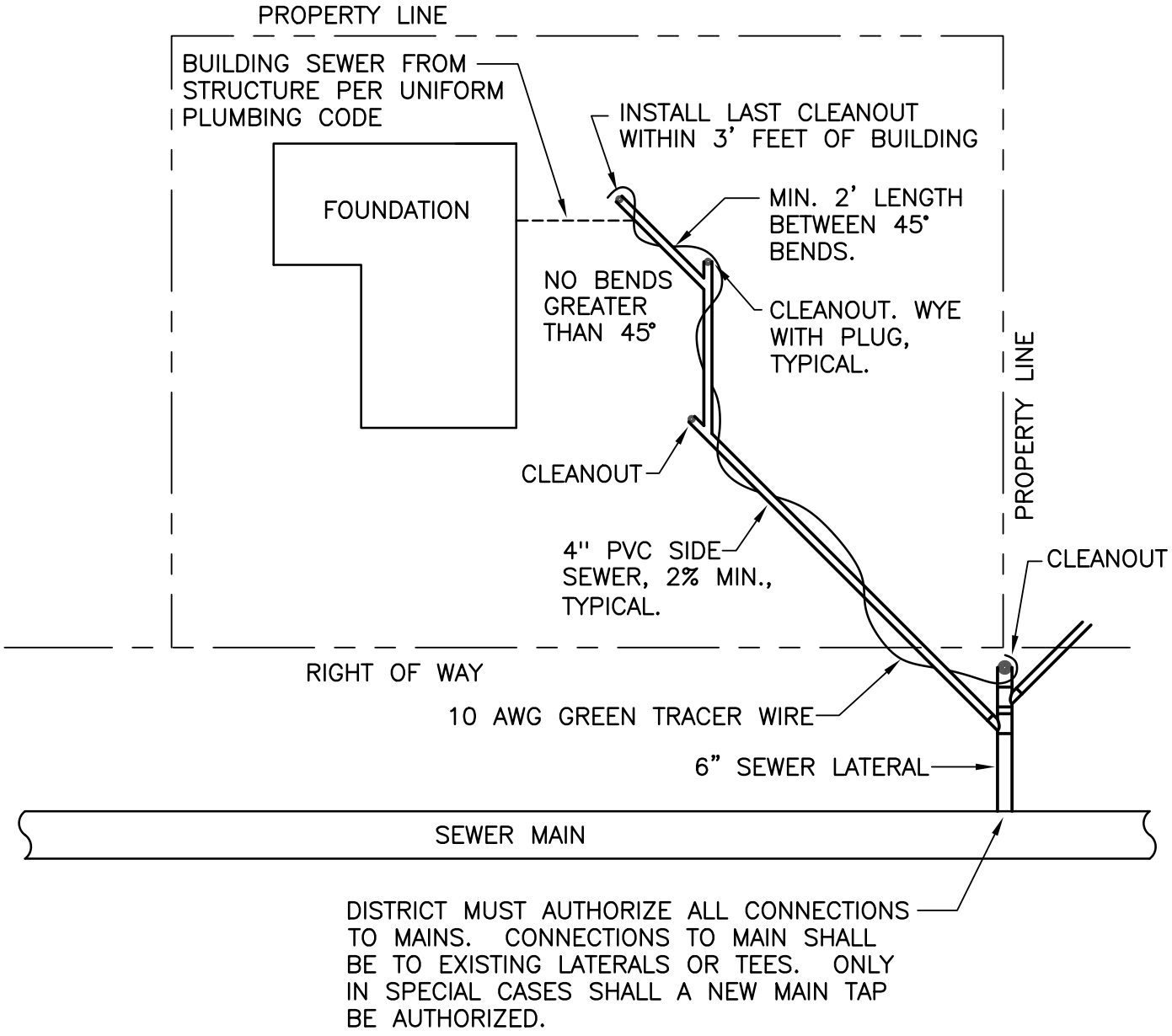
LAKE WHATCOM WATER & SEWER DISTRICT

SEWER LATERAL AND CLEANOUT

STANDARD DETAIL

S7

3/13/2014



Notes:

1. All pipe from main to cleanout at foundation shall be PVC ASTM D3034 SDR 35, joints shall conform to ASTM D3212 using elastomeric gaskets conforming to ASTM F477. Fittings shall be injection molded, factory welded, or factory solvent cemented.
2. Minimum 18" of cover from property line to building.
3. Down spouts, sump pumps, and outside drains shall not be connected to the sewer line.
4. Bends greater than 45° will not be accepted.
5. Minimum size for sewer lines will be 4" for single family residence and 6" for multi–family residence up to a 4 plex.
6. Cleanouts on service lines shall be installed at every change in alignment or grade in excess of 22 1/2 degrees.
7. Cleanouts shall be spaced no greater than 100' apart.
8. A cleanout shall be installed within 3' of the building.

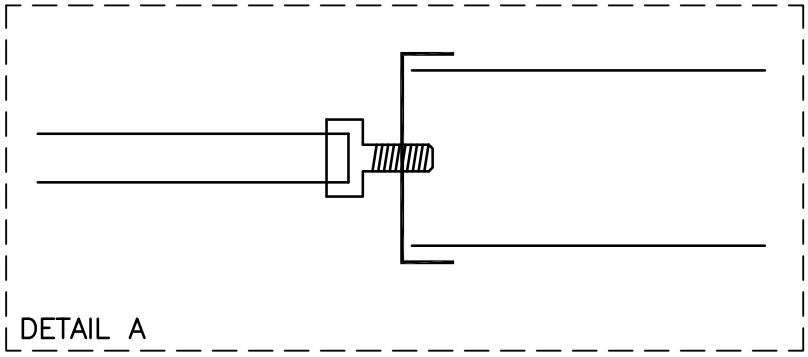
LAKE WHATCOM WATER & SEWER DISTRICT

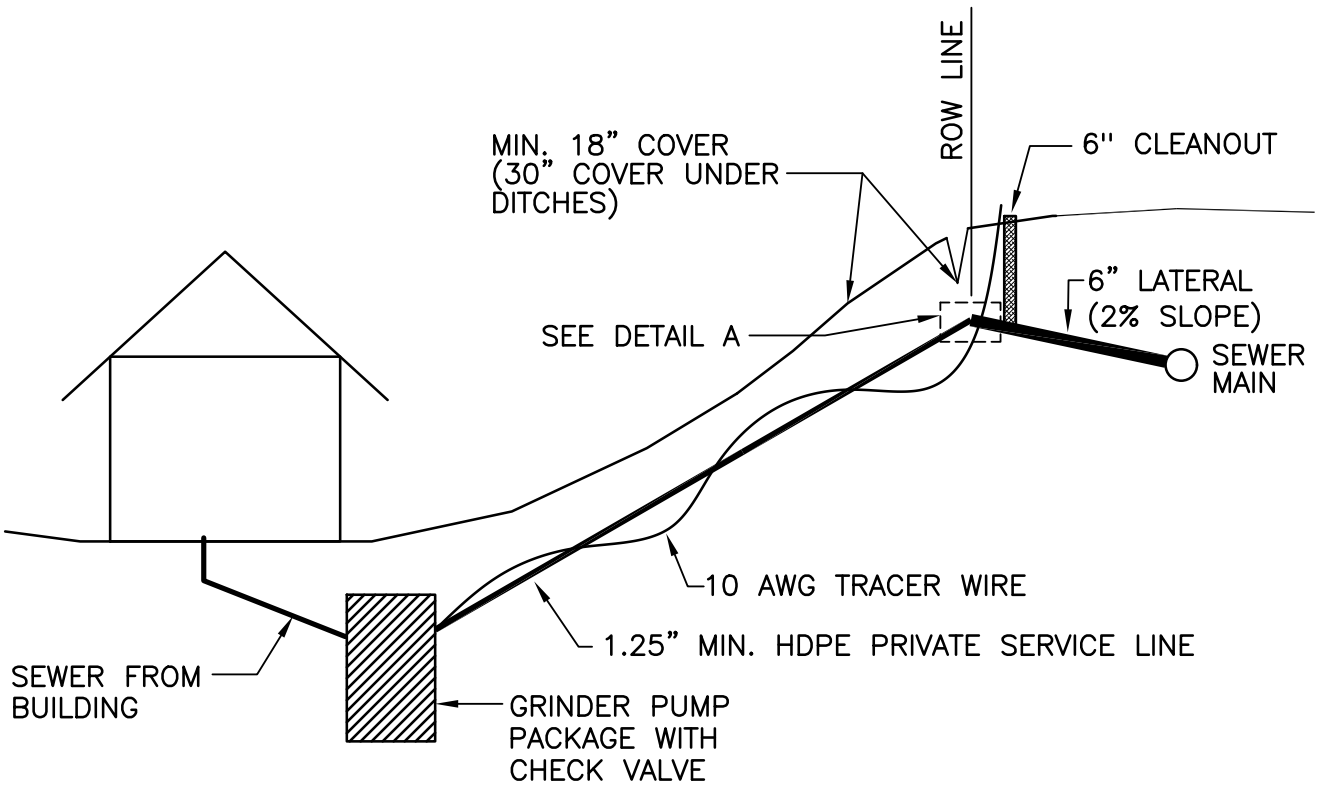
GRAVITY SIDE SEWER INSTALLATION

STANDARD DETAIL

S8

3/13/2014





SEE DOE'S CRITERIA FOR
SEWAGE WORKS DESIGN,
SECTIONS C1–10.1 & C1–10.2
FOR GRINDER PUMP DESIGN &
COMPONENT INFORMATION

NOTES:

1. Pressure sewer service pipe shall be PE 3408 HDPE conforming to the requirements of ASTM D–3350. Piping shall be SDR11, IPS (OD), pressure rated at 160 PSI, conforming to the requirements of AWWA C901 and ASTM F714.

2. Brass compression fittings only – no hose clamps.

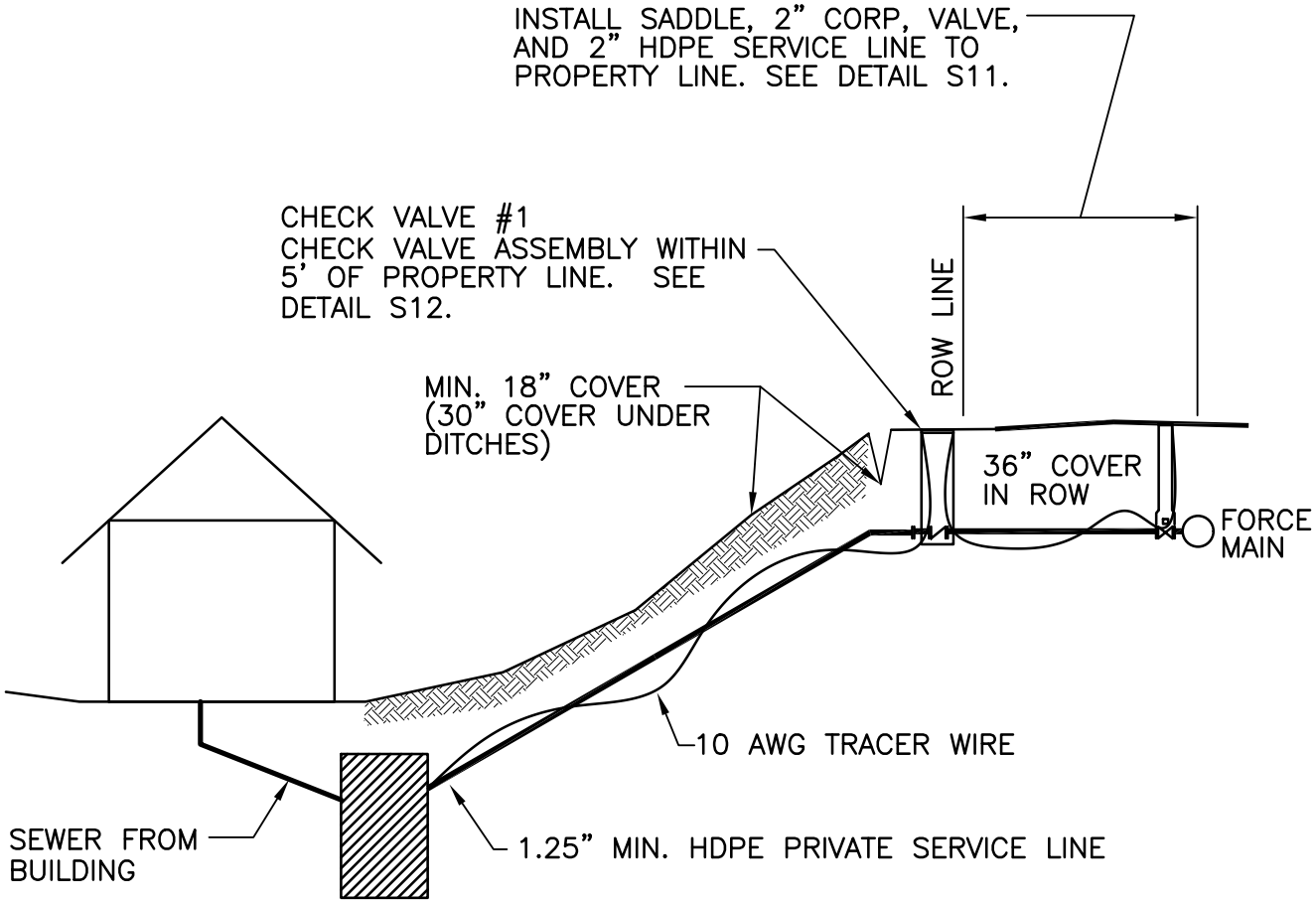
LAKE WHATCOM WATER & SEWER DISTRICT

GRINDER PUMP SERVICE TO GRAVITY MAIN INSTALLATION

STANDARD DETAIL

S9

3/13/2014



GRINDER PUMP (CHECK VALVE #2 AT GRINDER PUMP)

SEE DOE'S CRITERIA FOR SEWAGE WORKS DESIGN, SECTIONS C1–10.1 & C1–10.2 FOR GRINDER PUMP DESIGN & COMPONENT INFORMATION

NOTES:

1. Pressure sewer service pipe shall be PE 3408 HDPE conforming to the requirements of ASTM D–3350. Piping shall be SDR11, IPS (OD), pressure rated at 160 PSI, conforming to the requirements of AWWA C901 and ASTM F714.

2. Two check valves are required between the pump station and the force main. One check valve shall be installed within 5' of the right–of–way in the check valve vault. The second valve shall be installed at the grinder pump.

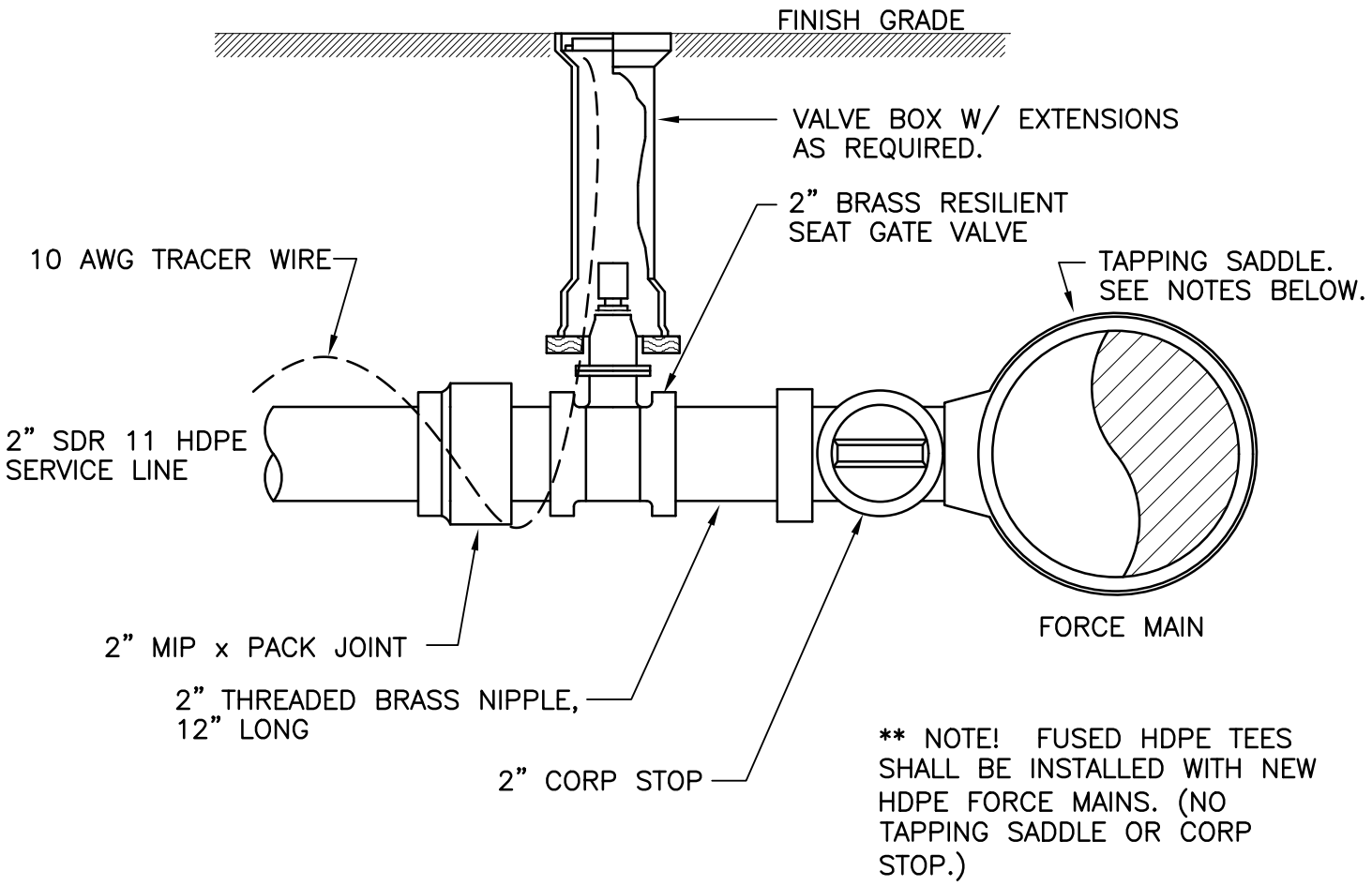
LAKE WHATCOM WATER & SEWER DISTRICT

GRINDER PUMP SERVICE TO FORCE MAIN INSTALLATION

STANDARD DETAIL

S10

3/13/2014



NOTES:

1. HDPE Service Saddles. Saddles for use on SDR 17 HDPE mains shall be epoxy or nylon coated ductile iron tapping saddles with a double stainless steel strapping mechanism specifically recommended by the manufacturer for use on HDPE piping. Saddles shall be Romac style 202N–H or approved equal.

2. PVC Service Saddles. Saddles for use on AWWA C900 PVC mains shall have epoxy or nylon coated ductile iron tapping saddles with a double strap stainless steel strapping mechanism. Service saddles shall be Romac style 202N or approved equal.

3. Ductile Iron Service Saddles. Saddles for use on ductile iron mains shall have epoxy or nylon coated ductile iron tapping saddles with stainless steel tapping mechanism. Service saddles shall be Romac style 101NS or approved equal.

4. Customer Service Shutoff Valves. Shutoff valves shall be resilient wedge type gate valves in conformance with AWWA C509. Valves shall be suitable for sewage service and be equipped with transition gaskets where needed. Gate valves shall have a non–rising stem and be fusion–bonded epoxy coated inside and out meeting AWWA C550. Gate valves shall be Clow resilient wedge gate valves or approved equal.

5. Valve boxes shall have the word "SEWER" cast into the cover.

6. Fittings. All fittings shall be brass.

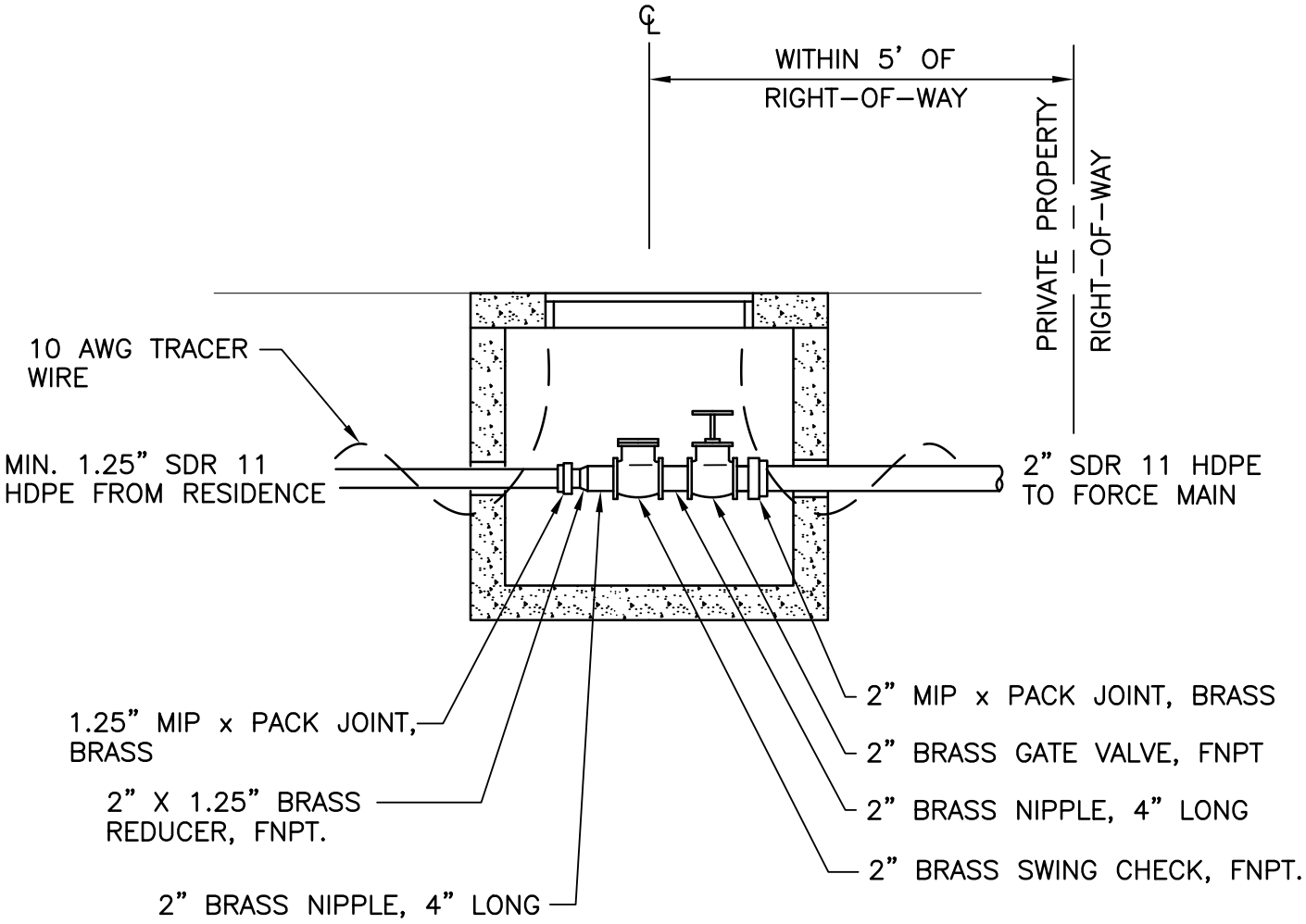
LAKE WHATCOM WATER & SEWER DISTRICT

CONNECTION TO FORCE MAIN

STANDARD DETAIL

S11

3/13/2014



Notes

1. Check Valve. Check valve shall be horizontal swing type manufactured out of brass and be pressure rated to 125 psi. Valve shall have metal to metal seal and threaded NPT end connections. Valve shall be a Watts Regulator Company Series WCV or equal.

2. Gate Valve. Gate valve shall be manufactured out of brass and be pressure rated to 200 psi. Valve shall have threaded bonnet and non-rising stem. Valve shall be a Watts Regulator Company Series WGV or equal.

3. Vault. Vault shall be a pre-cast concrete hand hole with a 2'-0" by 3'-0" inside diameter and a maximum 4'-0" inside depth. Hand hole and access hatch shall be traffic rated. Access hatch shall be galvanized steel checker plate with pick holes and bolt down holes in plate. Check valve vaults shall be Utility Vault Model 2436 hand hole or approved equal.

4. Air/Vacuum Valve. Where required, air relief and combination air relief/ vacuum relief valves shall be as manufactured by Orenco, Apco, Crispin or equivalent for sewer service. All valves shall be fully accessible to enable customer's operation, maintenance and repair.

5. Fittings and Adapters. All fittings and adapters shall be brass.

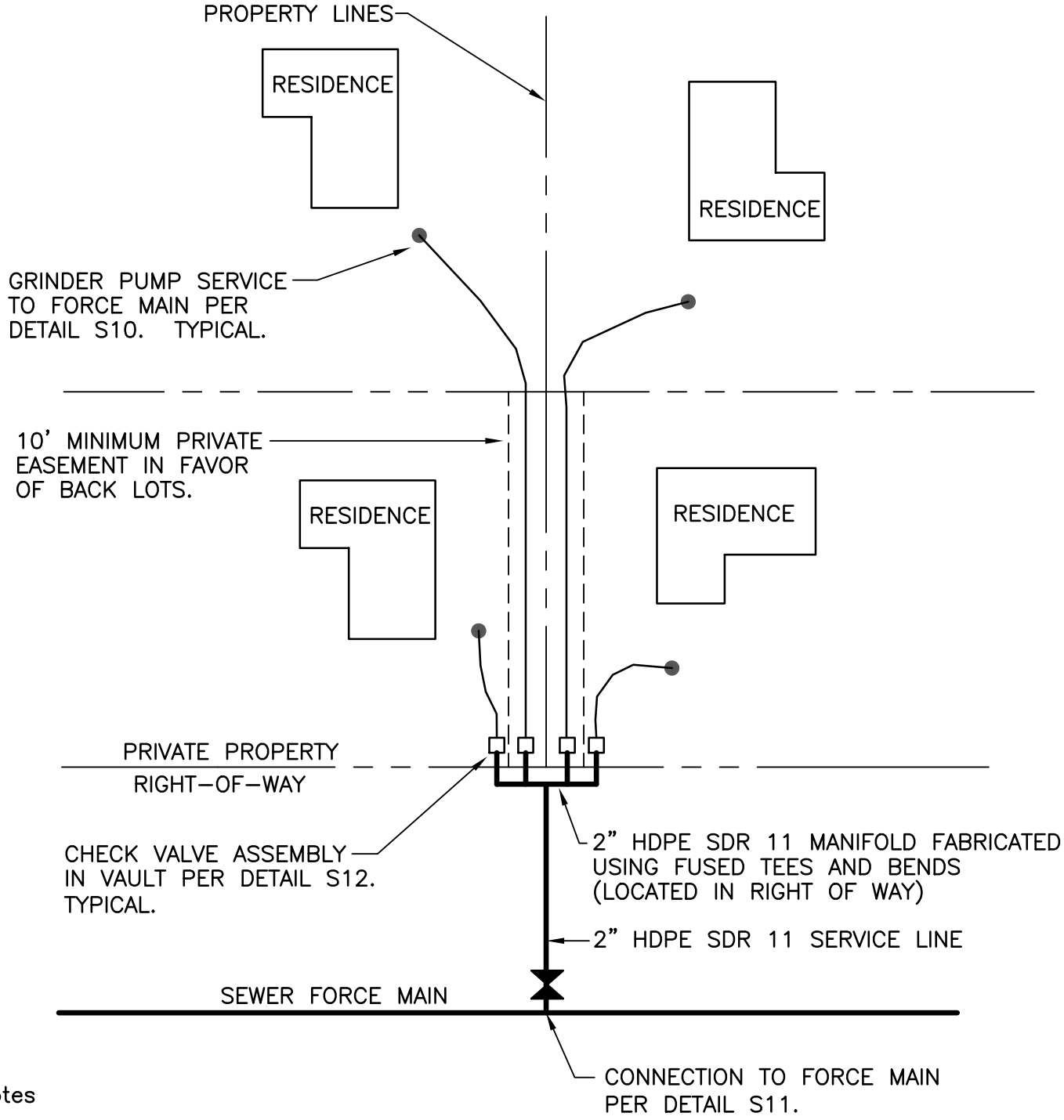
LAKE WHATCOM WATER & SEWER DISTRICT

FORCE MAIN SERVICE CHECK VALVE

STANDARD DETAIL

S12

3/13/2014



Notes

1. If approved by the District Engineer, a single 2" service tap may be shared with multiple residences. District will review requests for shared taps on a case by case basis. Property owners desiring to install a shared tap, shall individually but at the same time, submit a sewer permit application with the grinder pump check list for review by the District.

2. Manifold must be fabricated using fused HDPE tees and bends by a contractor certified by a HDPE pipe or fusion machine manufacturer.

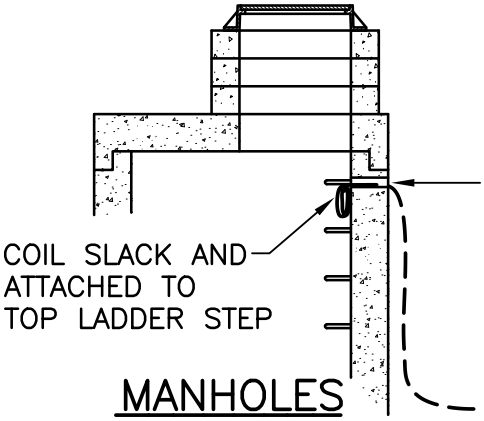
LAKE WHATCOM WATER & SEWER DISTRICT

SHARED FORCE MAIN SERVICE TAP

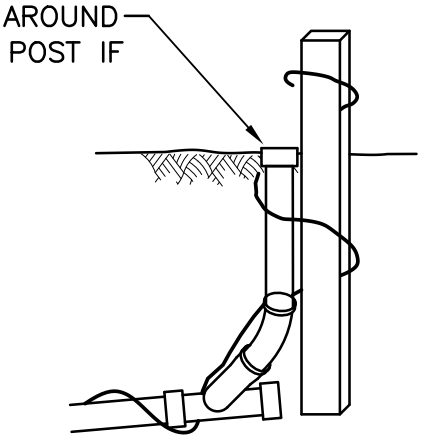
STANDARD DETAIL

S13

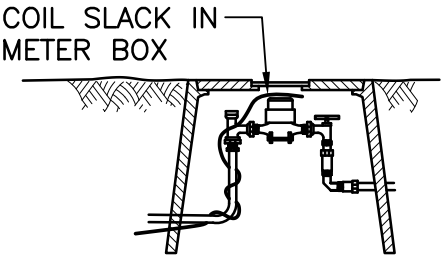
3/13/2014



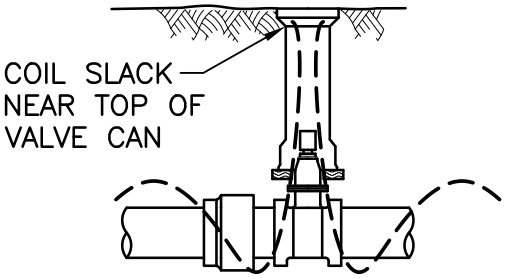
MANHOLES



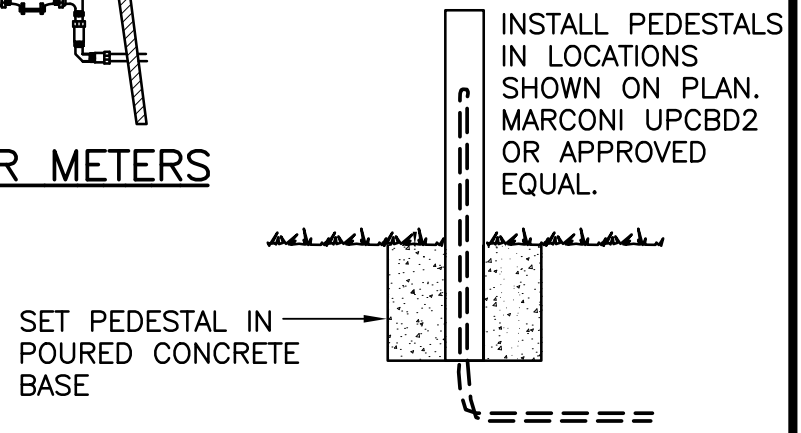
SEWER CLEANOUTS



WATER METERS



VALVE CANS



TRACER WIRE PEDESTAL

NOTES:

1. Tracer wire installation is required on all District owned pipe and communication lines. Tracer wire is also required on private side sewers.

2. Tracer wire shall be 10 AWG insulated copper wire rated for direct burial in wet locations. Use green insulation for sewer, blue insulation for water, and orange insulation for fiber/communication related utilities.

3. Install tracer wire in continuous lengths (no splices) between surface access points. Any direct bury splices shall be approved and inspected by the District Engineer prior to cover. Splices shall be made with silicone filled wire nuts rated for direct burial in wet locations such as "Ideal Underground Wire Connectors", "Ideal Mudbug Connectors," "Copperhead Snakebite Connectors," or "3M DBR Direct Bury Splice Kit."

4. Tape tracer wire to pipe at 10–foot intervals.

5. Provide at least 2–feet of coiled tracer wire slack at surface access points.

LAKE WHATCOM WATER & SEWER DISTRICT

TRACER WIRE

STANDARD DETAIL

E5

3/13/2014