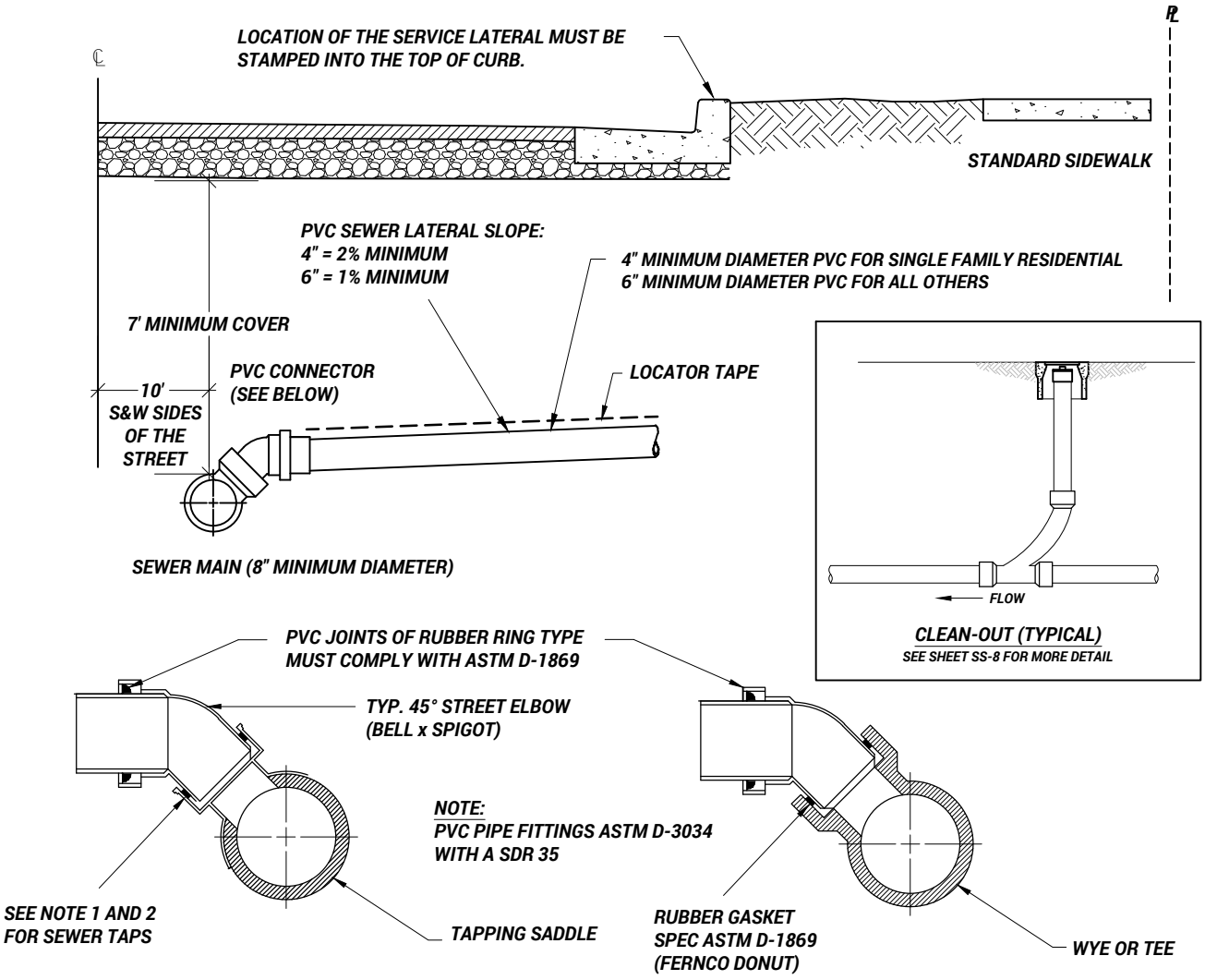
Ogden UTAH™
Engineering Division

Engineering Standards and Drawings for

Sewer Projects

2025 Edition



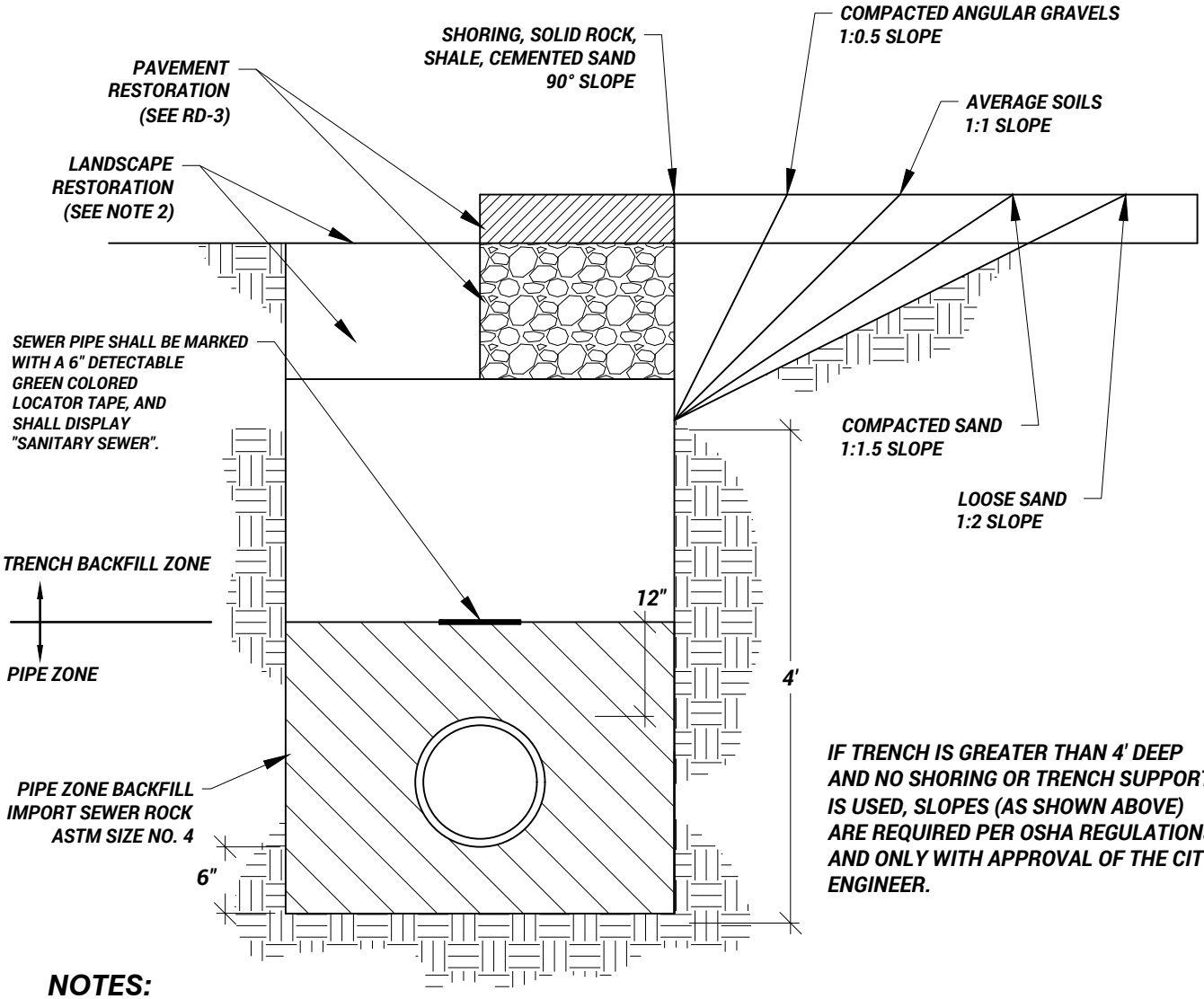
TAPPING TO AN EXISTING MAIN

CONNECTING VIA WYE OR TEE

NOTES:

1. CONNECTION FEES WILL BE ASSESSED AT THE TIME A PERMIT IS ISSUED. SEWER TAPS WILL BE PERFORMED BY OGDEN CITY PERSONNEL, WYE CONNECTIONS WILL BE PERFORMED BY THE CONTRACTOR UNDER THE SUPERVISION OF AN OGDEN CITY INSPECTOR. ANY TAP CONNECTIONS PERFORMED BY THE CONTRACTOR MUST BE APPROVED BY THE SEWER MANAGER.
2. SEWER TAPS INTO EXISTING 8" DIAMETER SANITARY SEWER PIPES SHALL NOT BE GREATER THAN 4".
3. ALLOWABLE SANITARY SEWER LATERAL PIPE MATERIAL:
   - 3.1. PVC SDR-35, GREEN IN COLOR
   - 3.2. HDPE DR-17 WITH FACTORY GREEN STRIPE
4. REQUIREMENTS FOR THE BEDDING OF A LATERAL IS THE SAME AS SHOWN IN SS-4.
5. THE SEWER LATERAL LOCATIONS SHALL BE MARKED WITH AN "S" IN THE TOP OF THE CONCRETE CURB.
6. PVC JOINTS OF RUBBER RING MUST COMPLY WITH ASTM D-1869.
7. FOR NEW PROJECTS: EXTEND SEWER LATERAL 5' BEHIND THE BACK OF THE SIDEWALK OR PROPERTY LINE, WHICHEVER IS FURTHER. THE END OF A LATERAL SHALL BE MARKED WITH A 2x4, SET IN THE GROUND, AND HAVE THE END COLORED GREEN.
8. CLEANOUTS SHALL BE REQUIRED EVERY 100'.
9. SEWER PIPE SHALL BE MARKED WITH A 6" DETECTABLE GREEN COLORED LOCATOR TAPE LABELED "SANITARY SEWER"

OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden UTAH Still Untamed™	SEWER LATERAL CONNECTION	SS-2
	TAYLOR NIELSEN, CITY ENGINEER	SHEET 1 OF 1 — 2025

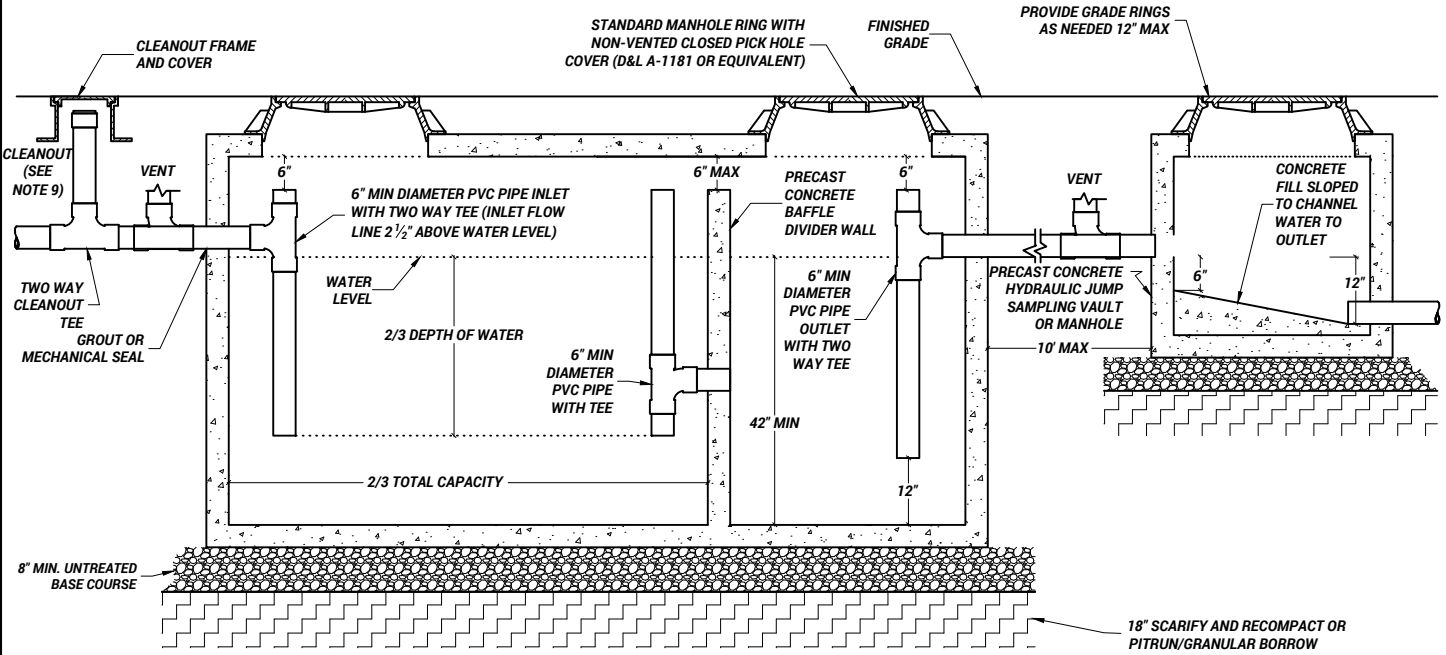


IF TRENCH IS GREATER THAN 4' DEEP AND NO SHORING OR TRENCH SUPPORT IS USED, SLOPES (AS SHOWN ABOVE) ARE REQUIRED PER OSHA REGULATIONS AND ONLY WITH APPROVAL OF THE CITY ENGINEER.

NOTES:

1. BACKFILL: ABOVE THE PIPE ZONE.
   - 1.1. GRANULAR IMPORT FILL: PLACE FILL PER APWA SECTION 33 05 20.
   - 1.2. COMPACT PER APWA SECTION 31 23 26 TO A STANDARD PROCTOR DENSITY OF 95 PERCENT OR GREATER. MAXIMUM LIFT THICKNESS BEFORE COMPACTION IS 8" WHEN USING RIDING AND 6" WHEN USING HAND COMPACTION EQUIPMENT.
2. LANDSCAPE RESTORATION: LANDSCAPE MUST BE RETURNED TO PRE-CONSTRUCTION CONDITIONS OR BETTER.
3. PAVEMENT RESTORATION: DO NOT INSTALL ANY PORTION OF ASPHALT OR CONCRETE SURFACING UNTIL TRENCH COMPACTION IS ACCEPTABLE TO THE ENGINEER.
4. PEA GRAVEL IS NOT ALLOWED IN ANY PART OF THE TRENCH.
5. STANDARD SEWER MAIN ALIGNMENT SHALL BE 10' WEST OR 10' SOUTH OF THE CENTERLINE IN THE PUBLIC RIGHT-OF-WAY (SEE RD-1).
6. HORIZONTAL CLEARANCE TO ANY WATER MAIN SHALL BE AT LEAST 10' (REFER TO UTAH ADMINISTRATIVE CODE # R309-550).
7. COMPACTION TESTS ARE REQUIRED EVERY 200 LINEAR FEET OF A MAIN INSTALLATION PER APWA SECTION 33 05 20. COMPACTION TESTS ARE REQUIRED AT HALF AND FULL DEPTHS.

OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden UTAH Still Untamed™	SEWER PIPE TRENCH	SS-3
	TAYLOR NIELSEN, CITY ENGINEER	SHEET 1 OF 1 — 2025



NOTES:

1. BACKFILL: PROVIDE AND PLACE PER APWA SECTION 31 23 23.
   1.1. COMPACT PER APWA SECTION 31 23 26 TO A DENSITY OF 95 PERCENT OR GREATER. MAXIMUM LIFT THICKNESS BEFORE COMPACTION IS 8" WHEN USING RIDING AND 6" WHEN USING HAND COMPACTION EQUIPMENT.

2. GRAVITY GREASE INTERCEPTOR (GGI) SHALL BE PRECAST REINFORCED CONCRETE WITH A MINIMUM OF 4" THICK WALLS.
   2.1. CONCRETE CLASS 4000 PER APWA SECTION 03 30 04.
   2.2. THE GGI SHALL HAVE A MINIMUM OF TWO COMPARTMENTS.
      2.2.1. THE INLET COMPARTMENT SHALL BE 2/3 OF THE TOTAL LIQUID CAPACITY AND THE OUTLET COMPARTMENT SHALL BE 1/3 OF THE TOTAL LIQUID CAPACITY OF THE GGI.
      2.2.2. GGI COMPARTMENTS SHALL BE SEPARATED BY A SEALED BAFFLE WALL 3" MINIMUM THICK.

3. THE GGI SHALL BE SIZED ACCORDING TO THE CURRENT MANUAL OF THE UNIFORM PLUMBING CODE (UPC).
   3.1. RESTROOM WASTE SHALL NOT BE ROUTED THROUGH THE GGI.
   3.2. THE GGI CAPACITY IS DEFINED AS THE STORAGE VOLUME OF THE VAULT BELOW THE ELEVATION OF THE OUTLET FLOW LINE.

4. ACCESS TO GGI SHALL BE PROVIDED BY A MINIMUM OF ONE MANHOLE RING AND COVER PER INTERCEPTOR DIVISION (BAFFLE CHAMBER) AND OF 24-INCH DIAMETER MINIMUM DIMENSIONS.
   4.1. ONE MANHOLE RING AND COVER SHALL BE LOCATED DIRECTLY ABOVE THE INLET TEE AND ONE MANHOLE RING AND COVER SHALL BE LOCATED DIRECTLY ABOVE THE OUTLET TEE.
   4.2. MANHOLE COVER SHALL HAVE A CLOSED PICK HOLE OR APPROVED GAS TIGHT EQUIVALENT AND SHALL BE MARKED "SEWER".

5. GGI SHALL BE LOCATED AS CLOSE AS PRACTICAL TO THE SOURCE OF THE WASTE WATER.
   5.1. GGI LOCATION SHALL BE EASILY ACCESSIBLE FOR INSPECTION AND CLEANING AND SHALL AVOID AREAS THAT COULD BE PERIODICALLY BLOCKED BY A VEHICLE, DUMPSTER, OR OTHER SIMILAR OBSTRUCTIONS.

6. WHEN LOCATED IN PAVED AREAS THE GRAVITY GREASE INTERCEPTOR SHALL HAVE MANHOLE RING AND COVERS RATED FOR TRAFFIC.
   6.1. LOW PROFILE MANHOLE RING AND COVERS SHALL NOT BE ALLOWED.

7. GRAVITY GREASE INTERCEPTOR SHALL BE WATER TIGHT AND GAS TIGHT.
   7.1. ALL PIPE OPENINGS SHALL BE MECHANICALLY SEALED OR GROUTED WITH 2:1 SAND/CEMENT MORTAR.
   7.2. DIRECT VENTING OF THE GRAVITY GREASE INTERCEPTOR SHALL NOT BE ALLOWED.
   7.3. INTERCEPTOR SHALL BE VENTED IN ACCORDANCE WITH THE CURRENT ADOPTED INTERNATIONAL PLUMBING CODE AND UNIFORM PLUMBING CODE.

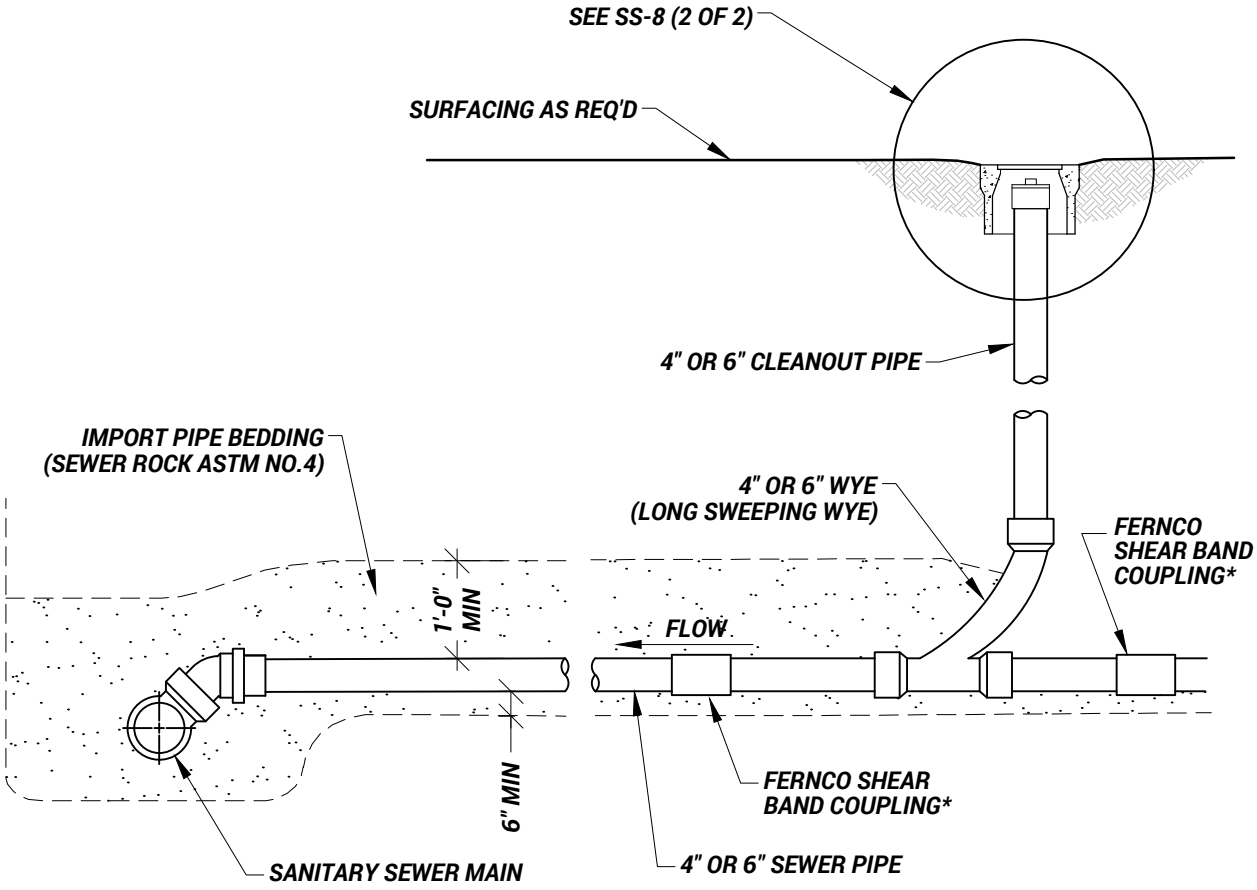
8. OUTLET PIPE FLOW LINE TO BE A MINIMUM OF 2.5" BELOW INLET PIPE FLOW LINE. THE INLET AND OUTLET PIPING SHALL HAVE 4" MIN PVC TWO WAY CLEANOUT TEES INSTALLED VERTICALLY INSIDE THE GGI.

9. THE BAFFLE WALL SHALL HAVE A 6" MIN PVC TWO WAY CLEANOUT TEE INSTALLED VERTICALLY. ALL PIPING SHALL MATCH THE SIZE OF THE INLET PIPE WHEN THE SIZE OF THE INLET PIPE EXCEEDS 4" DIAMETER.

10. THE CLEANOUT UPSTREAM OF THE GGI MAY BE ELIMINATED IF THE CLEANOUT AT THE BUILDING IS WITHIN 15 FEET OF THE GGI AND THE LINE BETWEEN THE GGI AND THE CLEANOUT IS A STRAIGHT SEGMENT.

11. A 3'X3' MINIMUM PRECAST VAULT OR 4' DIAMETER MINIMUM PRECAST MANHOLE SHALL BE INSTALLED NO MORE THAN 10' DOWNSTREAM FROM ANY GGI.
   11.1. THE SAMPLING VAULT OR MANHOLE SHALL HAVE A 12" MINIMUM HYDRAULIC JUMP BETWEEN THE INLET PIPE AND THE OUTLET PIPE WITH A MINIMUM OF A 6" CLEARANCE UNDER THE END OF THE INLET PIPE FOR PROPER SAMPLING OF GGI OUTFLOW.
   11.2. THE BOTTOM OF THE SAMPLING VAULT OR MANHOLE SHALL HAVE A WATER TIGHT CONCRETE FILL SLOPED TO CHANNEL THE WATER TO THE OUTLET PIPE.

OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden UTAH Still Untamed™	GRAVITY GREASE INTERCEPTOR	SS-7
	TAYLOR NIELSEN, CITY ENGINEER	SHEET 1 OF 1 — 2025

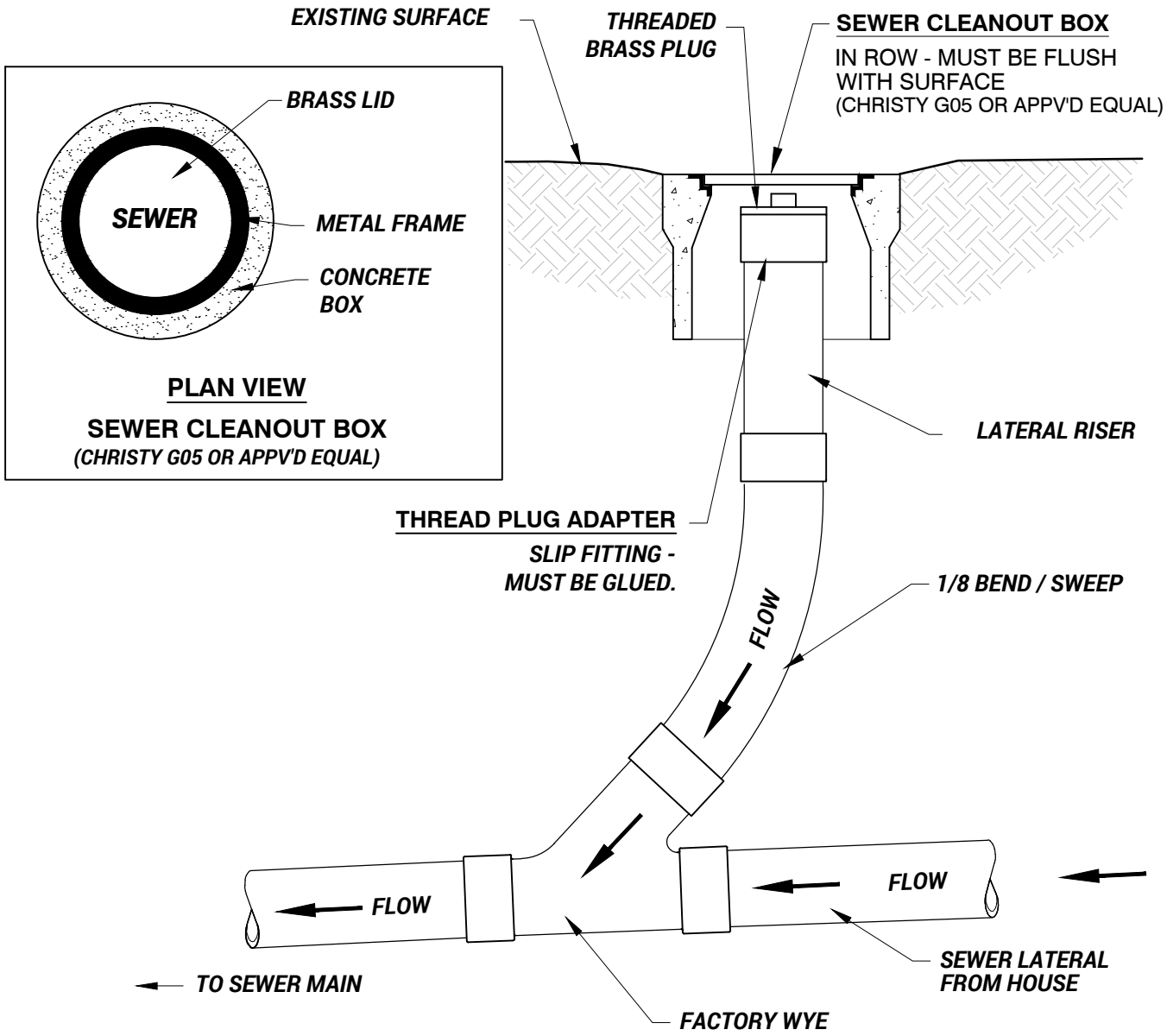


*NOTE: FERNCO SHEAR BAND COUPLINGS USED FOR LATERAL REPAIRS ONLY.

NOTES:

1. OBTAIN PERMIT
2. OGDEN CITY IS NOT RESPONSIBLE FOR FLUSHING LATERALS. OWNER IS RESPONSIBLE FOR LATERAL FROM CONNECTION AT THE MAIN TO THE HOME.
3. CLEANOUTS SHALL BE PLACED EVERY 100 FEET.
4. ALL FITTINGS EXCLUDING THE CAP NEED TO BE RUBBER GASKETED.
5. NO CLEANOUT SHALL BE INSTALLED IN ANY ROADWAY.
6. ALLOWABLE PIPE MATERIALS ARE ABS (ACRYLONITRILE BUTADIENE STYRENE) - SCH 40 GREEN IN COLOR; PVC (POLYVINYL CHLORIDE) SDR-35 (GREEN IN COLOR); OR HDPE - SDR 19 GREEN IN COLOR OR FACTORY GREEN STRIPE. SEE SHEET SS-8 (SHEET 2 OF 2) FOR FURTHER DETAIL.

OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden UTAH Still Untamed™	SEWER LATERAL CLEANOUT	SS-8
	TAYLOR NIELSEN, CITY ENGINEER	SHEET 1 OF 2 | 2025



NOTES:

1. OBTAIN PERMIT
2. OGDEN CITY IS NOT RESPONSIBLE FOR FLUSHING LATERALS. OWNER IS RESPONSIBLE FOR LATERAL FROM CONNECTION AT THE MAIN TO THE HOME.
3. CLEANOUTS SHALL BE PLACED EVERY 100 FEET.
4. ALL FITTINGS EXCLUDING THE CAP NEED TO BE RUBBER GASKETED.
5. NO CLEANOUT SHALL BE INSTALLED IN ANY ROADWAY.
6. ALLOWABLE PIPE MATERIALS ARE ABS (ACRYLONITRILE BUTADIENE STYRENE) - SCH 40 GREEN IN COLOR; PVC (POLYVINYL CHLORIDE) SDR-35 (GREEN IN COLOR); OR HDPE - SDR 19 GREEN IN COLOR OR FACTORY GREEN STRIPE.

OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden UTAH Still Untamed™	SEWER LATERAL CLEANOUT	SS-8
	TAYLOR NIELSEN, CITY ENGINEER	SHEET 2 OF 2 — 2025

3-2 Sanitary Sewer Design Standards

1. All Sanitary Sewer installation and design shall comply with Ogden City's Sanitary Sewer Master Plan.

2. New sewer lines shall be inspected by closed circuit television after completion of the backfill and finish grading, but prior to the placement of pavement or other resurfacing.
   a. Sewer lines less than eight feet (8') in length, and can be visually inspected, are not required to be televised.
   b. All closed circuit television work shall be done at the expense of the contractor.
      1. CCTV personnel are to be certified under the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment Certification Program (PACP).
      2. Ogden City reserves the right to have any portion of the pipe televised again, at the Contractor's expense, based on inaccurate or unclear information.
3. New sewer main shall require an air test to pass per APWA standard specifications.

A. Sewer Pipe Main Standards

4. Minimum mainline size shall be 8" in diameter.

5. Allowable sanitary sewer main pipe material for all projects in the City of Ogden:
   a. PVC (Polyvinyl Chloride) SDR 35 or other approved wall thickness for mainlines and laterals. Sewer main shall be green in color.
   b. HDPE (High Density Polyethylene) SDR 19 or SDR 17 (green stripe) or approved equal for other wall thickness (corrugated HDPE pipe is not approved for use).
      1. HDPE material must be approved by the City Engineer prior to being installed.
   c. CIPP Lining (Cure in Place Pipe) can be used to repair a main with the approval of the City Engineer.
      1. Installation and material tests of cured-in-place-pipe (CIPP) must meet the minimum requirements demonstrated in the following ASTM standards:
      2. ASTM F-1216 Standard Practice for the Installation of C.I.P.P. Pipe by Inversion Lining
      3. ASTM D-638 Test Method for Tensile Properties of Plastics Tensile Strength 3,000 psi
      4. ASTM D-790 Test Method of Flexural Properties of Plastic Flexural Strength 4,500 psi Flexural Modulus 250,000 psi
      5. NASSCO Wastewater Collection Systems Maintenance and Rehabilitation- 10th Edition: Chapters titled "TV Inspection" and "Sewer Line Cleaning."

6. Sewer mainlines shall be marked with a six inch (6") detectable green colored locator tape, and shall display "Sanitary Sewer", or "Underground Utility" on it.

7. Standard sewer mainline alignment within the public Right-of-Way shall be 10 feet (10') west or 10 feet (10') south of the roadway centerline.

8. Minimum depth of the sewer mainlines shall be 7 feet (7') of cover to the finish grade. Maximum depth will be set forth by the manufacture recommendations and will need to be verified if over 12 feet.

9. Horizontal clearance to any culinary water line shall be at least 10 feet (10').
   a. Any other utility crossing the sewer main shall do so as close to a right angle as possible.
   b. Perpendicular or skewed crossings between other utilities and sewer mains shall have a minimum clearance of 18 inches (18") (or as approved by the Utah Department of Health).
      1. Closer tolerances require a protection between the mains/services in combination with no mechanical joints on either utility within a 10 foot (10') radius of the crossing. All crossings must have the approval of the City Engineer.

10. Sewer Mainline grades shall provide a minimum velocity of 2.5 feet per second (2.5 ft/sec) when flowing 3/4 full are as follows: (grades less than what is listed below may be acceptable upon submittal, and approval by the City Engineer, of a detailed hydraulic analysis proving the minimum velocity can be met.)

Example Minimum Pipe Slope to Ensure Table 2.5 feet per second (2.5 ft/sec) Velocity in Sanitary Sewer Flowing 3/4 Full (n=0.011 for PVC Pipe)		
Pipe Size (inch)	**3/4 Pipe Flow (cfs)**	**Minimum Slope**
8	0.70	0.40%
10	1.11	0.32%
12	1.60	0.24%
15	2.48	0.18%
18	3.63	0.14%
21	5.03	0.12%
24*	6.50	0.10%

**Note: Any mainline 12" and larger must be approved by the City Engineer*

Table 1- Minimum Sewer Main Pipe Slope

B. Manhole Design Standards

1. Sewer manholes shall be installed:
   a. At a maximum spacing of 400 feet (400').
   b. At all changes in pipe size, slope, or alignment.
   c. At any junction with other sewer lines

2. No drop manholes shall be allowed.

3. Sewer manholes shall be sized based on the following:
   a. Four-foot (4') diameter for:
      1) In-line manholes
      2) Pipes under 12 inches (12") in diameter.
   b. Five-foot (5') diameter shall be required for the following:
      1) The deflection angle between pipes is greater than or equal to 45 degrees.
      2) When the manhole services three (3) or more lines.
      3) For pipes with a diameter of 12 inches (12") or greater.
      4) When the cover is greater than 15 feet (15').

4. Concrete thickness requirements for decking shall be a minimum of nine inches (9") thick for precast and cast in place manhole structures.

5. Entry into a manhole will require approval from the Ogden City Sewer Department.
   a. Entry into manholes must be per OSHA and DOL guidelines.

6. No low-profile sewer manhole frames will be allowed in any public Right-of-Way.

7. Contact the Ogden City Sewer Department for details and ordering information for a sewer lid and frame at (801) 629-8282 or (801) 629-8331.

8. The developer will provide all operations pertaining to the adjustment of existing manhole structures to grade.
   a. All broken and/or missing manhole components shall be replaced with new materials by the developer/contractor at no cost to the city. All components must be approved by the City prior to use.

9. The connection of a sewer line into a manhole shall be grouted smooth and sealed to prevent infiltration.

a. If attaching using a boot connection, no grout shall be used, except to fill the bottom void gap between the pipe and manhole. Pipe must be seated to the trough leaving no gap for sediment.

C. Sewer Pipe Main Trench Standards

1. Backfilling of the trench
   a. The pipe zone requirements can change with approval from the City Engineer.
      1) Any damage caused to the pipe system shall be replaced by the contractor.
   b. Compaction tests are required every 200 linear feet (200′) and must follow APWA requirements. Contractor is responsible to provide test results to the City.
      1) Compaction shall be to a 95% or greater density.
   c. Excavated native material shall not be used as structural fill in any portion of the trench within the public Right-of-Way without approval of the City Engineer and an approved testing method to verify compaction.

2. If groundwater is found during a Sewer Main installation:
   a. Trenches must be kept free from water during excavation, pipe installation, and the installation of material in the pipe zone.
   b. Pipes must be properly sealed so no water is allowed to infiltrate the Sanitary Sewer system.
   c. The sewer must pass an air test after the trench has been backfilled and the dewatering system has been removed to ensure the new sewer has no groundwater inflow.

3. Pea Gravel is not allowed in any part of the trench.

4. Excavation of any trench must be to OSHA safety standards.

5. Do not use recycled fill material in the pipe zone without the approval of the City Engineer.

D. Sewer Lateral Design Standards

1. Connection fees for a sewer lateral will be assessed at the time a permit is issued.
   a. A Sewer tap will be performed by Ogden City Personnel, if the applicable fees have been paid.
   b. Wye connections will be installed by the contractor under the supervision of Ogden City.
      1) Sewer taps into an existing eight inch (8″) main shall not be greater than four inches (4″). If a six inch (6″) connection is required, a portion of the sewer main must be removed, and a wye installed.
      2) A wye shall not be installed within 24" inches of bell or other connections.

3) Inserta Tees, or an approved equal, can be used when the connection is smaller than two-thirds of the main line and when approved by the City Engineer.

c. No lateral shall be allowed to enter a manhole directly unless the lateral is over six inches (6″) in diameter, ties in near the flow line, and is approved by the City Engineer.
   1) Connections larger than six inches (6″) require a manhole to be installed.

2. Allowable sanitary sewer lateral pipe material is as follows:
   a. PVC (Polyvinyl Chloride) SDR 35, green in color.
   b. HDPE (High Density Polyethylene) SDR 19 or SDR 17, green in color.
   c. CIPP Lining (Cure In Place Pipe) can be used for repair of old laterals with the approval of the City Engineer. The repair must not decrease the volume of the lateral.
      1) Installation and material tests of cured-in-place-pipe (CIPP) must meet the minimum requirements demonstrated in the following ASTM standards:
      2) ASTM F-1216 Standard Practice for the Installation of C.I.P.P. Pipe by Inversion Lining
      3) ASTM D-638 Test Method for Tensile Properties of Plastics Tensile Strength 3,000 psi
      4) ASTM D-790 Test Method of Flexural Properties of Plastic Flexural Strength 4,500 psi Flexural Modulus 250,000 psi
      5) National Association of Sewer Service Companies (NASSCO) Wastewater Collection Systems Maintenance and Rehabilitation- 10th Edition: Chapters titled “TV Inspection” and “Sewer Line Cleaning.”
      6) 4″ and 5″ MaxLiner or approved equivalent. Minimum thickness – 3mm
      7) 6″ and 8″ MaxLiner or approved equivalent. Minimum thickness – 4.5mm

3. Sewer lateral location shall be marked in the curb face by a stamped ‘S’ in the concrete.

4. Minimum lateral size shall be as follows:
   a. Four inches (4″) in diameter for a single family residential use with a minimum slope of 2%.
   b. Six inches (6″) in diameter for all other uses with a minimum slope of 1%.
      1) The sewer lateral shall be based on actual project flows, but in no case shall the lateral be less than six inches (6″) in diameter. All project flows and sizing calculations shall be in accordance with the most current manual of the International Plumbing Code (IPC), the State of Utah, and as designed by a licensed engineer and approved by the City.
   c. Laterals on private property must conform to the current adopted edition of the International Building Code.

5. No common use (shared use) laterals shall be allowed.
   a. Such practice of common use laterals shall be eliminated as redevelopment of the site occurs, or if repair or replacement is needed. The repair or replacement cost will be the responsibility of the Owner.

6. Sewage Collection: The developer shall connect to the sanitary sewer and provide adequate individual lateral lines to each property being developed. All proposed sewer connections must provide the future use of the property along with the necessary sized pipe with associated calculations.
   a. Sewer laterals shall not be allowed to connect into any private sewer system.
   b. Any new developments shall be subject to the following sewer lateral requirements:
      1) Developer will stub into each lot a minimum of one lateral with a factory wye, or tap, from the sewer main. Lateral size will depend on usage and current and future anticipated zoning for the lot.
      2) The lateral shall be extended to the back of the existing sidewalk, or beyond the property line, whichever is further.
      3) The end of the lateral must be marked with a 2x4 minimum, set in the ground, and have the end colored green.
      4) A cleanout must be installed on the sewer lateral stub one foot (1′) back of the sidewalk or beyond the property line, whichever is further.

7. Joint trench with a sewer and water lateral is not allowed. All sewer laterals shall maintain a 10-foot (10′) horizontal separation from all water lines.

8. Cleanouts shall be required every 100 feet (100′).
   a. A minimum of one (1) cleanout must be installed per lateral.

9. Location of the cleanout can be in the City's Right-of-Way so long as it is a landscaped area and maintains a minimum distance of one foot from sidewalk, curb and gutter, etc.

10. Cleanout shall be placed in an Oldcastle precast G08, G05, or approved equal type box.

11. Cleanout needs to have a glue on thread adapter and a threaded brass cap.

E. Grease Traps and Grease Interceptors

1. All Gravity and Hydromechanical Grease Interceptors shall be sized according to the current manual of the Uniform Plumbing Code (UPC).

a. All Drainage Fixtures (DFU) in any food and beverage preparation area or an area which can be contaminated with organic fats, oils, or greases (FOG) shall be routed though the Interceptor.
b. Restroom waste shall not be routed through the Interceptor.
c. The Interceptor capacity is defined as the storage volume of the vault below the elevation of the outlet flow line or as defined by the manufacture.

2. The Gravity Interceptor shall have manhole rings and covers rated for traffic loading when in areas which experience vehicular traffic.

3. The Interceptor shall be water and airtight.
   a. All pipe openings shall be mechanically sealed or grouted to prevent infiltration and exfiltration.
   b. Direct venting of the gravity grease interceptor shall not be allowed unless it follows the requirements of the International Building Code.
   c. All access manholes must be sealed to prevent air and fumes from escaping the containment unit.

4. Outlet pipe flowline shall be a minimum of 2.5 inches (2.5″) below the inlet pipe flowline.

5. The inlet and outlet piping shall have a two-way cleanout. The cleanout must be a minimum of four inch (4″) PVC tee installed vertically inside the interceptor.

6. The baffle wall shall have a six inch (6″) minimum PVC cleanout tee installed vertically.

7. If the inlet is greater than six inches (6″) a plan will need to be submitted and approved by the City.

8. A sampling manhole shall be installed no more than 10 feet (10′) downstream from any interceptor.
   a. The required vault shall be a five foot (5′) diameter manhole.

9. The sampling vault or manhole shall have a 12 inch (12″) minimum hydraulic jump between the inlet and outlet pipe.
   a. A six inch (6″) minimum clearance is required from the end of the inlet pipe to the bottom of the sampling manhole flowline.

10. The bottom of the sampling manhole shall be formed to slope the water towards the outlet pipe.

F. Pipe Bursting

1. The minimum allowable slope from the building to the main is 1% for a 6" service and 2% for a 4" service.

2. A video (CCTV) internal inspection of the cleaned existing piping shall be performed to assure that the piping conditions are acceptable to pipe bursting (e.g. no sags or obstructions in the pipe).

3. All sewer pipe must be green in color or marked with a green stripe.

3-3 Easements/Access Design Standards

A. Should easements be necessary for the installation and maintenance of a Public Sanitary Sewer system, such easements shall be:
   1. Based on the pipe size and the depth of the pipe. For every one foot of depth, to pipe invert, with easement must be two feet wide, with the pipe centered in the easement. The minimum easement width is 20 feet wide.
      a. If a sewer and water main share an easement, the minimum easement width is 20 feet.
   2. Extend a minimum of 10 feet (10') beyond the last manhole or structure on a line.
   3. Submitted to the City Engineer before final approval.

B. No buildings, utilities or structures shall be erected or constructed within or over such easements as to interfere with the activities necessary to properly access, maintain and/or replace the main lines.

C. Legal and physical access is required for all sewer manholes.
   1. Physical access shall consist of an all-weather surface sufficient to provide the needs of all routine maintenance and repair equipment.

3-4 Definitions

1. Drainage Fixture Units (DFU): A measure of the probable discharge into the drainage system by various types of plumbing fixtures. The measure is expressed in units of cubic volume per minute. The value for a particular fixture depends on the volume rate of drainage discharge, the time duration of a single drainage operation, and the average time between successive operations.

2. DOL: United States Department of Labor

3. Fats, Oils, and Grease (FOG): Organic polar compounds derived from animal and/or plant sources. These oils are used in, or a byproduct of, the cooking or food preparation process. The oils turn or may turn viscous or may solidify with a change in temperature or other condition.

4. OSHA: Occupational Safety & Health Administration

5. Uniform Plumbing Code (UPC): A model code developed by the International Association of Plumbing and Mechanical Officials (IAPMO) to govern the installation and inspection of plumbing systems as a means of promoting the public's health, safety and welfare.

6. International Building Code (IBC): is a model building code developed by the International Code Council (ICC). It has been adopted for use as a base code standard in Ogden City.

7. International Plumbing Code (IPC): is a model plumbing code developed by the International Code Council (ICC). It has been adopted for use as a base code standard in Ogden City.