Sewer Lateral Connection Information

This information is a guideline to answer commonly asked questions concerning the connection of a sewer lateral service from a residence. Definitions used in this outline are:

Do I need a permit from the DPW to work perform work on a sanitary sewer connection?

Any work done to the sanitary sewer outside of a building, including a cap off requires a permit from the DPW and a Sewer Bond. The Building Department has jurisdiction and requires a permit for work within the building envelope and the penetration through the foundation wall.

What do I need to pull a permit with the DPW?

You must present a sketch of the proposed work in accordance with the attached sample sketch, when applying for the permit. The sketch of proposed work shall include the: proposed sewer location; type and size of pipe; locations of all cleanouts, bends, and connections; pump location (if applicable); type of bedding material proposed; or other relevant information detailing proposed work.

You must be a licensed plumber and present your license. Acceptable State of Connecticut Department of Consumer Protection licenses are; P-1, P-3, P-7, and W-9. The permit must be signed in the presence of the Town of Darien representative.

A permit fee of $200.00 must be paid to the Town of Darien.

The plumber must post a Sewer Connection Bond (form attached) of $3,000 (or $3,000 certified bank check). Bond will be returned or refunded upon a satisfactory final inspection of the sewer work including submission of an acceptable "As Built" drawing of work performed. A sample As Built is attached to this information packet.

No permit shall be issued unless all above conditions have been met and a sewer inspector has reviewed and approved of the sketch of proposed work. You may set up an appointment to meet with a sewer inspector, or leave information and you will be notified of review results.

If your project involves work on town owned property, you must also obtain a Street Opening Permit from the DPW ($100.00 permit fee, CBYD #, Insurance certificate, and a street opening bond $3,000 (not the same as a sewer bond).

Definitions used in this outline are:

Main Gravity Sewer: is located in the street, collects wastewater from house laterals, discharges into wastewater pumping stations which transport it to the treatment plant in Stamford. Installation and maintenance of all Main Gravity Sewers falls under the jurisdiction of the Darien Sewer Commission. Main gravity sewers are 8 inches in diameter or larger and have manhole access at appropriate intervals. Connections to main line sewers must be made with approved saddles and encased in concrete. A Sewer Lateral Form (attached) must be submitted to the DPW when connecting to the sewer main.

Gravity Sewer Lateral: is the pipe which goes from a residence to the main gravity sewer. Construction of all laterals must be in accordance with Sewer Commission regulations, and all laterals are inspected by the Superintendent of Sewer Services when they are installed. Laterals are owned and maintained by the owner of the property. Gravity lines are to have a cleanout within 5ft of the foundation, every 75 ft. thereafter.

Connection to the sewer involves the following steps:

Obtain a qualified / licensed contractor to perform the work, the contractor must,
Call Before You Dig (CBYD).
Submit a sketch of proposed work, arrange inspection by town.
Obtaining the necessary permit(s) Sewer and Street Opening if necessary.
Submit as built sketch in accordance with permit package.

Sewers must be installed by a plumber licensed in the State of Connecticut.

The following State Plumbing licenses are acceptable: P-1, P-3, P-7, W-9.
A journeyman is not a contractor, but is a tradesman who is licensed to install sewer lines. If a specific Contractor does not have a licensed plumber from his staff on the jobsite, he must have a licensed journeyman present with one of the following licenses:
P-6, W-8 P-2, or P-4.

Please note: That a Connecticut State Health Department Septic Installers License is ***not*** valid for sanitary sewer connections.

Permits must be obtained by a licensed contractor prior to installation of the sewer lateral. Private homeowners cannot take out a sewer connection permit unless they have the credentials. **The Sewer Commission also requires 24 hours notice before the construction work starts, so that a inspection of the sewer lateral by the Superintendent of Sewer Services can be arranged.**

If proper advance notice is not given to the Sewer Inspector, if the connection is not complete, or if the connection fails inspection, the next scheduled inspection of the connection will be at the Sewer Inspectors discretion. The licensed plumber (permittee) is responsible for the work.

Any work in or within 50 ft. of a wetland or watercourse, is a regulated activity and requires a permit from the Darien Environmental Protection Commission. The Darien Health Dept. may require existing septic tanks to be abandoned in accordance with Health Dept. regulations.

What type of pipe materials can be used:

Acceptable pipes are:

4" or 6" Diameter Heavy Duty Cast Iron, pipe type: ASTM A-74 with bell and spigot joints or ASTM A-888 with Cast Iron split sleeve bolted joints with rubber gasket or 3" wide, heavy duty, stainless steel banded coupling with rubber gasket clamp all (ANACO SD 4000). Cast Iron can be used in most applications especially under a driveway if there is less than 4 ft. of cover, and is also the requirement to go through the foundation, if a pipe does not already exit the foundation or needs to be replaced.

4" or 6" Diameter C 900 PVC pipe with rubber compression gasket joints, is a stronger form of plastic pipe that can also be used where there is less than 4 ft of cover, and is preferred near water supply areas, or pipes.

6" Diameter SDR-35 PVC: pipe can be used where there is more than 4ft of cover, with rubber compression gasket joints.

4" or 6" Diameter Schedule 40 PVC: pipe can be used were there is more than 4ft of cover, with rubber compression gasketed couplings (Harco Mfg. ASTM D 3139) or Solvent weld couplings/ fittings using the proper two step PVC solvent solution procedure.

4" or 6" Diameter Ductile Iron: pipe with rubber compression gaskets can be used in almost any application.

How Deep does the pipe need to be?:

The ideal amount of cover for the lateral should be at least 4 ft, this is to protect the lateral from freezing and movement due to the freeze and thaw cycle, also to protect it from breaking if it is located in a driveway, or other traffic areas.

Check Valves:

Any building whose first floor elevation is below or at the gutter line elevation of the roadway, shall install a check valve.

Pitch of the Lateral:

Gravity sewers are designed to constantly flow downstream. Therefore, the minimum slope which is allowed on a sewer lateral connection is ¼" per ft. In homes which have very flat yards or have some type of hardship this minimum slope requirement may be waived, but only with the approval of the Superintendent of Sewer Services. In some cases where a gravity sewer installation is not possible a pump system may be required.
Under no circumstances will an installation of less than 1/8" per ft. be permitted.

Bedding for the pipe:

The material that is excavated from the pipe trench cannot be used as bedding for the sewer lateral,unless a certified sieve analysis is performed on this material and the results meet CONNDOT specification M .01.01. Gradation of Aggregates: No.6; No.8; or, No.67 or CONNDOT specification section M.03.01-2. There should be 6" of bedding below the pipe and 6" on the sides and top. The bedding shall be in place at time of final inspection with the joints exposed.

Where should the lateral be located?

The Sewer Commission requires that all fixtures within a home be tied into the sewer system at the time of the connection. Therefore, homes which have separate drywells for laundry facilities or kitchens must have these facilities tied into the main sewer pipe when connecting to the gravity sewer. A plumber should be consulted to determine whether it would be more economical to tie in these fixtures on the inside or outside of the homes.
It is usually up to the property owner (with assistance from a Contractor), to determine the route of the lateral pipe. In those houses which have a septic system in the back yard, it may be less expensive to redo the plumbing inside the basement so that the lateral goes out the front of the house, rather than construct a lateral all the way around the outside of the house.

Pump Lateral Installations:
Lateral lines must be at a depth of 4ft because the line is always charged, and the base of the pump must be encased in concrete per manufactures specification. The pipe materials that can be used are 1 ½" or 1 ¼" Sch. 40 PVC, SDR-9, SIDR-7, or DR-9 all pipes must be rated at a minimum of 200 psi. If the lateral line connects to a mainline pressure system there must be a check valve between the individual house pump and the road shut off valve. Fernco's are **NOT** allowed on pressure lines, joints should be threaded compression or glued.

Other things to keep in mind:

The longer the run of the pipe the more expensive it will be, so try to pick the most direct route. Bends can be installed on a lateral line, this can be done to avoid obstacles. Bends can never be more than 45 degrees, 90 degree bends or fittings of any kind are not allowed. Two 45 degree bends with a 8 inch section of straight pipe between them may be used to create a bend.

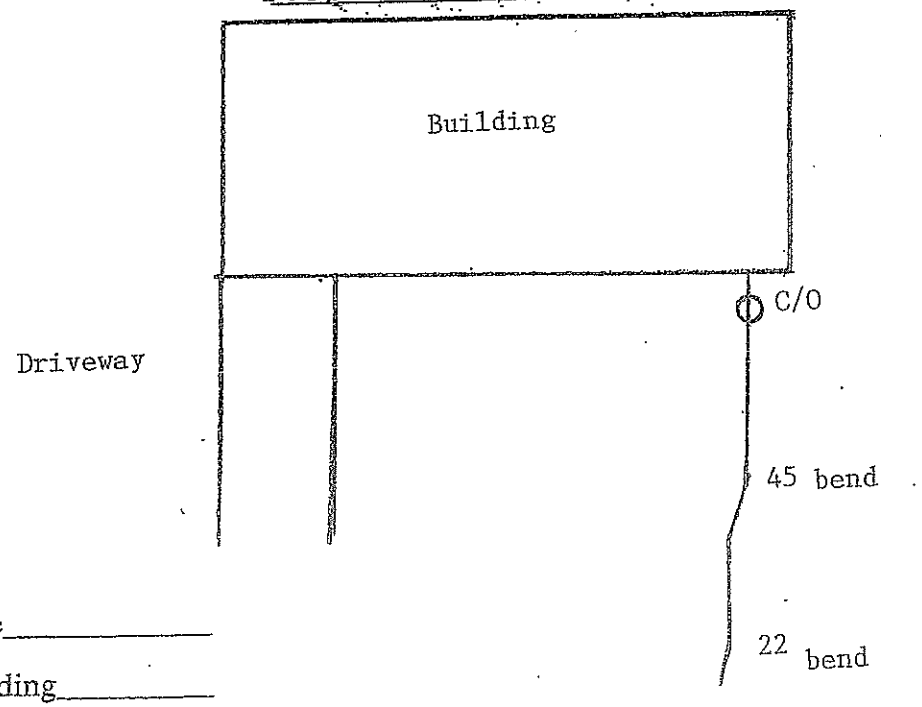
Gravity lines: Require a cleanout be installed at the building foundation, and at a spacing of no more than 75 ft for the remainder of the connection. This allows the lateral to be flushed out if it clogs. Cleanouts extend vertically from the lateral pipe to within six inches below or grade level. The building code requires that a 4" cast iron be used through the foundation wall.

NOTE: If you have an old septic system it must be pumped, crushed, and filled or pumped and filled. The contractor must contact Vincent Proto in the Health Dept. at 656-7324 for permits, inspections, or other requirements of that department. Also the sewer pipe that comes through the foundation wall including the first 5ft. of the sewer lateral starting at the outside foundation wall falls under the jurisdiction of the Building Dept. 656-7347., and they should be notified simultaneously by the contractor upon request of the final sewer inspection by the DPW.
Final Inspection: The contractor must make an appointment for the final inspection at least 24 hours in advance (656-7396) or (656-7365). No inspections shall be scheduled without the proper permits in place. At the time of the final inspection, all the connections should be made, if it is a pump installation, shut off, and check valves must be in place and the base of the pump should be encased in concrete. Also imported bedding for the pipe must be in place leaving all the connections open for view. *No section* of the lateral installation can be backfilled before the final inspection, or the contractor may be asked to uncover the lateral.

If you have a special situation that is not covered here, have any questions, or want to schedule an inspection you can reach the Town of Darien DPW at 656-7346.

Anthony Taccone 656-7396 or Darren Oustafine 656-7365

Proposed Sketch Sample



Type of Pipe_____

Type of Bedding_____

BUILDING SEWER CONNECTION PERMIT BOND #_____

Know all men by these presents, that we, _____, of the Town of_____, County of _____, State of _____, As Principal and the _____, State of _____, having an office and place of business at _____, as Surety, are held and firmly bound unto the TOWN OF DARIEN, CONNECTICUT, in the penal sum of Three Thousand Dollars ($3,000) lawful money of the United States of America, to be paid to the OF DARIEN, CONNECTICUT, for which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, firmly by these presents.

WHEREAS, THE ABOVE NAMED PRINCIPAL HAS RECEIVED, OR MAY UPON APPLICATION RECEIVE, A PERMIT OR PERMITS FROM THE TOWN OF DARIEN, CONNECTICUT TO PERFORM WORK ON A SANITARY SEWER BUILDING CONNECTION WITHIN SAID TOWN OF DARIEN, CONNECTICUT; AND,

WHEREAS, THE SAID PRINCIPAL HAS UNDERTAKEN AND DOES HEREBY AGREE TO COMPLY WITH ALL THE RULES, REGULATIONS AND RESTRICTIONS OF SAID TOWN OF DARIEN, CONNECTICUT IN REGARD TO SAID PEMIT OR PERMITS INCLUDING PROVIDING AN AS BUILT RECORD DRAWING OF SAID BUILDING SEWER CONNECTION TO THE SATISFACTION OF THE SEWER SUPERINTENDENT PER DARIEN CODE OF ORDINANCE SECTION 3A-15, ENACTED ON AUGUST 2, 2005

NOW THEREFORE, IF THE SAID PRINCIPAL, HIS SERVANTS, AGENTS OR EMPLOYEES WELL AND TRULY PERFORM AND FULFILL ALL THE UNDERTAKINGS, COVENANTS, TERMS, CONDITIONS, AND AGREEMENTS SPECIFIED IN SAID PERMIT OR PERMITS, INCLUDING SUBMISSION OF AN AS BUILT RECORD DRAWING OF SAID BUILDING SEWER CONNECTION TO THE SATISFACTION OF THE SEWER SUPERINTENDENT, THEN THIS OBLIGATION SHALL BE VOID, OTHERWISE, TO REMAIN IN FULL FORCE AND EFFECT.

NOW THEREFORE, IF SAID PRINCIPAL, HIS SERVANTS, AGENTS OR EMPLOYEES FAIL TO PERFORM AND FULFILL ALL THE UNDERTAKINGS, COVENANTS, TERMS, CONDITIONS, AND AGREEMENTS SPECIFIED IN SAID PERMIT OR PERMITS, INCLUDING SUBMISSION OF AN AS BUILT RECORD DRAWING OF SAID BUILDING SEWER CONNECTION TO THE SATISFACTION OF THE SEWER SUPERINTENDENT, WITHIN SIX (6) MONTHS OF THE FINAL SEWER INSPECTION BY THE TOWN OF DARIEN CONNECTICUT, THEN THIS OBLIGATION SHALL BE AUTOMATICALLY DEFAULTED AND FORFEITED TO SAID TOWN OF DARIEN CONNECTICUT.

IN WITNESS WHEREOF, WE HAVE HEREUNTO SET OUR HANDS AND SEALS

THIS_____ DAY OF _____20___.

WITNESS_____BY_____

WITNESS_____BY_____

Affix
Embossed
Seal
Here

TOWN OF DARIEN
DEPARTMENT OF PUBLIC WORKS
TOWN HALL, 2 RENSHAW ROAD
DARIEN, CONNECTICUT 06820-5397
TELEPHONE (203) 656-7346

ROBERT S. STEEGER, P.E.
DIRECTOR OF PUBLIC WORKS

DARREN OUSTAFINE, P.E.
ASSISTANT DIRECTOR

As Built Sketch Checklist
(to be completed by Installer)

1. Use a straight edge.
2. All final sketches should be on a single piece of paper. Plot plans or surveys marked up are acceptable.
3. Draw outline of house and all other buildings, driveways, stone walls, property lines, sewer manholes, driveways, piers, or other significant surface features (manmade or natural).
4. Show building orientation in relation to road.
5. Draw any existing or proposed sewer work and label all.
6. Include a north arrow on all sketches (approximate).
7. Include property address, installers name, date of work, and preparer of sketch.
8. Label the length and type of pipe used (ie: X feet of 6" diameter Schedule 40 PVC).
9. Locate any cleanouts, change in directions beginning or termination points of work, any and all connection points of other sewers, and provide measurements.
10. Show mainline sewer in roadway or easement and label direction of flow.
11. Include all information as requested.
12. A sample sketch is attached, a final "As Built" must be submitted no later than 14 days after the final inspection or new permits will not be issued.

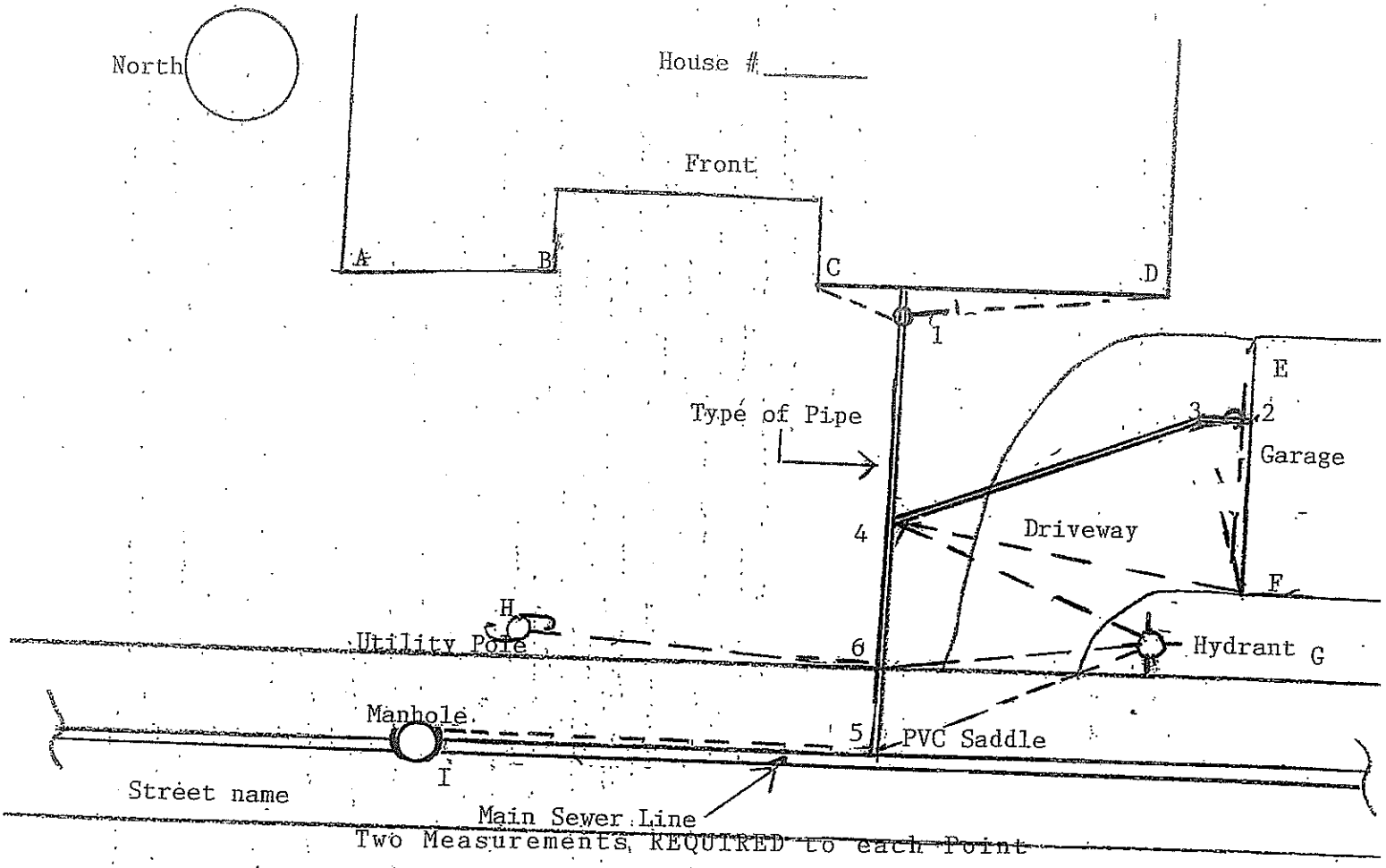
Sample As Built Sketch

Property Address

Sketch Prepared By

Contractor

Date



	1 Cleanout	2 Cleanout	3 22°	4 wye tee	5 saddle	6 Property line
A corner	—	—	—	—	—	—
B. Corner	—	—	—	—	—	—
C Corner	20 ft	—	—	—	—	—
D Corner	30 ft	—	—	—	—	—
E Garage	—	15 ft	20 ft	—	—	—
F Garage	—	20 ft	30 ft	35 ft	—	—
G Hydrant	—	—	—	30 ft	35 ft	35 ft
H Pole	—	—	—	—	—	40 ft
I manhole	—	—	—	—	40 ft	—

Darien Sewer Lateral Form

Indicate which side of main pipe the lateral was installed
Use separate form for each lateral connection
heck all boxes that apply

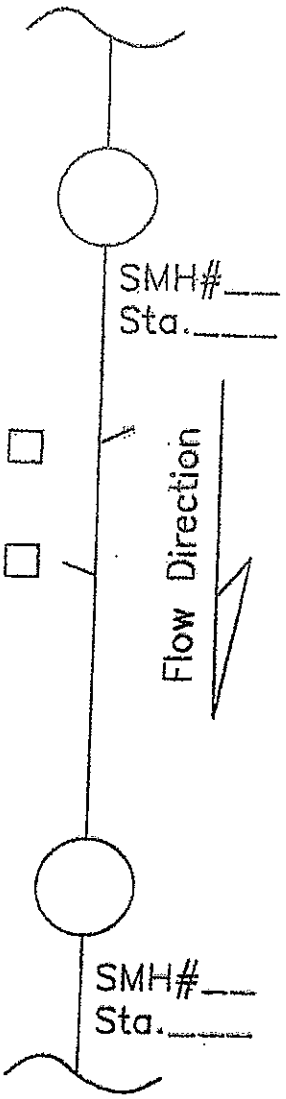
Contractor_____
Date of Installation_____
Street and Address_____,
Darien, CT 06820
Town of Darien Contract Number _____
Owner or Developers Name_____

1. Connection to Main Sewer
A) Made with Wye Fitting ☐
B) Made with Tee Fitting ☐
C) Made with Approved Saddle ☐
D) Encased in Concrete ☐

2. Lateral Pipe Installed
A) Using C.I Soil Pipe ☐
) Using PVC Pipe ☐
C) Using Rubber Gasket Joint ☐
D) Using plug at end of pipe ☐

3. Following Backfill of Pipe
A) Stake set over end of Lateral ☐
B) Stake marked to show depth of invert of pipe ☐

4. Diameter of Service Connection_____
5. Elevation of Lateral End_____
6. Depth below Grade to Invert_____
7. Distance from downstream Manhole_____
center of MH to center of Lateral Connection)



This form is to be completed when a new tap is made onto the main.