Center Township Sanitary Authority

BEAVER COUNTY, PENNSYLVANIA

SEWER SYSTEM

RULES AND REGULATIONS

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CENTER TOWNSHIP SANITARY AUTHORITY
BEAVER COUNTY, PENNSYLVANIA

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ARTICLE I

DEFINITIONS

Unless the context specifically indicates otherwise, the following words and terms used in these Rules and Regulations shall have the following meanings:

Section 101. Authority shall mean Center Township Sanitary Authority, situated in Beaver County, Pennsylvania.

Section 102. Board shall mean the elected and appointed members of the Board of Center Township Sanitary Authority, as now or hereafter constituted, and its duly authorized agents or representative.

Section 103. Sewage shall mean a combination of water-carried wastes from residences, business buildings, institutions, and industrial and commercial establishments, together with such ground, surface or storm water as may present.

Section 104. Sanitary Sewage shall mean the normal water-carried household and toilet wastes from residences, business buildings, institutions, industrial and commercial establishments, exclusive of storm water runoff, surface water or ground water.

Section 105. Industrial Wastes shall mean any liquid, gaseous or water-borne wastes from industrial processes or commercial establishments, as distinct from sanitary sewage.

Section 106. Garbage shall mean solid wastes from the preparation, cooking and dispensing of food and from the handling, storage and sale of produce.

Section 107. Properly Shredded Garbage shall mean the wastes from the preparation, cooking and dispensing of food and from the handling, storage and sale

of produce that have been shredded to such degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half inch (1/2") in any dimension.

Section 108. Storm Water Runoff shall mean that portion of the rainfall, which reaches a channel, trench, sewer or sink.

Section 109. Sewer shall mean a pipe or conduit for carrying sewage.

Section 110. Combined Sewer shall mean a sewer designed to receive both sewage and storm water runoff, which has been approved for such purpose.

Section 111. Sanitary Sewer shall mean a sewer, which carries sewage, and to which storm, surface and ground waters are not intentionally admitted.

Section 112. Storm Sewer shall mean a sewer which is intended to carry storm water runoff, surface waters, groundwater drainage, etc., but which is not intended to carry any sanitary sewage or polluted industrial waste.

Section 113. Public Sanitary Sewage System (sometimes called the "Sewer System") shall mean all sanitary or combined sewers, all pumping stations, all force mains, all sewage treatment works, and all other sewerage facilities owned or leased and operated by the Authority for the collection, transportation and treatment of sanitary sewage and industrial wastes, together with their appurtenances, and any additions, extensions or improvements thereto. It shall also include sewers within the Authority's service area, which serve one or more persons and discharge into the public sanitary sewerage system even though those sewers may not have been constructed by the Authority and are not owned or maintained by the Authority. It does not include separate storm sewers or culverts which have been constructed for the sole purpose of carrying storm and surface runoff, the discharge from which is not and does not become tributary to the sewage treatment facilities.

Section 114. Occupied Building shall mean any structure erected and intended for continuous or periodic habitation, occupancy or use by human beings or animals, and from which structure sanitary sewage and industrial wastes, or either thereof, is or may be discharged.

Section 115. Premises Accessible to the Public Sanitary Sewage System shall mean any real estate abutting on or adjoining or having access to any street, alley or right-of-way in which a sewer is located which ultimately connects to the public sanitary sewage system and the building constructed thereon is within 150 feet of a sanitary sewer service connection.

Section 116. Person shall include natural persons, partnerships, associations and corporations, public or private.

Section 117. Residential Sewer Service means the provision of sewer collection service to premises with one or more residential dwelling units, excluding the provision of sewer collection service herein defined as “Commercial Sewer Service.”

Section 118. Commercial Sewer Service means the provision of sewer collection service to premises used for a business, trade, manufacturing or processing activity, including without limitation hotels, motels, rest homes, Church, schools and all other services not hereinafter defined as a “Residential Sewer Service.” The provision for sewer service to premises used for both commercial and residential purposes shall be considered Commercial Sewer Service.

Section 119. Equivalent Dwelling Unit (EDU) For calculation of tapping fee, an EDU shall mean a single family dwelling or that part of a multiple family dwelling or commercial or industrial establishment with sewage flows equal to 211 gallons per day, or less, as determined by sewage flow estimates based on generally accepted standards in the industry and approved by the Authority.

Section 120. pH shall mean the logarithm to the base 10 of the reciprocal of the hydrogen ion concentration expressed in moles per liter. It shall be determined by one of the acceptable methods described in the latest edition of "Standard Methods for the Examination of Water and Wastewater" published jointly by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation.

Section 121. Suspended Solids shall mean solids that either float on the surface or are in suspension in water, sewage, industrial waste or other liquids, and which are removable by laboratory filtration. The quantity of suspended solids shall be determined by one of the acceptable methods described in the latest edition of "Standard Methods for the Examination of Water and Wastewater", cited above.

Section 122. B.O.D. of Sewage or Industrial Waste shall designate its "Biochemical Oxygen Demand" and shall mean the quantity of oxygen utilized in the biochemical oxidation of the organic matter in said sewage or industrial waste under standard laboratory procedure in 5 days at 20^{o} C., expressed in milligrams per liter by weight. It shall be determined by one of the acceptable methods described in the latest edition of "Standard Methods for the Examination of Water and Wastewater", cited above.

Section 123. Abnormal Industrial Waste shall mean any industrial waste having a suspended solid content or B.O.D. appreciably in excess of that normally found in municipal sewage. For the purposes of these regulations any industrial waste containing more that 250 milligrams per liter of suspended solids, or having a B.O.D. in excess of 250 milligrams per liter, shall be considered an abnormal industrial waste regardless of whether or not it contains other substances in concentrations differing appreciably from those normally found in municipal sewage.

Section 124. F.O.G. shall mean fats, oil or grease in a physical state such that it will separate by gravity from wastewater by treatment in an approved pretreatment facility. A wastewater shall be considered free of floatable fat if it is properly pretreated and the wastewater does not interfere with the collection system.

Section 125. Unpolluted Water or Waste shall mean any water or waste containing none of the following; free or emulsified grease or oil; pH less than 6.0 or greater that 9.0; phenols or other suspended imparting taste and odor to receiving waters; toxic or poisonous substances in suspension, colloidal state or solution; obnoxious or odorous gases. It shall contain not more than 1,000 milligrams per liter by weight or dissolved solids of which not more than 250 milligrams per liter shall be as chloride and not more than 10 milligrams per liter each of suspended solids and B.O.D. The color shall not exceed 50 color units. Analyses for any of the above-mentioned substances shall be made in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater", cited above.

Section 126. Water Authority shall mean any publicly or privately owned duly authorized agency, corporation or organization, which is the approved purveyor of the public water supply within the limits of the Authority's service area.

Section 127. "Shall" is mandatory; "may" is permissive.

Section 128. Free and Clear is a term meaning that there is free access to the manholes for our field staff to work. This would be enough room for two men to work to remove the lid and gain access with material and equipment. Trees, shrubs and other plantings should be placed far enough away (out of the right-of-way) to allow access by our field staff and not to block access to the manhole. This will help minimize property damage in the event of an emergency.

ARTICLE II

DISCHARGE OF SANITARY SEWAGE TO PUBLIC SANITARY SEWAGE SYSTEM REQUIRED

Section 201. All persons owning any occupied building now erected within the Authority's service area upon premises accessible to the public sanitary sewage system shall, at their own expense, make connection with the public sanitary sewage system in accordance with applicable Connection Ordinance in effect in the Authority's service area, if they are not presently so connected.

Section 202. All persons owning any premises within the Authority's service area assessable to the public sanitary sewage system upon which an occupied building is subsequently erected shall, at the time of erection of such building, and at their own expense, make connection with the public sanitary sewage system in accordance with the applicable Connection Ordinance in effect in the Authority's service area.

Section 203. All persons owning any occupied building within the Authority's service area upon premises which subsequently become accessible to the public sanitary sewage system shall, at their own expense, make connection with the public sanitary sewage system within 90 days after proper notice to do so has been given in accordance with applicable law. The Authority reserves the right to extend an extension upon written request.

Section 204. All connections to the public sanitary sewage system shall be made in accordance with Article IX hereof.

Section 205. No privy vault, cesspool, septic tank, mine hole or similar receptacle for human excrement shall presently or at any time hereafter be connected with the public sanitary sewage system.

ARTICLE III

EXCLUSION OF STORM WATER RUNOFF

Section 301. The discharge of storm water runoff to sanitary sewers is prohibited.

Section 302. All persons connecting to the public sanitary sewage system shall provide adequate means for excluding storm water runoff in the event the connection is made to a sanitary sewer.

Section 303. No person connected to a sanitary sewer shall connect any roof drain or foundation drain thereto or permit any such drains to remain connected thereto, nor shall he permit, allow or cause to enter into any sanitary sewer any spring water or surface water from any other source.

Section 304. In the event connection of storm water is found, the property owner will be notified by the Authority to remove such connection within 90 days of notice. Failure to do so may result in loss of sewer service.

Section 305. The provisions of these Rules and Regulations do not prohibit the present or future discharge of storm water runoff to combined sewers or storm sewers or to natural water courses within the Authority's service area.

ARTICLE IV

ADMISSION OF INDUSTRIAL WASTES TO PUBLIC SANITARY SEWAGE SYSTEM

Section 401. The economy and desirability of the combined treatment of industrial wastes and sanitary sewage is recognized. In general, any and all industrial wastes may be discharged to the public sanitary sewage system except those, which are deemed harmful to the system or are specifically prohibited by these Rules and Regulations. However, it is also recognized that the treatment of abnormal industrial wastes may add to the cost of operating and maintaining the public sanitary sewage system. Such additional cost must therefore be borne by the person or persons receiving the benefit of such treatment.

Section 402. The Authority reserves the right to refuse connection to the public sanitary sewage system for deleterious industrial wastes, or to compel discontinuance of the use of the system for such wastes, or to require pretreatment and/or equalization of flow thereof in order to prevent harmful or adverse effects upon the system. The design, construction and operation of such pretreatment and/or flow equalization facilities shall be made at the sole expense of the person discharging said wastes and shall be subject to the approval of the Board or its designated representative.

Section 403. In general, industrial waste shall be considered harmful to the public sanitary sewage system if it may cause any of the following damaging effects.

A. Chemical reaction either directly or indirectly with the materials of construction of the public sanitary sewage system in such a manner as to impair the strength or durability of any sewerage structures.

B. Mechanical action that will destroy any sewerage structures.

C. Restriction of the hydraulic capacity of any sewerage structures.

D. Restriction of the normal inspection or maintenance of any sewerage structures.

E. Danger to public health and safety.

F. Obnoxious conditions inimical to the public interest.

G. Any waste which will interfere with the biological treatment process.

H. Any waste which will interfere with the approved sludge disposal method.

Section 404. When required by the Board, any person discharging to the public sanitary sewage system any industrial wastes, or industrial wastes and sanitary sewage together, shall install a suitable manhole or manholes or metering chamber on his connecting sewer or sewers to facilitate observation, sampling and measurement of the combined flow or wastes from his premises. Such manhole or manholes or metering chamber shall be accessible and safely located and shall be constructed in accordance with plans approved by the Board or its designated representative. The manhole or manholes or metering chamber shall be installed by such person at his expense and shall be maintained by him so as to be safe and accessible to the Board or its designated representative at all times. The construction and maintenance of such manhole or metering chamber shall be mandatory for the producers of abnormal industrial wastes, and if deemed necessary by the Board, flows from such manhole or metering chamber shall be continuously monitored, transmitted and recorded by means of an approved receiving device to be located at the treatment plant.

ARTICLE V

UNACCEPTABLE SANITARY SEWAGE AND INDUSTRIAL WASTES

Section 501. The discharge of excessive amounts of unpolluted water or waste to a sanitary sewer is expressly prohibited. The Board reserves the right to define the amount it deems excessive in each particular instance based upon the hydraulic capacity of the tributary sewer system and the sewage treatment plant.

Section 502. The discharge of garbage to the public sanitary sewage system is expressly prohibited unless the garbage is first properly shredded.

Section 503. No sanitary sewage or industrial waste from any property other than that for which a permit has been issued as provided in Article IX hereof shall be discharged to the public sanitary sewage system.

Section 504. No person shall discharge to the public sanitary sewage system any sanitary sewage or industrial wastes having any of the following characteristics:

A. Wastes containing liquids, solids or gases, which by reason of their nature or quality may cause fire, explosions, or be in any other way injurious to persons, the structures of the public sewage system or its operation.

B. Wastes having a temperature in excess of 150^{o} F, or less than 32^{o} F.

C. Wastes having a pH lower than 6.0 or higher than 9.0 or having any corrosive properties capable of causing damage or hazards to structures, equipment or personnel of the public sanitary sewage system. Where the Board deems it advisable, it may require any person discharging industrial wastes to install and maintain, at his own expense, in a manner approved by the Board or its designated representative, a suitable device to continuously measure and record the pH of the wastes so discharged.

D. Wastes containing any noxious or malodorous gas or substance which either singly or by interaction with sewage or other wastes is, in the opinion of the Board, likely to create a public nuisance or hazard to life, or prevent entry to sewerage structures for their maintenance and repair.

E. Wastes containing ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, hair, chemical or paint residues, greases, lime slurry or viscous materials or such character or in such quantity that, in the opinion of the Board, that may cause an obstruction to the flow in the sewers or otherwise interfere with the proper operations of the public sanitary sewage system. Attention is called to the fact that the maximum permissible concentration will vary throughout the public sanitary sewage system depending upon the size of the particular interceptor sewer receiving the same and the flows therein.

F. Wastes containing insoluble, non-flocculent substance having a specific gravity in excess of 2.65.

G. Wastes containing soluble substances in such concentration as to cause the specific gravity of the waste to be greater than 1.1.

H. Wastes containing any of the following substances in solution or in suspension in concentrations exceeding those shown in the following table:

Phenolic compounds as C_5H_6OH	1.0 mg/l
Cyanides as CN	NDl
Cyanates as CNO	ND
Iron as Fe	0.3 mg/l
Trivalent Chromium as Cr+	0.5 mg/l
Hexavalent Chromium as Cr	0.5 mg/l
Nickel as Ni	0.5 mg/l
Copper as Cu	0.03 mg/l
Lead as Pb	0.5 mg/l
Zinc as Zn	0.15 mg/l
Manganese	0.05 mg/l

I. Wastes containing more than 50 mg/l by weight of fat, oil or grease.

J. Wastes containing more than 10 mg/l of any of the following gases; Hydrogen sulfide, sulfur dioxide, nitrous oxide, or any of the halogens.

K. Wastes containing gases or vapors, either free or occluded, in concentration toxic or dangerous to humans or animals.

L. Wastes containing toxic substances in quantities sufficient to interfere with the biochemical processes of the sewage treatment works or that will pass through the treatment process and still exceed the state and federal requirements for the receiving stream.

M. Wastes containing toxic radioactive isotopes without a special permit.

N. Wastes which interfere with the approved sludge disposal method.

O. Medical Wastes

ARTICLE VI

SEWAGE COLLECTION, TRANSPORTATION AND TREATMENT CHARGES

Section 601. There is imposed upon the owners of, or the users of water in or on, all properties served by the public sanitary sewage system, sewage collection, transportation and treatment charges for the use of said system, payable in the amounts and as provided in Appendix “A” Fee & Rate Schedule heretofore adopted by the Board and as it is hereinafter from time to time amended and modified. Said owners and users will be jointly and severally liable for the payment of said sewage collection, transportation and treatment charges and the penalties therein prescribed for delinquent payments thereof.

Section 602. All bills for sewage collection, transportation and treatment charges shall be due (when rendered) on the date indicated in the billing and shall be subject to the penalty provisions set forth in the Authority's Sewer Rate Resolution, Owners and, where adequate arrangements have been made with the Authority, users will be billed periodically for the sewage collection, transportation and treatment charges in accordance with the billing practices of the Authority. Water shall not be turned on until such time as the tenant pays a deposit as defined in Appendix “A” Fee & Rate Schedule if applicable in an amount to be determined from time to time by the Authority Board.

Section 603. The Authority's initial sewage collection, transportation and treatment charges information are in the Fee & Rate Schedule provided in Appendix “A”. The Authority may, if it deems advisable, elect at some time in the future to impose, in whole or in part, the sewage collection, transportation and treatment charges on such other basis as it may determine. When water usage is used as the basis for said charges, the volume of water to be used for billing purposes shall be

based upon water meter readings of the Water Authority or, in the absence of such readings, upon estimates made by the Authority or flat rate charges.

Section 604. When water usage is used as the basis of charges, then if an owner or user obtains part of all of the water used in or on a property from sources other than the Water Authority, such owner or user may, after written approval from the Authority, at no expense to the Authority or the Water Authority, install and maintain a water meter or meters satisfactory to the Authority and the Water Authority for measuring all water used other than that obtained from the Water Authority, and the quantity of water used to determine the sewage collection, transportation and treatment charges shall be the quantity of water measured by all such meters plus the quantity of water obtained from the Water Authority. In lieu of such additional meters, the Board may establish under the Sewer Fee & Rate Schedule a flat rate charge, which shall be applicable to such non-metered water usage.

Section 605. When water usage is used as the basis of charges, then if it is established to the satisfaction of the Board that a portion of the water used in or on any property served by the public sanitary sewage system does not and cannot enter said system, and in the event that the total water used in or on said property exceeds 100,000 gallons per quarter, the Board may determine, in such manner and by such method as it may deem practical, the percentage of the water entering the public sanitary sewage system, or the Board may require or permit the installation of additional meters in such manner as to determine either the quantity of water excluded from the public sanitary sewage system or the quantity of water, sewage or industrial waste actually entering the public sanitary sewage system, exclusive of storm water runoff. In such cases, the sewage collection, transportation and treatment charge shall be based upon the quantity of water estimated, measured or computed by the Board to be actually entering the public sanitary sewage system, exclusive of storm Water Runoff.

Section 606. When water usage is used as the basis of charges, than any person requesting consideration for a reduction of the amount of the sewage collection, transportation and treatment charges because of water not entering the public sanitary sewage system shall make written application to the Board for such consideration, giving the name of such person, his address and setting forth supporting data fully describing other sources of water, if any, as well as the disposition of water alleged not to be entering the public sanitary sewage system. the application shall be accompanied by a sketch to approximate scale showing the plan of the property, the water distribution system, sewer layout, existing meters, and proposed meters in the scheme to determine the quantity of flow entering, or not entering, the public sanitary sewage system. The cost of furnishing, installing and maintaining any Deduct Meters other than those utilized to measure water purchased from the Water Authority shall be borne by the applicant (refer to Appendix “A” Fee & Rate Schedule for costs). The type, size, location, arrangement and maintenance of such meters shall be subject to the approval of the Board and the Water Authority.

ARTICLE VII

SURCHARGE FOR CERTAIN INDUSTRIAL WASTES

Section 701. Although the sewage treatment works will be capable of treating certain abnormal industrial wastes as heretofore defined in Article I, the actual treatment of such wastes may increase the cost of operating and maintaining the public sanitary sewage system. Therefore, there will be imposed upon each person discharging such industrial waste into the public sanitary sewage system a surcharge, or surcharges, which are intended to cover such additional cost. Such surcharges shall be in addition to the regular sewage collection, transportation and treatment charges set forth in the Sewer Rate Resolution of the Authority, and shall be payable as therein provided.

Section 702. The strength of any industrial waste, the discharge of which is to be subject to surcharge, shall be determined monthly, or more frequently as the Board shall determine, from samples taken either at the manhole or metering chamber referred to in Article IV hereof, or at any other sampling point mutually agreed upon by the Board and the producer of such wastes. The frequency and duration of the sampling period shall be such as, in the opinion of the Board, will permit a reasonably reliable determination of the average composition of such waste, exclusive of storm water runoff. Samples shall be collected or their collection supervised by a representative of the Board and shall be in proportion to the flow of waste, exclusive of storm water runoff, and composited for analysis in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater", cited above. Except as hereinafter provided, the strength of the waste so found by analysis shall be used for establishing the surcharge or surcharges. However, the Board may, if it so elects, accept the results of routine sampling and analyses by the producer of such wastes in lieu of making its own samplings and analyses.

Section 703. In the event any industrial waste is found, by the Board, to have a B.O.D. in excess of 200 milligrams per liter, the producer of said waste shall be surcharged an amount equal to the project of the actual volume of wastes in thousand gallons per billing period, exclusive of storm water runoff, discharged to the public sanitary sewage system and the "B.O.D. surcharge rate". The "B.O.D. surcharge rate" shall be determined by the following formula:

Rc = 0.00834 x P (C-200)

Where Rc = The B.O.D. surcharge rate in cents per 1,000 gallons of waste discharged.

P = the average annual fixed, operating and maintenance cost of secondary treatment processes per pound of B.O.D. received at the treatment works and shall be computed annually based upon the current operating budget and shall be set by resolution of the Board. (Prior to completion of the first year of operation the value of "P" shall be assumed to be four (4) cents

C = The average B.O.D. of the industrial waste expressed in milligrams per liter as determined in accordance with Section 702 of this Article.

The figure 200 appearing in the above formula corresponds to the maximum B.O.D. permissible without surcharge. The figure 0.00834 is the factor to convert milligrams per liter to pound per 1,000 gallons. No discount will be permitted for sewage or industrial wastes having a B.O.D. less than 250 milligrams per liter.

Section 704. In the event any industrial waste is found, by the Board, to have an average suspended solids concentration in excess of 250 milligrams per liter, the producer of such waste shall be surcharged an amount equal to the product of the actual volume of wastes in thousand gallons per billing period, exclusive of storm runoff, discharged to the public sanitary sewage system and the "suspended solids surcharge rate". The "suspended solids surcharge rate" shall be determined by the following formula:

Rs = 0.00834 x B (S-250)

Where Rs = The suspended solids surcharge rate in cents per 1,000 gallons of waste discharge.

B = the average annual fixed, operating and maintenance cost of the sludge digestion, sludge drying and sludge disposal operations per pound of suspended solids received at the treatment works and shall be computed annually based upon the current operation budget and shall be set by resolution of the Board. (Prior to completion of the first year of operation the value of "B" shall be assumed to be four (4) cents.

S = The average suspended solids concentration of the abnormal industrial waste expressed in milligrams per liter as determined in accordance with Section 702 of this Article.

The figure 250 appearing in the above formula corresponds to the maximum suspended solids concentration permissible without surcharge. The figure 0.00834 is the factor to convert milligrams per liter to pounds per 1,000 gallons. No discount will be permitted for sewage or industrial wastes having a suspended solids concentration less than 250 milligrams per liter.

Section 705. The surcharge provided for in this Article shall be added to the sewage collection, transportation and treatment charges imposed by the Board under the Sewer Rate Resolution.

ARTICLE VIII

BILLING, COLLECTION AND DELIINQUENT PAYMENT

Section 801. All Bills for services shall be rendered quarterly to the owner of the premises to which said services are supplied. The Authority, at the request of the owner and after proper arrangement, may render its quarterly bills to the tenant of such premises; however, the owner shall not be relieved thereby of liability for the payment of such bills.

Section 802. Every bill for services shall be rendered quarterly and shall be due and payable immediately upon receipt. A penalty of ten per centum (10%) shall be added in every case where payment of any bill for services is not received at the Authority's office by the fifteenth day of the month for which such bill was originally rendered.

ARTICLE IX

CONNECTIONS TO SYSTEM

Section 901. Application for connection to the public sanitary sewage system shall be made to the Board upon the permit form to be formulated and furnished by the Board. Application Fee is shown in Appendix “A” Fee & Rate Schedule.

Section 902. All information requested on said form shall be furnished by the applicant, including the character and use of each structure located upon the property.

Section 903. The application Fee and any required tap connection and inspection fee shall be paid at the time of making application for permission to make a connection.

Section 904. No work shall commence before the payment of the Application Fee and any aforementioned tap connection and inspection fee and issuance of the aforementioned connection permit.

Section 905. Unless written permission is obtained from the Township or the Authority, separate connections and additional tapping fees will be required for each individual occupied building whether constructed as a detached unit or as one of a pair or row. A single connection and a single tapping fee, however, will be permitted to serve a school, factory, apartment house, dormitory, motel or other permanent multiple unit structure whose individual apartments or units may not be subject to separate ownership even though sewage collection, transportation and treatment charges shall be imposed on an Equivalent Dwelling Unit basis in connection therewith.

Section 906. Connections to sanitary sewers shall be completed within ninety (90) calendar days after receipt of proper notice.

Section 907. All connections to the sanitary sewers shall be subject to certain restrictions as to unacceptable sanitary sewage, which are set forth herein in Article V. Any time a sewer line is repaired or altered, an inspection is required by the Authority. The inspection is non-technical and not in-depth but is required for the protection of the authority to ensure legal connections to the main sewer line. The property owner will indemnify and hold harmless the authority from any and all liability in conjunction with the means, methods and techniques used by their contractor for construction same.

Section 908. The designated Inspector of the Board shall be given at least twenty-four (24) hour's notice of the time when such connection shall be made in order that said Inspector can be present to inspect and approve the work of connection. The Inspector shall signify his approval of the connection by endorsing his name and the date of approval on the aforementioned connection permit in the possession of the permittees. All failed inspections will be reported to the property owner.

Section 909. At the time of inspection of the connection the owner or owners of properties shall permit the Inspector full and complete access to all sanitary and drainage arrangements and facilities in each building and in and about all parts of the property. No building sewer line shall be covered over, or in any manner concealed, until after it is inspected and approved by said Inspector.

Section 910. It is the intention of these Rules and Regulations that the entire connection be inspected at one time; however, if the property owner feels that special conditions warrant more than one inspection, he may request the same subject to such additional inspection fees as the Board shall determine.

Section 911. All pipe installed for service laterals shall be either PVC (SDR 26 or Schedule 40) or Ductile Iron Pipe and of at least four (4) inches inside diameter, although a six (6) inch inside diameter is the recommended minimum pipe size. On filled ground or on ground which is not firm, the unsuitable material shall be removed and backfilled with crushed stone. Each section of pipe shall be stamped with the manufacturer's certification. Where reference is made to PaDOT 2A or AASHTO #57 shall be understood to be crushed stone. The use of slag for pipe bedding or backfill is prohibited.

Section 912. Pressure sewer service line material from the grinder pump to the sewer main shall be minimum 1-1/4” diameter, either SDR 11 Polyethylene (PE) or SDR 21 Polyvinyl Chloride (PVC) Pipe. Include a redundant check valve and shutoff (ball) valve of the same type and by the same manufacturer on the pressure sewer service line. Provide valve boxes / service boxes of cast iron construction with cover at grade for access to valves. The property owner owns the valve box and connection to it. The authority owns the service lateral going up to the box within the right-of-way.

Section 913. All sewer pipe shall be installed in strict accord with the manufacturer's recommendations. Where rock trench foundation exists, a 6" AASHTO #57 stone cradle shall be provided under the pipe and one foot over the top of the pipe.

Section 914. All pipe shall be installed with a minimum slope of 1/8" (1%) per foot and a minimum cover of four (4) feet unless otherwise approved. All pipe shall be laid to an even grade and straight alignment to the public sanitary sewer. All pipe shall be laid with full and even bearing and no block supports will be allowed. Bell holes shall be dug to allow sufficient space to properly make each joint. Backfill shall be tamped uniformly around the pipe. All work shall be done in a workmanlike manner and shall provide a durable installation.

Section 915. Unless otherwise approved by the Authority, all pressure sewer service lines shall be installed at a minimum depth of 4 feet cover over the top of the pipe and shall maintain a positive grade avoiding low points as much as possible. The trench shall be excavated to a width that will permit placement of concrete thrust blocks. Provide earth surfaces for thrust blocks that are perpendicular to the direction of thrust and are free of loose or soft material.

Section 916. A PVC or Ductile Iron Pipe Trap with a 4" Vent shall be installed a maximum of five feet (5') from the building. The vent shall be so situated as not to allow the discharge of any surface water to the sanitary sewer. (Reference Appendix “B” – Requirements and Specifications for Sanitary Sewer Line Installation)

Section 917. The use of an inspection port is required and owned by the property owner along with the connection to the service lateral from the main line. The inspection port shall consist of a 6” diameter vertical riser with 6” diameter solid screw-on cap. The inspection port shall be installed by the property owner at the property line or right-of-way line at the point where the sanitary sewer lateral connects to the public sewer system. The inspection port must be laterally supported with properly compacted backfill and must not be installed in driveways or other areas where it would be subject to damage from vehicular traffic and/or used as an area drain for surface water.

Section 918. Commercial installations must also comply with all local construction regulations. All commercial connections to the main sewer line are at the expense of the property owner.

Section 919. Maintenance and repair of all building sewers shall be the responsibility of the property owner who must follow the authority Rule’s & Regulations.

Section 920. Maintenance and repair of all pressure sewer service lines (and grinder pumps) shall be the responsibility of the property owner. The property owner shall grant to the authority the right of entry for purposes of inspection to ensure proper maintenance of the system by the property owner.

Section 921. Manholes on your property. CTSA must have free and clear access at all times. It is strictly prohibited to cover a manhole by placing anything on top of it.

A. It is the current property owner’s responsibility to correct any manhole located on his/her property that has been buried more than 4 inches at any point within its circumference, or is obstructed in any way as to not permit free and clear access.
B. The property owner will be given 30 days to correct the situation via contractor, or by the authority at the property owner’s expense. The work shall be in conformance with the authority’s specifications and inspected by the authority.
C. If the situation is not corrected after 30 days, the authority will have said work performed and bill the property owner for all costs. This cost will become a debt due and payable to the authority.

ARTICLE X

PROPOSED EXTENSIONS OF SYSTEM BY DEVELOPERS

Section 1001. Three (3) copies of plans for proposed extensions shall be submitted to the Board on 24" x 36" sheets showing plan views to a scale of 1" = 50' and profiles to a scale of 1" = 10' vertically and 1" = 50' horizontally, a north point, a suitable title block, date and the name of the engineer or surveyor and imprint of his registration seal.

Section 1002. All sewers shall be designed in accordance with the Domestic Wastewater Facilities Manual of the Pennsylvania Department of Environmental Protection and these Rules & Regulations.

Section 1003. Construction of sewers will not be permitted until all proper permits have been obtained. All construction shall be in accordance with the details contained in Appendix “D”.

Section 1004. Prior to final acceptance of any sewer extensions by the Board, it will be necessary for the developer to furnish to the Board one set of "as built plans" showing the angle and distance between manholes, the top and invert elevation of each manhole and the exact location of all house sewer connections relative to the nearest manhole both downstream and upstream. As-Builts shall be prepared by field surveys. Deliver hard copies and electronic versions of the as-built surveys to the Authority.

Section 1005. Easements shall be recorded in the name of the Authority for all sewers to be constructed outside of dedicated street rights-of-way.

Section 1006. All mainline piping installed shall be either PVC (SDR 35 or SDR 26) or Ductile Iron Pipe. Final selection of mainline piping material shall rest with the Authority. Service line piping shall be SDR26 or Schedule 40 PVC Piping.

Section 1007. Pressure sewer main shall be either DR 11 Polyethylene (PE) or DR 21 Polyvinyl Chloride (PVC) pipe and shall be sized in accordance with site-specific pumping requirements. All PVC pipe shall be standard laying length 14 feet (plus or minus 1') for all sizes. At least 85% of the total footage of pipe of any class and size shall be furnished in standard lengths. The remaining 15% can be furnished in random lengths. Random lengths shall not be less than 10 feet long.

Section 1008. All mainline sewer pipe shall be a minimum of 8" in diameter and have a minimum of laying length of not less than five feet.

Section 1009. The installation of sewers shall start at the lower end of the line and proceed upstream so that the spigot ends point in the direction of flow. The pipe shall be carefully laid to line and grade. The handling, placing and jointing of pipe shall be in strict accordance with the pipe manufacturer's recommendations.

Section 1010. Unless otherwise approved by the Authority, all pressure sewer service lines shall be installed at a minimum depth of 4 feet cover over the top of the pipe and shall maintain a positive grade avoiding low points as much as possible. The trench shall be excavated to a width that will permit placement of concrete thrust blocks.

Concrete blocks shall be cast in place and shall be required to be poured, after installation of the adjacent piping at all fittings installed along the pressure sewer main. The concrete shall be placed such that it is supported against undisturbed earth along the excavated trench wall and the trench bottom and shall be thoroughly worked and vibrated to insure complete contact with the walls of the fittings being restrained. No trench backfill shall be placed at the locations of the thrust blocks until twenty-four (24) hours after placement, and/or until the Authority has inspected the installation. Where existing conditions and/or available space do not permit the installation of concrete thrust blocks, pipes shall be secured with restraining fittings such as Field-Loc Gaskets or EBAA Iron Mega-Lug Restraint Fittings at the discretion of the Authority.

Two-inch wide marking tape shall be installed at a depth of two (2) feet above the pipe along the alignment of all pressure sewer mains, including pressure sewer service lines. It shall be vividly colored and marked “Intermittent Pressure Sewer”. The marking tape for sewer lines shall be green with a foil back. The tape shall be magnetically detectable with conventional location equipment and therefore shall be encased aluminum foil or other similar materials.

Section 1011. All manholes shall be constructed in accordance with the standards established from time to time by the Board. Frames and covers for all manholes shall be fabricated of cast iron and shall conform to the standards established by the Board.

Section 1012. Sewers shall be hydrostatically, pneumatically, and/or smoke tested for leakage at the discretion of, and in the manner required by, the Board.

Section 1013. Each section of pressure sewer shall be cleaned and pressure tested to locate obstructions in the lines or deficiencies in materials or workmanship. The section to be tested shall be filled with water ensuring that all air has been removed from the section under test. Once the pressure sewer line is filled, water shall be pumped into the pressure sewer to increase the pressure to a maximum of 150 psi as measured at the lowest point of the section being tested. When the test pressure of 150 psi has been reached, the pump shall be valved off for a period of 15 minutes. At the end of the test period, the pressure shall be increased, measuring the amount of water required to reach the test pressure of 150 psi. The allowable leakage in each section tested shall not exceed 1.25 gallons per 100 feet of pressure sewer line.

Section 1014. Manhole Testing

A. General: Make a visual inspection of each manhole constructed to ensure compliance with installation requirements.

B. General Requirements: Test each manhole constructed in the project and conduct tests in presence of, and to complete satisfaction of the Engineer. Should a manhole not satisfactorily pass testing, discontinue manhole construction in the Project until that manhole does test satisfactorily.

1. Provide tools, materials, equipment and instruments necessary to conduct the manhole testing specified herein.
    a. Vacuum Testing Equipment: Use vacuum apparatus equipped with necessary piping, control valves and gauges to control air removal rate from the manhole and to monitor vacuum.
        1) Provide an extra vacuum gauge of known accuracy to frequently check equipment and apparatus.
        2) Vacuum Testing Equipment and associated testing apparatus are subject to Engineer's approval.
        3) Provide seal plate with vacuum piping connections for inserting in manhole frame.
2. Prior to testing, clean manholes thoroughly and seal openings, both to the complete satisfaction of the Engineer. Seal Openings using properly sizes plugs.
3. Perform testing with the cast iron frames and covers installed. Include the joint between the precast manhole component and the cast iron manhole frame in the test.
4. The contractor may elect to make a test for his own purposes prior to backfilling. However, conduct tests of the manholes for acceptance, only after the backfilling has been completed.
5. If a manhole is constructed on an existing active sanitary sewer, where sewage flow must be maintained, the test will be waived.

C. Vacuum Test Procedure: Perform vacuum testing in accordance with the testing equipment manufacturers' written instructions and the following:
   1. Draw a vacuum of ten inches of mercury and close the valves.
   2. Consider manhole acceptable when vacuum does not drop below nine inches of mercury for the following manhole sizes and times:
      a. Four foot diameter – 60 seconds.
      b. Five foot diameter – 75 seconds.
      c. Six foot diameter – 90 seconds.
      d. Seven foot diameter – 105 seconds

D. Repair and Retest: Determine source or sources of leaks in manholes failing acceptable limits.
   1. Repair or replace defective materials and workmanship, as is the case, and conduct such additional Manhole Acceptance Tests and such subsequent repairs and retesting as required until manholes meet test requirements.
   2. Materials and methods used to make manhole repairs shall meet with Engineer's approval prior to use.
   3. Make repairs, replacements and retest.

Section 1015. The Developer shall file all necessary connection permits and pay the applicable tap connection and inspection fee per Appendix "A" Fee & Rate Schedule for each house or building to the Board, which shall become due and payable prior to inspection and approval by the Inspector for each respective house service sewer.

Section 1016. The Developer shall also reimburse the Board in full for all costs of inspection of construction and any other fees of all sanitary sewers. The amount and type of inspection required shall be determined by the Board during construction.

Section 1017. No sewer extensions constructed by a Developer will be approved for use by the Board until said sewers are formally approved by the Board, all building tap connection and inspection fees have been paid for each building connected to the system, and the Board has been reimbursed in full for all inspection costs and any other costs incurred by the Inspector during construction, testing and approval. Final acceptance of a sewer line extension intended for CTSA ownership will only take place after all developer agreement stipulations are met and an 18 month maintenance period has passed.

Section 1018. The Developer's, Fee & Rate Schedule and cost agreements shall be in a form and substance as approved from time to time by resolution of the Board.

ARTICLE XI

TAPPING CONNECTION RULES

Section 1101. Schedule of Tapping Connection Charges. That the Tapping Connection Charge required to be paid for each Unit connection to the Sewer System in accordance with Appendix “A” Fee & Rate Schedule. A paid Tapping Connection Fee permanently remains with the intended unit connection and/or parcel of land which it was originally paid for and is not transferrable to any other parcel of land.

Section 1102. Alteration of Unit. Whenever a Unit shall be remodeled or otherwise altered to create one or more additional Units within the perimeter walls of the original or former Unit, each such additional Unit thereby created shall pay a Tapping Connection Charge in accordance with Appendix “A” Fee & Rate Schedule.

Section 1103. Expansion of Unit. Whenever the gross area of a Unit shall be expanded beyond its original or former perimeter walls, Article XI Section 1109 rules apply for additional Tapping Connection Charge if applicable.

Section 1104. Change of Unit Use. Whenever the use conducted in a Unit shall be changed from the use for which the Unit was originally formerly connected to the Sewer System, Article XI Section 1109 rules apply for additional Tapping Connection Charge if applicable.

Section 1105. Payment Prior to Connection or User; Penalty. In every case of new construction, the entire Tapping Connection Charge, as determined in accordance with Appendix “A” Fee & Rate Schedule, shall be paid to the Authority concurrently with the filing of the application for the required municipal building permit. In every case of alteration whereby one or more new Units are created, or where a change of use in an approved Unit shall create an additional burden on the Sewer System, the entire Tapping Connection Charge, as determined in accordance with

Appendix “A” Fee & Rate Schedule, shall be paid to the Authority concurrently with the filing of the application for the required municipal building or occupancy permit.

In every case the Tapping Connection Charge so determined must be paid in full prior to the connection of each new Unit to the Sewer System, or in cases of alteration, expansion or change of Unit use, as aforementioned, prior to occupancy of the Unit. If the Tapping Connection Charge determined to be due as a penalty; and an additional penalty of 5% for each additional month or part thereof shall be added thereto, until the Tapping Connection Charge required to be paid hereunder shall be paid in full.

In addition to the foregoing and any other civil remedy, any person who willfully connects any new Unit to the Sewer System without having paid in advance the entire Tapping Connection Charge required to be paid therefore, or in cases of alteration, expansion or change of Unit muse, who willfully fails to pay in advance the entire Tapping Connection Charge required to be paid prior to occupancy of the Unit, shall be subject to prosecution for Theft of Services, as provided in Section 3926 of the Crimes Code (18 P.S. §3936), as amended.

Section 1106. Separate/Combined Connections. Each Unit shall be separately connected to the Sewer System. However, upon the prior approval of the Authority, two or more Units may be combined into a single connection where separate ownership of such Units, as evidenced by construction or design, is not intended. Such approval, where granted, shall be conditioned upon the following:

A. The entire Tapping Connection Charge shall be paid for each Unit served by the combined connection in advance of their connection.

B. The Authority shall not assume any responsibility nor incur any liability as a result of permitting such combined connection.

C. In the event of non nonpayment of sewage collection, transportation and treatment charges (hereinafter, "service charges") by a Unit served by a combined connection, the Authority reserves the right, as provided in the Act of April 14, 1949, P.L. 482 (53 P.S. §2261), as amended, and more fully set forth in Article XI of the Sewer System Rules and Regulations as amended, to require the shutoff of water service to all Units served by the combined connection in order to compel payment of delinquent service charges.

D. In the event of nonpayment of service charges to leased Units served by a combined connection, the owner and the tenant of the Unit shall be jointly and severally liable for the payment of service charges billed to the combined Units and in default of payment, the Authority reserves the right to collect the same from the benefited property of which the Unit shall form a part, together with five percent as attorney's commission and interest from the date such service charges were due, in like manner as municipal claims are by law filed and collected under the Act of May 16, 1923 P.L. 207 (53 P.S. §7101 et seq.), as amended, and the further right to collect delinquent service charges by action of assumpsit's against the owner or owners of such benefited property.

Section 1107. Connection Procedures. All connections to the Sewer System shall be made in accordance with the provisions and procedures set forth in Article IX of the Sewer System Rules and Regulations as amended, and no connection to the Sewer System or use thereof shall be made except upon an approved application for service as provided in Section 1109 hereof.

Section 1108. Application for Service. All applications for connection to the Sewer System must be made in writing to the Authority on forms prescribed by the Authority, and must state fully and truly the purpose of the service and the intended use of the Unit to be served.

A new application must be made upon each change of ownership or tenancy of the Unit to be served. A new application must be made in advance of Unit alteration, expansion or change of use, as aforementioned. The Authority reserves the right to require shut-off of municipal water service until new applications, where required, are finally made to and approved by the Authority.

Applications must be made by the owner(s) of the Unit to be served or from tenants of leased units to be served.

Section 1109. Estimation of Connection Charge Based on Water Supply. Where the Tapping Connection Charge required to be paid shall be based upon the annualized volume of water required for the Unit's use and preliminarily determine the Tapping Connection Charge therefore on the basis of such estimate. Such estimated Tapping Connection Charge shall be paid in advance of the Unit's connection to or use of the Sewer System.

Two annual (12 month) reviews will be conducted within the first 24 months of occupation, the Authority shall review the records of metered water supplied to the Unit and shall annually determine the Tapping Connection Charge to be paid therefore on the basis of the actual volume of water supplied to the Unit during the most intensive continuous twelve-month period within said first twenty-four (24) month period of actual occupancy. If after each annual review the tapping connection charge is determined greater than that originally estimated, the difference shall be paid within sixty (60) days after the Authority's certification of same; in the event of nonpayment, the Authority reserves the right to require the shut-off of municipal water service to compel payment of the balance of the Tapping Connection Charge as finally determined. If the Tapping Connection Charge finally determined is less than that originally estimated, the difference shall be refunded without interest within sixty (60) days after the Authority's certification of same. Any required deficiency or refund not made within the time period hereinabove set forth shall bear interest at the maximum rate permitted by law

.

Section 1110. Water Excluded from the Sewer System. Where the Tapping Connection Charge required to be paid shall be based upon the annualized volume of water supplied to a Unit, the Authority is preliminarily fixing the Tapping Connection Charge required to be paid shall estimate a proper allowance for any large volume of water which is designed to be physically excluded from the Sewer System, and such estimation shall be final. The consumer, however, shall have the right to install an approved water-deduct meter in the Unit to register the volume of water to be excluded from the Sewer System. And if such approved meter is installed within the first six months of actual occupancy, the Tapping Connection Charge to be finally determined shall be computed subject to the deduction registered by such approved meter over the remaining most intensive twelve-month period.

Section 1111. Estimation of Non-Metered Water Supply. Where the Tapping Connection Charge required to be paid shall be based upon the annualized volume of water supplied to a Unit, and metered water service is not supplied, the Authority shall determine such water volume by estimation, and such estimation shall be final. The consumer, however, shall have the right to install an approved water meter in the Unit to determine the actual volume of water supplied thereto. And if such approved meter is installed within the first six months of occupancy, the Tapping Connection Charge to be finally determined shall be computed in accordance with the actual volume registered by such approved meter over the remaining most intensive twelve-months.

Section 1112. Water Meters and Water-Deduct Meters. Where, as provided in Sections 111 and 112 hereof, the consumer elects to install a water meter and/or a water-deduct meter in a Unit to register the volume of water supplied to the Unit and/or excluded from the Sewer System, the Consumer shall complete an application and pay applicable fees to the Authority, fully confirming to the requirements of Section 606 of the Sewer System Rules and Regulations as amended. The cost of furnishing, installing and maintaining such meters shall be

borne by the consumer; the type, size, location, arrangement and maintenance of such meters shall be subject to the approval of the Authority.

Section 1113. Engineer's Recommendation. Where in any provision of this Section the Authority is required to make an estimation, such estimation shall be made and certified by the Authority's Engineer.

ARTICLE XII
ASSESSMENT RULES

These rules are intended to illustrate the manner in which individual properties will be assessed by the Authority; however, the Authority reserves the right to make adjustments in these rules at the time assessment bills are rendered in order to insure that the cost of the sewers being installed will be legally and equitably distributed among the abutting property owners.

The general intent of these rules is that assessments will be based on the actual length of property frontage unless adjustments are made as herein provided. The assessment rate is determined in accordance with Appendix “A” Fee & Rate Schedule. The method of measurement as indicated in Appendix “C” will be utilized for the purpose of measuring for Front Foot Assessment Charges.

1. Where a property abuts on only one street, that side shall be considered its *front*.
    A. Where the property is served from the front.
        (1) Where the sewer runs the full length of the lot, that side shall be considered its front and the full length shall be assessed.
        (2) Where the sewer does not run the full length of the lot, assessable footage shall include (2/3) the length of the lot.
    B. Where the property is served from the rear.
        (1) Where the sewer runs the full length of the lot.
            (a) Assessable footage shall consist of the full width of the lot where the sewer line runs parallel to the property line.
            (b) Assessable footage shall consist of the full width of the lot when the sewer line runs at an angle through the lot.
        (2) Where the sewer line does not run the full length of the lot:
            (a) Assessable footage shall consist of (2/3) the length of the lot.

2. Where a property abuts on more than one street:

A. Corner Lots:

(1) Where sewer services one side only:

(a) The front shall be determined with due consideration for the layout of the property with respect to adjacent properties in so far as the intent of the original layout was concerned, regardless of which way the building faces or the present use of the property, and shall be assessed.

(b) Where no determination of the front can be made on the basis of the layout of the property with respect to adjacent properties in the area, the side abutting on the sewer shall be considered to be the front and shall be assessed.

(2) Where the sewer services two sides:

(a) Where property is not large enough to be subdivided, use Rule 2.A. (1).

(b) Where property is large enough to be subdivided, the full length of the two shortest sides, plus the excess over 300 feet of the longest side, abutting a street, shall be assessed.

(3) Where sewer services more than two sides:

(a) Where property is not large enough to be subdivided, use Rule 2.A. (1).

(b) Where property is large enough to be subdivided, the full length of the two shortest sides, plus the excess over 300 feet of the longest side, abutting a street, shall be assessed.

B. Property other than corner lots:

(1) Where sewer services one side only, use Rule 2.A. (1)

(2) Where sewer services both sides:

(a) Where property is not large enough to be subdivided, use Rule 2.A. (1).

(b) Where property is large enough to be subdivided, the full frontage of both ends shall be assessed.

3. Odd – Shaped Lots:
   A. Corner areas connecting to straight sides:
      (1) The length of the frontage shall be determined by adding the straight line distance plus an amount equal to one – half the area distance.
   B. Triangular – Shaped or trapezoidal – shaped lots fronting on one street only:
      (1) Two – thirds (2/3) of the length of the front plus one – third (1/3) the length of the rear, or of a line parallel to the front and 150 feet therefrom if the lot is deeper than 150 feet, shall be assessed (only those properties where the front and rear or line parallel as stipulated above of the lot exceed each other by a variation in excess of ten (10%) percent of the longer of the two sides shall be considered as within this rule).

4. Usually large frontage of undeveloped land:
   A. Either full frontage shall be assessed:
   B. Or Authority may enter into an agreement with the owner, acknowledged by both parties and thereafter recorded, whereunder the owner shall:
      (1) Pay immediately either an assessment with respect to that portion of the property upon which a building is maintained or if there is no building erected on the property, a portion equal to a lot frontage of 200 feet, with a depth of 150 feet, and
      (2) Shall also covenant to pay the established front – foot rate in the future (Deferred) as the property is developed, subject to the foregoing Rules.

5. Any area which can be subdivided under the provisions of existing zoning regulations or, in the absence thereof, more than 150 feet in depth, shall be considered an area that can be subdivided for the purposes of these Rules.

6. No assessments shall be levied against property owned by the United States of America; or the Commonwealth of Pennsylvania; or used for cemetery purposes; provided however, that where a building is situated on cemetery property and connected to the sewer system, an assessment shall be made with respect to that portion of the property upon which the building is maintained.

7. For all cases where the foregoing Rules cannot be equitably applied or where it is in the best interest of the Authority, the Authority may enter into an agreement with the owner or may have the assessment by the benefits method.

CENTER TOWNSHIP CTSA SANITARY AUTHORITY

Center Township Sanitary Authority

224 Center Grange Road Aliquippa, Pennsylvania 15001 / Office: (724)774-0326 Fax: (724)774-4984
www.ctsapa.us

Appendix "A"

FEE & RATE SCHEDULE

Residential Billing	**$36.25 / month**
Commercial Billing	$36.25 / month for first 4,200 gallons: and $8.63 each additional 1,000 gallons
Tapping Fee	$3,950 / EDU (Collection $2,900 / Capacity $1,050)
EDU	77,015 gallons / year or 211 gallons / day
Service Application Fee	$10
Account past due charge	10% of current balance
Returned check charge	$35
Deduct Meter Application	$10
Lateral / Sewer Line Inspection	$150
Rental Unit Security Deposit	$125
Convenience Fee – Debit & Credit Card Usage	3.25% of amount
Administrative Service Charge for Invoice Reimbursement	$35
Amount to Lien for unpaid Sewer Balance	$250 or at the discretion of the board.
No – Lien Letter	$20 / per parcel or account
Municipal Lien Satisfaction **&** **Front Foot Assessment Lien Satisfaction**	5% Interest on balance accrued per year 5% One Time Penalty $200 Attorney Fee $28.50 Court Costs $125 Lien Refile Charge – If required
Front Foot Assessment Charge	$20 per front - foot
Deferred Assessment Lien Satisfaction	NO INTEREST 5% One Time Penalty $200 Attorney Fee $28.50 Court Costs
Hourly Rate – Operations Supervisor	$45 / hour
Hourly Rate – Engineer	$130 / hour
Hourly Rate – Solicitor	$125 / hour

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APPENDIX "B"

Requirements and Specifications for Sanitary Sewer Line Installation

1. That all future installations of sanitary sewer lines from "Y" Connection in main sanitary sewer to the footer of a house, building, residence or other edifice being serviced by the CTSA Sewer System, shall be four (4) inch or six (6) inch PVC (SDR26 or Schedule 40) or better.

2. That all other sanitary sewer pipe necessary to said connection under footer, basement and foundation shall be of PVC (SDR 26 or Schedule 40) or better.

3. That a PVC Trap with a four inch (4") Vent shall be installed a maximum of five feet (5') from the building for all future installations. The trap shall be situated as not to allow the discharge of any surface water into the sanitary sewer.

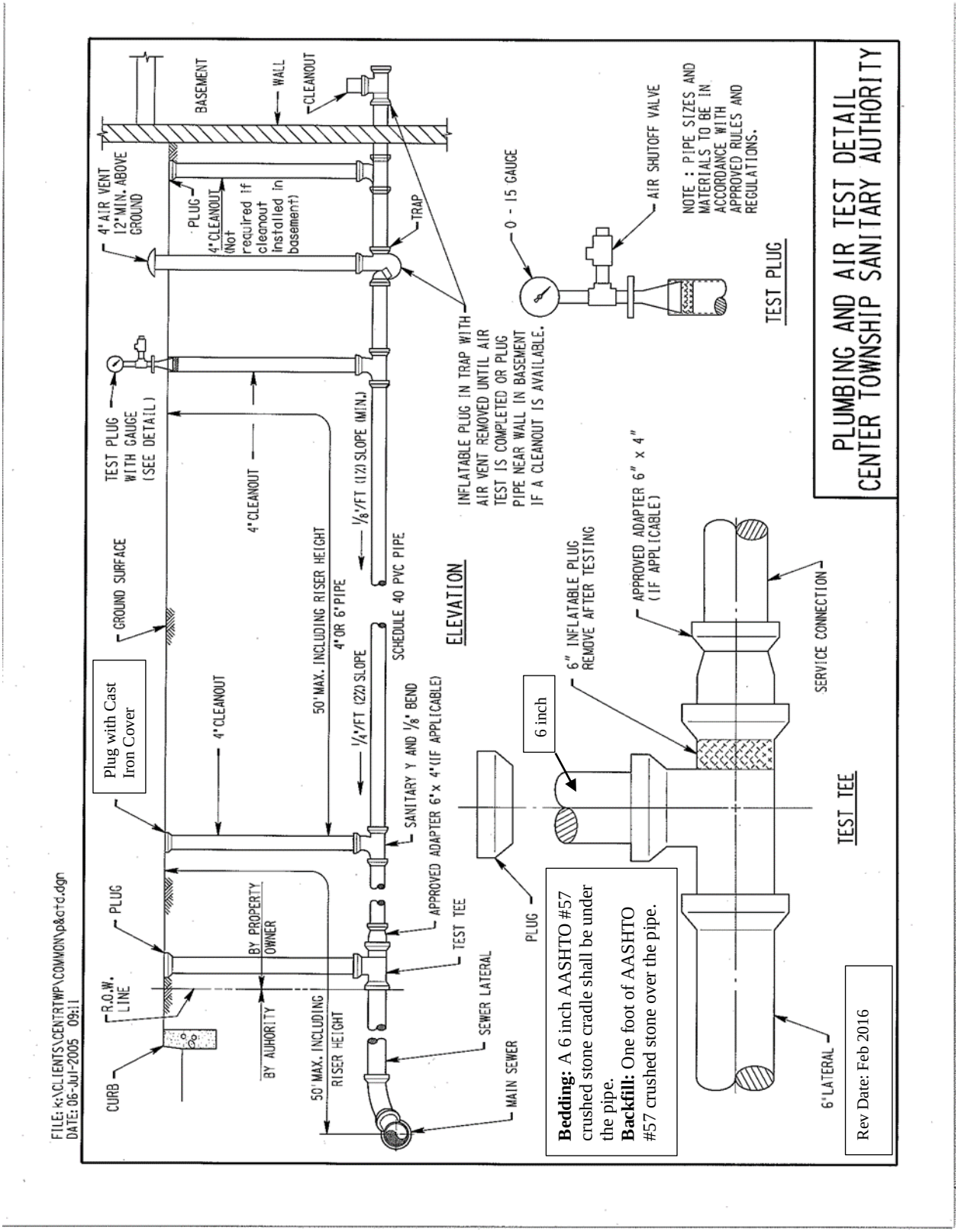
4. All pipe shall be installed with a minimum slope of 1/8" (1%) per foot and a minimum cover of four feet (4') unless otherwise approved.

5. That no installation shall contain sewer pipe with a curve exceeding forty-five degrees (45°).

6. That every property owner replacing a sewer service line, desiring to or required to connect to the CTSA Sewer System shall first pay all established fees and obtain all required permits before beginning the replacement, installation or connections of any Sanitary Sewer Pipe to the CTSA Sewer System.

7. All sanitary sewer replacements or installations connecting to the CTSA Sewer System shall be inspected by the Center Township Sanitary Authority Manager / Operations Supervisor or their designee before being covered.

8. All depths, grades and distances supplied by CTSA are to be considered approximate. All locations should be verified by excavation prior to construction of the building sewer.


PLUMBING AND AIR TEST DETAIL
CENTER TOWNSHIP SANITARY AUTHORITY
ELEVATION
TEST PLUG
TEST TEE
BASEMENT
WALL
CLEANOUT
4" AIR VENT 12" MIN. ABOVE GROUND
PLUG
4" CLEANOUT (Not required if cleanout installed in basement)
TRAP
TEST PLUG WITH GAUGE (SEE DETAIL)
GROUND SURFACE
4" CLEANOUT
50' MAX. INCLUDING RISER HEIGHT
4" OR 6" PIPE
1/8"/FT (1%) SLOPE (MIN.)
SCHEDULE 40 PVC PIPE
INFLATABLE PLUG IN TRAP WITH AIR VENT REMOVED UNTIL AIR TEST IS COMPLETED OR PLUG PIPE NEAR WALL IN BASEMENT IF A CLEANOUT IS AVAILABLE.
0 - 15 GAUGE
AIR SHUTOFF VALVE
NOTE : PIPE SIZES AND MATERIALS TO BE IN ACCORDANCE WITH APPROVED RULES AND REGULATIONS.
Plug with Cast Iron Cover
4" CLEANOUT
1/4"/FT (2%) SLOPE
SANITARY Y AND 1/8" BEND
APPROVED ADAPTER 6" x 4" (IF APPLICABLE)
TEST TEE
PLUG
SEWER LATERAL
MAIN SEWER
CURB
R.O.W. LINE
PLUG
BY PROPERTY OWNER
BY AUHORITY
50' MAX. INCLUDING RISER HEIGHT
6 inch
6" INFLATABLE PLUG REMOVE AFTER TESTING
APPROVED ADAPTER 6" x 4" (IF APPLICABLE)
SERVICE CONNECTION
6" LATERAL
Bedding: A 6 inch AASHTO #57 crushed stone cradle shall be under the pipe.
Backfill: One foot of AASHTO #57 crushed stone over the pipe.
Rev Date: Feb 2016
FILE: K:\CLIENTS\CENTRTWP\COMMON\p&ctd.dgn
DATE: 06-Jul-2005 09:11

CENTER TOWNSHIP CTSA SANITARY AUTHORITY

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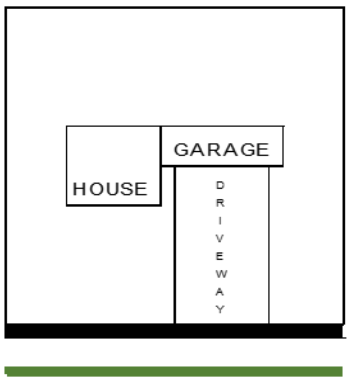
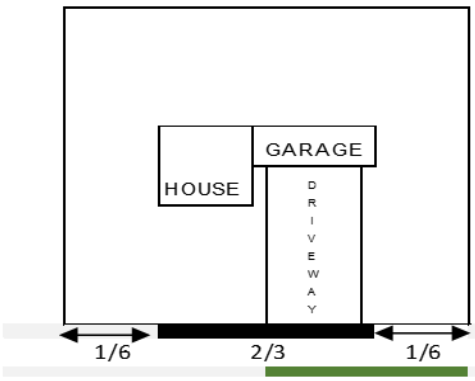
Appendix "C"

FRONT FOOT ASSESSMENT MEASURMENT DIAGRAMS

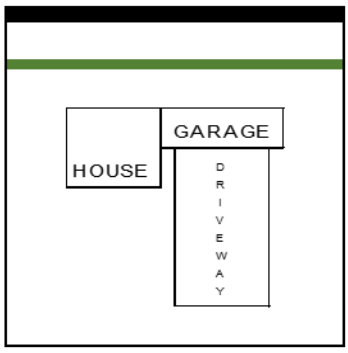
Sewer Line ***Assessable Frontage***



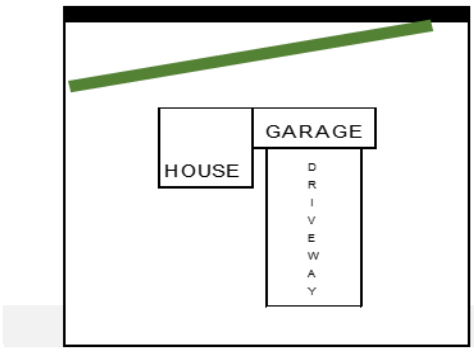
RULE - 1.A. (1)



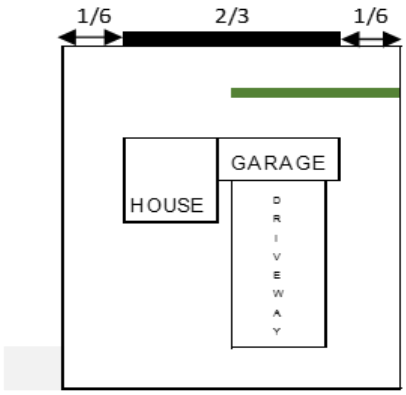
RULE - 1.A. (2)



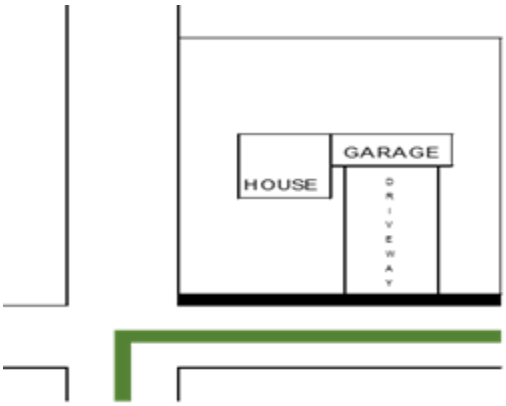
RULE - 1.B. (1) (a)



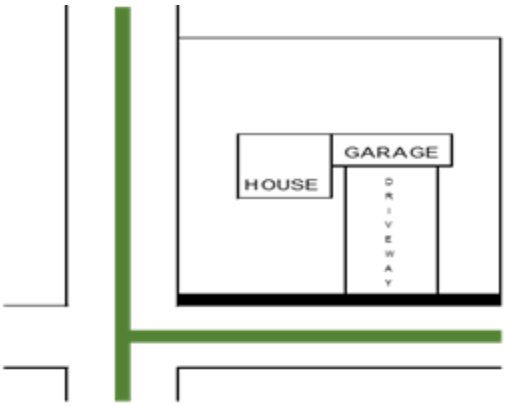
RULE - 1.B. (1) (b)



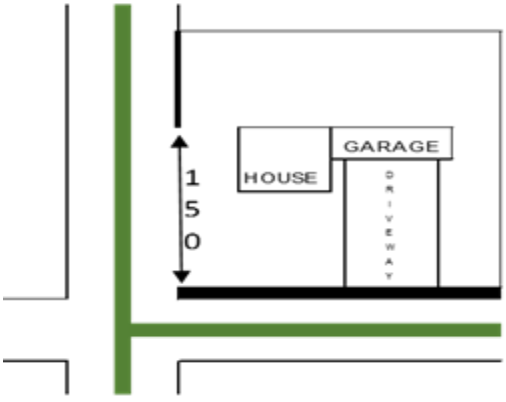
RULE - 1.B. (2) (a)



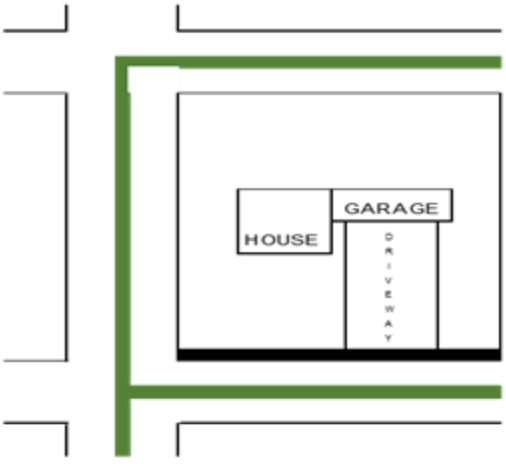
Rule 2.A. (1)



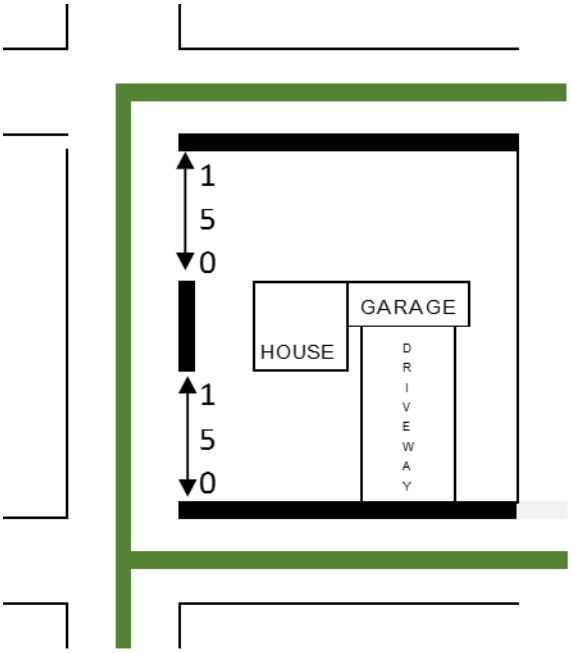
Rule 2.A. (2) (a)



Rule 2.A. (2) (b)



Rule 2.A. (3) (a)



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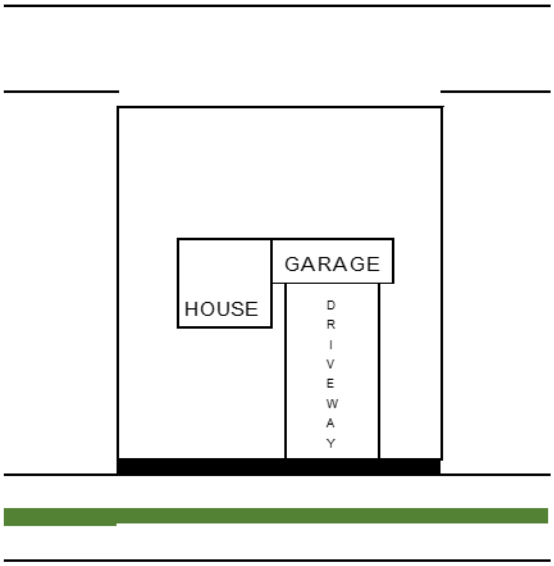

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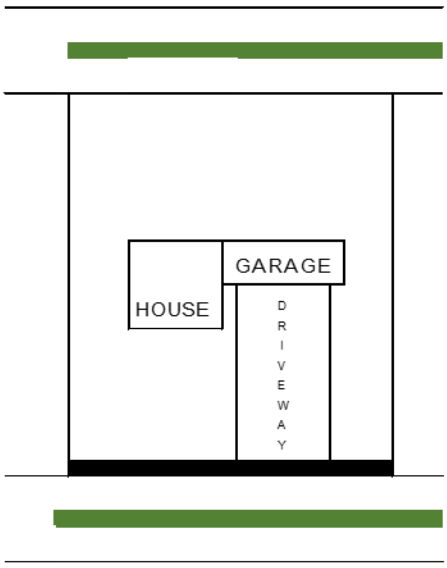
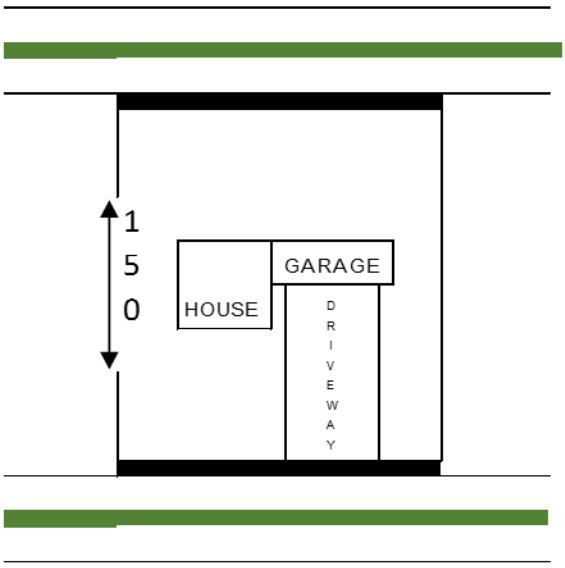


Rule 2.B. (2) (a)



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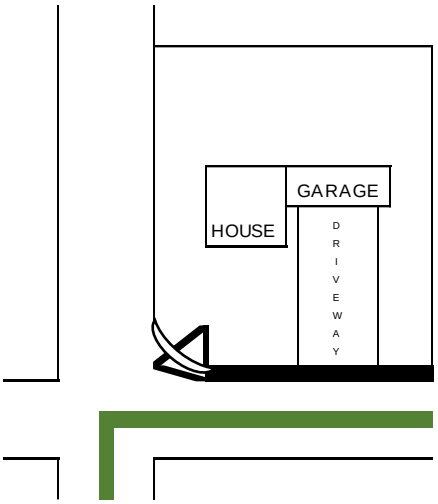
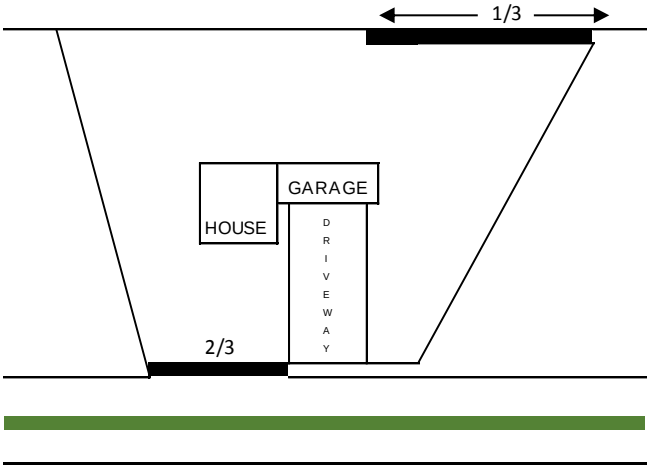
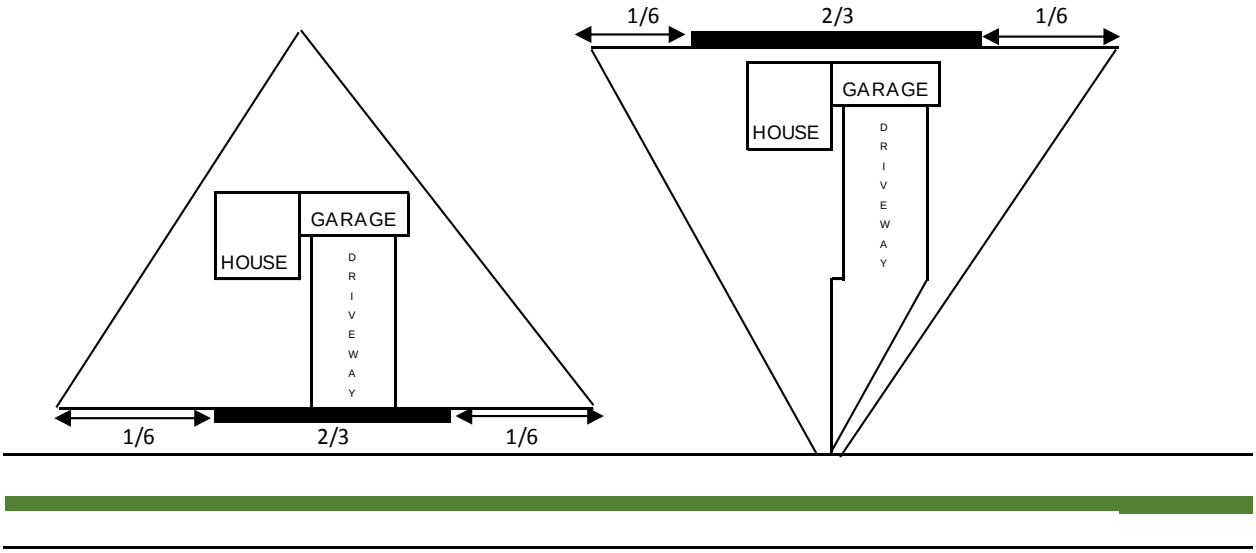


Rule 3.A. (1)



Rule 3.B. (1)



Rule 3.B. (1)

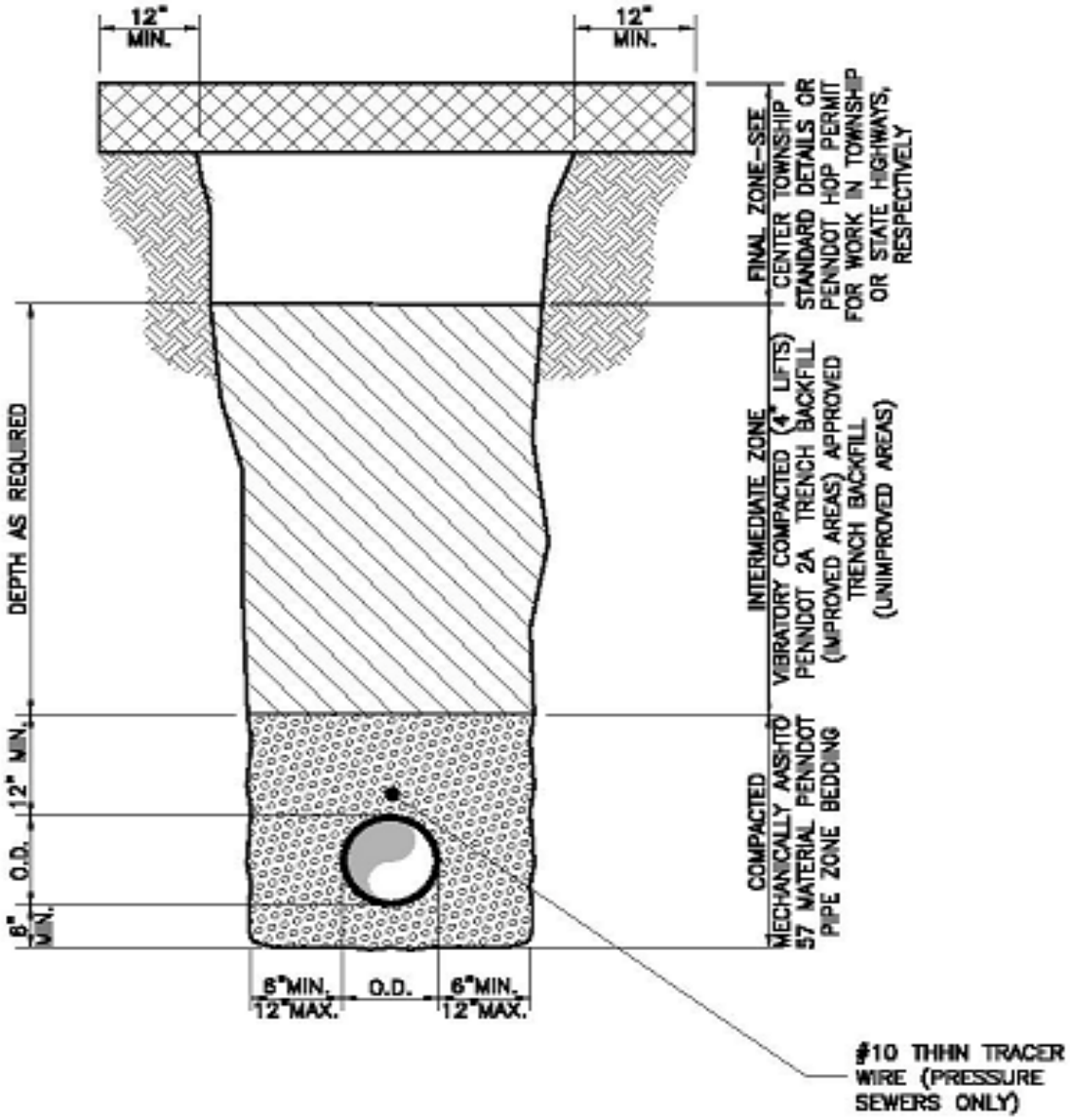
Center Township Sanitary Authority

224 Center Grange Road Aliquippa, Pennsylvania 15001 / Office: (724)774-0326 Fax: (724)774-4984
www.ctsapa.us

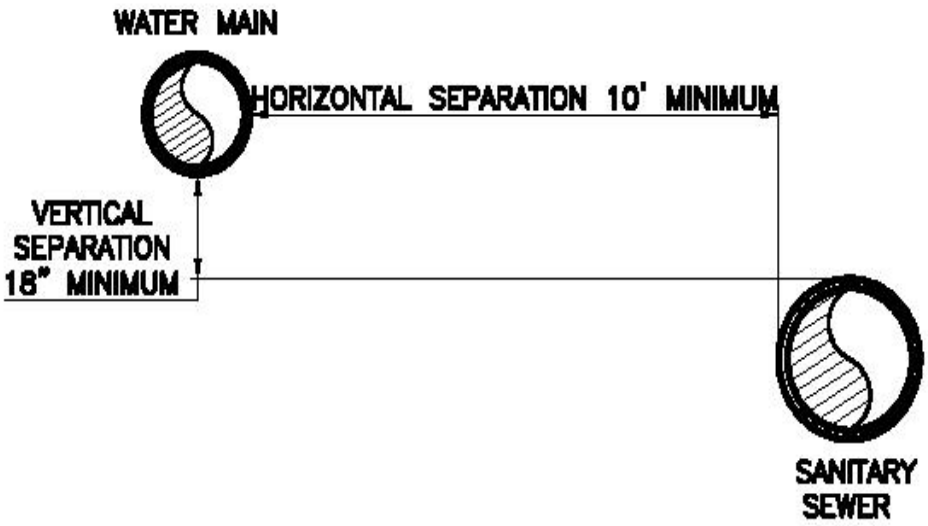
APPENDIX "D"

STANDARD SANITARY CONSTRUCTION DETAILS

SAN – 01	Trench and Pipe Zones
SAN – 02	Utility Separation
SAN – 03	Concrete Anchor for Pipe Lines
SAN – 04	Forcemain Horizontal Thrust Blocking (150 PSI)
SAN – 05	Forcemain Vertical Blocking (150 PSI)
SAN – 06	Air/Vacuum Release assembly
SAN – 07	Concrete Cradle
SAN – 08	Concrete Encasement
SAN – 09	Casing Pipe Assembly Detail
SAN – 10	Forcemain Under Obstructions
SAN – 11	Precast Concrete Sanitary Manhole and Slab Top
SAN – 12	Cast – In – Place or Precast Concrete 5' Diameter Sanitary Manhole
SAN – 13	Inside Manhole Drop Connection 8", 10", and 15' Diameter Sewer Pipes
SAN – 14	Manhole Channels
SAN – 15	Ladder Bars for Manhole
SAN – 16	Standard Sanitary Manhole Frame and Cover
SAN – 17	Watertight Sanitary Manhole Frame and Cover (with Inner Cover Option)
SAN – 18	Wye Connection, Service Lateral Sight Tee Detail (New Service)
SAN – 19	Service Connection at Manhole
SAN – 20	Sewer Termination Manhole Repair



TYPICAL
TRENCH AND PIPE ZONES
N. T. S.



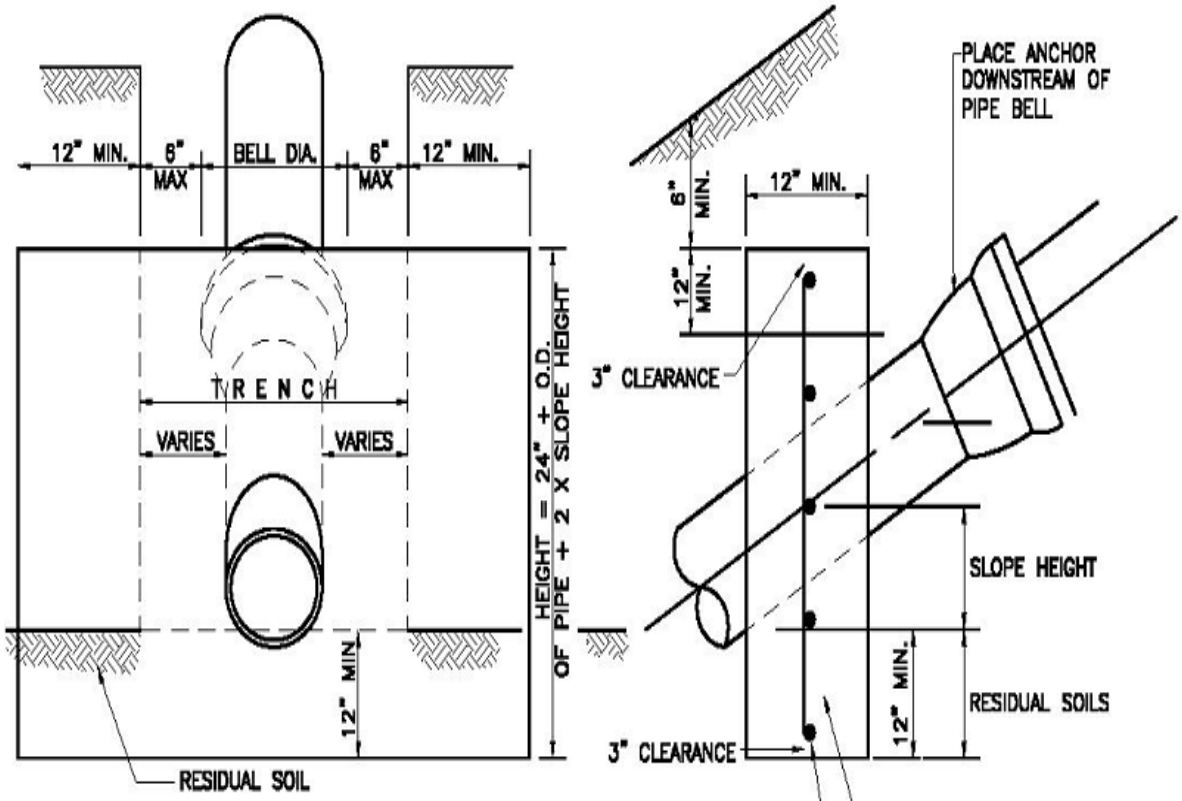
NOTES:

1. WHEN THE HORIZONTAL SEPARATION OF THE WATER MAIN AND SEWER LINE IS LESS THAN 10', THE VERTICAL SEPARATION BETWEEN THE TOP (CROWN) OF THE SEWER LINE AND THE BOTTOM (INVERT) OF THE WATER MAIN SHALL BE AT LEAST 18". ENCASE WATERLINE IN CONCRETE WHERE SEWER / WATERLINE CROSSINGS OCCUR AND, WHERE THE CONDITIONS PREVENT AN 18" VERTICAL SEPARATION.

2. NO OTHER UNDERGROUND UTILITIES, SUCH AS GAS, STORM SEWER, ELECTRIC, TELEPHONE, OR CABLE, SHALL BE PLACED ABOVE THE SANITARY SEWER OR WITHIN THREE FEET OF EACH SIDE OF THE SANITARY SEWER.

UTILITY SEPARATION

N. T. S.



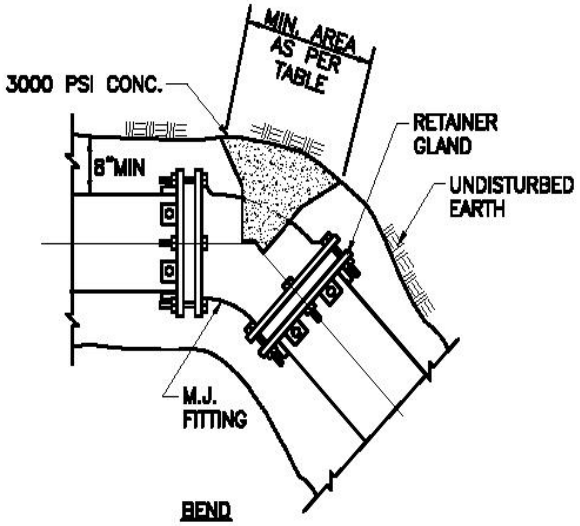
SPACING REQUIRED

% GRADE	DISTANCE CENTER TO CENTER
20% TO 35%	36' C. to C.
35% TO 50%	24' C. to C.
50% +	16' C. to C.

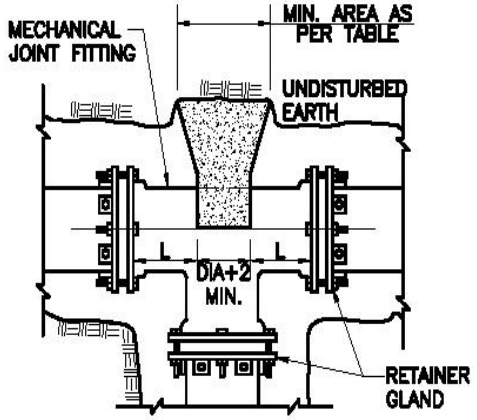
DUCTILE IRON PIPE SHALL BE USED FOR ALL PIPING OVER 20% GRADE. ALL DUCTILE IRON PIPE TO BE EPOXY LINED AND HAVE FIELD LOK GASKETS.

CONCRETE ANCHOR FOR PIPE LINES

N. T. S.

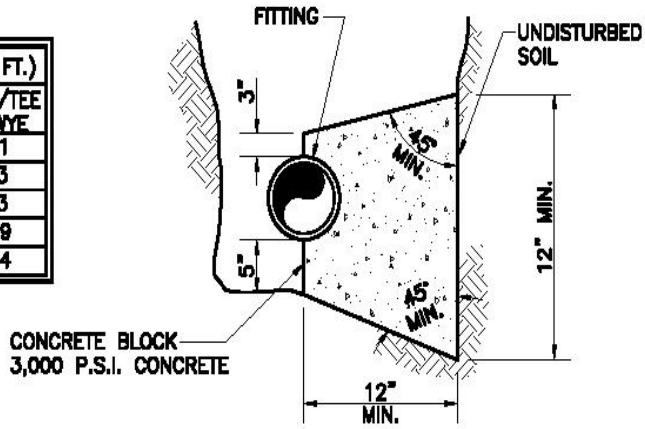


BEND



TEE, CAP, VALVE AND WYE

PIPE SIZE (In)	L (in.)	MINIMUM BEARING AREA OF BLOCK(SQ. FT.)				
		90° BENDS	45° BENDS	22.5° BENDS	11.25° BENDS	VALVE/TEE OR WYE
4	5	2.9	1.6	1.0	1.0	2.1
6	6	6.0	3.3	1.7	1.0	4.3
8	6.5	10.3	5.6	2.9	1.5	7.3
10	6.5	15.4	8.4	4.3	2.2	10.9
12	7	21.8	11.8	6.0	3.1	15.4

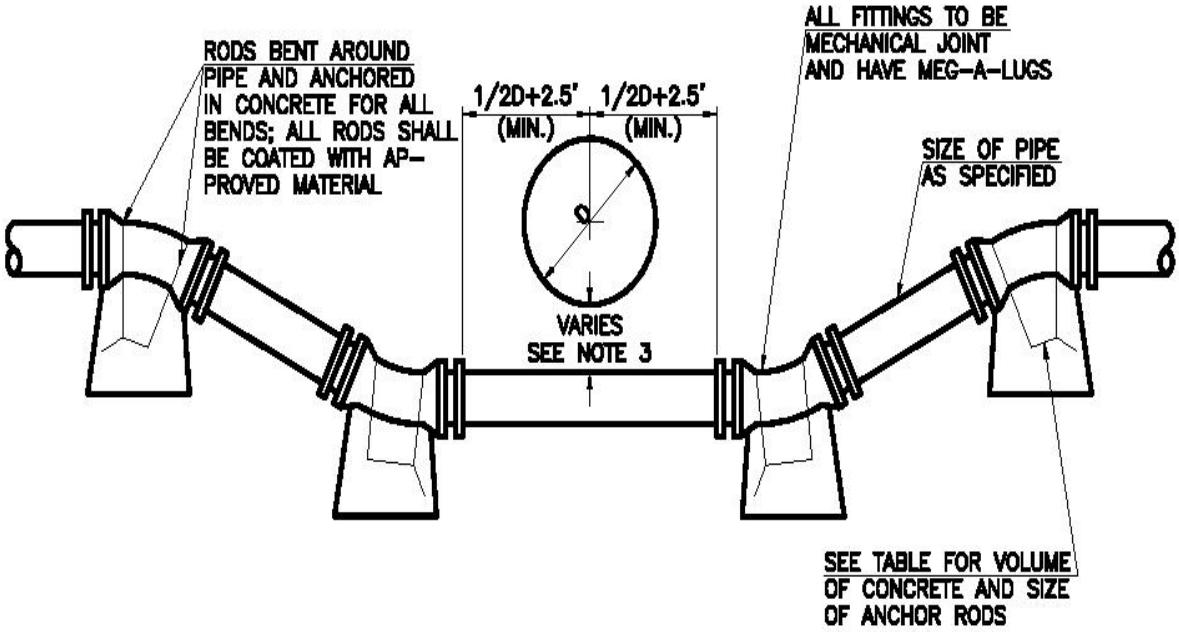


NOTES:

1. EARTH PRESSURE = 2,000 LBS./SQ.FT.
2. APPLIED PRESSURE = 150 P.S.I.+50% FOR WATER HAMMER OR SURGE
3. IF EARTH IN FIELD WILL NOT SUPPORT THE ABOVE EARTH PRESSURE, AREA OF BLOCK MUST BE INCREASED PROPORTIONATELY.
4. CONCRETE TO BE 3,000 P.S.I., PADOT CLASS A, 3" SLUMP
5. ALL MECHANICAL JOINT FASTENERS (I.E. BOLTS, NUTS, ETC.) SHALL BE FREE OF CONCRETE. ALL FITTINGS SHALL BE MECHANICAL JOINT AND HAVE MEG-A-LUG RETAINER GLANDS(OR EQUAL) INSTALLED TO MANUFACTURERS SPECIFICATIONS.
6. CONCRETE WITH BEARING AREAS GREATER THAN 3 S.F. TO HAVE W4 x W4 WELDED WIRE FABRIC.
7. ALL FITTINGS TO BE DUCTILE IRON WITH EPOXY LINING.

FORCEMAIN HORIZONTAL THRUST BLOCKING

N.T.S.



PIPE SIZE	TOTAL PRESSURE IN POUNDS	VOLUME IN CUBIC FEET			SIZE AND No. OF ANCHORS		
		45° BENDS	22.5° BENDS	11.25° BENDS	45° BENDS	22.5° BENDS	11.25° BENDS
4	3900	20	10	5	1-#4	1-#4	1-#4
6	7200	37	19	9	2-#4	1-#4	1-#4
8	11800	60	31	15	2-#4	2-#4	1-#4
10	17100	87	45	22	2-#4	2-#4	2-#4
12	23700	122	62	31	2-#5	2-#4	2-#4

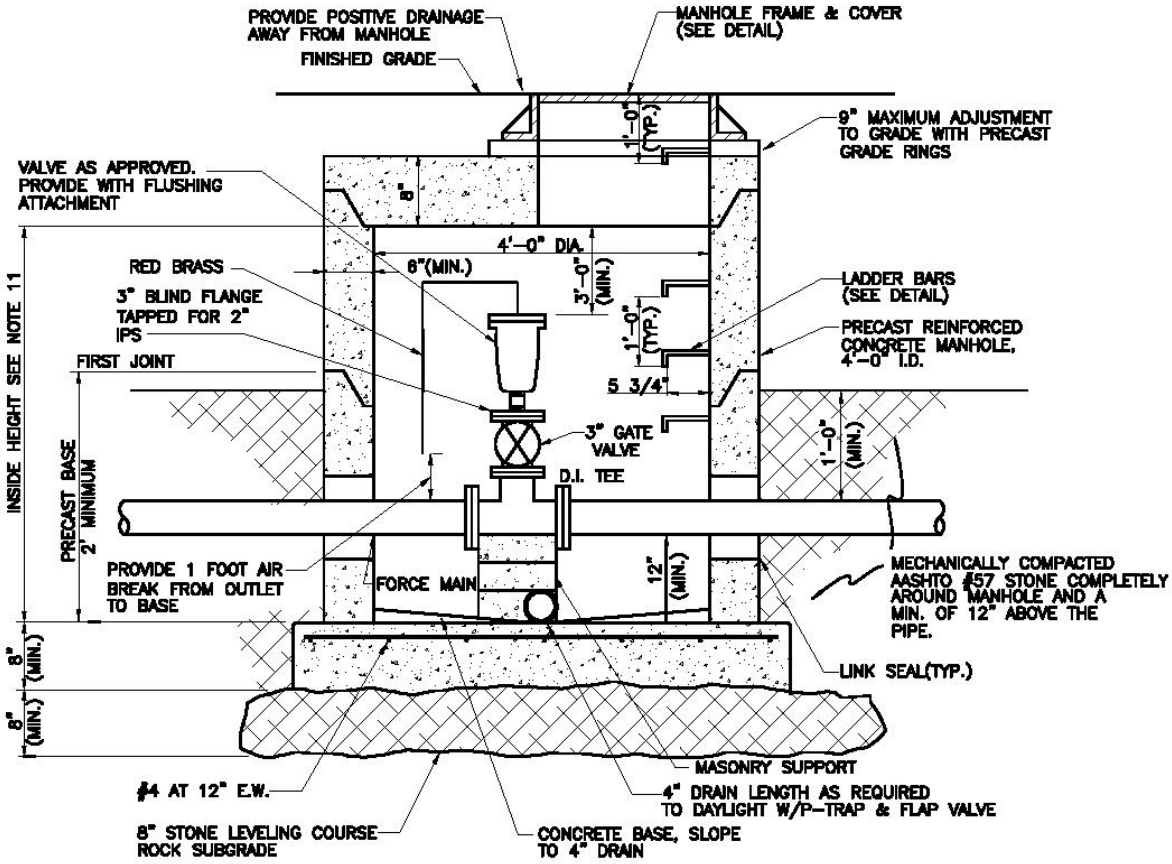
NOTES:

1. THE TABLE IS BASED ON 150# TEST PRESSURE.
2. REINFORCE ALL BLOCKS WITH #4 AT 6" E.F. MINIMUM 3" FROM ALL SIDES.
3. SEE "FORCEMAIN UNDER OBSTRUCTION" DETAIL.

TYPICAL

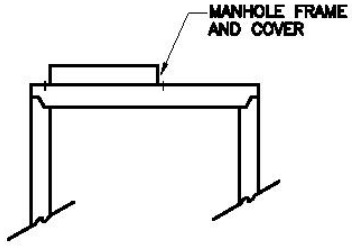
FORCEMAIN VERTICAL BLOCKING

N. T. S.



N O T E S :

1. ALL CONCRETE TO BE CLASS 'AAA' CONCRETE, 4,500 PSI, 5%± 1% AIR ENTRAINED.
2. MANHOLE BARREL JOINTS TO BE SEALED WITH 1"ø 2 FLEXIBLE BUTYL RUBBER JOINT SEALANT, USE 1/2"ø FOR FRAME AND COVER.
3. FRAME AND COVER TO BE ANCHORED WITH 2-3/4" DIA. S.S. ANCHOR BOLTS SET PERMANENTLY ANCHORED INTO CONCRETE.
4. LIFTING HOLES TO BE POINTED WITH NON-SHRINK GROUT, AND LEFT WATERTIGHT, NEAT AND SMOOTH.
5. MAXIMUM ADJUSTMENT TO FINISHED GRADE USING PRECAST GRADE RINGS SHALL NOT EXCEED NINE INCHES (9").
6. PRECAST SECTIONS SHALL CONFORM TO ASTM C-478 AS REVISED.
7. COAT EXTERIOR OF ALL MANHOLE BARREL SECTIONS WITH APPROVED BITUMINOUS COATING.
8. CAST LADDER BARS INTO BARREL SECTIONS AND CONFORM TO ASTM C-478, AS REVISED.
9. PROVIDE ALL RED BRASS AND DUCTILE IRON PIPING, UNLESS NOTED.
10. PROVIDE ALL NECESSARY PIPE, FITTINGS AND/OR ADAPTORS TO MAKE A COMPLETE WATER TIGHT CONNECTION.
11. INSIDE HEIGHT TO BE SET BASED ON VALVE INSTALLED. ADJUST PIPE DEPTH AS REQUIRED. MINIMUM HEIGHT IS 6'-6".

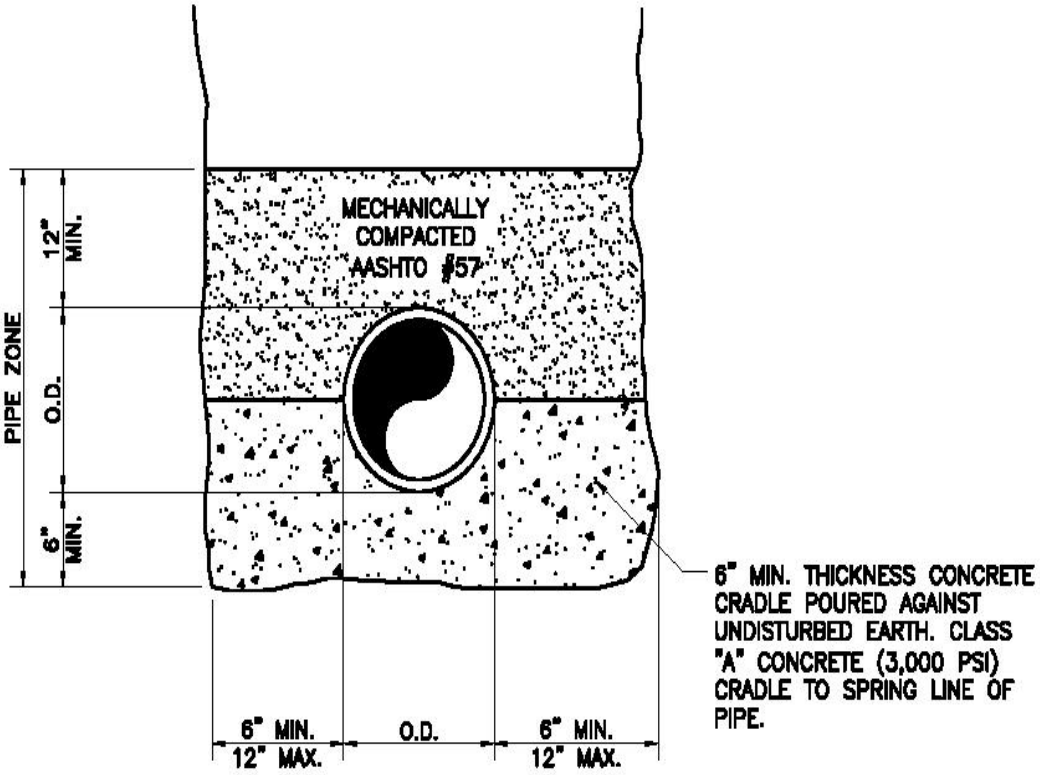


NOTE:
MANHOLE SLAB TOP SHALL MEET MINIMUM H-20 LOADING AND SHALL BE USED TO MEET GRADES AND/OR OTHER CONDITIONS AS MAY BE REQUIRED.

MANHOLE SLAB TOP

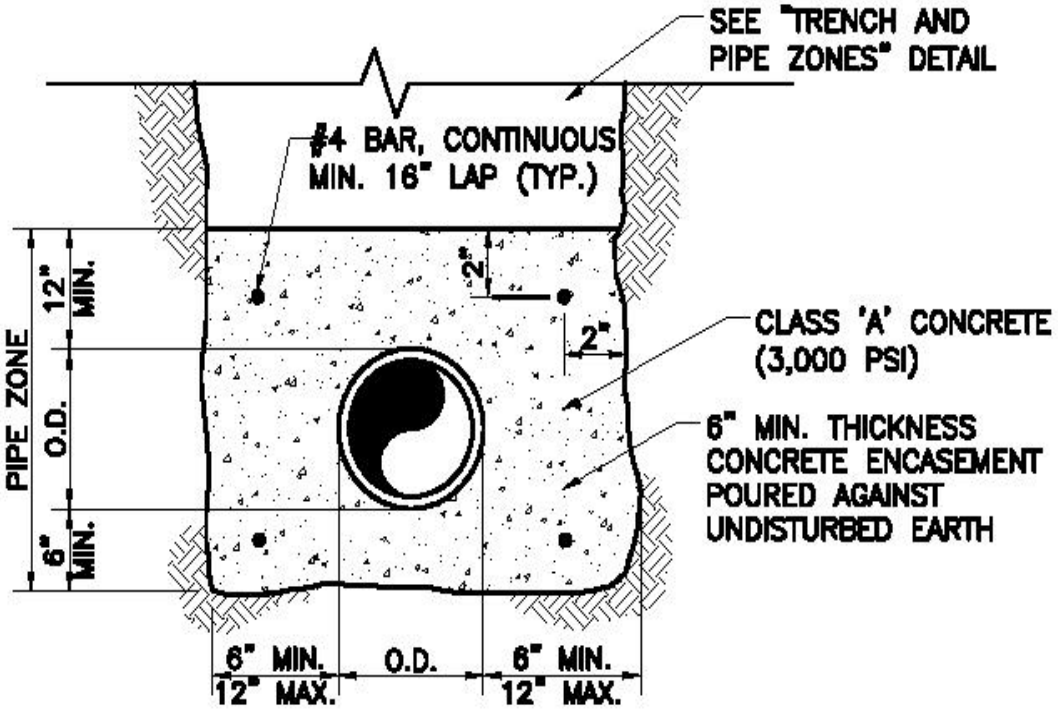
AIR/VACUUM RELEASE ASSEMBLY

N. T. S.



TYPICAL
CONCRETE CRADLE
N. T. S.

NOTE:
RESTRAIN PIPE AS REQUIRED TO PREVENT FROM FLOATING OR DISPLACEMENT UNTIL CONCRETE SET.

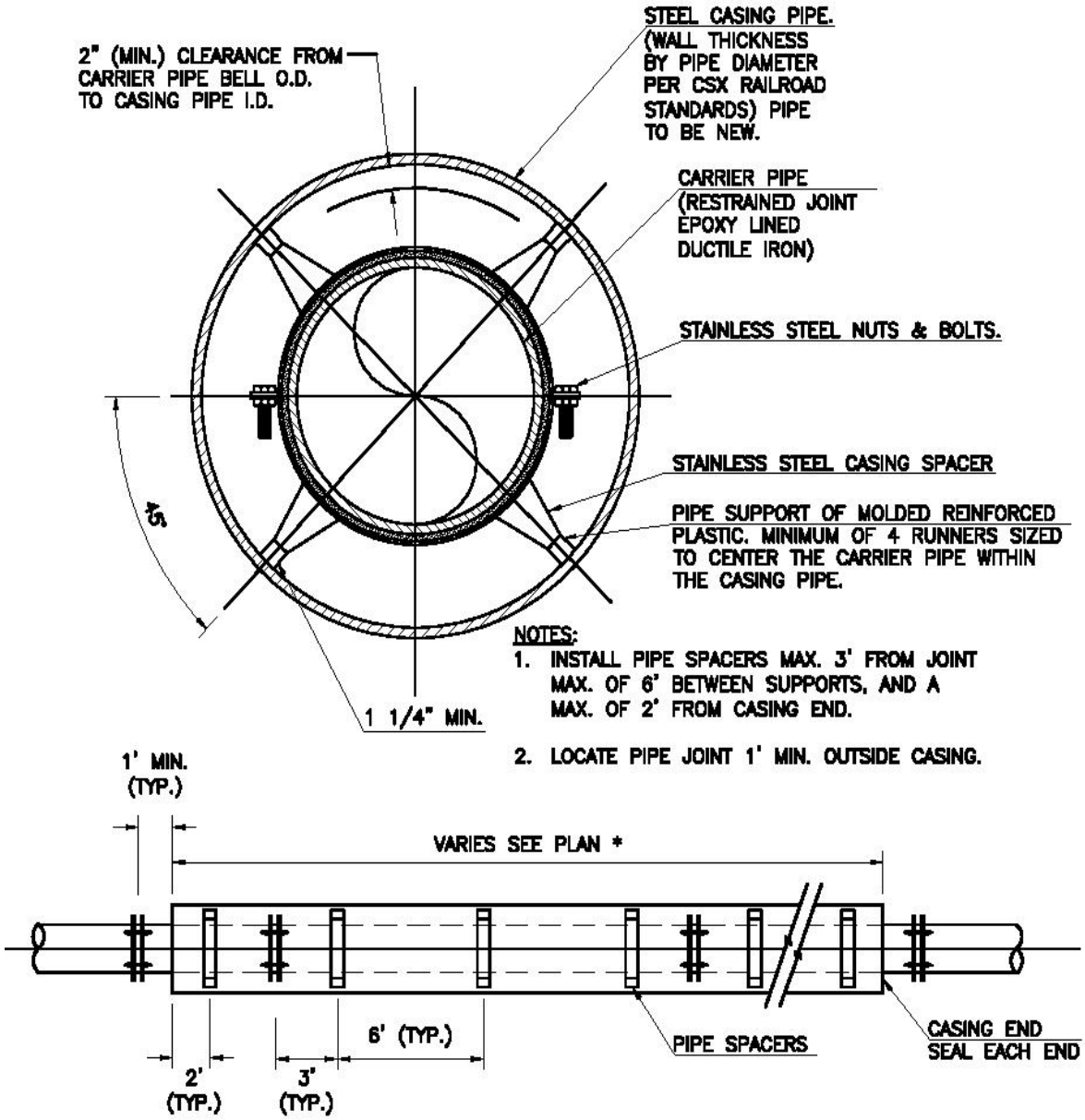


TYPICAL

CONCRETE ENCASEMENT

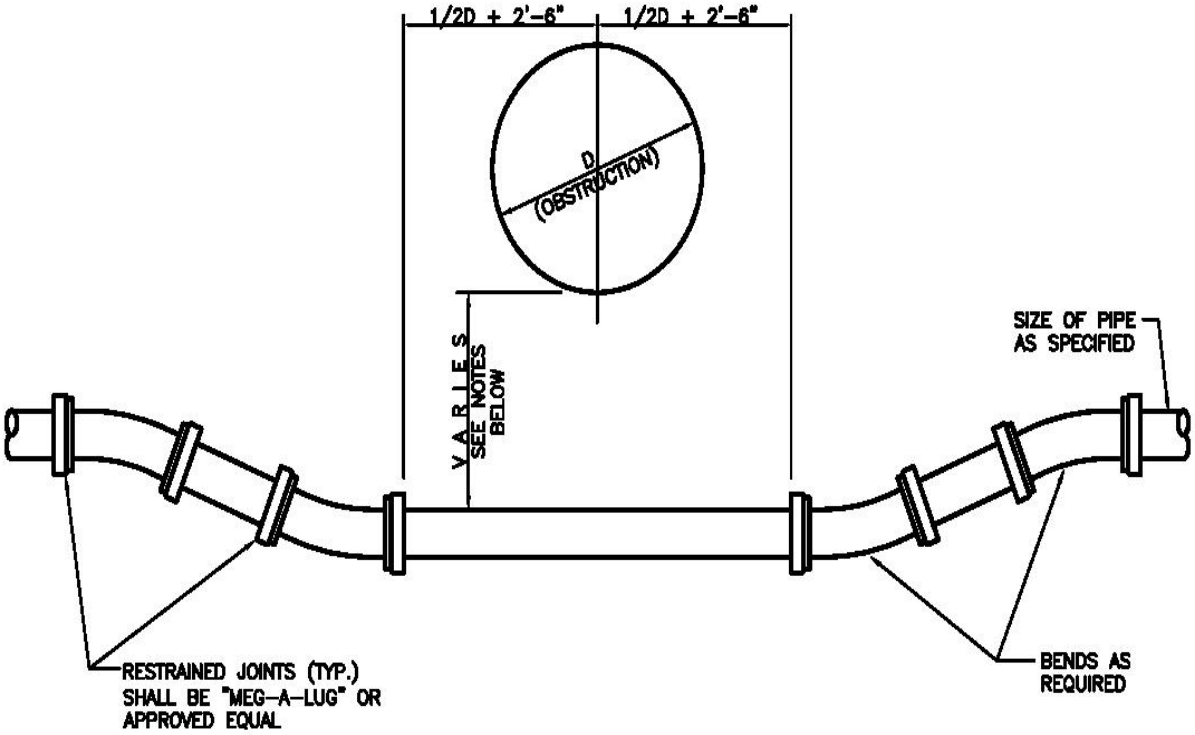
N. T. S.

NOTE:
RESTRAIN PIPE AS REQUIRED TO PREVENT FROM FLOATING OR DISPLACEMENT UNTIL CONCRETE SET.



CASING PIPE ASSEMBLY DETAIL

N. T. S.

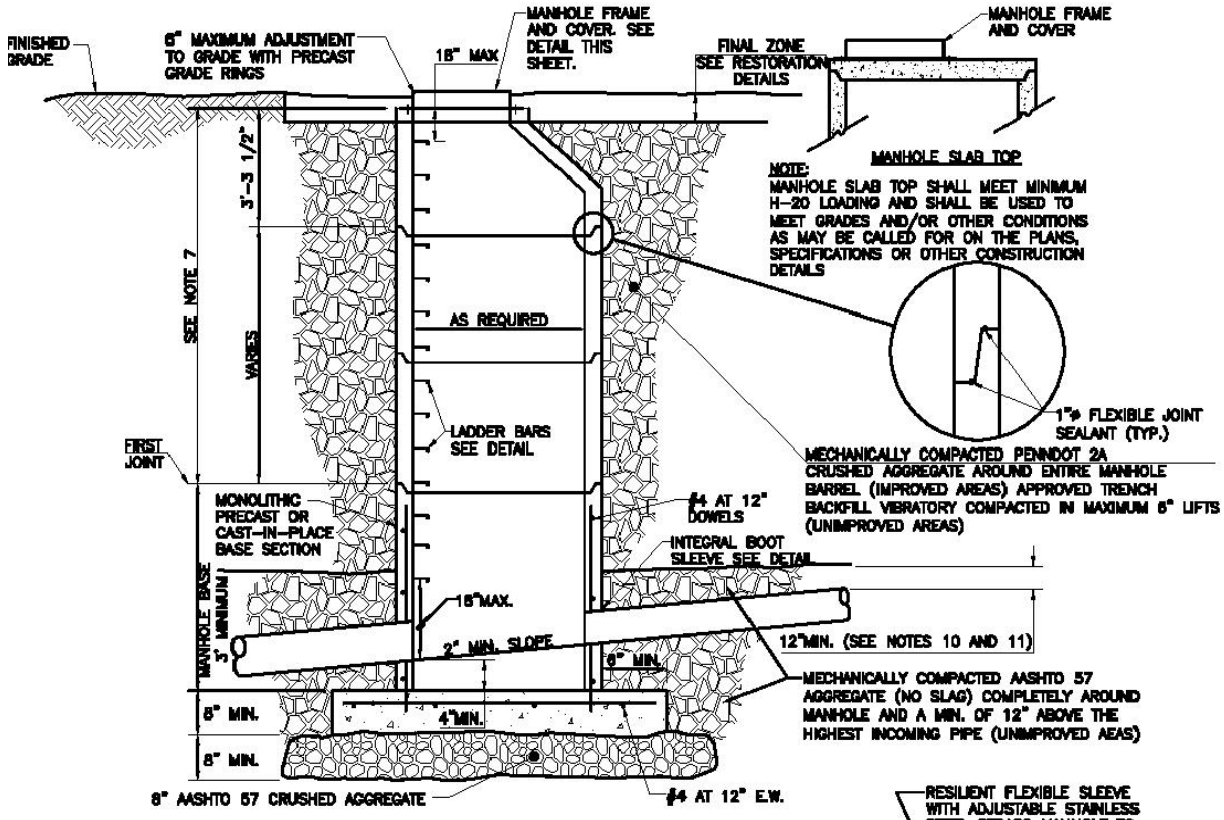


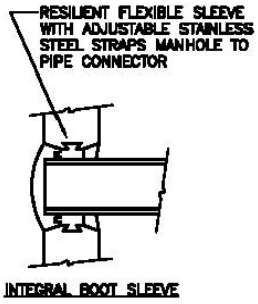
NOTES:

1. ALL PIPE SHALL BE DUCTILE IRON CLASS 52 SELF RESTRAINED JOINT (EPOXY LINED) FOR CREEK CROSSINGS WITH A MINIMUM OF 3'-0" COVER FROM THE STREAM BOTTOM TO THE TOP OF THE PIPE AND SHALL EXTEND A MINIMUM OF 10'-0" BEYOND THE TOP OF BANK ON EACH SIDE OF CREEK.
2. FOR CROSSING UNDER EXISTING PIPE OR OBSTRUCTIONS A MINIMUM OF 18" CLEARANCE SHALL BE MAINTAINED FROM THE BOTTOM OF THE EXISTING PIPE TO THE TOP OF THE PROPOSED FORCEMAIN.
3. FOR CROSSING UNDER EXISTING PIPE THE CONTRACTOR MAY ELIMINATE FITTINGS, IF DEPTH CAN BE OBTAINED BY DEFLECTING PIPE JOINTS WITHIN ALLOWABLE LIMITS AND IN ACCORDANCE WITH MANUFACTURES RECOMMENDATIONS.
4. SEE "FORCEMAIN VERTICAL BLOCKING" DETAIL.

FORCEMAINS UNDER OBSTRUCTIONS

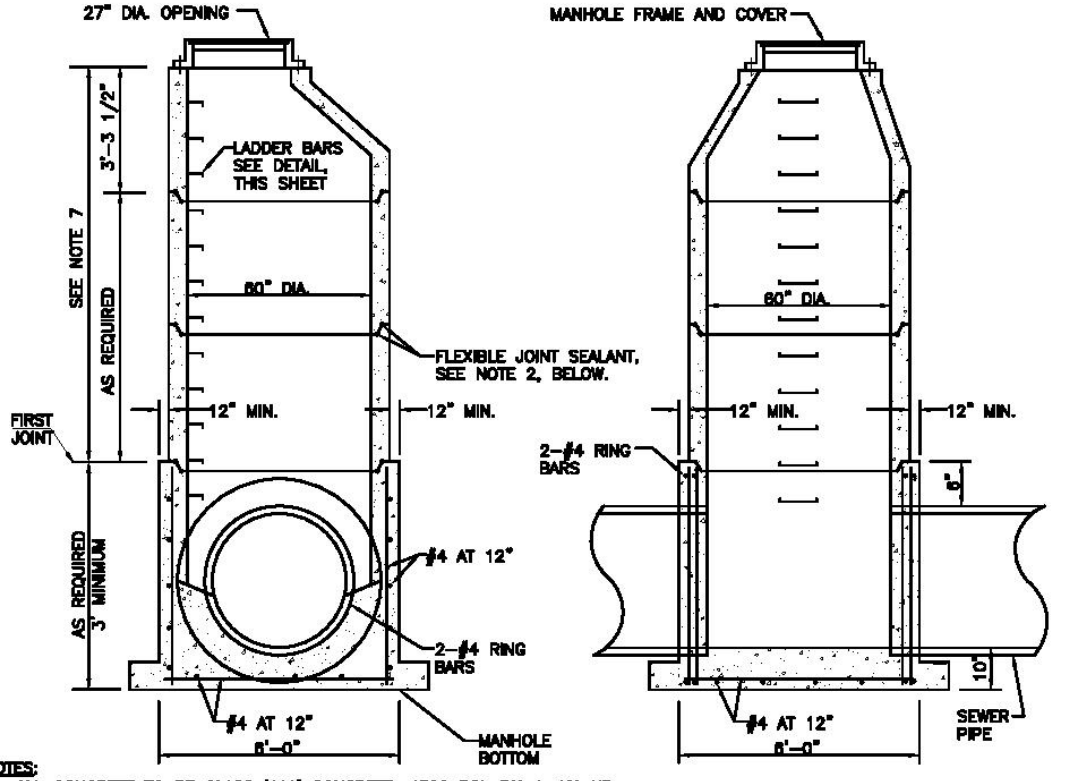
N. T. S.





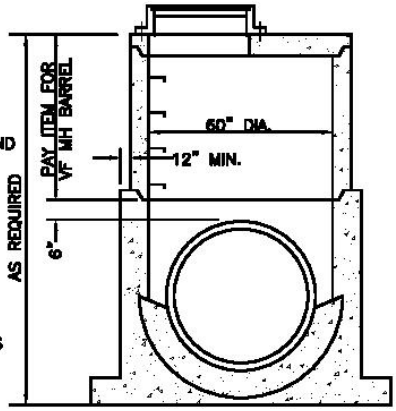
NOTES:
1. ALL CONCRETE TO BE CLASS AAA CONCRETE, 4500 PSI, 5% ± 1% AIR ENTRAINED WITH XYPEX ADMIXTURE.
2. SEAL MANHOLE BARREL JOINTS WITH 2– 1"ø FLEXIBLE BUTYL RUBBER JOINT SEALANT, USE 1/2"ø FOR FRAME AND COVER.
3. ANCHOR FRAME AND COVER WITH 2–3/4" DIA. S.S. ANCHOR BOLTS SET PERMANENTLY INTO CONCRETE.
4. POINT LIFTING HOLES WITH NON–SHRINK GROUT, WATERTIGHT, NEAT AND SMOOTH.
5. MAXIMUM ADJUSTMENT TO FINISHED GRADE USING PRECAST GRADE RINGS IS SIX INCHES (6").
6. CONFORM PRECAST SECTIONS TO ASTM C–478 AS REVISED.
7. IF THIS DIMENSION IS LESS THAN 3'–3" USE PRECAST SLAB TOP DESIGNED TO MEET LOAD CONDITIONS (H–20 MIN.)
8. COAT EXTERIOR OF ALL MANHOLE BARREL SECTIONS WITH APPROVED BITUMINOUS COATING.
9. CAST LADDER BARS INTO BARREL SECTIONS AND CONFORMING TO ASTM C–478, AS REVISED.
10. WHERE MANHOLES ARE INSTALLED IN IMPROVED AREAS, BACKFILL THE ENTIRE EXCAVATED AREA WITH MECHANICALLY COMPACTED PENNDOT 2A AND AASHTO 57 CRUSHED AGGREGATE PER DETAIL (NO SLAG).
11. WHERE MANHOLES ARE CONSTRUCTED IN UNIMPROVED AREAS, BACKFILL THE ENTIRE EXCAVATED AREA WITH MECHANICALLY COMPACTED AASHTO 57 CRUSHED AGGREGATE (NO SLAG). FROM THE BOTTOM OF THE EXCAVATED AREA TO 12 INCHES ABOVE THE HIGHEST PIPE ENTERING THE MANHOLE.

TYPICAL
PRECAST CONCRETE SANITARY MANHOLE AND SLAB TOP
N. T. S.



NOTES:

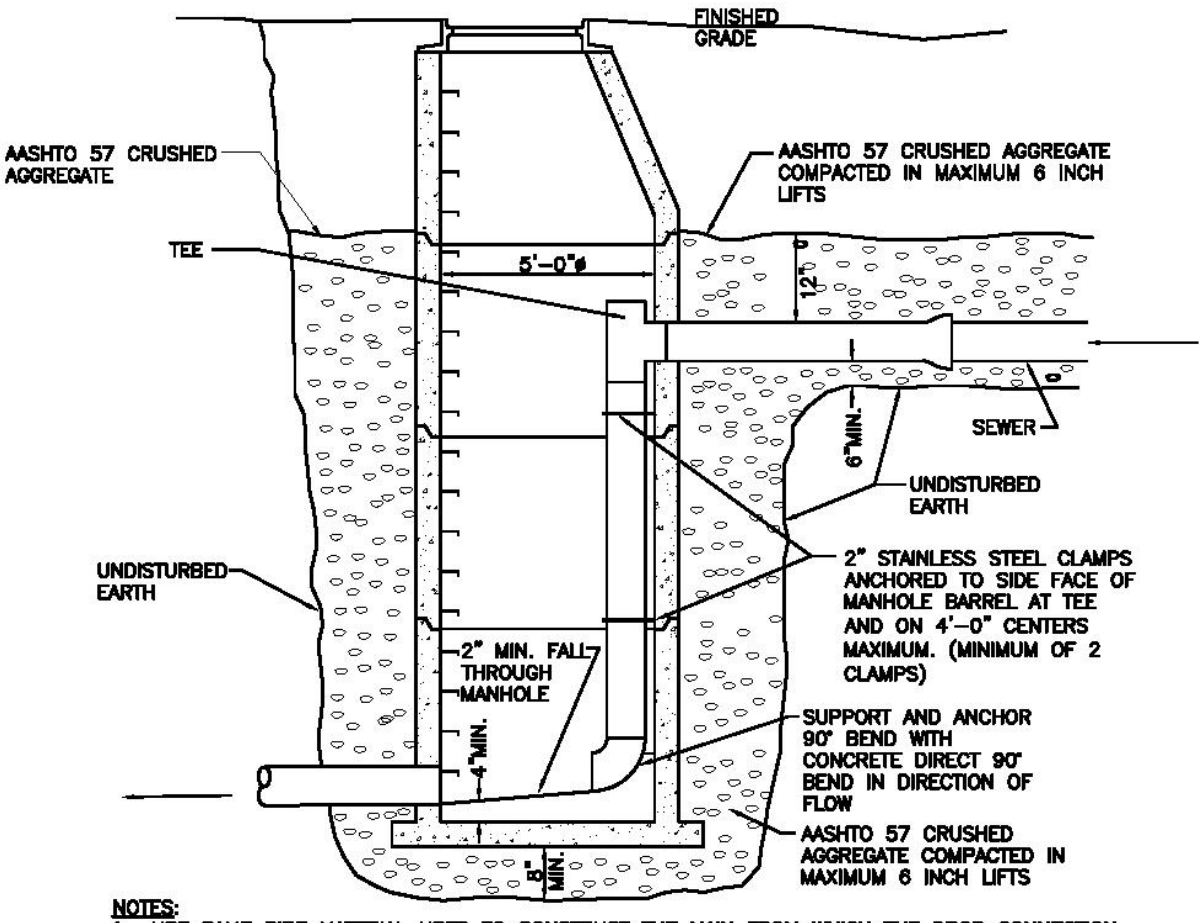
1. ALL CONCRETE TO BE CLASS 'AAA' CONCRETE, 4500 PSI, 5% ± 1% AIR ENTRAINED. WITH XYPEX ADMIXTURE.
2. SEAL MANHOLE BARREL JOINTS WITH 2– 1"ø FLEXIBLE BUTYL RUBBER JOINT SEALANT, USE 1/2"ø FOR FRAME AND COVER.
3. ANCHOR FRAME AND COVER WITH 2–3/4" DIA. S.S. ANCHOR BOLTS SET PERMANENTLY ANCHORED INTO CONCRETE.
4. POINT LIFTING HOLES WITH NON–SHRINK GROUT, AND LEFT WATERTIGHT, NEAT AND SMOOTH.
5. MAXIMUM ADJUSTMENT TO FINISHED GRADE USING PRECAST GRADE RINGS SHALL NOT EXCEED SIX INCHES (6").
6. CONFORM PRECAST SECTIONS TO ASTM C–478 AS REVISED.
7. IF THIS DIMENSION IS LESS THAN 3'–3" USE PRECAST SLAB TOP DESIGNED TO MEET LOAD CONDITIONS.(H–20 MIN).
8. COAT EXTERIOR OF ALL MANHOLE BARREL SECTIONS WITH APPROVED BITUMINOUS COATING.
9. CAST LADDER BARS INTO BARREL SECTIONS AND SHALL CONFORM TO ASTM C–478, AS REVISED.
10. WHERE MANHOLES ARE INSTALLED IN IMPROVED AREAS, THE ENTIRE EXCAVATED AREA SHALL BE BACKFILLED WITH PENNDOT 2A AND AASHTO 57 CRUSHED AGGREGATE. PER SAN–11
11. WHERE MANHOLES ARE CONSTRUCTED IN UNIMPROVED AREAS, BACKFILL THE ENTIRE EXCAVATED AREA WITH AASHTO 57 CRUSHED AGGREGATE FROM THE BOTTOM OF THE EXCAVATED AREA TO 12 INCHES ABOVE THE HIGHEST PIPE ENTERING THE MANHOLE.
12. PROVIDE FLANGED BASE.



CAST-IN PLACE OR PRECAST CONCRETE

5' DIAMETER SANITARY MANHOLE

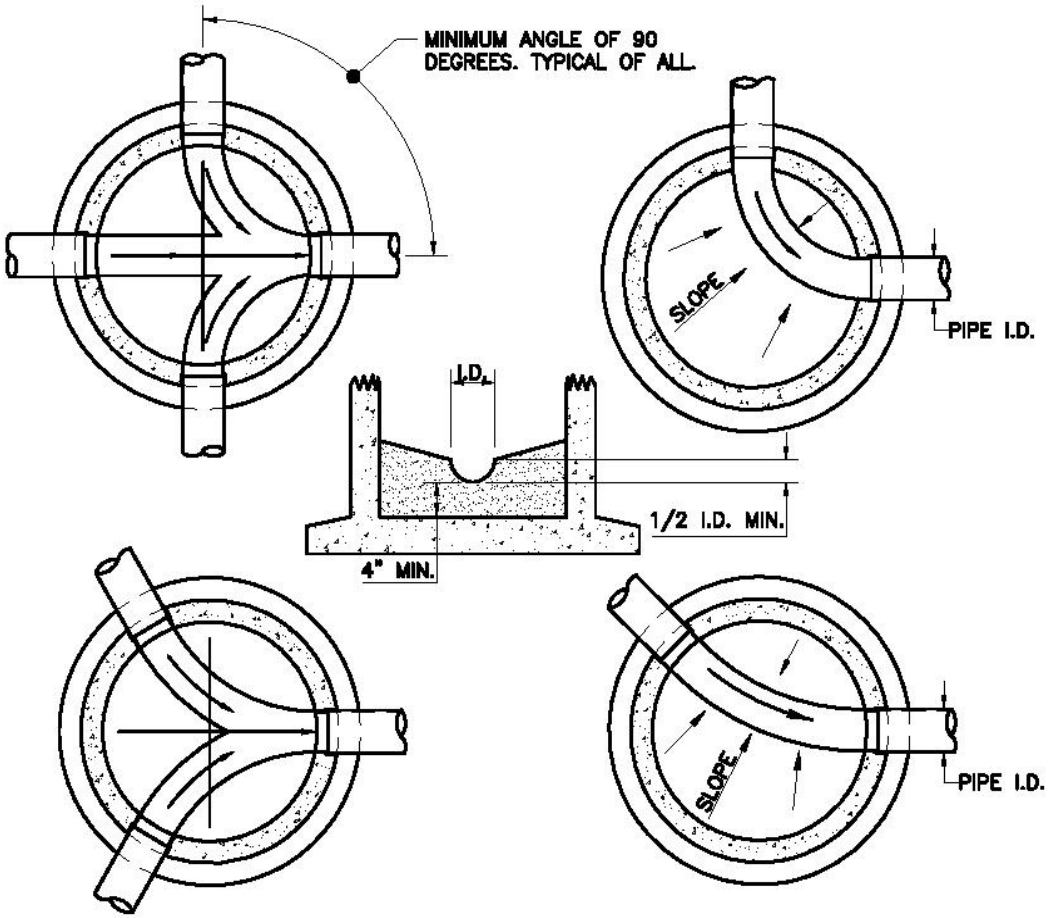
N. T. S.



NOTES:

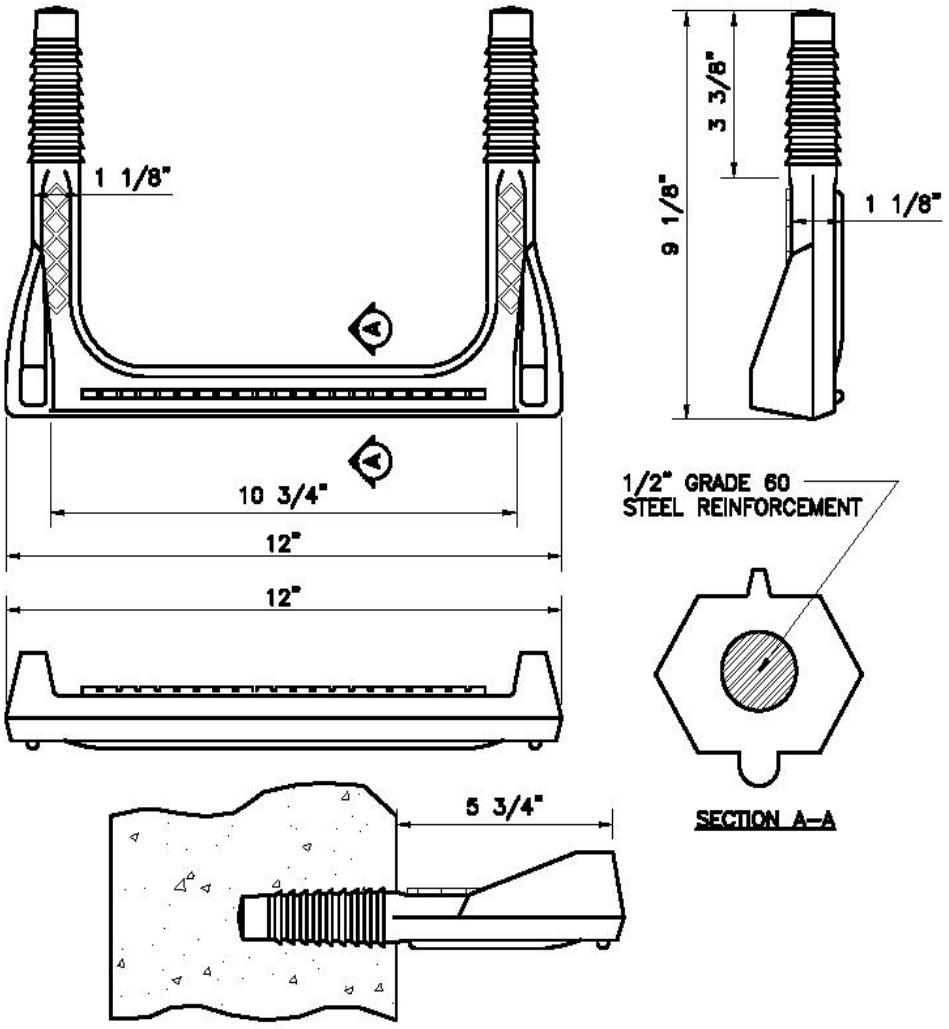
1. USE SAME PIPE MATERIAL USED TO CONSTRUCT THE MAIN FROM WHICH THE DROP CONNECTION IS MADE.
2. PVC DROP CONNECTION PIPE SHALL BE ASTM SDR 26.
3. DIAMETER OF THE DROP CONNECTION INLET PIPING SHALL EQUAL THE DIAMETER OF THE INLET PIPE.
4. MECHANICALLY COMPACTED AASHTO No. 57 CRUSHED AGGREGATE 8" MINIMUM LEVELING COURSE UNDER BOTTOM OF MANHOLE.
5. PROVIDE 5'-0" DIAMETER MANHOLES FOR MANHOLE DROP CONNECTIONS. SEE 5' DIAMETER SANITARY MANHOLE DETAIL. (SAN-12) FOR SPECIFIC MANHOLE DETAIL INFORMATION.
6. ALL MOUNTING HARDWARE TO BE STAINLESS STEEL.

TYPICAL
INSIDE MANHOLE DROP CONNECTION
8", 10", 12" AND 15" DIAMETER SEWER PIPES
N. T. S.

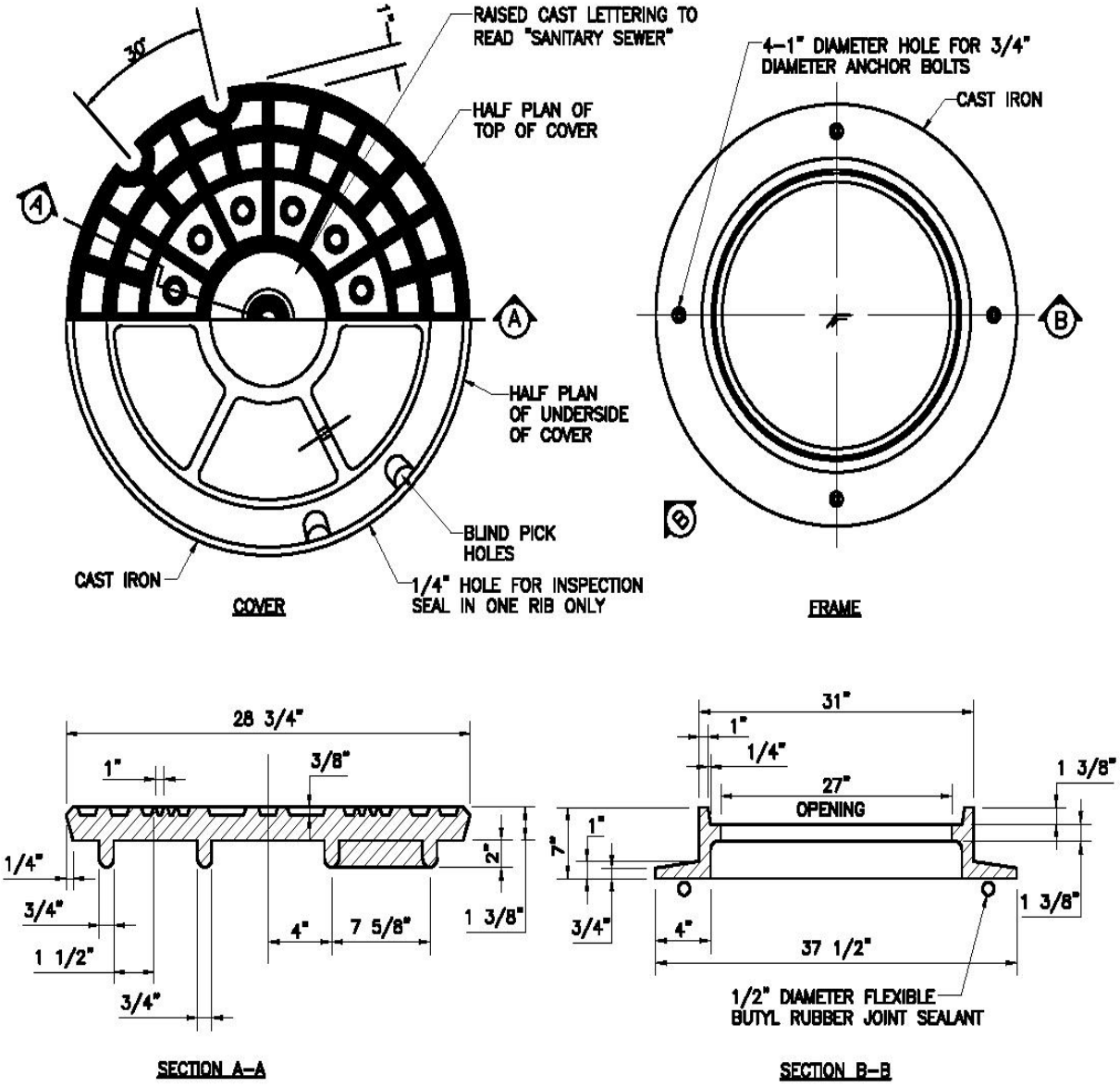


NOTES:
1. CHANNELS TYPICAL, NUMBER AND LOCATION TO MEET FIELD CONDITIONS.
2. CHANNELS TO BE SEMI–CIRCULAR IN SECTION.
3. SLOPE MANHOLE FLOOR TO CHANNEL FOR DRAINAGE.
4. USE PADOT CLASS 'AAA' CONCRETE (4,500 PSI) TO FORM CHANNELS AND HAVE A MINIMUM DEPTH OF 4 INCHES. ADD XYPEX TO CONCRETE MIX.
5. PROVIDE SMOOTH FLOAT FINISH. PROVIDE UNIFORM RADIUS.
6. PRE–POURED INVERTS PROHIBITED. ALL INVERTS TO BE FIELD POURED. UNLESS OTHERWISE APPROVED BY CTSA

TYPICAL
MANHOLE CHANNELS
N. T. S.



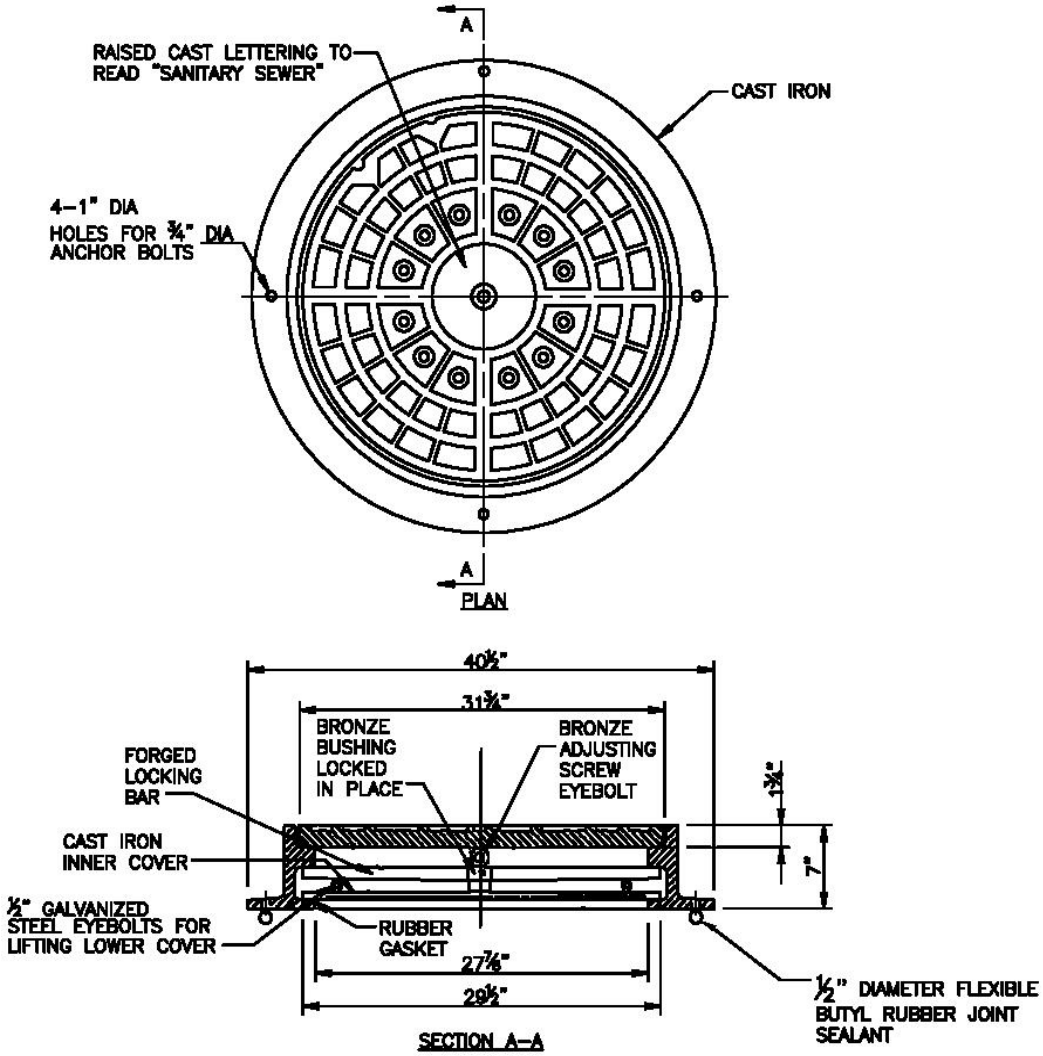
TYPICAL
LADDER BARS FOR MANHOLE
N. T. S.



TYPICAL

STANDARD SANITARY MANHOLE FRAME AND COVER

N. T. S.

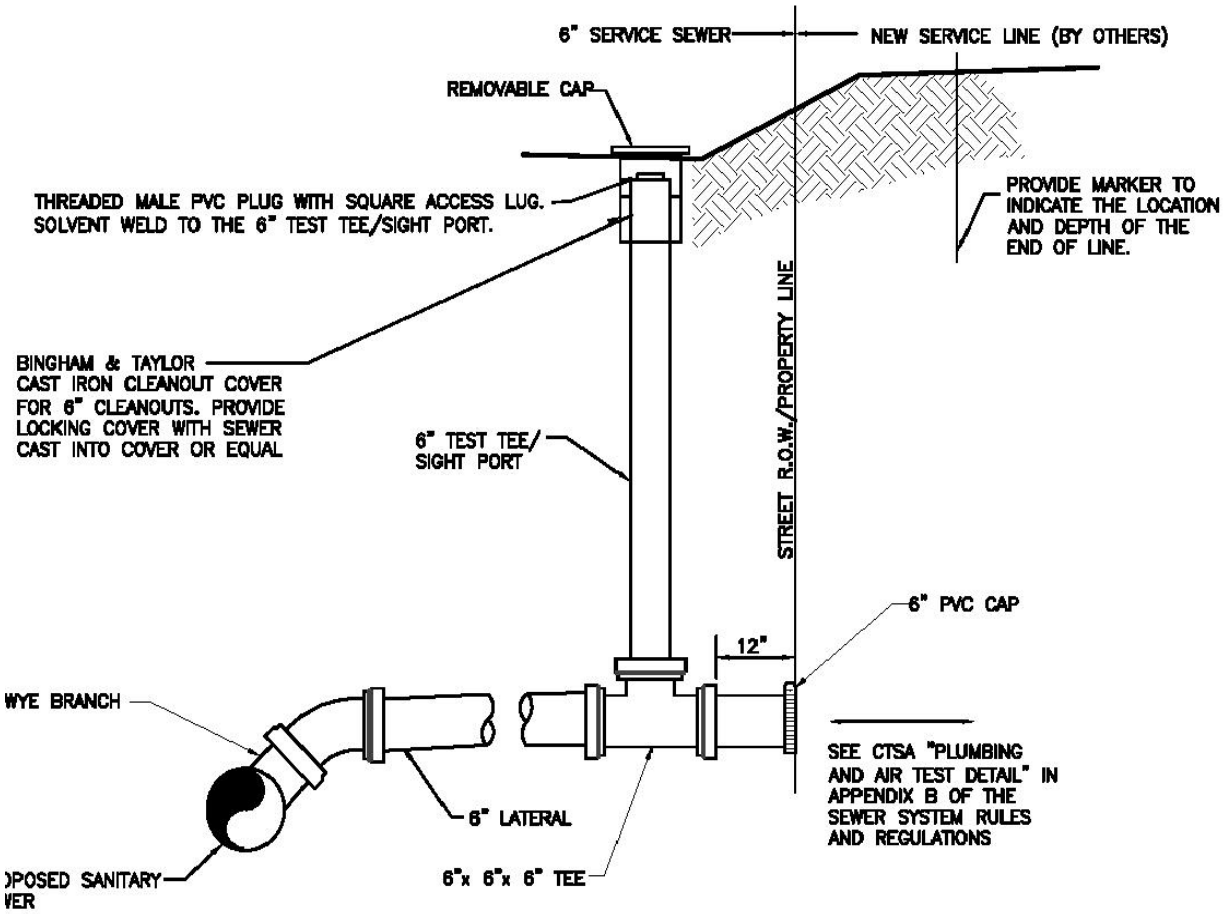


NOTES:

1. ALL CONTACT SURFACES MACHINED.
2. PROVIDE SECURITY SADDLE OVER EYEBOLT IF SPECIFIED.
3. REFER TO STANDARD SANITARY MANHOLE FRAME AND COVER DETAIL FOR DETAIL ON COVER.

WATERTIGHT SANITARY MANHOLE FRAME AND COVER

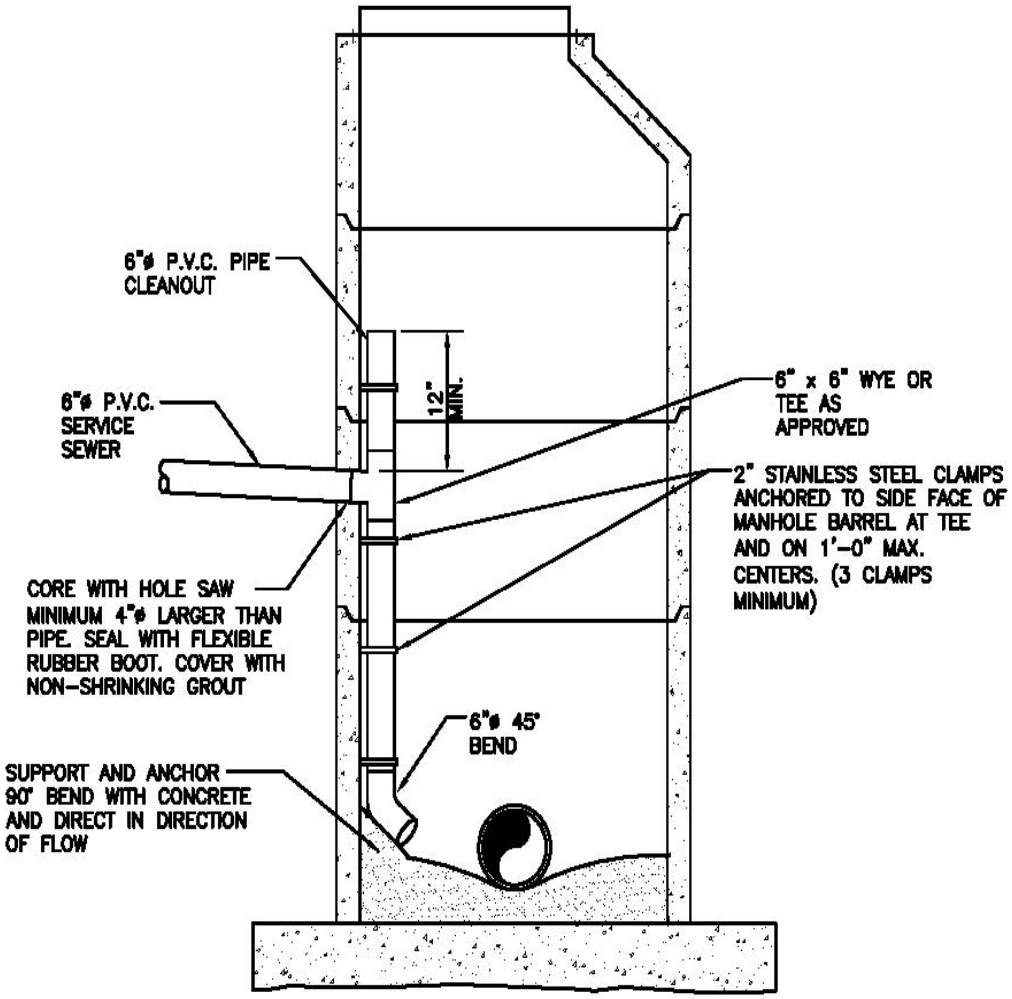
N. T. S.



NOTES:

1. CONFORM PVC PIPE AND FITTINGS TO THE REQUIREMENTS OF ASTM D-3034-SDR 26 AND ASTM D-3212 JOINTS.
2. CONSTRUCT ALL LATERALS AT A MINIMUM SLOPE OF TWO PERCENT(2%).
3. INSTALL ALL LATERALS ACCORDING TO THE TRENCH AND PIPE ZONE DETAIL.
4. THE CONTRACTOR TO COORDINATE PLACEMENT OF WYE CONNECTION, SERVICE LATERAL AND SIGHT TEE WITH THE PROPERTY OWNER AND THE OWNER'S REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION.

TYPICAL
WYE CONNECTION, SERVICE LATERAL
SIGHT TEE DETAIL
N. T. S.

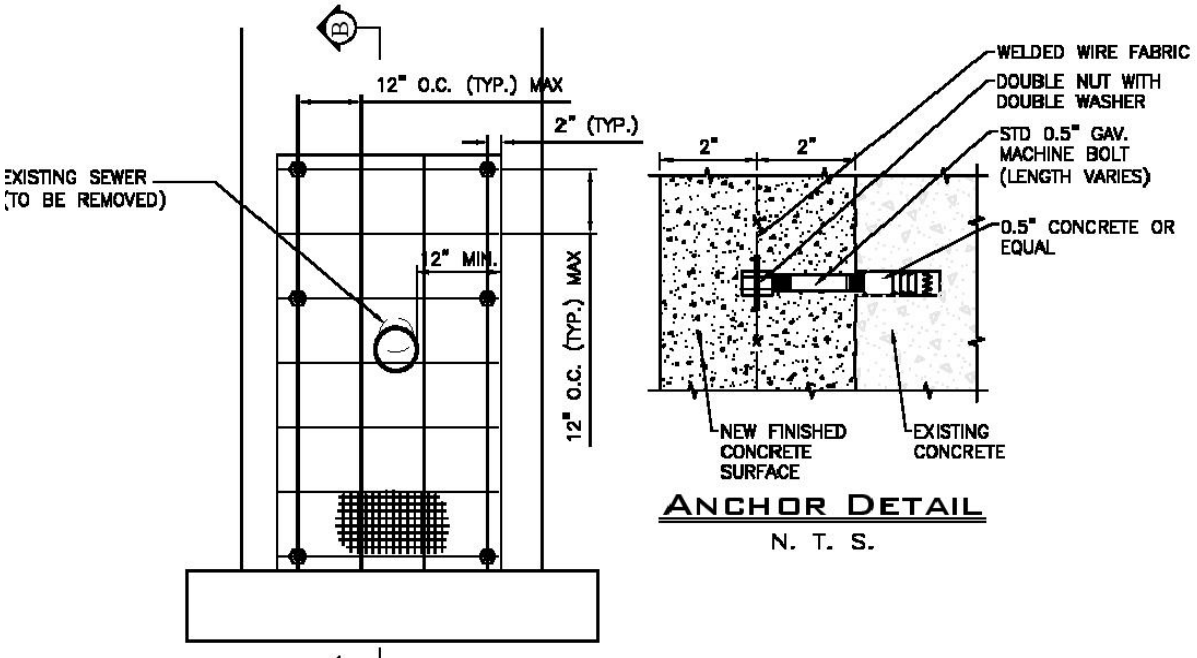


NOTE:
DROP CONNECTION INLET PIPE SHALL BE 6"ø P.V.C. PIPE CONFORMING TO ASTM SDR26.

TYPICAL

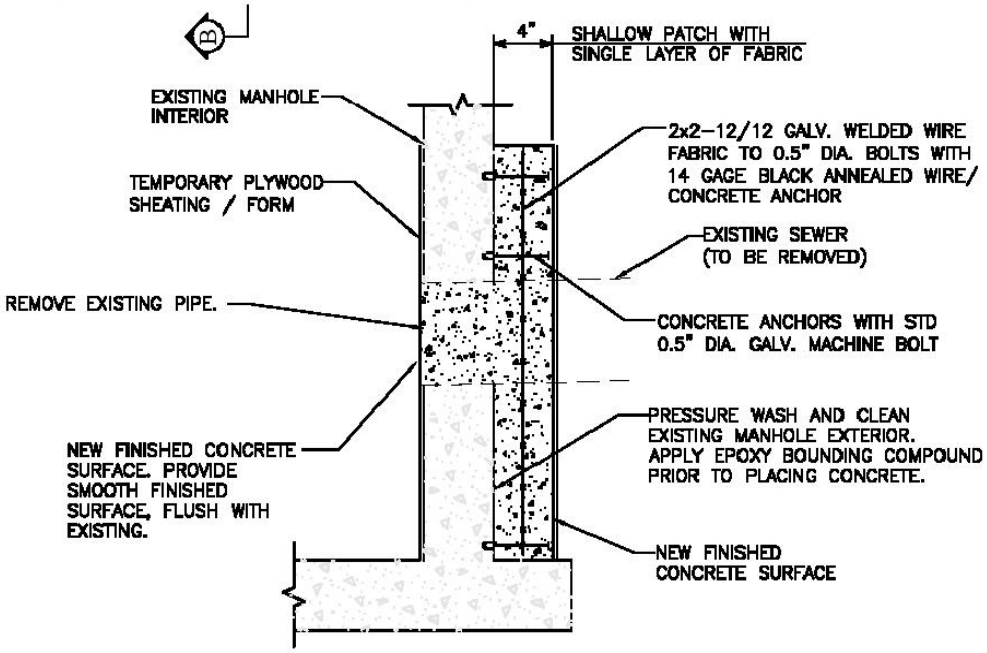
SERVICE CONNECTION AT MANHOLE

N. T. S.



ANCHOR DETAIL

N. T. S.



SECTION B-B (TYP.)
SEWER TERMINATION

MANHOLE REPAIR DETAIL

N. T. S.