

Junaluska Sanitary District

SEWER

Policy and Procedures



March 08, 2021

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POLICY AND PROCEDURES FOR SEWER SERVICE

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JUNALUSAK SANITARY DISTRICT
of HAYWOOD COUNTY, NORTH CAROLINA

SEWER POLICY AND PROCEDURES

POLICY

The Junaluska Sanitary District of Haywood County (hereinafter “JSD” or “District”) recognizes there will be a need from time to time to extend the sewerage system operated by the District (the “District Sewerage System”) to serve new industrial, commercial and residential development and to serve areas not currently served by the District. The District also recognizes that there will be additional connections to the existing District Sewerage System. The purpose of this document is to set forth the policy, rules and procedures for extension of and connection to the District Sewerage System. Terms used herein are defined in Appendix B – Definitions.

I. GENERAL PRINCIPLES

A. Extensions Defined

The District will only consider Sewer extensions to the existing District Sewerage System. Extension of service consists of:

1. Construction of new public Sewers and appurtenances. Any extension of sewer service which is proposed to serve more than one property under separate ownership or to serve more than one building under separate ownership must be built to public sewer standards, NCDEQ regulations and transferred to and accepted by the District for ownership and maintenance.
2. Pump stations will only be allowed on extensions to the District Sewerage System where, in the opinion of the District, gravity service is not achievable. Pump Stations, if approved, *may* also subject to payment of a Pump Station Maintenance Fee. Pump stations that would be allowed must be pre-approved by the District’s Engineer.
3. Construction of new Private Sewer Systems. The District reserves the right to limit or prohibit discharges from Private Sewer Systems. (See Section III)
4. The connection of a Building Sewer to an existing sewer line. (See Section IV)
5. The connection of existing Public or Private Sewer Systems not previously served by the District. (See Section V).

B. Applicant Responsibilities

As a general rule, the District will not extend sewer service or pay the cost of extending sewer service. The Applicant desiring to extend or connect to the District Sewerage System shall be responsible for:

1. The cost of designing, permitting and constructing all components necessary to connect to the District Sewerage System.
2. The costs of improvements to any existing lines, pump stations and appurtenances, which, in the opinion of the District, are necessary for adequate transport of the proposed discharge.
3. Conveyance of physical components and easements and rights-of-way to the District.

C. Coordination with other District policies

The extension of the District's Sewerage System shall:

1. Be in accordance with and subject to the District's current Sewer Policies, Specifications and Sewer Use Ordinance and to rates and charges for sewer.
2. Be made in a manner to serve users and to allow for future orderly development of the District Sewerage System.
3. Be in accordance with applicable laws and regulations, and policies of the District Board.

D. Ownership

The District shall be responsible for operation, maintenance, repair and replacement, if necessary, of all sewerage facilities transferred to and accepted by the District. Separation of Sewer ownership is described as:

JSD owns and is responsible for all main trunk lines (8" or greater), Manholes and tap lines to the Cleanout (the cleanout designates ownership separation).

Customers, developers and communities own and are responsible for all sewer lines less than 8" (unless previously approved by the District) and from the tap cleanout back to the properties.

II. NEW PUBLIC SEWER LINE EXTENSION REQUIREMENTS

Extensions of **Public Sewer Lines** shall meet the following requirements:

A. Approval by Local Governments & Agencies

Prior to starting construction on any Public Sewer Line extensions, the Applicant for service shall provide to the District certification and/or documentation that the proposed development of the property to be served has been approved by the political subdivision and regulatory agencies having jurisdiction.

B. Review by the District

All extensions shall meet the minimum requirements set by the District's Sewer Policies, Specifications, Sewer Use Ordinance and *NCDEQ regulations*. An Extension request form must be submitted to the District along with plans and design for review. Engineer drawings of the extension must be approved by the District's Engineer.

C. Approval by Regulatory Agencies

Prior to approval by the District, the construction drawings and specifications for the extension of sewer service must be submitted by the Applicant to, and reviewed and approved by, all regulatory agencies having jurisdiction (*Town of Waynesville WWTP, Haywood Co Building Department*).

D. Permitting: Approval by the District and NCDEQ

Construction shall not commence until a Sewer Permit has been issued by NCDEQ for the public sewer line extension that JSD will own and operate (8" or larger).

The Sewer permit shall be in the Contractor, Developer or property owners name. Once the sewer line is completed and accepted by the District, the Contractor, Developer or property owner shall convey the line to the district. It is the permittees responsibility to close out the permit with NCDEQ.

For permits of all private lines (less than 8"), see section III.

E. Construction

Construction of Public Sewer Line extensions, including connection to the public sewer, shall be performed by a licensed utility contractor under contract to the Applicant, and in full compliance with the District's Sewer

Policies and Specifications. All work is subject to inspection and approval by the District. The Applicant may be required to reconstruct or replace any work to bring it into conformity with the District's Sewer Policies and Specifications. Construction observation by the District does not imply supervision or acceptance of the work.

F. Rights-of-Way / Easements

Public Sewer Lines shall be installed only in dedicated street rights-of-way or rights-of-way secured by easements satisfactory to the District. The Applicant is responsible for providing or securing the necessary rights-of-way or easement required for the extension.

G. Ownership and Control

All Public Sewer Lines constructed in accordance with this policy and connected to the District Sewerage System shall be conveyed to and become the property of the District upon completion and acceptance by the District. The Applicant is required to convey the physical components of the sewer system and the required rights-of-way or easement to the District by instruments in form and content satisfactory to the District.

The District shall have exclusive control of all such Public Sewer Lines and shall be responsible for operation, maintenance, repair and replacement, if necessary. JSD's ownership and responsibility end within the rights-of-way or dedicated easement.

H. Warranty

The Applicant conveying an extension to the District Sewerage System shall guarantee to hold harmless and indemnify the District from any and all claims for injury to person or property arising out of or resulting in any way from defective material or workmanship, including any claims for consequential damages for a period of twelve (12) months from the date of completion and acceptance of the extension. At the completion of construction and prior to acceptance of any fees for connection of service, the Applicant must supply to the District a completed District form titled "Contractor's Certificate of Completion and Warranty".

I. System Expansion

Nothing herein shall preclude the District from extending the Sewerage System.

III. NEW PRIVATE SEWER SYSTEMS

A Private Sewer System is any part of a sewer system which collects wastewater from more than one building, is privately owned, and is not directly controlled by a public authority. Any extension of sewer service which is proposed to serve more than one property under separate ownership or to serve more than one building under separate ownership must be public and transferred to the District for ownership and maintenance. The District reserves the right to limit or prohibit discharges from Private Sewer Systems.

See NCDEQ Permitted Rule for Sewers Shared by Two Residential Structures (Session Law 2020-61)

A. Approval

Prior to construction of a Private Sewer System, the Applicant for service shall provide to the District certification and/or documentation that the proposed development of the property to be served has been approved by the political subdivision and regulatory agencies having jurisdiction.

All Private extensions or sewer systems that will be discharged into the District's sewer system must be pre-approved by JSD before construction. Approval is for evaluation and determination of JSD's pumping station capacity requirements.

B. Permitting Requirements

Prior to the commencement of construction of the Private Sewer System, the Applicant shall provide evidence that all required permits have been obtained and that the Private Sewer Systems will be built in accordance with NCDEQ regulations and all applicable law.

For all lines less than 8" (deemed Private) that will serve more than one structure, an NCDEQ sewer permit is required. Proof of permit from NCDEQ must be submitted to the District for approval and prior to any connection will be made.

Only a licensed utility contractor or District personnel may connect a Private Sewer System to the District Sewerage System.

IV. NEW SERVICE CONNECTIONS

Property (Customer) must be on the District's water system in order to obtain sewer service.

Application and Approval Required:

A customer request/service connection form must be completed and submitted to the District for new service connections. Approval from the District must be obtained prior to a new service connection. No person shall make connection with or discharge to the District Sewerage System or any sewer line ultimately discharging to the District Sewerage System without first obtaining written approval from the District.

This section does not apply to Private Sewer Systems serving one lot, parcel or property constructed in accordance with the provisions of Section III.

A. Service

Each lot or parcel to be served shall have a Public Sewer Line extended to such lot or parcel so that the Building Sewer serving each lot or parcel may be connected to the Public Sewer Line.

B. Installation

Installation of the Building Sewer from the house to the Sewer Line, including furnishing and setting cleanouts, will be the responsibility of the property owner. The normal location for the first cleanout in the Building Sewer upstream of the Sewer Line will be at the property line or edge of right-of-way. The Service Line (that portion of the Building Sewer within the public right-of-way or easement) shall be constructed in accordance with the District's Sewer Policies. Taps into Public Sewer Lines in service will be made only by the District's personnel or personnel authorized by the District.

The District is not responsible for any service line installed prior to the Tap being made. If the private service line is installed prior to the Main Line Tap, JSD has no responsibility of any depth or flow grade issues. It is highly recommended that the main line tap is constructed prior to any service line being installed.

C. Provisions for Subsequent Connection

To avoid future cutting of street surface where sewer service is not immediately required, a Service Line with cleanout shall be installed to each parcel or lot line.

D. Codes

All private Building Sewers shall be installed in accordance with applicable North Carolina or Local Plumbing Codes and Regulations.

V. EXISTING PRIVATE SEWER SYSTEMS

The District recognizes that there are existing substandard Private Sewer Systems within or adjacent to the District Boundary and discharge to the District Sewerage System. These systems have not been accepted for ownership by the District and are not operated or maintained by the District. Such systems will not be considered for acceptance of ownership by the District unless upgraded to current Public Sewer Standards. Such existing Private Sewer Systems must be improved to current Public Sewer Standards prior to connecting a Public Sewer Line extension to such Private Sewer System.

Note: JSD owns, maintains and operates Public sewer lines that are minimum of 8". All lines less than 8" (4" or 6") are deemed as Private sewer systems.

VII. FEES

All fees and payments due the District shall be made prior to any connection with or discharge into the District Sewerage System.

A. General

Rates, Fees and Charges for improving, extending, connecting to, and discharging into the District Sewerage System shall be in accordance with the current Schedule of Rates, Fees and Charges adopted by the District Board, and the District Board reserves the right to adjust such rates, fees and charges. The following fees are those associated with extensions only and are in addition to sewer service charges and other fees and assessments charged by the District.

B. Service Connection Fee

The Sewer connection fee consists of the actual Tap Fee plus a Facility Fee.

1. Building Sewer Tap Fee

The purpose of the tap fee is to recover a portion of the costs of making the actual tap/connection into the Sewer Line or lines and providing a connection point for Building Sewers.

2. Facility Fee

The purpose of the facility fee is to recover a portion of the cost associated with providing wastewater system facility capacity of the District's pumping stations.

VIII. EXTENSIONS TO PUBLIC OR PRIVATE SEWAGE COLLECTION SYSTEMS OUTSIDE THE DISTRICT

A. Standards to Apply Outside the District

The District acknowledges that it presently serves and collects sewer systems outside the boundaries of the District. Some of these sewer systems are operated by private entities or individuals, and some are operated by political subdivisions outside the boundaries of the District. The District intends that these Procedures will apply to Extensions to sewer systems outside the District except as these Procedures may be qualified by a preexisting written agreement between the District and the operator of the sewer system. The District reserves the right to limit or prohibit discharges from sewer systems that lie outside the District Boundary.

B. Contract Required

Any proposed extension to Public or Private Sewer Systems that lie outside the District boundaries, and whose wastewater will be collected by the District, may be required to enter into a Sewage Disposal Agreement with the District unless the extension is covered by an existing written Agreement between the District and a political subdivision or a written agreement between the District and the owner of a private system. The District reserves the right to limit or prohibit discharges from sewer systems that lie outside the District Boundary.

IX. ADMINISTRATION AND ENFORCEMENT

The General Manager is hereby authorized and delegated the responsibility to administer the Policy and Procedures set forth herein.

X. AMENDMENTS

The District Board reserves the right to revise or amend this Policy and Procedures at any time.

XI. AUTHORIZATION

This Sewer Policy Amendment, together with Procedures set forth herein, is hereby adopted by the District Board of the Junaluska Sanitary District of Haywood County, North Carolina on April 15, 2021.

APPENDIX A – Definitions

Applicant:	The person or entity desiring to extend or connect to the District sewerage system.
Building:	Any structure or part of a structure built for the separate shelter or enclosure of persons, animals, belongings, or property of any kind and which has enclosing walls for at least 50 percent of its perimeter. Each unit separated from other units by a four-hour fire wall shall be considered as a separate building. For the purposes of this policy a manufactured home is not considered a building. A manufactured home is defined as a unit, transportable in one or more sections, built on a permanent chassis and designed to be used with or without a permanent foundation when connected to utilities and does not meet the standards established by the North Carolina Residential Building Code.
Building Drain:	That part of the lowest piping of a drainage system which receives waste from inside the building and conveys it to the building sewer which begins 5 feet outside the building wall.
Building Sewer:	That part of the horizontal piping of a sewer drainage system which receives the discharge from a single building sewer drain and conveys it directly to a public sewer, private sewer, or on- site sewage disposal system. Pipelines or conduits, pumping stations and appliances appurtenant thereto will not be considered to be building sewers if they traverse adjoining property under separate ownership or travel along any highway right of way.
District Board:	The District Board of the Junaluska Sanitary District of Haywood County, North Carolina.
District Sewerage System:	The system of sewage collection and disposal owned and operated by the District.

Private Sewer System:	Any part of a sewer system which collects wastewater from more than one building, is privately owned, and is not directly controlled by a public authority. A Private Sewer System is one that is not owned or maintained by the District. This includes by way of example, but is not limited to, mobile home parks and multi-unit rental properties.
Public Sewer:	A sewer located in a dedicated public street, roadway, or dedicated public right of way or easement which is owned and operated by any Junaluska Sanitary District, municipality, county, water or sewer district, or any other political subdivision of the state authorized to construct or operate a system.
Public Sewer Standards:	Technical standards or specifications, design criteria and easement requirements for Public Sewer Extensions as published in the Sewer Policies.
Fees:	The current Schedule of Rates, Fees and Charges as adopted by the District Board of the Junaluska Sanitary District of Haywood County, North Carolina.
Pumping Station:	A pumping station (also called lift station) is the sewer appurtenance which pumps wastewater from a sewer line of lower elevation to a sewer line of higher elevation.
Service Connection:	The physical connection to a Public or Private Sewer Line which allows the discharge of wastewater into the District Sewerage System.
Service Line:	The private sewer line transmitting sewage from the property to JSD's main line. (Owned by customer or property owner)
Sewer Policies:	The design guidelines, technical specifications, standard details, and easement requirements as published and promulgated by the Junaluska Sanitary District of Haywood County, North Carolina.
Sewer System:	Pipelines or conduits, pumping stations, specialized mode of conveyance and appliances appurtenant thereto, used for conducting wastes to a point of ultimate disposal.
Sewer Tap:	The connection of a building sewer or service line to a sewerline.

APPENDIX B – References

1. NC General Statute Chapter 162A
2. NC General Statute 130A-47
3. Junaluska Sanitary District Sewer Standards and Specifications
4. Junaluska Sanitary District Sewer Use Ordinance
5. Junaluska Sanitary District Sewer Policy
6. Customer Request Form
7. NCDEQ Regulations: Session Law 2020-61 (Permitted Rule)
8. NCDEQ Regulations: Title 15A / Subchapter 2T / Section .0100-.1600



Junaluska Sanitary District
P.O. Box 35
Lake Junaluska, NC 28745
828-452-1178
www.jsdwater.org

November 15, 2018
District Policies

Item 1

In order for the District to provide sewer service, the customer is required to be connected to the District's water system. The customer must have a metered water connection with a JSD meter installed.

Item 2

For District customers that will connect to the District's sewer service, there must be one sewer tap for each metered water connection. Customers (whether residential single-family, residential multi-family or commercial) are not allowed to have multiple sewer taps connected to one line unless such connections and line are part of a "collection line" expressly approved in writing by the District's Engineer. Collection lines are generally prohibited unless written approval by the District's Engineer is first obtained.

[Board Approved 11-15-18](#)



Junaluska Sanitary District
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Junaluska Sanitary District

Water & Sewer Line Size and Material Policy – presented to the board 7/25/18 for update and reinforcement

For all water and sewer lines installed by others (developers, contractors, owners) that the district will take ownership of, the following must apply:

- Water Lines – a minimum size of 6" and Ductile Iron Pipe (DIP) as material
- Sewer Lines – a minimum size of 8"

Any lines that do not meet this specification must have written approval through the District's engineer prior to installation, otherwise the District will not take ownership of.

*Board Approved and passed Policy 7-25-18

Sewer Ordinance

Town of Waynesville N.C sewer ordinance
Adopted by the Junaluska Sanitary District

Approved By: William A. Backer Jr
JUNALUSKA SANITARY DISTRICT SEC. TREASURER
APPROVED 7-18-06

§ 58-92

WAYNESVILLE CODE

ARTICLE IV. SEWER SERVICE*

DIVISION 1. GENERALLY

Sec. 58-126. Purpose and policy.

(a) This article sets forth uniform requirements for direct and indirect contributors into the wastewater collection and treatment system for the town and enables the town to comply with all applicable state and federal laws, including the Clean Water Act (33 USC 251 et seq.) and the General Pretreatment Regulations (40 CFR 403).

*State law references—Authority to establish and operate a sewerage system, G.S. 160A-311; wastewater systems, G.S. 130A-333 et seq.

CD58:12

(b) The objectives of this article are to:

- (1) Prevent the introduction of pollutants into the municipal wastewater system which will interfere with the operation of the system or contaminate the resulting sludge;
- (2) Prevent the introduction of pollutants into the municipal wastewater system which will pass through the system, inadequately treated, into any waters of the state or otherwise be incompatible with the system;
- (3) Promote reuse and recycling of industrial wastewater and sludges from the municipal system;
- (4) Protect both municipal personnel who may be affected by sewage, sludge and effluent in the course of their employment as well as protecting the general public;
- (5) Provide for equitable distribution of the cost of operation, maintenance and improvement of the municipal wastewater system; and
- (6) Ensure that the municipality complies with its NPDES or nondischarge permit conditions, sludge use and disposal requirements, and any other federal or state laws to which the municipal wastewater system is subject.

(c) This article provides for the regulation of direct and indirect contributors to the municipal wastewater system through the issuance of permits to certain nondomestic users and through enforcement of general requirements for the other users, authorizes monitoring and enforcement activities, requires user reporting and provides for the setting of fees for the equitable distribution of costs resulting from the program established in this article.

(d) This article shall apply to all users of the municipal wastewater system. Except as otherwise provided in this article, the POTW director shall administer, implement and enforce the provisions of this article. Any powers granted to or imposed upon the POTW director may be delegated by the POTW director to other town personnel. By discharging wastewater into the municipal wastewater system, industrial users located outside the town limits agree to comply with the terms and conditions established in this article, as well as any permits, enforcement actions, or orders issued under this article.

(Ord. No. 19-94, § 1.1, 7-26-1994)

Sec. 58-127. Definitions.

(a) The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Act and *the act* mean the Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 USC 1251 et seq.

Approval authority means the director of the division of environmental management of the state department of environment, health and natural resources or his designee.

Authorized representative of the industrial user means:

- (1) If the industrial user is a corporation:
 - a. The president, secretary or a vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
 - b. The manager of one or more manufacturing, production or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000.00 (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- (2) If the industrial user is a partnership or sole proprietorship, a general partner or the proprietor, respectively.
- (3) If the industrial user is a federal, state or local government facility, a director or highest official appointed or designated to oversee the operation and performance of the activities of the government facility, or their designee.

The individuals described in subsections (1)—(3) of this definition may designate another authorized representative if the authorization is in writing, the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the company, and the written authorization is submitted to the town.

Biochemical oxygen demand (BOD) means the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedures for five days at 20 degrees Celsius, usually expressed as a concentration (e.g., mg/l).

Building sewer means a sewer conveying wastewater from the premises of a user to the POTW.

Bypass means the intentional diversion of waste streams from any portion of a user's treatment facility.

Categorical standards means National Categorical Pretreatment Standards or pretreatment standard.

Design flow means the POTW treatment plant's NPDES permit limit for flow.

Environmental protection agency and *EPA* mean the U.S. Environmental Protection Agency, or where appropriate the term may also be used as a designation for the administrator or other duly authorized official of that agency.

Grab sample means a sample which is taken from a waste stream on a one-time basis without regard to the flow in the waste stream and over a period of time not to exceed 15 minutes.

Holding tank waste means any waste from holding tanks, including but not limited to such holding tanks as vessels, chemical toilets, campers, trailers, septic tanks, and vacuum-pump tank trucks.

Indirect discharge and *discharge* mean the discharge or the introduction from any nondomestic source regulated under section 307(b), (c) or (d) of the act (33 USC 1317), into the POTW (including holding tank waste discharged into the system).

Industrial user and *user* mean any person who is a source of indirect discharge.

Interference means the inhibition or disruption of the POTW treatment processes, operations or its sludge process, use or disposal which causes or contributes to a violation of any requirement of the POTW's NPDES or nondischarge permit or prevents sewage sludge use or disposal in compliance with specified applicable state and federal statutes, regulations, or permits. The term includes prevention of sewage sludge use or disposal by the POTW in accordance with section 405 of the act (33 USC 1345) or any criteria, guidelines or regulations developed pursuant to the Solid Waste Disposal Act (SWDA) (42 USC 6901 et seq.), the Clean Air Act, the Toxic Substances Control Act, the Marine Protection Research and Sanctuary Act (MPRSA) or more stringent state criteria (including those contained in any state sludge management plan prepared pursuant to title IV of SWDA) applicable to the method of disposal or use employed by the POTW.

Medical waste means isolation wastes, infectious agents, human blood and blood products, pathological wastes, sharps, body parts, contaminated bedding, surgical wastes, potentially contaminated laboratory wastes, and dialysis wastes.

National Categorical Pretreatment Standard and *categorical standard* mean any regulation containing pollutant discharge limits promulgated by EPA in accordance with sections 307(b) and (c) of the act (33 USC 1317) which applies to a specific category of industrial users, and which appears in 40 CFR chapter 1, subchapter N, parts 405—471.

National Pollution Discharge Elimination System (NPDES) permit means a permit issued pursuant to section 402 of the act (33 USC 342), or pursuant to G.S. 143-215.1 by the state under delegation from EPA.

National Prohibitive Discharge Standard and *prohibitive discharge standard* mean absolute prohibitions against the discharge of certain substances. These prohibitions appear in section 58-151 and are developed under the authority of section 307(b) of the act and 40 CFR 403.5.

New source means:

- (1) Any building, structure, facility or installation from which there may be a discharge of pollutants, the construction of which commenced after the publication of proposed

categorical pretreatment standards under section 307(c) of the act which will be applicable to such source if such standards are thereafter promulgated in accordance with section 307(c), provided that the:

- a. Building, structure, facility or installation is constructed at a site at which no other source is located;
- b. Building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or
- c. Production or wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site.

In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant and the extent to which the new facility is engaged in the same general type of activity as the existing source should be considered.

- (2) Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility or installation meeting the criteria of subsection (1)b. or c. of this definition but otherwise alters, replaces or adds to existing process or production equipment.
- (3) For purposes of this definition, construction of a new source has commenced if the owner or operator has:
 - a. Begun, or caused to begin, as part of a continuous on-site construction program:
 1. Any placement, assembly, or installation of facilities or equipment; or
 2. Significant site preparation work, including clearing, excavation or removal of existing buildings, structures or facilities which is necessary for the placement, assembly or installation of new source facilities or equipment; or
 - b. Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss and contracts for feasibility, engineering and design studies do not constitute a contractual obligation under this definition.

Noncontact cooling water means water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product or finished product.

Nondischarge permit means a disposal system permit issued by the state pursuant to G.S. 143-215.1.

Pass through means a discharge which exits the POTW into waters of the state in quantities or concentrations which, alone or with discharges from other sources, causes a violation, including an increase in the magnitude or duration of a violation, of the POTW's NPDES or nondischarge permit, or a downstream water quality standard.

Person means any individual, partnership, copartnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity or any other legal entity, or their legal representatives, agents or assigns. This definition includes all federal, state and local government entities.

pH means a measure of the acidity or alkalinity of a substance, expressed as standard units, and calculated as the logarithm (base 10) of the reciprocal of the concentration of hydrogen ions expressed in grams per liter of solution.

Pollutant means any waste as defined in G.S. 143-213(18) and dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, medical wastes, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste and certain characteristics of wastewater (e.g., pH, temperature, TSS, turbidity, color, BOD, COD, toxicity or odor).

POTW director means the town director of public works/town engineer.

POTW treatment plant means that portion of the POTW designed to provide treatment to wastewater.

Pretreatment and *treatment* mean the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollution into a POTW. The reduction or alteration can be obtained by physical, chemical or biological processes, or process changes or other means, except by diluting the concentration of the pollutants unless allowed by an applicable pretreatment standard.

Pretreatment program means the program for the control of pollutants introduced into the POTW from nondomestic sources which was developed by the town in compliance with 40 CFR 403.8 and approved by the approval authority as authorized by G.S. 143-215.3(a)(14) in accordance with 40 CFR 403.11.

Pretreatment requirements means any substantive or procedural requirement related to pretreatment, other than a pretreatment standard.

Pretreatment standards means prohibited discharge standards, categorical standards, and local limits.

Publicly owned treatment works (POTW) and *municipal wastewater system* mean a treatment works as defined by section 212 of the act (33 USC 292), which is owned in this instance by the town. This definition includes any devices or systems used in the collection, storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to the POTW treatment plant. For the purposes of this article, POTW shall also include any sewers that convey wastewaters to the POTW from persons outside the town who are, by contract or agreement with the town, or in any other way users of the town's POTW.

Severe property damage means substantial physical damage to property, damage to the user's treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

Significant industrial user means any industrial user of the wastewater disposal system who:

- (1) Has an average daily process wastewater flow of 50,000 gallons or more;
- (2) Contributes more than five percent of any design or treatment capacity (i.e., allowable pollutant load) of the wastewater treatment plant receiving the indirect discharge;
- (3) Is required to meet a National Categorical Pretreatment Standard; or
- (4) Is found by the town, the division of environmental management or EPA to have the potential for impact, either singly or in combination with other contributing industrial users, on the wastewater treatment system, the quality of sludge, the system's effluent quality, or compliance with any pretreatment standards or requirements.

Significant noncompliance and *reportable noncompliance* mean a status of noncompliance defined as follows:

- (1) Violations of wastewater discharge limits.
 - a. *Chronic violations.* At least 66 percent or more of the measurements exceed (by any magnitude) the same daily maximum limit or the same average limit in a six-month period.
 - b. *Technical review criteria (TRC) violations.* At least 33 percent or more of the measurements are more than the TRC times the limit (maximum or average) in a six-month period. There are two groups of TRCs: For conventional pollutants, BOD, TSS, fats, oil and grease TRC = 1.4; for all other pollutants, TRC = 1.2.
 - c. Any other violation of an effluent limit (average or daily maximum) that the control authority believes has caused, alone or in combination with other discharges, interference or pass through, or endangered the health of the sewage treatment plant personnel or the public.
 - d. Any discharge of a pollutant that has caused imminent endangerment to human health/welfare or to the environment and has resulted in the POTW's exercise of its emergency authority to halt or prevent such a discharge.
- (2) Violations of compliance schedule milestones, contained in a pretreatment permit or enforcement order, for starting construction, completing construction, and attaining final compliance by 90 days or more after the scheduled date.
- (3) Failure to provide reports for compliance schedule, self-monitoring data, baseline monitoring reports, 90-day compliance reports, and periodic compliance reports within 30 days from the due date.

- (4) Failure to accurately report noncompliance.
- (5) Any other violation or group of violations that the control authority considers to be significant.

Slug load means any discharge at a flow rate or concentration which could cause a violation of the prohibited discharge standards in section 58-151.

Standard Industrial Classification (SIC) means a classification pursuant to the Standard Industrial Classification Manual issued by the Executive Office of the President, Office of Management and Budget, 1987.

Stormwater means any flow occurring during or following any form of natural precipitation and resulting from such precipitation.

Superintendent means the person designated by the town to supervise the operation of the publicly owned treatment works and who is charged with certain duties and responsibilities by this article, or his duly authorized representative.

Suspended solids means the total suspended matter that floats on the surface of or is suspended in water, wastewater or other liquids, and which is removable by laboratory filtering.

System means the town's POTW or wastewater collection and treatment system.

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with categorical pretreatment standards because of factors beyond the reasonable control of the user. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Wastewater means the liquid and water-carried industrial or domestic wastes from dwellings, commercial buildings, industrial facilities, mobile sources, treatment facilities and institutions, together with any groundwater, surface water and stormwater that may be present, whether treated or untreated, which are contributed into or permitted to enter the POTW.

Wastewater permit means a permit as set forth in section 58-207.

Waters of the state means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through or border upon the state or any portion of the state.

(b) The following abbreviations, when used in this article, shall have the designated meanings:

BOD	Biochemical oxygen demand.
CFR	Code of Federal Regulations.
COD	Chemical oxygen demand.

Df	Design flow.
EPA	Environmental Protection Agency.
gpd	Gallons per day.
l	Liter.
mg	Milligrams.
mg/l	Milligrams per liter.
NPDES	National Pollution Discharge Elimination System.
O&M	Operation and maintenance.
POTW	Publicly owned treatment works.
RCRA	Resource Conservation and Recovery Act.
SIC	Standard Industrial Classification.
SWDA	Solid Waste Disposal Act.
TSS	Total suspended solids.
TKN	Total Kjeldahl nitrogen.
USC	United States Code.

(Ord. No. 19-94, § 1.2, 7-26-1994)

Cross reference—Definitions generally, § 1-2.

Sec. 58-128. Use of public sewers.

(a) It shall be unlawful for any person to discharge to any outlet other than a sanitary sewer, within the area under jurisdiction of the town, any domestic or industrial wastes except where suitable treatment has been provided in accordance with the provisions of this article.

(b) The owners of all houses, buildings or properties used for human occupancy, employment, recreation or other purposes situated within the town and abutting on any street, alley or right-of-way in which there is located a public sanitary sewer of the town or other municipal agency or public utility that discharges to the sewer system owned and/or operated by the town is required at their expense to connect such facilities directly with the proper public sewer in accordance with the provisions of this article and the requirements of the appropriate municipal agency or public utility within 90 days after date of official notice to do so, provided that such public sewer abuts the property. Failure to make such connection within the allotted time will result in a minimum user charge being assessed on a monthly basis to the property owner as if such connection were made. The owners of all houses, buildings or properties used for human occupancy, employment, recreation or other purposes situated within the town which have an existing septic tank system properly functioning and abutting on any street, alley or right-of-way in which there is not located a public sanitary sewer of the town or other municipal agency or public utility that discharges to the sewer system owned and/or operated by the town is required at their expense, based on the applicable tap-on fee at the time, to connect such facilities directly with the proper public sewer in accordance with provisions of this article and the requirements of the appropriate municipal agency or public utility, within 90 days after date of installation of such public sanitary sewer, provided that such public sewer abuts the property. Failure to make such connection at the specified time will result in a minimum user charge being assessed on a monthly basis to the property owner as if such connection were made.

(c) All sewer construction and connections shall be in accordance with the state building code and the state plumbing code, which are incorporated into this article by reference.

(d) A separate and independent building sewer shall be provided for every building, except by special approval of the director for unusual cases.

(e) All costs and expenses and all responsibility for proper installation of building sewers shall be borne by the property owner. The property owner shall indemnify the town for any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer.

(f) Existing building sewers may be used in connection with new buildings when they are found, on inspection by the director, to meet all requirements of this article.

(g) Wherever possible, building sewers shall be brought to the building at an elevation below the lowest floor. If any area of sewer discharge is too low to permit gravity flow to the public sewer, sanitary sewage from such discharge shall be lifted by mechanical means and discharged to the building sewer.

(h) The depth of the building sewer shall be sufficient to afford protection from frost with a minimum pipe cover of 30 inches. The size and slope of the building sewer shall be subject to approval of the director; but in any case, the building sewer shall be a minimum size of four inches with a minimum slope of 0.5 percent and shall be installed at a uniform grade and a straight alignment insofar as is possible. Changes in direction shall be made only with proper fittings and clean-outs.

(i) All excavations required for the installation of a building sewer shall be by open trench unless otherwise required or approved by the director. Pipe laying and backfill shall be performed in accordance with ASTM C12 and all pertinent OSHA requirements.

(j) All building sewers shall be constructed of polyvinyl chloride pipe (ASTM D 3034 or ASTM D 1784), cast iron soil pipe (ASTM A 74) or vitrified clay pipe (ASTM C13) or other suitable material approved by the director. All pipe joints shall be tight and waterproof and of the latest joint design for the type of pipe being used.

(Ord. No. 19-94, § 11.1, 7-26-1994)

Sec. 58-129. Requests for connections to, extension of sewer lines outside town limits.

(a) All requests for connections to or extensions of sewer lines from the present sewerage system of the town outside the corporate limits of the town shall be in writing and shall be addressed to the board of aldermen.

(b) A written petition for voluntary annexation which meets the requirements of G.S. 160A-24 et seq. for the particular piece of property in question shall accompany all written requests for connections to or extensions of sewer lines outside the corporate limits of the town. The petition shall be addressed to the board of aldermen and shall comply in all respects with the then-existing annexation laws of the state.

(c) The board of aldermen shall have 180 days from the date of submission of the voluntary petition for annexation to the board of aldermen within which to commence the annexation process.

(d) The board of aldermen may accept or reject a written request for extension of sewer lines outside the corporate limits of the town without regard to whether or not it accepts the property in question for annexation; however, if the board of aldermen rejects the written request for connection to or extension of the town sewer lines outside the corporate limits of the town, the board of aldermen shall also automatically reject the petition for annexation.
(Ord. No. 19-94, § 11.2, 7-26-1994)

Sec. 58-130. Private wastewater disposal.

(a) Where a public sanitary sewer is not available under the provisions of section 58-128, such toilet and other facilities necessary for the discharge of domestic and industrial wastes shall be connected to a private wastewater disposal system complying with the requirements of the appropriate state, federal and/or local regulatory agency.

(b) Before commencement of construction of a private wastewater disposal system, the owner shall first obtain a written permit from the appropriate regulatory authority and furnish a copy to the director. The copy of the permit shall be accompanied by such supplementary data as deemed necessary by the director to maintain an accurate file of such private wastewater disposal systems to facilitate the planning of future public sewer service.

(c) The type, capacities, location and layout of a private wastewater disposal system shall comply with all requirements of the state division of environmental management, department of natural resources and community development or other such board or authority. The discharge of septic tank effluent or cesspool overflow to any open drain, ditch, stream or well penetrating water-bearing formations is prohibited.

(d) At such time as a public sewer abuts a property served by a private wastewater disposal system, the provisions of section 58-128 shall become applicable regarding connection to the public sewer. Any septic tanks, cesspools or similar private wastewater disposal facility shall be cleaned of sludge and filled with suitable material.

(e) The owner shall operate and maintain any private wastewater disposal facilities in a proper manner at all times, at no expense to the town.
(Ord. No. 19-94, § 11.3, 7-26-1994)

Sec. 58-131. Damage to sewerage works, equipment.

(a) No unauthorized person shall maliciously, willfully or negligently break, damage, destroy, uncover, deface or tamper with any structure, appurtenance or equipment which is a part of the sewerage works. Any person violating this subsection shall be subject to immediate arrest under charge of disorderly conduct.

(b) No person shall maliciously, willfully or negligently break, damage, destroy, deface, tamper with or remove any equipment or materials used by the town for the purpose of making waste examinations and waste flow measurements and left upon the premises of a person discharging wastes into the sanitary sewerage system. Only persons authorized by the director will be allowed to uncover, adjust, maintain and remove such equipment and materials. (Ord. No. 19-94, § 11.4, 7-26-1994)

Secs. 58-132—58-150. Reserved.

DIVISION 2. USE REQUIREMENTS

Sec. 58-151. Prohibited discharge standards.

(a) *General prohibitions.* No user shall contribute or cause to be contributed into the POTW, directly or indirectly, any pollutant or wastewater which causes interference or pass through. These general prohibitions apply to all users of a POTW whether or not the user is a significant industrial user or subject to any national, state or local pretreatment standards or requirements.

(b) *Specific prohibitions.* No user shall contribute or cause to be contributed into the POTW the following pollutants, substances or wastewater:

- (1) Pollutants which create a fire or explosive hazard in the POTW, including but not limited to waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit (60 degrees Celsius) using the test methods specified in 40 CFR 261.21.
- (2) Solid or viscous substances in amounts which will cause obstruction of the flow in the POTW resulting in interference (but in no case solids greater than one-half inch in any dimension).
- (3) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through.
- (4) Any wastewater having a pH less than 5.0 or more than 10.0 or wastewater having any other corrosive property capable of causing damage to the POTW or equipment.
- (5) Any wastewater containing pollutants, including oxygen-demanding pollutants, (BOD, etc.) in sufficient quantity (flow or concentration), either singly or by interaction with other pollutants, to cause interference with the POTW.
- (6) Any wastewater having a temperature greater than 150 degrees Fahrenheit (66 degrees Celsius), or which will inhibit biological activity in the POTW treatment plant resulting in interference, but in no case wastewater which causes the temperature at the introduction into the treatment plant to exceed 104 degrees Fahrenheit (40 degrees Celsius).
- (7) Any pollutants which result in the presence of toxic gases, vapors or fumes within the POTW in a quantity that may cause acute worker health and safety problems.

- (8) Any trucked or hauled pollutants, except at discharge points designated by the POTW director in accordance with section 58-159.
- (9) Any noxious or malodorous liquids, gases, or solids or other wastewater which, either singly or by interaction with other wastes, are sufficient to create a public nuisance or hazard to life or are sufficient to prevent entry into the sewers for maintenance and repair.
- (10) Any substance which may cause the POTW's effluent or any other product of the POTW such as residues, sludges or scums to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case shall a substance discharged to the POTW cause the POTW to be in noncompliance with sludge use or disposal regulations or permits issued under section 405 of the act, the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substances Control Act, or state criteria applicable to the sludge management method being used.
- (11) Any wastewater which imparts color which cannot be removed by the treatment process, including but not limited to dye wastes and vegetable tanning solutions, which consequently imparts sufficient color to the treatment plant's effluent to render the waters injurious to public health or secondary recreation or to aquatic life and wildlife or to adversely affect the palatability of fish or aesthetic quality or impair the receiving waters for any designated uses.
- (12) Any wastewater containing any radioactive wastes or isotopes except as specifically approved by the POTW director in compliance with applicable state or federal regulations.
- (13) Stormwater, surface water, groundwater, artesian well water, roof runoff, subsurface drainage, swimming pool drainage, condensate, deionized water, noncontact cooling water and unpolluted industrial wastewater, unless specifically authorized by the POTW director.
- (14) Fats, oils or greases of animal or vegetable origin in concentrations greater than 100 mg/l.
- (15) Any sludges, screenings or other residues from the pretreatment of industrial wastes.
- (16) Any medical wastes, except as specifically authorized by the POTW director in a wastewater discharge permit.
- (17) Any material containing ammonia, ammonia salts, or other chelating agents which will produce metallic complexes that interfere with the municipal wastewater system.
- (18) Any material that would be identified as hazardous waste according to 40 CFR 261 if not disposed of in a sewer except as may be specifically authorized by the POTW director.
- (19) Any wastewater causing the treatment plant effluent to violate state water quality standards for toxic substances as described in 15A NCAC 2B .0200.

- (20) Wastewater causing, alone or in conjunction with other sources, the treatment plant's effluent to fail a toxicity test.
- (21) Recognizable portions of human or animal anatomy.
- (22) Any wastes containing detergents, surface active agents, or other substances which may cause excessive foaming in the municipal wastewater system.

(c) *Explosion hazard meter readings.* At no time shall two successive readings on an explosion hazard meter at the point of discharge into the system (or at any point in the system) be more than five percent nor any single reading over ten percent of the lower explosive limit (LEL) of the meter.

(d) *Discharges into user's pretreatment facility.* Pollutants, substances, wastewater or other wastes prohibited by this section shall not be processed or stored in such a manner that they could be discharged to the municipal wastewater system. All floor drains located in process or materials storage areas must discharge to the industrial user's pretreatment facility before connecting with the system.

(e) *Action by director.* When the POTW director determines that a user is contributing to the POTW any of the substances listed in subsection (b) of this section in such amounts which may cause or contribute to interference of POTW operation or pass through, the POTW director shall:

- (1) Advise the user of the potential impact of the contribution on the POTW in accordance with section 58-291; and
 - (2) Take appropriate actions in accordance with division 4 of this article for such user to protect the POTW from interference or pass through.
- (Ord. No. 19-94, § 2.1, 7-26-1994)

Sec. 58-152. National Categorical Pretreatment Standards.

(a) Users subject to categorical pretreatment standards are required to comply with applicable standards as set out in 40 CFR chapter 1, subchapter N, parts 405—471 and incorporated in this section.

(b) Where a categorical pretreatment standard is expressed only in terms of either the mass or the concentration of a pollutant in wastewater, the POTW director may impose equivalent concentration or mass limits in accordance with 40 CFR 403.6(c).

(c) When wastewater subject to a categorical pretreatment standard is mixed with wastewater not regulated by the same standard, the POTW director shall impose an alternate limit using the combined wastestream formula in 40 CFR 403.6(e).

(d) A user may obtain a variance from a categorical pretreatment standard if the user can prove, pursuant to the procedural and substantive provisions in 40 CFR 403.13, that factors relating to its discharge are fundamentally different from the factors considered by EPA when developing the categorical pretreatment standard.

(e) A user may obtain a net gross adjustment to a categorical standard in accordance with 40 CFR 403.15.
(Ord. No. 19-94, § 2.2, 7-26-1994)

Sec. 58-153. Local limits.

(a) To implement the general and specific discharge prohibitions listed in this article, industrial user-specific local limits will be developed ensuring that the POTW's maximum allowable headworks loading is not exceeded for particular pollutants of concern for each industrial user. Where specific local limits are not contained for a given parameter or pollutant in an industrial user permit, the following limits will apply to all users:

250	mg/l BOD
250	mg/l TSS
40	mg/l TKN
0.01	mg/l arsenic
0.01	mg/l cadmium
0.10	mg/l copper
0.08	mg/l cyanide
0.09	mg/l lead
0.0003	mg/l mercury
0.05	mg/l nickel
0.01	mg/l silver
0.10	mg/l total chromium
0.35	mg/l zinc

(b) Industrial user-specific local limits for appropriate pollutants of concern shall be included in wastewater permits and are considered pretreatment standards. The POTW director may impose mass limits in addition to or in place of the concentration-based limits.
(Ord. No. 19-94, § 2.3, 7-26-1994)

Sec. 58-154. State requirements.

State requirements and limitations on discharges shall apply in any case where they are more stringent than federal requirements and limitations or those in this article.
(Ord. No. 19-94, § 2.4, 7-26-1994)

Sec. 58-155. Right of revision.

The town reserves the right to establish limitations and requirements which are more stringent than those required by either state or federal regulation if deemed necessary to comply with the objectives presented in section 58-126 or the general and specific prohibitions in section 58-151, as is allowed by 40 CFR 403.4.
(Ord. No. 19-94, § 2.5, 7-26-1994)

Sec. 58-156. Dilution.

No user shall ever increase the use of process water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in the National Categorical Pretreatment Standards, unless expressly authorized by an applicable pretreatment standard, or in any other pollutant-specific limitation developed by the town or state.

(Ord. No. 19-94, § 2.6, 7-26-1994)

Sec. 58-157. Pretreatment of wastewater.

(a) *Pretreatment facilities.* Users shall provide wastewater treatment as necessary to comply with this article and wastewater permits issued under section 58-206 and shall achieve compliance with all National Categorical Pretreatment Standards, local limits, and the prohibitions set out in section 58-151 within the time limitations as specified by EPA, the state, or the POTW director, whichever is more stringent. Any facilities necessary for compliance shall be provided, operated and maintained at the user's expense. Detailed plans showing the pretreatment facilities and operating procedures shall be submitted to the town for review, and shall be approved by the POTW director before construction of the facility. The review of such plans and operating procedures shall in no way relieve the user from the responsibility of modifying the facility as necessary to produce an effluent acceptable to the town under the provisions of this article. Any subsequent changes in the pretreatment facilities or method of operation shall be reported to and be approved by the POTW director prior to the user's initiation of the changes.

(b) *Additional pretreatment measures.*

- (1) Whenever deemed necessary, the POTW director may require users to restrict their discharge during peak flow periods, designate that certain wastewater be discharged only into specific sewers, relocate and/or consolidate points of discharge, separate sewage waste streams from industrial waste streams, and such other conditions as may be necessary to protect the POTW and determine the user's compliance with the requirements of this article.
- (2) The POTW director may require any person discharging into the POTW to install and maintain, on such person's property and at such person's expense, a suitable storage and flow-control facility to ensure equalization of flow. A wastewater discharge permit may be issued solely for flow equalization.
- (3) Grease, oil and sand interceptors shall be provided when, in the opinion of the POTW director, they are necessary for the proper handling of wastewater containing excessive amounts of grease and oil, or sand; except that such interceptors shall not be required for residential users. All interception units shall be of type and capacity approved by the POTW director and shall be so located to be easily accessible for cleaning and inspection. Such interceptors shall be inspected, cleaned and repaired regularly, as needed, by the user at his expense.

- (4) Users with the potential to discharge flammable substances may be required to install and maintain an approved combustible gas detection meter.

(Ord. No. 19-94, § 2.7, 7-26-1994)

Sec. 58-158. Accidental discharge/slug control plans.

At least once every two years, the POTW director shall evaluate whether each significant industrial user needs an accidental discharge/slug control plan. The POTW director may require any user to develop, submit for approval and implement such a plan. Alternatively, the POTW director may develop such a plan for any user. An accidental discharge/slug control plan shall address, at a minimum, the following:

- (1) Description of discharge practices, including nonroutine batch discharges;
- (2) Description of stored chemicals;
- (3) Procedures for immediately notifying the POTW director of any accidental or slug discharge, as required by section 58-236; and
- (4) Procedures to prevent adverse impact from any accidental or slug discharge. Such procedures include but are not limited to:
 - a. Inspection and maintenance of storage areas;
 - b. Handling and transfer of materials;
 - c. Loading and unloading operations;
 - d. Control of plant site runoff;
 - e. Worker training;
 - f. Building of containment structures or equipment;
 - g. Measures for containing toxic organic pollutants, including solvents; and/or
 - h. Measures and equipment for emergency response.

(Ord. No. 19-94, § 2.8, 7-26-1994)

Sec. 58-159. Hauled wastewater.

(a) Septic tank waste may be introduced into the POTW only at locations designated by the POTW director, and at such times as are established by the POTW director. Such waste shall not violate this division or any other requirements established by the town. The POTW director may require septic tank waste haulers to obtain wastewater discharge permits.

(b) The POTW director may require generators of hauled industrial waste to obtain wastewater discharge permits. The POTW director also may prohibit the disposal of hauled industrial waste. The discharge of hauled industrial waste is subject to all other requirements of this article.

(c) Industrial waste haulers may discharge loads only at locations designated by the POTW director. No load may be discharged without prior consent of the POTW director. The POTW director may collect samples of each hauled load to ensure compliance with applicable standards. The POTW director may require the industrial waste hauler to provide a waste analysis of any load prior to discharge.

(d) Industrial waste haulers must provide a waste-tracking form for every load. This form shall include, at a minimum, the name and address of the industrial waste hauler, permit number, truck identification, names and addresses of sources of waste, and volume and characteristics of waste. The form shall identify the type of industry, known or suspected waste constituents, and whether any wastes are RCRA hazardous wastes.
(Ord. No. 19-94, § 2.9, 7-26-1994)

Secs. 58-160—58-180. Reserved.

DIVISION 3. FEES

Sec. 58-181. Purpose.

It is the purpose of this division to provide for the recovery of costs from users of the town's wastewater disposal system for the implementation of the program established in this article. The applicable charges or fees shall be set forth in the town's schedule of charges and fees.
(Ord. No. 19-94, § 3.1, 7-26-1994)

Sec. 58-182. User charges.

A user charge shall be levied on all users, including but not limited to persons that discharge, cause or permit the discharge of sewage into the POTW.
(Ord. No. 19-94, § 3.2, 7-26-1994)

Sec. 58-183. Surcharges.

(a) All industrial users of the POTW are subject to industrial waste surcharges on discharges which exceed the following levels:

<i>Discharge</i>	<i>Inside Town</i>	<i>Outside Town</i>
BOD (mg/l)	>500	>250
COD (mg/l)	>500	>500
TSS (mg/l)	>500	>250
Flow (gpd)	>10% Df	>10% Df

(Df is the design flow of the POTW in gpd)

(b) The amount of surcharge will be based upon the mass emission rate (in pounds per day) discharged above the levels listed in subsection (a) of this section. The amount charged per pound of excess will be set forth in the schedule of charges and fees. The volume of flow used in determining the total discharge of wastewater for payment of user charges and surcharges shall be based on the following:

- (1) Metered water consumption as shown in the records of meter readings maintained by the town; or
- (2) If required by the town or at the individual discharger's option, other flow monitoring devices which measure the actual volume of wastewater discharged to the sewer. Such devices shall be accessible and safely located, and the measuring system shall be installed in accordance with plans approved by the town. The metering system shall be installed and maintained at the user's expense according to arrangements that may be made with the town.

(c) Where any user procures all or part of his water supply from sources other than the town, the user shall install and maintain at his own expense a flow measuring device of a type approved by the town.

(d) The character and concentration of the constituents of the wastewater used in determining surcharges shall be determined by samples collected and analyzed by the town. Samples shall be collected in such a manner as to be representative of the actual discharge and shall be analyzed using procedures set forth in 40 CFR 136.

(e) The determination of the character and concentration of the constituents of the wastewater discharge by the POTW director or his duly appointed representatives shall be binding as a basis for charges.

(Ord. No. 19-94, § 3.3, 7-26-1994)

Sec. 58-184. Pretreatment program administration charges.

The schedule of charges and fees adopted by the town may include charges and fees for:

- (1) Reimbursement of costs of setting up and operating the pretreatment program.
- (2) Monitoring, inspections and surveillance procedures.
- (3) Reviewing slug control plans, including accidental and/or slug load discharge procedures and construction plans and specifications.
- (4) Permitting.
- (5) Other fees as the town may deem necessary to carry out the requirements of the pretreatment program.

(Ord. No. 19-94, § 3.4, 7-26-1994)

Secs. 58-185—58-205. Reserved.

DIVISION 4. WASTEWATER DISCHARGE PERMIT APPLICATION AND ISSUANCE

Sec. 58-206. Wastewater dischargers.

It shall be unlawful for any person to connect or discharge to the POTW without first obtaining the permission of the town. When requested by the POTW director, a user must submit information on the nature and characteristics of its wastewater within 30 days of the request. The POTW director is authorized to prepare a form for this purpose and may periodically require users to update this information.

(Ord. No. 19-94, § 4.1, 7-26-1994)

Sec. 58-207. Wastewater permits.

(a) *Required.* All significant industrial users shall obtain a significant industrial user permit prior to the commencement of discharge to the POTW. Existing industrial users who are determined by the POTW director to be significant industrial users shall obtain a significant industrial user permit within 180 days of receiving notification of the POTW director's determination. Industrial users who do not fit the significant industrial user criteria may at the discretion of the POTW director be required to obtain a wastewater discharge permit for nonsignificant industrial users.

(b) *Significant industrial user determination.* All persons proposing to discharge nondomestic wastewater, or proposing to change the volume or characteristics of an existing discharge of nondomestic wastewater shall request from the POTW director a significant industrial user determination. If the POTW director determines or suspects that the proposed discharge fits the significant industrial user criteria, he will require that a significant industrial user permit application be filed.

(c) *Significant industrial user permit application.* Users required to obtain a significant industrial user permit shall complete and file with the town an application in the form prescribed by the POTW director and accompanied by an application fee in the amount prescribed in the schedule of charges and fees. Significant industrial users shall apply for a significant industrial user permit within 90 days after notification of the POTW director's determination in subsection (b) of this section. In support of the application, the user shall submit, in units and terms appropriate for evaluation, the following information:

- (1) Name, address and location (if different from the address).
- (2) Standard Industrial Classification (SIC) codes for pretreatment, the industry as a whole, and any processes for which categorical pretreatment standards have been promulgated.
- (3) Analytical data on wastewater constituents and characteristics including but not limited to those mentioned in division 2 of this article, any of the priority pollutants (section 307(a) of the act) which the applicant knows or suspects are present in the discharge as determined by a reliable analytical laboratory, and any other pollutant of

concern to the POTW. Sampling and analysis shall be performed in accordance with procedures established by the EPA pursuant to section 304(g) of the act and contained in 40 CFR 136, as amended.

- (4) Time and duration of the indirect discharge.
- (5) Average daily and 30-minute peak wastewater flow rates, including daily, monthly and seasonal variations if any.
- (6) Site plans, floor plans, mechanical and plumbing plans and details to show all sewers, floor drains, sewer connections, direction of flow and appurtenances by the size, location and elevation.
- (7) Description of activities, facilities and plant processes on the premises, including all materials which are or could be accidentally or intentionally discharged.
- (8) Where known, the nature and concentration of any pollutants in the discharge which are limited by any town, state or federal pretreatment standards, and a statement regarding whether or not the pretreatment standards are being met on a consistent basis and if not, whether additional operation and maintenance (O&M) and/or additional pretreatment is required for the user to meet applicable pretreatment standards.
- (9) If additional pretreatment and/or O&M will be required to meet the pretreatment standards, the shortest schedule by which the user will provide such additional pretreatment. The completion date in this schedule shall not be longer than the compliance date established for the applicable pretreatment standard. The following conditions apply to this schedule:
 - a. The schedule shall contain progress increments in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable pretreatment standards. No increment in the schedule shall exceed nine months.
 - b. No later than 14 days following each date in the schedule and the final date for compliance, the user shall submit a progress report to the POTW director, including, at a minimum, whether or not it complied with the increment of progress, the reason for any delay, and if appropriate, the steps being taken by the user to return to the established schedule. In no event shall more than nine months elapse between such progress reports to the POTW director.
- (10) Each product produced by type, amount, process or processes and rate of production.
- (11) Type and amount of raw materials processed (average and maximum per day).
- (12) Number and type of employees, and hours of operation of plant and proposed or actual hours of operation of pretreatment system.
- (13) If subject to a categorical standard, a baseline monitoring report in accordance with 40 CFR 403.12(b) and 15A NCAC 2H .0908(a), as outlined in section 58-231.

- (14) Any other information as may be deemed by the POTW director to be necessary to evaluate the permit application.

(d) *Application signatories and certification.* All wastewater discharge permit applications and user reports must be signed by an authorized representative of the user and contain the following certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

(e) *Application review and evaluation.*

- (1) The POTW director will evaluate the data furnished by the user and may require additional information.
- (2) The POTW director is authorized to accept applications for the town and shall refer all applications to the POTW staff for review and evaluation.
- (3) Within 30 days of receipt, the POTW director shall acknowledge and accept the complete application; or if not complete, shall return the application to the applicant with a statement of what additional information is required.

(f) *Tentative determination and draft permit.*

- (1) The POTW staff shall conduct a review of the application and an on-site inspection of the significant industrial user, including any pretreatment facilities, and shall prepare a written evaluation and tentative determination to issue or deny the significant industrial user permit.
- (2) If the staff's tentative determination in subsection (f)(1) is to issue the permit, the following additional determinations shall be made in writing:
 - a. Proposed discharge limitations for those pollutants proposed to be limited;
 - b. A proposed schedule of compliance, including interim dates and requirements, for meeting the proposed limitations; and
 - c. A brief description of any other proposed special conditions which will have significant impact upon the discharge described in the application.
- (3) The staff shall organize the determinations made pursuant to subsection (f)(1) and (2) and the town's general permit conditions into a significant industrial user permit.

(g) *Permit synopsis.* A fact sheet providing a brief synopsis of the application shall be prepared by the POTW staff for submission to the applicant and the approval authority and shall be made available to the public upon request. The contents of such fact sheets shall include at least the following information:

- (1) A sketch and detailed description of the industrial facilities and pretreatment facilities, including the location of all points of discharge to the POTW and all established compliance monitoring points.
- (2) A quantitative description of the discharge described in the application, which includes at least the following:
 - a. The rate or frequency of the proposed discharge; if the discharge is continuous, the average daily flow;
 - b. The actual average daily discharge in pounds per day of any limited pollutant and any pollutant identified in the application as known or suspected present; and
 - c. The basis for the pretreatment limitations, including the documentation of any calculations in applying categorical pretreatment standards.

(h) *Final action on significant industrial user permit applications.*

- (1) The POTW director shall take final action on all applications not later than 90 days following receipt of a complete application.
- (2) The POTW director is authorized to:
 - a. Issue a significant industrial user permit containing such conditions as are necessary to effectuate the purposes of this article and G.S. 143-215.1.
 - b. Issue a significant industrial user permit containing time schedules for achieving compliance with applicable pretreatment standards and requirements.
 - c. Modify any permit upon not less than 60 days' notice and pursuant to subsection (j) of this section.
 - d. Revoke any permit pursuant to section 58-291.
 - e. Suspend a permit pursuant to section 58-291.
 - f. Deny a permit application when in the opinion of the POTW director such discharge may cause or contribute to pass through or interference of the wastewater treatment plant or where necessary to effectuate the purposes of G.S. 143-215.1.

(i) *Hearings.*

- (1) *Initial adjudicatory hearing.* An applicant whose permit is denied, or is granted subject to conditions he deems unacceptable, a permittee/user assessed a civil penalty under section 58-292, or one issued an administrative order under section 58-291 shall have the right to an adjudicatory hearing before a hearing officer designated by the POTW director upon making written demand, identifying the specific issues to be contested, to the POTW director within 30 days following receipt of the significant

industrial user permit, civil penalty assessment, or administrative order. Unless such written demand is made within the time specified in this section, the action shall be final and binding. The hearing officer shall make a final decision on the contested permit, penalty or order within 45 days of the receipt of the written demand for a hearing. The POTW director shall transmit a copy of the hearing officer's decision by registered or certified mail.

- a. *New permits.* Upon appeal, including judicial review in the general courts of justice, of the terms or conditions of a newly issued permit, the terms and conditions of the entire permit are stayed and the permit is not in effect until either the conclusion of judicial review or until the parties reach a mutual resolution.
 - b. *Renewed permits.* Upon appeal, including judicial review in the general courts of justice, of the terms or conditions of a renewed permit, the terms and conditions of the existing permit remain in effect until either the conclusion of judicial review or until the parties reach a mutual resolution.
- (2) *Final appeal hearing.* Any decision of a hearing officer made as a result of an adjudicatory hearing held under subsection (i)(1) may be appealed to the board of aldermen upon filing a written demand within ten days of receipt of notice of the decision. Failure to make written demand within the time specified herein shall bar further appeal. The board of aldermen shall make a final decision on the appeal within 90 days of the date the appeal was filed and shall transmit a written copy of its decision by registered or certified mail.
- (3) *Official record.* When a final decision is issued under subsection (i)(2), the board of aldermen shall prepare an official record of the case that includes:
- a. All notices, motions and other like pleadings.
 - b. A copy of all documentary evidence introduced.
 - c. A certified transcript of all testimony taken, if testimony is transcribed. If testimony is taken and not transcribed, then a narrative summary of any testimony taken.
 - d. A copy of the final decision of the board of aldermen.
- (4) *Judicial review.* Any person against whom a final order or decision of the board of aldermen is entered, pursuant to the hearing conducted under subsection (i)(2), may seek judicial review of the order or decision by filing a written petition within 30 days after receipt of notice by registered or certified mail of the order or decision, but not thereafter, with the superior court of the county along with a copy to the town. Within 30 days after receipt of the copy of the petition of judicial review, the board of aldermen shall transmit to the reviewing court the original or a certified copy of the official record.

(j) *Permit modification.*

- (1) Modifications of permits shall be subject to the same procedural requirements as the issuance of permits except as follows:
 - a. Changes in the ownership of the discharge when no other change in the permit is indicated.
 - b. Single modification of any compliance schedule not in excess of four months.
 - c. Modification of compliance schedules (construction schedules) in permits for new sources where the new source will not begin to discharge until control facilities are operational.

Any changes or new conditions in the permit shall include a reasonable time schedule for compliance.

- (2) Within nine months of the promulgation of a National Categorical Pretreatment Standard, the wastewater discharge permit of users subject to such standards shall be revised to require compliance with such standard within the time frame prescribed by such standard. Where a user, subject to a National Categorical Pretreatment Standard, has not previously submitted an application for a wastewater discharge permit as required by subsection (c), the user shall apply for a wastewater discharge permit within 180 days after the promulgation of the applicable National Categorical Pretreatment Standard.
- (3) A request for a modification by the permittee shall constitute a waiver of the 60-day notice required by G.S. 143-215.1(b) for modifications.

(k) *Permit conditions.*

- (1) The POTW director shall have the authority to grant a permit with such conditions attached as he believes necessary to achieve the purpose of this article and G.S. 143-215.1. Wastewater permits shall contain but are not limited to the following:
 - a. A statement of duration (in no case more than five years);
 - b. A statement of nontransferability;
 - c. Applicable effluent limits based on categorical standards or local limits or both;
 - d. Applicable monitoring, sampling, reporting, notification, and recordkeeping requirements, which shall include an identification of pollutants to be monitored, sampling location, sampling frequency, and sample type based on federal, state and local law;
 - e. Notification requirements for slug loads; and
 - f. A statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements and any applicable compliance schedule.
- (2) In addition, permits may contain, but are not limited to, the following:
 - a. Limits on the average and/or maximum rate of discharge, and/or requirements for flow regulation and equalization.

- b. Limits on the instantaneous, daily and monthly average and/or maximum concentration, mass or other measure of identified wastewater pollutants or properties.
- c. Requirements for the installation of pretreatment technology or construction of appropriate containment devices, etc., designed to reduce, eliminate or prevent the introduction of pollutants into the treatment works.
- d. Development and implementation of spill control plans or other special conditions, including management practices necessary to adequately prevent accidental, unanticipated or nonroutine discharges.
- e. Development and implementation of waste minimization plans to reduce the amount of pollutants discharged to the municipal wastewater system.
- f. The unit charge or schedule of user charges and fees for the management of the wastewater discharged to the system.
- g. Requirements for installation and maintenance of inspection and sampling facilities and equipment.
- h. Specifications for monitoring programs, which may include sampling locations, frequency of sampling, number, types, and standards for tests, and reporting schedules.
- i. Requirements for immediate reporting of any instance of noncompliance and for automatic resampling and reporting within 30 days where self-monitoring indicates a violation.
- j. Compliance schedules for meeting pretreatment standards and requirements.
- k. Requirements for submission of periodic self-monitoring or special notification reports.
- l. Requirements for maintaining and retaining plans and records relating to wastewater discharges as specified in section 58-243 and affording the POTW director or his representatives access to such plans and records.
- m. Requirements for prior notification and approval by the POTW director of any new introduction of wastewater pollutants or of any significant change in the volume or character of the wastewater prior to introduction in the system.
- n. Requirements for the prior notification and approval by the POTW director of any change in the manufacturing and/or pretreatment process used by the permittee.
- o. Requirements for immediate notification of excessive, accidental or slug discharges, or any discharge which could cause any problems to the system.
- p. A statement that compliance with the permit does not relieve the permittee of responsibility for compliance with all applicable federal and state pretreatment standards, including those which become effective during the terms of the permit.
- q. Other conditions as deemed appropriate by the POTW director to ensure compliance with this article and state and federal laws, rules and regulations.

(l) *Permit duration.* Permits shall be issued for a specified time period, not to exceed five years. A permit may be issued for a period less than a year or may be stated to expire on a specific date.

(m) *Permit transfer.* Wastewater permits are issued to a specific user for a specific operation. A wastewater discharge permit shall not be reassigned or transferred or sold to a new owner, new user, different premises, or a new or changed operation.

(n) *Permit reissuance.* A significant industrial user shall apply for permit reissuance by submitting a complete permit application in accordance with this section a minimum of 180 days prior to the expiration of the existing permit.

(Ord. No. 19-94, § 4.2, 7-26-1994)

Secs. 58-208—58-230. Reserved.

DIVISION 5. REPORTING REQUIREMENTS

Sec. 58-231. Baseline monitoring reports.

(a) Within either 180 days after the effective date of a categorical pretreatment standard, or the final administrative decision on a category determination under 40 CFR 403.6(a)(4), whichever is later, existing categorical users currently discharging to or scheduled to discharge to the POTW shall submit to the POTW director a report which contains the information listed in subsection (b) of this section. At least 90 days prior to commencement of their discharge, new sources, and sources that become categorical users subsequent to the promulgation of an applicable categorical standard, shall submit to the POTW director a report which contains the information listed in subsection (b). A new source shall report the method of pretreatment it intends to use to meet applicable categorical standards. A new source also shall give estimates of its anticipated flow and quantity of pollutants to be discharged.

(b) Users described in subsection (a) shall submit the information set forth as follows:

- (1) *Identifying information.* The name and address of the facility, including the name of the operator and owner.
- (2) *Environmental permits.* A list of any environmental control permits held by or for the facility.
- (3) *Description of operations.* A brief description of the nature, average rate of production, and standard industrial classifications of the operations carried out by such user. This description should include a schematic process diagram which indicates points of discharge to the POTW from the regulated processes.
- (4) *Flow measurement.* Information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW from regulated process streams and other streams, as necessary, to allow use of the combined waste stream formula set out in 40 CFR 403.6(e).

- (5) *Measurement of pollutants.*
- a. The categorical pretreatment standards applicable to each regulated process.
 - b. The results of sampling and analysis identifying the nature and concentration, and/or mass, where required by the standard or by the POTW director, of regulated pollutants in the discharge from each regulated process. Instantaneous, daily maximum, and long-term average concentrations, or mass, where required, shall be reported. The sample shall be representative of daily operations and shall be analyzed in accordance with procedures set out in section 58-240.
 - c. Sampling must be performed in accordance with procedures set out in section 58-241.
- (6) *Certification.* A statement, reviewed by the user's authorized representative and certified by a qualified professional, indicating whether pretreatment standards are being met on a consistent basis and, if not, whether additional operation and maintenance (O&M) and/or additional pretreatment is required to meet the pretreatment standards and requirements.
- (7) *Compliance schedule.* If additional pretreatment and/or O&M will be required to meet the pretreatment standards, the shortest schedule by which the user will provide such additional pretreatment and/or O&M. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard. A compliance schedule pursuant to this section must meet the requirements set out in section 58-232.
- (8) *Signature and certification.* All baseline monitoring reports must be signed and certified in accordance with section 58-207.
- (Ord. No. 19-94, § 5.1, 7-26-1994)

Sec. 58-232. Compliance schedule progress reports.

The following conditions shall apply to the compliance schedule required by section 58-231:

- (1) The schedule shall contain progress increments in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable pretreatment standards (such events include but are not limited to hiring an engineer, completing preliminary and final plans, executing contracts for major components, commencing and completing construction, and beginning and conducting routine operation);
- (2) No increment referred to in subsection (1) of this section shall exceed nine months;
- (3) The user shall submit a progress report to the POTW director no later than 14 days following each date in the schedule and the final date of compliance, including, as a minimum, whether or not it complied with the increment of progress, the reason for any delay, and, if appropriate, the steps being taken by the user to return to the established schedule; and

- (4) In no event shall more than nine months elapse between such progress reports to the POTW director.

(Ord. No. 19-94, § 5.2, 7-26-1994)

Sec. 58-233. Reports on compliance with categorical pretreatment standard deadline.

Within 90 days following the date for final compliance with applicable categorical pretreatment standards, or in the case of a new source following commencement of the introduction of wastewater into the POTW, any user subject to such pretreatment standards and requirements shall submit to the POTW director a report containing the information described in section 58-231. For users subject to equivalent mass or concentration limits established in accordance with the procedures in 40 CFR 403.6(c), this report shall contain a reasonable measure of the user's long-term production rate. For all other users subject to categorical pretreatment standards expressed in terms of allowable pollutant discharge per unit of production (or other measure of operation), this report shall include the user's actual production during the appropriate sampling period. All compliance reports must be signed and certified in accordance with section 58-207.

(Ord. No. 19-94, § 5.3, 7-26-1994)

Sec. 58-234. Periodic Compliance Reports.

(Note: The town may sample and analyze user discharges in lieu of requiring the users to conduct sampling and analysis.)

(a) All significant industrial users shall, at a frequency determined by the POTW director but in no case less than twice per year (in June and December), submit a report indicating the nature and concentration of pollutants in the discharge which are limited by pretreatment standards and the measured or estimated average and maximum daily flows for the reporting period. All periodic compliance reports must be signed and certified in accordance with section 58-207.

(b) All wastewater samples must be representative of the user's discharge. Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean, and maintained in good working order at all times. The failure of a user to keep its monitoring facility in good working order shall not be grounds for the user to claim that sample results are unrepresentative of its discharge.

(c) If a user subject to the reporting requirement in this section monitors any pollutant more frequently than required by the POTW director, using the procedures prescribed in section 58-240, the results of this monitoring shall be included in the report.

(Ord. No. 19-94, § 5.4, 7-26-1994)

Sec. 58-235. Reports of changed conditions.

(a) Each user must notify the POTW director of any planned significant changes to the user's operations or system which might alter the nature, quality or volume of its wastewater at least 30 days before the change.

(b) The POTW director may require the user to submit such information as may be deemed necessary to evaluate the changed condition, including the submission of a wastewater discharge permit application under section 58-207.

(c) The POTW director may issue a wastewater discharge permit under section 58-207 or modify an existing wastewater discharge permit under section 58-207 in response to changed conditions or anticipated changed conditions.

(d) For purposes of this requirement, significant changes include but are not limited to flow increases of 25 percent or greater, and the discharge of any previously unreported pollutants. (Ord. No. 19-94, § 5.5, 7-26-1994)

Sec. 58-236. Reports of potential problems.

(a) In the case of any discharge, including but not limited to accidental discharges, discharges of a nonroutine, episodic nature, a noncustomary batch discharge, or a slug load, that may cause potential problems for the POTW, the user shall immediately telephone and notify the POTW director of the incident. This notification shall include the location of the discharge, type of waste, concentration and volume, if known, and corrective actions taken by the user.

(b) Within five days following such discharge, the user shall, unless waived by the POTW director, submit a detailed written report describing the cause of the discharge and the measures to be taken by the user to prevent similar future occurrences. Such notification shall not relieve the user of any expense, loss, damage or other liability which may be incurred as a result of damage to the POTW, natural resources, or any other damage to person or property; nor shall such notification relieve the user of any fines, penalties or other liability which may be imposed pursuant to this article.

(c) A notice shall be permanently posted on the user's bulletin board or other prominent place advising employees whom to call in the event of a discharge described in subsection (a) of this section. Employers shall ensure that all employees who may cause such a discharge to occur are advised of the emergency notification procedure. (Ord. No. 19-94, § 5.6, 7-26-1994)

Sec. 58-237. Reports from unpermitted users.

All users not required to obtain a wastewater discharge permit shall provide appropriate reports to the POTW director as the POTW director may require. (Ord. No. 19-94, § 5.7, 7-26-1994)

Sec. 58-238. Notice of violation/repeat sampling and reporting.

If sampling performed by a user indicates a violation, the user must notify the POTW director within 24 hours of becoming aware of the violation. The user shall also repeat the sampling and analysis and submit the results of the repeat analysis to the POTW director within 30 days after becoming aware of the violation. The user is not required to resample if

the POTW director monitors at the user's facility at least once a month, or if the POTW director samples between the user's initial sampling and when the user receives the results of this sampling.

(Ord. No. 19-94, § 5.8, 7-26-1994)

Sec. 58-239. Notification of the discharge of hazardous waste.

(a) Any user who commences the discharge of hazardous waste shall notify the POTW, the EPA regional waste management division director, and state hazardous waste authorities, in writing, of any discharge into the POTW of a substance which, if otherwise disposed of, would be a hazardous waste under 40 CFR 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR 261, the EPA hazardous waste number, and the type of discharge (continuous, batch or other). If the user discharges more than 15 kilograms of such waste per calendar month to the POTW, the notification also shall contain the following information to the extent such information is known and readily available to the user:

- (1) An identification of the hazardous constituents contained in the wastes;
- (2) An estimation of the mass and concentration of such constituents in the waste stream discharge during the calendar month; and
- (3) An estimation of the mass of constituents in the waste stream expected to be discharged during the following 12 months.

All notifications must take place no later than 180 days after the discharge commences. Any notification under this subsection need be submitted only once for each hazardous waste discharge. However, notifications of changed conditions must be submitted. The notification requirement in this section does not apply to pollutants already reported by users subject to categorical pretreatment standards under the self-monitoring requirements of sections 58-231, 58-233 and 58-234.

(b) Dischargers are exempt from the requirements of subsection (a) of this section during a calendar month in which they discharge no more than five kilograms of hazardous wastes unless the wastes are acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e). Discharge of more than five kilograms of nonacute hazardous wastes in a calendar month, or of any quantity of acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e), requires a one-time notification. Subsequent months during which the user discharges more than such quantities of any hazardous waste do not require additional notification.

(c) In the case of any new regulation under section 3001 of RCRA identifying additional characteristics of hazardous waste or listing any additional substance as a hazardous waste, the user must notify the POTW director, the EPA regional waste management waste division director, and state hazardous waste authorities of the discharge of such substance within 90 days of the effective date of such regulations.

(d) In the case of any notification made under this section, the user shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated to the degree it has determined to be economically practical.

(e) This provision does not create a right to discharge any substance not otherwise permitted to be discharged by this article, a permit issued under this article, or any applicable federal or state law.

(Ord. No. 19-94, § 5.9, 7-26-1994)

Sec. 58-240. Analytical requirements.

All pollutant analyses, including sampling techniques, to be submitted as part of a wastewater discharge permit application or report shall be performed in accordance with the techniques prescribed in 40 CFR 136 unless otherwise specified in an applicable categorical pretreatment standard. If 40 CFR 136 does not contain sampling or analytical techniques for the pollutant in question, sampling and analyses must be performed in accordance with procedures approved by EPA.

(Ord. No. 19-94, § 5.10, 7-26-1994)

Sec. 58-241. Sample collection.

(a) Except as indicated in subsection (b) of this section, the user must collect wastewater samples using flow proportional composite collection techniques. If flow proportional sampling is infeasible, the POTW director may authorize the use of time proportional sampling or a minimum of four grab samples where the user demonstrates that this will provide a representative sample of the effluent being discharged. In addition, grab samples may be required to show compliance with instantaneous discharge limits.

(b) Samples for oil and grease, temperature, pH, cyanide, phenols, sulfides, and volatile organic compounds must be obtained using grab collection techniques.

(Ord. No. 19-94, § 5.11, 7-26-1994)

Sec. 58-242. Timing.

Written reports will be deemed to have been submitted on the date postmarked. For reports which are not mailed, postage prepaid, into a mail facility serviced by the United States Postal Service, the date of receipt of the report shall govern.

(Ord. No. 19-94, § 5.12, 7-26-1994)

Sec. 58-243. Recordkeeping.

Users subject to the reporting requirements of this article shall retain and make available for inspection and copying all records of information obtained pursuant to any monitoring activities required by this article and any additional records of information obtained pursuant to monitoring activities undertaken by the user independent of such requirements. Records shall include the date, exact place, method and time of sampling, and the name of the person taking the samples; the dates analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses. These records shall

remain available for a period of at least three years. This period shall be automatically extended for the duration of any litigation concerning the user or the town, or where the user has been specifically notified of a longer retention period by the POTW director.
(Ord. No. 19-94, § 5.13, 7-26-1994)

Secs. 58-244—58-265. Reserved.

DIVISION 6. COMPLIANCE MONITORING

Sec. 58-266. Monitoring facilities.

(a) The town requires the user to provide and operate at the user's own expense monitoring facilities to allow inspection, sampling and flow measurement of the building sewer and/or internal drainage systems. The monitoring facility should normally be situated on the user's premises; but the town may, when such a location would be impractical or cause undue hardship on the user, allow the facility to be constructed in the public street or sidewalk area and located so that it will not be obstructed by landscaping or parked vehicles.

(b) There shall be ample room in or near such sampling manhole or facility to allow accurate sampling and preparation of samples for analysis. The facility, sampling and measuring equipment shall be maintained at all times in a safe and proper operating condition at the expense of the user.

(c) Whether constructed on public or private property, the sampling and monitoring facilities shall be provided in accordance with the town's requirements and all applicable local construction standards and specifications. Construction shall be completed within 90 days following written notification by the town.
(Ord. No. 19-94, § 6.1, 7-26-1994)

Sec. 58-267. Inspection and sampling.

(a) The town will inspect the facilities of any user to ascertain whether the purpose of this article is being met and all requirements are being complied with. Persons or occupants of premises where wastewater is created or discharged shall allow the town, the approval authority and EPA or their representative ready access at all reasonable times to all parts of the premises for the purposes of inspection, sampling, records examination and copying or in the performance of any of their duties. The town, the approval authority and EPA shall have the right to set up on the user's property such devices as are necessary to conduct sampling, inspection, compliance monitoring and/or metering operations.

(b) Where a user has security measures in force which would require proper identification and clearance before entry into its premises, the user shall make necessary arrangements with their security guards so that upon presentation of suitable identification, personnel from the town, the approval authority and EPA will be permitted to enter, without delay, for the

purposes of performing their specific responsibilities. Denial of the POTW director's, the approval authority's, or EPA's access to the user's premises shall be a violation of this article. Unreasonable delays may constitute denial of access.

(Ord. No. 19-94, § 6.2, 7-26-1994)

Sec. 58-268. Search warrants.

If the POTW director, the approval authority, or EPA has been refused access to a building, structure or property, or any part of a building, structure or property, and is able to demonstrate probable cause to believe that there may be a violation of this article, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program of the town designed to verify compliance with this article or any permit or order issued under this article, or to protect the overall public health, safety and welfare of the community, the POTW director, the approval authority or EPA may seek issuance of a search warrant from the appropriate state or federal court.

(Ord. No. 19-94, § 6.3, 7-26-1994)

Sec. 58-269. Confidential information.

(a) Information and data on a user obtained from reports, questionnaires, permit applications, permits and monitoring programs and from inspections shall be available to the public or other governmental agency without restriction unless the user specifically requests and is able to demonstrate to the satisfaction of the POTW director that the release of such information would divulge information, processes or methods of production entitled to protection as trade secrets of the user. Any such request must be asserted at the time of submission of the information or data.

(b) When requested by the person furnishing a report, the portions of a report which might disclose trade secrets or secret processes shall not be made available for inspection by the public, but shall be made available upon written request to governmental agencies for uses related to this article, the National Pollutant Discharge Elimination System (NPDES) permit, nondischarge permit and/or the pretreatment programs; however, such portions of a report shall be available for use by the state or any state agency in judicial review or enforcement proceedings involving the person furnishing the report. Wastewater constituents and characteristics will not be recognized as confidential information.

(c) All records relating to compliance with pretreatment standards shall be made available to officials of the approval authority and EPA upon request.

(Ord. No. 19-94, § 7, 7-26-1994)

Secs. 58-270—58-290. Reserved.

DIVISION 7. ENFORCEMENT AND ADMINISTRATION

Sec. 58-291. Administrative remedies.

(a) *Notification of violation.* Whenever the POTW director finds that any industrial user has violated or is violating this article, wastewater permit, or any prohibition, limitation or requirements contained in such permit or any other pretreatment requirement, the POTW

director may serve upon such a person a written notice stating the nature of the violation. Within 30 days from the date of this notice, an explanation for the violation and a plan for its satisfactory correction shall be submitted to the town by the user. Submission of this plan does not relieve the discharger of liability for any violations occurring before or after receipt of the notice of violation.

(b) *Consent orders.* The POTW director is empowered to enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with the person responsible for the noncompliance. Such orders will include specific action to be taken by the discharger to correct the noncompliance within a time period also specified by the order. Consent orders shall have the same force and effect as an administrative order issued pursuant to subsection (d) of this section.

(c) *Show cause hearing.*

- (1) The POTW director may order any industrial user who causes or is responsible for an unauthorized discharge, has violated this article or is in noncompliance with a wastewater discharge permit to show cause why a proposed enforcement action should not be taken. If the POTW director determines that a show cause order should be issued, a notice shall be served on the user specifying the time and place for the hearing, the proposed enforcement action, the reasons for such action, and a request that the user show cause why this proposed enforcement action should not be taken. The notice of the hearing shall be served personally or by registered or certified mail (return receipt requested) at least ten days before the hearing. Service may be made on any agent or officer of a corporation.
- (2) The POTW director shall review the evidence presented at the hearing and determine whether the proposed enforcement action is appropriate.
- (3) A show cause hearing under this section is not a prerequisite to the assessment of a civil penalty under section 58-292, nor is any action or inaction taken by the POTW director under this section subject to an administrative appeal under section 58-207.

(d) *Administrative orders.* When the POTW director finds that an industrial user has violated or continues to violate this article, permits or orders issued under this article, or any other pretreatment requirement, the POTW director may issue an order to cease and desist all such violations and direct those persons in noncompliance to do any of the following:

- (1) Immediately comply with all requirements.
- (2) Comply in accordance with a compliance time schedule set forth in the order.
- (3) Take appropriate remedial or preventive action in the event of a continuing or threatened violation.
- (4) Disconnect unless adequate treatment facilities, devices or other related appurtenances are installed and properly operated within a specified time period.

(e) *Emergency suspensions.*

- (1) The POTW director may suspend the wastewater treatment service and/or wastewater permit when such suspension is necessary in order to stop an actual or threatened discharge which presents or may present an imminent or substantial endangerment to the health or welfare of persons or the environment, interferes with the POTW, or causes the POTW to violate any condition of its NPDES or nondischarge permit.
- (2) Any user notified of a suspension of the wastewater treatment service and/or the wastewater permit shall immediately stop or eliminate the contribution. A hearing will be held within 15 days of the notice of suspension to determine whether the suspension may be lifted or the user's waste discharge permit terminated.
- (3) In the event of a failure to comply voluntarily with the suspension order, the POTW director shall take such steps as deemed necessary, including immediate severance of the sewer connection, to prevent or minimize damage to the POTW system or endangerment to any individuals. The POTW director shall reinstate the wastewater permit and the wastewater treatment service upon proof of the elimination of the noncompliant discharge. The industrial user shall submit a detailed written statement describing the causes of the harmful contribution and the measures taken to prevent any future occurrence to the POTW director prior to the date of the hearing.

(f) *Termination of permit.* Any user who violates the following conditions of this article, or applicable state and federal regulations, is subject to having its permit terminated:

- (1) Failure to accurately report the wastewater constituents and characteristics of his discharge;
- (2) Failure to report significant changes in operations or wastewater constituents and characteristics;
- (3) Refusal of reasonable access to the user's premises for the purpose of inspection or monitoring; or
- (4) Violation of conditions of the permit.

Noncompliant industrial users will be notified of the proposed termination of their wastewater permit and will be offered an opportunity to show cause under this section why the proposed action should not be taken.

(Ord. No. 19-94, § 8.1, 7-26-1994)

Sec. 58-292. Civil penalties.

(a) Any user who is found to have failed to comply with any provision of this article, or the orders, rules, regulations and permits issued under this article, may be fined up to \$10,000.00 per day per violation.

(b) In determining the amount of the civil penalty, the POTW director shall consider the following:

- (1) The degree and extent of the harm to the natural resources, to the public health, or to public or private property resulting from the violation.
- (2) The duration and gravity of the violation.
- (3) The effect on ground or surface water quantity or quality or on air quality.
- (4) The cost of rectifying the damage.
- (5) The amount of money saved by noncompliance.
- (6) Whether the violation was committed willfully or intentionally.
- (7) The prior record of the violator in complying or failing to comply with the pretreatment program.
- (8) The costs of enforcement to the town.

(c) Appeals of civil penalties assessed in accordance with this section shall be as provided in section 58-207.

(Ord. No. 19-94, § 8.2, 7-26-1994)

Sec. 58-293. Other available remedies.

Remedies, in addition to those previously mentioned in this article, are available to the POTW director, who may use any single one or combination against a noncompliant user. Additional available remedies include but are not limited to:

- (1) *Criminal violations.* The district attorney for the judicial district may, at the request of the town, prosecute noncompliant users who violate the provisions of G.S. 143-215.6B.
- (2) *Injunctive relief.* Whenever a user is in violation of the provisions of this article or an order or permit issued under this article, the POTW director, through the town attorney, may petition the superior court of justice for the issuance of a restraining order or a preliminary and permanent injunction which restrains or compels the activities in question.
- (3) *Water supply severance.* Whenever a user is in violation of the provisions of this article or an order or permit issued under this article, water service to the user may be severed; and service will only recommence, at the user's expense, after it has satisfactorily demonstrated ability to comply.
- (4) *Public nuisances.* Any violation of the prohibitions or effluent limitations of this article or of a permit or order issued under this article is declared a public nuisance and shall be corrected or abated as directed by the POTW director. Any person creating a public

nuisance shall be subject to the provisions of this Code governing such nuisances, including reimbursing the POTW for any costs incurred in removing, abating or remedying the nuisance.

(Ord. No. 19-94, § 8.3, 7-26-1994)

Sec. 58-294. Remedies nonexclusive.

The remedies provided for in this article are not exclusive. The POTW director may take any, all or any combination of these actions against a noncompliant user. Enforcement of pretreatment violations will generally be in accordance with the town's enforcement response plan. However, the POTW director may take other action against any user when the circumstances warrant. Further, the POTW director is empowered to take more than one enforcement action against any noncompliant user.

(Ord. No. 19-94, § 8.4, 7-26-1994)

Sec. 58-295. Annual publication of significant noncompliance.

At least annually, the POTW director shall publish in the largest daily newspaper circulated in the service area a list of those industrial users which were found to be in significant noncompliance, also referred to as reportable noncompliance in 15A NCAC 2H .0903(b)(10), with applicable pretreatment standards and requirements, during the previous 12 months.

(Ord. No. 19-94, § 9, 7-26-1994)

Sec. 58-296. Affirmative defenses to discharge violations.

(a) *Upset.*

- (1) An upset shall constitute an affirmative defense to an action brought for noncompliance with categorical pretreatment standards if the requirements of subsection (a)(2) of this section are met.
- (2) A user who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and the user can identify the cause of the upset;
 - b. The facility was at the time being operated in a prudent and workmanlike manner and in compliance with applicable operation and maintenance procedures; and
 - c. The user has submitted the following information to the POTW director within 24 hours of becoming aware of the upset [if this information is provided orally, a written submission must be provided within five days]:
 1. A description of the indirect discharge and cause of noncompliance;
 2. The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; and

3. Steps being taken and/or planned to reduce, eliminate and prevent recurrence of the noncompliance.
 - (3) In any enforcement proceeding, the user seeking to establish the occurrence of an upset shall have the burden of proof.
 - (4) Users will have the opportunity for a judicial determination on any claim of upset only in an enforcement action brought for noncompliance with categorical pretreatment standards.
 - (5) Users shall control production of all discharges to the extent necessary to maintain compliance with categorical pretreatment standards upon reduction, loss or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost or fails.
- (b) *Prohibited discharge standards defense.* A user shall have an affirmative defense to an enforcement action brought against it for noncompliance with the general prohibitions in section 58-151(a) or the specific prohibitions in section 58-151(b)(2), (3), (5)—(7) and (9)—(23) if it can prove that it did not know, or have reason to know, that its discharge, alone or in conjunction with discharges from other sources, would cause pass through or interference and that either:
- (1) A local limit exists for each pollutant discharged and the user was in compliance with each limit directly prior to and during the pass through or interference; or
 - (2) No local limit exists, but the discharge did not change substantially in nature or constituents from the user's prior discharge when the town was regularly in compliance with its NPDES permit, and in the case of interference, was in compliance with applicable sludge use or disposal requirements.
- (c) *Bypass.*
- (1) A user may allow any bypass to occur which does not cause pretreatment standards or requirements to be violated, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of subsection (c)(2), (3) of this section.
 - (2)
 - a. If a user knows in advance of the need for a bypass, it shall submit prior notice to the POTW director at least ten days before the date of the bypass if possible.
 - b. A user shall submit oral notice to the POTW director of an unanticipated bypass that exceeds applicable pretreatment standards within 24 hours from the time it becomes aware of the bypass. A written submission shall also be provided within five days of the time the user becomes aware of the bypass. The written submission shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or

planned to reduce, eliminate and prevent reoccurrence of the bypass. The POTW director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

- (3) c. Bypass is prohibited, and the POTW director may take an enforcement action against a user for a bypass unless:
1. Bypass was unavoidable to prevent loss of life, personal injury or severe property damage;
 2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime; this condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 3. The user submitted notices as required under subsection (c)(2) of this section.
- d. The POTW director may approve an anticipated bypass, after considering its adverse effects, if the POTW director determines that it will meet the three conditions listed in subsection (c)(3)a. of this section.

(Ord. No. 19-94, § 10.3, 7-26-1994)

JUNALUSKA SANITARY DISTRICT

GREASE TRAP/INTERCEPTOR STANDARDS AND REQUIREMENTS

DEFINITION : GREASE INTERCEPTOR/GREASE TRAP:

A device utilized to effect the separation of grease and oils in wastewater effluent from a food service establishment. Such traps or interceptors may be the 'Outdoor' or "Underground' type normally of a 1,000 gallon capacity or more, or the "Under -the -Counter" package units which are typically less than 100 gallon capacity. For the purpose of this definition, the words "trap" and "interceptor" are used interchangeably.

(a)General requirements

- (1) All food service establishments shall have grease handling facilities approved by the Junaluska Sanitary District .Establishments whose grease handling facilities or methods are not adequately maintained to prevent floatable oils, fat or grease from entering the sewerage system shall be notified in writing of any non-compliance and required to provide a schedule whereby corrections shall be accomplished.
- (2) All food service establishment's grease handling facilities shall be subject to review, evaluation and inspection by Junaluska Sanitary District representatives during normal working hours. Results of inspection will be made available to the facility owner, lease holder or operator .The J.S.D. may lend assistance and make recommendations for correction and improvements.
- (3) Food service establishments receiving two (2) consecutive unsatisfactory evaluations or inspections, may be subject to penalties or other corrective actions as provided in the Sewer Use Ordinance.
- (4) Food service establishments who continue to violate the J.S.D. grease standards/ requirements may be considered grounds for discontinuance of sewer service.
- (5) Food service establishments whose operations cause or allow excessive grease to discharge or accumulate in the J.S.D. collection system may be liable to J.S.D. for costs related to service calls for line blockages, line cleanings, line and pump repairs etc. including

all labor, materials and equipment. Failure to pay all service related charges may also be grounds for sewer service discontinuance.

- (6) Regularly scheduled maintenance of grease handling facilities is required to insure adequate operation. In the maintenance of these grease interceptors, the owner(S), lease holder or operator shall be responsible for the proper removal and disposal of grease by appropriate means and shall maintain on-site records of dates and means of disposal. Records shall be maintained for a period of three (3) years.
- (7) Any food service establishments whose effluent discharge to the sewerage system is determined by the J.S.D. to cause interference in the conveyance or operation of the sewerage system, may be required to sample its grease trap discharge and have it analyzed for oil and grease at the expense of the owner, lease holder or operator. Results of such analysis shall be reported to the Junaluska Sanitary District.
- (8) All grease traps /interceptors shall be designed and installed to allow for complete access for inspection and maintenance of the inner chamber(s) and viewing and sampling of effluent wastewater discharged to the sewer.
- (9) Food service establishments shall adopt procedures for handling sources of floatable oils, grease or fat originating within their facility. A notice shall be permanently posted at a prominent place in the facility advising employees of the procedures to be followed.
- (10) Food service establishments shall develop and implement a Waste Minimization Plan pertaining to the disposal of grease, oils, and food particles. Junaluska Sanitary District may render advice or make suggestions regarding the minimization of waste.

(b) CONSTRUCTION STANDARDS: NEW FACILITIES

- (1) All new food service establishments shall be required to install a grease interceptor, approved by the J.S.D. Grease interceptors shall be adequately sized with no interceptor less than 1,000

gallon total capacity unless otherwise approved by Junaluska Sanitary District.

- (2) No new food service establishments will be allowed to initiate operations until grease handling facilities are installed and approved by the Junaluska Sanitary District.
- (3) All grease interceptors, whether singular or two tanks in series, must have each chamber directly accessible from the surface to provide means for servicing and maintaining the interceptor in working and operating condition.
- (4) A basket, screen or other intercepting device, shall prevent passage into the drainage system of solids $\frac{1}{2}$ inch or larger in size. The basket or device shall be removable for cleaning purposes.
- (5) Where food waste grinders are installed, the waste from those units shall discharge directly into the building drainage system without passing through a grease interceptor. All other fixtures and drains receiving kitchen or food preparation wastewaters shall pass through a grease interceptor.

(C) CONSTRUCTING STANDARDS: EXISTING FACILITIES

- (1) All existing food service establishments shall have grease handling facilities approved by Junaluska Sanitary District. Food service establishments without any grease handling facilities will be given a compliance deadline not to exceed (6) months from date of notification to have approved and installed grease handling equipment in compliance with this standard. Failure to do so will be considered a violation of the Junaluska Sanitary District sewer use ordinance and may subject the facility to penalties and corrective actions. Said installations shall meet the same requirements for design as for new facilities.
- (2) In the event an existing food service establishment's grease handling facilities are either under-designed or substandard in

accordance with this policy, the owner(s) will be notified in writing of the deficiencies and required improvements and given a compliance deadline not to exceed (6) months to conform with the requirements of this grease standard.

- (3) For cases in which “Outdoor” type grease interceptors are infeasible to install, existing food service establishments will be required to install adequate and approved “Under –the- Counter” grease traps for use on individual fixtures including dishwashers, sinks, and other potentially grease-containing drains.
- (4) Sizing of “Under –the- Counter” grease traps will be in accordance with recommended ratings for commercial grease traps, attached to this Standard. The grease retention capacity rating in pounds shall be at least (2) two times the G.P.M. flow rate of the type of fixture which it serves. Flow control fittings must be provided to the inlet side of All “Under- the- Counter” units to prevent overloading of the grease trap and to allow for proper operation.
- (5) Junaluska Sanitary District approval of flow control devices and grease trap design must be obtained prior to installation.
- (6) The location of “Under-the Counter” units must be near the source of the wastewater as is physically possible.
- (7) Wastewater from garbage grinders should be discharged to grease traps/interceptors.
- (8) In maintaining grease traps/interceptors the owner(s) shall be responsible for the proper removal and disposal by appropriate means of captured material and shall maintain records of the dates and means of the dates and means of disposal that are subject to review by the Junaluska Sanitary District.
- (9) The exclusive use of enzymes, grease solvents, emulsifiers, etc. IS NOT considered acceptable grease trap maintenance practice.

(d) NEW FOOD SERVICE ESTABLISHMENTS IN EXISTING BUILDINGS

- (1) Whenever practical, new food service establishments, locating in existing buildings will be required to comply with the Grease Trap Standards applicable to new facilities.
- (2) Where physically impossible to install “Outdoor” units, “Under-The –Counter” units may be approved as with existing food service establishments provided prior approval of unit type, size, location, etc. is approved by the Junaluska Sanitary District.

**Recommended Ratings
"Under-the-Counter" Package Unit Grease Traps**

Type of Fixture	Flow Rate	Grease Retention Capacity Rating	Recommended Maximum Capacity Per Fixture Connected to Trap
	gpm	lb	gal
Restaurant Kitchen Sink	15	30	50.0
Single Compartment Scullery Sink	20	40	50.0
Double Compartment Scullery Sink	25	50	62.5
2 Single Compartment Sinks	25	50	62.5
2 Double Compartment Sinks	35	70	87.5
Dishwashers for Restaurants			
Up to 30 gall. water capacity	15	30	50.0
Up to 50	25	50	62.5

WANTED: YOUR DRAINS' WORST ENEMY



the Grease Goblin

LAST SEEN
Loitering in Sinks
and Drains

WANTED FOR
Causing Sewer Overflows

Don't Feed the Grease Goblin!

DO

DO NOT

✓ Put oil and grease in collection containers

⊘ Pour oil and grease down drains

✓ Remove oil and grease from kitchen utensils, equipment, and food preparation areas with scrapers/towels/brooms

⊘ Wash fryers/griddles, pots/pans, and plates with water until oil and grease are removed

✓ Keep grease out of wash water

⊘ Use ~~hot~~ water to rinse grease off surfaces

✓ Place food scraps in collection containers

⊘ Put food scraps down drains

Help keep this guy out of your drains and in the hands of the proper authorities!



N.C. DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF POLLUTION PREVENTION AND ENVIRONMENTAL ASSISTANCE 1-800-769-0136

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Junaluska Sanitary District
P.O. Box 35
Lake Junaluska, NC 28745
828-452-1178
www.jsdwater.org

Junaluska Sanitary District Spill Response Plan:

November 5, 2015

May 23, 2017 (Revised)

Sewer Collection System Spill Clean up and Operation Procedures:

- 1) Remove all visible debris.
- 2) Remove all visibly ponded wastewater by pumping back into the sewer system.
- 3) Disinfect the area using quick lime (No Chemical additive to Surface Waters).
- 4) Barriers (such as caution or colored tape) should be put up to prevent public access for at least 25 hours.
- 5) If soil is disturbed near stream banks, then the area should be re-seeded immediately to prevent erosion.
- 6) Complete and submit a field report to the ORC/Crew supervisor and JSD Management.
- 7) If any sewer spill reaches surface waters or any spill surpasses 1,000 gallons, the ORC is to notify the Asheville Regional office of NCDEQ at 828-296-4500 and complete the Collection System Sanitary Sewer Overflow Reporting form (CS-SSO). See attached blank SSO form and can be found in JSD server, NCDEQ & PWS/Spill Reporting (DENR)
 - a. The form is to be submitted to the regional office within 5 business days of the first knowledge of the SSO (sanitary sewer overflow).
 - b. For all spills reaching surface waters or surpasses 1,000 gallons, issue a press release to all local news media (Haywood County) within 24 hours.
 - c. For all spills surpassing 15,000 gallons, issue a press release same as above (b.) but also to each county downstream that could be affected. Note, the regional office shall determine which counties that are impacted and who to notify.
 - d. For any and all spills, release a public announcement on JSD's website (www.jsdwater.org) and periodically update on progression and status.

Determination and protocol of sewer spill:

- Once the sewer spill is recognized, JSD crew member and ORC to determine if the sewer system affected is that of JSD or if it is the Town of Waynesville's 24" sewer line system that runs through our District.
- If JSD's, follow procedures above (1-7)
- If Town of Waynesville,
 - Notify immediately the Town of Waynesville, Ronnie Norris with the Town of Waynesville Sewer Plant (828-452-4685) and/or Preston Gregg, Town of Waynesville Engineer (828-456-3706).
 - JSD crew should tend to the spill until the Town of Waynesville shows up and takes over the process.

JSD Spill Response Plan

Emergency Contact Phone Numbers:

JSD Office, normal business hours	828-452-1178, info@jswater.org
JSD after hours, Sheriff Dispatcher	828-452-6600

James Stinnett, JSD ORC & Customer Service supervisor	828-452-1178, jstinnett@jswater.org
Jethro Ward, JSD ORC & Crew Supervisor	828-452-1178, jward@jswater.org
Josh Nickol, JSD General Manager	828-452-1178, jnickol@jswater.org

***Note, JSD has a crew member on-call 24 hours a day. This employee has an emergency cell phone that the Sheriff Dispatch has along with the GM's direct cell. The district does not give out cell numbers to the public, but the Dispatch office has these contacts for all emergencies.*

Town of Waynesville:

Sewer Treatment Plant (Ronnie Norris) 828-452-4685
Town Engineer (Preston Gregg) 828-456-3706

Subcontractors:

Clark & Leatherwood 828-452-4500
NEO Corporation 828-456-4332
Birchfield Brothers Septic Tank Service 828-456-7144

JSD Spill Response Plan

Equipment List:

- Kubota Trac-Hoe
- CAT 308 Backhoe
- 2 Utility Trucks (Dodge & F250)
- 1 Pickup truck (Toyota Tacoma)
- Submersible Pump (Gas powered)
- Jetter
- Sewer Camera
- Misc. tools
- Tripod safety harness
- Misc. safety equipment and traffic control devices
- Portable generator and lighting
- Enmet sewer sniffer

JSD Spill Response Plan

Sewer Collection System Material List (audited 6/23/17)

8" x 4" Sewer Saddle PVC
6" x 4" Sewer Saddle PVC 90* Tap
8" x 6" Sewer Saddle PVC
12" x 6" Sewer Saddle PVC
6 X 4 Sewer Saddle PVC
Universal Sewer Saddle 6" Tap
Universal Sewer Saddle 4" Tap
6 x 6 x6 Wye SCH 35
6 x 6 x 6 Wye Sch 35 glue
Sch 35 to Sch 40 Glue
6" 45* Sch 35
8" 45* Sch 35
8" plug Sch 35
6 " Caps Sch 35
4" Sch 40 Couplings (glue)
4" Sch 40 Tee (glue)
4" x 4" x 4" Wye Sch 40 (glue)
4" street 45* Sch 40 (glue)
11/1/4* Sch 40* Bend Glue 4"
22* Sch 40 Bend Glue 4"
45* Sch 40 * Bend 4"
4" Sch 40 90* bend
4" Sch 40 Caps
4" Sch 35 to Sch 40 Couplings
4" Sch 35 Caps
4" Sch 35 22* Bends
4" Sch 35 glue 90* Bends
4" Sch 35 glue 45* Bend
4" Sch 35 glue 22* Bend
4 x 4 x 4 Sch 35 Wye
8x 8 fern Co Coupling
8x6 fern Co Coupling
6 x 6 fern co coupling
4 x 6 fern co coupling
4 x 4 fern co coupling
Manhole Ring & Lids
4" Sch 40 Pipe
6" Sch 40 Pipe
4" Sch 35 Pipe
6" Sch 35 Pipe
8" Sch 35 Pipe
16 8 x 4 Sleeves Ductile Iron (for sewer taps)
Pipe Joint Lube
2" Man Hole Lid Risers



PART I:

This form shall be submitted to the appropriate DWR Regional Office within five business days of the first knowledge of the sanitary sewer overflow (SSO).

Permit Number: (WQCS# if active, otherwise use WQCSD#)

Facility: Incident #: Owner:

Region: City: County:

Source of SSO (check applicable): Sanitary Sewer Pump Station / Lift Station

SPECIFIC location of the SSO (be consistent in description from past reports or documentation - i.e. Pump Station 6, Manhole at Westall & Bragg Street, etc.):

Manhole #:

Latitude (degrees/minute/second): Longitude (degrees/minute/second):

Incident Started Dt: Time: Incident End Dt: Time:
(mm-dd-yyyy) (hh:mm) AM/PM (mm-dd-yyyy) (hh:mm) AM/PM

Estimated volume of the SSO: gallons Estimated Duration (round to nearest hour): hour(s)

Describe how the volume was determined:

Weather conditions during the SSO event:

Did the SSO reach surface waters? Yes No Unknown

Volume reaching surface waters: gallons Surface water name:

Did the SSO result in a fish kill? Yes No Unknown

If Yes, what is the estimated number of fish killed?

SPECIFIC cause(s) of the SSO:

- Severe Natural Conditions Grease Roots Inflow & Infiltration
Pump Station Equipment Failure Power Outage Vandalism Debris in line Pipe Failure (Break)
Other (Please explain in Part II)

24-hour verbal notification (name of person contacted):

DWR Emergency Management Date (mm-dd-yyy): Time: (hh:mm AM/PM):

Per G.S. 143-215.1C(b), the owner or operator of any wastewater collection system shall:

In the event of a discharge of 1,000 gallons or more of untreated wastewater to the surface waters of the State, issue a press release to all print and electronic news media that provide general coverage in the county where the discharge occurred setting out the details of the discharge. The press release shall be issued within 24 hours after the owner or operator has determined that the discharge has reached surface waters of the State.

In the event of a discharge of 15,000 gallons or more of untreated wastewater to the surface waters of the State, publish a notice of the discharge in a newspaper having general circulation in the county in which the discharge occurs and in each county downstream from the point of discharge that is significantly affected by the discharge. The Regional Office shall determine which counties are significantly affected by the discharge and shall approve the form and content of the notice and the newspapers in which the notice is published.

WHETHER OF NOT PART II IS COMPLETED, A SIGNATURE IS REQUIRED SEE PAGE 13

In order to submit a claim for justification of an SSO, you must use Part II of form CS-SSO with additional documentation as necessary. DWR staff will review the justification claim and determine if enforcement action is appropriate.

PART II:

ANSWER THE FOLLOWING QUESTIONS FOR EACH RELATED CAUSE CHECKED IN PART I OF THIS FORM AND INCLUDE THE APPROPRIATE DOCUMENTATION AS REQUIRED OR DESIRED

COMPLETE ONLY THOSE SECTIONS PERTAINING TO THE CAUSE OF THE SSO AS CHECKED IN PART I

(In the check boxes below, NA = Not Applicable and NE = Not Evaluated)

A HARDCOPY OF THIS FORM SHOULD BE SUBMITTED TO THE APPROPRIATE DWR REGIONAL OFFICE UNLESS IS HAS BEEN SUBMITTED ELECTRONICALLY THROUGH THE ONLINE REPORTING SYSTEM

Severe Natural Conditions (hurricane, tornado, etc.)

Describe the "severe natural condition" in detail:

How much advance warning did you have and what actions were taken in preparation for the event? _____

Comments: _____

Grease (Documentation such as cleaning, inspection, enforcement actions, past overflow reports, educational material and distribution date, etc. should be available upon request.)

When was the last time this specific line (or wet well) was cleaned? _____

Do you have an enforceable grease ordinance that requires new or retrofit of grease traps/interceptors? Yes No NA NE

Have there been recent inspection and/or enforcement actions taken on nearby restaurants or other nonresidential grease contributors? Yes No NA NE

Explain: _____

Have there been other SSOs or blockages in this areas that were also caused by grease Yes No NA NE

When? _____

If yes, describe them: _____

Have cleaning and inspections ever been done at this location? Yes No NA NE
Explain.

Have educational material about grease been distributed in the past? Yes No NA NE

When: _____

and to whom: _____

Explain: _____

If the SSO occurred at a pump station, when was the wet well and pumps last checked for grease accumulation:

Were the floats clean? Yes No NA NE

Comments: _____

Roots

Do you have an active root control program on the line / area in question? Yes No NA NE

Describe: _____

Have cleaning and inspections ever been increased at this location because of roots? Yes No NA NE

Explain: _____

What corrective actions have been accomplished at the SSO location (and surrounding system if associated with the SSO)?

What corrective actions are planned at the SSO location to reduce root intrusion? _____

H
as the line been smoke tested or videoed within the past year? Yes No NA NE

If Yes, when?

Comments: _____

Inflow and Infiltration

Are you under an SOC (Special Order by Consent) or do you have a schedule Yes No NA NE in any permit that addresses I/I?

Explain if Yes: _____

What corrective actions have been taken to reduce or eliminate I & I related overflows this spill location within the last year? _____

Has there been any flow studies to determine I/I problems in the collection system at the SSO location? Yes No NA NE

If Yes, when was the study completed and what actions did it recommend? _____

Has the line been smoke tested or videoed within the past year? Yes No NA NE

If Yes, when and what actions are necessary and the status of such actions: _____

Are there I/I related projects in your Capital Improvement Plan? Yes No NA NE

If Yes, explain: _____

Have there been any grant or loan applications for I/I reduction projects? Yes No NA NE

If Yes, explain: _____

Do you suspect any major sources of inflow or cross connections with storm sewers? Yes No NA NE

If Yes, explain: _____

Have all lines contacting surface waters in the SSO location and upstream been inspected recently? Yes No NA NE

If Yes, explain: _____

What other corrective actions are planned to prevent future I/I related SSOs at this location? _____

Comments: _____

Pump Station Equipment Failure (Documentation of testing records, etc should be provided upon request)

What kind of notification/alarm systems are present?

- Auto-dialer/telemetry (one-way communication) Yes
- Audible Yes
- Visual Yes
- SCADA (two-way communication) Yes
- Emergency Contact Signage Yes
- Other Yes

If Yes, explain: _____

Describe the equipment that failed: _____

What kind of situations trigger an alarm condition at this station (i.e. pump failure, power failure, high water, etc.)?

Were notification/alarm systems operable? Yes No NA NE

In no, explain: _____

If a pump failed, when was the last maintenance and/or inspection performed? _____

What specifically was checked/maintained? _____

If a valve failed, when was it last exercised? _____

Were all pumps set to alternate? Yes No NA NE

Did any pump show above normal run times prior to and during the SSO event? Yes No NA NE

Were adequate spare parts on hand to fix the equipment Yes No NA NE

Was a spare or portable pump immediately available? Yes No NA NE

If a float problem, when were the floats last tested? How? _____

If an auto-dialer or SCADA, when was the system last tested? How? _____

Comments: _____

Power outage (Documentation of testing, records, tec., should be provided of alternative power source upon request.)

What is your alternate power or pumping source? _____

Did it function properly? Yes No NA NE

Describe? _____

When was the alternate power or pumping source last tested under load? _____

If caused by a weather event, how much advance warning did you have and what actions were taken to prepare for the event?

Comments: _____

Vandalism

Provide police report number: _____

Was the site secured? Yes No NA NE

If Yes, how? _____

Have there been previous problems with vandalism at the SSO location? _____

If Yes, explain: _____

What security measures have been put in place to prevent similar occurrences in the future? Yes No NA NE

Comments: _____

Debris in line (Rocks, sticks, rags and other items not allowed in the collection system, etc.)

What type of debris has been found in the line? _____

Suspected cause or source of debris: _____

Are manholes in the area secure and intact? Yes No NA NE

When was the area last checked/cleaned? _____

Have cleaning and inspections ever been increased at this location due to previous problems with debris? Yes No NA NE

Explain: _____

Are appropriate educational materials being developed and distributed to prevent future similar occurrences? Yes No NA NE

Comments: _____

Other (Pictures and police report, as applicable, must be available upon request.)

Describe:

Were adequate equipment and resources available to fix the problem?

Yes No NA NE

If Yes, explain: _____

If the problem could not be immediately repaired, what actions were taken to lessen the impact of the SSO?

Yes No NA NE

Comments:

Pipe Failure (Break)

Pipe size (inches): _____

What is the pipe material: _____

What is the approximate age of the line/ pipe (years old): _____

Is this a gravity line? Yes No NA NE

Is this a force main line? Yes No NA NE

Is the line a "High Priority" line? Yes No NA NE

Last inspection date and findings: _____

If a force main then,

Was the break on the force main vertical? Yes No NA NE

Was the break on the force main horizontal? Yes No NA NE

Was the leak at the joint due to gasket failure ? Yes No NA NE

Was the leak at the joint due to split bell? Yes No NA NE

When was the last inspection or test of the nearest air-release valve to determine if operable? _____

When was the last maintenance of the air release performed? _____

If gravity sewer then,

Does the line receive flow from a force main immediately upstream of the failed section of pipe? Yes No NA NE

If yes, what measures are taken to control the hydrogen sulfide production? _____

When was the line last inspected or videoed? _____

If line collapsed, what is the condition of the lineup and downstream of the failure? _____

What type of repair was made? _____

If temporary, when is the permanent repair planned? _____

Have there been other failures of this line in the past five years? Yes No NA NE

If so, then describe

System Visitation

ORC Yes No
Backup Yes No

Name: _____

Certification Number: _____

Date visited: _____

Time visited: _____

How was the SSO remediated (i./e. Stopped and cleaned up)?

As a representative for the responsible party, I certify that the information contained in this report is true and accurate to the best of my knowledge.

Person submitting claim: _____

Date: _____

Signature: _____

Title: _____

Telephone Number:

Any additional information desired to be submitted should be sent to the appropriate Division Regional Office within five business days of first knowledge of the SSO with reference to the incident number (the incident number is only generated when electronic entry of this form is completed, if used).

Press Release: Month, day, Year

The Junaluska Sanitary District experienced a discharge of untreated sewage from a insert description of cause/reason, when it was realized and where. The instance sewage totaled over #,### gallons.

The sewage released at if reached surface waters, where and which waters affected.

The N.C. Department of Environmental Quality's Division of Water Quality was notified of the event and is reviewing the matter.

General Statute 143-215.1C requires that the owner or operator of any wastewater collection or treatment works to issue a press release when an untreated wastewater discharge of 1,000 gallons or more reaches surface waters.

For further information, please contact Junaluska Sanitary District office at 828-452-1178.

SECTION 00005
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Junaluska Sanitary District
Haywood County, North Carolina
August, 2011

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END OF SECTION

SECTION 02722

SEWERS: SANITARY, GRAVITY

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: Provide sanitary sewerage system as shown on the drawings, specified herein, and needed for a complete and proper installation.

1.2 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Provide American made materials.

1.3 SUBMITTALS

- A. Comply with pertinent provisions of Section 01340.
- B. Product data: Within 15 calendar days after the Contractor has received the Owner's Notice to Proceed, submit:
 - 1. Materials list of items proposed to be provided under this Section;
 - 2. Manufacturer's specifications and other data needed to prove compliance with the specified requirements.

1.4 PRODUCT HANDLING

- A. Comply with pertinent provisions of Section 01640.
- B. Storage of PVC pipe:
 - 1. Store in unit packages as received from manufacturer until just prior to use.
 - 2. Stack units in such a manner as to prevent deformation to pipe barrel and bells.
 - 3. Protect from direct sunlight by covering with opaque material if storage period will exceed six weeks.
- C. Avoid severe impact blows, gouging or cutting by metal surfaces or rocks.

1.5 ORDER AND ACCEPTANCE OF WORK

- A. The Engineer shall direct on what line or street the Contractor shall work and the order thereof.
- B. Owner reserves right to accept and use any portion of work.
- C. Before flow can be released into manhole/lines, work must be approved by the Engineer and/or the OWNER.

1.6 PROTECTION OF OTHER UTILITIES

- A. Location:
 - 1. Approximate location of certain known underground lines is shown.
 - 2. Existing small lines not shown.
 - 3. Locate small and other possible utility lines using electronic pipe finder, or other approved method.
 - 4. Excavate and expose existing underground utilities ahead of trenching operations.
- B. Repair or replace any damaged utility line or structure at no additional cost to Owner.

1.7 CONFLICTING UTILITIES

- A. Remove and/or relay conflicting utilities, when so directed by the Engineer, at no expense to the Owner.
- B. Where alterations to existing utilities are shown to avoid conflicts, make alterations at no cost to the Owner.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Pipe shall be subject to Engineer's inspection, at plant, trench or other point of delivery, for culling and rejecting pipe, independent of laboratory tests, not conforming to specifications.
- B. Rejected pipe will be marked by the Engineer and Contractor shall remove it from project site.

2.2 PIPE AND FITTINGS

- A. Use any pipe material specified herein, except where use of a particular pipe material is indicated on the Contract Drawings.

B. Polyvinyl chloride pipe and fittings (PVC):

1. Use integral wall bell and spigot, minimum of SDR35, complying with ASTM 3034.
2. Use elastomeric gasket joints, providing watertight seal.
3. Furnish pipe in 12.5 or 20 foot lengths.

C. Ductile-iron pipe and fittings (DIP):

1. Comply with ANSI/AWWA C151/A21.51.
2. Use mechanical or push-on joints complying with ANSI/AWWA C111/A21.11 as modified by ANSI/AWWA C151/A21.51.
3. Use rubber gaskets and lubricant complying with ANSI/AWWA C111/A21.10.
4. Use wall thickness Pressure Class 350 unless otherwise noted.
5. Use fittings with pressure rating of 250 psi, complying with ANSI/AWWA C110/A21.10.
6. Use virgin polyethylene lining complying with ANSI/ASTM D1248. The polyethylene shall be bonded to the interior of the pipe and fittings by heat. Alternate pipe linings may be considered, such as a bituminous or ceramic epoxy lining.
7. Provide watertight covers, where indicated, conforming to above requirements and with frame tapped for four bolts, countersunk in cover.
 - a. Provide rubber gasket between frame and cover.
 - b. Watertight frames to be provided at all manhole locations where the top of the manhole is below the elevation of the 100-year flood as indicated on the drawings.
 - c. Ventilated watertight manholes are to be provided as shown on the drawings and are to be provided with a concrete slab top, ventilation pipe to above the 100-year flood elevation with a 180° bend, with stainless steel insect screen, at the top. All vent piping to be ductile iron.

2.3 MANHOLES

A. Use precast manholes:

1. Provide reinforced precast concrete ring and eccentric cone sections complying with ASTM C478 and the following.
2. Use portland cement complying with ASTM C150, Type II.
3. Cast ladder rungs into the units.
4. Provide tongue and groove or o-ring rubber gasketed joints.
5. Use vulcanized butyl rubber sealant with tongue and groove joints. Install double mastic at joints to minimize future infiltration and inflow.
6. Provide flat slab tops where manhole depth is less than 4'-0".

B. Steps:

1. Use plastic or rubber encased steel rod steps.
2. Provide steps having non-skid top surfaces, safety slope at each end, minimum width of 10 inches and not less than 5 inch projection from wall.
3. Steps shall support 1000 pound load at center with no deformation, coat embedded ends with bituminous paint.
4. Provide polypropylene plastic steps reinforced with 3/8" diameter steel rod, M.S.A. Industries, Inc. Model PS-K, or equal.
5. Provide corrosion-resistant rubber steps reinforced with 1/2" diameter steel rod, Oliver Tire and Rubber Co., or equal.

C. Frames and Covers:

1. Provide American-made grey iron castings, complying with ASTM A48, Class 30 iron.
2. Machine all bearing surfaces.
3. Provide frames weighing not less than 208 pounds with inside opening between 21 and 24 inches.
4. Provide circular cover with two "pick" holes and weighing not less than 120 pounds.
5. Covers to have the words "SANITARY SEWER" cast in the metal.
6. Provide water tight covers, where indicated, conforming to above requirements and with frame tapped for four bolts, countersunk in cover.
 - a. Provide rubber gasket between frame and cover.
 - b. Watertight frames to be provided at all manhole locations where the top of the manhole is below the elevation of the 100-year flood as indicated on the drawings.
 - c. Ventilated watertight manholes are to be provided as shown on the drawings and are to be provided with a concrete slab top, ventilation pipe to above the 100-year flood elevation with a 180° bend, with stainless steel insect screen, at the top. All vent piping to be ductile iron.

2.4 OTHER MATERIALS

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Engineer.

PART 3 - EXECUTION

3.1 LAYING OUT WORK

- A. Provide all materials, labor, instruments, etc. required to lay out Work.
- B. Prepare "cut sheets" for each manhole prior to beginning excavation. Submit cut sheets for approval by Engineer prior to beginning any pipe laying operations.

- C. Exercise proper precaution to verify figures on the drawings prior to laying out Work. Contractor will be held responsible for any errors therein that otherwise might have been avoided.
- D. Promptly inform Engineer of errors or discrepancies found, in order that proper corrections may be made.

3.2 LOCATION

- A. Sewer lines in relation to water lines must conform to "Ten State Standards".
- B. Where the sewer location is not located clearly by dimensions on the drawings, locate the sewer:
 - 1. Not closer than ten feet horizontally from a water supply main or service line. The distance shall be measured edge to edge.
 - 2. Where it is not practical to maintain a ten foot horizontal separation, the sewer pipe may be installed closer to a water main, provided that the water main is in a separate trench or on an undisturbed earth shelf located on one side of the sewer and at an elevation so the bottom of the water main is at least 18 inches above the top of the sewer.
 - 3. Where sewers are crossing a water main, either above or below, provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer.
 - 4. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints.
 - 5. Where a water main crosses under a sewer, fully encase the sewer pipe for a distance of ten (10) feet on each side of the crossing; or
 - 6. Use acceptable pressure pipe with no joint closer horizontally than three feet from the crossing. This pipe will be pressure tested to assure watertightness prior to backfilling.
 - 7. Where concrete encasement is used, provide not less than 4" thickness including that on pipe joints.

3.3 INSTALLATION

- A. Trench, backfill and compact for the work of this Section in strict accordance with pertinent provisions of Section 02221 of these specifications.
- B. Bedding shall be Class C unless otherwise noted or required for wet ditch conditions.
 - 1. For wet or shallow ditch conditions, use Class C Alternate or Class B at the Engineers or Owner's direction.

C. Pipe laying:

1. General:
 - a. Protect pipe during handling against shocks and free fall. Remove extraneous material from the pipe interior.
 - b. Lay pipe by proceeding upgrade with the spigot ends of bell-and-spigot pipe pointing in direction of flow.
 - c. Lay each pipe accurately to the indicated line and grade, aligning so the sewer has a uniform invert.
 - d. Continually clear interior of the pipe free from foreign material.
 - e. Before making pipe joints, clean and dry all surfaces of the pipe to be joined.
 - f. Use gasket lubricants as recommended by the pipe manufacturer.
 - g. Place, fit, join and adjust the joints to obtain the degree of water tightness required.
2. Polyvinyl chloride pipe:
 - a. Class C bedding shall be used for all PVC sewers unless otherwise noted or required by laying conditions.
 - b. Comply with ASTM D2321, except as otherwise specified herein.
3. Ductile-iron pipe:
 - a. Class C bedding shall be used for all DIP unless otherwise noted.
 - b. Comply with ANSI/AWWA C600, except as otherwise specified herein.
4. Remove defective pipe and replace with sound pipe, at no cost to the Owner.

3.4 MANHOLES

- A. Set bases level so that walls will be plumb.
- B. Apply joint sealer, or ring gasket to wall section(s), set firmly in place to assure watertight joints.
- C. Form the invert channels directly in the concrete of the manhole base, with mortar, or by laying full section sewer pipe through the manhole and breaking out the top half after surrounding concrete has hardened. Smooth the floor of the manhole outside the channels, and slope toward the channels at not less than 1" per foot nor more than 2" per foot.
 1. Shape the invert channels to be smooth and semicircular, conforming to the inside of the adjacent sewer section.
 2. Make changes in direction of flow with a smooth curve of as large a radius as the size of the manhole will permit.
 3. Make changes in size and grade of channels smoothly and evenly.
 4. Slope invert uniformly from invert of inlet to invert of outlet.

3.5 DROP MANHOLES

- A. Where indicated, or as directed by the Engineer, construct drop manhole connections, complying with plan details.

3.6 CONNECTIONS TO EXISTING SYSTEM

- A. Construct new manhole as specified, breaking upper half of existing pipe after base of manhole is completed so as not to obstruct flow of the existing pipe.
- B. At existing manhole tie-ins, temporarily block and/or divert sewage flows, perform other miscellaneous work.
 - 1. Use high-early strength cement for mortar, forming proper channels with minimum interruption to service of the existing sewer.

3.7 INSTALLATION IN CASING PIPES

- A. Install sewer where indicated within a casing pipe complying with Section 02780 of these specifications.

3.8 SERVICE LINES

- A. Install wye or tapping saddle, "Fernco Brand" at service tap, extend 4-inch service line to property line and install a clean out to be capped 4-inches below grade.
 - 1. Invert of service line at property line shall be low enough to serve the dwelling by gravity.
- B. Drive a #4 iron rebar adjacent to the clean out to be flush with the top of the ground. The rebar is to be used for future location of the cleanout and service line. Sewer clean out box & cover may be required as directed by JSD.

3.9 INSPECTIONS AND TESTING

- A. General:
 - 1. All sewers and service lines will be visually inspected, tested and gauged for infiltration and/or exfiltration.
 - 2. All visible leaks shall be repaired even if infiltration is within allowable limits.
 - 3. Broken or cracked pipe, mislaid pipe and other defects shall be corrected.
 - 4. All repairs, relaying of sewers, etc. required to bring the sewers to specified status shall be made at no additional cost to the Owner.
 - 5. Expense of all testing will be borne by the Contractor.

B. Inspection:

1. Clean and prepare for inspection each block or section of sewer upon completion, or at such other time as the Engineer may direct.
2. Each section between manholes shall show a full circle of light when viewed from either end.
3. If the Engineer, during visual inspection, detects deflection in the pipe he may require mandrel deflection testing to be performed by the contractor at no additional cost to the Owner.
 - a. Pull mandrel through pipe, mandrel size to be such that deflections in excess of five percent of the pipe's internal diameter will prevent passage of mandrel.
 - b. Relay and retest any section of sewer failing to meet the five percent deflection limit.

C. Infiltration tests:

1. Conduct tests using V-notch weir, or by direct measurement prior to allowing sewage flows in the line.
2. Close the end of the sewer at upstream structure sufficiently to prevent the entrance of water.
3. Discontinue use of well points or other groundwater pumping operations at least three days prior to testing.
4. Infiltration into the entire system of new sewers or any one trunk, interceptor or outfall sewer, including connecting laterals, or any stretch of sewer shall not exceed:
 - a. 100 gallons per inch of diameter per mile per day.
5. Make tests in presence of the Engineer, giving the Engineer at least three days advance notice.

D. Air testing:

1. Where sewers and service lines are installed above the groundwater table, conduct air tests complying with ASTM C828.
2. Service lines are to be air tested along with the main service lines. Cap all cleanouts air tight prior to testing. Repair any leaks in service laterals.
3. Air Test Procedure
 - a. Procedure
 1. Air test shall be conducted in strict accordance with the testing equipment manufacturer's instructions, including all recommended safety precautions. No one will be allowed in the manholes during testing. Equipment used for air testing shall be equipment specifically designed for this type of test and shall include:

Shut-off valve, pressure regulating valve, pressure reduction valve, monitoring gauge (0 to 5 psi with minimum divisions of 0.10 psi and accuracy to within 0.04 psi), air compressor and plug.

2. After an internal pressure of 4.0 psig is obtained, allow at least two minutes for air temperature to stabilize, adding only the amount of air required to maintain pressure. After stabilization period, adjust the air pressure 3.5 psig and valve off air supply.
3. For vitrified clay and ductile iron pipe, the section of the line being tested will be considered acceptable if the time required for a pressure drop of 1.0 psig is more than the time shown for each pipe size in the following table.

Pipe Diameter (in.)	Time/100' (Min:Sec)
4	0:18
8	1:12
10	1:30
12	1:48
15	2:06
18	2:24

E. Infiltration/Exfiltration testing: will be performed if required by the Engineer.

1. Infiltration and Exfiltration shall be checked on all sewer lines and manholes. All tests shall be conducted under the direction of the MSD. Infiltration and exfiltration shall not exceed 200 gallons per minute per mile per inch diameter per day. These conditions shall be met before a sewer line is accepted. An exfiltration test only will be required where infiltration can not be checked due to excessively dry conditions. All excess of the maximum allowable amount shall be eliminated by the Contractor prior to retesting. The Contractor shall be responsible for providing labor and needed equipment for the exfiltration test. Test procedure by either using water or air may be used as follows, with the Contractor having the option of which method may be most economical for the given situation. The Contractor shall furnish the water if this test procedure is utilized.

a. Test Procedure – Water Test For Sewer Pipe Lines and Manholes

1. Plug lower end of section to be tested. A section is defined as the length of pipe between any two consecutive manholes.
2. Fill line-and manhole with water to a level as directed by the Sewer District.
3. Let water stand overnight or at least 4 hours to allow all trapped air to escape and pipe to reach its maximum absorption.
4. After pipe has reached its maximum absorption, refill manhole to original depth. After a period of time as directed by the Sewer District or for a period of one hour unless otherwise directed, record difference

in elevation of water and compute exfiltration rate. All sections of the pipe line must meet infiltration specifications, must be cleaned and debris, and must be inspected by MSD Inspector prior to physical connection of the pipe to a service line.

- F. Camera Testing: if required by the Engineer or MSD, camera testing of the lines will be performed at the cost of the Contractor.

END OF SECTION

SECTION 02723

SEWERS: SANITARY, PRESSURE

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: Provide sanitary sewer pressure (force) mains as shown on the drawings, specified herein, and needed for a complete and proper installation.

1.2 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. All materials in this Section are to be manufactured in the United States.

1.3 SUBMITTALS

- A. Comply with pertinent provisions of Section 01340.
- B. Product data: Within 15 calendar days after the Contractor has received the Owner's Notice to Proceed, submit:
 - 1. Materials list of items proposed to be provided under this Section.
 - 2. Manufacturer's specifications and other data needed to prove compliance with the specified requirements.

1.4 PRODUCT HANDLING

- A. Avoid severe impact blows, gouging or cutting by metal surfaces or rocks.

PART 2 – PRODUCTS

2.1 GENERAL

- A. Use any pipe material and associated fittings as specified herein, except where use of a particular material is indicated on the plans, or specified herein.
- B. Minimum 4" DIP on all force mains.

2.2 PIPE AND FITTINGS

A. Ductile-iron pipe and fittings (DIP):

1. Use Pressure Class 350, complying with ANSI/AWWA C151/A21.51, and ASTM A377, latest revision.
2. Use mechanical or push-on joints complying with ANSI/AWWA C111/A21.11 as modified by ANSI/AWWA C151/A21.51.
3. Use rubber gaskets and lubricant complying with ANSI/AWWA C111/A21.11.
4. Use fittings with pressure rating of 150 psi, complying with ANSI/AWWA C110/A21.10.
5. Use standard thickness cement mortar lining in accordance with ANSI/AWWA C104/A21.4.
6. Ductile iron pipe must be installed in accordance with AWWA C-600, latest revision.

B. Polyvinyl chloride pipe and fittings (PVC):

1. PVC shall be pressure Class 200, PVC 1120, SDR 21.
2. All fittings shall be DIP M.J. with transferring gaskets.

2.3 AIR RELEASE AND VACUUM VALVES

- A. Air release valves to be GA-935F, with flushing attachment.
- B. Install air release valve in concrete manhole as indicated on the Standard Detail Drawings.

2.4 METALLIC DETECTION TAPE

- A. Provide No. 12 detection wire over the center of the force main temporarily at a valve hex on either end of the force main, when PVC pipe is used.

2.5 CONCRETE

- A. Use 3000 psi complying with Section 03300.

PART 3 - EXECUTION

3.1 HANDLING

- A. Handle pipe accessories so as to ensure delivery to the trench in sound, undamaged condition:
1. Carry pipe into position - do not drag.
 2. Use pinch bars or tongs for aligning or turning ductile-iron pipe only on the bare end of the pipe.
 3. Use care not to injure pipe linings.

- B. Thoroughly clean interior of pipe and accessories before lowering pipe into trench. Keep clean during laying operations by plugging or other method approved by the Engineer.
- C. Before installation, inspect each piece of pipe and each fitting for defects:
 - 1. Material found to be defective before or after laying: Replace with sound material meeting the specified requirements, and without additional cost to the Owner.
- D. Rubber gaskets: Store in a cool dark place until just prior to time of installation.

3.2 PIPE CUTTING

- A. Cut pipe neatly and without damage to the pipe.
- B. Unless otherwise recommended by the pipe manufacturer and authorized by the Engineer, cut pipe with mechanical cutter only.
 - 1. Use wheel cutters when practicable.
 - 2. Cut plastic pipe square, and remove all burrs.

3.3 LOCATING

- A. Where possible, locate pressure sewer at least ten feet away, horizontally, from water mains.
- B. Where pressure sewers cross over or under water lines, maintain minimum 18" separation between outside edges of the two pipes.
 - 1. A full length of the pressure sewer pipe shall be located so that the joints will be equal distance from the water main.

3.4 EXCAVATION AND BACKFILLING

- A. Comply with pertinent provisions of Section 02221 of these Specifications.

3.5 ALIGNMENT OF PIPE

- A. Pipe lines intended to be straight shall be so laid.
- B. Where vertical or horizontal alignment requires deflection from straight line or grade, such deflection shall not exceed maximum deflection recommended by the pipe manufacturer.

- C. If alignment requires deflection exceeding recommended limits, furnish special bends or a sufficient number of shorter lengths of pipe to provide angular deflections within the allowable limits.

3.6 PLACING AND LAYING

A. General:

1. Lower pipe and accessories into trench by means of derrick, ropes, belt slings, or other equipment approved by the Engineer.
2. Do not dump or drop any of the materials of this Section into the trench.
3. Rest the full length of each section of pipe solidly on the pipe bed, with recesses excavated to accommodate bells, couplings, and joints.
4. Take up and relay pipe that has the grade or joint disturbed after laying.
5. Do not lay pipe in water, or when trench conditions are unsuitable for the work; keep water out of the trench until jointing is completed.
6. Securely close open ends of pipe when work is not in progress.
7. Where any part of coating or lining is damaged, repair to the approval of the Engineer and at no additional cost to the Owner.

3.7 THRUST BLOCKS

A. General:

1. Provide thrust blocks or dead man restraint on plugs, caps, tees and bends deflecting 113E or more either vertically or horizontally.
2. Size of blocking will be determined by the Engineer, based on soil bearing capacity.

B. Installation:

1. Locate thrust blocking between solid ground and the fitting to be anchored.
2. Unless otherwise shown or directed by the Engineer, place the base and thrust bearing sides of thrust blocking directly against undisturbed earth.
3. Sides of thrust blocking not subject to thrust may be placed against forms.
4. Place thrust blocking so the fitting joints will be accessible for repair.

3.8 HYDROSTATIC TESTING

A. General:

1. Clean and flush line of dirt and foreign material.
2. Do not perform hydrostatic tests until at least five days after installation of concrete thrust blocking.
3. Test pump, pipe connection, pressure gauges, measuring devices and all other necessary apparatus to conduct tests shall be provided by the Contractor.

4. Provide temporary plug and blocking at open ends.

B. Pressure test:

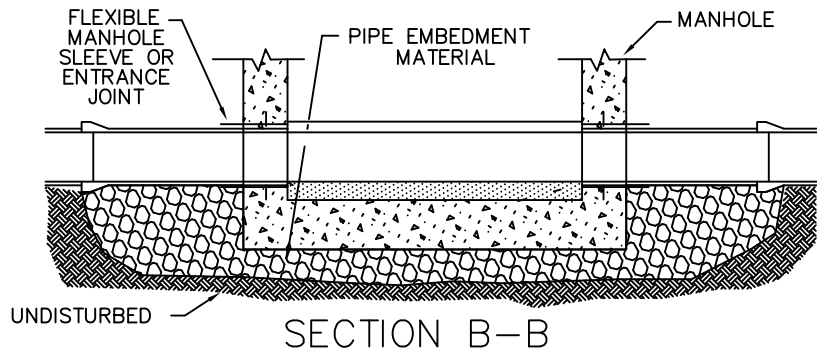
1. Duration of each test: At least 2 hours.
2. During the test, subject pressure sewer lines to a hydrostatic pressure of 150 psi measured at the lowest point on the line. There shall be no pressure drop during the two hour period.
3. Repair and retest the line until there is no drop in pressure.

3.9 PUMP STATIONS

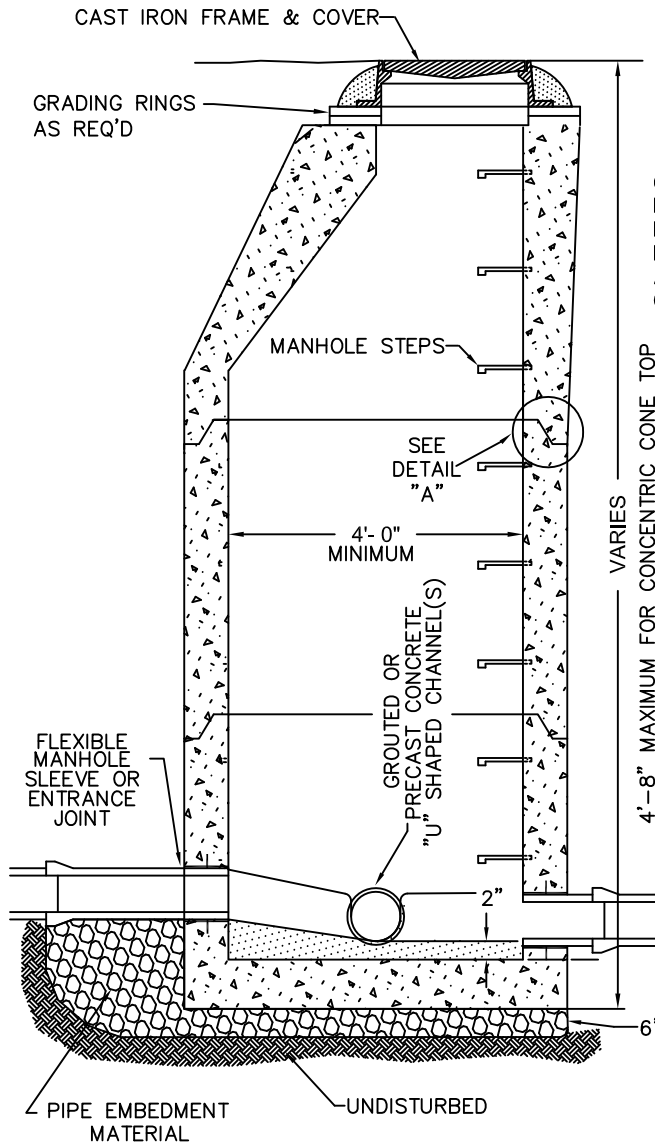
The OWNER and the ENGINEER shall review and approve each pump station on a case-by-case basis. To be reviewed the pump station review package shall include pumps selected, pump curves, flow data, wet well size, pipe material, electrical controls to include the control panels, alarms, wiring diagram, and all other associated items for a complete and operational pump station.

END OF SECTION

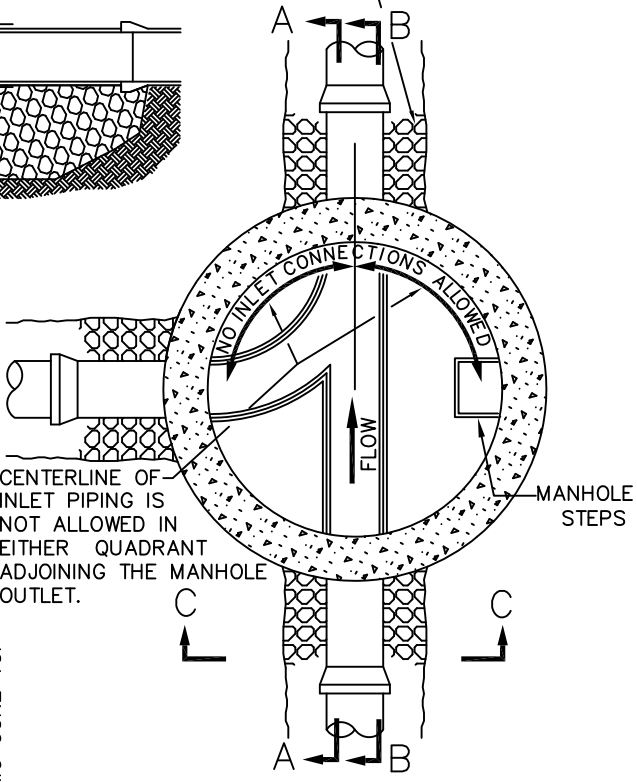
Standard JSD Sanitary Sewer Details



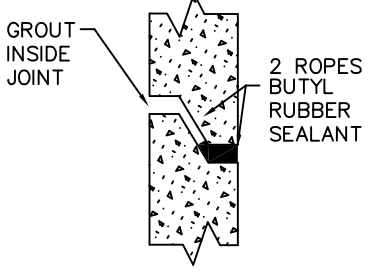
SECTION B-B



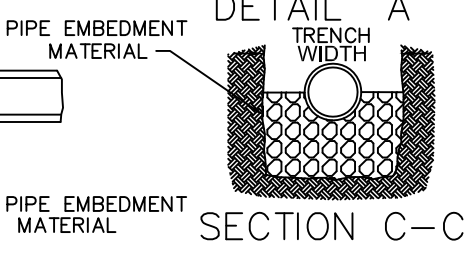
SECTION A-A



SECTIONAL PLAN



DETAIL "A"



SECTION C-C



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**STANDARD MANHOLE
DETAILS**

DATE: DECEMBER 2011

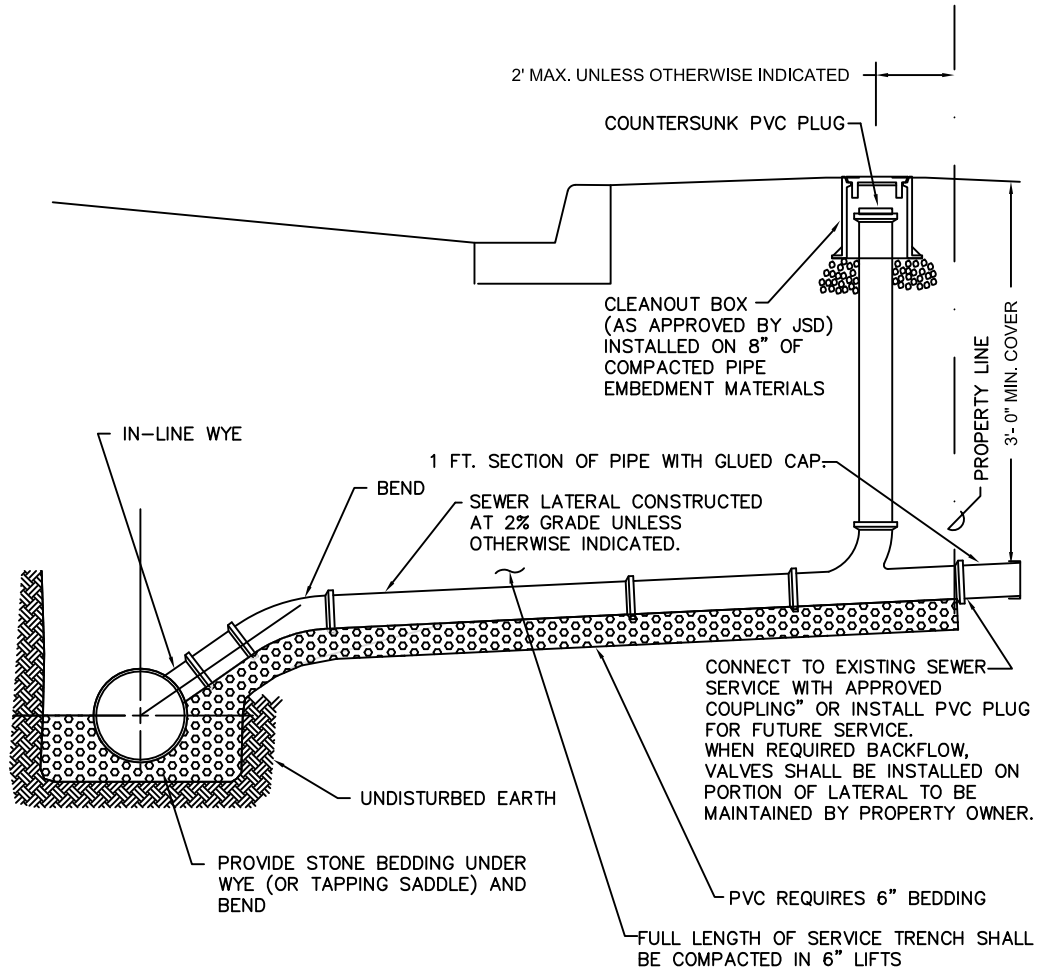
SCALE: NOT TO SCALE

Revisions	
Date	Description

FILE NO.

NOTES:

1. WYE CONNECTIONS ARE STANDARD FOR NEW SEWER MAIN CONSTRUCTION.
2. WHERE COVER IS LESS THAN 3 FT. DUCTILE IRON MUST BE USED.
3. WHERE DUCTILE IRON IS REQUIRED RISER MAY BE CONSTRUCTED WITH SCH. 40 PVC
4. REQUIREMENT OF THE CLEAN OUT BOX IS UP TO THE DISCRETION OF JSD.



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**SAN. SEWER SERVICE
LESS THAN 5FT DEEP
DETAIL**

DATE: DECEMBER 2011

SCALE: NOT TO SCALE

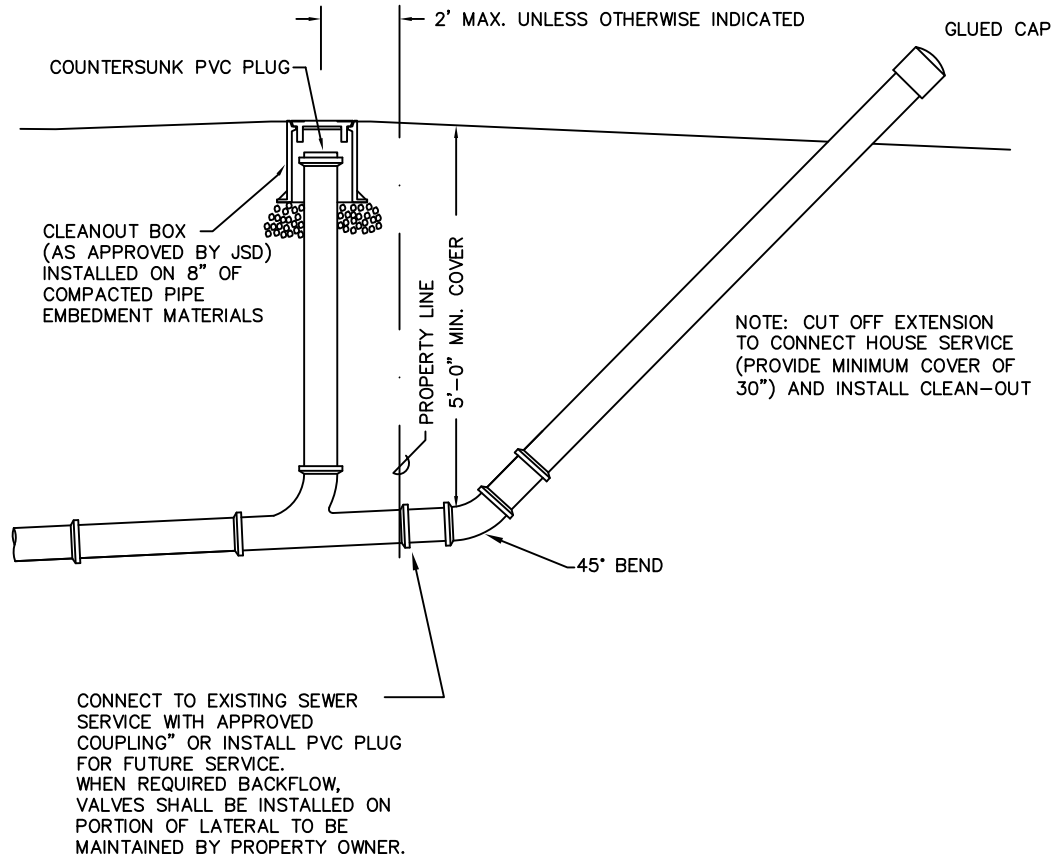
Revisions

Date	Description

FILE NO.

NOTES:

1. WYE CONNECTIONS ARE STANDARD FOR NEW SEWER MAIN CONSTRUCTION.
2. WHERE COVER IS LESS THAN 3 FT. DUCTILE IRON MUST BE USED.
3. WHERE DUCTILE IRON IS REQUIRED RISER MAY BE CONSTRUCTED WITH SCH. 40 PVC
4. REQUIREMENT OF THE CLEAN OUT BOX IS UP TO THE DISCRETION OF JSD.



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**SAN. SEWER SERVICE
MORE THAN 5FT DEEP
DETAIL**

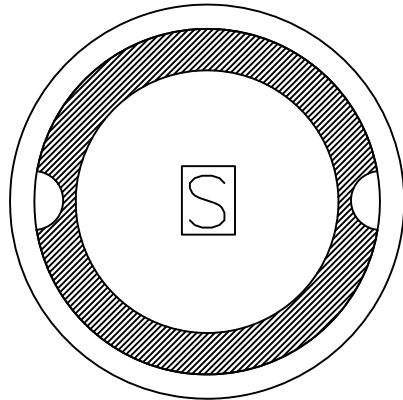
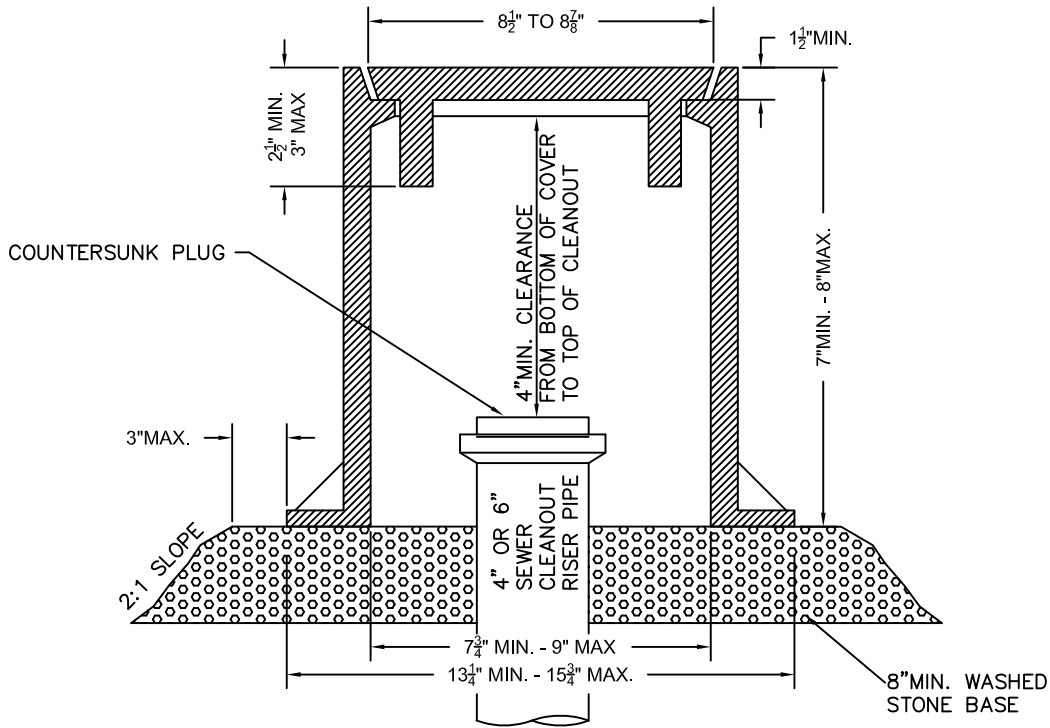
DATE: DECEMBER 2011

SCALE: NOT TO SCALE

Revisions

Date	Description

FILE NO.



MINIMUM WEIGHT CHART	
	MIN. WEIGHT-LBS.
COVER	25
BASE	40
TOTAL UNIT	65

NOTE:

1. ALL SANITARY SEWER CLEAN OUT BOXES AND COVERS SHALL BE MANUFACTURED FROM GRAY IRON (CAST IRON) MEETING THE REQUIREMENTS OF AWWA C110 AND ASTM A536.
2. ALL SANITARY SEWER CLEAN OUT BOXES AND COVERS SHALL BE MADE IN THE U.S.A.
3. SANITARY SEWER CLEAN OUT BOXES AND COVERS MANUFACTURED BY U.S. FOUNDRY (HAND HOLE RING & FC COVER, MODEL #7610), EAST JORDEN IRON WORKS (HEAVY DUTY MONUMENT BOX, MODEL #1574) OR APPROVED EQUAL. U.S. FOUNDRY (HAND HOLE RING & FC COVER, MODEL #7630) MAY BE USED WHERE CLEAN OUT IS WITHIN AN ASPHALT OR CONCRETE PAVED AREA.
4. REQUIREMENT OF THE CLEAN OUT BOX IS UP TO THE DISCRETION OF JSD.



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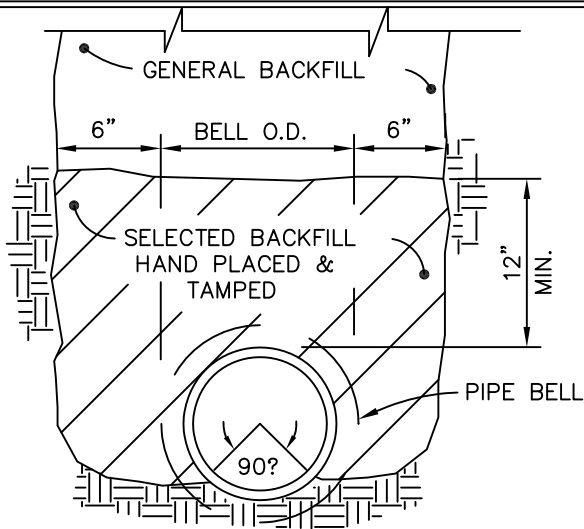
**CLEAN-OUT
DETAIL**

DATE: DECEMBER 2011

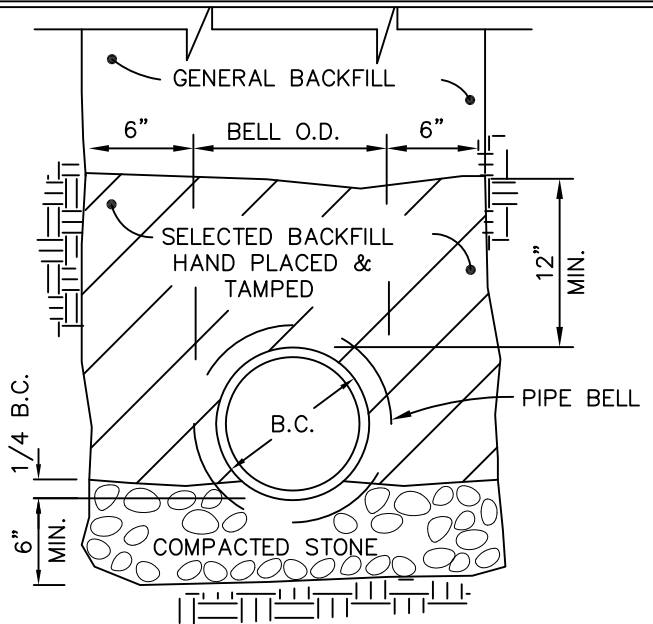
SCALE: NOT TO SCALE

Revisions	
Date	Description

FILE NO.



NOTE: FOR USE WITH TRENCH EXCAVATED BY BACKHOE. HAND SHAPED BOTTOM – SHAPE BELL HOLES FOR USE IN DRY EARTH TRENCHES ONLY.

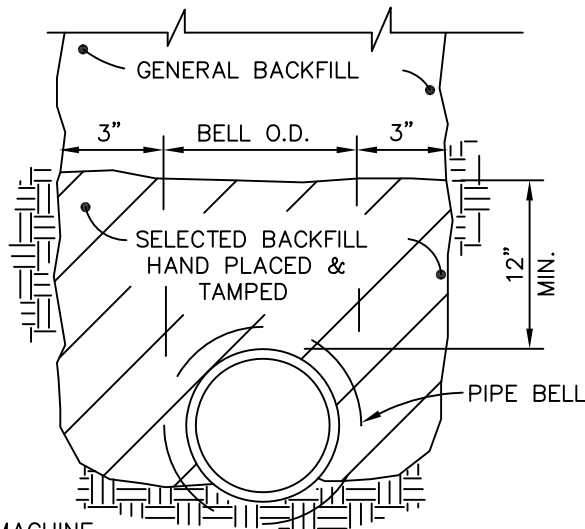


NOTE: FOR USE W/ TRENCH EXCAVATED BY BACKHOE IN UNSTABLE SOIL, ROCK AND GROUNDWATER CONDITIONS APPLICABLE TO BOTH EARTH AND ROCK TRENCHES.

CLASS "C" ALTERNATE

CLASS "C" BEDDING

NOT TO SCALE



NOTE: FOR USE WITH TRENCHING MACHINE. USE IN DRY EARTH TRENCHES ONLY.

CLASS "D" BEDDING

NOT TO SCALE



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TRENCHING DETAILS

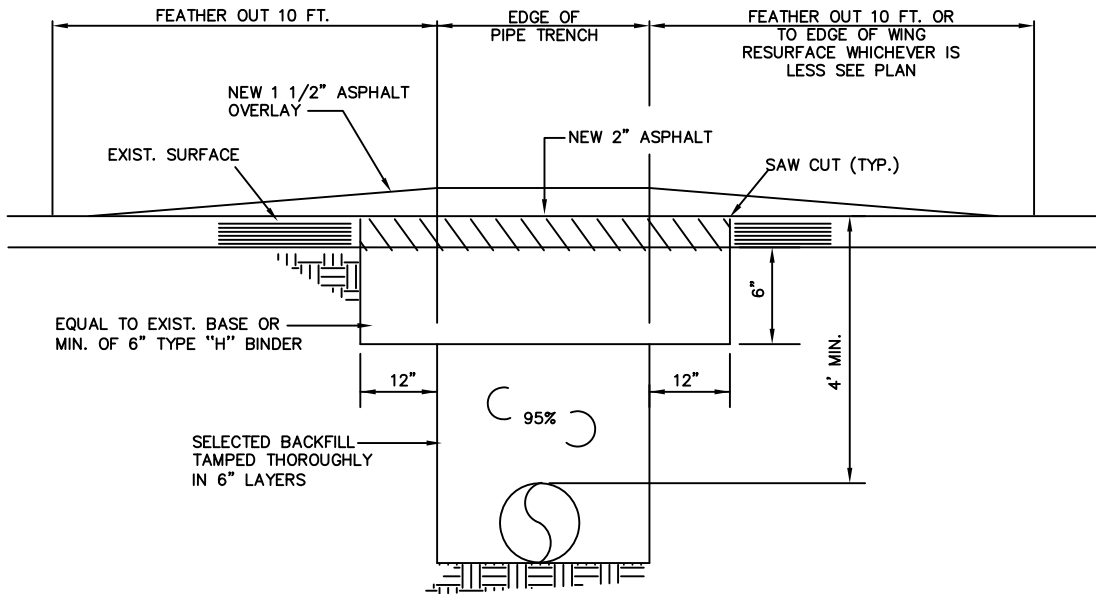
DATE: DECEMBER 2011

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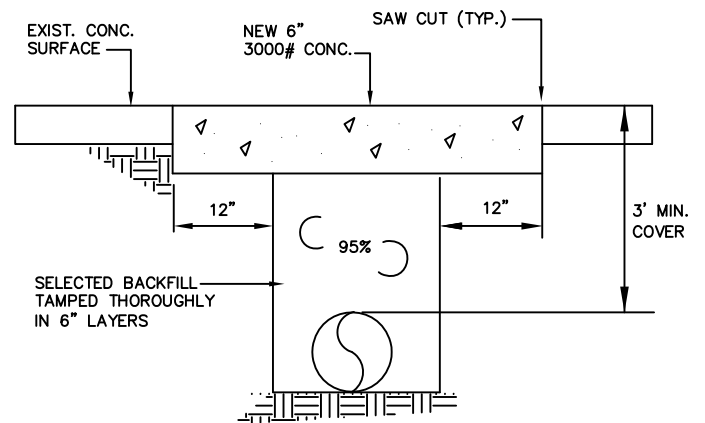
Revisions

Date	Description

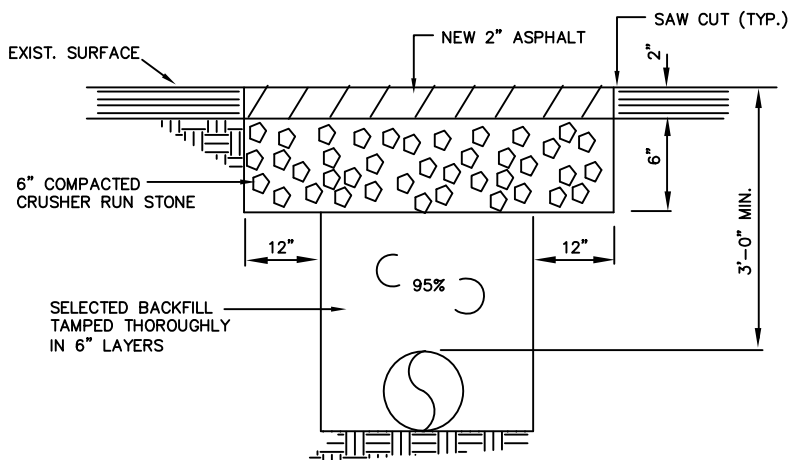
FILE NO.



**PRIMARY & SECONDARY ROAD
PAVEMENT REPLACEMENT DETAIL**



**CONCRETE DRIVEWAY
REPLACEMENT DETAIL**



**DRIVEWAY & PARKING LOT
ASPHALT REPLACEMENT DETAIL**



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**PAVEMENT REPLACEMENT
DETAILS**

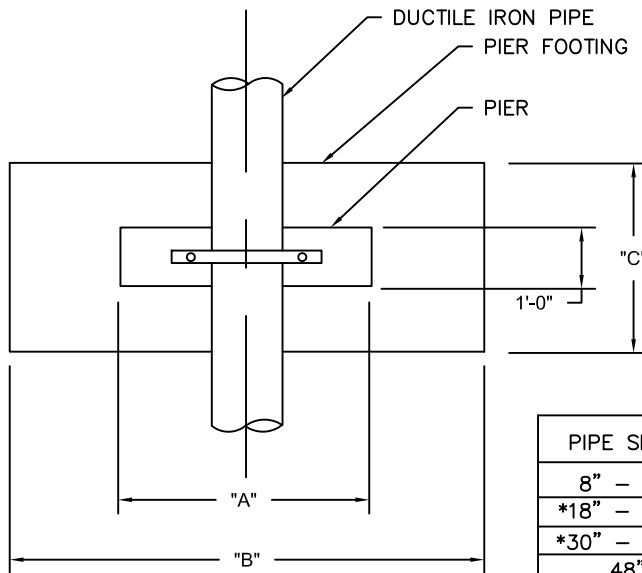
DATE: DECEMBER 2011

SCALE: NOT TO SCALE

Revisions

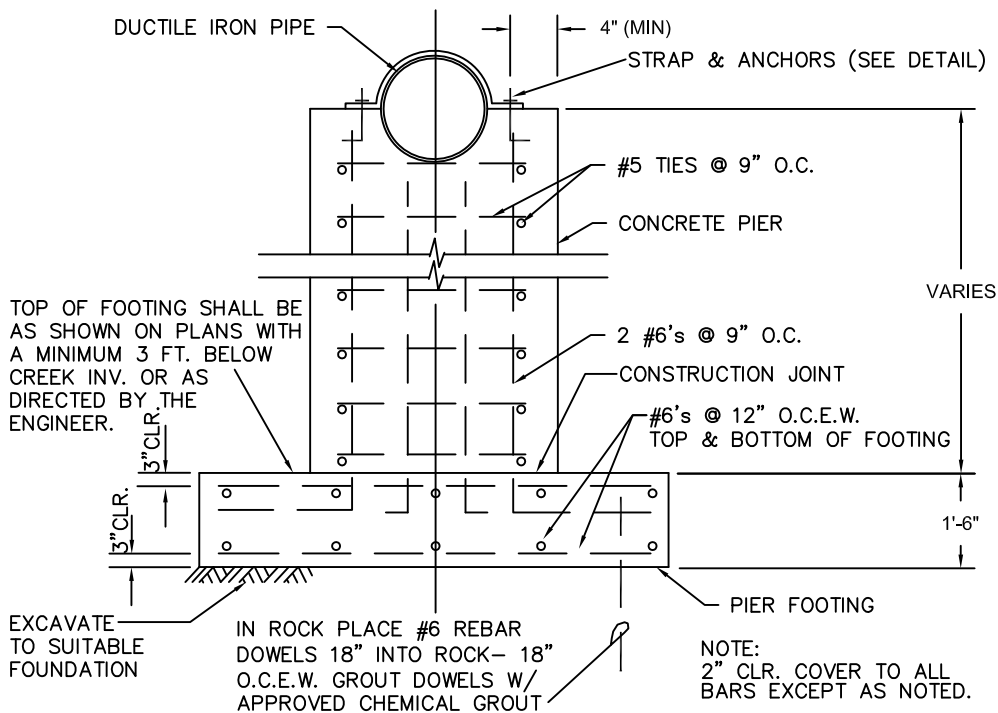
Date	Description

FILE NO.



PIPE SIZE	"A"	"B"	"C"
8" - 16"	2'-4"	6'-4"	3'-0"
*18" - 24"	3'-0"	7'-0"	4'-0"
*30" - 42"	4'-6"	8'-6"	5'-0"
48"	6'-0"	11'-0"	6'-0"
54"	6'-6"	12'-0"	7'-0"
60"	7'-0"	13'-0"	8'-0"

SEE CHART AT RIGHT FOR DIMENSIONS A,B & C PLAN



SECTION

- NOTES:
1. CONCRETE SHALL ATTAIN A COMPRESSIVE STRENGTH OF 3000 PSI WITHIN 28 DAYS.
 2. SEE CROSSING DETAIL AND STAP/ANCHOR DETAILS FOR ADDITIONAL INFORMATION.



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CONCRETE PIER DETAIL

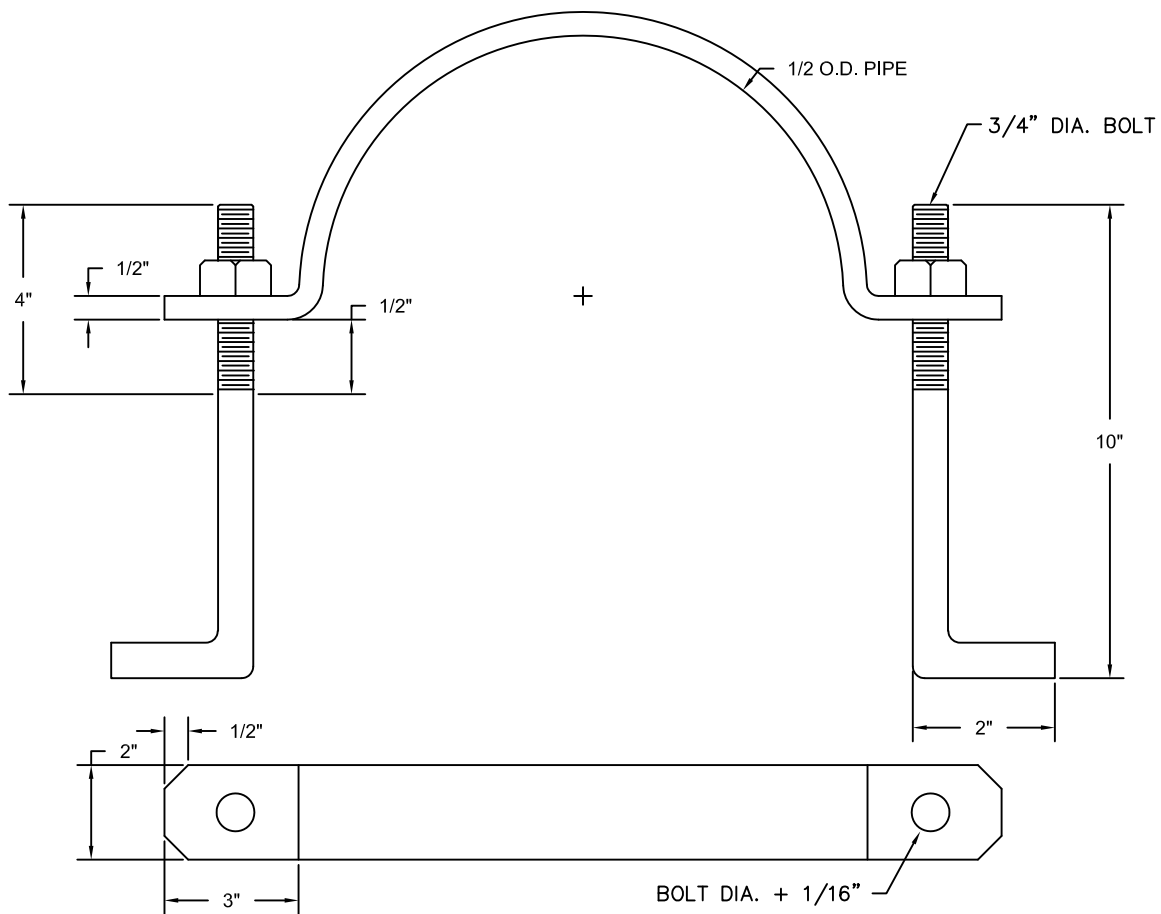
DATE: DECEMBER 2011

SCALE: NOT TO SCALE

Revisions

Date	Description

FILE NO.



NOTES:

1. ANCHOR BOLTS AND STRAPS SHALL BE GALVANIZED STEEL OR STAINLESS STEEL
2. FOR PIPE 24" AND LARGER USE 1" DIA. BOLTS.
3. HOLES TO BE DRILLED IN STRAP.



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PIPE STRAP DETAIL

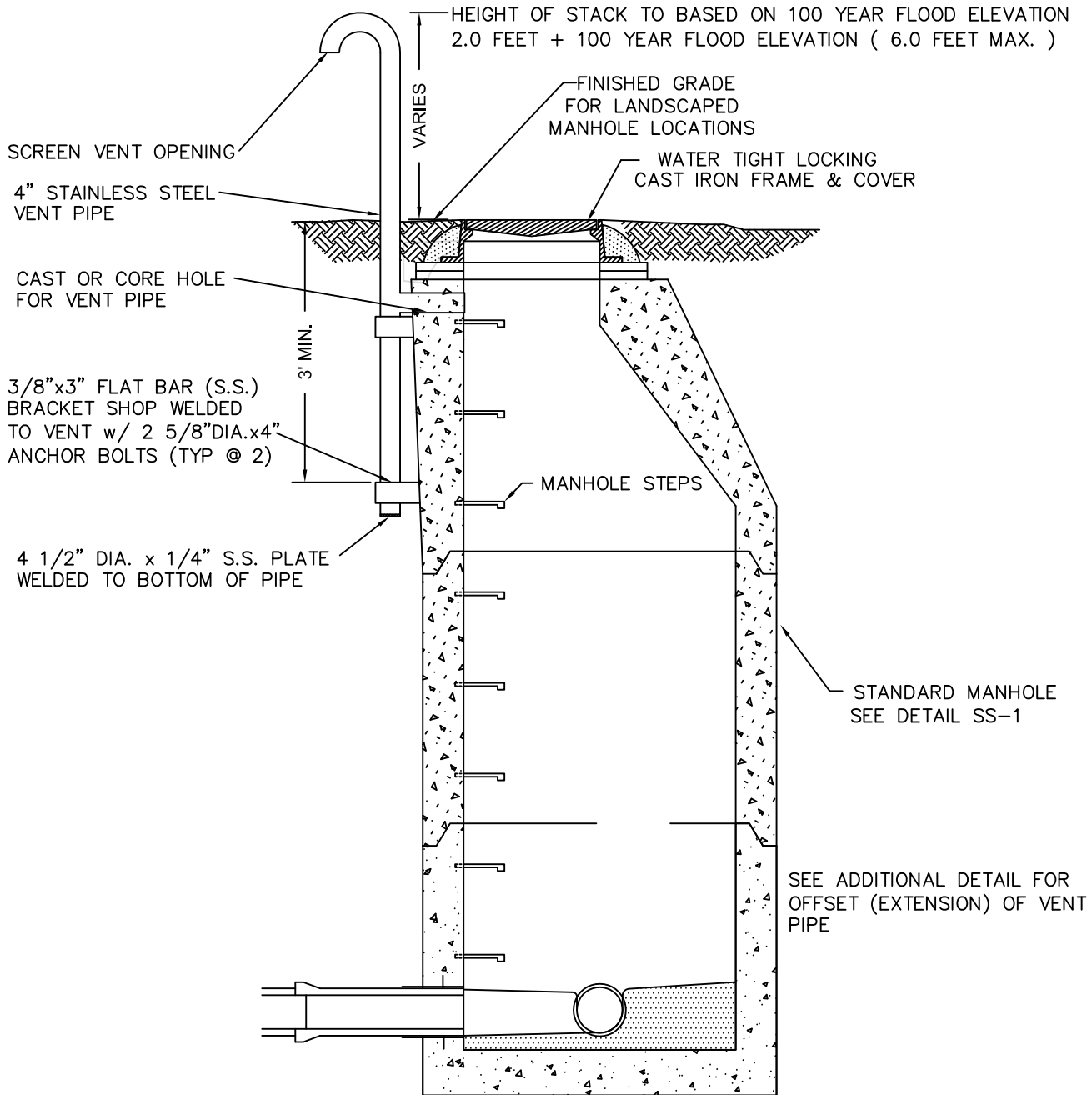
DATE: DECEMBER 2011

SCALE: NOT TO SCALE

Revisions

Date	Description

FILE NO.



NOTE:
 4" VENT PIPE, STRAPS AND ANCHOR BOLTS SHALL BE STAINLESS STEEL



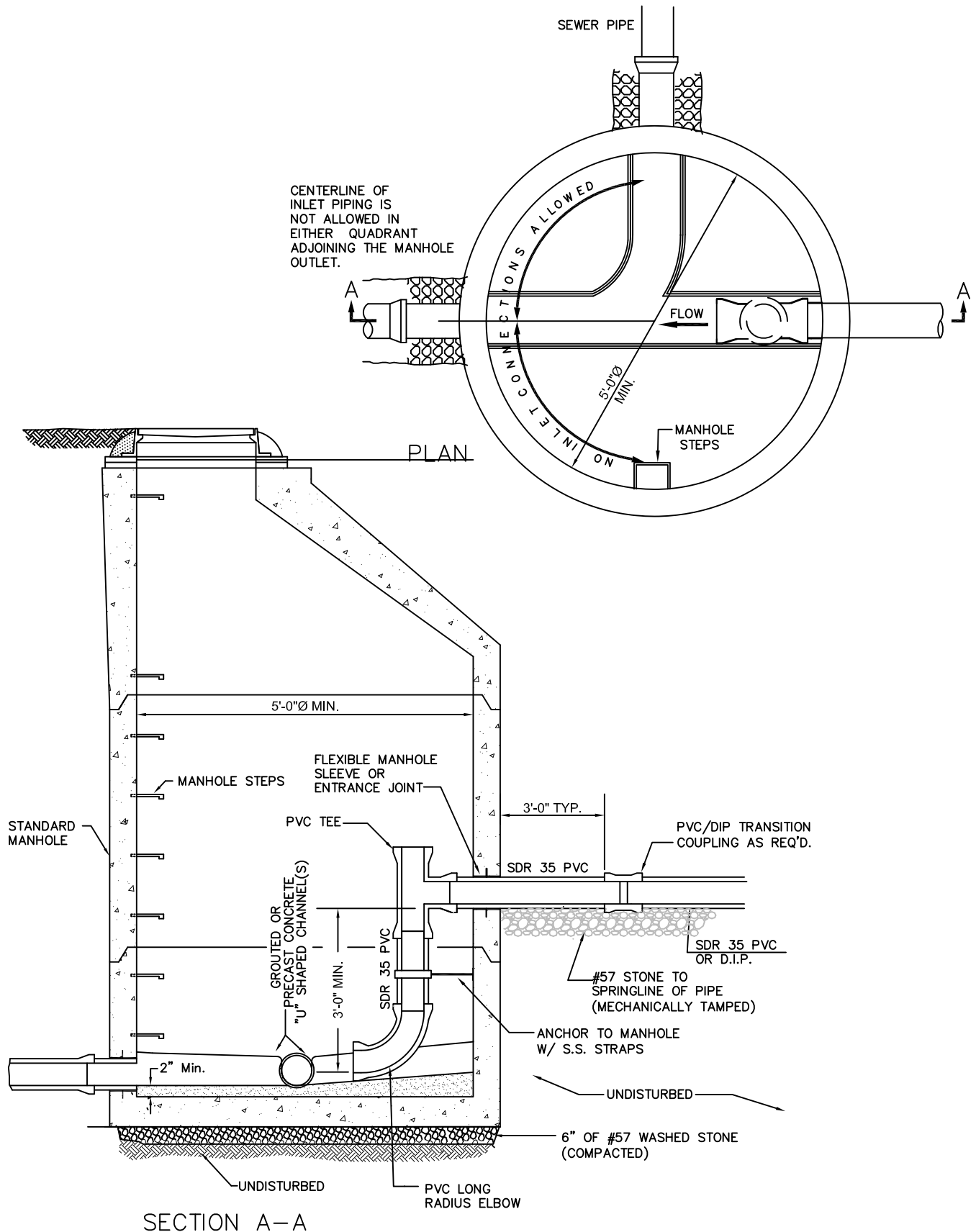
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STANDARD WATERTIGHT MANHOLE DETAILS

DATE: DECEMBER 2011 SCALE: NOT TO SCALE

Revisions	
Date	Description

FILE NO.



SECTION A-A



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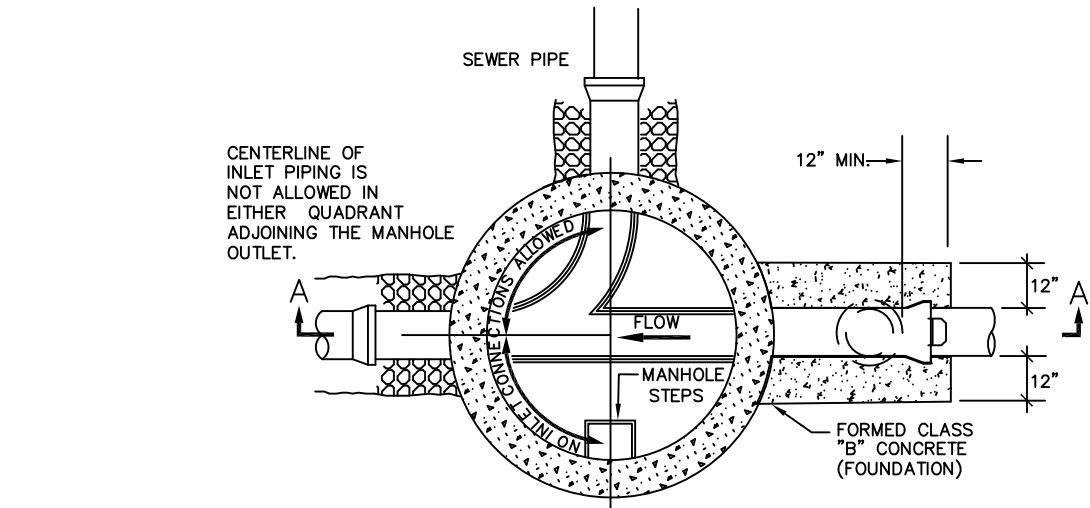
**TYPICAL
DROP MANHOLE DETAIL**

DATE: DECEMBER 2011

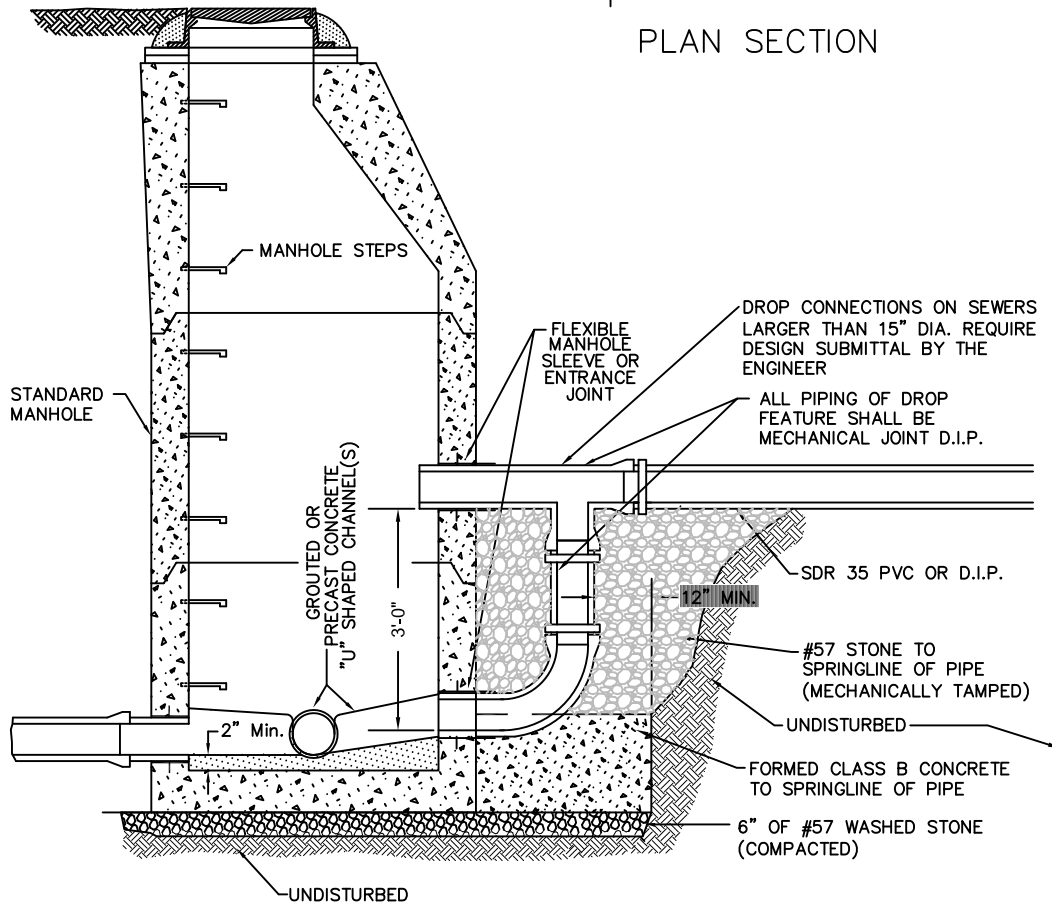
SCALE: NOT TO SCALE

Revisions	
Date	Description

FILE NO.



PLAN SECTION



SECTION A-A



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**ALTERNATE "A"
DROP MANHOLE DETAIL**

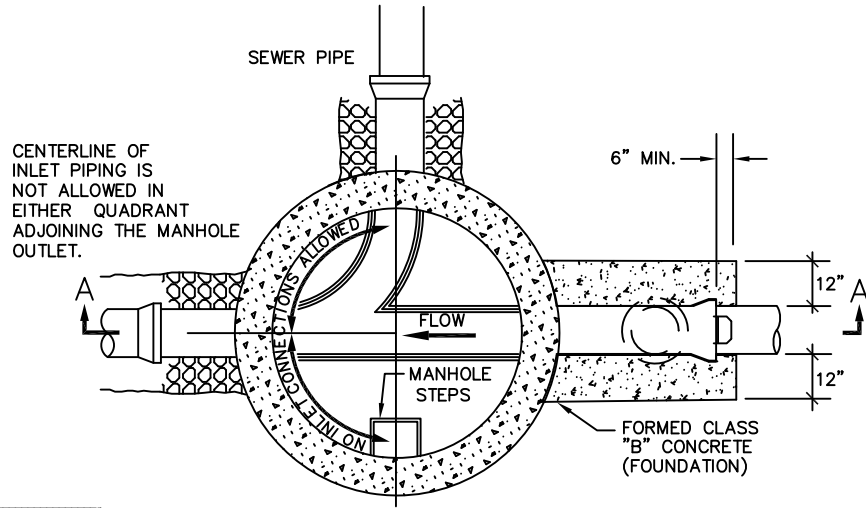
DATE: DECEMBER 2011

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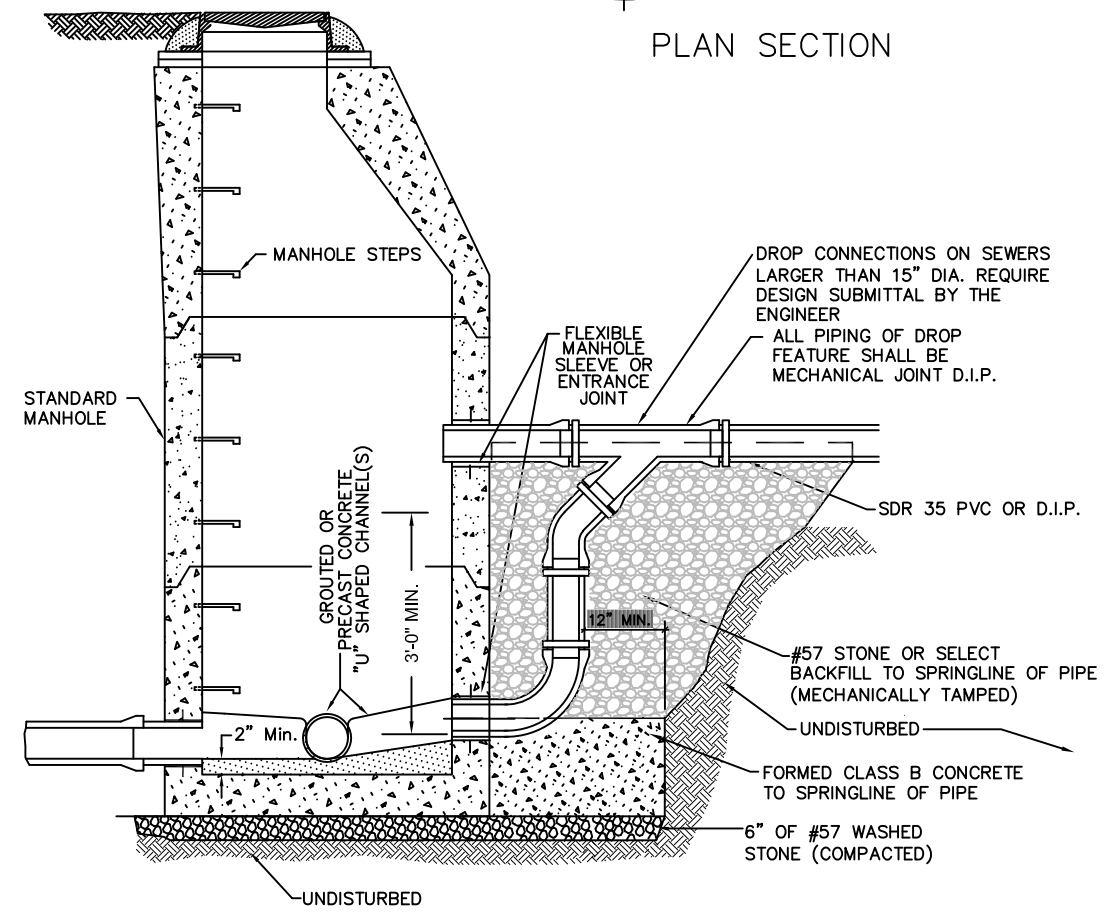
Revisions

Date	Description

FILE NO.



PLAN SECTION



SECTION A-A



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**ALTERNATE "B"
DROP MANHOLE DETAIL**

DATE: DECEMBER 2011

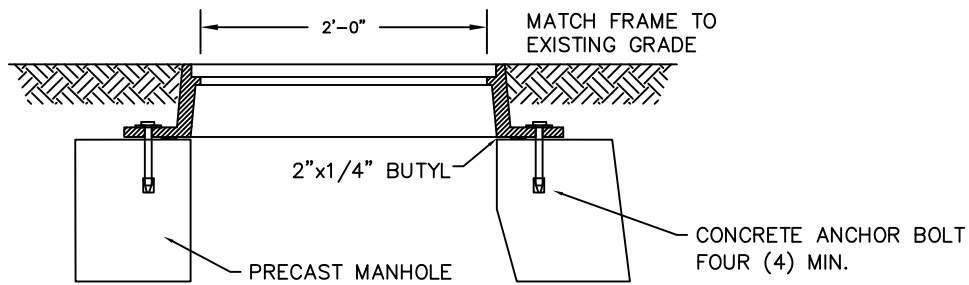
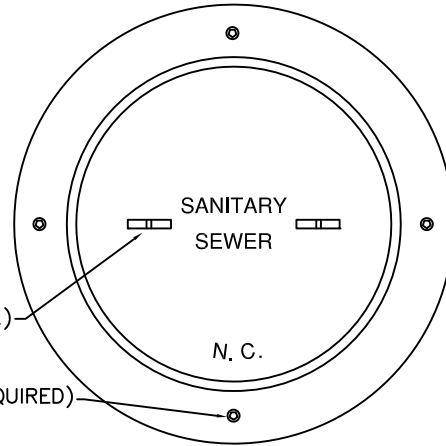
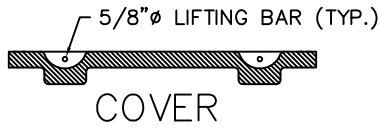
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Revisions	
Date	Description

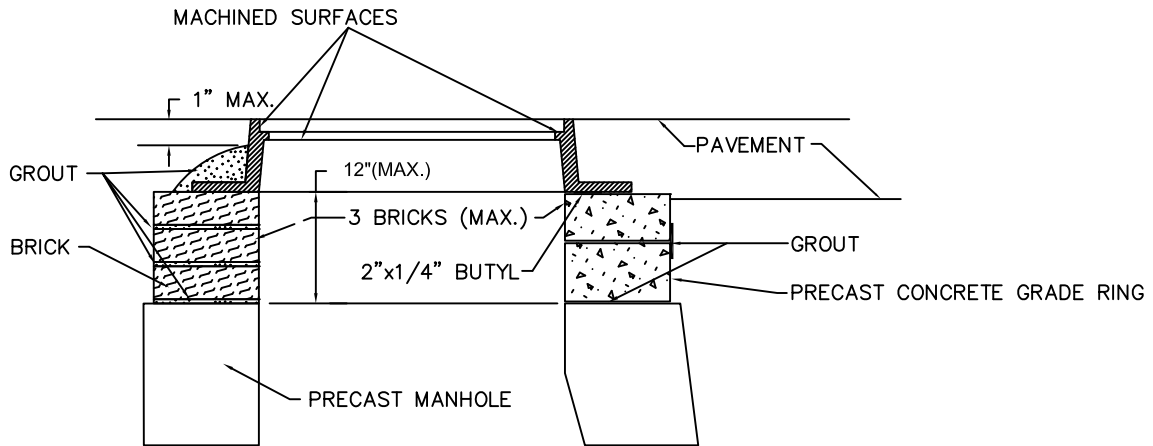
FILE NO.

STANDARD RING AND COVER

NOTE: ALL CASTINGS SHALL BE MANUFACTURED IN THE USA



FRAME SET IN NON-ROADWAY LOCATION



NOTE: WHERE M.H. IS IN ROAD SHOULDER AND ROAD DOES NOT HAVE CURB AND GUTTER, DO NOT USE ANCHOR BOLTS IN FRAME.

FRAME SET IN ROADWAY LOCATION



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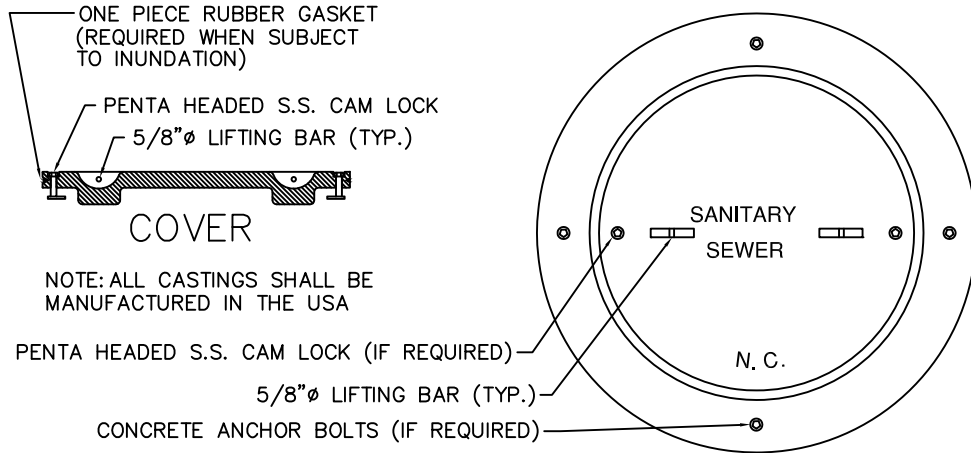
FRAME & COVER DETAIL

DATE: DECEMBER 2011

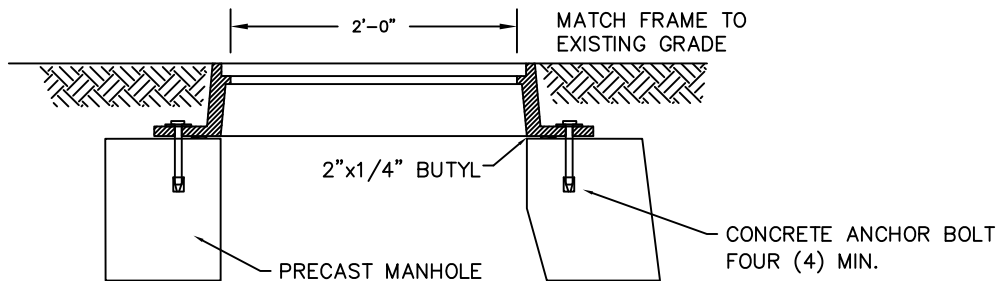
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Revisions	
Date	Description

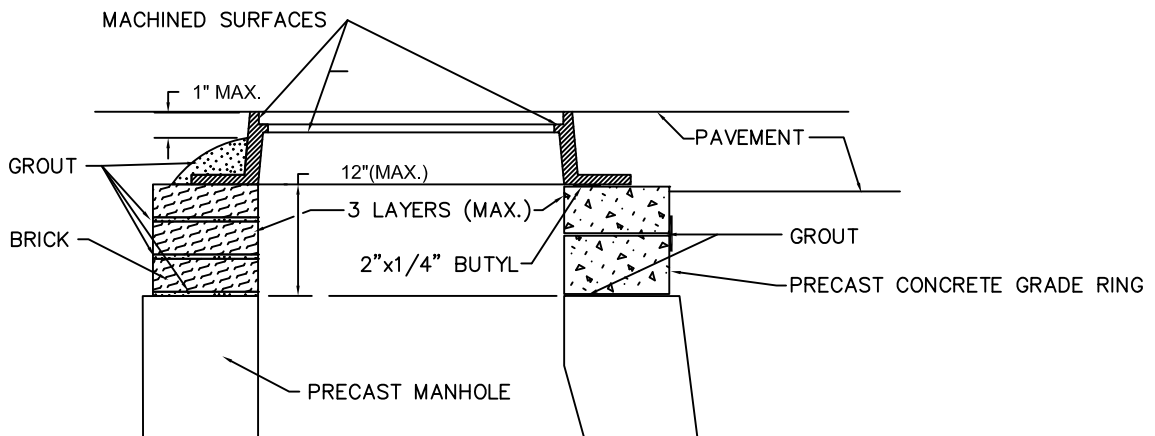
FILE NO.



WATERTIGHT RING AND COVER LOCKING



FRAME SET IN NON-ROADWAY LOCATION



FRAME SET IN ROADWAY LOCATION

NOTE: WATERTIGHT FRAME & COVER
REQUIRED IN FLOODPLAIN OR WHEN
SPECIFIED ON PLANS



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WATERTIGHT FRAME & COVER DETAIL

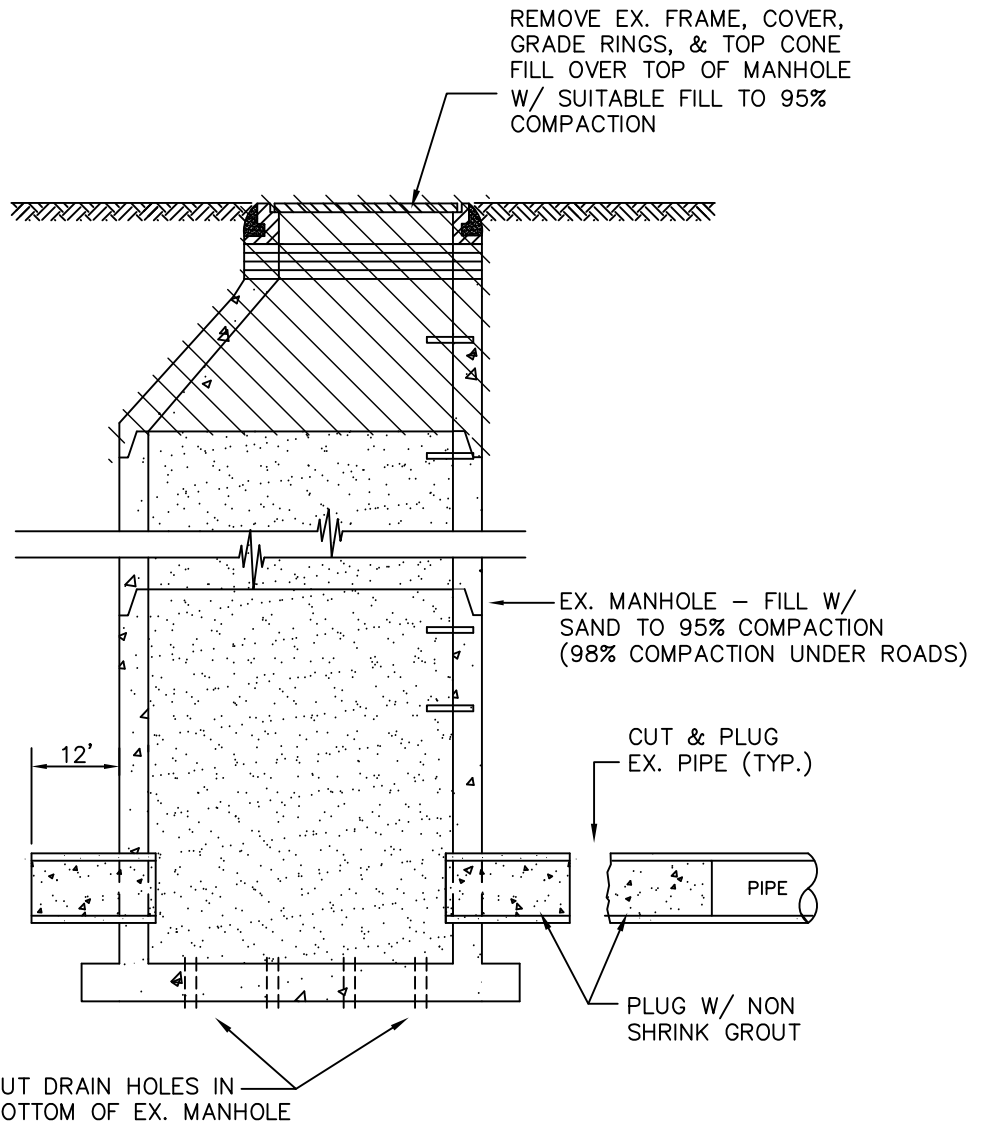
DATE: DECEMBER 2011

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Revisions

Date	Description

FILE NO.

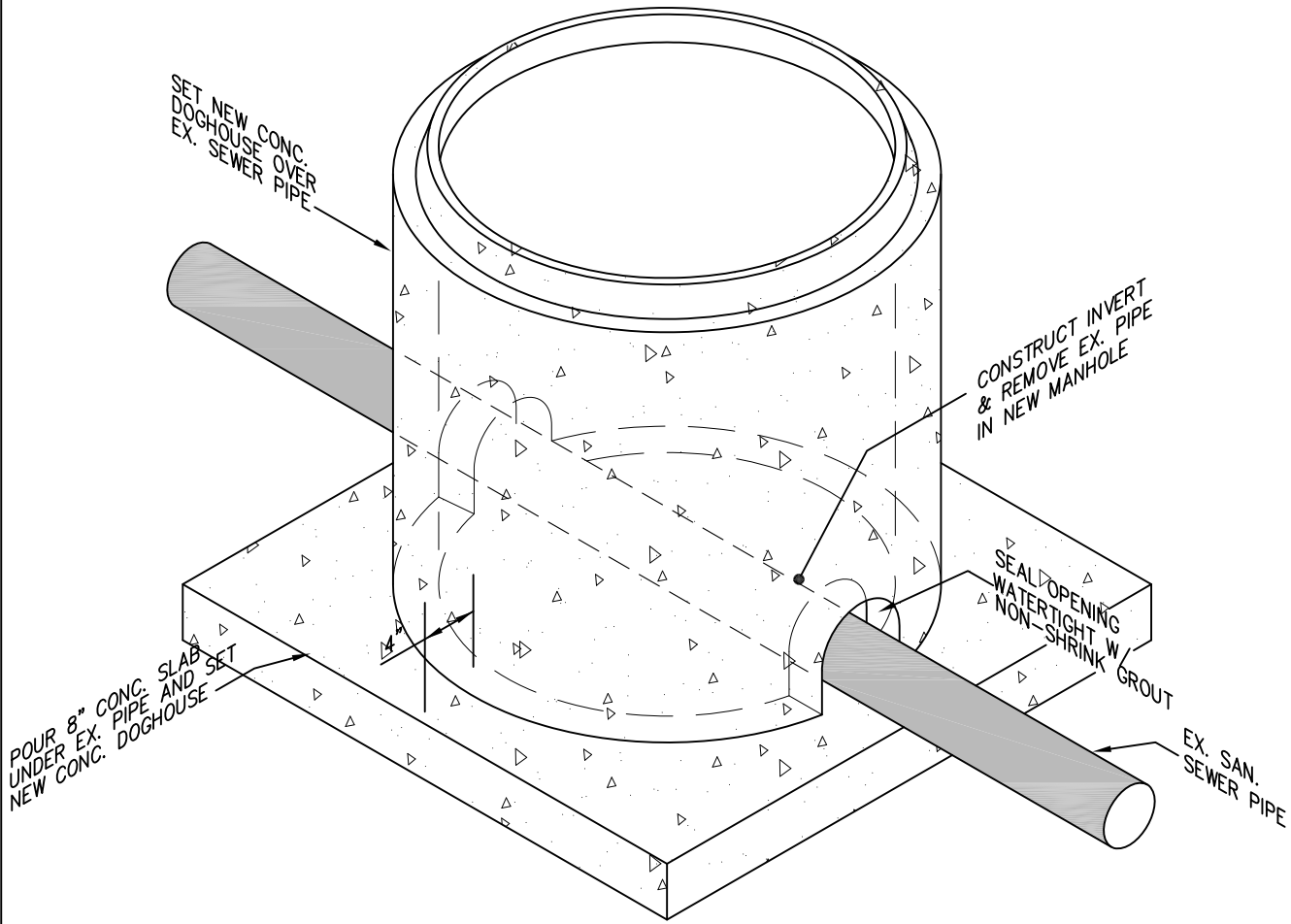
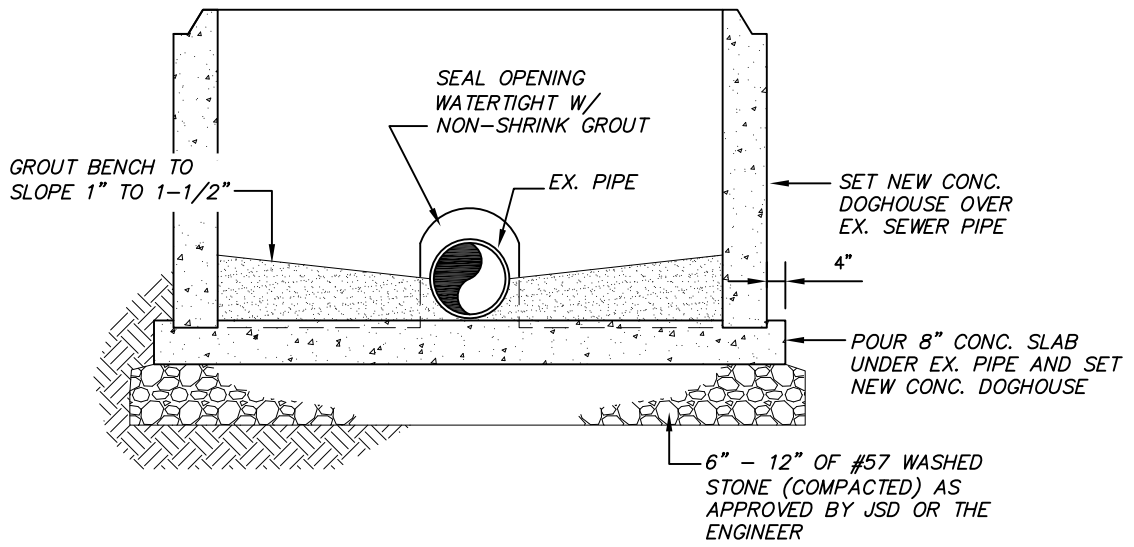


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**ABANDONMENT OF
EXIST. MANHOLE
DETAIL**
DATE: DECEMBER 2011 SCALE: NOT TO SCALE

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Date	Description

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**DOGHOUSE MANHOLE
DETAIL**

DATE: DECEMBER 2011

SCALE: NOT TO SCALE

Revisions	
Date	Description

FILE NO.