

THORN CREEK BASIN SANITARY DISTRICT

700 West End Avenue
Chicago Heights, Illinois 60411
(708) 754-0525
www.thorncreekbasin.org

Requirements for Permitting and Construction of Sanitary Sewer Extensions, Sanitary Sewer Connections, and Building Demolition

JULY 2007

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1) DEFINITIONS AND GENERAL REQUIREMENTS

- a) This document supplements current District ordinances, which are available upon request.

- b) Annexation

Property to be served by the District must be located within the District's corporate boundaries. Contact the District for further information regarding annexation procedures.

- c) A District permit is required prior to the construction of:

- Any new sanitary sewer extension as defined below
- Any new sanitary sewer connection as defined below
- Modifications to any existing sanitary connection or building as described in 1.f below

d) Definitions

- i) A *sewer extension* is a public sanitary sewer tributary to the District's system, intended to serve one or more private sewer connections.
- ii) A *sewer connection* is a private connection, addition or penetration of any kind into any public sanitary sewer tributary to the District's system.
- iii) *Population Equivalent (P.E.)* is a unit of wastewater discharge equaling 100 gallons per day, 0.20 lb suspended solids (SS) per day, or 0.17 lb biochemical oxygen demand (BOD) per day. Domestic-grade wastewater is calculated based on 100 gallons per day. One P.E. generally represents the wastewater flow generated by one person per day. See Appendix E for additional guidance regarding P.E. calculations.

e) Sewer Connection Requirements

- i) *Residential* - Each single family home must be served by a separate service line connection. A duplex under common ownership may be served by a single service line connection. An apartment building or building containing condominiums may be served by a single service line connection. Town homes or rowhouses are required to have a separate service line connection for each occupancy unit.
- ii) *Commercial or Industrial* - Multiple commercial or industrial buildings located on property of common ownership may be served by a network of private service lines. The District may require separate service line connections for each individual occupant in a commercial or industrial building if the occupants represent unique or separate operations.

f) Existing Commercial/ Industrial Facilities

A connection permit is required for any existing commercial/industrial facility project that:

- Increases the facility's permitted P.E.⁽¹⁾ by four or more;
- Involves reconstruction of a building to the extent that it is in function a new building as determined by the District; or
- Involves significant modification to a building's plumbing and/or field sewer piping as determined by the District

Note:

(1) See Appendix E of this document for P.E. calculation guidance.

g) Building Demolition

Permits are not required for demolition of buildings. However, the District must be notified at 708-754-0525 x19 when a building is demolished to visually verify that the existing sewer service line has been properly capped prior to backfilling.

2) APPLICATION PROCEDURE REQUIREMENTS

a) Municipality Approval

The municipality the project is sited in must first approve sewer extensions and connections before submittal may be made to the District. Approval must include project drawings and specifications, if any.

b) Preparer's Qualifications

Sewer extension permit applications must be prepared by a registered Professional Engineer licensed in the State of Illinois.

c) District Review Time and Review Fees

- i) District staff will approve, disapprove or request modifications to each permit application within 15 working days of each complete submittal.
- ii) The cost of the first two submittal reviews for a project is included with the project permit fee. Every resubmittal thereafter will require a \$100 review fee.
- iii) Incomplete application submittals will be returned without staff review.

d) District Staff Assistance

District Engineering Department staff is available by phone at 708-754-0525 x19 to answer specific questions regarding permit application submittals. Meetings are by appointment and subject to availability.

3) REQUIRED PERMIT APPLICATION DOCUMENTS

a) For Sanitary Sewer Extension applications, the following documents are required:

- i) Completed TCBSD Sewer Extension Permit application
- ii) Completed Illinois EPA Permit application
- iii) Plat of survey or plat of subdivision, with one copy in electronic form
- iv) One complete set of plans and specifications with:
 - ◆ A location map with project Township, Range, Section and Quarter-Section
 - ◆ Numbering of new sanitary sewer manholes
 - ◆ A note requiring one set of sewer plan and profile *record* drawings in electronic form
 - ◆ Notes and details in accordance with General Construction Requirements below

b) For Sanitary Sewer Connection applications, the following documents are required:

- i) Plat of survey with existing sanitary sewer, proposed service line, and nearest cross streets shown. For residential applications, Property Identification Number and Township, Range, Section and Quarter-Section may be provided in lieu of a plat of survey.
- ii) Completed TCBSD Sewer Connection Permit application
- iii) Completed Illinois EPA Permit application if at least one building's P.E.⁽¹⁾ equals or exceeds fifteen
- iv) For Commercial/Industrial sewer connection projects, one set each of plumbing and site piping plans which include:
 - ◆ A location map with project Township, Range, Section and Quarter-Section indicated
 - ◆ Numbering of new sanitary sewer manholes
 - ◆ Notes and details in accordance with General Construction Requirements below

Note:

(1) See Appendix E of this document for P.E. calculation guidance.

4) GENERAL CONSTRUCTION REQUIREMENTS

a) The following requirements shall be:

- Included as notes in drawings and specifications, as applicable
 - Conformed with during construction
- i) Construction shall be in accordance with the most recent editions of 1) *Standard Specifications for Sewer and Water Main Construction in Illinois* and 2) *Illinois EPA Part 370 – Recommended Standards for Sewage Works*.
 - ii) The underground contractor shall notify the District 48 hours prior to the start of construction at (708) 754-0525 x19. Residential sanitary sewer connection projects that do not include new manholes or connections to existing manholes are exempt from this requirement.
 - iii) Connections to existing manholes shall be made by coring the existing manhole with a diamond or carbide tip cutter and installing an A-Loc or Core-n-Seal boot in the opening.
 - iv) One sampling manhole shall be provided for each commercial/industrial building. New manholes shall meet the District's Standard Manhole requirements.
 - v) Testing
 - ◆ New manholes shall be vacuum tested per ASTM C1244-93. Pre-testing shall be performed prior to scheduling District test inspection.
 - ◆ New sanitary sewer extensions shall be low-pressure air tested and mandrel tested per *Standard Specifications for Sewer and Water Main Construction in Illinois*.
 - ◆ District personnel must observe all tests. Tests must be scheduled at least 48 hours in advance at (708) 754-0525 x19. A voicemail message left at this number does not constitute a scheduled appointment.
 - ◆ Retesting failed items, and retroactive testing of construction illegally placed into service, will require a \$200 fee prior to scheduling testing.
 - ◆ For sewer extensions, record drawings must be provided to the District in electronic form prior to sewer testing.
- b) The District's Standard Manhole Detail (included as Appendix D of this document) shall be included on the project drawings.

5) DESCRIPTION OF FEES

The District's current fees are available at:

- Website: www.thorncreekbasin.org
- District Offices: 700 West End Avenue
Chicago Heights, IL 60411
708-754-0525

Some fees are based on Population Equivalent (P.E.) calculations. See Appendix E of this document for P.E. calculation guidance. Appendix E is also available at the District's website.

APPENDIX A

TCBSD RESIDENTIAL SANITARY SEWER CONNECTION PERMIT APPLICATION FORM

APPENDIX B

TCBSD COMMERCIAL OR INDUSTRIAL SANITARY SEWER CONNECTION PERMIT APPLICATION FORM

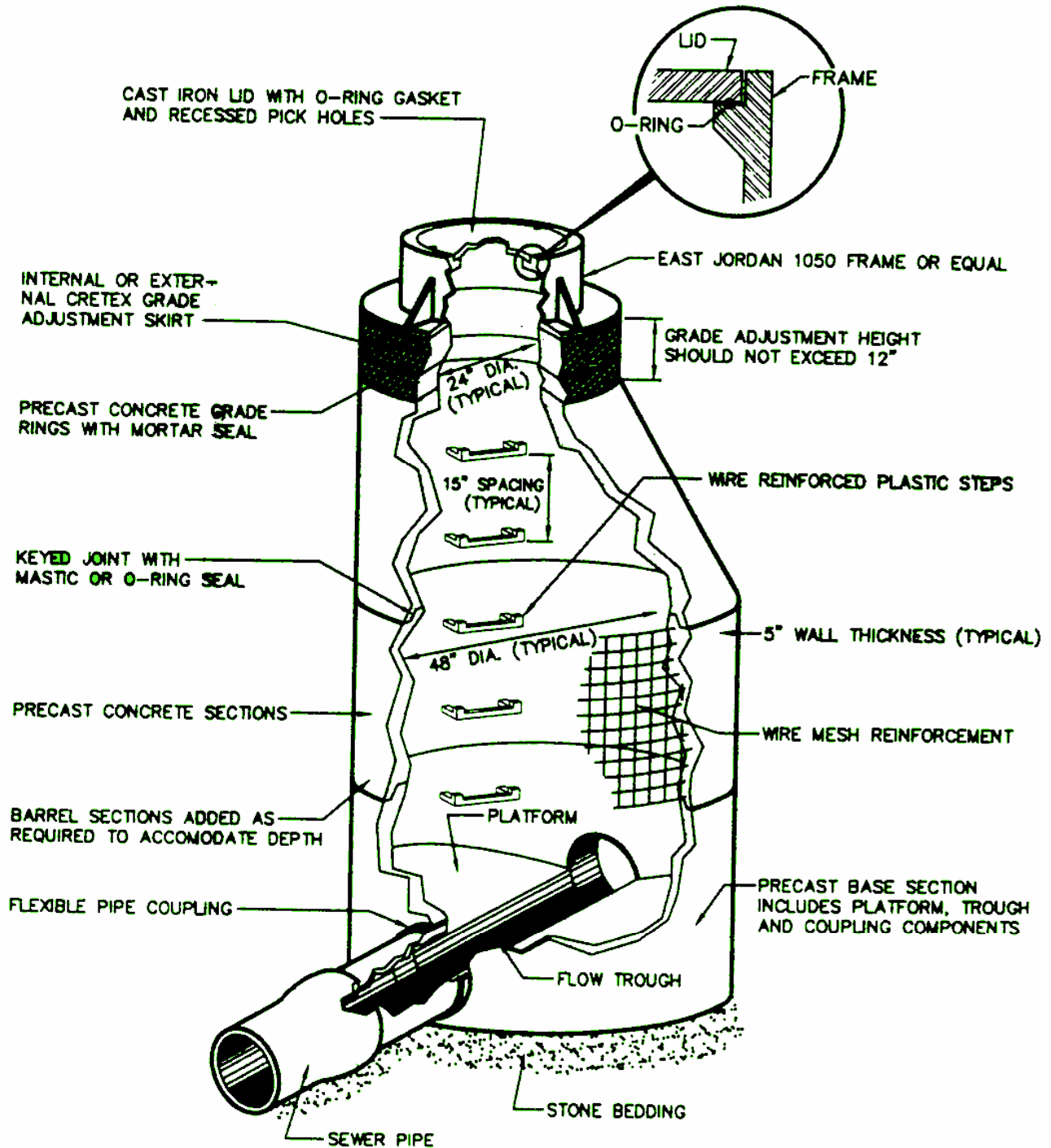
APPENDIX C

TCBSD SANITARY SEWER EXTENSION PERMIT APPLICATION FORM

APPENDIX D

TCBSD STANDARD MANHOLE DETAIL

Thorn Creek Basin Sanitary District Standard Manhole Detail (Not to Scale)



APPENDIX E

GUIDANCE FOR POPULATION EQUIVALENT (P.E.) CALCULATION

THORN CREEK BASIN SANITARY DISTRICT
Guidance for Population Equivalent (P.E.) Calculations

Extension and Commercial/industrial connection permit applicants must provide P.E. calculations with each application for District review and approval. Consult with a civil engineer if calculations are more complex. The District will not perform P.E. calculations for applicants.

One P.E. equals 100 gallons/day, 0.20 lb SS/day, or 0.17 lb BOD/day wastewater discharge, whichever is largest. Typically, 100 gallons/day/P.E. applies to domestic-quality wastewater.

The following wastewater discharge guidance is from *Illinois EPA Part 370 – Recommended Standards for Sewage Works, Appendix B, Table No. 2 - Commonly Used Quantities of Sewage Flows From Miscellaneous Type Facilities.* (Source: Amended at 21 Ill. Reg. 12444, effective August 28, 1997)

Type of Establishment	Gallons Per Person Per Day (Unless otherwise noted)
Airports (per passenger)	5
Bathhouses and swimming pools	10
Camps:	
Campground with central comfort stations	35
With flush toilets, no showers	25
Construction camps (semi-permanent)	50
Day camps (no meals served)	15
Resort camps (night and day) with limited plumbing	50
Luxury camps	100
Cottages and small dwellings with seasonal occupancy	75
Country clubs (per resident member)	100
Country clubs (per non-resident member present)	25
Dwellings: Boarding houses	50
(additional for non-resident boarders)	10
Dwellings: Rooming houses	40
Factories (gallons per person, per shift, exclusive of industrial wastes)	35
Hospitals (per bed space)	250
Hotels with laundry (2 persons per room) per room	150
Institutions other than hospitals including Nursing Homes (per bed)	125
Laundries-self service (gallons per wash)	30
Motels (per bed space) with laundry	50
Picnic parks (toilet wastes only per park user)	5
Picnic parks with bathhouses, showers and flush toilets (per park user)	10
Restaurants (toilet and kitchen wastes per patron)	10
Restaurants (kitchen wastes per meal served)	3
Restaurants (additional for bars and cocktail lounges)	2
Schools:	
Boarding	100
Day, without gyms, cafeterias or shower	15
Day, with gyms, cafeterias and showers	25
Day, with cafeterias, but without gyms or showers	20
Service stations (per vehicle served)	5
Swimming pools and bathhouses	10
Theaters: Movie (per auditorium seat)	5
Drive-in (per car space)	10
Travel trailer parks without individual water and sewer hook-ups (per space)	50
Travel trailer parks with individual water and sewer hook-ups (per space)	100
Workers: Offices, schools and business establishments (per shift)	15