#### SANITARY SEWER SYSTEM ADMINISTRATIVE STANDARDS

# A.1 <u>SANITARY SEWER SYSTEM PLAN SUBMITTAL PROCEDURES AND</u> GENERAL REQUIREMENTS

All plans for sanitary sewer main extensions, improvements and modifications shall be submitted to the District for review and approval prior to initiation of any construction. All plans must be approved by the District manager, District engineer, and City of Littleton prior to initiation of construction. Plans shall be submitted and reviewed in accordance with the following procedures and requirements.

#### A.1.1 Submittals

In order to initiate construction plan review the following items must be submitted to the District

## 1. Construction Plans

Three sets of sanitary sewer system construction plans stamped and signed by a Professional Engineer licensed to practice in the State of Colorado. All plans and specifications submitted shall be in strict compliance with the standards and specifications contained herein and shall meet any special conditions that may be reasonably required. The design and installation of all facilities shall ensure development of an integrated sanitary sewer system. No work shall commence on any facilities until the plans and specifications are approved in writing by Platte Canyon Water and Sanitation District and the City of Littleton. Plans and specifications should not be submitted for work that will not be installed within six months of the approval date.

- a. Three sets of detailed plans and specifications for system extensions shall be submitted to the District for approval. The copies shall contain the requirements stated below:
  - 1. Cover sheet containing the following information:
    - a. Vicinity map.
    - b. Index drawings
    - c. List of quantities of facilities to be installed.

- d. List of agencies including surveyor, soils engineer, design engineer, District engineer, District representative, City of Littleton and other permit agencies.
- e. General notes (see Exhibit D, Chapter 4).
- 2. Sanitary sewer main in plan view (24" x 36") showing:
  - a. Location and dimensions of dedicated street, easements, and rights-of-way including street names.
  - b. Lots to be served, including lot and block numbers.
  - c. All existing or proposed curb and gutter.
  - d. The proposed alignment of the sanitary sewer main and the location of all proposed sanitary sewer facilities such as manholes.
  - e. A profile of all proposed sanitary sewer mains, existing ground elevations and proposed ground elevations.
  - f. All existing or proposed utilities, including water mains and appurtenances and storm sewers.
  - g. All existing or proposed obstructions such as vaults, catch basins, traffic islands, etc.
  - h. Title block on each sheet.
  - i. Bench mark including U.S.G.S. datum, location, elevation, and monument type.
  - j. Match lines and sheet references called out in plan and profile.
  - k. Center line of drainage channels.
  - 1. 100 year flood plain boundaries.
  - m. Detention pond boundaries and elevations (topography).
- 3. Typical street cross-sections showing:
  - a. Property lines or easement lines.

- b. Street curb and gutter, and existing or proposed utilities complete with dimensions to the property lines or easement lines.
- 4. Centerline profile of the streets showing:
  - a. Official street grades and horizontal curve data.
  - b. Existing ground line and proposed ground line.
  - c. Any proposed or existing utility crossing the proposed sanitary sewer main.
  - d. Street cross-pans and traffic island.
- 5. A detail sheet showing all relevant detail drawings such as: manholes, encasements, tapping details, manhole bases, ring and covers, etc.
- 6. Additionally, all plans shall:
  - a. Be made from actual field surveys by a Land Surveyor registered in the State of Colorado, referenced to land corners or other official survey control points and be of sufficient accuracy so that the facilities can be accurately staked for installation and can be readily located after installation for maintenance, tapping and control.
  - b. Show sufficient adjacent area to give the relation of new facilities to existing facilities.
  - c. Contain the signature and stamp of the Professional Engineer registered in the State of Colorado responsible for the design of the system extension.

## 7. The Specifications shall:

- a. State that the trench shall be excavated and the pipe exposed for inspection at any location on the project if so ordered by the District or City of Littleton.
- b. Contain the requirement that all work and materials is to be accomplished in accordance with the rules, regulations, standards and specifications of Platte Canyon Water and Sanitation District and the City of Littleton.

8. Submittals for planned development complexes shall additionally show all existing and proposed structures, driveways, and parking facilities.

## 2. Applications and Agreements for Sewer Main Extensions

Four copies of Platte Canyon's Application and Agreement for Sanitary Sewer Main Extensions. All copies must be signed as originals, notarized, and stamped with the owner/developer's corporate seal if the applications are executed as a Corporation. A complete Owner/Applicant information form must be returned to the District along with, or prior to, submittal of the Applications and Agreements for Sewer Main Extensions.

#### 3. Payment of Plan Review Fees

Payment of applicable District and City of Littleton plan review fees. A fee schedule is available from the District upon request. Fees are subject to change without notice.

## 4. Subdivision Plat

One copy of the recorded subdivision plat with district easements.

#### 5. Easement Checklist

Three copies of the District's easement checklist together with all supplemental information (see exhibit A). This information is required for all facilities to be constructed outside of dedicated public rights of way.

## **6. Soils Information**

Geotechnical soils information may be required by the District.

#### 7. County Approvals

A written statement from a representative of the appropriate county planning department stating that none of the proposed facilities lie within or impact a Flood Plain Overlay Zone or Geo-Hazard Area. In the event facilities do lie within, or impact, a Flood Plain Overlay Zone District or Geo-Hazard Area, proof that the owner-developer has applied

for a Flood Plain Development Permit or Geo-Hazard Development Permit will be required. In addition, the owner-developer must furnish a statement from the appropriate county approving the design of the facilities impacting the Flood Plain or Geo-Hazard Area.

#### A.1.2 Engineering

All plans and specifications submitted to the District for review, comment, and approval of a system extension or modification shall be prepared by, or under the direct supervision of a Professional Engineer registered by the State of Colorado. Said Professional Engineer shall be responsible for the sanitary sewer design, the plans, determining the material specifications and conducting the field survey. All submitted plans and specifications shall include the Professional Engineer's seal prior to approval for construction.

The applicant, contractor, and Professional Engineer associated with said plans shall be responsible for the adequacy and satisfactory performance of the design and the installation of all items therein, and any failure or unsatisfactory performance of the system, so constructed, shall not be a cause for action against the District. The District does not perform engineering services for any person or entity in connection with its review of plans. Approval of plans by the District signifies only that the plans meet the minimum requirements of these standards and specifications based upon the information provided to the District by the Professional Engineer and/or owner/developer and makes no finding, representation, or warranty that the system and associated components will perform any certain function.

If the Professional Engineer responsible for the plans disagrees with any changes made to the submitted plans that may be required by the District as a result of the District's review of the plans, such disagreement must be brought to the attention of the District for resolution prior to construction of the project set forth in said plans. The seal of the Professional Engineer on plans so corrected and approved for construction will signify that he has reviewed, approved and authorized said corrected plans for construction.

#### A.1.3 Surveying

Line and grade for sanitary sewer mains shall be established by a professional engineer or by a land surveyor licensed to practice in the State of Colorado, or his authorized representative. All work shall be done in workmanlike manner.

Correct alignment and elevation of the sanitary sewer mains as shown on the approved drawings is the responsibility of the Professional Engineer. Inspection of the staked alignment and elevations by the District does not relieve the Professional Engineer in any manner from the responsibility for field errors. Sufficient pipe shall be staked to ensure

continual work progress. Under no circumstances shall pipe be installed without line and grade stakes set by the Professional Engineer or Land Surveyor.

#### **A.1.4 Plan Review Process**

Upon receipt of all information described under section A.1.1, the District will initiate review of the construction plans and other pertinent information. The plans will be reviewed by the District and the District engineer. If modifications to the plans are required, the plans will be returned to the design engineer for revision.

Subsequent to approval of the plans by the District, they will be sent to the City of Littleton for review and approval. If further modifications are required, the plans will be returned by the City of Littleton to the District for return to the design engineer. When revised, the plans must be returned to the District for review prior to re-submittal to the City of Littleton.

**NOTE**: The approval of sanitary sewer system construction plans signifies only that the plans meet the minimum requirements of the District's standards and specifications based on the information provided by the design engineer, owner-developer, and contractor. Approval is not a representation or warranty that the system and associated components will perform any certain function.

Approved plans will be stamped with the District stamp and be signed by the District manager and District engineer.

## A.1.5 Expiration of Plan Approval

Plans and specifications are approved for a six month period only. If construction has not begun within this six month period, or if it has been halted and not restarted prior to expiration of the approval period, the plans must be resubmitted for review and approval.

#### **A.1.6 Preconstruction Meeting**

When construction plans and all other pertinent information has been approved by the District and the City of Littleton, the approved plans will be retained by the District until a preconstruction meeting is held. The preconstruction meeting will be scheduled by the District upon request of the contractor, design engineer, or owner-developer.

Representatives of the owner-developer, contractor, design engineer, District, and/or District engineer must be in attendance at the preconstruction meeting.

#### A.1.7 Authorization to Proceed

Authorization to commence construction will be granted by the District's manager upon approval of plans by the District and the City of Littleton, payment of applicable District and City of Littleton construction inspection fees, and completion of the preconstruction meeting.

A copy of the construction plan review schedule is available upon request. Fees are subject to change without notice.