# Form 5-I
# Review Checklist for Infiltration/Inflow Analysis

Borrower _____ Project _____

Reviewer _____ Date _____

**Y=yes N=no N/A=not applicable**

## A. BACKGROUND INFORMATION

1. Interviews

a) Sewer maintenance personnel ☐Y ☐N ☐N/A

b) Treatment plant operators ☐Y ☐N ☐N/A

c) City engineer ☐Y ☐N ☐N/A

d) City officials ☐Y ☐N ☐N/A

e) Local contractors ☐Y ☐N ☐N/A

f) Homeowners ☐Y ☐N ☐N/A

2. Sewer Map Analysis

a) Maps available ☐Y ☐N ☐N/A

b) Maps prepared or updated ☐Y ☐N ☐N/A

c) Storm sewers shown ☐Y ☐N ☐N/A

d) Springs, ditches, etc., shown ☐Y ☐N ☐N/A

3. Inventory of Existing Sewer System

a) Age ☐Y ☐N ☐N/A

b) Sizes and lengths ☐Y ☐N ☐N/A

c) Pipe material and type of joints ☐Y ☐N ☐N/A

d) Maximum, minimum, and average depths ☐Y ☐N ☐N/A

i) All manholes accessible ☐Y ☐N ☐N/A

ii) Length of service laterals ☐Y ☐N ☐N/A

4. Geographic and Geologic Data

a) Topography ☐Y ☐N ☐N/A

b) Rainfall ☐Y ☐N ☐N/A

c) Soil ☐Y ☐N ☐N/A

d) Ground water table ☐Y ☐N ☐N/A

5. Wastewater Flow Data

a) Service population ☐Y ☐N ☐N/A

b) Monthly water consumption ☐Y ☐N ☐N/A

c) Influent BOD5 and total suspended solids ☐Y ☐N ☐N/A

d) Nighttime flow measurements ☐Y ☐N ☐N/A

e) Flow fluctuations due to rainstorms ☐Y ☐N ☐N/A

6. Physical Condition of Sewer Systems

a) Subsystem flow measurements ☐Y ☐N ☐N/A

b) Physical inspection ☐Y ☐N ☐N/A

c) Smoke testing ☐Y ☐N ☐N/A

**B. DETERMINATION OF INFILTRATION/INFLOW**

1. General

a) Peak infiltration ☐Y ☐N ☐N/A

b) Peak inflow ☐Y ☐N ☐N/A

c) Total yearly infiltration ☐Y ☐N ☐N/A

d) Total yearly inflow ☐Y ☐N ☐N/A

2. Analysis

a) Key manholes shown on a map ◯Y ◯N ◯N/A

b) GIDM for system, include laterals ◯Y ◯N ◯N/A

c) GIDM for subsystem, include laterals ◯Y ◯N ◯N/A

d) Correlate rainfall with influent flow ◯Y ◯N ◯N/A

3. Cost-effective analysis

a) Treatment alternatives considered ◯Y ◯N ◯N/A

b) Cost estimates reasonable ◯Y ◯N ◯N/A

c) Inclusion of subsystems acceptable ◯Y ◯N ◯N/A

d) Design flows reasonable ◯Y ◯N ◯N/A

**C. ESTABLISH POSSIBLE EXCESSIVE OR NONEXCESSIVE INFILTRATION/INFLOW**

Cost-effective point established ◯Y ◯N ◯N/A

**D. INFILTRATION/INFLOW SURVEY PROGRAM RECOMMENDATIONS**

1. Work

a) Physical work ◯Y ◯N ◯N/A

b) Preparatory cleaning ◯Y ◯N ◯N/A

c) Internal inspection ◯Y ◯N ◯N/A

d) Report ◯Y ◯N ◯N/A

e) Minor repairs and joint sealing ◯Y ◯N ◯N/A

2. Cost estimate for evaluation ◯Y ◯N ◯N/A

3. Project schedule ◯Y ◯N ◯N/A

**E. INFILTRATION/INFLOW EVALUATION SUMMARY**

1. Certification by DEQ on nonexistence ☐Y ☐N ☐N/A

2. Infiltration/inflow analysis demonstrates non-existence ☐Y ☐N ☐N/A

3. If no to item 2 above, is adequate economic justification included? ☐Y ☐N ☐N/A

General comments: