

Sanitary Review Checklist

Project Name

Project Number

Applicant

Date of Application

Instructions: Please review all of the following checklist items and fill out the Sanitary Review Checklist as it applies to the above referenced project. Click on the arrow next to the drop down and select an applicable answer. A comment will be generated if the selected answer does not follow Citizens standards. If a comment is generated, please refer to the <u>Citizens Sanitary Manual</u> and the references below to make the appropriate changes to the plan set prior to submittal to a Citizens' plan reviewer.

Comment

Review Checklist Item

Pipelines in the Area?

Frontage Covered?

Subsequent connector fees owed?

Variance request required?

Unusual construction?

Contract Documents

Public Main?

Private Main?

Type of System

Gravity Sewer

Low Pressure System

Plan Review Documents

Design summary form missing?

Units incorrect on design summary?

Peaking factor equal to 4.0?

Offsite design flows and areas not provided on design summary?

Design does not match design summary?

Design summary form incomplete?

Design summary form unsigned/ unstamped?

Plans Incomplete?

Cover Sheet

Cover sheet missing?

Project name missing?

Site location map missing?

Sheet index missing?

Engineering firm's contact information missing?

Developer's contact information missing?

Citizens' contact information incorrect/missing?

Plans unsigned/unstamped?

Service Area Map

Service area map missing?

Onsite service area boundaries not shown?

Offsite undeveloped service area map boundaries not shown?

Offsite developed service area boundaries not shown?

Contour lines/relevant topographic information not shown?

Existing sanitary facilities not shown?

Use pipeline map to determine location of nearby pipelines At least one entire frontage of development must be covered Connections to developer installed sanitary mains within the last 10 years are subject to fees Unusual designs or requests that do not meet standards may need variance requests Unusual construction requires additional REACH review

Reference

Either the Citizens or IDEM Design Summary Form is acceptable

Citizens Sanitary Manual Section 202.04.2

Brad Hostetler should be listed as the Citizens utility contact

Citizens Sanitary Manual section 104.04.01 Citizens Sanitary Manual section 202.03.01 Citizens Sanitary Manual section 202.03.01 Citizens Sanitary Manual section 202.03.01 Citizens Sanitary Manual section 202.03.01

Citizens Sanitary Manual section 202.03.01

Gravity Sewer

North arrow missing?

North arrow pointing wrong direction?

Vertical scale missing?

Vertical scale incorrect?

Horizontal scale missing?

Horizontal scale incorrect?

Sewer too shallow?

Standard notes missing?

Standard notes incorrect?

Pipe and structure table missing?

Profile sheets missing?

Other utilities missing?

Utilities shown incorrectly?

Separation not met?

Crossing angle not met?

Invert elevations incorrect?

Top of casting/rim elevations missing from profile?

Top of casting/rim elevations incorrect?

Slope too shallow?

Slope too steep?

Pipe too small?

Pipe too big?

Pipe material incorrect?

Located outside the R/W or exclusive easement?

Easements not shown and dimensioned?

Easement too small?

Too close to public well?

Too close to private well?

Drainage crossing too shallow?

Floodways not shown?

Located within floodway?

Manhole rim elevations incorrect?

Drops required by missing?

Manholes too far apart?

Manhole angle greater than 90 degrees?

Manhole dimensions incorrect?

Connection manhole may require rehab?

Too many connections to manhole?

Incorrect abandonment of main?

Lateral stubs not shown?

Lateral stubs not provided with every lot

Lateral stationing missing?

Lateral lengths missing?

More than 3 lateral connections to a terminal manhole?

Comment

Reference

Citizens Sanitary Manual section 202.03.01

Citizens Sanitary Manual section 204.01

Citizens Sanitary Manual section 204.01

Citizens Sanitary Manual section 204.01

Citizens Sanitary Manual Section 202.05 Citizens Sanitary Manual section 104.04

Citizens Sanitary Manual section 104.04 Citizens Sanitary Manual section 104.04 Citizens Sanitary Manual section 204.04

Citizens Sanitary Manual section 204.03 (10' horizontal, 18" vertical) 45 degree minimum angle Citizens Sanitary Manual section 204.02

Citizens Sanitary Manual section 202.05.2 Citizens Sanitary Manual section 202.05.2 Citizens Sanitary Manual section 202.05 Citizens Sanitary Manual section 202.05 Citizens Sanitary Manual section 302.02 If easement is required see Citizens Sanitary Manual section 204.02 for width requirements If easement is required see Citizens Sanitary Manual section 204.02 for width requirements If easement is required see Citizens Sanitary Manual section 204.02 for width requirements Citizens Sanitary Manual section 204.03.2 Citizens Sanitary Manual section 204.03.2 Citizens Sanitary Manual section 204.06 Citizens Sanitary Manual section 202.08 Citizens Sanitary Manual section 203.06 Citizens Sanitary Manual section 203.04 Citizens Sanitary Manual section 203.02 Citizens Sanitary Manual section 203.05 Citizens Sanitary Manual section 202.12 Citizens Sanitary Manual section 202.12 Citizens Sanitary Manual section 401.09 Apartments and condos are exceptions

Gravity Sewer

Lateral within R/W less than 6"?

Lateral too shallow?

Lateral slope too shallow?

Laterals cross parcel lines?

Lateral too close to property line?

Lateral too long within R/W?

Laterals too close together?

R/W cleanout missing?

Lateral material incorrect?

Jack and bore casing pipe material incorrect?

Jack and bore casing pipe too small?

Jack and bore pits not shown?

Gravity Standard Details

Details not current?

100.01 (Terms Used in Trench Details)

200.01 (Minimum Elevations for Gravity Connection)

300.01 (Standard Manhole)

300.04 (Inside Drop Manhole)

300.05 (Outside Drop Manhole)

300.06 (Doghouse Manhole)

300.07 (Standard Benching)

300.08 (Adjusting Ring)

300.09 (Frame and Cover)

400.01 (Flexible Pipe Bedding & Backfill)

400.02 (Semi-Rigid Pipe Bedding & Backfill)

400.03 (Rigid Pipe Bedding & Backfill)

400.05 (Shallow Service Connection)

400.06 (Deep Service Connection)

400.07 (Controlled Settlement Joint)

400.09 (Clean-out/Check Valve)

400.10 (R/W Clean-out)

Low Pressure Systems

Justification not provided?

Calculation worksheet not provided?

Pump information not provided? North arrow missing?

North arrow not pointing north?

Vertical scale missing?

Vertical scale incorrect?

Horizontal scale missing?

Horizontal scale incorrect?

Standard notes missing?

Standard notes incorrect?

Pipe size too small?

Pipe too shallow?

Pipe velocity too low?

Comment

Reference

Citizens Sanitary Manual section 201.06

Citizens Sanitary Manual section 201.06 Citizens Sanitary Manual section 201.06 Citizens Sanitary Manual section 201.07 Citizens Sanitary Manual section 201.07 Citizens Sanitary Manual section 201.07 Citizens Sanitary Manual section 201.08 Citizens Sanitary Manual section 303.02 Citizens Sanitary Manual section 404.03

Citizens Sanitary Manual section 404.03

Always required

Always required

Required if inside drop used

Required if outside drop used

Required if doghouse manhole used

Always required

Always required

Always required

PVC, HDPE, Centrifugally Cast Fiberglass Reinforced Polymer Mortar, and Closed Profile Large Diameter PVC

Ductile Iron Pipe

RCP and PCCP

Required for laterals less than 15' deep

Required for laterals 15' deep and over

Required if 400.06 is required

Always required

Citizens Sanitary Manual section 501.03 Citizens Sanitary Manual section 504.03.4 Citizens Sanitary Manual section 504.03.4 Citizens Sanitary Manual section 204.01

Citizens Sanitary Manual section 204.01

Citizens Sanitary Manual section 204.01

Citizens Sanitary Manual section 104.04

Citizens Sanitary Manual section 504.06

Low Pressure Systems

Pipe velocity too high?

Flushing stations missing?

Air relief valves missing?

Laterals not shown?

Lateral assemblies not provided for each lot?

Lateral stationing missing?

Lateral lengths missing?

More than 3 lateral connections to a terminal manhole?

Laterals too shallow?

Laterals cross parcel lines?

Laterals too close to property line?

Lateral too long within R/W?

Laterals too close together?

Profile sheets missing?

Other utilities missing?

Utilities shown incorrectly?

Separation not met?

Crossing angle not met?

Located outside the R/W or exclusive easement?

Easements not shown and dimensioned?

Easement too small?

Pipe material incorrect?

Too close to public well?

Drainage crossing too shallow?

Floodways not shown?

Located within floodway?

Manhole angle greater than 90 degrees?

Connection manhole may require rehab?

Too many connections to manhole?

Lateral material incorrect?

Jack and bore casing pipe material incorrect?

Jack and bore casing pipe too

small?Jack and bore pits not

shown?Directional drilling incorrect?

Low Pressure System Standard Details

Details not current?

500.02 (Low Pressure System Detail) missing?

500.03 (Low Pressure System Detail) missing?

500.04 (Low Pressure System Detail) missing?

Comment

Reference

Citizens Sanitary Manual section 202.02.2.B Citizens Sanitary Manual section 504.06 Citizens Sanitary Manual section 504.06 Citizens Sanitary Manual section 504.06 Citizens Sanitary Manual section 504.07

Citizens Sanitary Manual section 204.05 Citizens Sanitary Manual section 201.06 Citizens Sanitary Manual section 201.07 Citizens Sanitary Manual section 201.07 Citizens Sanitary Manual section 201.07

Citizens Sanitary Manual section 201.07

Citizens Sanitary Manual section 204.04

Citizens Sanitary Manual section 204.03 (10' horizontal, 18" vertical)

45 degree minimum angle

If easement is required, see Citizens Sanitary Manual section 204.02 for width requirements

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If easement is required, see Citizens Sanitary Manual section 204.02 for width requirements

Citizens Sanitary Manual section 302.02 Citizens Sanitary Manual section 204.03.2

Citizens Sanitary Manual section 204.03.3

Citizens Sanitary Manual section 204.06

Citizens Sanitary Manual section 202.08

Citizens Sanitary Manual section 203.02

Citizens Sanitary Manual section 202.12

Citizens Sanitary Manual section 303.02

Citizens Sanitary Manual section 404.03

Citizens Sanitary Manual section 404.03

Citizens Sanitary Manual section 404.04 (minimum slope 1.5%)