G. PLAN REVIEW CHECKLIST

PROJECT:
_____

ENGINEER: _____

PHONE: _____

REVIEWER: _____

DATE STARTED: _____

GENERAL:

1. _____ Master Plan Requirements/Well sites required

2. _____ Authority detail sheets used

3. _____ Plat showing existing and proposed easements

4. _____ Plat has proper dedication language

5. _____ Easements shown where facilities are on private property

6. _____ Water and sewer separation statement

7. _____ Project in wellfield protection zone

8. _____ Overall Master Utility Plan

9. _____ Pipe crossings shown with clearances

10. _____ Offsite water, sewer and reclaimed appurtenances properly shown

11. _____ Replace ACP, PVC or VCP pipe

12. _____ Proper materials specified

13. _____ Clearance from buildings (15 feet minimum including footers and overhangs and other structures)

14. _____ Connections to existing facilities clearly detailed

15. _____ Operating nut on valves no deeper than 24 inches below finish grade

16. _____ Pipe/service size

17. _____ Necessary water/sewer detail sheets attached

18. _____ Each unit building served

19. _____ Utility plan showing conduit crossings and utility boxes

20. _____ Proper cover over existing water, sewer and reclaimed facilities

21. _____ Existing and proposed easements by instrument shown

22. _____ Existing water, sewer, reclaimed, drainage and large diameter irrigation

23. _____ Water and sewer mains have to be extended to furthest property line

24. _____ Plan elevations in NAVD 1988 Datum

25. _____ Notation for contractor to adjust existing valve boxes, fire hydrants, manholes, etc. to finish grade when impacted by development

26. _____ Provide project phasing plan where applicable. If phased show each phase separated by a valve and/or manhole

WATER:

1. _____ Proper backflow preventer (including auxiliary water supply user and dual backflows required for critical uses)

2. _____ Meter at property line - not in driveway or sidewalk

3. _____ Double services where possible

4. _____ Water mains looped for projects greater than 25 dwelling units and projects which Authority determines are considered critical use.

5. _____ Proper valving - two at each tee, every 1500 feet, greater than 25 dwelling units

6. _____ Double valve point of feed

7. _____ Minimum/Maximum cover 2.5 feet to 4.0 feet

8. _____ Fire hydrant spacing/provision for line flushing

9. _____ Mains in green areas

10. _____ Valve boxes for corporations where tap is under paving (non-residential projects only)

11. _____ Valve & length of pipe for future extension

12. _____ Thrust blocks, tie rods, restrained joints

13. _____ Booster pump > 2 stories for domestic service

14. _____ No services greater than 75 feet long

15. _____ Fire line for building (commercial or multi-family)

16. _____ Fire line for single family home

17. _____ Large meter/backflow assemblies clearly detailed

18. _____ Bypass on meters > 2 inches and all critical installations

19. _____ Velocity less than 10 fps during fire flows

20. _____ Dead ends minimized

21. _____ Mains and services perpendicular to street where possible

22. _____ Valves in accessible locations

23. _____ Sample points shown

24. _____ Air release valves at high points

SEWER:

1. _____ Minimum depth 4 feet invert of terminal manhole

2. _____ C-900 pipe for cuts greater than 12 feet

3. _____ Maximum distance between manholes 400 feet

4. _____ Mains under paving - concrete collars on manholes in green areas and in paver block areas

5. _____ Outside drop if drop is greater than 2 feet

6. _____ Minimum/Maximum slopes

7. _____ No oversized pipe

8. _____ No future stubs - terminate with manhole

9. _____ Entry to existing manhole - core only

10. _____ No services tied to manholes

11. _____ Double services where possible

12. _____ Clean out on service lines at property line and at 75 foot intervals on service laterals

13. _____ Grease trap/oil/sand interceptors

14. _____ Profile of gravity sewer mains including proposed finished grades

15. _____ Profile force main including proposed finished grade

16. _____ Location tape included on force main

17. _____ Valving on force main at 1,500 intervals, two at each tee

18. _____ Manholes and sewer lines designed to be a minimum of 5 feet to curb and right of way

19. _____ Sanitary sewer crossing elevations with conflicting pipe (including sewer service laterals)

20. _____ Valves and manholes in accessible locations

21. _____ Manhole flow channels 90º or greater

22. _____Manhole depth less than 18 feet

23. _____Sewer main from lift station to first manhole to be DR 14 C-900 PVC

24. _____Air release valve at force main high points

25. _____2% maximum slope of sewer lines if connection to an existing manhole requires a steeper slope, a drop manhole must be utilized to minimize slope

26. _____ Collector manhole at lift station shall be located outside of traffic lanes

27. _____Lift Station depth less than 26 feet

28. _____ Lift Station Calculations - Signed & Sealed by EOR

a. average daily flow/peak flow calculations

b. force main minimum velocity

c. manifolding force main pressures

d. pump cycle time

e. floatation calculations

f. 240/480 volts

g. 100-year flood

h. System curve plotted on proposed pump curve

LANDSCAPE PLANS:

1. _____Authority details utilized

2. _____Root barriers shown on plans

3. _____Water and sewer lines and appurtenances shown

4. _____Water and sewer easements shown

5. _____Screening of backflows required by other governmental agencies