Guidelines and Checklist For SAWS <u>Water Service</u>

Developmental Engineering Division

INITIAL CONSIDERATIONS – UTILITY SERVICE AGREEMENT

<u>Utility Service Agreement</u> – A Utility Service Agreement (USA) will be required if the development meets any of the conditions listed in section 5.2 of the Utility Service Regulations, which can be found at the following link: http://www.saws.org/business_center/developer/utilityserviceregs/index.shtml

- 1. If the Development meets any of the conditions requiring a <u>Utility Service</u> <u>Agreement</u> (USA), has one been applied for and approved by SAWS?
- 2. If the Development is within an existing USA is the USA still active?
- 3. If the Development is within an existing and active USA are there a sufficient number of EDUs remaining?

If you answered no to any of the above, apply for a Utility Service Agreement by submitting the information listed on the USA Checklist – Water, which can be found at <u>http://www.saws.org/business_center/specs/newdevel/documents/USA_Water.pdf</u>, and USA Checklist – Sewer, which can be found at <u>http://www.saws.org/business_center/specs/newdevel/documents/USA_Sewer.pdf</u>, to MANAGER - DEVELOPMENT ENGINEERING

Once you receive a draft copy of the Utility Service Agreement, which outlines what will be required to obtain service, you may submit your plat package and water and sewer plans, if applicable.

PLAT PACKAGE – WATER PLANS

- I. Developer/Consultant to submit the following to SAWS Manager of Developmental Engineering Division for initial review:
 - 1. ONE SET of PLAT and/or EASEMENT DOCUMENTS (if required)
 - 2. 2 sets of FOLDED PLANS & PROFILES (20-inch main and larger) on 24" x 36" sheets
 - 3. 2 COST ESTIMATES
 - 4. 2 sets of MASTER PLAN
- II. Proposed subdivision utility layout sheet and water mains must be in agreement with the SAWS approved Master Plan. If the plans do not match with the Master Plan, a revised Master Plan must be submitted for SAWS approval.

- III. Visit SAWS's webpage at <u>www.saws.org</u> for the latest specification for water and sanitary sewer construction and standard detail drawings.
- IV. General criteria for proposed water main installation.
 - 1. Proposed water mains design must comply with TCEQ, SAWS Utility Service Regulations, and any other governing entity ordinance or codes. These agency requirements supersede any of the requirements listed on this guidelines.
 - 2. Water mains should be properly identified as approach, boarder, on site, or oversize main.
 - 3. Service level 9 or higher should be designed with D.I. pipe or PVC DR 14.
 - 4. Visit SAWS's web page at <u>www.saws.org</u> for the latest specification and revisions of water and sanitary sewer construction and standard details.
 - 5. Consultant to determine pipe material to be used dependent upon the soil classification for each project. Pipe material must meet ASTM standards.
 - 6. SAWS procedure for the proposed water main alignment is a minimum of 6-feet from the property line within the proposed pavement section or in accordance to the governing R.O.W. owner's ordinances or codes.
 - 7. All mains 12 inches or larger are to have the appropriately sized air release valves at the high point of the main. Consultant shall determine the appropriate location and size of air release valve.
 - 8. The maximum distance is 1,200 feet between interconnecting grids for an 8-inch water main.
 - 9. Each dwelling unit is to be within 500 feet of a fire hydrant. The 500-foot distance is measured along the R.O.W.
 - 10. Size on size tapping sleeve and valves are not allowed. For size on size ties, use cut-in-tees.
 - 11. Permanent blow-off is required at the end of 25 feet or longer pipe sections.
 - 12. The top of pipe elevation of the water main must maintain a 2-foot vertical clearance where the water main crosses under existing and proposed utilities.

- 13. Steel or RCP Conduits shall be used when water mains cross under multi box culverts or large storm drain pipes exceeding one joint of pipe. Conduit sizes shall be in accordance with SAWS Construction Specifications.
- 14. D. I. Pipe is required for water main crossing under channels, streets, sidewalks, etc., and encased, if applicable.
- 15. All D. I. And P.V.C. fittings should have mechanical joints.
- 16. Fire Hydrants will be used at the end of dead end mains and cul-de-sacs instead of permanent blow-off.
- 17. Gate valves shall be placed every 1000 feet per SAWS criteria and at locations necessary to isolate the water distribution system. (Example: Street intersection)
- 18. Vertical bends on all ductile iron pipes should be reinforced with retainer glands and located at each bend joint.
- 19. Two abutting lots in which each lot is 50 feet in width or less can be served with a 1" dual service line.
- V. Water Distribution Plans:

Submitted plans shall meet all TCEQ, City of San Antonio and SAWS Utility Service Regulations. The following shall also apply:

- A. A SAWS cover sheet with the location map, SAWS job number, applicable general water notes, and any other notes pertinent to the project. Estimated quantities to be submitted with the plans.
- B. Plans must show existing and proposed street names, NCB, Block No., Lot No., R.O.W.
- C. Show all property lines, turnarounds, creeks, existing and proposed permanently and temporary construction water easements on plans.
- D. The plan scale is no smaller than 1"=50'.
- E. A north arrow is shown on all plan sheets.
- F. Plans should be by American National Standard Institution "D" size 24" x 36".
- G. Existing and proposed sanitary sewer, storm sewer, and all utilities are shown on plan and profile views.
- H. Engineer's Seal with signature needs to be on the final plans for SAWS acceptance.
- I. Water mains are standard sizes: 8", 12", 16", 20", 24", and 6" multiples thereafter.
- J. Length of ALL mains from fitting to fitting should be indicated.

- K. Show fire hydrant detail in plans.
- L. Show all applicable callout notes (see SAWS website at <u>www.saws</u> org) for the callout notes.
- M. Show cut and replace existing asphalt or sidewalk, if applicable.
- N. Plans should indicate matchline from one sheet to the next sheet, indicating stationing and sheet no. (Example matchline station 5+00, see sheet xx of xx).
- O. Include in the general notes; "SAWS shall machine chlorinate new water mains," if the water main length is greater than 750 feet. Include "Contractor shall chlorinate new mains with HTH," if water main length is 750 feet or less. NOTE: the length refers to the length of interconnecting new mains and not necessarily the total length of the new main.
- P. Indicate on the plans "HTH" for sections of mains that will be chlorinated by the contractor.
- Q. The length of the proposed water main is indicated from tie-in to tie-in or matchline to matchline and shall be rounded to the nearest 5 feet increment.
- R. A block with the required information should be included in the lower right corner on each sheet. The following information in the block is required:

Developer's name, address, phone number and a fax number, SAWS block map, job number, plat number and total sewer EDU's.

Example:			
Developer's Name:			
Address:			
 Ctiy ZIP	State		
Phone # ()			
SAWS Block Map # Acreage	Total EDU's	Total	
Total Linear Footage of Pipe:		Plat No	
SAWS JOB NO			