SECTION 1 GENERAL PRE-DESIGN REQUIREMENTS

1.0 GENERAL

The San Bernardino Municipal Water Department (SBMWD) is a governmental agency of the State of California, which provides municipal water service. The Design Standards presented herein has been approved by the SBMWD's Director of Water Utility and represent the minimum design criteria for water distribution systems within the SBMWD's jurisdiction.

1.1 DEFINITIONS

1.1.1 Agency

San Bernardino Municipal Water Department (SBMWD) 195 North "D" Street San Bernardino, CA 92402 (909) 384-5391

All definitions and abbreviations as set forth in the Standard Specifications for Public Works Construction (Green Book), latest addition, shall apply for these Design and Construction Standards.

1.2 PRE-DESIGN MEETING

Prior to scheduling a Pre-Design meeting with SBMWD, Developer shall implement the planning review process with City of San Bernardino's Environmental Review Committee/Design Review Committee (ERC/DRC) consideration. Thereafter, Developer's Engineer schedule a Pre-Design Meeting with the Developer, Developer's representatives, and SBMWD. Prior to meeting and after notification of the project through the ERC/DRC process, SBMWD shall complete the following:

1.2.1 ENGINEERING PROJECT NUMBER

SBMWD shall assign a new Engineering Project Number (EPN), if an EPN does not exist for the project. If a number exists for the particular project, it shall be continued to be used.

1.2.2 FILE ORGANIZATION AND REVIEW

SBMWD shall setup project files for the project in accordance with the Department's "File Structure" enclosed in Appendix A. SBMWD shall research existing files to determine if data already exists. If so, it shall be incorporated into the project files including all applicable Assessor Parcel Number (APN) files. SBMWD shall thoroughly review all existing records for the project.

1.2.3 RECORDS ACCUMULATION

SBMWD shall accumulate copies of Department records including system distribution sheets from City's digital files necessary for preparation of construction drawings. Plots shall be generated of sufficient area to provide necessary detail for design. The sheets shall be folded to 8.5" by 11" with the title block showing for drawing identification.

In addition, SBMWD shall assemble copies of the Department's Distribution System and Gate Book sheets that are affected by the project. Sheets shall also be folded appropriately. Samples are attached in Appendix B.

SBMWD shall assemble copies of the Department's sample agreement attached in Appendix C, Rule and Regulation No. 5 - New Service Installation and Acquisition of Service Charges, Rule and Regulation No. 20 - Application for Water Main Extension Reservoirs, Boosters, and/or New Sources of Supply, and Rule and Regulation No. 21 - General Water Service Water Rates attached in Appendix D, and the new SBMWD Water Standard Specifications and Drawings for Construction of Domestic Water Systems, latest edition.

1.2.4 PROJECT RESEARCH/FIRE FLOW

SBMWD shall determine the pressure zone or zones that will serve the project. If the project is located within two zones, SBMWD shall determine the most practical zone to best serve the project

or if the project will be served from multiple zones. SBMWD shall prepare a pressure zone map for project showing the location of the proposed project.

In addition, SBMWD shall research records in the project area for existing fire flow reports. SBMWD shall verify that system conditions have not significantly changed that may warrant verification. If verification is required or if an existing report is not available in the project area, SBMWD shall arrange for a system fire flow test at an appropriate location and prepare a fire flow report.

SBMWD shall perform a careful field review of the project area with Department operations staff to verify locations of existing improvements in the project area and that the project is entirely within the Department's service area. SBMWD shall verify existing system static pressures noting the date and time of the observations.

Each shall be documented on copies of gate map and system distribution sheets. Copies shall be placed in the project files.

1.2.5 SCHEDULE MEETING WITH SBMWD

After items 1.2.1 through 1.2.4 above have been completed, SBMWD shall schedule an internal meeting with Department staff including Water Utility Director and/or Principal Engineer. SBMWD shall present the project research findings at the meeting. SBMWD shall document the meeting and distribute minutes to all meeting attendees.

1.3 SCHEDULE PRE-DESIGN MEETING/DATA FURNISHED BY DEVELOPER

The Developer shall schedule a Pre-Design Meeting with the SBMWD. In addition, SBMWD shall invite all interested Department personnel including Water Utility Director and Water Utility Principal Engineer and other City Departments as necessary. SBMWD shall advise Developer to furnish the following documents at the Pre-Design Meeting:

• Recorded Tract Map or Tract Map in Progress

- Project Site Plan Including Existing Topographic Mapping
- Preliminary System Demand Estimates
- City Fire Flow Requirements

1.4 PRE-DESIGN MEETING

During the meeting, SBMWD shall:

- Furnish Developer with Department records of existing water facilities surrounding project.
- Furnish copies of the Department's Distribution System and Gate Book sheets, sample Agreement, AutoCAD Standards, Rules and Regulations Nos. 5, 20, and 21, Standards for Design and Construction, and Standard Specifications and Drawings.
- Furnish all Standard Drawings and AutoCAD Standards in digital format.
- Furnish pressure zone estimated hydraulic grade line at connection locations for use in the hydraulic model and fire flow test data.
- Request Developer to complete the Developer-Installed Information Sheet enclosed in Appendix F.
- Preliminary project conditions of approval. Standard conditions are enclosed in Appendix G.
- Hydraulic Grade Line Letter.

Copies of all data provided to the Developer and their representatives shall be filed in the EPN files.

SBMWD shall document attendance and all discussions that occur at the meeting and distribute minutes to attendees. Copies of minutes shall be in the EPN files.

The following agenda shall be reviewed, at a minimum, at the meeting:

- Record of Attendance
- Standards for Design and Construction and Standard Specifications and Drawings
- Scope of Construction
- Construction Schedule
- System Hydraulic Analysis
- Review of Developer-Installed Checklist