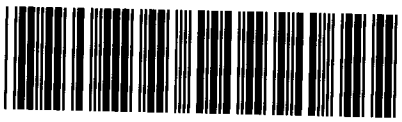

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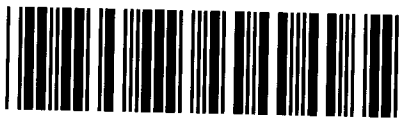

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SOAH DOCKET NO. 473-14-5138
PUC DOCKET NO. 42857

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| PETITION OF NORTH AUSTIN MUNICIPAL UTILITY DISTRICT NO. 1, NORTHTOWN MUNICIPAL UTILITY DISTRICT, TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NO. 10 AND WELLS BRANCH MUNICIPAL UTILITY DISTRICT FROM THE RATEMAKING ACTIONS OF THE CITY OF AUSTIN AND REQUEST FOR INTERIM RATES IN WILLIAMSON AND TRAVIS COUNTIES | § | BEFORE THE STATE OFFICE |
| | § | OF |
| | § | ADMINISTRATIVE HEARINGS |

SOAH DOCKET NO. ~~473-14-5138~~
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| | § | OF |
| | § | ADMINISTRATIVE HEARINGS |

# DIRECT TESTIMONY

OF

DAVID MALISH

ON BEHALF OF PETITIONERS
OCTOBER 17, 2014

**INDEX TO THE DIRECT TESTIMONY**

**OF DAVID MALISH, WITNESS FOR**

**PETITIONERS**



**EXHIBITS**

# DIRECT TESTIMONY
# OF DAVID MALISH, WITNESS FOR
# PETITIONERS

## I. QUALIFICATIONS

**Q. PLEASE STATE YOUR NAME.**

A. My name is David Malish, P.E.

**Q. PLEASE EXPLAIN YOUR EDUCATIONAL EXPERIENCE AND ANY DEGREES OBTAINED SINCE HIGH SCHOOL.**

A. I received my Bachelor of Science degree from the University of Texas at Austin in 1973 and subsequently received my Master of Science in Environmental Health Engineering from the University of Texas at Austin in 1975.

**Q. PLEASE STATE YOUR PRESENT EMPLOYER AND TITLE WITH THAT EMPLOYER.**

A. I am currently employed as the Vice President of Murfee Engineer Company, Inc. in Austin, Texas.

**Q. PLEASE EXPLAIN ANY RELEVANT EMPLOYMENT HISTORY, LISTING EMPLOYER'S NAME AND POSITION HELD WITH EACH RESPECTIVE EMPLOYER.**

A. Freese and Nichols Inc. Fort Worth TX, Staff EIT, Summer 1973
Radian Corporation, Staff EIT, 1975-1978
SUMX Corporation, Partner, Staff Engineer, 1978-1982
Murfee Engineering Company. Vice President, 1982 - Present

**Q. PLEASE DESCRIBE BRIEFLY YOUR WORK EXPERIENCE.**

A. After graduating from undergraduate school at the University of Texas, I went to work briefly for the firm of Freese and Nichols in Fort Worth, Texas. I primarily worked on

conceptual design of dam spillways and developed flow rating curves for various existing structures. I also wrote and executed stream hydraulic models for the preliminary design of a series of five small dams situated within the City of Lubbock. I returned to graduate school at the University of Texas after three months at Freese and Nichols. After completing graduate school at the University of Texas in 1975, I immediately went to work for Radian Corporation in Austin, Texas. The type of work which I did varied widely in subject and scope. However, my primary work was in the primary design and cost estimating for numerous wastewater treatment plants throughout the United States in support of the preparation of environmental impact statements. I also served as a technical representative of the US Environmental Protection Agency (US EPA) to Scandinavia and Northern Europe to identify and import specific wastewater treatment technologies for the removal and/or control of heavy metals in industrial wastewaters. On other projects, I worked with the chemical engineers and the chemist researching the characteristics of power plant sulfur dioxide scrubber sludge and identified and evaluated potential alternative for ultimate disposal. One unique alternative that I investigated was mixing the sulfur dioxide sludge with mine tailings (culm) as a possible structural fill material for reinjection into abandoned mines in an effort to control future subsidence. I also worked on the former Federal Energy Administration's project investigating alternatives for the strategic storage of petroleum in response to the 1973 embargo.

In 1978, I partnered with other engineers and founded SUMX Corporation in Austin, Texas. This company was engaged in development of ambient air monitoring systems, chemistry research, and civil engineering projects. Initially I was in charge of site development for locations of ambient air monitoring systems throughout the country. For the US EPA, I visited and inspected approximately 60 small water supply systems throughout the states of Wyoming and South Dakota primarily to offer consulting advice on improving disinfection practices. On another project for the US EPA, I investigated corrosion in potable water systems and prepared technical information transfer reports for resolving corrosion issues. These reports were eventually edited by the faculty at the University of Florida and published as a Noyes Publication entitled *Corrosion Prevention and Control in Water Treatment and Supply Systems* (1985).

On another project, while at SUMX, I was awarded a contract with the former US Department of Energy to design, construct, operate and evaluate an energy integrated farm system for both waste stabilization and cost recovery through methane generation and fuel alcohol production. This was a four year design, build, and demonstration project. The research site was a hog farm located just outside Austin in Del Valle. The objective of this project was basically to convert hog manure to methane gas and then use that methane gas to heat and light the hog barns, grind the feed grain, and also as a heat source for the production of a fuel grade alcohol for direct use in a farm pickup. For this project, I designed an automated hog manure collection system, an anaerobic digester, and a methane gas cleaning, collection, and storage facility for later use throughout the farm. The fuel alcohol production facility was actually designed by others but utilized the methane gas produced from the facilities I designed. This project was highly successful and used as a research and demonstration facility by the US Department of Energy for about five years before the farm was purchased for the construction of the new Del Valle high school.

Following the success of this project, I was employed by the Agency for International Development as a consultant to the American Farm School in Thessalonica, Greece, to assist in the design of a waste stabilization and methane production and recovery facility for a dairy cattle operation on the school farm. The methane gas from this facility was scheduled to be used as an energy source for pasteurizing the milk. After visiting the site, I prepared a design manual for the manure collection system as well as an anaerobic digester with gas production and recovery facilities. This system was similar to the system designed and constructed in Del Valle. Shortly after this engagement, I joined Murfee Engineering Company, Inc. (MEC) as vice president.

I currently serve as the vice president of MEC specializing primarily in providing district engineering services to special districts. I am also in charge of the preparation of detailed plans and specification for all water and wastewater facilities designed by MEC. I have personally been responsible for the design of numerous water and wastewater treatment

plants, as well as pump stations, lift stations, water distribution and transmission mains, both ground and elevated storage facilities, collector and interceptor lines, and force mains which are partially identified in my resume. My responsibilities also include preparation and processing of municipal wastewater discharge, as well as land application, permits in support of the wastewater treatment facilities. I have also been responsible for the preparation of numerous documents regarding consent to the creation of special districts and special district bond order application reports. I continue to routinely provide professional district engineering services to about a half dozen districts in the Austin area.

**Q. WOULD YOU PLEASE SUMMARIZE YOUR WORK EXPERIENCE AND EXPERTISE FOR THE JUDGE?**

A. Yes, in summary, over the last four decades, I have been involved in the engineering design of hundreds of project on behalf of both public and private entities located throughout Texas. These projects have involved all aspects of water and wastewater design, development, regulatory assessments and processing, contract preparations, and evaluations. A copy of my professional resume is attached as Exhibit DM-1.

## II. PURPOSE OF TESTIMONY

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

A. The purpose of my testimony is to provide a technical and historical perspective of North Austin MUD No. 1 and Wells Branch MUD with respect to service and cost of service for each District.

**Q. WHAT DOCUMENTS, ITEMS, CALCULATIONS, OR LITERATURE HAVE YOU REVIEWED IN PREPARATION OF YOUR REPORT OR OPINIONS IN THIS MATTER?**

A. I have reviewed District and City utility maps, historical documents including the Consent to Creation, Utility Construction Contracts, numerous TCEQ (formerly TNRCC)

and City of Austin correspondence letters, as well as various engineering reports, bond order applications, and the testimony of Teresa Lutes of the City of Austin.

**Q. WHAT IS THE SCOPE OF YOUR INVOLVEMENT WITH THE PETITIONERS WHOLESALE RATE APPEAL?**

A. The scope of my involvement with Petitioners Wholesale Rate Appeal is to provide technical and historical support information.

**Q. WHAT EXHIBITS ARE YOU SPONSORING?**

A. Over the course of my testimony, I will discuss and am sponsoring the following exhibits:

Exhibit DM-1 Resume of David Malish
Exhibit DM-2 Randy Goss Letter to NAMD1 Regarding Pressure Problems
Exhibit DM-3 October 2000 Agreement Between NAMD1 and City of Austin
Exhibit DM-4 NAMD1 Consent to Creation and Utility Construction Contract with City of Austin
Exhibit DM-5 June 4, 1985 TDWR Memo
Exhibit DM-6 First Amendment to the Utility Construction Contract
Exhibit DM-7 TCEQ Letter dated August 8, 2005
Exhibit DM-8 TCEQ Letter dated August July 25, 2006
Exhibit DM-9 Third Amendment to the Agreement Concerning WBMUD
Exhibit DM-10 Memo from Bart Jennings Dated May 10, 2004

Exhibits DM-2 through DM-8 are all true and correct copies of business and governmental records of North Austin MUD No.1. These exhibits constitute reports, records, and data compilations of acts, events, conditions, or options of North Austin MUD No. 1. The business records are kept in the course of regularly conducted business activities of North Austin MUD No. 1, and it is the regular practice of North Austin MUD No. 1 to make and keep such reports, records, and data compilations.

Exhibit DM-9 is a true and correct copy of business and governmental record of Wells Branch MUD. These exhibits constitute reports, records, and data compilations of acts,

events, conditions, or options of Wells Branch MUD. The business records are kept in the course of regularly conducted business activities of Wells Branch MUD, and it is the regular practice of Wells Branch MUD to make and keep such reports, records, and data compilations.

## III. NORTH AUSTIN MUD NO. 1

**Q. PLEASE DESCRIBE THE NORTH AUSTIN MUD NO. 1 WATER SYSTEM?**

A. North Austin MUD No. 1 ("NAMD1") receives wholesale potable water from the City of Austin and is situated within both the City's designated Northwest A and Northwest B pressure zones. The geographical area of NAMD1 to the north along SH45 is generally located in the higher Northwest B pressure zone and the geographical area south of NAMD1, i.e. south of the Jefferson Center development, is in the lower Northwest A pressure zone. Northwest B pressure water is delivered to NAMD1 from a 24-inch main extending east along SH45 to a master meter located near the northwest corner of NAMD1. The City of Austin does not provide adequate water pressure to the Northwest A pressure zone of NAMD1 sufficient to meet minimum State standards for domestic pressure. As a result, NAMD1 designed and constructed two in-line variable speed water pressure booster stations, at its own expense, to correct the City's pressure problem. Construction of these pump stations was completed near year-end 2007, and the pumps are operated and maintained solely by NAMD1. These two pump stations are located near the intersection of Tamayo Drive and Parmer Lane and Dallas Drive at Parmer Lane, respectively. The City Delivers wholesale potable water through master meters at both locations.

Prior to the construction of the booster stations, NAMD1 received wholesale potable water through master meters located at the intersections of McNeil Road and Amarillo Drive, McNeil Road and Parmer Lane, Anderson Mill Road and Parmer Lane, Amberglen Blvd and Parmer Lane, as well as both the Tamayo Drive and Dallas Drive

sites as are currently used. The previously-used master meters are currently closed or checked off.

**Q. DO YOU KNOW WHY THE CITY OF AUSTIN LOWERED THE WATER PRESSURE IN THE NORTHWEST A PRESSURE ZONE AROUND 1996.**

A. Yes. The Northwest A water pressure in the vicinity of NAMD1 is maintained by the City of Austin's Jollyville reservoir and the Martin Hill reservoir, which basically float on the same hydraulic grade. The City of Austin's Martin Hill reservoir was overdesigned excessively by the City, providing too much capacity to effectively operate. Evidently the excessive water volume turns over too infrequently and the water becomes stale. What I mean is the required chorine or chloramine residual dissipates prematurely, and the City chose not to rechlorinate at this site, citing public perception, safety and terrorism risks as well as other concerns. Instead of correcting the problem so that customers get the full benefit of the reservoir's capacity, the City chose to operate this reservoir to a lower level to affect greater turnover of the water and preserve the chlorine residual. This practice requires the Martin Hill water level to be lowered to 980-foot mean sea level. This operating level is insufficient to meet the State-required minimum pressure to serve the city's designated Northwest A Pressure system in all areas.

**Q. YOU SAID THAT YOU FIRST NOTICED THE WATER PRESSURE PROBLEM IN ABOUT 1996, WHY DID YOU WAIT UNTIL 2007 TO CONSTRUCT THE BOOSTER STATIONS?**

A. Once we started having water pressure problems in NAMD1, I contacted Teresa Lutes of the City of Austin to find out if the City knew of any problems. She informed me the pressure problem was because the City lowered the operating level in the Martin Hill reservoir due to the chlorine residual problem. As a result, NAMD1 contacted then City Manager, Mr. Jesus Garza, to express our concern. Mr. Randy Goss, P.E., Water and Wastewater Director at the time, in a letter to NAMD1's attorney, first denied that the City lowered the water level to 980 feet MSL, and then stated that the City had hired the firm of Espey Houston and Associates to study the problem. The City led NAMD1 to

believe that the City intended to fix the problem. The letter from Randy Goss is attached as Exhibit DM-2.

On October 23, 2000, NAMD1 entered into an agreement with the City of Austin to provide pass-through Northwest B pressure zone service to City of Austin utility customers that were situated in the Northwest A pressure zone, which did not have sufficient water pressure as a result of the lowering of the Martin Hill reservoir operating level. In this agreement, attached as Exhibit DM-3, the City again promised that the City would fix the pressure problem in the Northwest A zone within five years. When it became evident that the City had no intention of fixing the pressure problem, NAMD1 initiated design of the booster stations in 2004. It actually took approximately two years to obtain City approval of the booster stations before construction could begin. Although NAMD1 was responsible for all costs to correct the City's problem, the City staff provided no assistance in expediting the review, even insisting that NAMD1 pay all City of Austin review fees.

**Q. HOW DOES NAMD1 OBTAIN ITS WATER SUPPLY?**

A. As I have previously stated, NAMD1 purchases wholesale water from the City of Austin. The water is derived from the City's Davis Water Treatment Plant (118 MGD of capacity). Water to the lower pressure zone of NAMD1 is derived from the Jollyville reservoir and water to the higher portions of NAMD1 comes from the Anderson Mill Reservoir.

Q. **HAS NAMD1 CONSTRUCTED ANY WATER AND WASTEWATER FACILITIES OTHER THAN THE TWO BOOSTER STATIONS?**

A. Yes. In the early 1980's there was a public demand that growth and development in the Austin area pay for itself. In response, municipal and special utility districts with limited taxing authority were created. As a part of gaining consent for creation from the City of Austin as well as to provide a funding mechanism for extending ultimate service to the new growth area, NAMD1 entered into a Utility Construction Contract with the City of Austin, attached as Exhibit DM-4. This contract requires NAMD1 to issue bonds for

specific utility projects identified by the City of Austin to benefit NAMD1. NAMD1 was also required to design and construct the facilities. The debt service on these bonds was paid by both NAMD1 and the City of Austin based primarily on predetermined pro rata shared use of the facilities. Both parties agreed upon the estimated construction cost of each required facility as well as percentages of pro rata use by each entity. With these agreed upon estimates, the parties established and fixed a composite percentage of pro rata costs for each entity. This analysis was used as the basis for establishing both parties' share of the debt service payment. Once constructed, the facilities would be owned and operated by the City of Austin, even though NAMD1 paid for its actual share of the facilities directly serving NAMD1.

NAMD1 issued contract bonds for a total of $16,300,000 in 1985. Reading from a Texas Department of Water Resources internal memorandum dated June 4, 1985, attached as Exhibit DM-5, the contract bond projects included a 48-inch Spicewood Springs transmission main, oversized Research Blvd transmission main, Northwest A 2.7 Million Gallon ("MG") elevated reservoir, 36-inch Jollyville transmission main, a 36-inch main to the proposed reservoir, a 24-inch main from the reservoir to FM 620, a temporary sewer to Bull Creek laterally, and a permanent sewer to the Bull Creek interceptor.

In addition to paying for a pro rata share of these facilities, NAMD1 and the developers were responsible for all of the costs of construction required water, wastewater, and drainage facilities internal to NAMD1. The District issued approximately $37,000,000 in general obligation bonds to purchase the internal facilities.

**Q. YOU MENTIONED A 2.7 MILLION GALLON NORTHWEST A RESERVOIR AS ONE OF THE CONTRACT BOND PROJECTS. WHAT WAS NAMD1'S SHARE OF THAT FACILITY?**

A. That is a little more interesting. NAMD1 was responsible for 100% of the cost of this facility. However, that project was never built. In 1989, the City requested that this project along with the 48-inch Spicewood Springs transmission main be deleted, which

was agreed to in the First Amendment to the Utility Construction Contract (the third amendment to the Consent Agreement), which is attached as Exhibit DM-6.

**Q. SO WHAT HAPPENED TO NAMD1'S MONEY FOR THIS PROJECT?**

A. The City used NAMD1's money to pay for other City projects unrelated to the cost of providing service to NAMD1. I think it is important to know that no adjustments to debt service obligations were identified in the Amendment and NAMD1 continued to make payments for 100% of reservoir costs, originally the Northwest A Reservoir, until the District defeased those bonds.

**Q. DO YOU KNOW OF ANY ADDITIONAL EXPENSES NAMD1 MAY INCUR OWING TO THE CITY'S FAILURE TO PROVIDE ADEQUATE PRESSURE TO PORTIONS OF NAMD1?**

A. Yes. NAMD1's booster stations obtain water directly from the City of Austin 24-inch transmission main in Parmer Lane, which was 100% paid for by NAMD1 with the Contract Bonds. TCEQ design rules, in the absence of a waiver or exception, do not allow suction directly from a transmission main and instead require an air gap with water delivered to a ground storage tank. At this time, the TCEQ approval for NAMD1's booster stations is conditional and a full exception or waiver has not been granted as indicated in the letter attached as Exhibit DM-7. NAMD1 must now reapply every three years for continued conditional operation as is indicated in the letter to TCEQ attached as Exhibit DM-8. The District continues to reapply for continued operation every three years and as of this date the TCEQ has not issued a permanent exemption or waiver. If suction water pressures ever fall below 20 psi under routine operation, NAMD1 will be required to construct two ground storage tanks, two domestic and fire demand pump stations, backup power generation facilities, and a 2.7 Million Gallon elevated storage tank to meet TCEQ design rules. It is estimated that construction of these facilities will cost approximately $10,000,000 - $15,000,000 and will take approximately 3-5 years to construct due to permitting requirements.

**Q. WHAT IS THE TCEQ'S REQUIREMENT FOR WATER PRESSURE?**

A. Under State law, the utility provider is required to provide a minimum of 35 psi pressure at meters for domestic demand and a minimum of 20 psi at all fire hydrants under fire flow demands.

**Q. IS THE CITY IS IN VIOLATION OF THIS TCEQ PRESSURE REQUIREMENT?**

A. Yes.

**Q. HAVE YOU DISCUSSED THIS WITH CITY STAFF? IF SO WHAT HAS BEEN THEIR RESPONSE?**

A. Yes I have. The City staff's position is that the City does not have to meet State design criteria. The City staff claims that the City only has to provide 35 psi at the master meters, not to the retail connections within the District. The City staff denies that it is responsible for providing adequate pressure to all areas within its designated pressure zone.

**Q. DOES THE CITY ACTUALLY PROVIDE 35 PSI AT THE MASTER METER?**

A. Generally they do, but at times it falls slightly below. We have observed pressures near 30 psi at times on our continuous recorders at the master meters.

**Q. WHAT IS THE IMPACT ON THE DISTRICT DUE TO THE CITY'S IGNORING TCEQ REGULATIONS?**

A. Up until 1996, NAMD1 enjoyed sufficient water pressure to meet TCEQ's minimum standards of 35 psi and the District received no water pressure complaints. The City changed its operations due to a City design error, resulting in the excess capacity of the Martin Hill reservoir and the subsequent lowering of delivered pressure and the District manager began receiving low water pressure complaints.

Prior to this time, the City of Austin had previously reviewed and approved all subdivision plats in NAMD1 as well as all water and wastewater utility plans. Based on these approvals, the subdivisions were subsequently constructed, houses were built and

mortgages were obtained by the residents. In addition, District bonds were sold for utility cost reimbursement to the developers. In support of the issuance of bonds and with the consent of the City of Austin, the District represented to the future bond holders that sufficient water and wastewater services were available to all development identified in the tax base. Once the City modified the pressure plane by lowering the operating level, these subdivisions no longer had sufficient water pressure as previously represented in the official statements in support of the bond order applications. If it were the City's position that the City had no obligation to provide sufficient water pressure except to the District's master meter, it should never have approved the subdivision plats, subdivision plans, or the issuance of District bonds without qualifications. It is my understanding that the City cannot, or at least should not, approve plans for subdivisions with inadequate water capacity. It is the City's current policy to require a minimum of 50 psi for approval of water systems to serve future subdivisions. I believe the City knew it is the City's responsibility to provide adequate pressure at the time they approve the plats, plans, and bond orders as I previously described. In regard to NAMD1, the City staff simply chose to ignore State law and changed its stance on pressure once the issues with the Martin Hill Reservoir made compliance inconvenient.

## IV. WELLS BRANCH MUD

**Q. PLEASE DESCRIBE THE WELLS BRANCH MUNICIPAL UTILITY DISTRICT WATER SYSTEM?**

A. Wells Branch MUD ("WBMUD") receives wholesale water from the City of Austin and is situated wholly within the City's designated Northwest A pressure zone. Wholesale potable water is delivered to WBMUD at three master meter locations along FM 1825 near the intersections of Wells Branch Boulevard, Merrilltown Drive, and Shoreline Drive. The City of Austin currently does not provide adequate pressure and fails to meet TCEQ minimum standards for water pressure in portions of WBMUD. As a result, WBMUD designed, constructed, and operates to this day an in-line variable speed water pressure booster station immediate downstream of the Shoreline Drive master meter. The

City of Austin provided no financial assistance for design and construction of this booster system and provides no financial assistance with operation and maintenance cost.

**Q. WHEN DID WBMUD CONSTRUCT THE PRESSURE BOOSTER STATION?**

A. 1997.

**Q. WHY DIDN'T YOU OR WBMUD REQUIRE THE CITY TO PROVIDE PRESSURE BEFORE CONSTRUCTING A BOOSTER STATION?**

A. WBMUD was actually caught by surprise that the City was not providing adequate pressure around 1996. New homebuyers in the Willow Run subdivisions complained that they did not have adequate water pressure in their upstairs showers. In fact, most reported they had no water in their upstairs showers. WBMUD engineers subsequently measured water pressure within the subdivision and determined that the water pressure was below 25 psi at some locations, well below the State minimum of 35 psi. The City staff informed WBMUD that the City had lowered the operating hydraulic grade at the Martin Hill Reservoir in the interest of maintaining the required chlorine residual, similar to the situation that I discussed previously regarding the City providing insufficient pressure to NAMD1. Further discussion with City staff, including Ms. Theresa Lutes and Mr. Mike Erdman, revealed that the City staff had no immediate plan to restore water pressure in this area. The Wells Branch Board took emergency action to restore water pressure to the new homeowners and instructed WBMUD engineers to immediately design and construct a temporary water pressure booster station to resolve the problem. Mr. Mike Erdman of the City of Austin informed WBMUD that the City was working on a resolution to the pressure problem but that it would take two to three years. To date, the City of Austin has not corrected this water pressure problem.

**Q. IS IT THE CITY'S RESPONSIBILITY TO PROVIDE ADEQUATE WATER PRESSURE TO WBMUD?**

A. Absolutely, the TCEQ rules are clear that the water supplier must provide at least 35 psi water pressure for domestic service, and the City does not meet the State standard.

**Q. DOES THE CITY OF AUSTIN PROVIDE 35 PSI TO THE WELLS BRANCH MASTER METER?**

A. Most of the time the City does provide 35 psi to the master meter. However, the City explicitly agreed to provide water pressure, at WBMUD's master meters, sufficient under normal operating conditions, to provide 35 psi or greater pressure at WBMUD's retail customers' meters for all District customers in the Third Amendment to the Agreement Concerning Creation and Operation of WBMUD, dated June 1994, which is attached as DM-9. The City has failed and continues to fail to provide that level of pressure service.

**Q. HAS WBMUD CONSTRUCTED ANY OTHER WATER AND WASTEWATER FACILITIES OTHER THAN THE BOOSTER STATION?**

A. Definitely. In the early 1980's there was a public demand the growth and development pay for itself. When the Wells Branch Municipal Utility District was created, it was required to finance major water and wastewater extensions on behalf of the City of Austin to serve WBMUD. It was also required to design, construct, and finance all internal water, wastewater, and drainage facilities to serve WBMUD.

## V. WATER TREATMENT PLANT NO. 4 NOT USED AND USEFUL TO PETITIONERS

**Q. DO YOU BELIEVE THAT NORTH AUSTIN MUD NO. 1 WILL BENEFIT FROM CONSTRUCTION AND OPERATION OF THE CITY OF AUSTIN'S WATER TREATMENT PLANT NO. 4?**

A. Absolutely not. NAMD1 is over ninety percent built out based on developable land and the quantity of water needed to service the remaining development is negligible. As I previously said, municipal utility districts emerged in the Austin area in response to public demand that growth pay for itself. The City agreed and stated that once NAMD1 completed and paid its pro rata share of all projects identified in the Utility Construction Contract, the City would be obligated to ensure that adequate water distribution, wastewater collection, and treatment capacity would be reserved to serve all land within

the District. As I stated above, the City currently maintains adequate water supplies to serve the District at full build out without any City of Austin water treatment plant expansion. The City of Austin never represented that the District would be required to pay additional expenses once its financial obligation outlined in the Utility Construction Contract were completed. A copy of the Utility Construction Contract is attached as Exhibit DM-4.

Looking at Section 6.01 (on page 10) of that agreement, it says the City agrees that, upon completion of the Projects, the City shall be required to provide all water distribution and treatment capacity required to serve all land within NAMD1. All Projects have been completed, and NAMD1 has paid its full pro rata share for all City-used facilities. The District now expects the City to honor its contractual agreement to provide treatment capacity from the existing water plants. Water Treatment Plant 4 is being constructed to provide service to future growth for the Austin service area. NAMD1 has already paid under its contract for its water service. It is neither just nor reasonable for NAMD1 residents to pay for facilities to serve others.

In addition, NAMD1 has an inadequate pressure or water service quality problem not a quantity problem. The City is only addressing water quantity issues with the Water Treatment Plant No. 4 project, and nothing is being done to address pressure issues. Even with the completion of Water Treatment Plant No. 4, the City will continue to not provide adequate water pressure to the District to meet State standards. Regardless of the City's contractual commitment, NAMD1 has been financially responsible for all costs to restore water pressure without any assistance from the City of Austin.

**Q. THE CITY CLAIMS IT HAS TO BUILD THE $500 MILLION WATER TREATMENT PLANT NO. 4 SO THAT THE CITY CAN REPAIR THE DAVIS PLANT. WHAT SOUND ENGINEERING RULE OR CRITERIA NECESSITATES THE CONSTRUCTION OF A NEW WTP TO FACILITATE REPAIRS TO AN EXISTING PLANT?**

A. None. Repairs could be made at the Davis plant without building a whole new plant. What's even more frustrating, the City had a third plant, the Green Water Treatment Plant, which they chose to abandon. The City should have considered having back-up capacity for repairs before it chose to dismantle the Green Water Treatment Plant

The Davis plant has multiple treatment trains and units that can be taken down one at a time to facilitate systematic repairs to different parts of the plant. Temporary units and scheduling repairs during low-flow seasons could further facilitate systemic repairs to the Davis plant. This type of scheduled-repair of major treatment plants is standard industry practice, not the construction of an entirely separate plant.

Furthermore Water Treatment Plant 4 has an initial capacity of 50 MGD, while Davis has a capacity of 118 MGD. Clearly Water Treatment Plant No. 4 is not being constructed to allow complete shutdown of the Davis plant for repairs. Again, proper scheduling and project management could have easily negated the need for the City of Austin to waste $500 million on Water Treatment Plant No. 4 as a back-up facility.

**Q. IN MISS LUTES' TESTIMONY SHE STATED THAT THE CONSTRUCTION OF WATER TREATMENT PLANT 4 WOULD MINIMIZE RISK TO CITY OF AUSTIN TREATMENT FACILITIES DUE TO A POTENTIAL FAILURE AT TOM MILLER DAM, US DEPARTMENT OF HOMELAND SECURITY CONCERNS AS WELL AS FROM CONTAMINATION FROM TRUCK CONTENT SPILLS ON PENNYBACKER BRIDGE. DO YOU HAVE ANY OPINION WITH RESPECT O THOSE CONCERNS?**

A. Ms. Lutes and the City of Austin have, in the past, identified catastrophic failures that I consider to be somewhat "sky is falling" concerns, which might be possible but are

highly improbably. Certainly Ms. Lutes does not suggest that Water Treatment Plant 4 is being constructed primarily as a contingency plan in the event that a truck containing some kind of contaminating materials would plunge into Lake Austin from the Pennybacker Bridge on Loop 360 or that the Tom Miller Dam would suddenly fail. Certainly these things could happen, but Mansfield Dam could fail as well and perhaps we should consider building water supply facilities even further upstream. In a memo to me from Mr. Bart Jennings of the City of Austin dated May 10, 2004, which is attached as Exhibit DM-10, Mr. Jennings stated that the City could not consider restoring the chlorine residual in Martin Hill Reservoir as a means of correcting the pressure problem because he was concerned about terrorist activity and the additional security measures that would be required. There is no doubt that catastrophic events could occur, but other more cost effective immediate response measures should already be in place. I am not unfamiliar with these types of City arguments.

**Q. DO YOU BELIEVE THAT WBMUD WILL BENEFIT FROM CONSTRUCTION AND OPERATION OF THE CITY OF AUSTIN'S WATER TREATMENT PLANT NO. 4?**

A. No. The Wells Branch District is essentially built out and the City has sufficient water supplies to serve WBMUD. WBMUD has financed all facilities required by the City of Austin, both internal and external, and should not be obligated to finance facilities to support the growth and expansion of the City of Austin system for future growth. WBMUD currently receives inadequate water pressure from the City of Austin, and the City has never addressed that problem. However, the City's Water Treatment Plant No. 4 project will not benefit WBMUD in any way and will not relieve the current water pressure problems. WBMUD has contractually paid for and supported its own growth and impact on the City of Austin system, and WBMUD taxpayers should not be required to pay for Austin's future growth.

## VI. CONCLUSION

**Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

A. For the time being. The City of Austin continues to slowly provide responses to discovery requests. Additional discovery through deposition may occur between now and the hearing on the merits. I reserve the right to amend, modify, or supplement my testimony if additional data becomes available.

# Murfee Engineering Company, Inc.

## DAVID MALISH, P.E.

**CURRENT POSITION:**

Vice President, Murfee Engineering Company, Inc.

**EDUCATION:**

Bachelor of Science, Civil Engineering (1973)
University of Texas at Austin

Master of Science, Environmental Health Engineering (1975)
University of Texas at Austin

**REGISTRATIONS:**

Registered Professional Engineer – Texas #47757
Registered Professional Engineer – New Mexico #13018
Registered Professional Engineer – Mississippi #15012
Registered Professional Engineer – Colorado #36007
Registered Professional Engineer – Georgia #027249
Registered Professional Engineer – Alabama #27245

**PROFESSIONAL AFFILIATIONS:**

Member, National Society of Professional Engineers
Member, American Society of Civil Engineers
City of Austin Water and Wastewater Commission (1990-1994)
Member, Water Environment Federation
Member, American Water Works Association
Member, Austin Contractors and Engineers Association
Member, Texas Water Conservation Association

**BRIEF LIST OF WATER AND WASTEWATER EXPERIENCE:**

- Project Director for the Windermere Wastewater Treatment Plant and expansion.
- Project Director for the Forest Creek Wastewater Treatment Facility.
- Design engineer responsible for the preparation of plans for the Cottonwood Wastewater Treatment Plant (MBR).
- Design engineer for Plaza on the Lake Wastewater Treatment Plant.
- Project Director for the preparation and processing of twelve wastewater permit applications, amendments and renewals.
- Recently prepared designs for two water pressure booster stations for the North Austin MUD No. 1.
- Responsible for the preparation of detailed design and specifications for improvements to the 8,000 gpm Travis County MUD #4 surface water intake structure.
- Project director and primary design engineer for the reconstruction of the Rattan Creek Lift Station and force main.

- Responsible for the design of the 250,000 gallon elevated Travis County WCID #20 storage tank along Bee Cave Road, Travis County, Texas.
- Project Director for the redesign/relocation of the Lake Creek Lift Station.
- Responsible for the design of the 400,000 gallon Lower Colorado River Authority (LCRA) elevated storage tank along Bee Cave Road, Travis County, Texas.
- Project Director for the design of the 800,000 gallon per day Travis County WCID #20 surface water treatment plant in Travis County, Texas as well as a 1.0 MGD expansion to that facility.
- District engineer for North Austin MUD No. 1 1987 to present.
- Responsible for the design of the groundwater production and treatment facilities for the New Mexico Border Crossing facilities in Dona Ana County, New Mexico.
- Developed water and sewer master plan for continued expansion of the Wells Branch Municipal Utility District System in Travis and Williamson County, Texas. This work included establishing a water model for service predictions, system expansion requirements, and diagnosing system deficiencies.
- Developed water and wastewater master plan for continued expansion of the North Austin Municipal Utility District system in Travis and Williamson County, Texas. This work included establishing a water model for service predictions, system expansion requests, and diagnosing system deficiencies.
- Project Director for the design of the 520 gpm surface water intake structure and expansion for the Travis County WCID #20 Development in Austin, Texas.
- Design Engineer for 0.1 MGD South Barton Creek Wastewater Treatment Plant.
- Design engineer for three Carizo-Wilcox potable water supply wells in Lee County, Texas.
- Design Engineer for two LCRA water supply wells in Bastrop County.

**BRIEF LIST OF WATER AND WASTEWATER EXPERIENCE:**

- North Austin Municipal Utility District No. 1
- Wells Branch Municipal Utility District
- Sunfield Municipal Utility District (1, 2, 3, and 4)
- Travis County WCID No. 20
- Senna Hills MUD

**ENGINEERING WORK HISTORY:**

| | |
|---|---|
| Summer 1973 | Design Engineer in Training<br>Freese & Nichols, Inc.<br>Fort Worth, Texas |
| 1975 – 1978 | Research Engineer in Training<br>Radian Corporation<br>Austin, Texas |
| 1978 – 1982 | Research and Design Engineer<br>SumX Corporation<br>Austin, Texas |
| 1982 – Present | Vice President – Design Engineer<br>Murfee Engineering Company, Inc.<br>Austin, Texas |

# City of Austin

Founded by Congress, Republic of Texas, 1839
Municipal Building, Eighth at Colorado, P.O. Box 1088, Austin, Texas 78767 Telephone 512/499-2000


May 1, 1996

Ms. Sharlene N. Collins
North Austin Municipal Utility District
600 Congress Avenue #2600
Austin, Texas 78701-3288

Subject: City Water Service to North Austin Municipal Utility District No. 1

Dear Ms. Collins:

A copy of your letter dated April 19, 1996 to City Manager Jesus Garza, concerning a developing water pressure problem in the District has been forwarded to my office for a response.

In regard to the concern that the Martin Hill Reservoir would have its operating level lowered to 980 feet which in turn would lower water pressure to North Austin Municipal Utility District (MUD), that information is not correct. Reservoir and Pumping operations are under the direction of Mr. George Greene, P.E., Water and Wastewater Utility, and he has confirmed that no one from the District's Management Company or the District's Engineering firm had contacted him for information on the operating ranges for Martin Hill Reservoir.

In order to share information with the MUD Engineer on reservoir operations and for the Utility to learn what problems are occurring inside the MUD boundary, a meeting was held April 30, 1996. This meeting resulted in an agreement that both sides needed additional information, which will be obtained by the MUD Engineer on the water pressure problems that are occurring inside the District, when they started, what is the pressure drop, and how does that correspond to Utility Reservoir levels. The Utility will be sharing information with the District Engineer regarding a major engineering study of the Northwest "A" water pressure zone by the firm of Espey Huston and Associates. This study which is just beginning will assist the Utility in determining what are the needs of this water service area and how service levels can be maintained or improved as the area continues to grow. The District Engineer and the Utility staff will continue to work on identifying the specifics of the problem and solutions for both the District and City customers in this area.

The results of this study which will provide the answers to long term water pressure and service issues will be shared with the North Austin MUD and the other districts in this water service zone as the study is completed. We will

continue to work with your District Engineer in the meantime to ensure that the Utility is meeting the provisions of the Consent Agreement and providing a quality level of water service for North Austin MUD. If you have further questions, please call Mr. Mike Erdmann at 322-2876.

Sincerely,

Randy J. Goss, P.E., Director
Water and Wastewater Utility

RJG:me

xc: Jesus Garza, City Manager
Jim Smith, Assistant City Manager
Mike Erdmann, Wholesale Services Manager
John Tresnicky, Assistant City Attorney
George Greene, P.E., Pumping Division Manager

94002.129

FILE

**INTERLOCAL AGREEMENT REGARDING WATER AND WASTEWATER SERVICE TO JPI TRACT**

THE STATE OF TEXAS §
§ KNOW ALL BY THESE PRESENTS:
COUNTY OF WILLIAMSON §

**THIS AGREEMENT** is entered into between the City of Austin, Texas, a Texas home rule city (the "City"); North Austin Municipal Utility District No. 1 ("NAMUD") and Springwoods Municipal Utility District ("Springwoods"), both of which are conservation and reclamation districts created and operating under the provisions of Article XVI, Sec. 59 of the Texas Constitution and Chapters 49 and 54, Texas Water Code; and, for purposes of evidencing its joinder and consent to the provisions hereof, Jefferson Lake Creek, L.P. ("JPI"), a Texas limited partnership.

**WHEREAS,** JPI has contracted to purchase approximately 110 acres of land (the "JPI Tract"), which includes approximately 35 acres located within the boundaries of NAMUD, approximately 16 acres located within the boundaries of Springwoods, and approximately 58 acres located outside of the boundaries of NAMUD and Springwoods and within the retail service area of the City, all as more particularly shown on the attached Exhibit A; and

**WHEREAS,** JPI wishes to obtain 1100 living unit equivalents of water and wastewater service for a proposed multi-family development proposed to be constructed on the JPI Tract (the "Project") and has requested that the water and wastewater utility services to the Project be provided by a single retail utility service provider; and

**WHEREAS,** the City does not currently have water or wastewater facilities in the proximity of the JPI Tract that would be capable of providing the service requested, but desires to provide the requested retail water and wastewater service to the Project; and

**WHEREAS,** Springwoods does not have water or wastewater facilities in the proximity of the JPI Tract that would be capable of providing the service requested, and is willing to consent to the City providing the requested retail water and wastewater service to the Project; and

**WHEREAS,** NAMUD, which receives wholesale water and wastewater services from the City, has existing 15, 18 and 30-inch wastewater lines and an existing 16-inch Northwest B Pressure Zone water line in the proximity of the JPI Tract, as shown on Exhibit A, which existing lines are connected to the City's water and wastewater systems, and is willing to provide pass-through water and wastewater services to the City for the JPI Tract on the terms and conditions of this Agreement and to consent to the City providing retail water and wastewater services to the entirety of the JPI Tract; and

**WHEREAS,** the City, NAMUD and Springwoods desire to set forth in writing the terms and conditions upon which pass-through water and wastewater service will be provided by NAMUD to

the City for the JPI Tract and the City will provide retail water and wastewater services to the entirety of the JPI Tract, and JPI wishes to acknowledge and consent to such terms and conditions;

**NOW, THEREFORE,** in consideration of the foregoing premises and the mutual promises and agreements of the parties contained in this Agreement, the parties agree as follows:

## I.
## PROPERTY AND SERVICE

**1.01 Description of JPI Tract and the Project.** Unless otherwise agreed by written amendment of this Agreement signed by all of the parties, the service to be provided under this Agreement will be limited to the JPI Tract. The parties acknowledge that the JPI Tract will be developed in phases, as shown on Exhibit A.

**1.02 Consent by Springwoods to City Service.** Springwoods consents to the City's providing retail water and wastewater service to the portion of the JPI Tract that is located within the boundaries of Springwoods.

**1.03 Consent by NAMUD to City Service.** Subject to the terms of this Agreement, NAMUD consents to the City's providing retail water and wastewater service to the portion of the JPI Tract that is located within the boundaries of NAMUD.

**1.04 NAMUD Agreement to Provide Pass-Through Service; Definition of LUE.** Subject to the terms of this Agreement, NAMUD agrees to provide and to maintain the ability to provide up to1100 LUEs of pass-through water and wastewater service to the City for the JPI Tract. As used herein, the term "Living Unit Equivalent" or "LUE" means one single-family residential unit, or its equivalent calculated at the rate of 700 gallons of potable water per day and 350 gallons of wastewater per day, based on a 30-day average.

**1.05 City Agreement to Provide Retail Service.** The City agrees to provide and to maintain the ability to provide up to 1100 LUEs of retail water and wastewater services to the JPI Tract in accordance with the terms of this Agreement. Service to the JPI Tract will be provided in accordance with, and will be subject to, all applicable City rules, ordinances and policies applicable to City retail water and wastewater services, including, but not limited to, the City's conservation ordinances. Services to the JPI Tract may be curtailed on the same basis as services may be curtailed to any other City retail customer under applicable City ordinances and policies.

## II.
## WATER CAPACITY REQUIRED AND CAPACITY PAYMENT

**2.01 Water Capacity Required.** JPI requires 1,430 gallons per minute ("gpm") of peak-day domestic water service for the Project, together with 3,500 gpm of fire flow water service. 323 LUEs of water service are required for the portion of the Project located within the boundaries of NAMUD and an additional 777 LUEs of water service are required for the portion of the Project located outside of NAMUD.

**2.02 Temporary Capacity Payment.** NAMUD acknowledges that the City proposes to convert the existing Parmer Lane Northwest A Pressure Zone 24-inch water main (the "Parmer Line") to a Northwest B Pressure Zone water main within five years of the date of this Agreement, and that, upon this conversion, the Parmer Line will be capable of providing retail City water service directly to the entirety of the JPI Tract and pass-through water service to the JPI Tract under this Agreement will no longer be required. Accordingly, NAMUD's engineer has calculated the expense to NAMUD of operating and maintaining the services and facilities required to provide pass-through service for portion of the JPI Tract located outside the boundaries of NAMUD and of paying a prorata portion of the cost of the facilities required for such service for the estimated period of temporary pass-through water service, which calculation is set forth on the attached Exhibit B. In accordance with Section 49.215 of the Texas Water Code, JPI agrees to pay the sum of $35,825 to NAMUD for the purchase of the water capacity and related operation and maintenance expense required for NAMUD to provide temporary pass-through water service to the portion of the JPI Tract located outside the boundaries of NAMUD and , in consideration of such payment, NAMUD agrees to sell temporary water capacity for the Project to JPI on the terms of this Agreement.

**2.03 NAMUD Commitment to Provide Temporary Pass-Through Water Service.** Subject to the terms and conditions of this Agreement, NAMUD agrees to permit the connection of the entirety of the JPI Tract to the NAMUD water system as described in Section 2.04 and commits to provide temporary pass-through water service to the JPI Tract, as provided in this Agreement. Unless otherwise agreed by the parties, the pass-through service provided by NAMUD for the Project will be limited to a maximum of 1100 LUEs. The City acknowledges that NAMUD's ability to provide pass-through water service under this Agreement is contingent upon NAMUD's continued receipt of wholesale water supply from the City.

**2.04 Manner of Connection.** The JPI Tract will be connected to the NAMUD System through JPI's construction of the water facilities more particularly described on Exhibit C ("Water Connecting Facilities"). Upon completion of the Water Connecting Facilities, the Water Connecting Facilities will be dedicated to and owned, operated and maintained by the City.

**2.05 Master Meter for Temporary Pass-Through Water Service.** Water provided to the JPI Tract will be measured by a master meter of a size, type and design and at a location approved by the City and NAMUD. The master water meter will be provided by the City, at the City's expense. The meter vault and appurtenances will be constructed by JPI at the point of connection between the NAMUD water system and the facilities serving the JPI Tract. The master meter will be installed by JPI, at JPI's expense, within a dedicated easement or public right-of-way.

During the period that temporary pass-through water service is being provided to the City under this Agreement, the City will operate and maintain the master meter, meter vault and appurtenances at its expense, including calibration of the master meter at least once every 12 months. The City will calibrate the master meter more frequently than every 12 months, if requested to do so by NAMUD, but such calibration will be at NAMUD's expense. The City will give NAMUD at least 48 hours' prior notice prior to calibrating the master meter, and will provide a copy of the certified calibration results to NAMUD promptly upon receipt. No calibration will be considered valid unless this notice is given and the results provided to NAMUD. If the master meter registers

not more than two percent above or below the test result, it will be considered accurate. If the master meter fails to register accurately, the amount of water furnished will be estimated by using the water usage for a corresponding number of days based on data from the most recent billing cycle in which the meter was known to be registering accurately or, in the alternative, the City and NAMUD may agree on another suitable method for calculating the water usage during the period of meter failure.

The master meter will be read by the City at least monthly, on the same date that the master water meters that measure the wholesale water received by NAMUD from the City are read, and the amount of water measured by the master meter will be deducted from the total quantity of water for which NAMUD is billed by the City on a monthly basis, and will also be deducted from the total quantity of water from which NAMUD's wastewater winter averages are determined.

## III.
## WASTEWATER CAPACITY REQUIRED AND CAPACITY PAYMENT

**3.01 Wastewater Capacity Required.** JPI requires 1100 LUEs of wastewater service for the Project, of which 323 LUEs are required for the portion of the Project located within the boundaries of NAMUD. An additional 777 LUEs are required for the remainder of the JPI Tract.

**3.02 Capacity Payment.** NAMUD's engineer has calculated the expense to NAMUD of operating and maintaining the services and facilities required to provide pass-through wastewater service for portion of the JPI Tract located outside the boundaries of NAMUD and a prorata portion of the cost of the facilities required for such service, including the possible cost of construction of a relief line, which calculation is set forth on the attached Exhibit D. In accordance with Section 49.215 of the Texas Water Code, JPI agrees to pay the sum of $52,423 to NAMUD for the purchase of the wastewater capacity and related operation and maintenance cost required for NAMUD to provide pass-through wastewater service to the portion of the JPI Tract located outside the boundaries of NAMUD, and, in consideration of such payment, NAMUD agrees to sell wastewater capacity for the Project to JPI on the terms of this Agreement.

**3.03 NAMUD Commitment to Provide Pass-Through Wastewater Service.** Subject to the terms and conditions of this Agreement, NAMUD agrees to permit the connection of the entirety of the JPI Tract to the NAMUD wastewater system and commits to provide pass-through wastewater service to the JPI Tract as provided in this Agreement. Unless otherwise agreed by the parties, the pass-through wastewater service provided by NAMUD for the Project will be limited to a maximum of 1100 LUEs.

**3.04 Manner of Connection.** The JPI Tract will be connected to the NAMUD wastewater system through JPI's construction of the wastewater facilities, as more particularly described on Exhibit E ("Wastewater Connecting Facilities"). Upon completion of the Wastewater Connecting Facilities, the Wastewater Connecting Facilities will be dedicated to and owned, operated and maintained by the City. The JPI Tract is specifically prohibited from connecting to any portion of the District wastewater facilities located upstream of manhole no. 6 at station 22 + 96.15 on the

wastewater utility plans for North Austin MUD No. 1 PH 13A, prepared by Carlson & Dippel, Inc. dated July 1984.

## IV.
## FEES AND CHARGES

**4.01 Capital Recovery Fees.** The parties acknowledge that NAMUD and the City are currently discussing the applicability of City capital recovery fees to customers located within NAMUD and that such applicability has not yet been agreed upon between the City and NAMUD. If it is determined that City capital recovery fees are not applicable to connections within NAMUD, then JPI will not be required to pay City capital recovery fees for customer meters located within NAMUD. JPI will be required to pay City capital recovery fees for customer meters located outside NAMUD. JPI, NAMUD and the City agree that JPI will pay capital recovery fees to the City for its customer connections located within NAMUD prior to a resolution of this issue by NAMUD and the City in order to proceed with the Project without delay, but any such payment by JPI will not be construed to be an indication or admission by NAMUD that any customers within NAMUD's boundaries are currently obligated to pay City capital recovery fees. If it is determined by the City and NAMUD that capital recovery fees were paid for service units within NAMUD that were exempt, the City will refund the capital recovery fees applicable to such exempt service units within 60 days of the date of such determination. The water and wastewater capital recovery fees payable by JPI will be the City's water and wastewater capital recovery fee per service unit in effect at the time the City issues a tap permit authorizing new service units of development within the JPI Tract to be connected for retail service.

**4.02 Water and Wastewater Billings.** Customers within the JPI Tract will be considered City retail water and wastewater customers for all purposes. The City will generate retail water and wastewater billings for the services provided to each customer for each monthly billing period, and will be solely responsible for collecting its billings from the customers. The City may disconnect water and/or wastewater services to any customer within the JPI Tract in the event of non-payment, in accordance with the City's standard policies and ordinances.

**4.03 Other Fees.** Except as otherwise set forth in this Agreement, JPI will be required to pay all applicable City, Springwoods and NAMUD inspection fees, plan review fees and other fees and charges for services, labor and materials provided by the City, Springwoods and NAMUD, respectively, in aid of the provision of services as contemplated under this Agreement.

## V.
## Connections; Construction

**5.01 Manner of Connection.** The internal water and wastewater facilities constructed to serve the JPI Tract (the "Internal Facilities") will be connected to the NAMUD water and wastewater facilities through JPI's construction of the Water Connecting Facilities shown on Exhibit C, including a master water meter, meter vault and appurtenances, and the Wastewater Connecting Facilities shown on Exhibit E (collectively, the "Interconnect Facilities"). The Interconnect Facilities and Internal Facilities will be constructed by JPI in compliance with

applicable regulations and construction standards of NAMUD, the City and the TNRCC. If there is any conflict between these standards and specifications, the more stringent standards and specifications will apply.

**5.02 Approval of Plans and Specifications.** Before the commencement of construction, JPI must prepare and submit to the City and NAMUD detailed plans and specifications for the Interconnect Facilities and Internal Facilities. Review and approval of the plans and specifications by the City and NAMUD and all other agencies of relevant jurisdiction is required before the commencement of construction of the Interconnect Facilities or the Internal Facilities.

**5.03 Easements.** The Interconnect Facilities and all Internal Facilities and appurtenances within the JPI Tract must be constructed within public rights-of-way or easements dedicated to the City that are of standard dimensions and legally sufficient to allow for the lawful construction, operation, maintenance, upgrade, repair, and removal of such facilities and adequate ingress and egress for such purposes. The form and substance of all easements for the Interconnect Facilities and the Internal Facilities are subject to review and approval by the City Attorney of the City or his designee before execution or filing in the Real Property Records.

**5.04 Inspection of Interconnect Facilities and Internal Facilities Within JPI Tract.** NAMUD and the City may inspect the Interconnect Facilities as well as the Internal Facilities constructed within the JPI Tract to ensure their construction in accordance with the requirements of this Agreement and applicable regulations and construction standards of NAMUD, the City and TNRCC.

**5.05 Ownership, Operation and Maintenance of Internal Facilities.** JPI will be required to dedicate the Interconnect Facilities and the Internal Facilities to the City for operation and maintenance concurrently with the inspection and final acceptance by the City.

**5.06 Access to Interconnect Facilities.** Although the Interconnect Facilities shall be dedicated to the City by JPI for operation and maintenance, NAMUD will have access to and the right to inspect the Interconnect Facilities, as well as the master meter and appurtenances, at all times during the term of this Agreement.

## VI.
## GENERAL PROVISIONS

**6.01 Authority.** This Agreement is made under the authority conferred in V.T.C.A. Local Government Code, Section 402.001 and V.T.C.A. Water Code, Section 54.218.

**6.02 Term.** This Agreement will be effective from and after the date of execution hereof by all parties and will expire concurrently with the expiration of the "Agreement Concerning Creation and Operation of North Austin Municipal Utility District No. 1", as amended.

**6.03 Severability.** If any word, phrase, clause, sentence, paragraph, section or other portion of this Agreement is held to be invalid for any reason by a court or agency of competent

jurisdiction, the remainder of this Agreement will not be affected thereby and this Agreement will be construed as if the invalid portion had never been contained herein. The provisions of this Agreement are expressly deemed severable for this purpose.

**6.04 Payments from Current Revenues.** Any payments required to be made by a governmental entity hereunder will be payable from current revenues or other funds lawfully available for such purpose.

**6.05 Cooperation.** The parties agree to cooperate at all times in good faith to effectuate the purposes and intent of this Agreement.

**6.06 Entire Agreement.** This Agreement contains the entire agreement of the parties regarding the subject matter and supersedes all prior or contemporaneous understandings or representations, whether oral or written, respecting the subject matter. To the extent of any conflict between this Agreement and the Agreement Concerning Creation and Operation of North Austin Municipal Utility District No. 1, as amended, or the Agreement Concerning Creation and Operation of Springwoods Municipal Utility District, as amended (the "Consent Agreements") with regard to water and wastewater service, this Agreement will control during the term hereof; however, this Agreement does not affect any other provisions of the Consent Agreements, and the remaining provisions of the Consent Agreements, which are not in conflict with this Agreement, will continue to apply.

**6.07 Amendments.** Any amendment of this Agreement must be in writing and will be effective if signed by the authorized representatives of NAMUD and the City. An amendment will not require the joinder of Springwoods; however, the agreements of Springwoods under Sections 1.02, 1.04 or 1.05 may not be amended without Springwoods' written consent. Further, an amendment will not require the joinder of the JPI; however, the rights and obligations of the JPI under this Agreement may not be amended without the JPI's written consent.

**6.08 Effect of Force Majeure.** If any party is rendered unable by force majeure to carry out any of its obligations under this Agreement, whether in whole or in part, then the obligations of that party, to the extent affected by the force majeure, will be suspended during the continuance of the inability; provided, however, that due diligence is exercised to resume performance at the earliest practicable time. As soon as reasonably possible after the occurrence of the force majeure relied upon to suspend performance, the party whose contractual obligations are affected must give notice and the full particulars of the force majeure to the other party. The cause, as far as possible, will be remedied with all reasonable diligence. The term "force majeure" includes acts of God, strikes, lockouts or other industrial disturbances, criminal conduct or sabotage, acts of the public enemy, orders of the government of the United States or the State of Texas or any civil or military authority, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, hurricanes, storms, floods, washouts, droughts, arrests, restraints of government and civil disturbances, explosions, breakage, or accidents to equipment, pipelines, or canals, partial or complete failure of water supply or wastewater systems, and any other inabilities of either party, whether similar to those enumerated or otherwise, that are not within the control of the party claiming the inability and that could not have been avoided by the exercise of due diligence. The settlement of strikes, lockouts and other

industrial or labor disturbances will be entirely within the discretion of the party having the difficulty and the requirement that any force majeure be remedied with all reasonable dispatch will not require the settlement of strikes, lockouts or other industrial or labor disturbances by acceding to the demands of the opposing party if the settlement is unfavorable to it, in the judgment of the party having the difficulty. Force majeure will relieve NAMUD from liability to the City or any customer of the City for failure to provide water or wastewater service due to an inability covered by this Article. Force majeure will not relieve any customer from its obligation to make payment to the City for service provided under this Agreement.

**6.09 Assignment** The rights and obligations of the JPI arising under this Agreement will only be assignable if (i) the assignee assumes all of the obligations of the JPI hereunder in writing, and (ii) written notice of the assignment, together with a fully executed copy of the written assignment and assumption document, is furnished to the City, Springwoods and NAMUD.

**6.10 Applicable Law.** This Agreement will be construed in accordance with Texas law.

**6.11 Venue.** Venue for any action arising hereunder will be in Williamson County, Texas.

**6.12 Notices.** Notices to be provided hereunder will be sufficient if forwarded to the other party by hand-delivery or via U.S. Postal Service, postage prepaid, to the address of the other party shown below:

**NAMUD:**

North Austin Municipal Utility District No. 1
c/o Armbrust Brown & Davis, L.L.P.
100 Congress Avenue, Suite 1300
Austin, Texas 78701

**SPRINGWOODS:**

Springwoods Municipal Utility District
c/o Armbrust Brown & Davis, L.L.P.
100 Congress Avenue, Suite 1300
Austin, Texas 78701

**CITY OF AUSTIN:**

Director, City of Austin
Water and Wastewater Utility
625 E. 10th Street
P.O. Box 1088
Austin, Texas 76767

**6.13 Exhibits.** The following exhibits are attached to this Agreement and incorporated herein by reference:

| | |
|---|---|
| Exhibit A - | Description of the JPI Tract; District Boundaries, Existing Facilities and Phases of Project |
| Exhibit B - | Estimated Cost for Water Service |
| Exhibit C - | Water Connecting Facilities |
| Exhibit D- | Estimated Cost for Wastewater Service |
| Exhibit E - | Wastewater Connecting Facilities |

**6.14 Counterparts.** This Agreement may be executed simultaneously in two or more counterparts, each of which will be deemed an original, but all of which will constitute one and the same instrument. Each party represents and warrants that it has the full right, power and authority to execute this Agreement.

**6.15 Effective Date.** This Agreement will be effective from and after the date of due execution hereof by all parties.

**ATTEST:**

Betty L. Brown
DEPUTY City Clerk

CITY OF AUSTIN TEXAS TRAVIS COUNTY

**CITY OF AUSTIN:**

By: Marcia Conner
Name: Marcia Conner
Title: Assistant City Manager
Date: October 24, 2000

THE STATE OF TEXAS §
§
COUNTY OF TRAVIS §

**THIS INSTRUMENT** was acknowledged before me on this 24th day of October, 2000, by Marcia L. Conner, as ACM, of the City of Austin, a Texas municipal corporation, on behalf of said municipal corporation.

JOBETH L. PRENTICE
MY COMMISSION EXPIRES
September 18, 2004

JoBeth L. Prentice
Notary Public, State of Texas

Printed/Typed Name of Notary
My Commission Expires: _____

ATTEST:

Board Secretary

**NORTH AUSTIN MUNICIPAL UTILITY DISTRICT NO. 1:**

By: _____
Name: Terry Rippeda
Title: President
Date: Oct. 16, 2000

THE STATE OF TEXAS §
§
COUNTY OF TRAVIS §

**THIS INSTRUMENT** was acknowledged before me on this 16 day of October, 2000, by Terry Rippeda, President of the Board of Directors of North Austin Municipal Utility District No. 1, a conservation and reclamation district of the State of Texas, on behalf of said district.

Notary Public, State of Texas

SHARLENE N. COLLINS
NOTARY PUBLIC
State of Texas
Comm. Exp. 02-24-2004

75921.13/072000

**ATTEST:**

Board Secretary

**SPRINGWOODS MUNICIPAL UTILITY DISTRICT:**

By: _____
Name: William Saaranen
Title: President
Date: October 19, 2000

THE STATE OF TEXAS §
§
COUNTY OF TRAVIS §

**THIS INSTRUMENT** was acknowledged before me on this 19th day of October, 2000, by William Saaranen, President of the Board of Directors of Springwoods Municipal Utility District, a conservation and reclamation district of the State of Texas, on behalf of said district.

GREGG C. KRUMME
Notary Public, State of Texas
My Commission Expires
MAY 18, 2002

_____
Notary Public, State of Texas

_____
Printed/Typed Name of Notary
My Commission Expires: _____

75921.13/101600

11

**JOINDER AND CONSENT**

Jefferson Lake Creek, L.P., a Texas limited partnership, joins in this Agreement for purposes of expressing its joinder and consent to this Agreement. This Agreement will be binding on any future owner of the JPI Tract.

JEFFERSON LAKE CREEK, L.P., a Texas limited partnership

By: JPI Genpar Realty LLC, a Delaware limited liability company, Its General Partner

By: _____
Name: James W. Morgan, Jr.
Its: Assistant Vice President

Date: _____

STATE OF TEXAS §

COUNTY OF TRAVIS §

**THIS INSTRUMENT** was acknowledged before me the 18th day of OCTOBER, 2000, by JAMES MORGAN ASST. V.P., of JPI Genpar Realty LLC, a Delaware limited liability company, General Partner of Jefferson Lake Creek, L.P., a Texas limited partnership, on behalf of the company and the partnership.

_____
Notary Public, State of Texas

_____
Printed/Typed Name of Notary
My Commission Expires: _____

SHERRY GOODWIN
Notary Public, State of Texas
My Commission Exp. 08-10-2002

75921.13/101600

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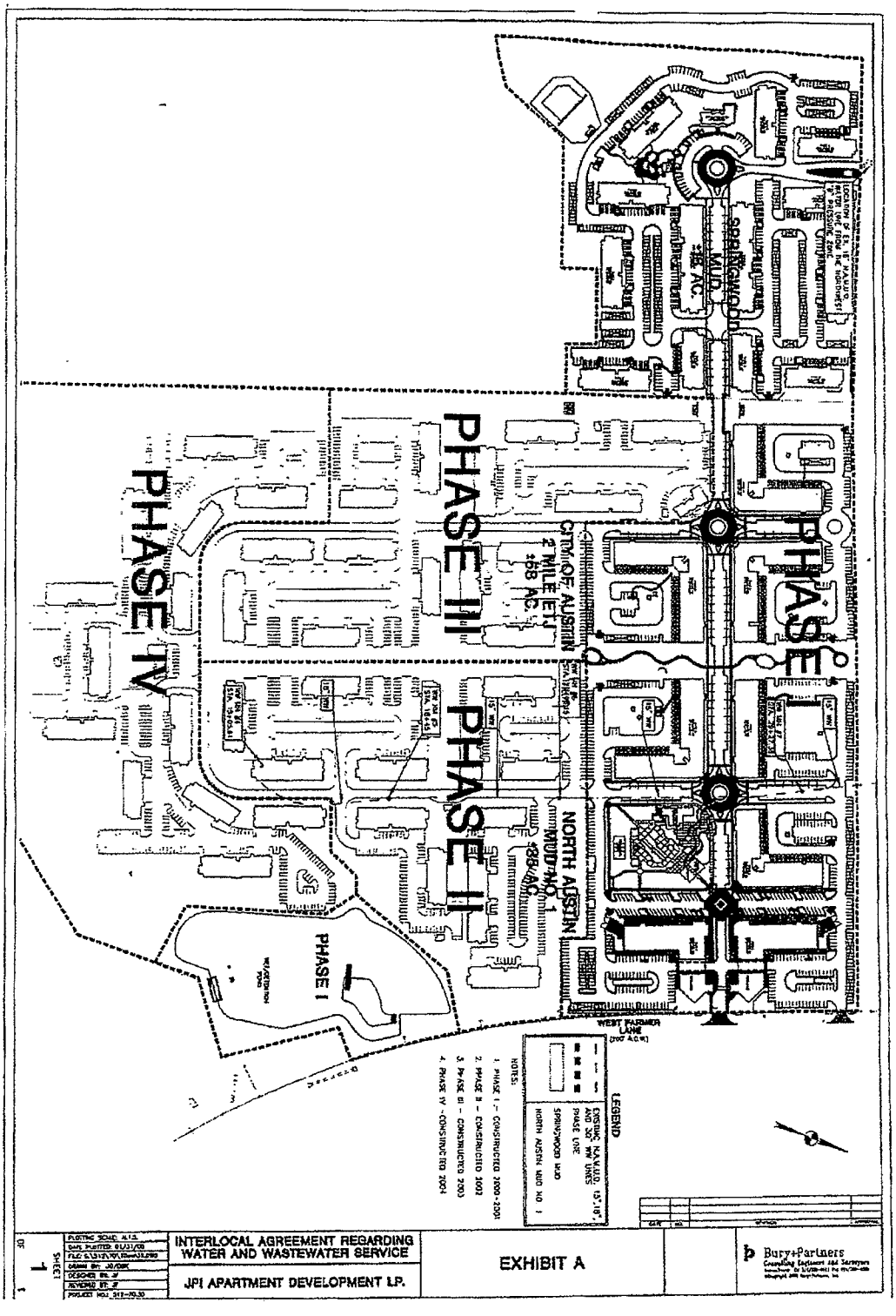

PHASE I
PHASE II
PHASE III
PHASE IV
SPRINGWOOD MUD
NORTH AUSTIN MUD NO. 1
CITY OF AUSTIN 2 MILE ETJ
WEST PALMER LANE
LEGEND
NOTES:
1. PHASE I - CONSTRUCTED 2000 - 2001
2. PHASE II - CONSTRUCTED 2002
3. PHASE III - CONSTRUCTED 2003
4. PHASE IV - CONSTRUCTED 2004
INTERLOCAL AGREEMENT REGARDING WATER AND WASTEWATER SERVICE
JPI APARTMENT DEVELOPMENT LP.
EXHIBIT A
Bury+Partners

# Exhibit B

## Estimated Cost for Water Service from NAMUD to Serve JPI Tract

**Out of District Portion Only**

| | | |
|---|---|---|
| Assumptions | | |
| Total Jefferson Center Utility Demand | | 1100 LUEs |
| Out of District Demand - Jefferson Center | | 777 LUEs |
| Period of Use (Water) | | 5 years |
| Design Life of Water Mains | | 40 years |
| Peak Hour Water Demand | | 2.2 gpm/LUE |
| Water Main Use & Estimated Cost | | |
| JPI Demand | | 1709 gpm |
| Water Main Capacity @ 5 fps | | |
| Pipe Diameter | | 16 in |
| Design Velocity | | 5 ft/s |
| Capacity | | 3133 gpm |
| Percent Use by JPI | | 54.56% |
| Estimated Replacement Cost of 16" Waterline (2000 dollars) | | |
| Unit Cost | $ | 60 /ft |
| Line Length | | 5100 ft |
| Line Cost | $ | 306,000 |
| Contingency @ 12% | $ | 36,720 |
| *Subtotal* | $ | 342,720 |
| Engineering, Surveying, Inspection @ 15% | $ | 51,408 |
| City Review, Inspection @ 5% | $ | 17,136 |
| *Subtotal* | $ | 411,264 |
| Bond Issue Cost @ 18% | $ | 74,028 |
| Total Replacement Cost | $ | 485,292 |
| JPI Prorata Share of Cost | | 6.82% |
| JPI Prorata Cost of Water Main Replacement | $ | 33,095 |
| Annual O&M Cost | $ | 1,000 |
| JPI Prorata Cost of Water Main O&M | $ | 546 |
| JPI Prorata Cost of Water | $ | 35,825 |

22 April 01

STATE OF TEXAS
DAVID A. MALISH
47757
REGISTERED
PROFESSIONAL ENGINEER

EXHIBIT B

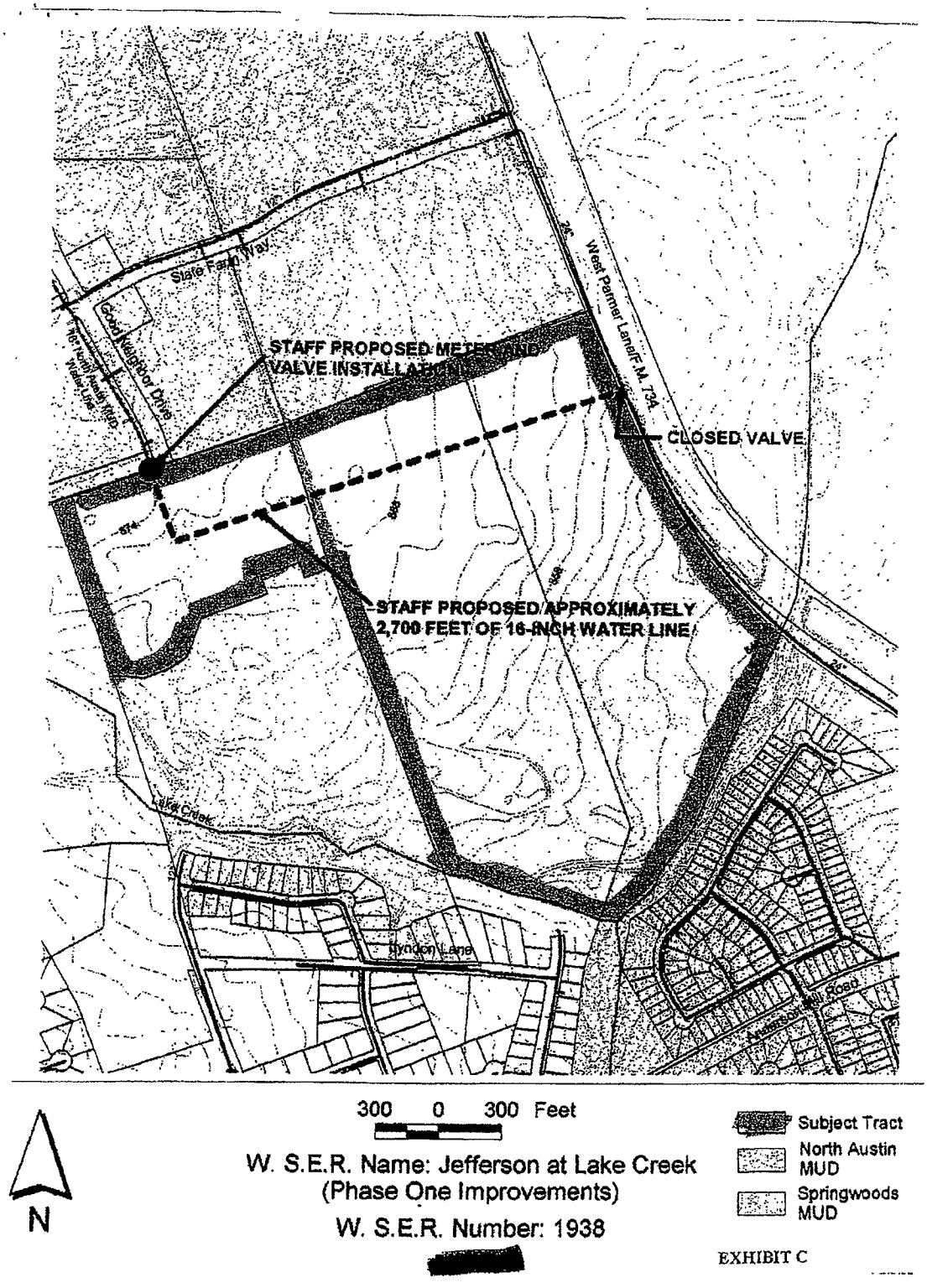

State Farm Way
Good Neighbor Drive
West Parmer Lane/F.M. 734
STAFF PROPOSED METER AND VALVE INSTALLATION
CLOSED VALVE
STAFF PROPOSED APPROXIMATELY 2,700 FEET OF 16-INCH WATER LINE
Lake Creek
Lyndon Lane
Anderson Mill Road
300 0 300 Feet
N
W. S.E.R. Name: Jefferson at Lake Creek
(Phase One Improvements)
W. S.E.R. Number: 1938
Subject Tract
North Austin MUD
Springwoods MUD

EXHIBIT C

# Exhibit D

## Estimated Cost for Wastewater Service from NAMUD to Serve JPI Tract

**Out of District Portion Only**

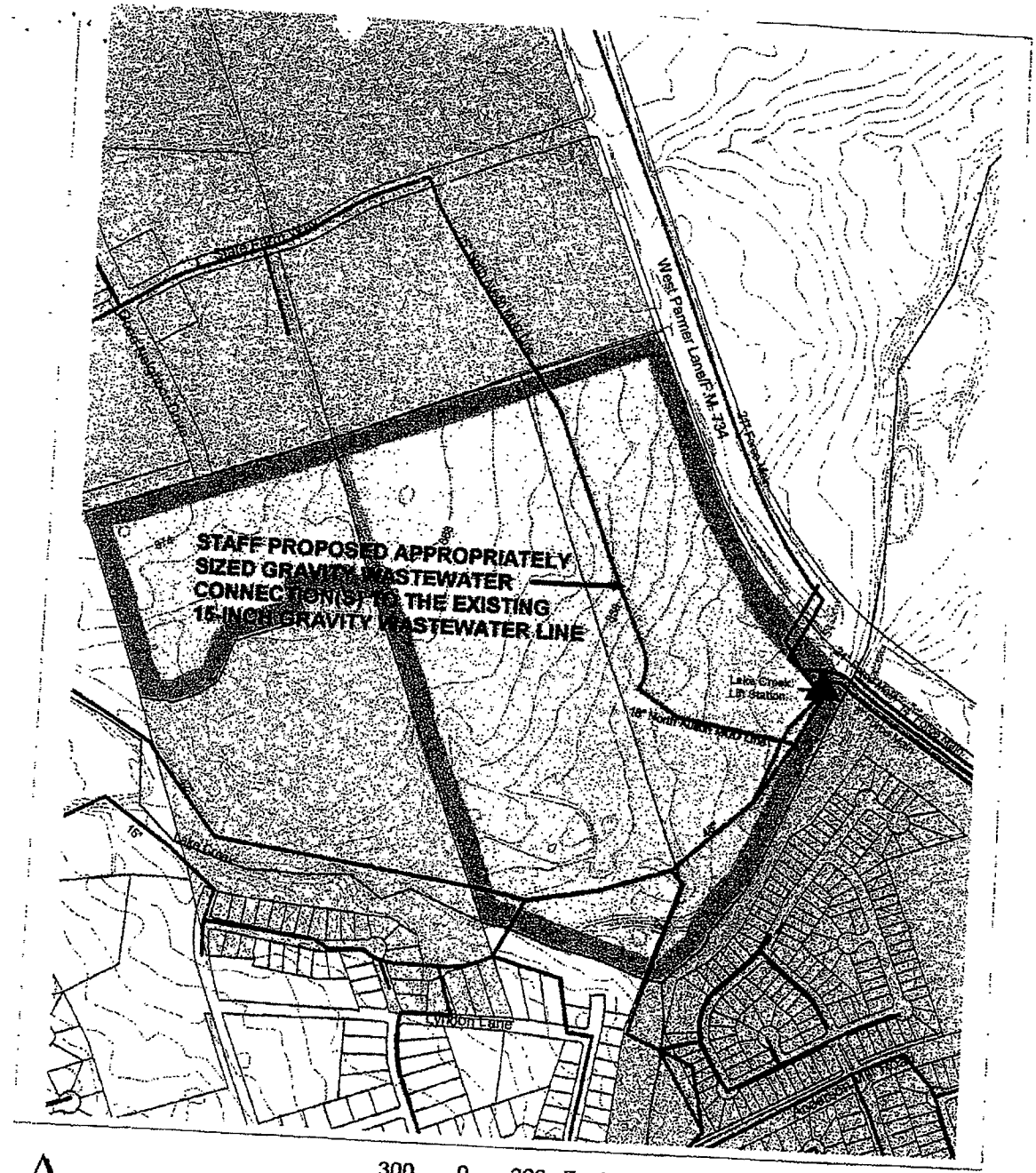
| Assumptions | |
|---|---|
| Total Jefferson Center Utility Demand | 1100 LUEs |
| Out of District Demand - Jefferson Center | 777 LUEs |
| Peak Wastewater Demand | 1.1 gpm/LUE |

| Wastewater Estimated Cost | | |
|---|---|---|
| JPI Shared Cost | $ | 21,574 |
| Contingency @ 12% | $ | 2,589 |
| *Subtotal* | $ | 24,163 |
| Engineering, Surveying, Inspection @ 15% | $ | 3,624 |
| City Review, Inspection @ 5% | $ | 1,208 |
| *Subtotal* | $ | 28,995 |
| Bond Issue Cost @ 18% | $ | 5,219 |
| JPI Prorata Replacement Cost | $ | 34,214 |
| | | |
| Line Annual O&M Cost | $ | 1,000 |
| 20% Share (Average) over 10 years | $ | 2,000 |
| | | |
| At - Capacity Line Segment Parallel w/ 15" | $ | 12,060 |
| Contingency @ 12% | $ | 1,447 |
| *Subtotal* | $ | 13,507 |
| Engineering, Surveying, Inspection @ 15% | $ | 2,026 |
| City Review, Inspection @ 5% | $ | 675 |
| Total Replacement Cost | $ | 16,209 |
| | | |
| JPI Prorata Cost of Wastewater Lines | $ | 52,423 |

27 Apr '08

STATE OF TEXAS
DAVID A. MALISH
47757
REGISTERED
PROFESSIONAL ENGINEER

EXHIBIT D


STAFF PROPOSED APPROPRIATELY SIZED GRAVITY WASTEWATER CONNECTION(S) TO THE EXISTING 15-INCH GRAVITY WASTEWATER LINE
West Parmer Lane/F.M. 734
Lake Creek LS Station
Lyndon Lane
300 0 300 Feet
N
W.W. S.E.R. Name: Jefferson at Lake Creek (Revised)
W.W. S.E.R. Number: 1939
Subject Tract
North Austin MUD
Springwoods MUD
EXHIBIT E
Utility Development Services Plotted 3/6/2000

AGREEMENT CONCERNING CREATION AND OPERATION
OF
NORTH AUSTIN MUNICIPAL
UTILITY DISTRICT NO. 1

THE STATE OF TEXAS §

COUNTIES OF TRAVIS §
AND WILLIAMSON § KNOW ALL MEN BY THESE PRESENTS:

THIS AGREEMENT is made and entered into by and between the City of Austin, Texas (hereinafter referred to as the "City"), a municipal corporation situated in Travis County, Texas, acting herein by and through its undersigned duly authorized City Manager, as authorized by specific action of its City Council; North Austin Municipal Utility District No. 1 (hereinafter referred to as the "District"), a municipal utility district created on the 15th day of November, 1983, by order of the Texas Water Commission and operating pursuant to Chapter 54 of the Texas Water Code; and Milwood Joint Venture, Robinson Ranch, and Austin White Lime Company (hereinafter collectively referred to as "Milwood"), the holders of legal title to all of the land comprising the District, which consists of approximately 997 acres situated partially within Williamson County, Texas, and partially within Travis County, Texas, a portion of which lies within the City and a portion of which lies within the extraterritorial jurisdiction of the City.

For and in consideration of the premises and the mutual agreements, covenants, and conditions hereinafter set forth, the parties hereto hereby contract and agree as follows, to wit:

ARTICLE I

ISSUANCE OF BONDS BY THE DISTRICT

A. Bonds For District Facilities

1. The City has granted its unconditional consent to the creation of the District in accordance with the Water District Ordinance adopted by the City Council of the City on August 19, 1981, by Ordinance Number 810819-E, a true and correct copy of which is attached hereto as Exhibit "A" and incorporated herein by reference (the "Water District Ordinance"); subject, however, to a variance granting the District the bonding authority provided in the Water District Ordinance for Growth Area III. The terms and conditions of the Water District Ordinance are made a part of this Agreement for all purposes to the extent allowed by law. The District agrees that it shall only issue bonds and notes, including bond anticipation notes, in the manner provided by the Water District Ordinance and the rules and requirements of the Texas Water Commission. All bonds and notes of the District shall be approved by the City Council of the City prior to the

suance thereof; provided, however, that the authorization granted herein by the City of a principal amount (plus interest) of bonds proposed to be issued by the District shall be deemed to include the approval of bond anticipation notes not to exceed the amount of principal and interest of the bonds so authorized. It is specifically agreed that the District's bonds, when issued, shall be secured by a pledge of the District's taxes and revenues.

2. The parties hereto acknowledge and agree that this Agreement and the Water District Ordinance, as now in effect and hereafter amended, have the effect of restricting the general statutory purposes for which the District may issue bonds and notes. The parties further recognize and agree that neither this Agreement nor the Water District Ordinance otherwise restrict or limit the powers and authority of the District to acquire, own, operate and maintain water or wastewater systems, drainage facilities, recreational facilities, or any other systems, facilities, assets or properties of or serving the District. The District may use funds and assets from any other available, lawful source to provide for such acquisition, ownership, maintenance and operation, as well as to accomplish any purpose or to exercise any function, act, power or right authorized by law. Such funds and assets shall include, without limiting the generality of the foregoing, revenues from any of the systems, facilities, properties and assets of the District not otherwise committed for the payment of indebtedness of the District; maintenance taxes; loans, gifts, grants and donations from public or private sources; and revenues from any other source lawfully available to the District. Bonds and notes of the District may be issued for any purpose not specifically prohibited by this Agreement or the Water District Ordinance, subject to the provisions of the Texas Water Code and the rules and requirements of the Texas Water Commission.

B. Bonds for Special Facilities

1. To enable the City to supply water to the District and to receive and treat wastewater from the District in accordance with the provisions of Articles II and III hereof, the parties hereby acknowledge that major extensions and improvements to the City's existing water and sewer facilities shall be necessary. The parties agree that, subject to the approval of the Texas Water Commission, the necessary improvements and extensions shall be accomplished as more fully described and identified in the Utility Construction Contract (the "Preferred Contract") by and between the District and the City, a copy of which is attached hereto as Exhibit "B" and incorporated herein by reference. The parties further agree that, in the event the

approval of the Texas Water Commission to the oversizing of the facilities described in the Preferred Contract is not obtained, the District shall construct improvements and extensions to the City's system sized only as necessary to provide service to the District, and the District shall purchase capacity from the City's water and wastewater utility system for a purchase price equivalent to the difference between the cost of construction of the oversized facilities, as described in the Preferred Contract, and the cost of facilities sized only to serve the District. The parties hereto acknowledge and agree that the value to the City of the District's oversizing certain utility facilities as provided in the Preferred Contract, is equivalent to the value to the District of the capacity to be allocated to the District by the City from the City's water and sewer utility systems. The Preferred Contract shall be deemed approved by the City Council of the City simultaneously with the City's approval of this Agreement.

2. It is expressly acknowledged and agreed that the approval of the Texas Water Commission of facilities described in the Preferred Contract will be requested at the time a petition for creation of the District is presented to the Texas Department of Water Resources. The parties mutually covenant and agree to cooperate in making such modifications to the Preferred Contract as may be reasonably necessary in order to obtain the approval of the Texas Water Commission thereof. In the event that the Texas Water Commission does not approve the construction of the facilities described in the Preferred Contract, the parties covenant and agree to cooperate with each other in order to develop a utility construction proposal which will satisfy the requirements of the District and the City in order to provide service to the land within the District and which will be acceptable to the Texas Water Commission.

3. The term "Construction Contract", as hereinafter utilized in this Agreement, shall mean and refer to the Preferred Contract or any subsequent utility construction agreement between the City and the District which provides for the construction of the utility facilities and improvements necessary to serve the District, and which is approved by the Texas Water Commission.

4. It is expressly acknowledged that the "Project", as such is defined in the Construction Contract, shall include approach mains necessary to serve the District and that no additional City approval of such approach mains shall be required upon completion of the Project.

5. To finance the cost of acquiring and constructing the Project, the District is hereby authorized to issue bonds and bond anticipation notes, subject to the terms, conditions and

procedures set forth in the Construction Contract. The Project shall be constructed by the District in accordance with the provisions of the Construction Contract and, upon completion thereof, shall be dedicated to the City. Upon such dedication, all right, title and interest of the District in and to the Project shall vest in the City. The City agrees that, upon completion of the Project, adequate distribution capacity shall be reserved by the City to serve all land within the District.

ARTICLE II

WATER SUPPLY

A. At the times and in the manner requested by the District, the City agrees to sell and deliver to the District all water which may be reasonably required by inhabitants of the District for domestic and commercial purposes. The City agrees that water service to the District shall immediately, upon execution of this Agreement by the City, be made available to the District from the City's Jollyville Reservoir. All such water shall be supplied from the City's water distribution system, as extended by the District, to a point or points of delivery adjacent to the boundaries of the District, as designated by the District's engineer and approved by the City. The sale and furnishing of water to the District shall be nondiscriminatory and uniform with the policy or policies of the City relating to utilities inside the City's utility service area as established by Ordinance Number 810820-B, as now in effect or hereafter amended. Water supplied to the District pursuant to this Agreement shall be at the rate or rates established by the City for water supplied to water districts generally. The District specifically agrees that the supply of water to the District may be reasonably limited by the City on the same basis and to the same extent as the supply of water to any other customer within the City's service area. "Water", as used in this Article II, shall mean potable water meeting the requirements of the Texas Department of Health for human consumption and other domestic uses. The City agrees to use reasonable efforts to acquire and maintain a supply of water adequate to provide service to the District. This Agreement shall serve in lieu of an approved approach main request for water service under the City's approach main policy.

B. Metering equipment and related facilities, including a meter loop, a meter house or pit, and standard-type devices required for properly measuring the quantity of water delivered to the District, shall be installed at each point of delivery of water to the District. The District, at its expense, shall install and provide the meter loop and the meter house or pit. The City, at the District's expense, shall provide and install

the meter. The City, at its expense, shall operate and maintain the metering equipment and related facilities and shall calibrate the metering equipment upon request by the District; provided, however, that the cost of calibrating the metering equipment shall be borne by the District if requested more frequently than once every twelve (12) months. Any meter registering not more than two percent (2%) above or below the test result shall be deemed to be accurate. If any meter fails to register for any period, the amount of water furnished during such period shall be deemed to be the amount of water delivered during the corresponding period immediately preceding such failure, subject to reasonable adjustments for seasonal and climatic considerations, unless the City and the District otherwise agree. The metering equipment shall be read once each calendar month.

C. 1. Rates charged to customers of the District for water delivered pursuant to this Article II shall be set by the District and shall not be less than those normally charged by the City for comparable customers within the City, as established from time to time by the City Council of the City. It is agreed and understood that the District shall charge the surcharge provided in Article VII hereof in addition to such water service rates.

2. The City and the District agree that the District shall comply with the City's Capital Recovery Fee Ordinance, Ordinance Number 821216-H, as hereafter amended from time to time, and shall be entitled to any credits and offsets for construction of offsite facilities set forth therein.

D. The District's billing and payment procedures shall substantially conform with the procedures established by the City as set forth in the City of Austin Utility Service Regulations, as now in effect or hereafter amended; provided, however, that the District may vary such procedures if required by law and that the District and the City may enter into a contract providing that the City may handle billings for the District in such a manner and for such compensation as may be mutually agreeable.

## ARTICLE III

## SEWAGE TREATMENT

A. The City agrees to receive, treat, and dispose of all sewage which is collected by the District and delivered to a point or points of delivery into the City's sanitary sewer trunk line, as extended by the District. Said point or points of delivery shall be designated by the District's engineer and approved by the City. Sewage treatment and disposal services provided to the District shall be nondiscriminatory and uniform with the policy or policies established by the City Council of the City relating to utilities in the City's utility service

area, as established by Ordinance Number 810820-B, as now in effect or hereafter amended. Sewage received from the District and treated by the City pursuant to the terms of this Agreement shall be at the rate or rates established by the City for sewage received from water districts generally. The District specifically agrees that the treatment of sewage received from the District may be reasonably limited by the City on the same basis and to the same extent as the treatment of sewage received any other customer within the City's service area. The City agrees to use reasonable efforts to acquire and maintain sewage treatment capacity adequate to provide service to the District. This Agreement shall serve in lieu of an approved approach main request for sewer service under the City's approach main policy.

B. The District is authorized to contract with any firm, corporation, person or governmental entity for the temporary disposal of sewage until such time as the facilities contemplated hereunder have been constructed by the District. The reasonable cost and expense of such temporary sewage disposal shall be a bondable expense of the District to the extent permissible under the rules and regulations of the Texas Water Commission. No package treatment plant shall be used within the District on either a temporary or permanent basis.

C. 1. Rates charged to customers of the District for sanitary sewer service shall be set by the District and shall not be less than those normally charged by the City for comparable customers within the City, as established from time to time by the City Council of the City. It is agreed and understood that the District shall charge the surcharge provided in Article VII hereof in addition to such sanitary sewer service rates.

2. The City and the District agree that the District shall comply with the City's Capital Recovery Fee Ordinance, Ordinance Number 821216-H, as hereafter amended from time to time, and shall be entitled to any credits and offsets for construction of offsite facilities set forth therein.

D. The District's billing and payment procedures shall substantially conform with the procedures established by the City as set forth in the City of Austin Utility Service Regulations, as now in effect or hereafter amended; provided, however, that the District may vary such procedures if required by law and that the District and the City may enter into a contract providing that the City may handle the billings for the District in such a manner and for such compensation as may be mutually agreeable.

E. Industrial waste, if any, received by the District shall be processed in a manner consistent with the provisions of the City's Industrial Waste Ordinance, Ordinance Number 821209-F.

ARTICLE IV

OPERATION AND MAINTENANCE

A. The District shall operate and maintain the water and wastewater system located within the District, unless the City and the District enter into a contract for the City to operate the system in such manner and for such compensation as may be mutually agreeable. All water and wastewater connections within the District shall be inspected by the District for compliance with the requirements of the City and the requirements of the Texas Department of Water Resources. Water meters shall be purchased by the District from the City's Water and Wastewater Department at cost.

B. The District shall operate and maintain the park and recreational facilities located within the District to the extent permitted by applicable law; provided, however, that in the event it is ever determined by the Texas Water Commission or any court of competent jurisdiction that the District is incapable of legally operating and maintaining such facilities, the City may accept the parks and recreational facilities located within the District for operation and maintenance under a time schedule mutually acceptable to the District and the City, or, if an agreement is not reached between the City and the District, the District may convey such facilities to Milwood, its successors or assigns, pursuant to the terms and conditions of restrictive covenants which are to be imposed against the property situated within the District. In either event, the District shall thereafter have no further obligation with respect to the operation and maintenance of such facilities.

ARTICLE V

AREA OF AND LIMITATIONS ON SERVICE

Unless the prior approval of the City Council of the City is obtained, the District shall not: (1) construct or install water or wastewater lines or facilities to serve areas outside the District; (2) sell or deliver City water or wastewater service to areas outside the District; or (3) annex any additional lands to the District.

ARTICLE VI

LIMITATION ON LIABILITY

The City shall not be liable to Milwood, the District, or any customer of the District for any failure of the City to provide water or sewer service: (1) where such failure results from impairment of facilities, strikes or other conditions beyond the City's control, so long as the City uses reasonable efforts to promptly correct such condition or conditions, or (2) as otherwise provided in Articles II and III hereof.