

**GENERAL NOTES**

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER. APPROVAL OF THESE PLANS BY THE CITY OF AUSTIN DOES NOT REMOVE THESE RESPONSIBILITIES.  
 REVIEWED BY AUSTIN WATER APPLIES ONLY TO FACILITIES WITHIN PUBLIC STREETS OR PUBLIC UTILITY EASEMENTS. ALL OTHER WATER AND WASTEWATER FACILITIES INSIDE PRIVATE PROPERTY ARE UNDER THE JURISDICTION OF BUILDING INSPECTIONS.

FIRE DESIGN CODES	IFC 2015 WITH CITY OF AUSTIN LOCAL AMENDMENTS
FIRE FLOW DEMAND @ 20 PSI	3,000 GPM
INTENDED USE	MULTI-FAMILY RESIDENTIAL UNITS
CONSTRUCTION CLASSIFICATION	I-A
BUILDING FIRE AREA (S.F.)	73,755 SF
AUTOMATIC FIRE SPRINKLER SYSTEM TYPE (IF APPLICABLE)	NFPA 13
REDUCED FIRE FLOW DEMAND @ 20 PSI FOR SPRINKLER (IF APPLICABLE)	1,500 GPM
AFD FIRE HYDRANT FLOW TEST DATE	JULY 8TH, 2018
AFD FIRE HYDRANT FLOW TEST LOCATION	40 BLK EAST AVENUE
HIGH-RISE	YES
ALTERNATIVE METHOD OF COMPLIANCE AMOC (IF APPLICABLE)	N/A

**INSPECTION NOTES**

PLEASE CALL DEVELOPMENT SERVICES DEPARTMENT, SITE AND SUBDIVISION INSPECTION AT 512.974.6360 FOR ARRANGEMENTS FOR PAYMENT OF INSPECTION FEES AND JOB ASSIGNMENT FOR INSPECTION OF THE PUBLIC UTILITIES TO THIS SITE. INSPECTION FEES MUST BE PAID BEFORE ANY PRE-CONSTRUCTION MEETING CAN BE HELD.

**SERVICE EXTENSION REQUESTS**

**Alexa Turney**

**From:** AW SER  
**Sent:** Tuesday, June 5, 2018 9:43 AM  
**To:** Alexa Turney; AW SER  
**Cc:** Bailey Harrington; Lance Rosenfeld; Jill Tarleton  
**Subject:** RE: SER Inquiry - 44 East Ave.

Alexa,

Based on the information listed below, SERs for water and wastewater will not be required. The existing 12" (Project No. 66-0823) or 16" (Project No. 2007-0761) water mains and the existing 8" wastewater main in East Avenue will be able to support the proposed 1500 gpm fire demand, the 550 gpm peak hour water demand, and the 163.53 gpm wastewater PWWF.

Alberto Ramirez  
 Utility Development Services  
 Austin Water  
 512-972-0211

**From:** Alexa Turney <alex.turney@bigreddog.com>  
**Sent:** Monday, May 21, 2018 10:31 AM  
**To:** 'AW SER' <ser@austintexas.gov>  
**Cc:** Bailey Harrington <bailey.harrington@bigreddog.com>; Lance Rosenfeld <lance.rosenfeld@bigreddog.com>; Jill Tarleton <jill.tarleton@bigreddog.com>  
**Subject:** SER Inquiry - 44 East Ave.

Good Morning,

We are in the early stages of a proposed multifamily development located at 44 East Avenue in Austin, Texas and I am writing to see if an SER will be required for the project. The project details are as follows:

Project address - 44 East Avenue  
 Proposed Use - Multifamily + Restaurant  
 Proposed building size - 445,605 SF

**Water**  
 Anticipated Peak Hour Demand: 550 GPM  
 Anticipated Peak Day Demand: 325 GPM  
 Anticipated Fire Flow Requirement: 1,500 GPM

**Wastewater**  
 Anticipated Average Dry Weather Flow: 42.53 GPM  
 Anticipated Peak Dry Weather Flow: 163.17 GPM  
 Anticipated Peak Wet Weather Flow: 163.53 GPM

Please see the attached SER calculations for additional details. Feel free to contact me if you have any questions or need to require more information.

Thank you,

Alexa Turney, E.I.T. | BIG RED DOG | Graduate Engineer  
 Austin 512.669.5560 | Dallas 214.307.4767 | Houston 832.730.1901 | San Antonio 210.860.9224  
 Follow us: [web](#) | [blog](#) | [twitter](#) | [facebook](#) | [LinkedIn](#)

We want to hear from you! We strive to ensure that every client of BIG RED DOG is a Raving Fan of our company. We invite you to complete our Client Satisfaction Survey to share your feedback and thoughts on our performance. Your input will allow us to continuously improve your client experience.

**PROJECT INFORMATION**

GRID NUMBER:	J21
MAPSCO NUMBER:	615
AW INTERSECTION NUMBER:	451
BUILDING SIZE IN SQUARE FEET:	129,318 SF
BUILDING TYPE PER IFC:	I-A
BUILDING HEIGHT:	582 FT
AVAILABLE FIRE FLOW CALCS AT 20 PSI:	12,975 GPM
REQUIRED BUILDING FIRE FLOW PER IFC:	4,000 GPM
REDUCED FIRE FLOW PER % FIRE SPRINKLER REDUCTION:	1,500 GPM (62.5% REDUCTION FOR TYPE I-A BLDG)
*MINIMUM FIRE FLOW:	1,500 GPM
DOMESTIC WATER DEMAND:	650 GPM
WATER SUPPLY FIXTURE UNITS (WSFU):	5,000
DOMESTIC DEMAND CALCULATED PER THE WSFU:	675 GPM
AUSTIN WATER PRESSURE ZONE:	J21
STATIC WATER PRESSURE:	110 PSI
HIGHEST LOT SERVED:	N/A
LOWEST LOT SERVED:	N/A
IRRIGATION DEMAND:	10 GPM
8" FIRE LINE VELOCITY:	TBD
4" DOMESTIC LINE VELOCITY:	TBD

NOTE: LOTS WITH 65 PSI OR GREATER REQUIRE A PRV TO BE INSTALLED ON THE PROPERTY OWNERS SIDE OF THE DOMESTIC WATER METER.  
 \*ON MINIMUM FIRE FLOW, DESIGN ENGINEER MUST INCLUDE 1500 GALLONS PER MINUTE OR REDUCED FIRE FLOW AMOUNT, WHICHEVER IS GREATER.

**METER NOTICE:**  
 METER 1.5 INCHES AND LARGER MUST BE PURCHASED AND ORDERED 90 DAYS IN ADVANCE OF INSTALLATION.

METER(S) REQUIREMENT FOR PROJECT: DOMESTIC  
 ADDRESS: 44 EAST AVENUE  
 PROPOSED USE: MULTI-FAMILY  
 TYPE: COMPOUND  
 SIZE: 4" GPM: 3-600  
 SERVICE UNITS: 30

METER(S) REQUIREMENT FOR PROJECT: IRRIGATION  
 ADDRESS: 44 EAST AVENUE  
 PROPOSED USE: IRRIGATION  
 TYPE: POSITIVE DISPLACEMENT  
 SIZE: 3/4" GPM: 2-30  
 SERVICE UNITS: 1.5

RECLAIMED METER(S) REQUIREMENT FOR PROJECT: N/A  
 ADDRESS: N/A  
 PROPOSED USE: N/A  
 TYPE: N/A  
 SIZE: N/A GPM: N/A

AUSTIN FIRE DEPARTMENT - FIRE PREVENTION DIVISION  
 Engineering Services Section  
 One Texas Center, Ste 200 - 505 Barton Springs Road  
 Austin, Texas 78704  
 Telephone (512) 974-0160 - Facsimile (512) 974-0162

**Austin Fire Department Hydrant Flow Test Report**

TEST DATE:	7/8/18	COMPANY:	PREV
TIME:	7:45 HRS	OFFICER:	NOAC/GIL

**RESIDUAL HYDRANT**

MAP GRID#	HYDRANT#	PIPE INTERSECTION#	MAIN SIZE	AFD BOX#
J21	161763	6330	12	101

BLK#	DIRECTION	STREET NAME	TYPE
40		EAST	AVE

STATIC PRESSURE (PSI): 110      RESIDUAL PRESSURE (PSI): 108

COMMENTS:

**FLOW HYDRANT**

MAP GRID#	HYDRANT#	PIPE INTERSECTION#	MAIN SIZE	AFD BOX#
J21	554237	6330	8	101

BLK#	DIRECTION	STREET NAME	TYPE
40		EAST	AVE

STATIC PRESSURE (PSI): 112      VELOCITY PRESSURE (PSI): 98

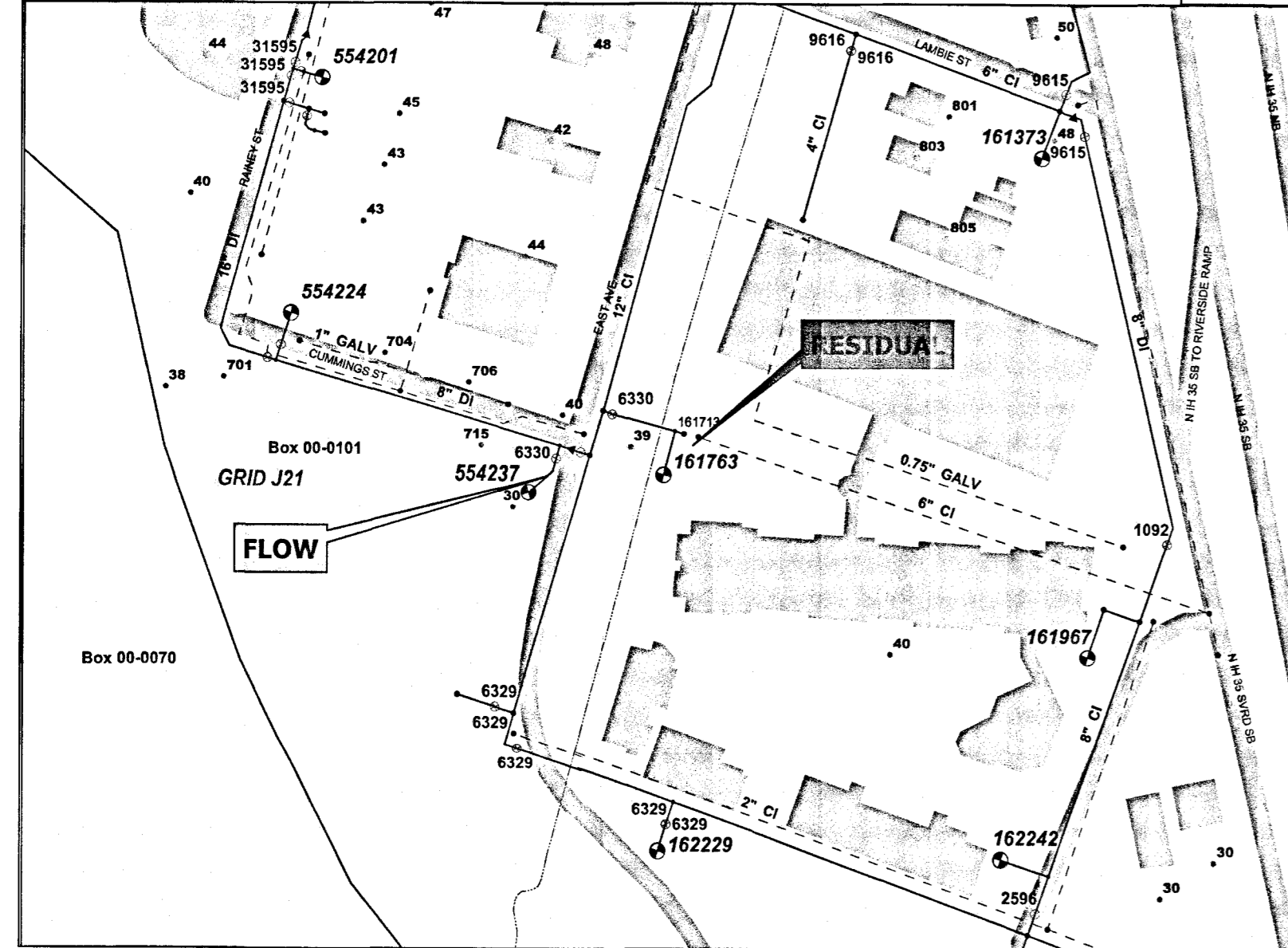
dc = discharge coefficient  
 straight 2x" butt = .9  
 w/45° elbow = .75

diffuser = N/A

FLOW RATE (GPM) = 1661

NOTE: This information represents the water supply characteristics in the immediate area on the date and time tested. The City of Austin does not guarantee this data will be representative of the water supply characteristics at any time in the future. It is the requesting party's responsibility to ensure that this test information is appropriate to the location of the project in question and that any differences in elevation between the test location and project are accounted for and included in the hydraulic calculations.

40 BLK EAST AVE... BOX 101      06/20/18



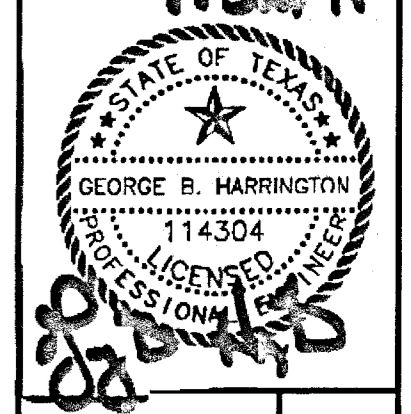
**STANDARD CONSTRUCTION NOTES (NOVEMBER 23, 2017)**

- THE CITY STANDARD CONSTRUCTION SPECIFICATIONS CURRENT AT THE TIME OF BIDDING SHALL COVER MATERIALS AND METHODS USED TO DO THIS WORK.
- CONTRACTOR MUST OBTAIN A STREET CUT PERMIT FROM AUSTIN TRANSPORTATION DEPARTMENT, RIGHT OF WAY MANAGEMENT DIVISION BEFORE BEGINNING CONSTRUCTION WITHIN THE RIGHT-OF-WAY OF A PUBLIC STREET OR ALLEY.
- AT LEAST 48 HOURS BEFORE BEGINNING ANY WATER AND WASTEWATER CONSTRUCTION IN PUBLIC R.O.W. OR PUBLIC EASEMENT, THE CONTRACTOR SHALL NOTIFY AUSTIN TRANSPORTATION INSPECTION OR DEVELOPMENT SERVICES DEPARTMENT (DSD) INSPECTIONS AT THE NUMBER INDICATED ON THE PLANS BY THE AW PLAN REVIEWER.
- THE CONTRACTOR SHALL CONTACT THE AUSTIN AREA "ONE CALL" SYSTEM AT 1-800-344-8377 FOR EXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATION IN ADVANCE OF CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES TO BE EXTENDED, TIED TO, OR ALTERED, OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS. THE CITY OF AUSTIN WATER AND WASTEWATER MAINTENANCE RESPONSIBILITY ENDS AT R.O.W. EASEMENT LINES.
- NO OTHER UTILITY SERVICE/APPOINTMENTS SHALL BE PLACED NEAR THE PROPERTY LINE, OR OTHER ASSIGNED LOCATION DESIGNATED FOR WATER AND WASTEWATER UTILITY SERVICE THAT WOULD INTERFERE WITH THE WATER AND WASTEWATER SERVICES.
- THE CITY SPECIFICATION ITEM 509S WILL BE REQUIRED AS A MINIMUM TRENCH SAFETY MEASURE.
- ALL MATERIALS TESTS ORDERED BY THE OWNER FOR QUALITY ASSURANCE PURPOSES, SHALL BE CONDUCTED BY AN INDEPENDENT LABORATORY AND FUNDED BY THE OWNER IN ACCORDANCE WITH CITY STANDARD SPECIFICATION ITEM 1804S.04.
- PRESSURE TAPS SHALL BE ALLOWED ON A CASE BY CASE BASIS, AS DETERMINED BY THE DIRECTOR'S DESIGNEE. NORMALLY PRESSURE TAPS WILL BE ALLOWED ONLY IN THE FOLLOWING CASES: A) A TEST SHUT OUT INDICATES AN ADEQUATE SHUT OUT TO PERFORM THE WORK IS NOT FEASIBLE BY MORE THAN 30 CUSTOMERS OR A SINGLE CRITICAL CUSTOMER (AS DEFINED BY AUSTIN WATER) WOULD BE IMPACTED BY THE SHUT OUT OR C) THE EXISTING WATER LINE WARRANTS IT.
- THRUST RESTRAINT SHALL BE IN ACCORDANCE WITH CITY STANDARD SPECIFICATION ITEM 510.3(2) AND SPL WW 27-A and WW 27-F.
- FIRE HYDRANTS SHALL BE SET IN ACCORDANCE WITH CITY STANDARD SPECIFICATION ITEM 511S.4 AND SHALL BE PAINTED FLYNT ALUMINUM OR EQUAL. FIRE HYDRANTS AND ASSOCIATED VALVES, TEN (10) YEARS AND OLDER WILL BE REQUIRED TO BE REPLACED WITH A NEW FIRE HYDRANT AND APPURTENANCES.
- WATER LINE TESTING AND STERILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH CITY STANDARD SPECIFICATION ITEMS 510.3 (27)-(29). FORCE MAIN PRESSURE TESTING SHALL BE CONDUCTED AND FALL UNDER THE SPECIFICATIONS AS WATER LINES (PRESSURE PIPE) OR AT THE PRESSURES SHOWN ON THE APPROVED PLANS.
- ALL MATERIAL USED ON THIS PROJECT MUST BE LISTED ON THE STANDARD PRODUCTS LISTING. ANY MATERIAL NOT LISTED HAS TO GO THROUGH THE REVIEW OF THE STANDARDS COMMITTEE FOR REVIEW AND APPROVAL PRIOR TO START OF PROJECT. TESTING AND EVALUATION OF PRODUCTS ARE REQUIRED BEFORE APPROVAL WILL BE GIVEN ANY CONSIDERATION.
- WHEN WATER SERVICES ARE DAMAGED AND THE SERVICE MATERIAL IS PE, THE LINE SHALL BE REPAIRED ONLY BY HEAT FUSION WELD OR REPLACED THE FULL LENGTH WITH TYPE K COPPER MATERIAL ANY TIME PS IS DAMAGED OR TAMPERED WITH IN ANY WAY, THE SERVICE LINE SHALL BE REPLACED FULL LENGTH WITH TYPE K COPPER MATERIAL. NOTE: FULL LENGTH IS FROM CORPORATION STOP TO METER.
- WHEN AN EXISTING WATERLINE SHUT OUT IS NECESSARY AND POSSIBLE, THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTOR WHO WILL THEN NOTIFY AUSTIN WATER DISPATCH AND THE AFFECTED CUSTOMERS A MINIMUM OF SEVENTY-TWO (72) HOURS IN ADVANCE.
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTOR SO THAT HE CAN NOTIFY THE AUSTIN WATER AT 972-0000 AT A MINIMUM OF 72 HOURS PRIOR TO RELOCATING ANY DOMESTIC OR FIRE DEMAND WATER METERS. THE CONTRACTOR SHALL CAREFULLY REMOVE ALL METERS AND METERS BOXES THAT ARE INDICATED TO BE RELOCATED OR SALVAGED. THE CONTRACTOR SHALL INSTALL THE REMOVED METER OR CITY PROVIDED METER AT THE NEW LOCATION INDICATED ON THE CONSTRUCTION PLANS.
- WATER AND WASTE WATER SERVICES WILL NEED TO BE REPLACED UP TO THE MAIN. REPAIR COUPLINGS ARE NOT ALLOWED ON NEW INSTALLATIONS.
- ALL MANHOLES IN UNPAVED AREAS PROVIDING DIRECT ACCESS TO A WASTEWATER LINE SHALL BE WATERTIGHT AND BEAR THE WORDING AND INSIGNIA FOR THE CITY OF AUSTIN.
- THE CONTRACTOR SHALL VERIFY ALL VERTICAL AND HORIZONTAL LOCATIONS OF EXISTING UTILITIES, BELOW GROUND AND OVERHEAD, PRIOR TO STARTING ONSITE UTILITY WORK.
- ALL WATER AND WASTEWATER MAINS SHALL BE INSTALLED IN ACCORDANCE WITH THE SEPARATION DISTANCES INDICATED IN CHAPTER 290 - DRINKING WATER STANDARDS, CHAPTER 217 - DESIGN CRITERIA FOR SEWERAGE SYSTEMS AND CHAPTER 210 - DESIGN CRITERIA FOR RECLAIMED SYSTEMS OF TCEQ RULES.
- CONTRACTORS PERSONNEL THAT PERFORM BUTT FUSION AND ELECTROFUSION ON OR TO HDPE PIPE AND FITTINGS MUST HAVE CURRENT QUALIFICATION TRAINING CERTIFICATE ISSUED BY MOELROY OR COMPARABLE TRAINING PROGRAM.
- SHOP DRAWINGS SIGNED AND SEALED BY A PROFESSIONAL STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF TEXAS, SHALL BE SUBMITTED FOR AUSTIN WATER APPROVAL FOR LARGE DIAMETER PRE-CAST MANHOLES, JUNCTION BOXES, WET WELLS, AND SIMILAR STRUCTURES. THE SHOP DRAWINGS SHALL INCLUDE FLOWLINE ELEVATIONS OF ALL INCOMING AND OUTGOING PIPES, ELEVATION OF TRANSITION FROM LARGE DIAMETER SECTIONS TO 48" ID SECTION, TOP OF MANHOLE ELEVATION, SURROUNDING GROUND ELEVATION, AS WELL AS SPECIAL CONSTRUCTION CONSIDERATIONS THAT ARE SPECIFIED IN THE CONTRACT DRAWINGS.
- VALVE STEM EXTENSIONS SHALL CONSIST OF A SINGLE PIECE OF IRON PIPE OF THE REQUIRED LENGTH WITH A SOCKET ON ONE END AND NUT ON THE OTHER.
- ALL POTABLE WATER SYSTEM COMPONENTS INSTALLED AFTER JANUARY 4, 2014, SHALL BE ESSENTIALLY "LEAD FREE" ACCORDING TO THE US SAFE DRINKING WATER ACT. EXAMPLES ARE VALVES (CORPORATION STOP, CURB STOP, AND PRESSURE REDUCING), NIPPLES, BUSHINGS, PIPE, FITTINGS, BACKFLOW PREVENTERS AND FIRE HYDRANTS. TAPPING SADDLES AND 2 INCH AND LARGER GATE VALVES ARE THE ONLY COMPONENTS EXEMPT FROM THIS REQUIREMENT. COMPONENTS THAT ARE NOT CLEARLY IDENTIFIED BY THE MANUFACTURER AS MEETING THIS REQUIREMENT EITHER BY MARKINGS ON THE COMPONENT OR ON THE PACKAGING SHALL NOT BE INSTALLED.
- ALL FIRE HYDRANTS AND VALVES THAT ARE TO BE ABANDONED SHALL BE REMOVED, SALVAGED AND RETURNED TO AUSTIN WATER. NOTICE SHOULD BE GIVEN 48 HOURS PRIOR TO RETURN TO PIPELINE OPERATIONS DISTRIBUTION SYSTEM MAINTENANCE, VALVES AND HYDRANT SERVICES. SUPERVISING PIPELINE TECHNICIAN AT 512-972-1133
- ALL EXISTING WATER METERS IDENTIFIED TO BE RELOCATED OR ABANDONED AT THE DEVELOPMENT, SHALL BE REMOVED FROM THE METER BOX PRIOR TO CONSTRUCTION AND GIVEN IMMEDIATELY TO THE DSD INSPECTOR.
- THE ENGINEER SHALL CALL OUT THE SIZE, TYPE AND USE (DOMESTIC OR IRRIGATION) OF ALL EXISTING WATER METERS TO BE RELOCATED OR REPURPOSED. WATER METER NUMBERS WILL NOT BE REQUIRED TO BE PLACED ON THE PLAN SHEET. A SEPARATE AUSTIN WATER TAPS OFFICE FORM WILL BE USED TO PROVIDE RELEVANT INFORMATION FOR THE EXISTING INFORMATION ON EXISTING METERS TO RECEIVE APPROPRIATE CREDITS. THIS FORM SHALL BE DIRECTLY SUBMITTED TO AUSTIN WATER TAPS OFFICE FOR REVIEW AND PROCESSING.
- NO CONNECTION MAY BE MADE BETWEEN THE PRIVATE PLUMBING AND AUSTIN WATER INFRASTRUCTURE UNTIL A CITY APPROVED WATER METER HAS BEEN INSTALLED.
- ALL GRAVITY LINES SHALL BE INSTALLED DOWNSTREAM TO UPSTREAM.
- METER BOXES AND CLEAN OUTS SHALL NOT BE LOCATED WITHIN PAVED AREAS SUCH AS DRIVEWAYS AND SIDEWALKS.
- PROTECTED STREET STATUS IS SUBJECT TO CHANGE OVER TIME. IT IS THE OWNER'S RESPONSIBILITY TO CONFIRM THE STREET STATUS PRIOR TO CONSTRUCTION AS PROTECTED STREET STATUS IS DIRECTLY IMPACT THE CONSTRUCTION COSTS. IF PROTECTED STREETS ARE PROPOSED TO BE DISTURBED, APPROVAL FROM THE STREET AND BRIDGE DIVISION OF THE TRANSPORTATION DEPARTMENT IS REQUIRED.

**SITE PLAN APPROVAL**      SHEET 05 OF 72  
 FILE NUMBER: SP-2018-0472C      APPLICATION DATE: 10-5-18  
 APPROVED BY COMMISSION ON      UNDER SECTION 112 OF  
 CHAPTER 25-6 OF THE CITY OF AUSTIN CODE  
 EXPIRATION DATE (25-6-81, LDC) 9-27-22 CASE MANAGER A. Johnson

**REVIEWED**  
 SEP 29 2019  
 Austin Water Utility

DIRECTOR, DEVELOPMENT SERVICES DEPARTMENT  
 RELEASED FOR GENERAL COMPLIANCE: 9-27-19 ZONING CBD  
 REV. 1      CORRECTION 1  
 REV. 2      CORRECTION 2  
 REV. 3      CORRECTION 3  
 FINAL PLAT MUST BE RECORDED BY THE PROJECT EXPIRATION DATE, IF APPLICABLE. SUBSEQUENT SITE PLANS WHICH DO NOT COMPLY WITH THE CODE CURRENT AT THE TIME OF FILING, AND ALL REQUIRED BUILDING PERMITS AND/OR NOTICE OF CONSTRUCTION (IF A BUILDING PERMIT IS NOT REQUIRED), MUST ALSO BE APPROVED PRIOR TO THE PROJECT EXPIRATION DATE.



44 EAST AVENUE  
 AUSTIN, TRAVIS COUNTY, TEXAS 78701  
 AUSTIN WATER GENERAL NOTES

DATE PLOTTED: 09/10/2019 10:33:29 AM  
 PLOT STYLE: ...  
 PRINTED BY: ...  
 PLOTTED ON: ...  
 PLOTTED BY: ...