

PUBLIC COMMENT VERSION-October 1, 2022

7-28-2021

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ORDINANCE NO. _____

An ordinance amending Chapter 54, "Dallas Plumbing Code," of the Dallas City Code, as amended; adopting with certain changes the 2021 Edition of the International Plumbing Code of the International Code Council, Inc.; regulating the construction, enlargement, alteration, repair, use, and maintenance of plumbing work in the city; providing a penalty not to exceed \$2,000; providing a saving clause; providing a severability clause; and providing an effective date.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

SECTION 1. That Chapter 54, "Dallas Plumbing Code," of the Dallas City Code, as amended, is amended by adopting the 2021 Edition of the International Plumbing Code of the International Code Council, Inc. (which is attached as Exhibit A and made a part of this ordinance), with the following amendments:

1. Chapter 1, "Scope and Administration," of the 2021 International Plumbing Code is deleted and replaced with new Chapter 1, "Administration," to read as follows:

“CHAPTER 1 ADMINISTRATION

SECTION 101 GENERAL

101.1 Title. These regulations are known as the *Dallas Plumbing Code*, hereinafter referred to as “this code.”

101.2 Scope. The provisions of this code apply to the erection, installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of plumbing systems within this jurisdiction. This code also regulates nonflammable medical gas, inhalation anesthetic, vacuum

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35 piping, nonmedical oxygen systems, sanitary and condensate vacuum collection systems. The
36 installation of fuel gas distribution piping and equipment, fuel gas-fired water heaters and water
37 heater venting systems are regulated by the *Dallas Fuel Gas Code*.

38 39 **Exceptions:**

- 40
41 1. Detached one- and two-family dwellings and multiple single-family dwellings
42 (townhouses) not more than three stories high with separate means of egress and their
43 accessory structures must comply with the *Dallas One- and Two-Family Dwelling*
44 *Code*.
- 45
46 2. Plumbing systems in existing buildings undergoing repair, alteration, or additions, and
47 change of occupancy may comply with the *Dallas Existing Building Code*.

48
49 **101.3 Administrative procedures.** Except as otherwise specified in this code, all provisions of
50 Chapter 52, “Administrative Procedures for the Construction Codes,” of the *Dallas City Code*
51 apply to this code.

52
53 **101.4 Referenced codes and standards.** The codes and standards referenced in this code shall be
54 considered part of the requirements of this code to the prescribed extent of each such reference
55 only when such codes and standards have been specifically adopted by the city of Dallas.
56 Whenever amendments have been adopted to the referenced codes and standards, each reference
57 to said code and standard shall be considered to reference the amendments as well. Any reference
58 made to NFPA 70 or the *ICC Electrical Code* means the *Dallas Electrical Code*, as adopted.
59 References made to the *International Building Code*, the *International Mechanical Code*, the
60 *International Plumbing Code*, the *International Fuel Gas Code*, the *International Fire Code*, the
61 *International Energy Conservation Code*, the *International Existing Building Code*, and the
62 *International Residential Code*, respectively mean the *Dallas Building Code*, the *Dallas*
63 *Mechanical Code*, the *Dallas Plumbing Code*, the *Dallas Fuel Gas Code*, the *Dallas Fire Code*,
64 the *Dallas Energy Conservation Code*, the *Dallas Existing Building Code*, and the *Dallas One-*
65 *and Two-Family Dwelling Code*, as amended.”

66
67 2. Subsection 301.6, “Prohibited Locations,” of Section 301, “General,” of Chapter 3,
68 “General Regulations,” of the 2021 International Plumbing Code is amended to read as follows:

69 **“301.6 Prohibited locations.** No plumbing system, waste disposal system, gas distribution
70 system, rainwater piping system, irrigation system, medical gas & vacuum system, or parts thereof,
71 shall be located on any lot other than a specific lot or building site as defined by Chapter 51A of
72 the *Dallas Development Code*. Piping, fixtures, or equipment shall not be located as to interfere
73 with the normal use thereof or the normal operation and use of any required windows, doors, or
74 other facilities. Plumbing systems shall not be located in an elevator shaft or in an elevator
75 equipment room.
76

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77 **Exception:** Floor drains, sumps and sump pumps shall be permitted at the base of the shaft,
78 provided that they are indirectly connected to the plumbing system and comply with Section
79 1003.4.”

80
81 3. Paragraph 305.4.1, “Sewer Depth,” of Subsection 305.4, “Freezing,” of Section 305,
82 “Protection of Pipes and Plumbing System Components,” of Chapter 3, “General Regulations,” of
83 the 2021 International Plumbing Code is amended to read as follows:

84
85 **“305.4.1 Sewer depth.** ~~[Building sewers that connect to private sewage disposal systems shall~~
86 ~~be installed not less than [NUMBER] inches (mm) below finished grade at the point of septic~~
87 ~~tank connection.]~~ *Building sewers* shall be a minimum of 12 ~~[installed not less than~~
88 ~~[NUMBER]] inches (304 mm) below grade.”~~

89
90 4. Subsection 401.1, “Scope,” of Section 401, “General,” of Chapter 4, “Fixtures, Faucets
91 and Fixture Fittings,” of the 2021 International Plumbing Code is amended to read as follows:

92 **“401.1 Scope.** This chapter shall govern the materials, design and installation of plumbing
93 fixtures, faucets and fixture fittings in accordance with the type of *occupancy*, and shall provide
94 the minimum number of fixtures for various types of occupancies. The provisions of this chapter
95 are intended to work in coordination with the provisions of the *Dallas Building Code*. Should any
96 conflicts arise between the two chapters, the building official shall determine which provision
97 applies.”

98
99 5. Subsection 403.1, “Minimum Number of Fixtures,” of Section 403, “Minimum
100 Plumbing Facilities,” of Chapter 4, “Fixtures, Faucets and Fixture Fittings,” of the 2021
101 International Plumbing Code is amended to read as follows:

102 **“403.1 Minimum number of fixtures.** Plumbing fixtures shall be provided for the type of
103 *occupancy* and in the minimum number as follows:

104
105 1. Assembly occupancies. At least one drinking fountain must be provided at each floor
106 level in an approved location.

107
108 Exception: A drinking fountain need not be provided in a drinking or dining
109 establishment.

110
111 2. Group A, B, F, H, I, M and S occupancies. Buildings, tenant spaces or portions of
112 buildings where persons are employed must be provided with at least one water closet for
113 each sex as provided for in Section 403.2.

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3. Group E and R occupancies. Fixtures must be provided as shown in Table 403.1

It is recommended, but not required, that the minimum number of fixtures provided also comply with the number shown in Table 403.1. [~~based on the actual use of the building or space~~]. Uses not shown in Table 403.1 shall be considered individually by the building [code] official. The number of occupants shall be determined by the *Dallas [International] Building Code*. Occupancy classification shall be determined in accordance with the *Dallas Building Code*.

403.1.1 Fixture calculations. To determine the occupant load of each sex, the total occupant load shall be divided in half. To determine the required number of fixtures, the fixtures ratio or ratios for each fixture type shall be applied to the occupant load of each sex in accordance with Table 403.1. Fractional numbers resulting from applying the fixture ratios of Table 403.1 shall be rounded up to the next whole number. For calculations involving multiple occupancies, such fractional numbers for each occupancy shall first be summed and then rounded to the next whole number.

Exception:

1. The total occupant load shall not be required to be divided in half where *approved* statistical data indicates a distribution of the sexes of other than 50 percent of each sex.
2. Where multiple-user facilities are designed to serve all genders, the minimum fixture count shall be calculated 100 percent, based on total occupant load. In such multiple-user facilities, each fixture type shall be in accordance with ICC A117.1 and each urinal that is provided shall be located in a stall.
3. Distribution of the sexes is not required where single-user water closets and bathing room fixtures are provided in accordance with Section 403.1.2.

403.1.2 Single-user toilet facility and bathing room fixtures. The plumbing fixtures located in single-user toilet facilities and bathing rooms, including family or assisted-use toilet and bathing rooms that are required by Section 1109.2.1 of the *Dallas [International] Building Code*, shall contribute toward the total number of the required plumbing fixtures for a building or tenant space. Single-user toilet and bathing rooms, and family or assisted-use toilet rooms and bathing rooms shall be identified as being available for use by all persons regardless of their sex.

The total number of fixtures shall be permitted to be based on the required number of separate facilities or based on the aggregate of any combination of single-user or separate facilities.

403.1.3 Lavatory distribution. Where two or more toilet rooms are provided for each sex, the required number of lavatories shall be distributed proportionately to the required number of water closets.”

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158 6. Subsection 413.4, “Public Laundries and Central Washing Facilities,” of Section 413,
159 “Floor and Trench Drains,” of Chapter 4, “Fixtures, Faucets and Fixture Fittings,” of the 2021
160 International Plumbing Code is deleted and replaced as follows:

161 **“413.4 Required location for floor drains.** Floor drains shall be required in the following
162 locations:

- 163
- 164 1. In public coin-operated laundries and in the central washing facilities of multiple-family
165 dwellings, the rooms containing automatic clothes washers shall be provided with floor
166 drains located to readily drain the entire floor area. Such drains shall have a minimum
167 outlet of not less than 3 inches (76 mm) in diameter.
 - 168
 - 169 2. Food Establishments as defined by Chapter 17 of the *Dallas City Code*.
 - 170
 - 171 3. Public restrooms.”

172

173 7. Section 502, “Installation,” of Chapter 5, “Water Heaters,” of the 2021 International
174 Plumbing Code is amended by adding a new Subsection 502.6, “Water Heaters Above Ground or
175 Floor,” to read as follows:

176 **“502.6 Water heaters above ground or floor.** When the attic, roof, mezzanine or platform in
177 which a water heater is installed is more than 8 feet (2438 mm) above the ground or floor level, it
178 must be made accessible by a stairway or permanent ladder fastened to the building.

179

180 **Exception:** A water heater may be reached by portable ladder if the water heater has a capacity
181 of no more than 10 gallons (or larger with prior approval), it is capable of being accessed
182 through a lay-in ceiling, and it is installed not more than 10 feet (3048 mm) above the ground
183 or floor level.

184

185 **502.6.1. Illumination and convenience outlet.** Whenever the attic, roof, mezzanine or
186 platform is not adequately lighted or access to a receptacle outlet is not obtainable from the
187 main level, lighting and a receptacle outlet must be provided in accordance with the *Dallas*
188 *Electrical Code*.”

189

190 8. Subsection 504.6, “Requirements for Discharge Piping,” of Section 504, “Safety
191 Devices,” of Chapter 5, “Water Heaters,” of the 2021 International Plumbing Code is amended to
192 read as follows:

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193 “504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve,
194 temperature relief valve or combination thereof shall:

- 195
- 196 1. Not be directly connected to the drainage system.
 - 197
 - 198 2. Discharge through an *air gap* [~~located in the same room as the water heater~~].
 - 199
 - 200 3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full
201 size to the *air gap*.
 - 202

- 203 4. Serve a single relief device and shall not connect to piping serving any other relief device
204 or equipment.
- 205

206 **Exception:** Multiple relief devices may be installed to a single T&P discharge piping
207 system when approved by the building official and permitted by the manufacturer’s
208 installation instructions and installed pursuant to those instructions.

- 209
- 210 5. Discharge by indirect means, [~~to the floor, to the pan serving the water heater or storage
211 tank,~~] to an approved location, to a waste receptor or to the outdoors.
- 212

- 213 6. Discharge in a manner that does not cause personal injury or structural damage.
- 214

- 215 7. Discharge to a termination point that is readily observable by the building occupants.
- 216

- 217 8. Not be trapped.
- 218

- 219 9. Be installed so as to flow by gravity.
- 220

- 221 10. Terminate not more than 6 inches (152 mm) above and not less than two times the discharge
222 pipe diameter above the [~~floor or~~] flood level rim of the waste receptor.
- 223

- 224 11. Not have a threaded connection at the end of such piping.
- 225

- 226 12. Not have valves or tee fittings.
- 227

- 228 13. Be constructed of those materials listed in Section 605.4 or materials tested, rated, and
229 *approved* for such use in accordance with ASME A112.4.1.
- 230

- 231 14. Be one nominal size larger than the size of the relief valve outlet, where the relief valve
232 discharging piping is installed with insert fittings. The outlet end of such tubing shall be
233 fastened in place.

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234 9. Paragraph 504.7.1, “Pan Size and Drain,” of Subsection 504.7, “Required Pan,” of
235 Section 504, “Safety Devices,” of Chapter 5, “Water Heaters,” of the 2021 International Plumbing
236 Code is amended to read as follows:

237 **“504.7.1 Pan size and drain.** The pan shall be not less than 1 1/2 inches (38 mm) in depth and
238 shall be of sufficient size and shape to receive all dripping or condensate from the tank or water
239 heater. The pan shall be drained by an indirect waste pipe having a diameter of not less than
240 3/4 inch (19 mm). Piping for safety pan drains shall be of those materials listed in Table 605.4.

241
242 **Exception:** Multiple pan drains may terminate to a single discharge piping system when
243 approved by the administrative authority and permitted by the water heaters manufacturer
244 installation instructions and installed according to manufacturer’s instructions.”
245

246 10. Subsection 602.3, “Individual Water Supply,” of Section 602, “Water Required,” of
247 Chapter 6, “Water Supply and Distribution,” of the 2021 International Plumbing Code is deleted.

248 11. Subsection 604.4, “Maximum Flow and Water Consumption,” of Section 604,
249 “Design of Building Water Distribution System,” of Chapter 6, “Water Supply and Distribution,”
250 of the 2021 International Plumbing Code is amended by adding a new Paragraph 604.4.1, “State
251 Maximum Flow Rate,” to read as follows:

252 **“604.4.1 State maximum flow rate.** Where the state-mandated maximum flow rate is more
253 restrictive than those of this section, the state flow rate takes precedence.”

254
255 12. Subsection 606.1, “Location of Full-Open Valves,” of Section 606, “Installation of
256 the Building Water Distribution System,” of Chapter 6, “Water Supply and Distribution,” of the
257 2021 International Plumbing Code is amended to read as follows:

258 **“606.1 Location of full-open valves.** *Full-open valves* shall be installed in the following
259 locations:

260
261 1. [~~On the building water service pipe from the public water supply near the curb.~~

262
263 ~~2.]~~ On the water distribution supply pipe at the entrance into the structure.
264

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265 1.1. 2-1. In multiple-tenant buildings, where a common water supply piping system is
266 installed to supply other than one- and two-family dwellings, a main shutoff valve shall
267 be provided for each tenant.
268

269 ~~3. On the discharge side of every water meter.~~

270
271 ~~4. On the base of every water riser pipe in occupancies other than multiple-family residential~~
272 ~~occupancies that are two stories or less in height and in one- and two-family residential~~
273 ~~occupancies.~~

274
275 ~~5. On the top of every water down-feed pipe in occupancies other than one- and two-family~~
276 ~~residential occupancies.]~~

277
278 2[6]. On the entrance to every water supply pipe to a dwelling unit, except where supplying a
279 single fixture equipped with individual stops.

280
281 3[7]. On the water supply pipe to a gravity or pressurized water tank.

282
283 4[8]. On the water supply pipe to every water heater.”

284
285 13. Subsection 606.2, “Location of Shutoff Valves,” of Section 606, “Installation of the
286 Building Water Distribution System,” of Chapter 6, “Water Supply and Distribution,” of the 2021
287 International Plumbing Code is amended to read as follows:

288 **“606.2 Location of shutoff valves.** Shutoff valves shall be installed in the following locations:

289
290 1. On the fixture supply to each plumbing fixture other than bathtubs and showers, or similar
291 type valves, in one- and two-family residential *occupancies*, and other than in individual
292 sleeping units that are provided with unit shutoff valves in hotels, motels, boarding houses
293 and similar *occupancies*.
294

295 2. ~~[On the water supply pipe to each sillcock.~~

296
297 ~~3.]~~ On the water supply pipe to each appliance or mechanical equipment.”

298
299 14. Paragraph 608.17.5, “Connections to Lawn Irrigations Systems,” of Subsection
300 608.17, “Connections to the Potable Water System,” of Section 608, “Protection of Potable Water
301 Supply,” of Chapter 6, “Water Supply and Distribution,” of the 2021 International Plumbing Code
302 is amended to read as follows:

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303 “**608.17.5 Connections to lawn irrigation systems.** The potable water supply to lawn
304 irrigation systems shall be protected against backflow by an atmospheric vacuum breaker, a
305 pressure vacuum breaker assembly, a double-check assembly or a reduced pressure principle
306 backflow prevention assembly. Valves shall not be installed downstream from an atmospheric
307 vacuum breaker. Where chemicals are introduced into the system, the potable water supply
308 shall be protected against backflow by a reduced pressure principle backflow prevention
309 assembly and all piping installation and identification shall comply with the requirement of
310 Appendix F and Section 608.9 of the *Dallas Plumbing Code.*”
311

312 15. Subsection 608.18, “Protection of Individual Water Supplies,” of Section 608,
313 “Protection of Potable Water Supply,” of Chapter 6, “Water Supply and Distribution,” of the 2021
314 International Plumbing Code shall be deleted.

315 16. Section 712, “Sumps and Ejectors,” of Chapter 7, “Sanitary Drainage,” of the 2021
316 International Plumbing Code is amended by adding a new Subsection 712.5, “Dual Pump System,”
317 to read as follows:

318 “**712.5 Dual pump system.** All sumps must be automatically discharged and, when in any “public
319 use” occupancy where the sump serves more than 10 fixture units, must be provided with dual
320 sumps or ejectors arranged to function independently in case of overload or mechanical failure.
321 For storm drainage sumps and pumping systems, see Section 1113.”
322

323 17. Section 713, “Computerized Drainage Design,” of Chapter 7, “Sanitary Drainage,” of
324 the 2021 International Plumbing Code is retitled as Section 713, “Engineered Drainage Design.”

325 18. Subsection 713.1, “Design of Drainage System,” of Section 713, “Engineered Drainage
326 Design,” of Chapter 7, “Sanitary Drainage,” of the 2021 International Plumbing Code is amended
327 to read as follows:

328 “**713.1 Design of drainage system.** The sizing, design and layout of the drainage system shall be
329 permitted to be designed by a registered engineer using approved [computer] design methods.”
330

331 19. Paragraph 802.1.1, “Food Handling,” of Subsection 802.1, “Where Required,” of
332 Section 802, “Indirect Wastes,” of Chapter 8, “Indirect/Special Waste,” of the 2021 International
333 Plumbing Code is amended to read as follows:

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334 **“802.1.1 Food handling.** Equipment and fixtures utilized for the storage, preparation and
335 handling of food shall discharge through an indirect waste pipe by means of an air gap into a
336 floor sink sized in accordance with Section 802.4.1 [~~Each well of a multiple-compartment sink~~
337 ~~shall discharge independently to a waste receptor.~~.]”
338

339 20. Paragraph 802.1.2, “Floor Drains in Food Storage Areas,” of Subsection 802.1,
340 “Where Required,” of Section 802, “Indirect Wastes,” of Chapter 8, “Indirect/Special Waste,” of
341 the 2021 International Plumbing Code is amended to read as follows:

342 **“802.1.2 Floor drains in floor storage areas.** Floor drains located within walk-in refrigerators
343 or freezers in food service and food establishments shall be indirectly connected to the sanitary
344 drainage system by means of an air gap into a floor sink sized in accordance with Section
345 802.4.1. Where a floor drain is located within an area subject to freezing, the waste line serving
346 the floor drain shall not be trapped and shall indirectly discharge by means of an air gap into a
347 floor sink sized in accordance with Section 802.4.1, and [~~waste receptor~~] located outside the
348 area subject to freezing.
349

350 [~~Exception: Where protected against backflow by a backwater valve, such floor drains~~
351 ~~shall be indirectly connected to the sanitary drainage system by means of an air break or~~
352 ~~an air gap.~~.]”
353

354 21. Paragraph 802.1.6, “Commercial Dishwashing Machines,” of Subsection 802.1,
355 “Where Required,” of Section 802, “Indirect Wastes,” of Chapter 8, “Indirect/Special Waste,” of
356 the 2021 International Plumbing Code is amended to read as follows:

357 **“802.1.6 Commercial dishwashing machines.** The discharge from a commercial dishwashing
358 machine shall be through an air gap [~~or air break~~] into a floor sink [~~waste receptor~~] in
359 accordance with Sections 802.3.”
360

361 22. Paragraph 802.1.7, “Food Utensils, Dishes, Pots and Pans Sinks,” of Subsection 802.1,
362 “Where Required,” of Section 802, “Indirect Wastes,” of Chapter 8, “Indirect/Special Waste,” of
363 the 2021 International Plumbing Code is amended to read as follows:

364 **“802.1.7 Food utensils, dishes, pots and pans sinks.** Sinks and equipment, in other than
365 dwelling units, used for the washing, rinsing or sanitizing of utensils, dishes, pots, pans or
366 service ware used in the preparation, serving or eating of food shall discharge indirectly
367 through an air gap into a floor sink sized in accordance with Section 802.4.1 [~~or an air break~~
368 ~~to the drainage system~~].”

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369

370 23. Paragraph 802.4.3, “Standpipes,” of Subsection 802.4, “Waste Receptors,” of Section

371 802, “Indirect Wastes,” of Chapter 8, “Indirect/Special Waste,” of the 2021 International Plumbing

372 Code is amended to read as follows:

373 **“802.4.3 Standpipes.** Standpipes shall be individually trapped. Standpipes shall extend not
374 less than 18 inches (457 mm) but not greater than 42 inches (1066 mm) above the trap weir.
375 *Access* shall be provided to all standpipes and drains for rodding. No trap serving a standpipe
376 may be installed below the floor.

377

378

379 **802.4.3.1 Connection of laundry tray to standpipe.**

380 As an alternative for a laundry tray fixture connecting directly to a drainage system, a
381 laundry tray waste line without a fixture trap shall connect to a standpipe for an automatic
382 clothes washer drain. The standpipe shall extend not less than 30 inches (762 mm) above
383 the weir of the standpipe trap and shall extend above the *flood level rim* of the laundry tray.
384 The outlet of the laundry tray shall not be greater than 30 inches (762 mm) horizontal
385 distance from the side of the standpipe.”

386

387 24. Paragraph 903.1.1, “Roof Extension Unprotected,” of Subsection 903.1, “Vent terminal

388 required,” of Section 903, “Vent Terminals,” of Chapter 9, “Vents,” of the 2021 International

389 Plumbing Code is amended to read as follows:

390

391 **“903.1.1 Roof extension unprotected.** Open vent pipes that extend through a roof shall ~~be~~
392 terminated not less than 6 ~~[[NUMBER]]~~ inches (152 mm) above the roof.

393

394 **903.1.2 Roof used for recreational or assembly purposes.** Where a roof is to be used for
395 assembly or as a promenade, restaurant, bar, or sunbathing deck, as an observation deck, or for
396 similar purposes, open vent pipes shall terminate not less than 7 feet (2134 mm) above the
397 roof.

398

399 **903.1.3 Protected vent terminal.** Where an open vent pipe terminates above a sloped roof and
400 is covered by either a roof-mounted panel (such as a solar collector or photovoltaic panel
401 mounted over a vent opening) or a roof element (such as an architectural feature or a decorative
402 shroud), the vent pipe shall terminate not less than 2 inches (51mm) above the roof surface.
403 Such roof elements shall be designed to prevent the adverse effects of snow accumulation and
404 wind on the function of the vent. The placement of the panel over a vent and the design of a
405 roof element covering the vent pipe shall provide an open area for the vent to the outdoors that
406 is not less than the area of the pipe, as calculated from the inside diameter of the pipe. Such

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407 vent terminals shall be protected by a method that prevents birds and rodents from entering of
408 blocking the vent opening.

409
410 **903.1.4 Sidewall vent terminal.** Vent terminals extending through the wall shall terminate not
411 less than 10 feet (3048 mm) from the lot line and 10 feet (3048 mm) above the highest adjacent
412 grade within 10 feet (3048 mm) horizontally of the vent terminal. Vent terminals shall not
413 terminate under an overhang of a structure with soffit vents. Sidewall vent terminals shall be
414 protected to prevent birds and rodents from entering or blocking the vent opening.

415
416 **903.1.5 Vents above grade.** Open vents pipes above grade and adjacent to a structure, shall
417 meet the requirements of Section 903.5 and terminate not less than 10 feet (3048 mm) above
418 grade. Remote vents must terminate no less than 6 inches (152 mm) above grade.”

419
420 25. Subsection 905.4, “Vertical Rise of Vent,” of Section 905, “Vent Connections and

421 Grades,” of Chapter 9, “Vents,” of the 2021 International Plumbing Code is amended to read as

422 follows:

423 **“905.4 Vertical rise of vent.** Every dry vent shall rise vertically to a point not less than 6 inches
424 (152 mm) above the *flood level rim* of the highest trap or trapped fixture being vented.

425
426 **Exceptions:**

427 1. Vents for interceptors located outdoors.

428
429 2. Where structural conditions prohibit the vent to rise 6 inches (152 mm), before
430 offsetting horizontally, and whenever multiple vent pipes converge, each such vent
431 shall rise 6 inches (152 mm) in height above the flood level rim of the fixture it serves
432 before connecting to any other vent. Vents less than 6 inches (152 mm) above the flood
433 level rim of the fixture shall comply with Sections 905.2 and 905.3 and they shall have
434 a full size cleanout installed on the vent stack in an accessible location.

435

436 26. Subsection 915.1, “Type of Fixtures,” of Section 915, “Combination Waste and Vent

437 System,” of Chapter 9, “Vents,” of the 2021 International Plumbing Code is amended to read as

438 follows:

439 **“915.1 Type of fixtures.** *A combination waste and vent system shall not serve fixtures other than*
440 *floor drains, [~~sinks, lavatories~~] and indirect waste receptors [~~drinking fountains~~]. *Combination**
441 *waste and vent systems shall not receive the discharge from a food waste disposer or clinical sink.”*

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443 27. Subsection 916.2, “Vent Connection,” of Section 916, “Island Fixture Venting,” of
444 Chapter 9, “Vents,” of the 2021 International Plumbing Code is deleted and replaced with a new
445 Subsection 916.2, “Installation,” to read as follows:

446 **“916.2 Installation.** Traps for island sinks and similar equipment must be roughed in above the
447 floor and may be vented by extending the vent as high as possible, but not less than the drain board
448 height and then returning it downward and connecting it to the horizontal sink drain immediately
449 downstream from the vertical fixture drain. The return vent must be connected to the horizontal
450 drain through a wye-branch fitting and must, in addition, be provided with a foot vent taken off
451 the vertical fixture vent by means of a wye-branch immediately below the floor and extending to
452 the nearest partition and then through the roof to the open air or may be connected to other vents
453 at a point not less than 6 inches (152 mm) above the flood level rim of the fixtures served. Drainage
454 fittings must be used on all parts of the vent below the floor level and a minimum slope of ¼ inch
455 per foot (20.9 mm/m) back to the drain must be maintained. The return bend used under the drain
456 board must be a one piece fitting or an assembly of a 45 degree (0.79 radius), a 90 degree (1.6
457 radius) and a 45 degree (0.79 radius) elbow in the order named. Pipe sizing must be as required
458 elsewhere in this code. The island sink drain, upstream of the return vent, must serve no other
459 fixtures. An accessible cleanout must be installed in the vertical portion of the foot vent.”
460

461 28. Subsection 916.3, “Vent installation below the fixture flood level rim,” of Section 916,
462 “Island Fixture Venting,” of Chapter 9, “Vents,” of the 2021 International Plumbing Code is
463 deleted.

464 29. Paragraph 1003.3.1, “Grease Interceptors and Automatic Grease Removal Devices
465 Required,” of Subsection 1003.3, “Grease Interceptors,” of Section 1003, “Interceptors and
466 Separators,” of Chapter 10, “Traps, Interceptors and Separators,” of the 2021 International
467 Plumbing Code is amended to read as follows:

468 **“1003.3.1 Grease interceptors and automatic grease removal devices required.** A grease
469 interceptor or automatic grease removal device shall be required to receive the drainage from
470 fixtures and equipment with grease-laden waste exposure located in food preparation areas,
471 such as in restaurants, hotel kitchens, hospitals, school kitchens, bars, factory cafeterias and
472 clubs. Fixtures and equipment capable of generating or receiving grease-laden waste shall
473 include, but not be limited to, pot sinks, prerinse sinks; hand sinks; 3-compartment sinks; mop
474 sinks; soup kettles or similar devices; wok stations; floor drains; [Ø] floor sinks [into which
475 kettles are drained]; automatic hood wash units and dishwashers ~~without prerinse sinks.~~
476 Grease interceptors and automatic grease removal devices shall receive waste only through
477 indirect means from fixtures and equipment that allow fats, oils or grease to be discharged.

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478 ~~[Where lack of space or other constraints prevent] T[he] installation [or replacement] of [a]~~
479 ~~grease interceptor [one] or automatic [more] grease removal devices must comply with~~
480 ~~Section 17-5.2(e) of Chapter 17 of the *Dallas City Code* [interceptors shall be permitted to be~~
481 ~~installed on or above the floor and upstream of an existing grease interceptor].”~~
482

483 30. Section 1003, “Interceptors and Separators,” of Chapter 10, “Traps, Interceptors and
484 Separators,” of the 2021 International Plumbing Code is amended by adding a new Subsection
485 1003.11, “Effluent Sampling,” to read as follows:

486 **“1003.11 Effluent sampling.** An effluent sampling well shall be installed at or near the outlet of
487 an interceptor or separator.”

488
489 31. Section 1003, “Interceptors and Separators,” of Chapter 10, “Traps, Interceptors and
490 Separators,” of the 2021 International Plumbing Code is amended by adding a new Subsection
491 1003.12, “Abandoned Traps, Interceptors or Separators,” to read as follows:

492 **“1003.12 Abandoned traps, interceptors or separators.** Abandoned traps, interceptors or
493 separators must be plugged or capped and must have the contents pumped and discarded in an
494 approved manner. The top or entire vessel must be removed and the remaining portion of the tank
495 or excavation must be immediately filled with approved materials.”

496
497 32. Subsection [F] 1202.1, “Nonflammable Medical Gases,” of Section 1202, “Medical
498 Gases,” of Chapter 12, “Special Piping and Storage Systems,” of the 2021 International Plumbing
499 Code is amended to read as follows:

500 **“[F] 1202.1 Nonflammable medical gases.** Nonflammable medical gas systems, inhalation
501 anesthetic systems and vacuum piping systems shall be designed and installed in accordance with
502 NFPA 99.

503
504 **Exception[s]:**

505
506 [1.] This section shall not apply to portable systems or cylinder storage.

507
508 [2. ~~Vacuum system exhaust terminations shall comply with the *International Mechanical*~~
509 ~~*Code.*]~~”

510
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512 33. Appendix E, “Sizing of Water Piping System,” of the 2021 International Plumbing
513 Code is adopted.

514 34. Appendix F, “Board of Appeals” of the 2021 International Plumbing Code is retitled
515 as Appendix F, “Standards for Designing, Installing and Maintaining Landscape Irrigation
516 Systems,” and replaced with the following.

517 “APPENDIX F
518 STANDARDS FOR DESIGNING, INSTALLING
519 AND MAINTAINING LANDSCAPE IRRIGATION SYSTEMS

520
521 SECTION F101
522 SCOPE AND PURPOSE

523
524 **F101.1 Scope.** This appendix applies to the installation, alteration, repairs, relocation,
525 replacement, addition to, use or maintenance of *irrigation systems* within the city. This appendix
526 regulates the installation of backflow prevention devices, control valves, automatic irrigation
527 controllers, control wiring and *water conservation* required for the proper design, installation and
528 operation of *irrigation systems*. All *irrigation systems* must comply with the provisions of this
529 appendix and with 30 *Texas Administrative Code* Chapter 344. All irrigation systems supplied by
530 a non-potable water source shall comply with Chapter 13 and all other sections of this code
531 applicable to non-potable water uses.

532
533 **F101.2 Purpose.** The purpose of this appendix is to require all *irrigation systems* to be designed,
534 installed, maintained, altered, repaired, serviced and operated in a manner that will promote *water*
535 *conservation*.

536
537 SECTION F102
538 DEFINITIONS

539
540 **F102.1 Definitions.** The following words and terms shall have the meanings shown herein:

541
542 **IRRIGATION SYSTEM.** An assembly of component parts that is permanently installed for the
543 controlled distribution and conservation of water to irrigate any type of landscape vegetation in
544 any location, reduce dust or control erosion. This term does not include a system that is used on
545 or by an agricultural operation as defined by Section 251.002 of the *Texas Agriculture Code*.

546
547 **IRRIGATION TECHNICIAN.** A person who works under the supervision of a licensed irrigator
548 to install, maintain, alter, repair, service or supervise installation of an *irrigation system*, including
549 the connection of such system in or to a private or public, raw or potable water supply system or
550 any water supply, and who is required to be licensed under this ordinance or 30 *Texas*
551 *Administrative Code* Chapter 344.

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553 **MAINTENANCE, ALTERATION, REPAIR OR SERVICE.** Any activity that involves
554 opening the irrigation main line to the atmosphere at any point prior to the discharge side of any
555 irrigation zone control valve. This includes, but is not limited to, repairing or connecting into a
556 main supply pipe, replacing a zone control valve or repairing a zone control valve in a manner that
557 opens the system to the atmosphere.

558
559 **TCEQ.** Texas Commission on Environmental Quality.

560
561 **WATER CONSERVATION.** The design, installation, service and operation of an *irrigation*
562 *system* in a manner that prevents the waste of water, promotes the most efficient use of water, and
563 applies the least amount of water that is required to maintain healthy individual plant material or
564 turf, reduce dust and control erosion.

565 566 **SECTION F103** 567 **DESIGN OF THE IRRIGATION PLAN**

568 569 **F103.1 Minimum standards for the design of the irrigation plan.**

570
571 **F103.1.1 Irrigation plan.** A licensed irrigator or landscape architect shall prepare an irrigation
572 plan for each site where a new *irrigation system* will be installed. A city approved irrigation
573 plan must be on the job site at all times during the installation of the *irrigation system*. A
574 drawing showing the actual system installation must be provided to the *irrigation system* owner
575 on completion of the installation. During installation, variances from the original plan may be
576 authorized by the licensed irrigator if the variance from the plan does not:

- 577
578 1. Diminish the operational integrity of the *irrigation system*;
- 579
580 2. Violate any requirements of this ordinance or 30 *Texas Administrative Code* Chapter
581 344; and
- 582
583 3. Go unnoted in red on the irrigation plan.

584
585 **F103.1.2 Coverage area.** The irrigation plan must include complete coverage of the areas to
586 be irrigated; areas not irrigated must be noted on the irrigation plan.

587
588 **F103.1.3 Plan requirements.** All irrigation plans used for *irrigation system* installation must
589 be drawn to scale. Two sets of irrigation drawings must be submitted, one set to be retained as
590 part of the inspection records, the other set is required for onsite inspection and must be given
591 to the property owner on completion of the *irrigation system*. Submitted irrigation plans must
592 have a minimum font size of 3/32", a maximum drawing sheet size of 36" X 48" and must
593 include the following information:

- 594
595 1. the dated seal and signature of either a licensed irrigator or a landscape architect;

596
597 **Exceptions:**

598

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- 599 1. Not required for property that is owned and occupied solely as a person's
600 homestead.
601
602 2. Not required for irrigation plans submitted by a licensed and registered
603 plumbing contractor.
604
605 2. all major physical features and the boundaries of the area to be watered;
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607 3. north arrow;

608 4. a legend;
609
610 5. the zone flow measurement for each zone;
611
612 6. location and type of each:
613 6.1. controller;
614 6.2. rain and freeze sensors;
615 6.3. all electrical splices; and
616
617
618 7. location, type, and size of each:
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620 7.1. water source, such as, but not limited to a water meter and point(s) of
621 connection;
622 7.2. backflow prevention device;
623 7.3. water emission device, including, but not limited to, spray heads, rotary
624 sprinkler heads, quick-couplers, bubblers, drip or micro-sprays;
625 7.4. valve, including, but not limited to, zone valves, station solenoid valves,
626 automatic master valves and isolation valves;
627 7.5. pressure regulation components;
628 7.6. main line and lateral piping;
629 7.7. scale used; and
630 7.8. design pressure.
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SECTION F104 DESIGN AND INSTALLATION

F104.1 Minimum design and installation requirements.

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F104.1.1 Backflow protection. Any *irrigation system* connected to a public or private potable water system must be connected through a *TCEQ*-approved backflow prevention method. The backflow prevention device must be approved by the American Society of Sanitary Engineering or the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California, the *Uniform Plumbing Code*, the *Dallas Plumbing Code* or a city-approved laboratory that has equivalent capabilities for both the laboratory and field evaluation of backflow prevention assemblies. Backflow prevention devices must be installed in accordance with the laboratory approval standards, or if the approval does not include specific installation information, the manufacturer's current published recommendations.

F104.1.1.1 Backflow device installation. Connections between the potable water supply and the approved backflow preventer must be of the same type of material and joining method as required by the *Dallas Plumbing Code* and *Dallas One- and Two-Family Dwelling Code*. The backflow device must be installed a maximum of 10 feet from the water meter on the property being served by the *irrigation system*. Backflow devices may not be installed in the parkway (between the sidewalk and the public right-of-way.)

Exceptions:

1. Atmospheric vacuum breakers must be installed in an accessible location.
2. Backflow devices may be installed in the public right-of-way or at a distance greater than 10 feet from the water meter or potable water supply with prior approval from the building official.

F104.1.1.2 Approved types of backflow devices. The following types of backflow devices are approved:

1. Air gap.
2. Atmospheric vacuum breaker (AVB).
3. Pressure vacuum breaker (PVB).
4. Double check backflow preventer (DCA).
5. Reduced pressure principal backflow preventer (RPZ).

F104.1.1.3 Double check backflow assembly (DCA). A DCA must be installed and made accessible by a minimum jumbo valve box (length 26 inches X 19 inches) or larger.

F104.1.1.3.1 Valve box. A valve box must be installed on compacted soil. Rocks, brick or other types of support may not be used. A valve box cover must be installed flush with finish grade. A minimum 2-inch air gap is required between the bottom of the DCA and 12 inches of washed rock.

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F104.1.1.4 Reduced pressure principal backflow preventer (RPZ). An RPZ must be installed according to the manufacturer's installation requirements for aboveground installation and protected from freezing. Twelve inches of washed rock must be installed under the RPZ.

F104.1.2 Isolation valve and y-type strainer. An isolation valve and y-type strainer must be installed prior to the approved backflow prevention assembly-in an approved valve box. The isolation valve and y-type strainer must be installed a maximum of 24 inches from the installation of the approved backflow prevention assembly.

F104.2 Limitation. No irrigation design or installation may require the use of any component, including the water meter, in a way which exceeds the manufacturer's published performance limitations for the component.

F104.3 Emission devices.

F104.3.1 Emission devices. The maximum spacing between emission devices must not exceed the manufacturer's published radius or spacing of the device(s). The radius or spacing is determined by referring to the manufacturer's published specifications for a specific emission device at a specific operating pressure.

F104.3.2 Aboveground spray. New *irrigation systems* may not utilize aboveground spray emission devices in landscaped areas that are less than 60 inches in width or length not including impervious surfaces which contain impervious pedestrian or vehicular traffic surfaces, along two or more perimeters. If pop-up sprays or rotary sprinkler heads are used in a new *irrigation system*, the sprinkler heads must direct flow away from any adjacent surface and may not be installed closer than four inches from a hardscape, such as, but not limited to, a building foundation, fence, concrete, asphalt, pavers or stones set with mortar.

Exception: Narrow paved walkways, jogging paths, golf cart paths or other small areas located in cemeteries, parks, golf courses or other public areas may be exempted from this requirement if the runoff drains into a landscaped area.

F104.3.3 Water pressure. Emission devices must be installed to operate at the minimum and not above the maximum sprinkler head pressure as published by the manufacturer for the nozzle and head spacing that is used. Methods to achieve the water pressure requirements include, but are not limited to, flow control valves, a pressure regulator or pressure compensating spray heads.

F104.4 Misting. Misting must be kept to a minimum and may not be used as an irrigation method for shrubs and groundcover.

F104.5 Piping.

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737 **F104.5.1 Velocity.** Piping in *irrigation systems* must be designed and installed so that the flow
738 of water in the pipe will not exceed a velocity of 5 feet per second for polyvinyl chloride (PVC)
739 pipe or exceed the manufacturer's recommendation for other piping materials.
740

741 **F104.5.2 PVC pipe primer solvent.** All new *irrigation systems* installed using PVC pipe and
742 fittings must be primed with a colored primer prior to applying the PVC cement in accordance
743 with the *Dallas Plumbing Code* and the *Dallas One-and Two-Family Dwelling Code*.
744

745 **F104.5.3 Depth coverage of piping.** Piping must be installed to provide a minimum depth
746 coverage of 6 inches of select backfill between the top of the pipe and the natural grade of the
747 topsoil. All portions of the *irrigation system* that fail to meet this standard must be noted on
748 the irrigation plan. If the area being irrigated has rock at a depth of 6 inches or less, select
749 backfill may be mounded over the pipe. Mounding must be noted on the irrigation plan and
750 discussed with the *irrigation system* owner or owner's representative to address any safety
751 issues. All trenches and holes created during installation of an *irrigation system* must be
752 backfilled and compacted to the original grade. Mechanical excavation is not allowed where
753 damage could occur to a tree root system per Section 51A-10.136 of the *Dallas Development*
754 *Code*.
755

756 **Exception:** If a utility, man-made structure or roots create an unavoidable obstacle which
757 Makes the 6-inch depth coverage requirement impractical, the piping must be installed to
758 provide a minimum of 2 inches of select backfill between the top of the pipe and the natural
759 grade of the topsoil.
760

761 **F104.6 Irrigation zones.** *Irrigation systems* must have separate zones based on plant material
762 type, microclimate factors, topographic features, soil conditions and hydrological requirements.
763 Zones must be designed and installed so that all of the emission devices in that zone irrigate at the
764 same precipitation rate.
765

766 **F104.7 Spray over impervious surfaces prohibited.** *Irrigation systems* must not spray water
767 over surfaces made of concrete, asphalt, brick, wood, stones set with mortar or any other
768 impervious material, such as, but not limited to, walls, fences, sidewalks, streets, etc.
769

770 **F104.8 Master valve.** A master valve must be installed on the discharge side of the backflow
771 prevention device on all new installations in an approved valve box.
772

773 **F104.9 Rain and freeze shut-off devices.** All automatically controlled *irrigation systems* must
774 include sensors or other technology designed to inhibit or interrupt operation of the *irrigation*
775 *system* during periods of moisture, rainfall or freezing temperatures. Rain or moisture and freeze
776 shut-off technology must be installed according to the manufacturer's published recommendations.
777 All existing automatic *irrigation systems* must include a sensor or other technology designed to
778 inhibit or interrupt operation of the *irrigation system* during periods of moisture, rainfall or
779 temperatures of 37° or below.
780

781 **F104.10 Valves.** All new *irrigation systems* and major *maintenance, alterations, repairs or*
782 *service*, including repair or replacement of the backflow device, must include an isolation valve

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783 and y-type strainer between the water meter and the backflow prevention device. A master valve
784 must be installed after the backflow preventer. Zone valve(s), station solenoid valve(s), an
785 automatic master valve and isolation valves must be installed in an approved valve box for
786 accessibility, repair and service.

787

788 **F104.11 Irrigation system wiring.**

789

790 **F104.11.1 Underground electrical wiring.** Underground electrical wiring used to connect an
791 automatic controller to any electrical component of the *irrigation system* must be listed by
792 Underwriters Laboratories as acceptable for direct underground burial.

793

794 **F104.11.2 Component wiring size.** Electrical wiring that connects any *irrigation system*
795 electrical components must be sized according to the manufacturer's recommendation.

796

797 **F104.11.3 Wire splicing.** Electrical wire splices which may be exposed to moisture must be
798 waterproof as certified by the wire splice manufacturer. Electrical splice locations must be
799 noted on the irrigation plan.

800

801 **F104.11.4 Automatic controller wiring.** Underground electrical wiring that connects an
802 automatic controller to any electrical component of the *irrigation system* must be buried with
803 a minimum of 6 inches of select backfill.

804

805 **F104.11.5 Exposed wiring.** All exposed wiring must be protected from physical damage in
806 compliance with the *Dallas Electric Code*.

807

808 **Exception:** Listed cord and plug.

809

810 **F104.12 Non-potable water.** Water contained within the piping of an *irrigation system* is deemed
811 to be non-potable. No drinking or domestic water usage, such as, but not limited to, filling
812 swimming pools or decorative fountains, may be connected to an *irrigation system*. If a hose bibb
813 (an outdoor water faucet that has hose threads on the spout) is connected to an *irrigation system*
814 for the purpose of providing supplemental water to an area, the hose bibb must be installed using
815 a quick coupler key on a quick coupler installed in a covered purple valve box (consistent with
816 Pantone # 512) . The hose bibb and the valve box cover must be labeled "NON-POTABLE
817 WATER – DO NOT DRINK" and "AGUA DE RECIPERACION – NO BEBER". The lettering
818 shall be white on a purple background (consistent with Pantone # 512). In addition to the required
819 wordage, the pictograph shown in Figure 608.9.1 shall appear on the required signage. An isolation
820 valve must be installed upstream of a quick coupler connecting a hose bibb to an *irrigation system*.
821 The area being watered with a non-potable source shall be identified as per Section F106.1.5.

822

823 **F104.13 Check valves.** Check valves are required where elevation differences may result in low
824 head drainage. Check valves may be located at the sprinkler head(s) or on the lateral lines.

825

826 **F104.14 Direct supervision.** Job site supervision is required by either a licensed irrigator or
827 *irrigation technician* while work is being performed. When a licensed irrigator is not onsite, the
828 licensed irrigator shall be responsible for ensuring that a licensed *irrigation technician* is on-site
829 to supervise the installation of the *irrigation system*.

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F104.15 Programmable irrigation controller. All new *irrigation system* installations require the installation of a programmable irrigation controller. The programmable irrigation controller must be equipped with an emergency back-up power supply in the event of a primary power failure.

F104.15.1 Manufacturer's instructions. A programmable irrigation controller must be installed according to the manufacturer's installation instructions.

F104.15.2 Maximum height. A programmable irrigation controller may not be mounted more than 60 inches above a level floor surface.

F104.15.3 Power surges. The electrical power supplying a programmable irrigation controller must be protected from power surges or utilize a dedicated electrical circuit.

F104.15.4 Minimum installation distance. A programmable irrigation controller must be installed at least 15 inches from center to any side wall or similar obstruction.

Exception: When the manufacturer's installation instructions require a lesser distance.

SECTION F105 COMPLETION AND MAINTENANCE

F105.1 Completion of irrigation system installation.

F105.1.1 Completion. The licensed irrigator, installer or technician shall complete the following items upon completion of the *irrigation system* installation:

1. A final "walk through" with the *irrigation system's* owner or the owner's representative to explain the operation of the system.
2. A maintenance checklist with the signature of the *irrigation system's* owner or owner's representative and signed, dated and sealed by the licensed irrigator, installer or technician. If the *irrigation system's* owner or owner's representative is unwilling or unable to sign the maintenance checklist, the irrigator shall note the time and date of the refusal on the *irrigation system's* owner or owner's representative's signature line. The *irrigation system* owner or owner's representative will be given the original maintenance checklist and a duplicate copy of the maintenance checklist shall be maintained by the licensed irrigator. The items on the maintenance checklist must include but are not limited to:
 - 2.1. The manufacturer's manual for the automatic controller.
 - 2.2. A seasonal (spring, summer, fall, winter) watering schedule based on either current/real time evapotranspiration or monthly historical reference evapotranspiration (historical ET) data, monthly effective rainfall estimates, plant landscape coefficient factors and site factors.

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- 2.3. A list of components, such as the nozzle or pump filters, and other such components that require maintenance and the recommended frequency for the service.
3. A permanent sticker which contains the licensed irrigator's name, license number, company name, telephone number and the dates of the warranty period affixed to each programmable irrigation controller installed by the licensed irrigator, installer or technician. If the *irrigation system* is manual, the sticker must be affixed to the original maintenance checklist. Programmable irrigation controllers listed and installed for outdoor installation require a water proof permanent sticker. The information contained on the sticker, whether indoor or outdoor, must be printed with waterproof ink.
4. Provide the *irrigation system's* owner or owner's representative a copy of the irrigation plan indicating the actual system installation.
5. The statement, "This irrigation system has been installed in accordance with all applicable state and local laws, ordinances, rules, regulations or orders. I have tested the system and determined that it has been installed according to the irrigation plan and is properly adjusted for the most efficient application of water at this time."
6. Provide a certificate of compliance to the building official and the property owner or the property owner's representative stating that the requirements of this section and 30 *Texas Administrative Code* Chapter 344 have been completed.

F105.2 Maintenance, alteration, repair or service of irrigation systems.

F105.2.1 Irrigator responsibility. The irrigator is responsible for all work that the irrigator performed during the *maintenance, alteration, repair or service* of an *irrigation system* during the warranty period. The irrigator or business owner is not responsible for the professional negligence of any other irrigator who subsequently conducts any irrigation service on the same *irrigation system*.

F105.2.2 Trenches and holes. All trenches and holes created during the *maintenance, alteration, repair or service* of an *irrigation system* must be returned to the original grade with compacted select backfill.

F105.2.3 PVC primer. Colored PVC pipe primer solvent must be used on all pipes and fittings used in the *maintenance, alteration, repair or service* of an *irrigation system* in accordance with the *Dallas Plumbing Code* or *Dallas One- and Two-Family Dwelling Code*.

F105.2.4 Maintenance, alteration, repair or service. *When maintenance, alteration, repair or service* of an *irrigation system* is required and performed and an isolation valve, y-type strainer, rain and freeze sensors or approved backflow device are not present, the valve(s) and or sensors must be installed, permitted, tested and inspected. Existing approved backflow device(s) must be tested and test report given to the building official.

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SECTION F106 RECLAIMED WATER OR WATER WELLS

F106.1 Reclaimed water or water wells. Reclaimed water, storm water, rainwater harvest, gray water or water wells may be utilized in landscape *irrigation systems*.

F106.1.1 Connections. An *irrigation system* utilizing reclaimed water, storm water, rainwater harvest, gray water or well water must not be directly connected to the potable water supply.

Exception: When potable water is protected by an air gap as defined by and installed in accordance with the *Dallas Plumbing Code* or the *Dallas One- and Two-Family Dwelling Code* and the potable water system shall be protected by means of a reduce pressure backflow preventer immediately at the point of connection.

F106.1.2 Edible crops. Water from an *irrigation system* utilizing reclaimed water, storm water, rainwater harvest, gray water or well water may not make direct contact with edible crops, unless the crop is pasteurized before consumption.

F106.1.3 Property lines. An *irrigation system* utilizing reclaimed water, storm water, rainwater harvest, gray water or well water must not spray water across property lines.

F106.1.4 Purple components. An *irrigation system* utilizing reclaimed water, storm water, rainwater harvest, gray water or well water must be installed using purple components (consistent with Pantone # 512) as detailed in the *Dallas Plumbing Code* per the *Dallas One- and Two-Family Dwelling Code*.

F106.1.5 Sign. Areas being irrigated utilizing a water reuse system or well shall be properly identified. Signs shall be a minimum 8 inch by 8 inch corrosion-resistant waterproof sign. Signage shall read as follows: "NON-POTABLE WATER - DO NOT DRINK" and "AGUA DE RECUPERACION - NO BEBER." The words shall be legibly and indelibly printed and shall be not less than 0.5 inch (12.7 mm) in height on a purple background (consistent with Pantone color # 512) with white letters. In addition to the required wordage, the pictograph shown in Figure 608.9.1 shall appear on the required signage. The signs must be located in a manner that is visible to all persons and approved by the building official. The number of signs installed must also be approved by the building official.

F106.1.6 Backflow prevention. Backflow prevention on the reclaimed water supply line must be in accordance with the *Dallas Plumbing Code*, *Dallas One- and Two-Family Dwelling Code*, and Dallas Water Utilities rules and regulations."

35. Appendices A, B, C and D of the 2021 International Plumbing Code are not adopted.

36. All chapters of the 2021 International Plumbing Code adopted by this ordinance are subchapters of Chapter 54 of the Dallas City Code, as amended.

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965 37. All references in the 2021 International Plumbing Code to the fire code, building code,
966 mechanical code, electrical code, residential code, existing building code, energy conservation
967 code, fuel gas code, and green construction code refer, respectively, to Chapters 16, 53, 55, 56, 57,
968 58, 59, 60 and 61 of the Dallas City Code.

969 SECTION 2. That a person violating a provision of this ordinance, upon conviction, is
970 punishable by a fine not to exceed \$2,000. No offense committed and no liability, penalty, or
971 forfeiture, either civil or criminal, incurred prior to the effective date of this ordinance will be
972 discharged or affected by this ordinance. Prosecutions and suits for such offenses, liabilities,
973 penalties, and forfeitures may be instituted, and causes of action pending on the effective date of
974 this ordinance may proceed, as if the former laws applicable at the time the offense, liability,
975 penalty, or forfeiture was committed or incurred had not been amended, repealed, reenacted, or
976 superseded, and all former laws will continue in effect for these purposes.

977 SECTION 3. That Chapter 54 of the Dallas City Code, as amended, will remain in full
978 force and effect, save and except as amended by this ordinance. Any existing structure, system,
979 development project, or registration that is not required to come into compliance with a
980 requirement of this ordinance will be governed by the requirement as it existed in the former law
981 last applicable to the structure, system, development project, or registration, and all former laws
982 will continue in effect for this purpose.

983 SECTION 4. That the terms and provisions of this ordinance are severable and are
984 governed by Section 1-4 of Chapter 1 of the Dallas City Code, as amended.

985 SECTION 5. That this ordinance will take effect on _____, and it is
986 accordingly so ordained.

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PUBLIC COMMENT VERSION-October 1, 2022

988 APPROVED AS TO FORM:

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992 By _____

993 Assistant City Attorney

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996 Passed _____

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