- D. Post-Construction Stormwater Management in New Development and Redevelopment
 - 1. TCEQ Permit Requirements (Ref. TPDES Permit Part III.B.4):

(a) POST CONSTRUCTION STORMWATER MANAGEMENT PROGRAM

(1) All permittees shall develop, implement, and enforce a program, to the extent allowable under State, Federal, and local law, to control stormwater discharges from new development and redeveloped sites that discharge into the small MS4 that disturb one acre or more, including projects that disturb less than one acre that are part of a larger common plan of development or sale. The program must be established for private and public development sites. The program may utilize an offsite mitigation and payment in lieu of components to address this requirement.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of the permit term.

(2) All permittees shall use, to the extent allowable under State, Federal, and local law, and local development standards, an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects. The permittees shall establish, implement, and enforce a requirement that owners or operators of new development and redeveloped sites design, install, implement, and maintain a combination of structural and non-structural BMPs appropriate for the community and that protects water quality. If the construction of permanent structure is not feasible due to space limitations, health and safety concerns, cost effectiveness, or highway construction codes, the permittee may propose an alternative approach to TCEQ. Newly regulated permittees shall have the program element fully implements by the end of the permit term.

(b) REQUIREMENTS FOR ALL PERMITTEES

All permittees shall include the requirements described below in Parts III.B.4.(b)(1)-(3)

- (1) All permittees shall review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2.. Any changes must be included in the annual report. Such written procedures must be maintained either on site or in the SWMP and made available for inspection my TCEQ.
- (2) All permittees shall document and maintain records of enforcement actions and make them available for review by the TCEQ.
- (3) Long-Term Maintenance of Post-Construction Stormwater Control Measures

All permittees shall, to the extent allowable under State, Federal, and local law, ensure the long-term operations and maintenance of structural stormwater control measures installed through one or both of the following approaches:

a. Maintenance performed by the permittee. See Part III.B.5.

b. Maintenance performed by the owner or operator of a new development or redeveloped site under a maintenance plan. The maintenance plan must be filed in the real property records of the county in which the property is located. The permittee shall require the owner or operator of any new development or redeveloped site to develop and implement a maintenance plan addressing maintenance requirements for any structural control measures installed on site. The permittee shall require operation and maintenance performed is documented and retained on site, such as at the offices of the owner of operation, and made available for review by the small MS4.

(c) ADDITIONAL REQUIREMENTS FOR LEVEL 4 SMALL MS4S

In addition to the requirements described in Parts III.B.5.(b)(1)-(3) above, permittees who operate Level 4 small MS4s shall meet the following requirements:

- (1) Inspections Permittees who operate Level 4 small MS4s shall develop and implement an inspection program to ensure that all post-construction stormwater control measures are operating correctly and are being maintained as required consistent with its applicable maintenance plan. For small MS4s with limited enforcement authority, this requirement applies to the structural controls owned and operated by the small MS4 or its contractors that perform these activities within the small MS4's regulated area.
 - Inspection Reports The permittee shall document its inspection findings in an inspection report and make them available for review by the TCEQ.

2. Best Management Practices

The City of Dalworthington Gardens has selected the following BMPs to fulfill the requirements of the Post-Construction Stormwater Management in New Development and Redevelopment minimum control measure.

- Post-Construction Ordinance
- Long-Term Maintenance of Post-Construction BMPs
- Landscape Ordinance
- 4. Zoning Ordinance

POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

Best Management Practice	Responsible Department	Measurable Goal	E P	ation	n		
the same of the sa	Бериктепе		1	2	3	4	5
Post-Construction Ordinance			X	X	X	х)
Provide a post-construction stormwater runoff ordinance to require developers to address post-construction runoff control	City Administration	Continue to administer the existing post-construction runoff ordinance. Document and maintain enforcement actions.		Yea	r 1 - 1	rear 5	
from new development and redevelopment projects and ensure long term operation and maintenance of	elopment and t projects and ensure long		X				
proposed BMPs.		Modify the existing post- constrution ordinance, if necessary, based on the renewed permit requirements.	Year 2				

NOTES: The City has an existing post-construction stormwater ordinance. The existing ordinance requires the design, installation, implementation, and maintenance of BMPs to protect water quality. The BMPs will be reviewed by the Engineering office during planning and design of the site. The ordinance will be re-evaluated in Year 3 to determine if the ordinance should be updated based on the completion of the post-construction procedures developed in Year 2.

Develop requirements for long-term		Update the requirements for the	
maintenance of post-construction BMPs that are installed on new development and re-development projects.	City Administration	long-term operation and maintenance of structural controls installed on development sites.	Year 4

NOTES: The City shall review the existing long-term maintenance requirements of the post-construction ordinance and the long-term O&M requirements as outlined in Part III.B.4.(b)(3) of the TCEQ MS4 permit (Page 39). The City will evaluate and update the ordinance, if necessary, to require either maintenance performed by the City or maintenance performed by the owner/operator under a maintenance plan. Maintenance plans will be required to be filed in the real property records of the County. Maintenance plans will also have requirements for retention of maintenance records for any structural control measures installed on site.

The City has a long-term maintenance plan of mowing existing drainage ditches and clearing them of debris throughout the City. The mowing is either done by City staff or by third-party contractors. Work orders are written for each mowing/clearing cycle with an SOP schedule of maintenance dates and procedures.

POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

Best Management Practice	Responsible	Measurable Goal		Imple	ement Year		
	Department		1	2	3	4	5
Landscape Ordinance			х	x	х	х	×
Provide a landscape ordinance to promote buffering, tree preservation, landscaping, and open space minimum requirements for new development to ensure more pervious survaces are provided in new development and decrease the amount of post construction runoff.	City Administration	Continue to administer the existing landscape ordinance. Document and maintain enforcement actions.		Yea	ra - '	Year 5	4.5

NOTES: The City currently has a landscape ordinance in place that regulates the buffering and landscaping minimums for all new developments in the City. The ordinance has been updated to include a required tree suvey and tree preservation requirements.

E. Pollution Prevention and Good Housekeeping for Municipal Operations

1. TCEQ Permit Requirements (Ref. TPDES Permit Part III.B.5):

(a) PROGRAM DEVELOPMENT

(1) All permittees shall develop and implement an operation and maintenance program, including an employee training component that has the ultimate goal of preventing or reducing pollutant runoff from municipal activities and municipally owned areas including but not limited to park and open space maintenance; street, road, or highway maintenance; fleet and building maintenance; stormwater system maintenance; new construction and land disturbances; municipal parking lots; vehicle and equipment maintenance and storage yards; waste transfer stations; and salt/sand storage locations.

Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharges of pollutants for the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. See also Part III.A.1.(c))

(b) REQUIREMENTS FOR ALL PERMITTEES

All permittees shall include the requirements described below in Parts III.B.5.(1)-(6) in the program:

(1) Permittee-owned Facilities and Control Inventory

All permittees shall develop and maintain an inventory of facilities and stormwater controls that it owns and operates within the regulated area of the small MS4. If feasible, the inventory may include all applicable permit numbers, registration numbers, and authorizations for each facility or controls. The inventory must be available for review by TCEQ and must include, but is not limited to, the following, as applicable:

- a. Composting facilities;
- Equipment storage and maintenance facilities;
- Fuel storage facilities;
- d. Hazardous waste disposal facilities;
- e. Hazardous waste handling and transfer facilities;
- f. Incinerators;
- g. Landfills;
- h. Materials storage yards;
- Pesticide storage facilities;
- Buildings, including schools, libraries, police stations, fire stations, and office buildings;
- k. Parking lots;
- Golf courses;
- m. Swimming pools;
- Public works yards;
- Recycling facilities;
- p. Salt storage facilities;
- q. Solid waste handling and transfer facilities
- Street repair and maintenance sites;
- s. Vehicle storage and maintenance yards; and
- Structural stormwater controls.

(2) Training and Education

All permittees shall inform or train appropriate employees involved in implementing pollution prevention and good housekeeping practices. All permittees shall maintain a training attendance list for inspection by TCEQ when requested.

Disposal of Waste Material – Waste materials removed from the small MS4 must be disposed of in accordance with 30 TAC Chapters 330 or 335, as applicable.

(3) Contractor Requirements and Oversight

- a. Any contractors hired by the permittee to perform maintenance activities on permittee-owned facilities must be contractually required to comply with all of the stormwater control measures, good housekeeping practices, and facility specific stormwater management operating procedures as described in Parts III B.5.(2)-(6).
- b. All permittees shall provide oversight of contractor activities to ensure that contractors are using appropriate control measures and SOPs. Oversight procedures must be developed before the end of the permit term and maintained on site and made available for inspection by TCEQ.

(4) Municipal Operation and Maintenance Activities

Assessment of permittee-owned operations

All permittees shall evaluate operations and maintenance (O&M) activities for their potential to discharge pollutants in stormwater, including but not limited to:

- Road and parking lot maintenance may include such areas as pothole repair, pavement marking, sealing, and re-paving;
- (ii) Bridge maintenance may include such areas as re-chipping, grinding, and saw cutting;
- (iii) Cold weather operations, including plowing, sanding, and application of deicing and anti-icing compounds and maintenance of snow disposal areas; and
- (iv) Right-of-way maintenance, including mowing, herbicide and pesticide applications, and planting vegetation.
- All permittees shall identify pollutants of concern that could be discharged from the above O&M activities (for example, metals, chlorides; hydrocarbons such as benzene, toluene, ethyl benzene, and xylenes; sediment; and trash).
- c. All permittees shall develop and implement a set of pollution prevention measures that will reduce the discharge of pollutants in stormwater from the above activities. These pollution prevention measures may include the following examples:
 - (i) Replacing materials and chemicals with more environmentally benign materials or methods;
 - (ii) Changing operations to minimize the exposure or mobilization of pollutants to prevent them from entering surface waters; and

- (iii) Placing barriers around or conducting runoff away from deicing chemical storage areas to prevent discharge into surface waters.
- d. Inspection of pollutions prevention measures All pollution prevention measures implemented at permittee-owned facilities must be visually inspected at a frequency determined by the permittee to ensure they are working properly. A log of inspections must be maintained and made available for review by the TCEQ upon request.
- (5) Structural Control Maintenance

If BMPs include structural controls, maintenance of the controls must be performed at a frequency determined by the permittee and consistent with maintaining the effectiveness of the BMP.

(c) ADDITIONAL REQUIREMENTS FOR LEVEL 3 AND 4 SMALL MS4S:

In addition to the requirements described in Parts.B.5.(b)(1)–(6) above, permittees who operate Level 3 or 4 small MS4s shall meet the following requirements:

- (1) Storm Sewer System Operation and Maintenance
 - a. Permittees who operate Level 3 or 4 small MS4s shall develop and implement an O&M program to reduce to the maximum extent practicable the collection of pollutants in catch basins and other surface drainage structures.
 - b. Permittees who operate Level 3 or 4 small MS4s shall develop a list of potential problem areas. The permittees shall identify and prioritize problem areas for increased inspection (for example, areas with recurrent illegal dumping).
- (2) Operation and Maintenance Program to Reduce Discharges of Pollutants from Roads

Permittees who operate Level 3 or 4 small MS4s shall implement an O&M program that includes, if feasible and practicable, a street sweeping and cleaning program, or an equivalent BMP such as an inlet protection program, which must include an implementation schedule and a waste disposal procedure. The basis for the decision must be included in the SWMP. If a street sweeping and cleaning program is implemented, the permittee shall evaluate the following permittee-owned and operated areas for the program: streets, road segments, and public parking lots including, but not limited to, high traffic zones, commercial and industrial districts, sport and event venues, and plazas, as well as areas that consistently accumulate high volumes of trash, debris, and other stormwater pollutants.

- a. Implementation schedules If a sweeping program is implemented, the permittee shall sweep the areas in the program (for example, the streets roads, and public parking lots) in accordance with a frequency and schedule determined in the permittee's O&M program.
- b. For areas where street sweeping is technically infeasible (for example, streets without curbs), the permittee shall focus on implementation of other trash and litter control procedures, or provide inlet protection measures to minimize pollutant discharges to storm drains and creeks.
- c. Sweeper Waste Material Disposal If utilizing street sweepers, the permittee shall develop a procedure to dewater and dispose of street sweeper waste material and shall ensure that water and material will not reenter the small MS4.
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(3) Facility Assessment

Permittees who operate Level 3 or 4 small MS4s shall perform the following facility assessment in the regulated portion of the small MS4 operated by the permittee:

- Assessment of Facilities' Pollutant Discharge Potential The Permittee shall review the facilities identified in Part III.B.5.(b) once per permit term for their potential to discharge pollutants into stormwater.
- b. Identification of high priority facilities Based on the Part III.B.5.(c)(4)a. assessment, the permittee shall identify as high priority those facilities that have a high potential to generate stormwater pollutants and shall document this in a list of these facilities. Among the factors that must be considered in giving a facility a high priority ranking are the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must not be performed outside (for example, changing automotive fluids, vehicle washing), proximity to water bodies, proximity to sensitive aquifer recharge features, poor housekeeping practices, and discharge of pollutant(s) of concern to impaired water(s). High priority facilities must include, at a minimum, the permittee's maintenance yards, hazardous waste facilities, fuel storage locations, and any other facilities at which chemicals or other materials have a high potential to be discharged into stormwater.
- c. Documentation of Assessment Results The permittee shall document the results of the assessments and maintain copies of all site evaluation checklists used to conduct the assessments. The documentation must include the results of the permittee's initial assessment, and any identified deficiencies and corrective actions taken.

(4) Development of Facility Specific SOP's

Permittees who operate Level 3 or 4 small MS4s shall develop facility specific stormwater management SOPs. The permittee may utilize existing plans or documents that may contain the following required information:

- a. For each high priority facility identified in Part III.B.5.(c)(4)b., the permittee shall develop a SOP that identifies BMPs to be installed, implemented, and maintained to minimize the discharge of pollutants in stormwater from each facility.
- b. A hard or electronic copy of the facility-specific stormwater management SOP (or equivalent existing plan or document) must be maintained and be available for review by the TCEQ. The SOP must be kept on site when possible and must be updated as necessary.

(5) Stormwater Controls for High Priority Facilities

Permittees who operate Level 3 or 4 small MS4s shall implement the following stormwater controls at all high priority facilities identified in Part III.B.5.(c)(4)b. A description of BMPs developed to comply with this requirement must be included in each facility specific SOP:

 General good housekeeping – Material with a potential to contribute to stormwater pollution should be sheltered from exposure to stormwater when feasible.

- b. De-icing and anti-icing material storage The permittee shall ensure, to the MEP, that stormwater runoff from storage piles of salt and other deicing and anti-icing materials is not discharged; or shall ensure that any discharges from the piles are authorized under a separate discharge permit.
- c. Fueling operations and vehicle maintenance The permittee shall develop SOPs (or equivalent existing plans or documents) which address spill prevention and spill control at permittee-owned and operated vehicle fueling, vehicle maintenance, and bulk fuel delivery facilities.
- d. Equipment and vehicle washing The permittee shall develop SOPs that address equipment and vehicle washing activities at permittee-owned and operated facilities. The discharge of equipment and vehicle wash water to the small MS4 or directly to receiving water from permittee-owned facilities is not authorized under this general permit. To ensure that wastewater is not discharge under this general permit, the permittee's SOP may include installing a vehicle wash reclaim system, capturing and hauling the wastewater for proper disposal, connecting to sanitary sewer (where applicable and approved by local authorities), ceasing the washing activity, or applying for and obtaining a separate TPDES permit.

(6) Inspections

Permittees who operate Level 3 or 4 small MS4s shall develop and implement an inspection program, which at a minimum must include periodic inspections of high priority permittee-owned facilities. The results of the inspections and observations must be documented and available for review by the TCEQ.

(d) ADDITIONAL REQUIREMENTS FOR LEVEL 4 SMALL MS4S:

In addition to all the requirements described in Parts III.B.5.(b) and III.B.5.(c) above, permittees who operate Level 4 small MS4s shall meet the following requirements:

- (1) Pesticide, Herbicide, and Fertilizer Applications and Management
 - a. Landscape maintenance The permittee shall evaluate the materials used and activities performed on public spaces owned and operated by the permittee such as parks, schools, golf courses, easements, public rights-of-way, and other open spaces for pollution prevention opportunities. Maintenance activities for the turf landscaped portions of these areas may include mowing, fertilization, pesticide application, and irrigation. Typical pollutants include sediment, nutrients, hydrocarbons, pesticides, herbicides, and organic debris.
 - b. The permittee shall implement the following practices to minimize landscaping-related pollutant generation with regard to public spaces owned and operated by the permittee:
 - (i) Educational activities, permits, certifications, and other measures for the permittee's applicators and distributors.
 - (ii) Pest management measures that encourage non-chemical solutions where feasible. Examples may include:
 - (a) Use of native plants or xeroscaping;
 - (b) Keeping clippings and leaves out of the small MS4 and the street by encouraging mulching, composting, or landfilling;

- (c) Limiting application of pesticides and fertilizers if precipitation is forecasted within 24 hours, or as specified in label instructions;
- (d) Reducing mowing of grass to allow for greater pollutant removal, but not jeopardizing motorist safety.
- c. The permittee shall develop schedules for chemical application in public spaces owned and operated by the permittee that minimize the discharge of pollutants from the application due to irrigation and expected precipitation.
- d. The permittee shall ensure collection and proper disposal of the permittee's unused pesticides, herbicides, and fertilizers.

2. Best Management Practices

The City of Dalworthington Gardens has selected the following BMPs to fulfill the requirements of the Pollution Prevention/Good Housekeeping for Municipal Operations minimum control measure.

- Facility and Stormwater Control Inventory
- 2. Municipal Employee training Program
- 3. Contractor Requirements and Oversight
- 4. Municipal Operation and Maintenance Activities

POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Best Management Practice	Public of City-owned and operated facilities and stormwater controls, and the maintenance procedures	1 1 1 1 1 1		ementation Year			
	Department		1.	2	3	4	5
Facility and Stormwater Control Inventory					X	X	X
Develop and maintain a list of City-owned and operated facilities and stormwater controls, as well as all applicable permit numbers for any City facility with a separate TPDES permit.	Public Works	facilities and stormwater controls,		Yea	r3-1	ear 5	

NOTES: The City will review the list of facilities and controls provided under Part III.8.5.(b)(1) under the TCEQ MS4 permit (pages 40-41) and will consider other facilities as appropriate for inclusion in the inventory. (See page 48a for list of current City-owned and operated facilities).

Municipal Employee Training Program			X				
Develop a training program that includes seminars, in-house training sessions, new-		Organize a list of employee descriptions that will receive training, a training schedule, and select appropriate training materials and methods.		,	ear 1		
employee training, videos, manuals or other means to inform and train municipal	Public Works			X	x	х	×
employees about methods to prevent and reduce stormwater pollution from municipal activities.		Implement the municipal employee training program and maintain a training attendee list with signatures.	Year 2 - Year 5				5

NOTES: This BMP will target municipal employees involved in pollution prevention and good housekeeping practices. Examples of training activites include training on proper fertilizer and pesticide use, Public Works training on proper erosion and sediment controls during construction, training for the washing of construction equipment, or cleanup and spill response training. Several training resources are available for municipal use and include Partners for a Clean Environment (PACE, NCTCOG, and EPS resources.

Current Dalworthington Gardens Facilities

<u>Facility</u>	Address	<u>Department</u>	Build. Value
Barn/City Hall/ Public Safety	2600 Roosevelt Dr.	General Gov't.	\$ 1,242,848
Chlorination House	3210A Roosevelt Dr.	Public Utilities	\$ 6,172
300k gal Elev. Water Tank	3122 W. Arkansas Ln.	Public Utilities	\$ 1,083,768
500k gal Ground Water Tank	3122 W. Arkansas Ln.	Public Utilities	\$ 543,001
Pump Station #1	3122 W. Arkansas Ln.	Pubic Utilities	\$ 35,328
Pump Station #2	3210 Roosevelt Dr.	Public Utilities	\$ 19,153
250k gal Ground Water Tank #1	3210 Roosevelt Dr.	Public Utilities	\$ 334,122
250k gal Ground Water Tank #2	3210 Roosevelt Dr.	Public Utilities	\$ 334.122
Pavilion	Elkins Park	Parks/Recr.	\$ 12,450
Pedestrian Bridge #1	Elkins Park	Parks/Recr.	\$ 11,918
Pedestrian Bridge #2	Elkins Park	Parks/Recr.	\$ 8,832

POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Best Management Practice	Responsible Department	Measurable Goal	Implementation Year							
	Department		1	2	3	4	5			
Contractor Requirements and Oversight			X							
Requirements for City-hired contractors		Update the list of City-hired contractors subject to these stormwater program requirements.			Year 1					
City-owned facilities to comply with the	Public	An annual contraction of the con		х						
that perform maintenance activities on	Works	Works for applicable contractor	Year 2							
implemented.	37 1	Continue implementing the		×	x	X	x			
		oversight procedures and execute revised contractual agreements as applicable.	Year 2 - Year 5							

NOTES: The City will review the list of City-hired contractors subject to the stormwater pollution prevention and good housekeeping requirements of this program and review the existing contracts and revise as needed. The City will provide oversight of contractor activities to ensure that contractors are using appropriate control measures and standard operating procedures. Oversight procedures will be maintained with the stormwater program.

Municipal Operation and Maintenance Activitie	es		X		
Develop and implement pollution prevention measures for municipal		Perform an assessment of municipal operations and/or activities that have the potential for pollutant discharges.		Year 2	
operations and maintenance activities to reduce the potential for discharge of	Public Works	Leves of the second			
pollutants in stormwater.		Review/update pollution prevention measures for municipal O&M activities and update inspection frequencies.		Year 3	

NOTES: The City will assess municipal O&M activities such as road and parking lot maintenance including pothole repair, pavement marking, sealing, repaving, bridge maintenance, cold weather operations such as sanding and de-icing and right-of-way maintenance such as mowing, herbicide and pesticide application, and planting. The City will identify pollutants of concern (i.e. metals, chlorides, hydrocarbons, sediment, trash, etc.) that could be discharged from these O&M activities and develop a set of pollution prevention measures. Pollution prevention measures could include replacing materials with more environmentally benign materials, changing operations to minimize exposure, or using BMPs to prevent discharges such as containment devices. O&M activities will also include procedures for the maintenance of structural control BMPs to reduce pollution runoff. All pollution prevention measures will be visually inspected at a frequency to ensure they are working properly. Several pollution prevention methods and procedures have been developed for municipalities and are available on the PACE (Partners for a Clean Environment) website at www.pacepartners.com. (See page 49a for a list of pollutants addressed by the City's Public Works staff during this reporting year).

2019 Dalworthington Gardens Pollutants Disposal

Six small tires, six tires with rims, and one bobcat tire were taken on 11/08/19 to:

All American Tire Recycles 6414 Dick Price Road Mansfield, Texas 76063

Forty-two 1-gallon cans of paint were taken on 11/11/19 to:

Sherwin-Williams Paint Store 401 N. Cooper Street Arlington, Texas 76012

Four barrels (150 gallons) of oil were taken on 11/13/19 to:

Metroplex Oil Recovery 718 Sunny Lane Irving, Texas 75060 (972) 757-6740

Four 5-gallon cans of waste oil were taken on 11/25/19 to:

Metroplex Oil Recovery 718 Sunny Lane Irving, Texas 75060 (972) 757-6740

Eleven fire extinguishers were taken on 11/25/19 and left on the dock to be destroyed by:

Kimbrough Fire Protection 1203 South Second Avenue Mansfield, Texas 76063

City has contracted with CG Environmental to pick up future hazardous pollutant materials for proper disposal.

CG Environmental 1816 Central Commerce Ct. Round Rock, Texas 75664