APPENDIX C
WATER CIP PROJECTS

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Water CIP Projects

TARRANT REGIONAL WATER DISTRICT PROJECTS

Project Title: **Eagle Mountain Connection Raw Water Line and Pump Station**

Description: Construction of raw water line and pump station from Benbrook Lake to Eagle Mountain Lake.

Purpose: Provide additional raw water supplies to the Eagle Mountain Water Treatment Plant.

Allocation: This project is allocated 13% to growth in the study period, as it is required to provide capacity to meet projected water demands.

Project Title: **Integrated Pipeline and Pump Stations**

Description: Construction of raw water line and pump stations from Richland-Chambers Reservoir to Benbrook Lake.

Purpose: Provide an additional raw water line to provide additional raw water supplies.

Allocation: This project is allocated 24.2% to growth in the study period, as it is required to Provide capacity to meet projected water demands.

Project Title: **Richland-Chambers Wetlands**

Description: Construction of wetlands near Richland-Chambers Reservoir.

Purpose: Provide an additional raw water supply to the Integrated Pipeline Project.

Allocation: This project is allocated 64.9% to growth in the study period, as it is required to Provide capacity to meet projected water demands.

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RAW WATER SUPPLY

Project Title: **Expand Second Eagle Mountain Raw Water PS from 35 MGD to 70 MGD (N2-18B)**

Description: Design and construction of additional pumping capacity in the Second Eagle Mountain Raw Water Pump Station.

Purpose: Provide additional raw water supplies to the Eagle Mountain Water Treatment Plant to a capacity of 140 mgd.

Allocation: This project is allocated 40% to growth in the study period as it is required to treat a portion the projected maximum day demand of 589 mgd in 2027.

Project Title: **Clear Fork Raw Water Pump Station Parallel Pipeline to Holly WTP**

Description: Design and construction of an additional raw water pipeline from the Clear Fork Trinity River Pump Station to the Holly WTP.

Purpose: Provide an additional raw water line to provide additional raw water supplies.

Allocation: This project is allocated 32% to growth in the study period, as it is required to bring an additional 50 mgd of raw water to the Holly WTP.

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WATER TREATMENT PLANTS

Project Title: **Westside Water Treatment Plant (W3-15A)**

Description: Design and construction of new 12 MGD Water Treatment Plant.

Purpose: A new water treatment plant is recommended to meet the demands in the northwest part of the City. This project was recommended by the on-going Water Master Plan Update.

Allocation: This project is allocated 20% to growth in the study period, as it is required to provide capacity to meet projected water demands.

Project Title: **Eagle Mountain Clearwell #3 Expansion (N2-6A)**

Description: Design and construction of the third clearwell at the Eagle Mountain WTP.

Purpose: The completion of the third clearwell adds 2.5 MG of capacity as well as allows for the full 105 MGD capacity to be utilized at the water treatment plant.

Allocation: This project is allocated 60% to growth in the study period, as it is required to provide capacity to meet projected water demands.

Project Title: **Westside Water Treatment Plant Expansion (W3-15B)**

Description: Design and construction of a 3 MGD expansion of the Westside WTP.

Purpose: An expansion of the water treatment plant capacity from 12 mgd to 15 mgd is recommended to meet the demands in the northwest part of the City. This project was recommended by the on-going Water Master Plan Update.

Allocation: This project is allocated 100% to growth in the study period, as it is required to provide capacity to meet projected water demands.

Project Title: **Westside Water Treatment Plant Expansion (W3-15C)**

Description: Design and construction of a 3 MGD expansion of the Westside WTP.

Purpose: An expansion of the water treatment plant capacity from 15 mgd to 18 mgd is recommended to meet the demands in the northwest part of the City. This project was recommended by the on-going Water Master Plan Update.

Allocation: This project is allocated 81% to growth in the study period, as it is required to provide capacity to meet projected water demands.

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Project Title: **Eagle Mountain WTP Expansion from 105 MGD to 140 MGD; Expand High Service Pump Station (N2-18A)**

Description:	Design and construction of Eagle Mountain Water Treatment Plant expansion to treat 140 mgd.
Purpose:	An expansion of Eagle Mountain WTP to be increased further to 140 mgd because of the growth of the City's north side and Alliance Airport area, and because of the projected water demand increase.
Allocation:	This project is allocated 40% to growth in the study period, as it is required to provide capacity to meet projected water demands.

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PUMP STATIONS AND REGIONAL TRANSMISSION LINES

Project Title: **McCart Pump Station Improvements (S3-51)**

Description: Design and construction of an expansion to the McCart Pump Station with an expanded capacity from 25 to 35 mgd.

Purpose: A larger pump station is necessary to provide additional pumping capacity to this pressure plane and redeveloping areas.

Allocation: The additional 10 mgd pump station capacity increases the total pump station capacity by 40% to meet future water system demands. This project is allocated 86% to growth in the study period.

Project Title: **Westside V Pump Station with 3 mgd Capacity (W5-1)**

Description: Design and construction of a new Westside V Pump Station with a capacity of 3 mgd.

Purpose: A new pump station is necessary to address the projected new population growth in this pressure plane. This project was recommended in the on-going Water Master Plan Update.

Allocation: This project was allocated 68% to growth in the study period.

Project Title: **Northside Pump Station Improvements (N2-8)**

Description: Design and construction of an expansion to the Northside Pump Station with an expanded capacity from 58 to 70 mgd.

Purpose: A larger pump station is necessary to provide additional pumping capacity to this pressure plane and redeveloping areas. This project was recommended in the on-going Water Master Plan Update.

Allocation: This project was allocated 33% to growth in the study period.

Project Title: **SSIV Pump Station at Sun County Tank (S4-5)**

Description: Design and construction of a new Southside IV Pump Station with a capacity of 3 mgd.

Purpose: A new pump station is necessary to address the projected new population growth in this pressure plane. This project was recommended in the on-going Water Master Plan Update.

Allocation: This project was allocated 5% to growth in the study period.

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Project Title: **Westside IV Pump Station on Interstate 20 (W4-3)**

Description: Design and construction of a new Westside IV Pump Station with a capacity of 4 mgd.

Purpose: A new pump station is necessary to address the projected new population growth in this pressure plane. This project was recommended in the on-going Water Master Plan Update.

Allocation: This project is allocated 78% to growth in the study period.

Project Title: **Northside II 48-inch Transmission Line Phase II**

Description: Design and construction of a 48-inch transmission line in the Northside II Pressure Plane. This project runs from Cromwell Marine Creek Road to Texas Sage Trail.

Purpose: A large transmission line is necessary to address the projected new population growth in the area.

Allocation: This project is allocated 35% to growth in the study period.

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STORAGE TANKS

Project Title: **Sendera Ranch Ground Storage Tank and Pump Station (N3-11)**

Description: Design and construction of a 5 MG ground storage tank.

Purpose: In order to meet operational storage requirements and higher water demand due to the projected population, additional storage facilities are needed. This improvement was recommended by the on-going Water Master Plan Update.

Allocation: This project is allocated 29% to growth.

Project Title: **1.0 MG Elevated Storage Tank on Highway 287 (N4-2B)**

Description: Design and construction of a 1.0 MG elevated storage tank for the Northside IV Pressure Plane.

Purpose: In order to meet operational storage requirements and higher water demand due to the projected population, additional storage facilities are needed in the Northside IV Pressure Plane. This improvement was recommended by the on-going Water Master Plan Update.

Allocation: This project is allocated 55% to growth.

Project Title: **5.0 MG Ground Storage Tank at the Caylor Tank Site (N2-10)**

Description: Design and construction of a 5.0 MG ground storage tank for the Northside II Pressure Plane.

Purpose: This improvement is to provide additional storage facilities that are needed in the Northside II Pressure Plane. This improvement was recommended by the on-going Water Master Plan Update.

Allocation: This project is allocated 40% to growth.

Project Title: **1.0 MG Westside V Elevated Storage Tank North of Aledo Road (W5-3)**

Description: Design and construction of a 1.0 MG elevated storage tank for the Westside V Pressure Plane.

Purpose: In order to meet operational storage requirements and higher water demand due to the projected population, additional storage facilities are needed in the Westside V Pressure Plane. This improvement was recommended by the on-going Water Master Plan Update.

Allocation: This project is allocated 31% to growth.

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Project Title: **1.0 MG Westside IV Elevated Storage Tank (W4-10)**

Description: Design and construction of a 1.0 MG elevated storage tank for the Westside IV Pressure Plane.

Purpose: In order to meet operational storage requirements and higher water demand due to the projected population, additional storage facilities are needed in the Westside IV Pressure Plane. This improvement was recommended by the on-going Water Master Plan Update.

Allocation: This project is allocated 47% to growth.

Project Title: **2.5 MG Westside III Ground Storage Tank South of IH-20 (W3-4)**

Description: Design and construction of a 2.5 MG ground storage tank for the Westside III Pressure Plane.

Purpose: In order to meet operational storage requirements and higher water demand due to the projected population, additional storage facilities are needed in the Westside II Pressure Plane. This improvement was recommended by the on-going Water Master Plan Update.

Allocation: This project is allocated 36% to growth.

Project Title: **5.0 MG Ground Storage Tank at the McCart Pump Station (S2-73)**

Description: Design and construction of a 5.0 MG ground storage tank at the McCart Pump Station.

Purpose: This improvement is to provide additional storage facilities that are needed in the surrounding areas.

Allocation: This project is allocated 25% to growth.

Project Title: **2.0 MG Northside III Elevated Storage Tank (N3-13)**

Description: Design and construction of a 2.0MG elevated storage tank for the Northside III Pressure Plane.

Purpose: In order to meet operational storage requirements and higher water demand due to the projected population, additional storage facilities are needed in the Northside III Pressure Plane. This improvement was recommended by the on-going Water Master Plan Update.

Allocation: This project is allocated 46% to growth.

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ENGINEERING STUDIES

Project Title: **2004 Water Master Plan**

Description: An engineering study to update the 1994 Water Master Plan.

Purpose: The water master plan projects system flows and requirements for the 20 year period from 2005 to 2025. This plan was updated again in 2014. The water master plan guides the capital improvements program to ensure cost effective expansion of the system.

Allocation: 40% of the cost for the 2004 Water Master Plan is allocated to the study period because eight of the twenty years of the plan's useful life are within the study period.

Project Title: **2014 Water Master Plan**

Description: An engineering study to update the 2004 Water Master Plan.

Purpose: The water master plan projects system flows and requirements for the 20 year period from 2013 to 2033. The water master plan guides the capital improvements program to ensure cost effective expansion of the system.

Allocation: 50% of the cost for the 2014 Water Master Plan is allocated to the study period because ten of the twenty years of the plan's useful life are within the study period.

Project Title: **2016 Impact Fee Study (2017-2027)**

Description: An engineering study to revise the impact fee ordinance and recalculate the maximum allowable fee which can be assessed.

Purpose: By statute the impact fee report and ordinance must be updated every five years.

Allocation: 100% of the cost for the 2016 impact fee study can be allocated to the study period because seven of the ten years are within the study period. The impact fee covers water and wastewater, with 50% allocated to each.