



## **STATEMENT OF COMPLETION - ENGINEERING**



# **Public Works Department**

To: Xavier Cerventes

Project/Subdivision

Planning Director

Stewart Cove Phase II Subdivision

Project/Subdivision Contractor Elizondo 956 & Utilities Ilc

Hinojosa Engineering

Project/Subdivision Engineer

From: Juan Pablo "JP" Terrazas, P.E., CPM

Date: 3/28/2025

Assistant City Manager

### STATEMENT OF COMPLETION

The infrastructure installed has been, inspected and accepted by the City of Mission (Public Works) Utility, Streets & Drainage Department. As-builts are due for review.

## Streets:

Stewart Cove Phase II has been inspected by Joaquin Gonzalez and or Antonio Serna. The infrastructure installed by Elizondo 956 & Utilities IIc and the methods for testing and approval have complied with the City Subdivision Standards Manual revised September 2023.

Inspector (s)

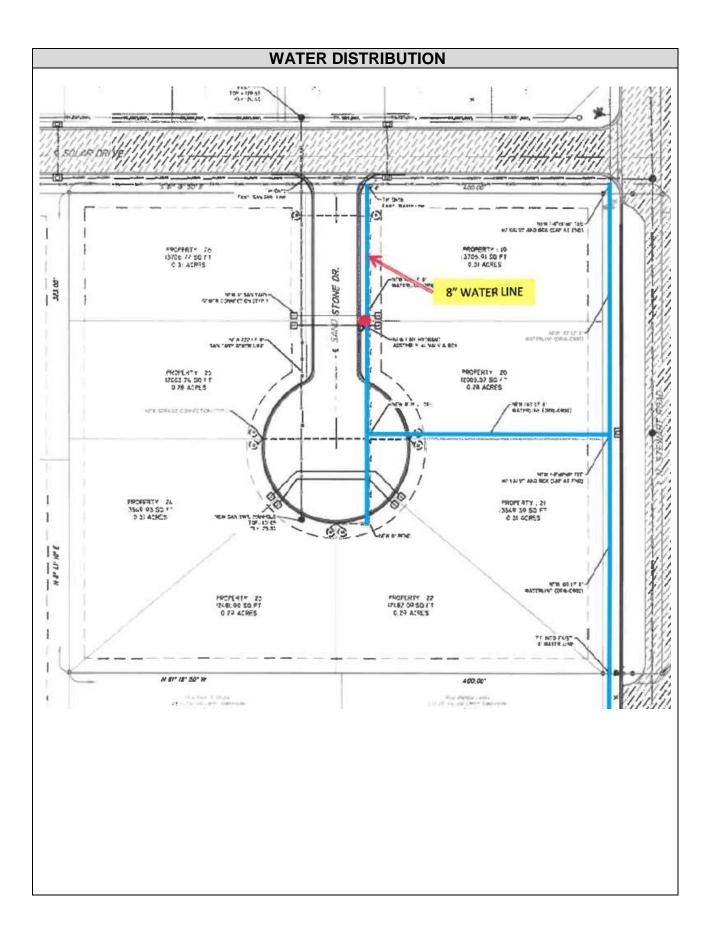
## Strom Drain:

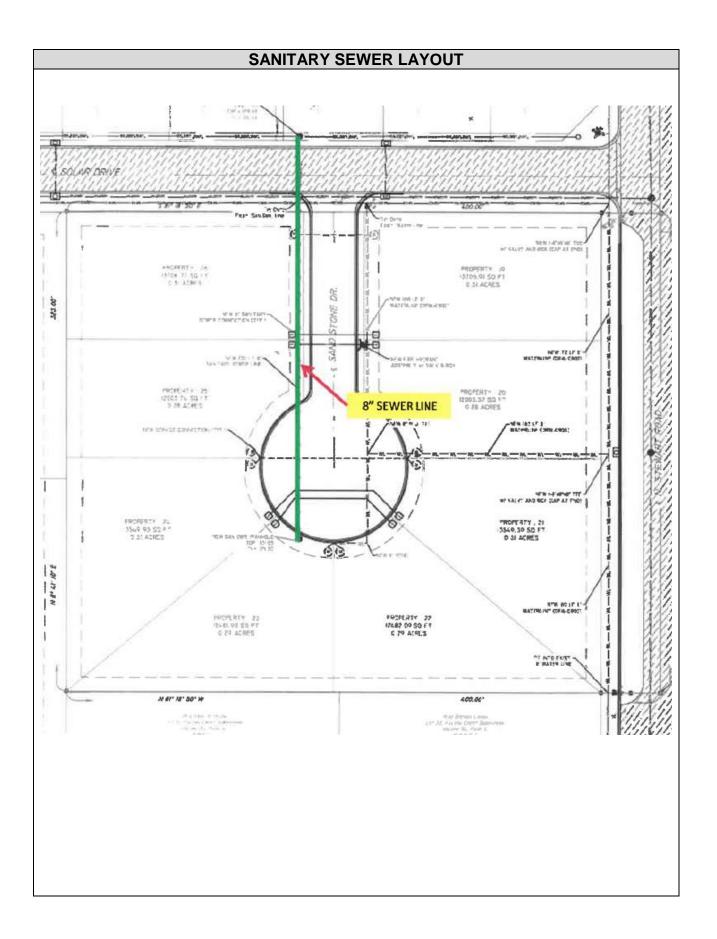
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Inspector (s)

Juan Pablo "JP" Terrazas, P.E., CPM Assistant City Manager

2801 N Holland 2 Mission, TX 78574 2 Phone: 956-580-8780 2 Fax: 956-580-8782





## STORM WATER DRAINAGE STATEMENT



# HINOJOSA ENGINEERING, INC.

Civil Engineering • Structural Engineering 108 West 18<sup>th</sup> Street Mission, Texas 78572 Tel: (956) 581-0143 I Fax: (956) 581-2074 Registration Number F-908 I Expiration Date 09/30/2019

> DRAINAGE STATEMENT For Subdivision Plat of Stewart Cove Mission, Texas

Stewart Cove Subdivision is located within the Mission City Limits, approximately ½ mile north of the Stewart Rd. / FM 495 (Griffin Parkway) intersection along the west right of way of Stewart Rd. and is described as follows: A 6.01 acre tract of land out of Lot 26-12, West Addition to Sharyland, Hidalgo County, Texas.

#### Flood Zone Designation:

By graphical plotting this property falls in Flood Zone "C", which is described as areas of minimal flooding, as per F.E.M.A. flood insurance rate map with Community Panel No. 480344 – 0400 C, Map Revised November 16, 1982.

### **Existing Soils:**

Per the USDA Soil Survey of Hidalgo County, the soils in this area consist predominantly of (25) Hidalgo Fine Sandy Loam and of (28) Hidalgo Sandy Clay Loam. These soils on this site are listed in Hydrologic Group "B", which consist of well drained soils with moderate infiltration rate.

#### **Existing Conditions:**

The land comprising the Stewart Cove Subdivision is currently vacant. Topography of the site reveals the subdivision site has an average existing grade of approximately (0 - .05%) towards the west, with an estimated predeveloped runoff of 7.94 cubic feet per second.

## Future Conditions:

Expected future use for this subdivision will consist of an 18 single – family lot residential subdivision. Drainage calculations for a pre-development 10-year frequency storm versus a post-development 10-year frequency storm using the modified rational formula reveal total maximum volume of additional run-off of 13,435 cubic feet (0.30 acre-feet), and a future Q of 17.27 cubic feet per second. This runoff will be detained on-site in a proposed swale within 15 foot utility and drainage easement dedicated by the subdivision plat, and discharged onto an existing City of Mission 24-inch RCP storm drain line located along west of the right-of-way of Stewart Road. Existing 24-inch RCP storm drainage line leads to an outfall onto existing H.C.D.D. No. 1 ditch, approximately 950 feet north of this proposed subdivision. A drainage plan is to be approved by the City of Mission at the time of issuance of building permit.

REJECTED PROVED FOR SUBMITTAL TI TOH.C. PLANNING DEPT. PTO CITY CISCHARGE PERMIT REQUIRED DISTRICT FACILITY CITY FACILITY

