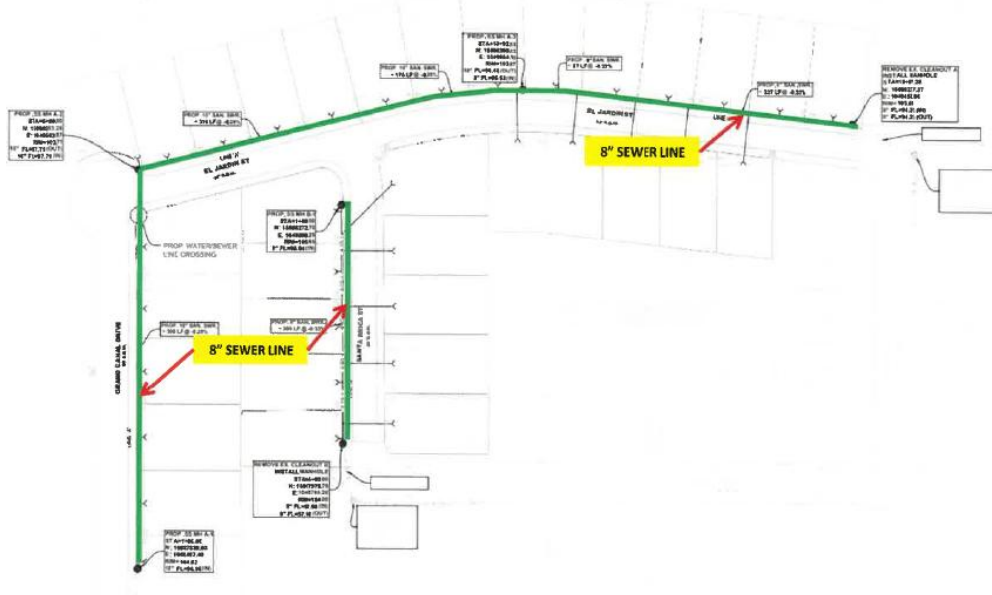


AERIAL PHOTO



WATER LAYOUT



STORM WATER DRAINAGE STATEMENT



DRAINAGE STATEMENT

for

Sharyland Plantation Village
Granada Phase 2 Subdivision
City of Mission, Hidalgo County, Texas

The Sharyland Plantation Village Subdivision is an 877-acre master planned unit development, updated February 25, 2002, out of the John H. Shary Subdivision as recorded in Volume 1, Page 17, Map Records of Hidalgo County, Texas. Sharyland Plantation Granada Phase 2 Subdivision contains 10.04 acres of land, more or less and partially located within Lot 92 & Lot 102, John H. Shary Subdivision. The Granada Phase 2 Subdivision will be located north of the intersection of Los Indios Parkway and Grand Canal Drive.

The proposed subdivision is situated in Flood Zone "C" of HIDALGO County Unincorporated Area per FEMA Flood Insurance Rate Map, Community Panel Number 4803340400 C, Map Revised date November 16, 1982, Panel 400 of 525, as further revised to reflect LOMR with an effective date of August 31, 2011. Zone "C" is defined as Areas of minimum flooding (No shading).

The site is currently vacant. According to the Hidalgo County, Texas Soil Survey as prepared by the USDA, the existing material at the site is comprised of two soil types, "Harlingen Clay", Map Symbol 19, Hydrologic Soil Group D and "Runn Silty Clay" which is a silty clay soil, Map Symbol 64, Hydrologic Soil Group C. The topography for this site is flat with a slight southwesterly surface flow.

The Granada Phase 2 Subdivision a residential subdivision, comprised of 35 residential lots and 1 common area. Minimum finished floor elevation must be set above the 100-yr flood elevation at 18 inches above the top of the curb or 105.5 feet, as established per Sharyland Plantation Development Drainage Master Plan Restudy prepared by Halff Associates, Inc. dated March 2008, whichever is greater. The lots shall be graded to allow runoff to flow away and around the residential structure and away from adjacent lots and towards the street. Per City of Mission Drainage Policy, the runoff generated from the developed conditions shall be detained by the developer on-site for a 50-year post-development frequency storm event and released into the receiving system at the rate for a 10-year frequency storm event, at the pre-existing conditions. The Pre-Development $Q_{10-yr} = 11.40$ cfs and the Post-Development $Q_{50-yr} = 41.25$ cfs for an increase of 29.85 cfs. **The developer will detain a total of 0.81 acre-feet.**

A master drainage plan and hydraulic and hydrology report has been prepared for a region encompassing approximately 7,000 acres. The region is bounded by the Mission Inlet to the north, the Banker Floodway to the south, Bentsen Road to the east, and Conway Avenue (F.M. 1016) to the west. The area was designed to be protected from the 100-year event based on starting water surface elevation provided in the Mission Inlet Master Plan by Turner, Collie & Braden dated September, 2002. The proposed canals are designed to convey and detain the runoff from the development. The canals and related right-of-way have been dedicated to the City of Mission. The regional system will utilize canals and boxes to detain and convey runoff. Wet and/or dry bottom off-line areas will be used in later phases to reduce peak storage and conveyance rates. As mentioned before, storm water runoff will be detained in an off-site area south of this development. Site drainage and detention improvements will conform to City of Mission and Hidalgo County ordinances and drainage policy.

<input type="checkbox"/> REJECTED	
<input checked="" type="checkbox"/> APPROVED FOR SUBMITTAL	
<input type="checkbox"/> TO H.C. PLANNING DEPT.	
<input checked="" type="checkbox"/> TO CITY	
<input checked="" type="checkbox"/> DISCHARGE PERMIT REQUIRED	
<input type="checkbox"/> DISTRICT FACILITY	
<input checked="" type="checkbox"/> CITY FACILITY	
<input type="checkbox"/> OTHER	
H.C.D.D. NO. 1	DATE BY: <u>7-16-24</u> <u>Chris Burns</u>



Chris Burns, PE

3-25-24
Date