# ITEM # 3.1

PRELIMINARY & FINAL PLAT APPROVAL SUBJECT TO CONDITIONS:

Trosper Creek Subdivision

Being a 8.21 gross acre tract of land, more or less, out of a portion of Lots 38, 43, and a portion of a 40.0-foot strip of land claimed fee simple lands held by United Irrigation District located between said Lots 38 and 43, all out of Bell-Woods Co.'s Subdivision "C"

R-2

Developer: Raymundo Platas

Engineer: Salinas Engineering & Assoc.

# REVIEW DATA

### PLAT DATA

The proposed site located at approximately 660' North of Mile 2 North Road along the East side of Trosper Road. — see vicinity map. The site has never been developed and is currently occupied by an orchard that will be removed. The subdivision will consist of twenty-three (23) duplex fourplex lots and a detention pond. — see plat for actual dimensions, square footages, and land uses. The owner/developer has submitted a variance requests for consideration as follows:

### **VARIANCE 1:**

The developer is requesting to have a 5' side setback on all lots whereas the city standard is 6'.

### WATER

The developer is proposing to connect to an existing 12" water line located along the west R.O.W. of N. Trosper Rd. and extend an 8" water line through the subdivision providing water service to each lot. It will be looped to the East where the developer will extend an 8" main line along the Compton Dr. R.O.W. and connect to an existing water line along the north side R.O.W. of W. Mile 2 Road. A fire hydrant is proposed on the South corner along Compton Dr. to include 2 fire hydrants within the development via direction of the Fire Marshal's office. – see utility plan

# **SEWER**

The developer is proposing to connect to an existing sewer line on the east side ROW of N. Trosper Rd. and extend an 8" PVC line to collect from all lots abutting the internal street which will end with a standard MH. All lots will be stubbed with a 6" PVC line. The Capital Sewer Recovery Fee is required at \$670.00/Lot which equates to \$15,410.00 (\$670 x 23 Lots).

# STREETS & STORM DRAINAGE

The subdivision will have 2 main accesses: Trosper Rd. and Compton Drive. The lone internal street will have a 60' ROW with a proposed paved 40' B-B.

The site is located within Zone "C", areas of minimal flooding based on the Community FIRM Panel No. 480334 0400C, Map Revised November 16, 1982. The proposed drainage infrastructure for this subdivision shall consist of an on-site pond along the North side of the subdivision where excess waters shall b bled into the existing Trosper Road drainage system. It is also noted that the

proposed storm sewer line shall temporarily hold a portion. Ultimately all water will be discharging into an existing 36" storm line located along the west side of Trosper Rd., which then goes into the Mission Lateral a Hidalgo Co. Drainage District No. 1 owned ditch. The City Engineer has reviewed and approved the drainage report.

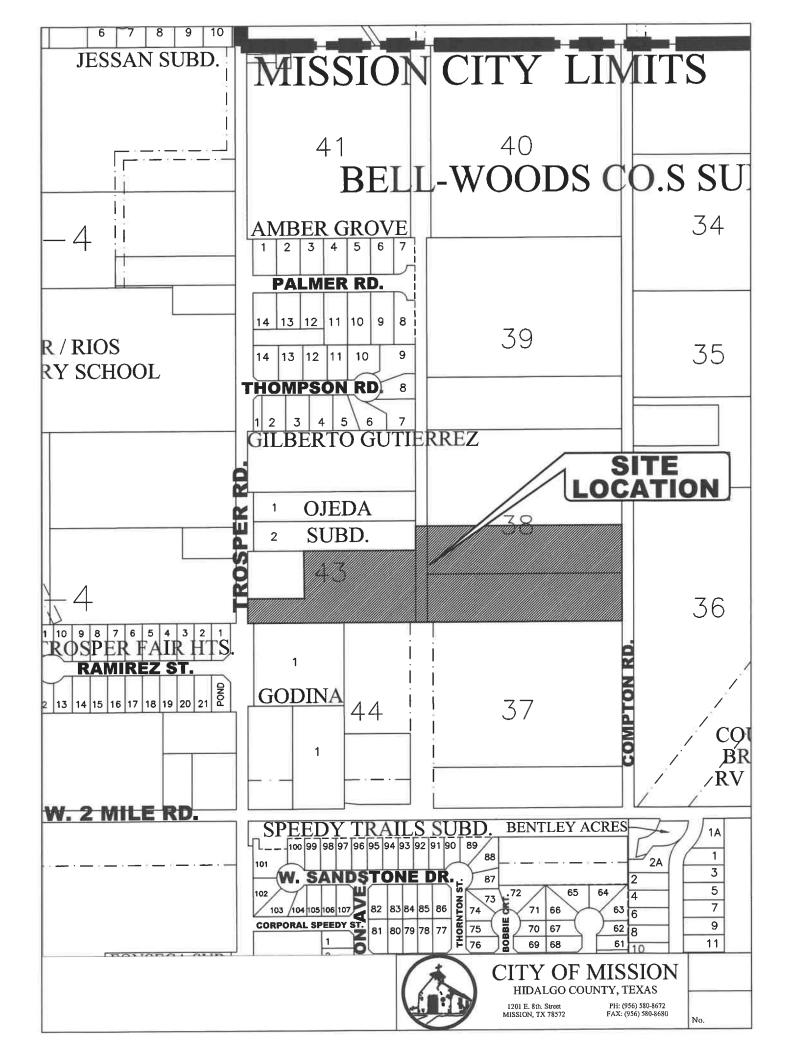
# **OTHER COMMENTS**

- Payment of Park Fees in the amount of \$46,000.00 (\$500 x 1-fourplex x 23 lots)
- Installation of Street Lighting as per City Standards
- Water District Exclusion
- Conveyance or Payment of Water Rights (\$3,000.00 per ac-ft.)
- Comply with all other format findings

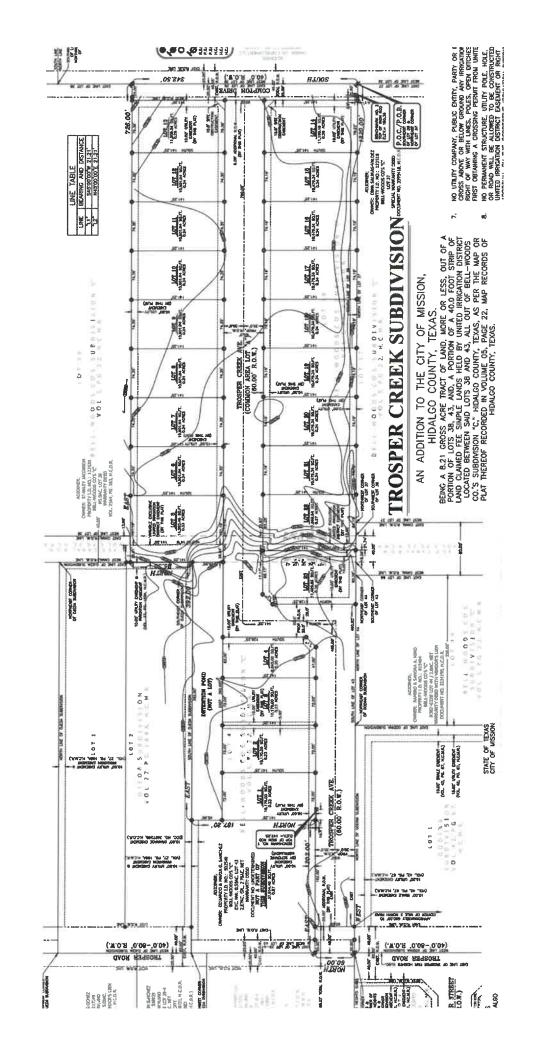
# **RECOMMENDATION**

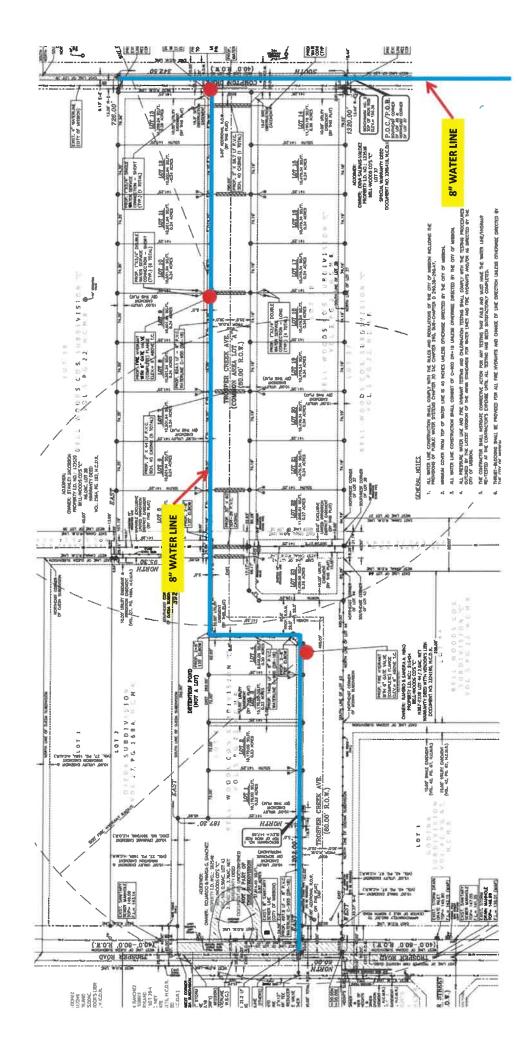
Staff recommends approval subject to:

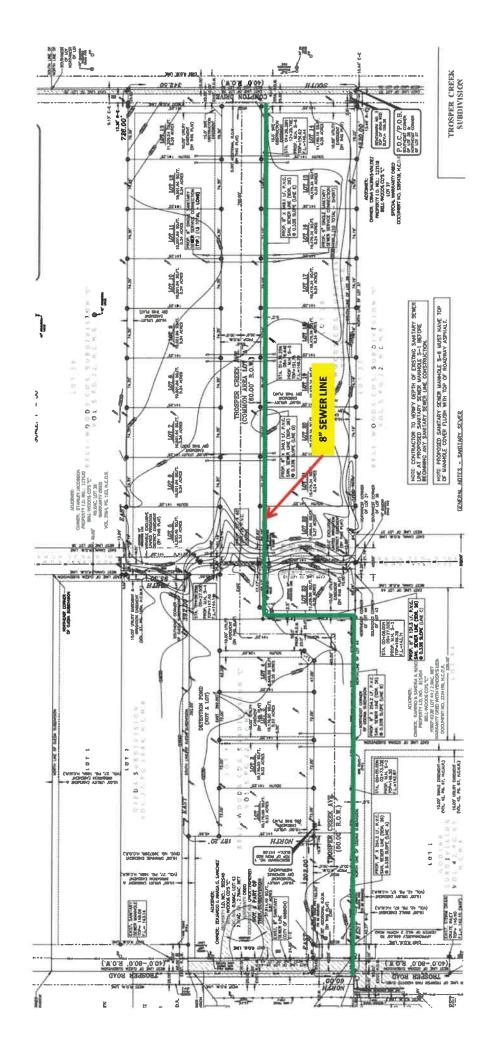
- 1. Payment of Capital Recovery Sewer fee
- 2. Payment of Park fee
- 3. Water District Exclusion
- 4. Conveyance or Payment of Water Rights,
- 5. Approval of the infrastructure from the different city departments as per approved construction plans, and
- 6. Approval of the variance to have a 5' side setback instead of the required 6'.

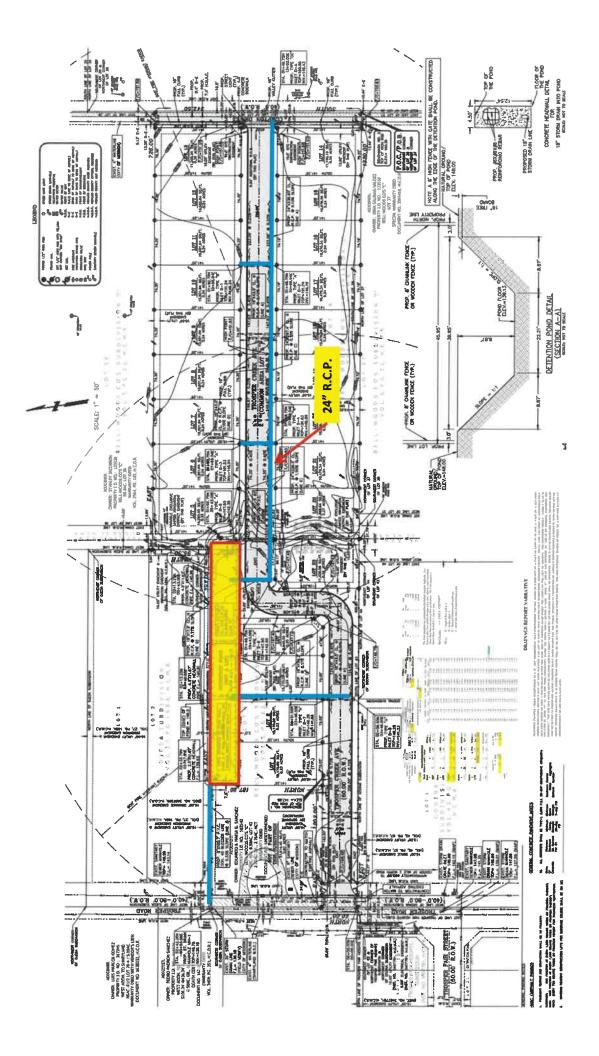












#### INDEX

Drainage Report Narrative: Page 2.-3.

- A. Hydrograph: Dated 01/29/25 Attached
- B. Plat reduction of Trosper Creek Subdivision, Mission
- C. Copy of FIRM CPN 480334 0400 C, dated 11/16/82
- D. Copy of Plat reduction and other drainage report exhibits

### DRAINGE REPORT NARRATIVE

Proposed Trosper Creek Subdivision is a 23 - lot residential plat containing 8.03 Net Acres of land out of a part of Lots 39, 43 and a part of a 40.0 foot United Irrigation District ROW located between said Lot 38 and 43, Bell-Woods Co.'s Subdivision, Hidalgo County, Texas, and, located at approximately 660.0 feet north of Mile 2 North Road along the east side of Trosper Road inside the limits of the City of Mission. The proposed single - family plat is located in Zone "C" as per the FIRM Community Panel No. 480334 0400 C, dated 11/16/82. Zone "C" areas are defined as "areas of minimal flooding (no shading)." The site has never been developed and is current occupied by an orchard that will be removed. There is 60.0 of frontage along Trosper Road and 342.50 feet of frontage along Compton Drive. Both roadways are public roadways consisting of asphalt improvements complete with storm sewer along Trosper Road only. It is noted that there will be no access to and from Compton Drive. The one internal roadway shall be a private roadway and proposed use are four-plex lots.

Soils of this proposed plat consist of a Hidalgo fine sandy loam complex – these soils are well drained with slow surface runoff with medium available water capacity. These soil range between 0 and 1 percent slope are in capability subclass IIc non-irrigated and in class I irrigated and are the Gray Sandy Loam range, Group B. This map unit (25) and can be seen on Sheet 92 of the **Soil Survey of Hidalgo County, Texas.** 

Topographic survey data reveals that natural ground elevations are flat (i.e. no change in elevation) from Trosper Road east for a distance of approximately 594.0 feet but after that contours will show that waters flow east to west (from Compton Drive towards Trosper Road) at an average slope of 0.55% over an average drainage run of 725.0 feet. Trosper Road is improved with asphalt pavement and underground storm sewer with a roadway grate inlet located approximately 140.0 feet south of the proposed internal roadway along the east side of Trosper Road. There are not storm sewer improvements along Compton Drive. The existing grate inlet ties directly into the City's 36" storm sewer line located in the center of said Trosper Road under the roadway improvements. The existing City 36" storm sewer line outfalls into a county ditch located south of Mile 2 North Road.

There is one proposed internal roadway ending with a cul-de-sac on 60' of ROW and 40' of back to back curb & gutter and pavement improvements. Waters along the proposed roadway shall drainage westerly where waters will be routed north to a drainage pond (by this plat). Waters entering the pond shall be bled via a series of underground storm sewer lines and inlets into the City's 36" storm sewer line after meeting detention requirements. All drainage waters from the proposed pond shall be routed to the existing City's storm sewer via a 8" PVC bleeder line into the existing storm sewer system located in the center of Trosper Road at a rate not to exceed the pre-development (10-year) or existing drainage condition. An additional 20.0 feet of ROW will be dedicated along the west side of Trosper for a total right-of-way of 40.0 feet and additional 10' of ROW shall be dedicated along the west side of Compton Drive.

In accordance with the drainage policies of the City of Mission, this subdivision shall be required to provide on-site detention for the volume of water CREATED by the development of this 8.03 Acre property. Using the Modified Rational Method (For Reference: TxDOT Intensity-Frequency-Duration Coefficients for Texas Counties HDM (2004)) over a 10-year storm event, and, existing drainage coefficient of 0.20 and a future computed drainage coefficient of 0.63 – For Reference: FHWA, Urban Drainage Design Manual HEC-22 (2001), an average drainage run of 725.0 feet and an average slope of 0.55%, it was computed that the improved condition would produce an additional total volume of 76,930.46 Cubic Feet, or, 1.77 Acre-Feet. This volume of water is equivalent to a layer of water 2.45 inches deep if spread out evenly over the entire 8.03 Acre site. Drainage shall increase from the pre-developed condition (4.67 CFS) to a post developed condition of 28.65 CFS – an increase of 23.98. Off-site discharge is limited to a rate not to exceed 4.67 CFS.

It is being proposed that the developer shall provide for the on-site detention of not less than 76,930.46 Cu. Ft. of drainage waters within a drainage pond located along the north side of the proposed subdivision where excess waters shall be bled into the existing Trosper Road drainage system via an 8" bleeder line. The actual dry volume of said pond will provide for 80,497.04 Cu. Ft. > 76,930.46 All waters routed into the City's 36" storm sewer line will outfall into a large ditch (Mission Lateral) located ½ mile south of Trosper Road and Mile 2 North Road. Discharge from the drainage pond shall not exceed 4.67 CFS.

The City of Mission is charged with the enforcement of the drainage parameters outlined in this report. The finished floor elevation is determined to be not less than 18 inches above the top of the paved road at the center of this lot, or, 18 inches above natural ground at the center of this lot, whichever is greater

DAVID OMAR

Date: January 29, 2025 Attachment: Hydrograph and Other Required Drainage Report Information xe: n;\subdivisionplats\trospercreek.sub\drainagereport.012925

DREJECTED

DAPPROVED FOR SUBMITTAL

DI TO H.C., PLANNING DEPT.

TO CITY

DISSCHARGE PERMIT REQUIRED

DISTRICT FACILITY

CITY FACILITY

DOTHER

H.C.D.D. NO. 1

DATE