



Fort Bend County Engineering  
FORT BEND COUNTY, TEXAS

J. Stacy Slawinski, P.E.  
County Engineer

May 29, 2025

Judge KP George  
Fort Bend County Judge  
401 Jackson Street  
Richmond, Texas 77406-0148

**Re: *Public Road Connection for Evergrove Parkway at FM 723 on behalf of TPHTL Hatcher, LLC – Sponsorship***

Honorable Judge George:

Fort Bend County Engineering Department has received and reviewed a request (letter attached) from LJA Engineering on behalf of TPHTL Hatcher, LLC for Fort Bend County to sponsor a project for a public road connection for Evergrove Parkway at FM 723. The road connection will provide a point of access for the Evergrove Development

Any and all cost involved with the project will be borne by TPHTL Hatcher, LLC. There will be no cost to Fort Bend County.

The Texas Department of Transportation requests that an agency, such as Fort Bend County, act as a sponsor for the project. This means that the permit for the work will be issued in the name of Fort Bend County and the County accepts responsibility for the terms and conditions of the permit.

We recommend acceptance of the sponsorship and request that this item be placed on the 06/10/2025 Commissioners Court agenda. We have prepared a letter to Texas Department of Transportation for the County Judges' signature.

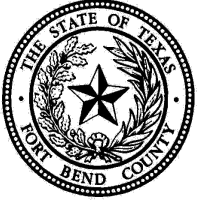
If there are any questions please do not hesitate to call.

Sincerely,

Hugo Sanchez  
Development Services Manager

Attachment: Scope of Work

cc: Commissioner Vincent M Morales, Jr. Pct. 1  
File



## COUNTY JUDGE

Fort Bend County, Texas

The Honorable KP George  
County Judge

June 10, 2025

Glenn Allbritton  
Houston District Engineer  
Texas Department of Transportation  
7600 Washington Avenue  
Houston, Texas 77007-1044

Re: ***Public Road Connection for Evergrove Parkway at FM 723 on behalf of TPHTL Hatcher, LLC - Sponsorship***

Dear Glenn Allbritton:

Fort Bend County has received and reviewed a request (letter attached) from LJA Engineering for Fort Bend County to sponsor a connection to a Texas Department of Transportation roadway on behalf of TPHTL Hatcher, LLC for a public road connection for Evergrove Parkway at FM 723, at no cost to the County.

The request was approved by Fort Bend County Commissioners Court at their meeting dated 6/10/2025. We request that a permit for the public road connection be issued with Fort Bend County as sponsor for this project.

If there are any questions or need for additional information, please call Hugo Sanchez in our Engineering Department at 281-633-7515.

Sincerely,

KP George  
Fort Bend County Judge

Attachments: Resolution  
Drawing

cc: Julio Triana, LJA Engineering [jtriana@lja.com](mailto:jtriana@lja.com)  
Denese Laskowski, TxDOT [denese.laskowski@txdot.gov](mailto:denese.laskowski@txdot.gov)  
File

THE STATE OF TEXAS       §

COUNTY OF FORT BEND   §

**RESOLUTION TO SPONSOR A PROJECT FOR A PUBLIC  
ROAD CONNECTION FOR EVERGROVE PARKWAY AT FM 723  
ON BEHALF OF TPHTL HATCHER, LLC.**

On this   10   day of   June  , 2025, the Commissioners Court, sitting as the governing body of Fort Bend County, Texas, at a regular meeting, upon motion of Commissioner   Prestage  , seconded by Commissioner   Meyers  , duly put and carried;

**WHEREAS**, the proposed sponsorship project includes the installation of a public road connection at FM 723 for Evergrove Parkway.

**WHEREAS**, the funding for such sponsorship of the project is to be provided through sources other than Fort Bend County.

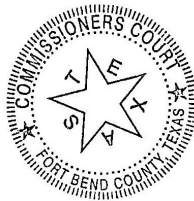
**NOW, THEREFORE, BE IT RESOLVED** that Fort Bend County expresses its support and sponsorship of such project with the Texas Department of Transportation to cause such improvements to be made at FM 723 for Evergrove Parkway.

**FORT BEND COUNTY**

By:           *KP George*            
          KP George, County Judge

ATTEST:

          *Laura Richard*            
Laura Richard, County Clerk



May 29, 2025,

Honorable KP George  
Fort Bend County Judge  
301 Jackson Street, Suite 719  
Richmond, Texas 77469

Re: Request for Sponsorship Letter  
Proposed Street Tie-in at Northbound FM 723  
Evergrove Parkway for Evergrove Development  
Fort Bend County, TX  
LJA Job No. 2085-6101 (6.0)

Dear Judge George:

LJA Engineering, Inc. is preparing a driveway permit application to submit to the Texas Department of Transportation (TxDOT) for the proposed street tie-in of Evergrove Parkway at existing northbound FM 723, at this street tie-in a stop sign is proposed for traffic control. TPHTL Hatcher, LLC, the developer, will fund the cost of construction. There will be no expense to Fort Bend County. Attached is the plat showing the proposed ROW and the construction plans drawings were prepared in accordance with TxDOT's street tie-in permit requirements.

As part of the permit application process, TxDOT is requiring a sponsorship letter from Fort Bend County. I am requesting Fort Bend County's sponsorship of this project and a sponsorship letter to include with the TxDOT permit application package.

Should you have comments or questions, please contact me at [jtriana@lja.com](mailto:jtriana@lja.com) or 713.580.4109.

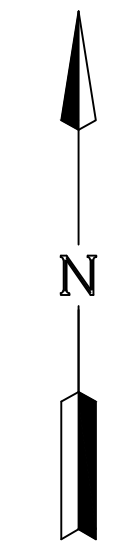
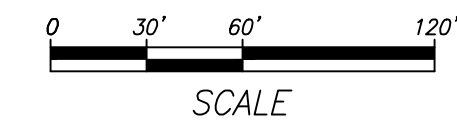
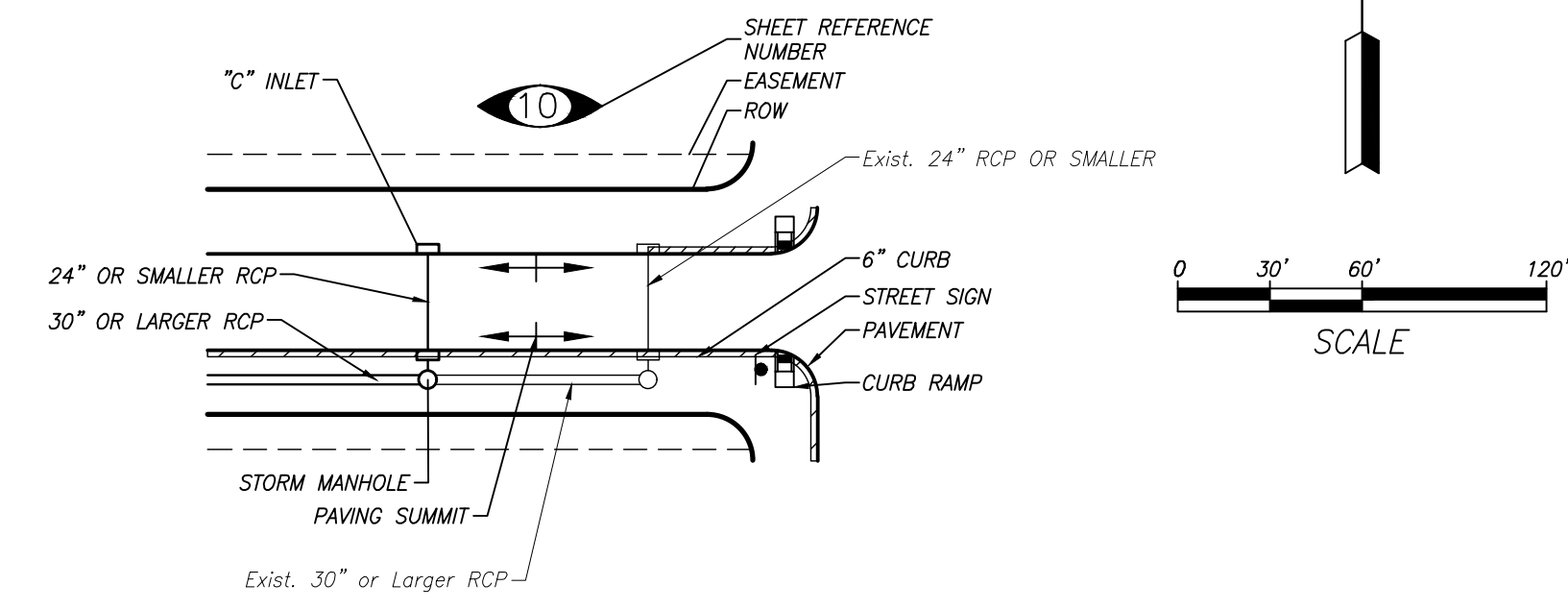
Sincerely,

A handwritten signature in blue ink that reads "Julio C. Triana".

Julio C. Triana, PE  
Project Manager

JCT/cg

**LEGEND**



**BENCHMARK:**  
 NATIONAL GEODETIC SURVEY MONUMENT E1212 (PID AW4733)  
 NORTHING: 13772176.66  
 EASTING: 2993694.71  
 ELEVATION: 99.87' NAVD 88 (GEOID 18)

0.85 MILE SOUTHWEST ALONG U.S. HIGHWAY 90 ALT. FROM THE COUNTY COURTHOUSE AT RICHMOND, THENCE 0.15 MILE WEST ALONG OLD RICHMOND ROAD, 0.15 MILE WEST OF THE SANTA FE RAILWAY OVERPASS OVER U.S. HIGHWAY 90 ALT. 0.4 MILE NORTHEAST OF THE JUNCTION OF HARD CASTLE STREET, AT THE CROSSING OF A STEEL TOWER POWER TRANSMISSION LINE, VERTICAL CONTROL DISK IS IN THE TOP OF THE CONCRETE FOUNDATION OF THE NORTHWEST LEG OF THE THIRD TOWER WEST OF THE OVERPASS, 47 FEET SOUTHWEST OF THE CENTER LINE OF THE ROAD, 0.5 FOOT NORTHWEST OF THE STEEL LEG.

**NOTES:**

**ABBREVIATIONS**

EXIST	EXISTING
JIB D-XX	JUNCTION BOX W/ ID NUMBER
MH D-XX	STORM MANHOLE W/ ID NUMBER
STM	STORM
STMSE	STORM SEWER EASEMENT
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
UE	UTILITY EASEMENT
S.E.T.	SAFETY END TREATMENT

FORT BEND COUNTY ENGINEERING DEPARTMENT  
 APPROVAL IS IMPLIED FOR IMPROVEMENTS WITHIN  
 FORT BEND COUNTY RIGHTS-OF-WAY ONLY.  
 UTILITY LINES APPROVED AS TO LOCATION ONLY.  
 AUTHORIZATION IS VALID FOR ONE YEAR ONLY.

APPROVED: \_\_\_\_\_ ASSISTANT TO THE COUNTY ENGINEER  
 DATE: \_\_\_\_\_



**RECORD DRAWING**

I CERTIFY THAT THIS DRAWING REFLECTS THE IMPROVEMENTS CONSTRUCTED AS TO SIZE, LOCATION AND GRADE AND THAT THE CONSTRUCTION WAS IN FULL COMPLIANCE WITH THE CONTRACT DOCUMENTS

UTILITY CONTRACTOR	PAVING CONTRACTOR	
(SIGNATURE)	(SIGNATURE)	
(DATE)	(DATE)	
DATE	REVISION	BY

FORT BEND COUNTY, TEXAS

**EVERGROVE PARKWAY  
 PHASE 1**

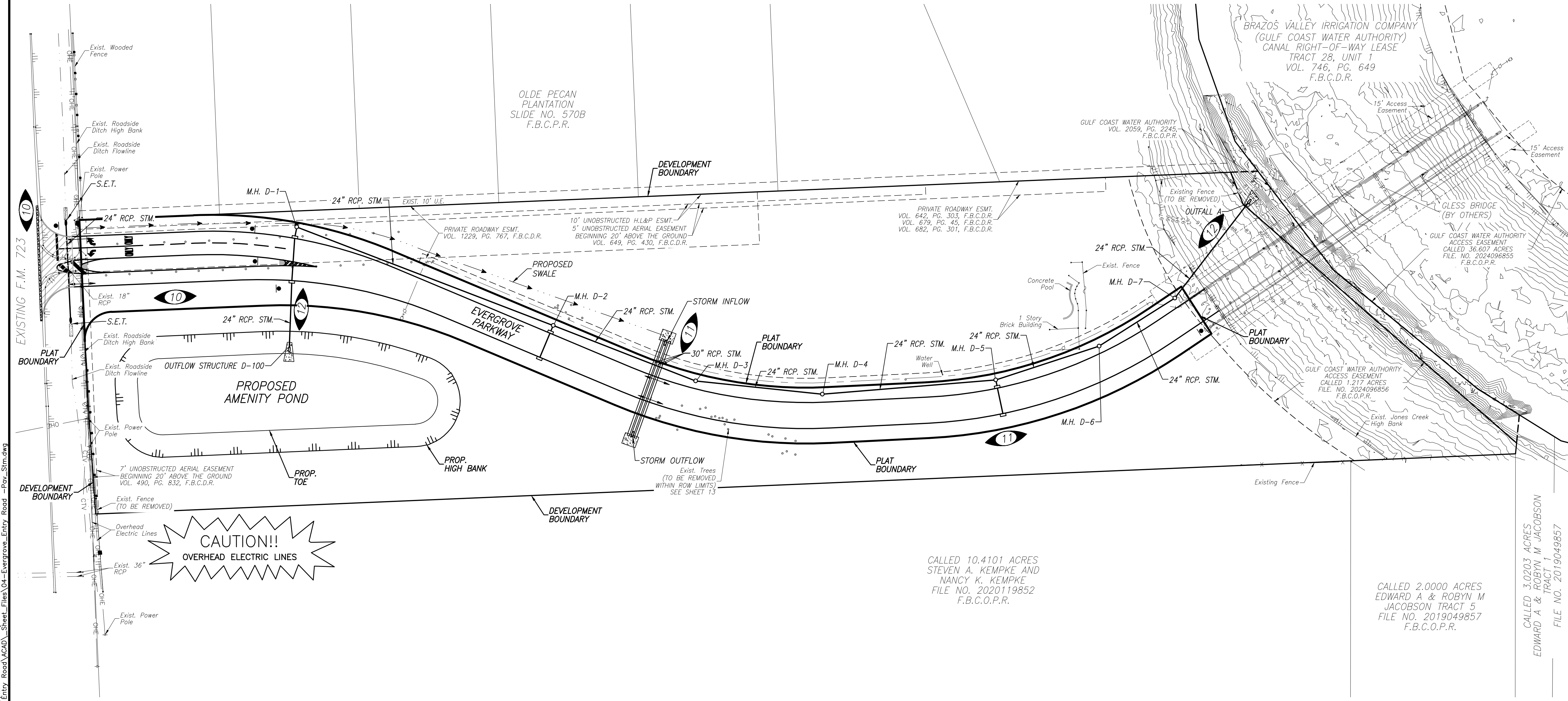
PAVING AND DRAINAGE  
 LAYOUT

**LJA Engineering, Inc.**

3600 W Sam Houston Parkway S Phone 713.953.5200  
 Suite 600 Fax 713.953.5026  
 Houston, Texas 77042 FRN - F-1386

LJA PROJECT NO: 2085-6101

SUBMITTED:	DESIGNED BY: JEF
SCALE: 1" = 60'	DRAWN BY: JEF
DATE: MAY 2025	SHEET NO. 4 OF 21
SURVEYED BY:	F B NO:



**CAUTION!!  
 OVERHEAD ELECTRIC LINES**

CALLED 10.4101 ACRES  
 STEVEN A. KEMPKE AND  
 NANCY K. KEMPKE  
 FILE NO. 2020119852  
 F.B.C.O.P.R.

CALLED 2.0000 ACRES  
 EDWARD A & ROBYN M  
 JACOBSON TRACT 5  
 FILE NO. 2019049857  
 F.B.C.O.P.R.




CALLED 3.0203 ACRES  
 EDWARD A & ROBYN M JACOBSON  
 TRACT 1  
 FILE NO. 2019049857

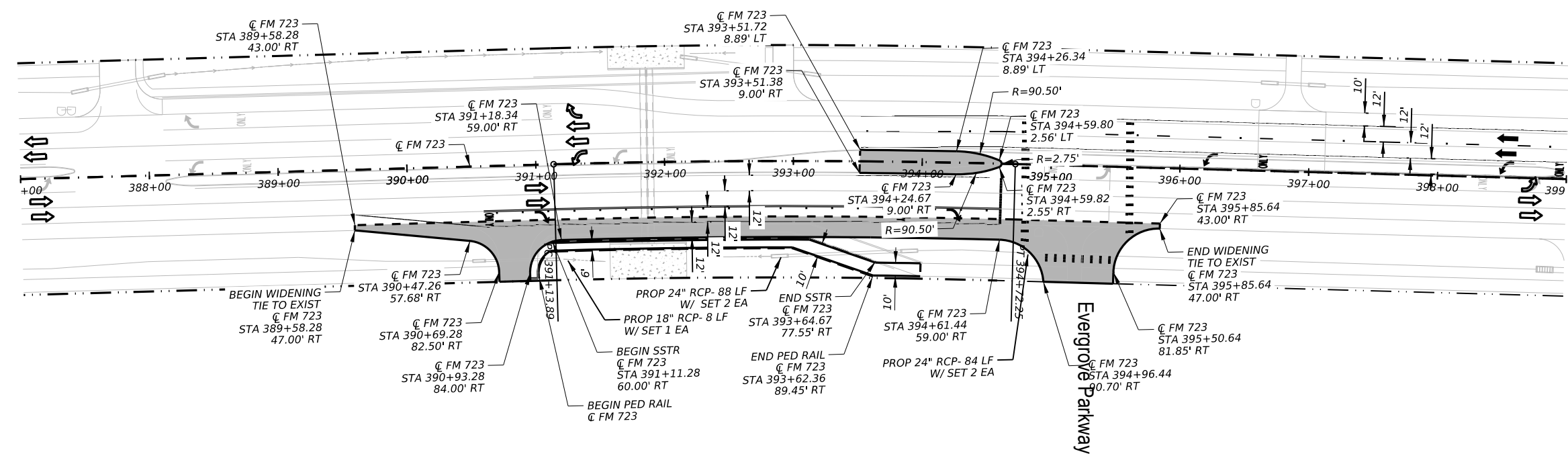
Date/Time : Wed, 14 May 2025 12:30pm User Name : jlores Path Name : I:\Projects\2085\6101 - Entry Road\ACAD\Sheet\Files\04-Evergrove-Entry Road - Pav-Stm.dwg

EVERGROVE PARKWAY PHASE 1 - JOB NO. 2085-6101

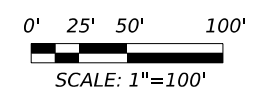
CK: DW: CK: DW:

LEGEND

-  PROPOSED TRAFFIC DIRECTION ARROW
-  EXISTING TRAFFIC DIRECTION ARROW
-  PROPOSED WIDENING



DOCUMENT IS FOR INTERIM REVIEW AND NOT INTENDED FOR CONSTRUCTION BIDDING, OR PERMIT PURPOSES.  
 ROBERT M. WHEELER, PE  
 110405  
 TEXAS SERIAL NO.  
 \*DATE\*  
 DATE



REV. NO.	DATE	DESCRIPTION	BY

**LJA Engineering, Inc.**   
 FRN - F-1386

 Texas Department of Transportation

FM 723  
 ROADWAY  
 PLAN

SHEET 1 OF 1

CONT	SECT	JOB	HIGHWAY
			FM 723
DIST	COUNTY	SHEET NO.	
HOUSTON	FORT BEND	10	

DATE:  
 FILE:

**EDGE LINE AND LANE LINES ONE-WAY ROADWAY WITH OR WITHOUT SHOULDERS**

**TYPICAL TWO-LANE, TWO-WAY PAVEMENT MARKINGS THROUGH INTERSECTIONS**

**CENTERLINE AND LANE LINES FOUR LANE TWO-WAY ROADWAY WITH OR WITHOUT SHOULDERS**

**TYPICAL MULTI-LANE, TWO-WAY PAVEMENT MARKINGS THROUGH INTERSECTIONS**

**TWO LANE TWO-WAY ROADWAY WITH OR WITHOUT SHOULDERS**

**FOUR LANE DIVIDED ROADWAY CROSSOVERS**

**GENERAL NOTES**

- Edge line striping shall be as shown in the plans or as directed by the Engineer. The edge line should not be placed less than 6 inches from the edge of pavement. This distance may vary due to required curbing or other conditions. Edge lines are not required in curb and gutter sections of roadways.
- The traveled way includes only that portion of the roadway used for vehicular travel. It does not include the parking lanes, sidewalks, berms and shoulders. The traveled way shall be measured from the center of edge line to the center of edge line of a two-lane roadway.

**MATERIAL SPECIFICATIONS**

PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
NOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.

**GUIDE FOR PLACEMENT OF STOP LINES, EDGE LINE & CENTERLINE**

Based on Traveled Way and Pavement Widths for Unimproved Roadways

**TYPICAL STANDARD PAVEMENT MARKINGS PM(1)-22**

11-11	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02
11-11	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02
11-11	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02
11-11	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02

**REFLECTIVE RAISED PAVEMENT MARKERS FOR VEHICLE POSITIONING GUIDANCE**

**CENTERLINE AND LANE LINES FOR TWO-WAY LEFT TURN LANE**

**CENTERLINE & LANE LINES FOR FOUR LANE TWO-WAY ROADWAYS**

**LANE LINES FOR ONE-WAY ROADWAY (NON-FREWAY FACILITIES)**

**REFLECTORIZED PROFILE PATTERN DETAIL**

**GENERAL NOTES**

- All raised pavement markers placed along broken lines shall be placed in line with and midway between the stripes.
- On concrete pavements the raised pavement markers should be placed to one side of the longitudinal joint.
- Use raised pavement marker Type I-C with undivided roadways, flush medians and two-way left turn lanes. Use raised pavement marker Type II-C-R with divided highways and raised medians.

**POSITION GUIDANCE USING RAISED PAVEMENT MARKERS**

1. Edge lines should typically be 6" wide and the materials shall be specified in the plans.

2. Profile markings shall not be placed on roadways with a posted speed limit of 45 MPH or less.

**MATERIAL SPECIFICATIONS**

PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
NOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.

**POSITION GUIDANCE USING RAISED PAVEMENT MARKERS**

**RAISED PAVEMENT MARKERS**

**POSITION GUIDANCE USING RAISED PAVEMENT MARKERS**

**REFLECTORIZED PROFILE PATTERN DETAIL**

**PM(2)-22**

11-11	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02
11-11	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02
11-11	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02
11-11	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02	08/15/02

**DESIGNS FOR TWO-WAY COMMERCIAL DRIVEWAYS**

**DESIGNS FOR TWO-WAY COMMERCIAL DRIVEWAYS**

**TYPICAL ASPH. CONC. P.V.M.T. DRIVEWAY SECTION**

**TYPICAL CONCRETE DRIVEWAY SECTION**

**PRIVATE AND COMMERCIAL DRIVES WITH CURB & GUTTER**

**PRIVATE AND COMMERCIAL DRIVES WITHOUT CURB & GUTTER**

**DRIVEWAY TYPES**

CONCRETE (RESIDENTIAL): EXIST. PRIVATE OR COMMERCIAL DRIVEWAYS TO BE CONSTRUCTED AS SHOWN WITH 4" NEW AND/OR SALVAGE FLEX. BASE, PRIME AND SURFACED WITH 1 1/4" 5/8" ASP.

CONCRETE (COMMERCIAL): EXIST. BUSINESS DRIVEWAYS TO BE CONSTRUCTED AS SHOWN WITH 6" CONCRETE. TO BE PAID FOR BY THE SO. YO.

**LF EQUIVALENT TABLE FOR PAYMENT LIMITS OF 2' VALLEY GUTTER**

Prop. Driveway Radius	X1 or X2
5'	1
8'	2
10'	4
12'	6
15'	9
18'	12
20'	15
22'	18
25'	24
28'	30
30'	34

**DRIVEWAY DETAILS PRIVATE (RESIDENTIAL-COMMERCIAL)**

REV. 01/17

TEXAS DEPARTMENT OF TRANSPORTATION

DRIVEWAYS.DGN

**DETAILS PAVEMENT AND DRIVEWAY DETAILS**

**LJA Engineering, Inc.**

3600 W Sam Houston Parkway S  
Suite 600  
Houston, Texas 77042

Phone 713.953.5200  
Fax 713.953.5026  
FRN - F-1386

**CROSS PIPE LENGTHS, REQUIRED PIPE SIZES, AND RIPRAP QUANTITIES**

Nominal Culvert I.D.	Conc Riprap (CY/G)	Pipe Culvert Spa - G	Single Barrel - 01	Multi-Barrel - 02	Conditions for Use of Cross Pipes	Cross Pipe Sizes
12"	0.8	0'-9"	N/A	2'-1"	1'-9"	3" Std (3.500" O.D.)
18"	0.7	0'-11"	N/A	2'-5"	2'-2"	3" Std (3.500" O.D.)
18"	0.8	1'-2"	N/A	2'-10"	2'-8"	3" Std (3.500" O.D.)
24"	0.9	1'-4"	N/A	3'-2"	3'-1"	3" Std (3.500" O.D.)
24"	1.0	1'-8"	N/A	3'-10"	3'-11"	3" Std (3.500" O.D.)
30"	1.1	1'-10"	N/A	4'-2"	4'-4"	3" Std (3.500" O.D.)
36"	1.2	1'-11"	4'-2"	4'-5"	4'-8"	3" Std (3.500" O.D.)
42"	1.3	2'-4"	4'-11"	5'-5"	5'-1"	3" Std (3.500" O.D.)
48"	1.7	2'-7"	5'-5"	6'-0"	6'-7"	3" Std (3.500" O.D.)
54"	2.0	3'-0"	5'-11"	6'-9"	7'-6"	3" Std (3.500" O.D.)
60"	2.4	3'-3"	6'-11"	7'-10"	8'-3"	3" Std (3.500" O.D.)
72"	2.7	3'-4"	7'-5"	8'-5"	9'-4"	3" Std (3.500" O.D.)

**DETAIL "A"**  
 (Showing invert with corrugated metal pipe (CMP) culvert. Reinforced concrete pipe (RCP) culvert details are similar. Cross pipes not shown for clarity.)

**SECTION B-B**  
 (Cross pipes not shown for clarity.)

**SECTION C-C**  
**CROSS PIPE DETAILS**

**ISOMETRIC VIEW OF TYPICAL INSTALLATION**  
 (Showing corrugated metal pipe (CMP) culvert. Details at reinforced concrete pipe (RCP) culvert are similar.)

**SHOWING TYPICAL PIPE CULVERT AND RIPRAP**

**SHOWING CROSS PIPE WITH ANCHOR BAR**

**SECTION A-A**  
**SHOWING CROSS PIPE WITH BOLTED ANCHOR**

**SAFETY END TREATMENT FOR 12" DIA TO 72" DIA PIPE CULVERTS TYPE II - PARALLEL DRAINAGE SETP-PD**

**GENERAL NOTES:**

- The proper installation of the first cross pipe is critical for vehicle safety. Place the top of the first cross pipe no more than 6" above the flow line.
- Provide cross pipes, except the first bottom pipe, of the size shown in the table. Provide a 3/8" standard pipe (4" O.D.) for the first bottom pipe.
- Install the third cross pipe from the bottom of the culvert using a bolted connection. Ensure that riprap concrete does not flow into the cross pipe so as to permit disassembly of the bolted connection to allow cleanout access. At the Contractor's option, install all other cross pipes using the bolted connection details. Riprap quantities are for contractor's information only.
- Riprap placed beyond the limits shown will be paid for as concrete riprap in accordance with Item 422, "Riprap".
- Quantities shown are for one end of one reinforced concrete pipe (RCP) culvert or for corrugated metal pipe (CMP) culverts. For multiple pipe culverts or for corrugated metal pipe (CMP) culverts, quantities will need to be adjusted. Riprap quantities are for contractor's information only.

**MATERIAL NOTES:**

- Synthetic fibers listed on the "Fibers for Concrete" Material Producer List (MPL) may be used in lieu of steel reinforcing in riprap concrete unless noted otherwise.
- Provide cross pipes that meet the requirements of ASTM A33 (Type E, S, or G), ASTM A307 (or B), or API BLACK.
- Provide ASTM A307 bolts and nuts.
- Salvage all steel components, except concrete reinforcing, after fabrication. Repair galvanizing damaged during transport or construction in accordance with the specifications.

**GENERAL NOTES:**

- Cross pipes are designed for a traveling load of 10,000 lbs. as recommended by Research Report 389-29, "Safety Treatment of Roadside Parallel-Drainage Structures," Texas Transportation Institute, March 1982.
- Safety end treatments (SET) shown herein are intended for use in those installations where out of control vehicles are likely to traverse the openings approximately perpendicular to the cross pipes.
- Construct concrete riprap and all necessary inverts in accordance with the requirements of Item 432, "Riprap".
- Payment for riprap and towall is included in the Price Bid for each Safety End Treatment.

**EXCAVATION AND BACKFILL DETAIL**  
 MANHOLES SMALLER THAN 36 IN. IN A PAVED OR GRADED AREAS N.T.S.

**EXCAVATION AND BACKFILL DETAIL**  
 JUNCTION BOXES IN A PAVED OR GRADED AREA N.T.S.

**EXCAVATION AND BACKFILL DETAIL**  
 MANHOLES 36 IN. AND GREATER IN A PAVED OR GRADED AREA N.T.S.

**EXCAVATION AND BACKFILL DETAIL**  
 CURB INLETS IN A PAVED OR GRADED AREA N.T.S.

**TABLE I**  
 SCHEDULE FOR PAY QUANTITIES OF CEMENT STABILIZED BACKFILL (SEE NOTE 1)

MANHOLE OR INLET DEPTH (D) IN FEET	CEMENT STABILIZED BACKFILL IN CUBIC YARDS
0 through 5	5.75
3.5 through 10	8.25
greater than 10	12.75

**NOTES:**

- The Contractor is paid a fixed estimated amount for cement stabilized backfill based on depth (D) and Table 1.
- Proposed roadway structure includes pavement, base and any subgrade.
- For backfill of intersecting pipes and box culverts, see "Excavation and Backfill Diagram for Pipes and Box Culverts."
- 6" cement stabilized backfill will be required only for precast inlets.

**E&BD**

**TEXAS DEPARTMENT OF TRANSPORTATION**  
 HOUSTON DISTRICT

**EXCAVATION AND BACKFILL DIAGRAMS**

**Legend:**  
 D = Depth  
 H = Height  
 T = Thickness  
 R = Radius  
 Dia = Diameter

**REINFORCED CONCRETE PIPE EXCAVATION AND BACKFILL QUANTITIES**

PIPE DIA. IN.	T FT.	EXCAVATION IN A PAVED OR GRADED AREA C.Y. PER L.F. PER FT. OF DEPTH	BACKFILL IN A PAVED OR GRADED AREA C.Y. PER L.F. OF PIPE
18	0.19	0.144	0.383
24	0.23	0.165	0.478
30	0.29	0.188	0.586
36	0.33	0.210	0.692
42	0.38	0.231	0.809
48	0.42	0.257	0.934
54	0.46	0.288	1.066
60	0.50	0.320	1.204
66	0.54	0.352	1.347
72	0.58	0.384	1.494
78	0.62	0.415	1.644
84	0.67	0.457	1.797

**MONOLITHIC PIPE EXCAVATION QUANTITIES**

PIPE DIA. IN.	T FT.	EXCAVATION C.Y. PER L.F. PER FT. OF DEPTH
36	0.417	0.142
42	0.458	0.164
48	0.498	0.182
54	0.500	0.204
60	0.583	0.228
66	0.583	0.247
72	0.625	0.269
78	0.675	0.287
84	0.625	0.308

**EXCAVATION AND BACKFILL DETAIL**  
 MONOLITHIC PIPE IN A PAVED OR GRADED AREA

**BACKFILL DETAIL**  
 BOX CULVERTS IN A GRADED OR PAVED AREA INCLUDING DETOURS \*

**EXCAVATION DETAIL**  
 BOX CULVERTS IN A GRADED AREA

**EXCAVATION & BACKFILL DETAIL**  
 REINFORCED CONCRETE PIPE IN A GRADED OR PAVED AREA INCLUDING DETOURS

**BACKFILL DETAIL**  
 AT MANHOLE, INLET OR JUNCTION BOX

**NOTE:**

- Cement stabilized backfill may be omitted in private driveways as indicated elsewhere in the plans.
- Rubber gaskets shall be required for all joints on proposed cross drainage, pipe culverts and proposed storm sewer systems, unless otherwise shown in the plans.
- Backfill with cement stabilized material will be required for all structures under detours unless noted otherwise in the General Notes.

**TEXAS DEPARTMENT OF TRANSPORTATION**  
 HOUSTON DISTRICT

**EXCAVATION AND BACKFILL DIAGRAMS**

**E&BD**

**Legend:**  
 D = Depth  
 H = Height  
 T = Thickness  
 R = Radius  
 Dia = Diameter

**DETAILS**  
**CULVERT AND EXCAVATION**  
**DETAILS**

**LJA Engineering, Inc.**

3600 W Sam Houston Parkway S  
 Suite 600  
 Houston, Texas 77042

Phone 713.953.5200  
 Fax 713.953.5026  
 FRN - F-1386

