



September 14, 2023

Okechukwu Chika, PMP, MBA  
Office of the County Engineer  
1111 Fannin St., 7th Fl,  
Houston, TX 77002  
Telephone (713) 274-3659

Re: Woodforest Blvd. Phase II - 2022, Precinct 2; UPIN 22102MF28U02  
System 47 – Line 160

**Stacy Jamison**  
Supervisor, Pipeline Damage Prevention  
**LyondellBasell**  
**Equistar Pipeline Operations**  
16055 Space Center Blvd., Ste 350  
Houston, TX 77062  
Direct: 281-709-0618  
Mobile: 281-387-3850

Okechukwu Chika,

I have reviewed your proposed installation of a 6’ wide concrete sidewalk to cross above Equistar’s pipeline. As indicated, you will maintain a minimum of 5’ separation between the proposed 6’ wide concrete sidewalk and the subject pipeline. Equistar approves of the installation contingent upon the following conditions:

1. The contractors adhere to the attached General Construction Guidelines while working in the area of Equistar’s pipelines to maintain pipeline integrity and safety.
2. Any significant changes to the construction plan, including but not limited to clearances or excavation methods, must be reevaluated and approved by the Equistar Damage Prevention Supervisor.
3. The indicated minimum clearance of 5’ is maintained from the Equistar Pipelines.
4. Our technician is on site during any excavations related to the installation. Please have the contractor/company contact:

**Jose Sandoval**  
Equistar Chemicals, LP  
Pipeline Technician  
Mobile – (979) 616-8328

This is only a technical evaluation of the easement encroachment. **Please sign and return this document.**

If you have any questions or need additional info I can be reached at (281.709.0618).

Sincerely,

Stacy Jamison  
[Stacy.Jamison@LYB.com](mailto:Stacy.Jamison@LYB.com)

I have reviewed and agree to follow the conditions outlined in this letter.

Printed Name: Lina Hidalgo, Harris County Judge

Signature: \_\_\_\_\_  
Representative Date

Approved as to Form:  
Christian D. Menefee, County Attorney:

By: An Le  
An Le  
C.A. File No.: 23GEN3315

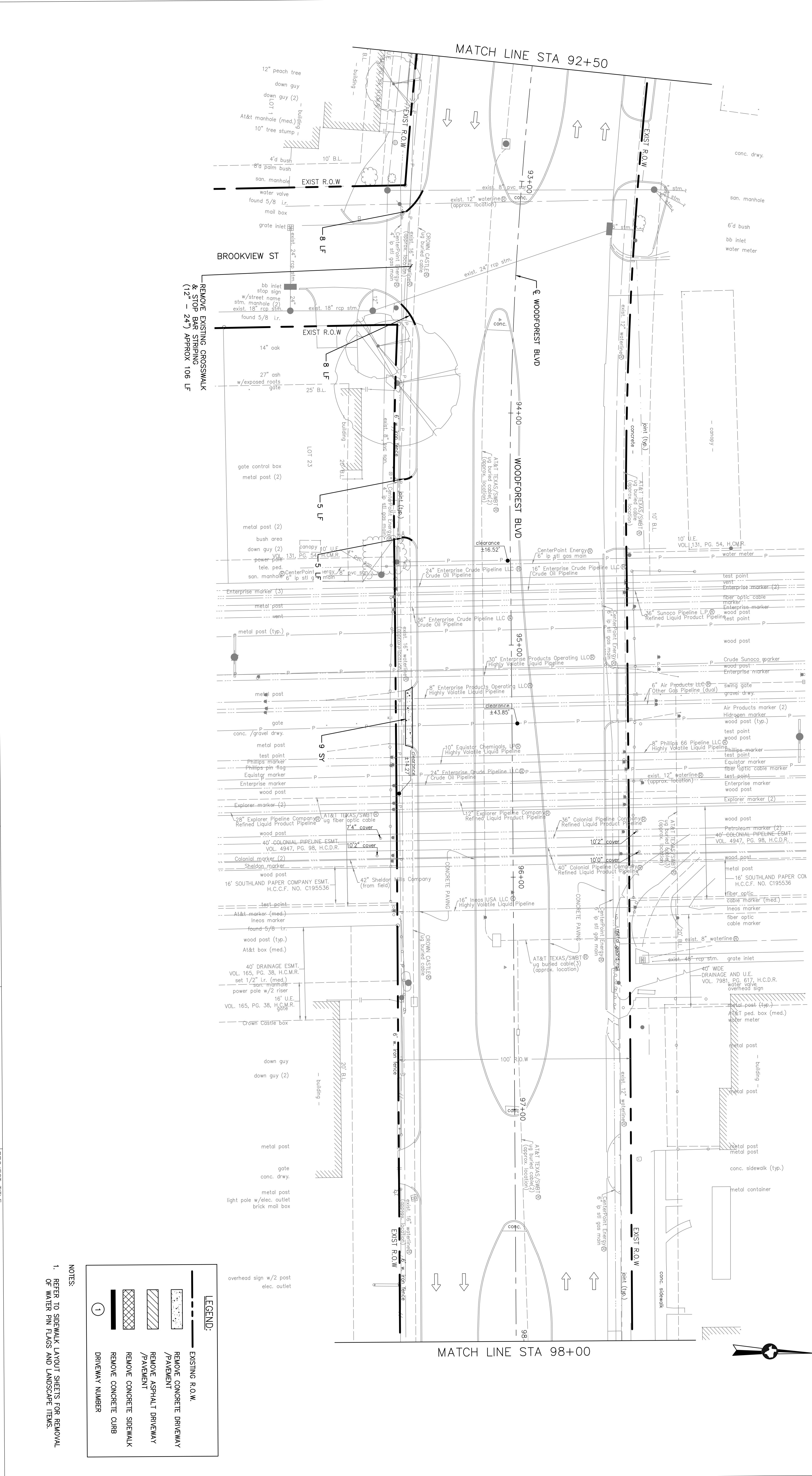
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HARRIS COUNTY  
ENGINEERING DEPARTMENT

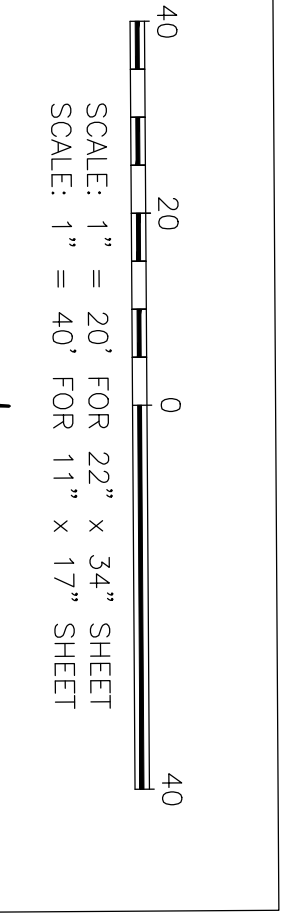
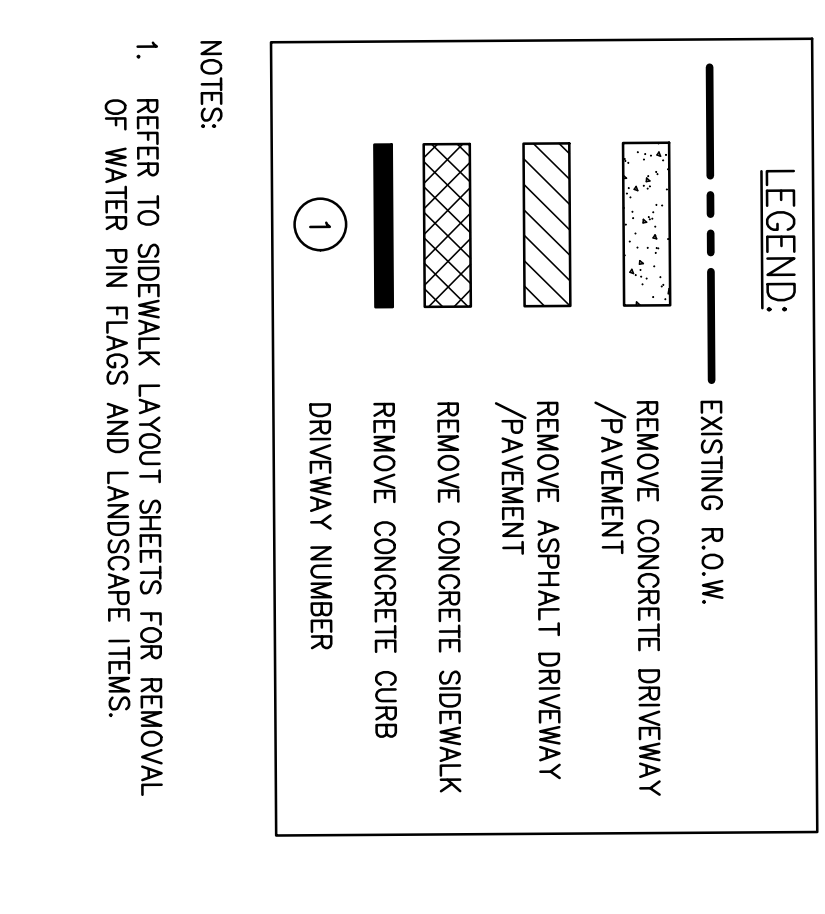


FOR INTERIM REVIEW ONLY NOT  
INTENDED FOR PERMIT OR  
CONSTRUCTION PURPOSES  
UNDER THE AUTHORITY OF:  
KYLE JOHN MACOY, P.E.  
DATE: JULY 2023

|                    |                                     |
|--------------------|-------------------------------------|
| PROJECT TITLE:     | SIDEWALK - WOODFOREST BOULEVARD     |
| SHEET DESCRIPTION: | FREEPORT STREET TO REDSTONE STREET  |
| DATE:              | JUN 2023                            |
| SHEET NO.:         | 26 / 97                             |
| DRAWN BY:          | EHRRA                               |
| OK'D BY:           | EHRRA                               |
| SCALE:             | 1" = 20' (22x34) / 1" = 40' (11x17) |



NOTES:  
1. REFER TO SIDEWALK LAYOUT SHEETS FOR REMOVAL OF WATER PIN FLAGS AND LANDSCAPE ITEMS.



## General Construction Requirements near Equistar Pipelines

Equistar Chemicals, LP (“Equistar”), a LyondellBasell company, is committed to protecting the environment and maintaining the safety of its employees, contractors, and the general public. Working safely is a core value of our LyondellBasell. It begins with Goal Zero, by which we make the commitment to never allow the safe, responsible operation of our facilities to be compromised for any reason. As a pipeline owner, operator, and member of the community Equistar operates and transports various liquids and gasses at high pressure and is committed to safely operating its pipelines.

In accordance with federal and state laws, Equistar developed these general requirements for working on Equistar pipeline rights-of-way or easements.

For any proposed activity (an “encroachment”) that may occur on Equistar pipeline rights-of-way or easements, the encroaching party shall complete an encroachment application. Equistar will endeavor to work with the encroaching party on an approved encroachment. Any deviations and/or changes in scope from what was originally planned and approved by Equistar may require additional time in engineering study and additional requirements beyond what was originally planned and approved. Once the encroaching party and Equistar have agreed to an encroachment plan, Equistar will issue a letter of no objection (“LONO”).

### **1. General Safety Requirements**

- 1.1. Texas811 (811) or Louisiana811 (811) must be contacted at least 48 hours (2 working days) before any construction and/or excavation activities are initiated. Equistar may have a representative present to ensure that there are no conflicts with the pipeline.
  - 1.1.1. Failure to utilize the One-Call service can be quite costly in terms of unnecessary risk for employees, innocent bystanders, personal property of others, and the environment; as well as potential civil penalties and/or fines.
- 1.2. Equistar’s pipeline location(s) must be accurately represented on the proposed construction plans.
- 1.3. Equistar will hold responsible all parties for taking all necessary safety and environmental precautions on Equistar property or near Equistar assets and Equistar will hold responsible all parties for any damages caused to the pipeline, property, or waterways because of their work.
- 1.4. Equistar shall be held harmless from and against any and all claims of whatsoever kind and nature which might be associated with or derived from such damage, disturbance or interference.
- 1.5. Equistar reserves the right to further impose reasonable stipulations or requirements specific to each situation.

### **2. General Construction Activities**

- 2.1. Where it is necessary for construction equipment (i.e. tractors, backhoes, dump trucks etc.) or equipment transporting construction materials to cross the pipeline to gain access to the job site, a crossing may be required to be constructed at a 90 degree (90°) angle to the pipeline. Equistar will evaluate load factors in order to define a safe crossing method.
- 2.2. No track type construction equipment shall be permitted to pivot or turn directly over top of the pipeline unless adequate cover is provided.
- 2.3. A scraper or pan type tractor shall not be used for removal of soil within ten feet (10') of the centerline of the pipeline unless pipeline cover & depth at no less than twenty feet (20')

longitudinal intervals have been verified by Equistar. Rubber tire or small track type equipment is an acceptable alternative.

- 2.4. Equistar approval will be required for vibratory rollers to be used within three feet (3') of the centerline of the pipeline, unless the compacted cover over the pipeline is a depth of three and one-half feet (3 1/2').
- 2.5. Equistar reserves the right to charge reasonable and customary fees to maintain an on-site field presence during large pipeline construction projects.

### **3. Excavation Specific Requirements**

- 3.1. No excavation or construction activity will be permitted near a pipeline until all appropriate communications have been made with Equistar.
- 3.2. The actual location of each excavation, or actual path of each directional drill should be accurately marked on the ground before Equistar arrives to respond to a One Call ticket.
- 3.3. There shall be no excavation or backfilling within the pipeline right-of-way for any reason without a representative of Equistar on site and actively monitoring. Equistar's representative may suspend any work activities at any time, at their sole discretion.
- 3.4. In order to minimize the potential for pipeline damage and significant incidents, all pipelines must be positively identified by either probing, or excavation at each excavation location or directional drill crossing.
- 3.5. Mechanized equipment is prohibited within the Tolerance Zone (18" + ½ pipe diameter) of the pipeline.
- 3.6. Digging perpendicular within ten feet (10') to the pipeline is prohibited until the pipeline is exposed.
- 3.7. All backhoe/trackhoe buckets used for excavation near the pipeline must have a safety bar across the "teeth" and side cutters removed.
- 3.8. No mechanical excavation will be permitted within 18 inches of the pipeline. All excavation within 18 inches must be done by hand or hydro-excavation.

### **4. Foreign Line or Utility Crossings**

- 4.1. All foreign lines will cross under the pipeline unless the pipeline is at a prohibitive depth.
  - 4.1.1. If the pipeline is at a prohibitive depth, Equistar will review and evaluate the proposed crossing location to determine if it will be feasible to allow the foreign line to cross above the pipeline.
- 4.2. All foreign lines shall cross the pipeline right-of-way at, or as near to, a 90 degree (90°) angle as is feasible.
- 4.3. Clearances for new line installations:
  - 4.3.1. New pipelines six inches (6") in diameter and smaller shall have a minimum of two feet (2') separation from the pipeline.
  - 4.3.2. New pipelines eight inches (8") in diameter and larger shall have a minimum of three feet (3') separation from the pipelines.
- 4.4. If the foreign line is a telecommunications cable, power cable, or similar in nature, the foreign line shall be placed in a Schedule 40 PVC conduit, or greater, for a linear distance extending ten feet (10') on either side of the centerline of the pipeline. The entire length of conduit, inside process areas and meter stations, shall either be encased in red dyed concrete, or shall have a red dyed concrete cap placed on top of it.
- 4.5. If the foreign line is a metallic pipeline, or similar in nature, the foreign line shall be coated with a suitable coating for a distance of at least fifty feet (50') on either side of the centerline of the pipeline. The foreign line owner, operator, or their contractor, shall install cathodic protection

bonds and potential test leads to the foreign line at the crossing location and terminate the leads at an above ground location as identified by Equistar. Equistar will install the test leads on the pipeline.

- 4.6. Below ground precautionary flagging (warning tape) shall be placed in the ditch line above the foreign line. The warning tape shall be placed approximately one foot (1') below the final surface grade/elevation. The warning tape shall extend for a linear distance of ten feet (10') on either side of the centerline of the pipeline.
- 4.7. Underground cabling approved to be installed over a pipeline shall be protected from excavation activities by a minimum of schedule 40 nonmetallic conduit that extends at least ten feet (10') past the line being crossed on both sides, with a minimum of two feet (2') clearance from the pipeline.

## **5. Directional Drilling or Boring**

- 5.1. May not be performed within four feet (4') of an underground Equistar asset.
- 5.2. May not be performed within ten feet (10') of an Equistar asset without visually validating the clearances.
- 5.3. Additional visual verifications or installation of sheet piling below the elevation of the pipeline to ensure the pipeline(s) are protected during installation may be required.
- 5.4. Continuous tracking of the drill head as well as physical or visual techniques to verify the drill head location (included but not limited to probing, pot-holing or a window).
- 5.5. Before the bore begins, Equistar will review the drill profile.

## **6. Exposing an Equistar Pipeline**

- 6.1. Must be avoided unless approved by an Equistar who must be present to ensure the integrity of the pipeline.
- 6.2. Must protect the exposed the pipeline from sags, bends, and equipment at all times.
- 6.3. The pipelines supported with cribbing, sand bags, equipment or dirt plugs if:
  - 6.3.1. Pipe is less than or equal to three inches (3") in diameter at least every ten feet (10').
  - 6.3.2. Pipe is greater than three inches (3") at least every twenty feet (20').
- 6.4. The excavator must allow sufficient time for Equistar to complete an Exposed Pipeline Report.
- 6.5. The excavator must allow sufficient time for Equistar to install a bond or test station if deemed necessary by Equistar.

## **7. Parking Lots, Roads, Driveways, Fences and Structures**

- 7.1. Equistar approval is required for any permanent structures to be constructed over the pipeline.
- 7.2. Permanent surface structures to be constructed near the pipeline must have minimum ten feet (10') of clearance from all Equistar pipelines.
- 7.3. Equistar approval will be required to have less than two feet (2') minimum vertical separation between the pipeline and any underground structure.
- 7.4. A minimum of four feet (4') of cover is required for all road crossings, and three feet (3') for driveways; however, a stress factor calculation may be needed to determine the actual amount of cover required depending on soil conditions and other circumstances.
- 7.5. Proposals for parking lot construction on the pipeline right of way are discouraged.
  - 7.5.1. Asphalt paving may be permitted as an exception under certain conditions with an agreement executed by the property owner and Equistar. The agreement grants Equistar the right to excavate within the pavement area for any pipeline maintenance that may be necessary in the future and acknowledges the property owner as the party responsible for the expense of pavement replacement.

7.5.2. If a parking lot is permitted by Equistar, a minimum of four feet (4') of cover will be required.

7.6. A minimum of three feet (3') of cover is required for all drainage ditches.

7.7. No subsurface structures (such as manholes or catch basins) shall be located over the pipeline. A minimum horizontal clearance of five feet (5') is required between the structure and the pipeline.

7.8. All parking lots planned within the Equistar's right-of-way should incorporate green areas (areas where surface access is not impeded by improvements) over the pipeline at intervals of approximately 60 feet but no more than 100 feet, measured along the pipeline centerline. Location and size will be subject to Enterprise's review and approval.

## **8. Temporary Equipment Crossings, Temporary Storage**

8.1. Temporary equipment crossings will require an air bridge with a minimum of six feet (6') horizontal distance from the edge of the pipeline(s).

8.2. Any other method will require:

8.2.1. Written approval from Equistar

8.2.2. Exact location of crossing(s)

8.2.3. Wheel load - concentrated surface load (lbs.) (Wheel Load)

8.2.4. Tracked vehicle load – total weight and width, length, gauge

8.3. Temporary storage must have at least ten feet (10') of horizontal clearance from the pipeline.

## **9. Landscape and vegetation**

9.1. Limited trees are allowed on the pipeline right-of-way.

9.2. Equistar may permit the installation of limited landscaping and minor shrubbery plantings with a verbal communication.

9.3. For a major development, landscaping plans must first be submitted in writing to Equistar for review and approval. Any plantings that restrict efficient aerial inspection or limit access to the easement area will be considered interference and must be addressed accordingly.

## **10. Exceptions**

10.1. Any deviations to the above construction requirements will require Equistar's approval. Questions should be directed to:

**Stacy Jamison** Supervisor  
Equistar Chemicals LP  
16055 Space Center Blvd., Ste 350  
Houston, TX 77062

Direct: 281-709-0618  
Mobile: 281-387-3850  
[Stacy.Jamison@LYB.com](mailto:Stacy.Jamison@LYB.com)

## **11. Encroachment Evaluations**

11.1. When reviewing plans that may encroach on its rights-of-way or pipeline facilities, Equistar reserves the right to request all information it deems necessary to evaluate the project, including, but not limited to, the following:

11.1.1. A detailed cover letter describing the proposed project and stating the name, address, and telephone number of the property owner, contractor, and developer.

11.1.2. A completed set of final design drawings of the project at the location where they impact the pipelines, which must include the following information:

11.1.2.1. A plan of the project drawn to scale, showing the location of the project and

indicating where changes in grade are proposed to the surface of rights-of-way. Existing and proposed elevations must be shown. Equistar will need to be contacted to determine actual pipeline elevations.

- 11.1.2.2. A ground profile where changes in grade are to be made to the surface of rights-of-way for activities such as road crossings, excavations, fill, etc.
- 11.1.2.3. If hauling or traveling across a pipeline facility or right-of-way is part of the project, vehicle information is to be supplied to Equistar. This shall include vehicle type, number of axles, and gross vehicle weight. Equistar will review this information and determine if special modifications need to be made to the depth of cover on the pipeline.
- 11.1.2.4. Location of any structures relative to Equistar's pipelines.
- 11.1.3. For pipeline crossings, detailed design plans and specifications, including final plan and profile drawings must be submitted to Equistar. Information submitted must include (if applicable):
  - 11.1.3.1. Line Crossing Locations
  - 11.1.3.2. Pipe depth and spacing from Equistar pipelines
  - 11.1.3.3. Drill Profile
  - 11.1.3.4. Alignment sheets
- 11.1.4. Companies who have a pre-existing agreement with Equistar must disclose the terms of that agreement if there are conflicts with these requirements.
- 11.2. Upon completion of the encroachment evaluation, Equistar will provide a Letter of No Objection ("LONO") which will need to be signed and returned to Equistar's Damage Prevention Supervisor prior to construction.

**Stacy Jamison** Supervisor  
Equistar Chemicals LP  
16055 Space Center Blvd., Ste 350  
Houston, TX 77062

Direct: 281-709-0618  
Mobile: 281-387-3850  
[Stacy.Jamison@LYB.com](mailto:Stacy.Jamison@LYB.com)

**ORDER OF COMMISSIONERS COURT**

The Commissioners Court of Harris County, Texas, met in regular session at its regular term at the Harris County Administration Building in the City of Houston, Texas, on \_\_\_\_\_, 2024 with all members present except \_\_\_\_\_.

A quorum was present. Among other business, the following was transacted:

**ORDER AUTHORIZING THE EXECUTION OF A TECHNICAL EVALUATION OF THE EASEMENT ENCROACHMENT BETWEEN HARRIS COUNTY AND LYONDELLBASELL**

Commissioner \_\_\_\_\_ introduced an order and moved that Commissioners Court adopt the order. Commissioner \_\_\_\_\_ seconded the motion for adoption of the order. The motion, carrying with it the adoption of the order, prevailed by the following vote:

|                           | Yes                      | No                       | Abstain                  |
|---------------------------|--------------------------|--------------------------|--------------------------|
| Judge Lina Hidalgo        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Comm. Rodney Ellis        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Comm. Adrian Garcia       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Comm. Tom S. Ramsey, P.E. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Comm. Lesley Briones      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

The County Judge thereupon announced that the motion had duly and lawfully carried and that the order had been duly and lawfully adopted. The order thus adopted follows:

**IT IS ORDERED** that County Judge be, and is hereby, authorized to execute for and on behalf of Harris County, a Technical Evaluation of the Easement Encroachment between Harris County and Lyondellbasell for the purpose of providing a 6’ wide concrete sidewalk on Woodforest Boulevard. The Technical Evaluation of the Easement Encroachment is incorporated herein as though fully set forth word for word.

All Harris County officials and employees are authorized to do any and all things necessary or convenient to accomplish the purpose of this Order.