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April 16, 2019

Deisy Perez
Research Analyst
Economic Development and Local Government
Data Analysis and Transparency Division
Texas Comptroller of Public Accounts
111 E. 17th Street
Austin, Texas 78774

Re: Application #1324 La Porte ISD-Celanese Ltd – Supplement #003 Transmittal Letter

Dear Ms. Perez:

This letter is in response to your email dated April 10, 2019. Per your request, La Porte ISD-Celanese Ltd have made the following changes to Application #1324.

Enumerated below are the changes contained in Supplement #003:

1. Tab 7 has been updated for the following changes:
    a. Additional description of feedstock and acetic acid production
    b. Additional description of synergies between new and existing equipment
    c. Added the word "New" to the previous "Machinery" headline
    d. Removal of "Other equipment typical to chemical processing"

2. Tab 8 has been updated for the following changes:
    a. Additional description of feedstock and acetic acid production
    b. Additional description of synergies between new and existing equipment
    c. Added the word "New" to the previous "Machinery" headline
    d. Removal of "Other equipment typical to chemical processing"

3. Tab 10 has been updated to contain additional maps, labeling significant components of the facility.

If you have any questions, or would like to discuss this matter further, please contact me at (214) 840-7179, or Tanner Robertson at (214) 840-7986.

Respectfully submitted,

George Francis

Enclosures

cc: *Via Electronic Mail:* supt-secretary@lpisd.org
Mr. Lloyd W. Graham, Superintendent of Schools, La Porte Independent School District

Via Electronic Mail: kimberly.andrews@celanese.com
Ms. Kim Andrews, Tax Director, Celanese Ltd.

Via Electronic Mail: fred.stormer@uwlaw.com
Mr. Fred Stormer, Underwood Law Firm

Tab #7
Detailed Description of Qualified Investment

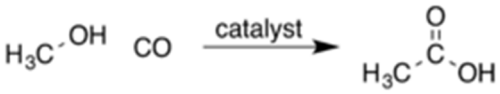
Proposed Project Description

The proposed project to which this application pertains is the construction of an acetic acid production unit on the grounds of Applicant's existing Clear Lake facility, utilizing existing Clear Lake technology. This acetic acid production unit will produce an estimated 800,000 tonnes per year, that is expandable to 1,200,000 tonnes per year, with favorable capital efficiency. At 1,200,000 tonnes per year, this will be the third largest acetic plant in the world, behind only Applicant's plant already in Clear Lake, and Applicant's plant in Nanjing, China.

Much of Applicant's North American methanol needs are met from the existing methanol plant in Clear Lake. Should this application's investment be made, additional future capital investment could be necessary to meet Applicant's expanded market needs.

Applicant's current Clear Lake facility in Pasadena produces acetic acid, vinyl acetate monomer (a derivative of acetic acid), methanol, and many other intermediate chemicals. This facility hosts multiple other chemical companies operating at the site. This facility also has a Research and Development facility that supports Applicant's business on a global basis.

The primary feed stocks for the production of Acetic Acid are: methanol, carbon monoxide, iodomethane, metal carbonyl, and water. The Acetic acid produced at Celanese facility will be produced via by the carbonylation of methanol. In this process, methanol and carbon Monoxide react to produce acetic acid according to the following equation:



The process involves iodomethane as an intermediate and occurs in three steps. A catalyst, metal carbonyl, is also needed for the carbonylation.

The output from the Acetic Acid production unit is "Acetic Acid". At times it is also called glacial acetic acid or virgin acetic acid. Acetic acid has a distinctive sour taste and pungent smell. In addition to household vinegar, it is mainly produced as a precursor to polyvinyl acetate and cellulose acetate. Also used in medical field for treatment of certain cancers, as well as a solvent in the production of terephthalic acid.

The synergies between the current Clear Lake facility and the construction of the acetic production unit will inevitably share interconnections with the existing feedstock supply, but any new connections that will be established will consist of new piping constructed specifically for the project to which this application pertains. However, the connections from the unit to the storage tanks will not share any existing connections with the current facility.

Applicant anticipates investments for construction of approximately $425 million. This anticipated investment amount includes engineering, equipment, and construction costs.

Significant Components of the Facility Include:

- New Machinery:
  - Reactor
  - Vessels
  - Towers
  - Pumps
  - Heat Exchangers
  - New Tanks for storage
- Functional Processing Areas:
  - Reaction
  - Purification
  - Light ends recovery
  - Catalyst area

Tab #8
Detailed Description of Qualified Property

Proposed Project Description

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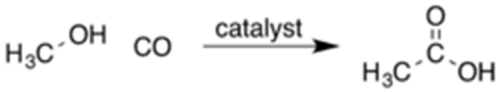

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  - Light ends recovery
  - Catalyst area

Tab #10
Description of all property not eligible to become qualified property

The construction area for the proposed project is encompassed by the yellow box. Currently, within the proposed project boundary, as shown below, there sits approximately $49M worth of real and personal property, according to 2018 data from Harris County Appraisal District. Please see notation below HCAD Parcel Viewer printout, below.

The parcels of land where construction will occur are bifurcated out in the last set of maps shown below. On the proposed project site to the left of the page, there is currently situated, for temporary purposes, a variety of storage trailers, materials, and other various items commonly found in a chemical plant. On the proposed project site to the right of the page, the land is completely vacant, as shown below. There are no permanent structures located in the proposed project areas, and the remainder of the property within the yellow box is not considered for the project to which this application pertains.

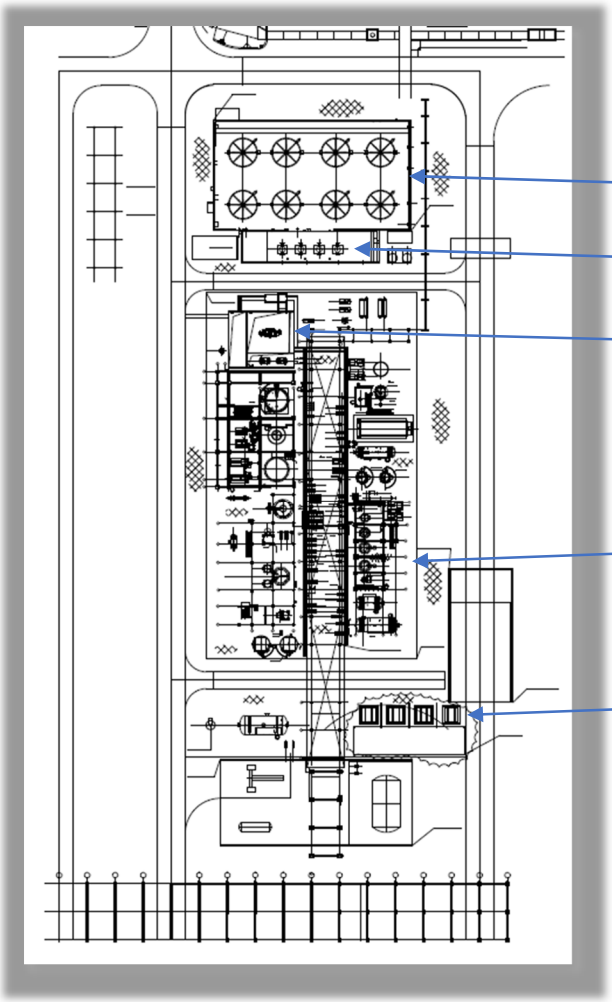
The parcels of land are separate as the left area represents the battery limits of the operating area, and the right area represents the available product storage area, consisting of tankage and pumps used to store and transfer the just finished acetic acid. Due to a variety of reason including space constraints, safety reasons, and the stand-off from the operating area, the product storage area must be separate. However, one would not exist without the other.

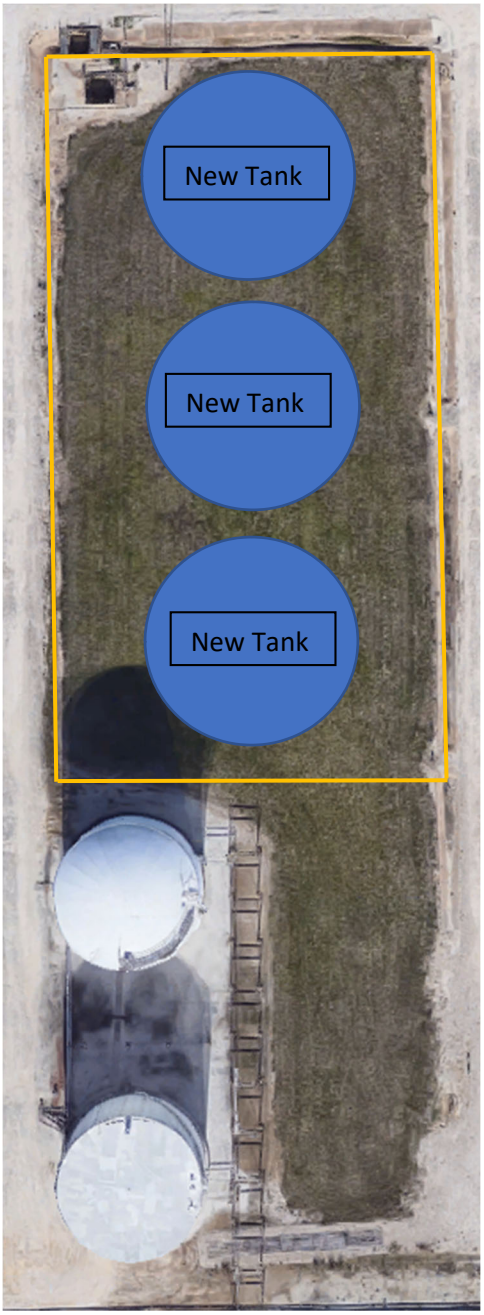
All areas outside of the yellow box are existing projects, not related to the proposed project.

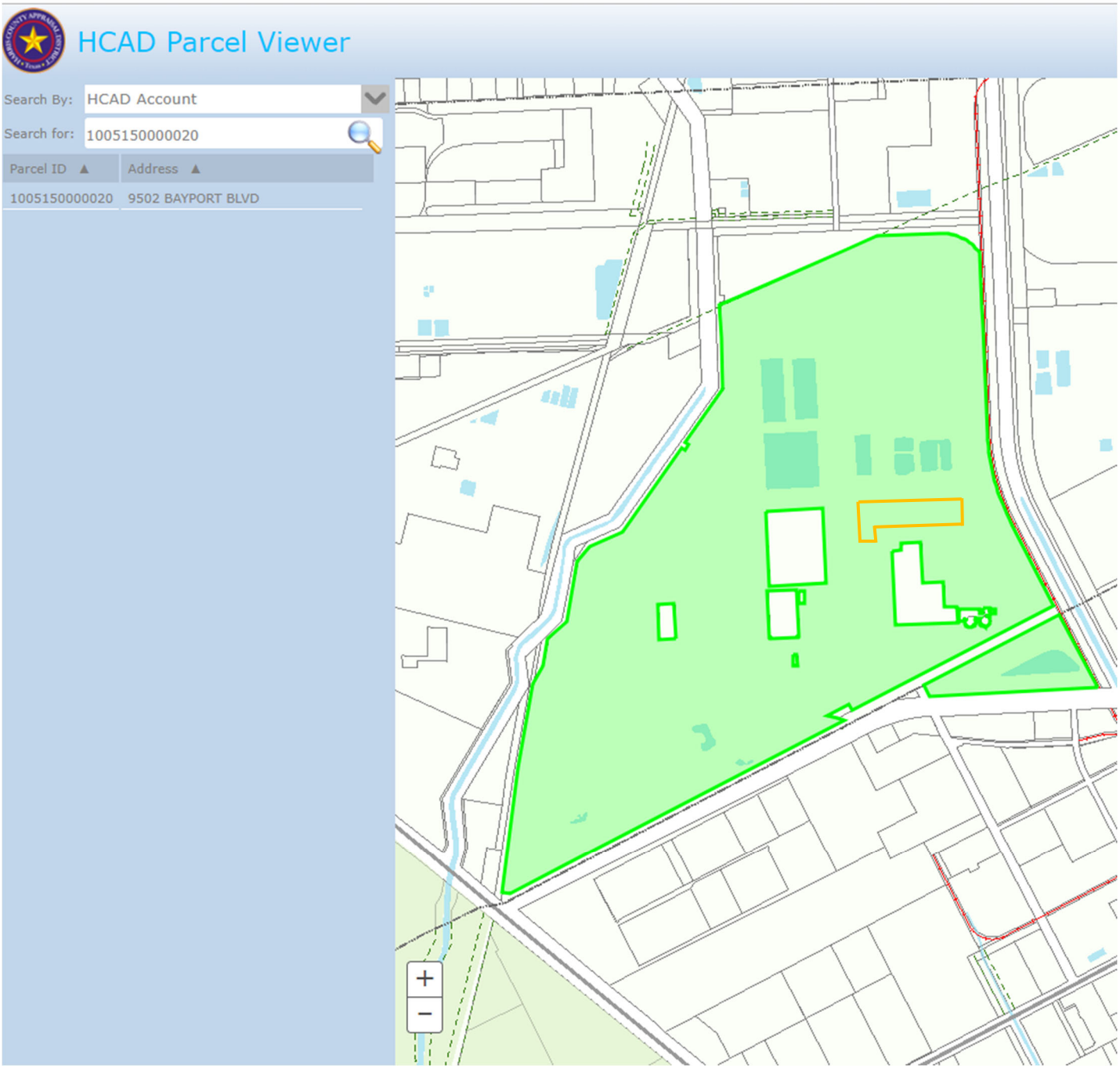
The existing acetic acid unit is shown on the last page of Tab #10, shaded in blue.

Google

Celanese Chemical
Clear Lake


Reactor


New Tank
New Tank
New Tank

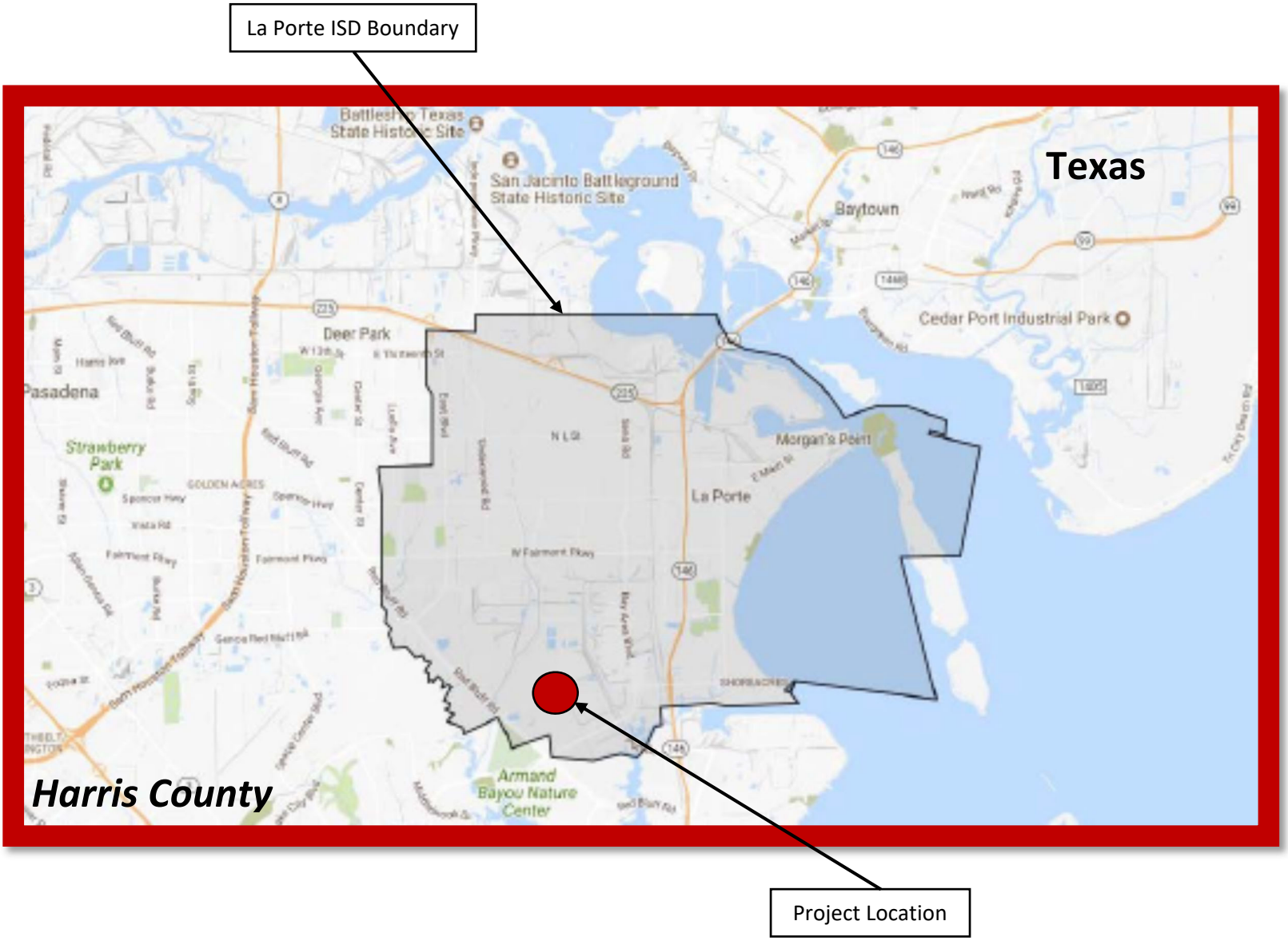
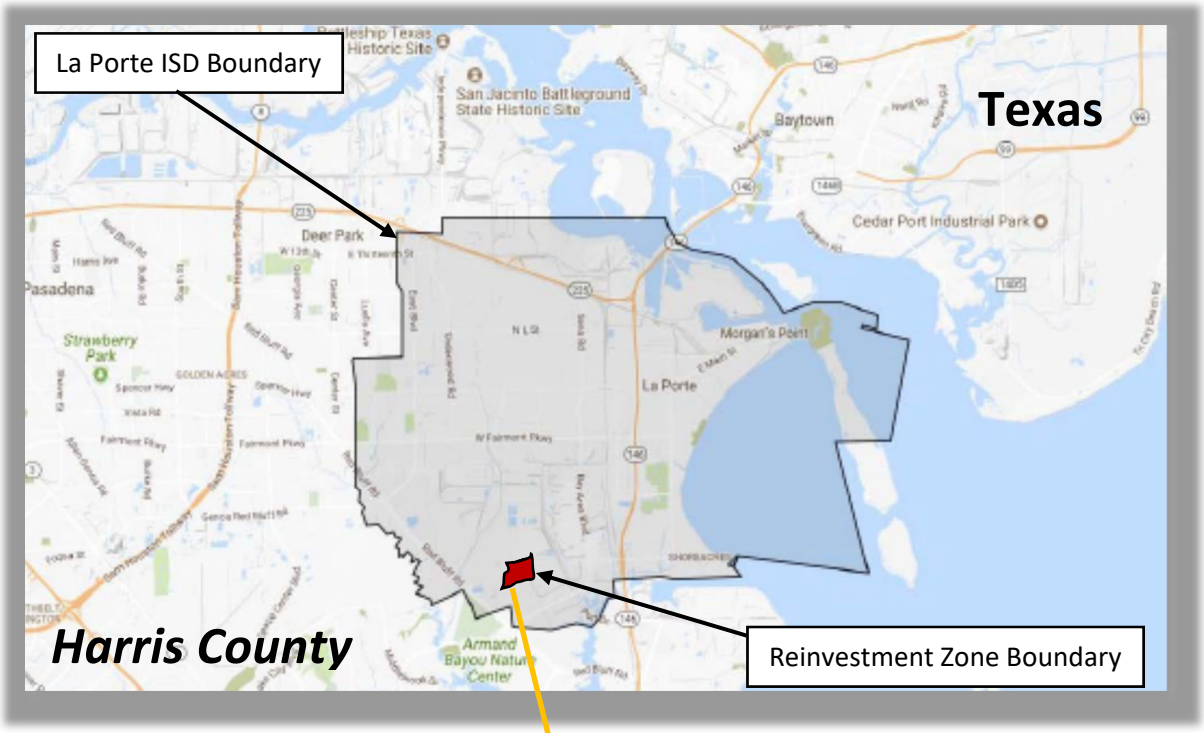
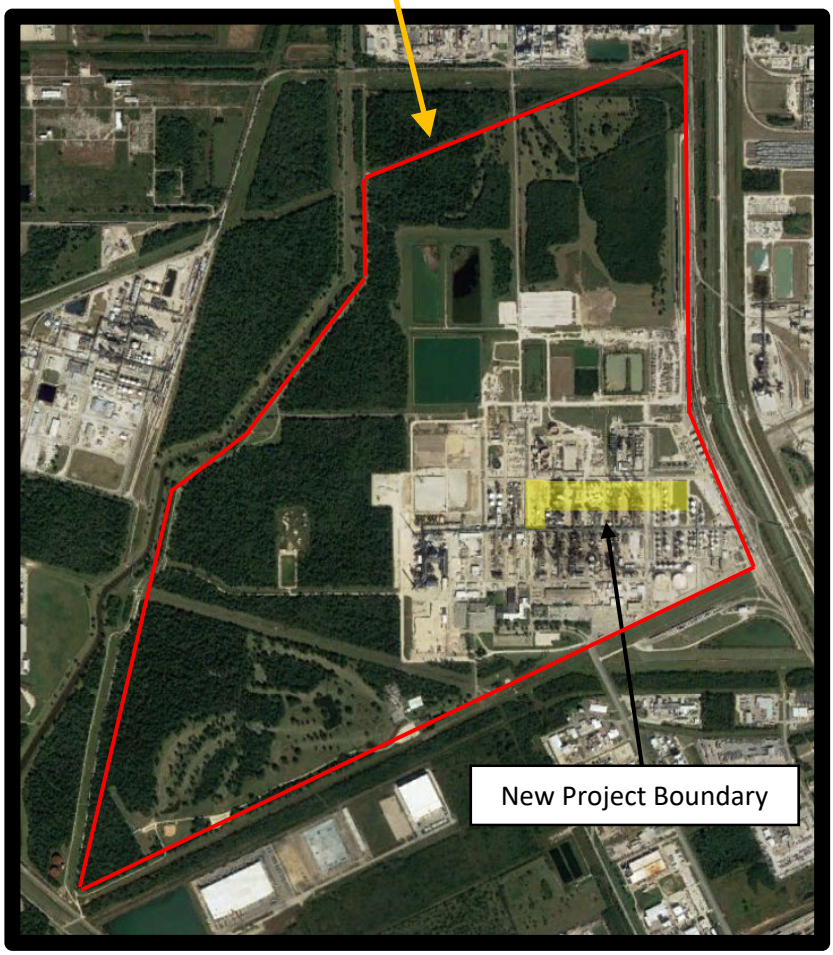


The above pictured parcel, HCAD Account No. 1005150000020, was given an appraised value of $110,871,086 as of January 1, 2018. The appraised value is comprised of $23,833,966 land and $87,037,120 of improvement. With the small exception of the white parcels outlined inside the above green shaded area, the entirety of Applicant's facility is within this parcel, previously referenced as HCAD Account No. 1005150000020. It is Applicant's good faith estimate that the value of land and improvements located within the yellow box, as outlined numerous times above that are not part of the project to which this application pertains, are worth approximately $49,000,000 in assessed value.

Tab #11
Maps that clearly show:

a) **Project Vicinity –** See following map labeled "Project Vicinity Map"
b) **Qualified Investment –** See following map labeled "Qualified Investment / Qualified Property Map"
c) **Qualified Property –** See following map labeled "Qualified Investment / Qualified Property Map"
d) **Existing Property –** See Tab #10
e) **Land location and vicinity map –** see following map labeled "Project Vicinity Map"
f) **Reinvestment Zone within vicinity map, showing the actual or proposed boundaries and size –** See following map containing the label "Reinvestment Zone Boundary"

Project Vicinity Map



Qualified Investment / Qualified Property Map