

Appendix B

Agency Correspondence

NEPA Correspondence Summary Table
DEER PARK – Patrick’s Bayou Flooding Mitigation Project

| # | Agency | Date Sent | Agency Response | Approval Status |
|---|---|-----------|---|-------------------------------------|
| A | Texas Parks & Wildlife (TPW) Mr. Carter Smith Executive Director Texas Parks & Wildlife 4200 Smith School Road Austin, TX 78744 | 8/4/09 | 1/6/10 – Approval with recommendation to replace woodlands | Approved with Recommendation |
| B | Texas Historical Commission (THC) Mr. F. Lawrence Oaks Texas Historical Commission 1511 Colorado Street Austin, TX 78701 | 8/4/09 | 8/10/09 - “No survey required” | Approved |
| C | Coastal Resources Program Jodenna Henneke Deputy Commissioner Coastal Resources Program Texas General Land Office P.O. Box 12873 Austin, TX 78711-2873 | 8/4/09 | 9/9/09 - “No Significant Impacts” | Approved |
| D | Texas Commission on Environmental Quality (TCEQ) Ms. Glenda Thorn Water Program Section 12100 Park 35 Circle Austin, TX 78753 | 8/4/09 | 11/12/09 - “No Significant Impacts” | Approved |
| E | United States Army Corps of Engineers (USACE) Mr. Kevin Morgan Chief, Evaluation Section U.S. Army Corps of Engineers Jadwin Building 2000 Fort Point Road Galveston, TX 77550 | 8/4/09 | 1/14/10 – No comment on project. Letter states if project involves impacts to provide project specifics to Regulatory Branch. | No Comment |

CORRESPONDENCE 118 11



Essayon Engineering & Development, Inc.
Civil & Environmental Engineers

David G. McSwain, P.E.
Kelvin R. Gomez, P.E.
Onur Inanoglu, P.E.

August 4, 2009



Mr. F. Lawrence Oaks
Texas Historical Commission
1511 Colorado Street
Austin, TX 78701

Dear Mr. Oaks:

RE: City of Deer Park Flood Mitigation Project – Patrick’s Bayou
NEPA Coordination – Correspondence B

The City of Deer Park, Texas, is requesting assistance from the Texas Division of Emergency Management through the Hazard Mitigation Grant Program (HMGP). The City is seeking funding for a 32-acre detention facility in order to mitigate against repetitive flooding, which has caused several millions of dollars of damage to the area. A project description with a preliminary environmental assessment and project maps are attached.

The scope of work will be restricted to land currently owned by the City within the existing limits of the City on unimproved land. Pursuant to the National Environmental Policy Act the City wishes to know if you have any interest in this project.

The City has retained Essayon Engineering & Development, Inc. to assist them in the application process. If you have any comments, concerns, or wish to review this project further kindly let me know within thirty (30) days so that I can work with your office to address your concerns. Kindly notify me if you have no comment, or if you approve of this project.

Thank you for your time in this matter. If you have any questions or need further information, I may be reached at 972-790-0081.

Sincerely,

Kayla L. Saperstein
Grants Administrator



Enc: Project Description/Preliminary Environmental Assessment, Project Maps



Coastal Coordination Council

P.O. Box 12873 ♦ Austin, Texas 78711-2873 ♦ (800) 998-4GLO ♦ FAX (512) 475-0680

Chairman

Jerry Patterson
Texas Land Commissioner



Members

Karen Hixon
Parks & Wildlife Commission
of Texas

Jose Dodier
Texas State Soil & Water
Conservation Board

Edward G. Vaughan
Texas Water Development Board

Ned Holmes
Texas Transportation Commission

Elizabeth Jones
Railroad Commission of Texas

H. S. Buddy Garcia
Texas Commission on
Environmental Quality

Robert R. Stickney
Sea Grant College Program

Robert "Bob" Jones
Coastal Resident Representative

Jerry Mohn
Coastal Business Representative

George Deshotels
Coastal Government
Representative

Bob McCan
Agriculture Representative



Tammy Brooks
Council Secretary

Jesse Solis, Jr.
Permit Service Center
Corpus Christi
1-866-894-3578

Permit Service Center
Galveston
1-866-894-7664

September 9, 2009

Kayla Saperstein
Essayon Engineering & Development, Inc.
1723 E Southlake Blvd Suite 120
Southlake Texas 76092

Re: FEMA Hazard Mitigation Grant Program – Patricks Bayou Detention Facility

Dear Ms. Saperstein:

Based on information provided to the Texas Coastal Management Program (TCMP) on the above project, it has been determined that it will likely not have adverse impacts on coastal natural resource areas in the coastal zone and is consistent with the goals and policies of the TCMP.

If you have any questions or concerns, please contact me at (512) 463-9212 or at tammy.brooks@glo.state.tx.us.

Sincerely,

Tammy S. Brooks
Coastal Coordination Council Secretary
Consistency Review Coordinator
Texas General Land Office

Bryan W. Shaw, Ph.D., *Chairman*
 Buddy Garcia, *Commissioner*
 Carlos Rubinstein, *Commissioner*
 Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 12, 2009

Ms. Kayla L. Saperstein
 Essayon Engineering & Development, Inc.
 1723 E. Southlake Blvd., Suite #120
 Southlake, TX 76092

Re: TCEQ Grant and Texas Review and Comment System (TRACS) #9952, City of Deer Park, Harris County,
 Patrick's Bayou Detention Facility

Dear Ms. Saperstein:

The Texas Commission on Environmental Quality (TCEQ) has reviewed the above-referenced project and offers following comments:

A review of the project for General Conformity impact in accordance with 40 CFR Part 93 and Title 30, Texas Administrative Code § 101.30 indicates that the proposed project is located in the City of Deer Park, Harris County, which is currently classified as a severe ozone nonattainment area. Therefore, General Conformity rules apply.

The two criteria pollutants of concern as precursors to ozone formation are volatile organic compounds (VOCs) and nitrogen oxides (NO_x). An increase of 100 tons per year for VOCs or NO_x, resulting from the proposed project, could trigger general conformity analysis. However, the emissions from the proposed project are expected to be well below the 25 tons per year significance level. Therefore, a general conformity analysis will not be required.

Although any demolition, construction, rehabilitation or repair project will produce dust and particulate emissions, these actions should pose no significant impact upon air quality standards. Any minimal dust and particulate emissions should be easily controlled by the construction contractors using standard dust mitigation techniques.

We do not anticipate significant long term environmental impacts from this project as long as construction and waste disposal activities associated with it are completed in accordance with applicable local, state, and federal environmental permits and regulations. We recommend that the applicant take necessary steps to insure that best management practices are utilized to control runoff from construction sites to prevent detrimental impact to surface and ground water.

Thank you for the opportunity to review this project. If you have any questions, please call Ms. Glenda Thorn at (512) 239-1980.

Sincerely,

Katherine Nelson

Katherine Nelson
 Assistant Division Director
 Water Quality Planning Division



REPLY TO
ATTENTION OF

Environmental Section

DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77553-1229

January 14, 2010

CORRESPONDENCE "E"

Ms. Kayla L. Saperstein
Grants Administrator
Essayon Engineering and Development, Inc.
1723 E. Southlake Blvd., Suite 120
Southlake, Texas 76092

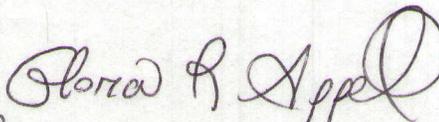
Dear Ms. Saperstein:

This is in response to the City of Deer Park's Hazard Mitigation Grant Program application, to construct a 32-acre flood detention basin along Patrick Bayou, in Harris County, Texas. Proposed project plans were sent by the City of Deer Park to the Galveston District Corps of Engineers for review. The proposed plans were reviewed by elements of the Planning and Environmental Branch, and the Engineering and Construction Division.

The Corps of Engineers regulates work and/or structures in or affecting navigable waters of the U.S. (including all waters affected by the daily tide) under Section 10 of the Rivers and Harbors Act of 1899. We also regulate any discharge of dredged and/or fill material into any waters of the U.S. (including adjacent wetlands) under Section 404 of the Clean Water Act. If any of your proposed project(s) involve impacts under the aforementioned federal laws, please provide the project specifics to our Regulatory Branch at P.O. Box 1229, Galveston, Texas 77553-1229.

We appreciate the opportunity to review and comment upon the proposed project and trust that this response facilitates your planning and implementation process. If you have any questions, please contact Mr. George Dabney at 409-766-6345.

Sincerely,


for Carolyn Murphy
Chief, Environmental Section



Essayon Engineering & Development, Inc.
Civil & Environmental Engineers

David G. McSwain, P.E.
Kelvin R. Gomez, P.E.
Onur Inanoglu, P.E.

August 4, 2009

Mr. Carter Smith
Executive Director
Texas Parks & Wildlife
4200 Smith School Road
Austin, TX 78744

**RE: CITY OF DEER PARK FLOOD MITIGATION PROJECT – PATRICK’S
BAYOU DETENTION FACILITY
NEPA COORDINATION – CORRESPONDENCE A**

Dear Mr. Smith:

The City of Deer Park, Texas, is requesting assistance from the Texas Division of Emergency Management through the Hazard Mitigation Grant Program (HMGP). The City is seeking funding for a 32-acre detention facility in order to mitigate against repetitive flooding, which has caused several millions of dollars of damage to the area. A project description with a preliminary environmental assessment and project maps are attached.

The scope of work will be restricted to land currently owned by the City within the existing limits of the City on unimproved land. Pursuant to the National Environmental Policy Act the City wishes to know if you have any interest in this project.

The City has retained Essayon Engineering & Development, Inc. to assist them in the application process. If you have any comments, concerns, or wish to review this project further kindly let me know within thirty (30) days so that I can work with your office to address your concerns.

Thank you for your time in this matter. If you have any questions or need further information, I may be reached at 972-790-0081.

Sincerely,

Kayla L. Saperstein
Grants Administrator

Enc: Project Description/Preliminary Environmental Assessment, Project Maps

*1723 E. Southlake Blvd., Suite #120
Southlake, Texas 76092
P: 972.790.0081 F: 214.257.8347*

NEPA COORDINATION – CORRESPONDENCE A

CITY OF DEER PARK PATRICK'S BAYOU FLOODING MITIGATION PROJECT

PROJECT SUMMARY:

The project area is near the northeast border of the City of Deer Park in Harris County, Texas. The latitude and longitude of the project are 29.4219 and -95.0626. Deer Park lies southeast of the City of Houston, just south of State Hwy 225. To the north of SH 225 lies Superfund oil refineries and the Houston Ship Channel. Flooding occurs frequently in the Deer Park area, especially in the Patrick's Bayou watershed in the northeast quadrant of the City. Drainage is restricted in undersized culverts passing beneath SH 225, causing backflow into the surrounding neighborhood. There have been several studies of the flooding problem. The best alternative is a 32-acre detention facility at the location shown on the attached maps. The facility will be constructed on City-owned land which is bordered on the north by State Hwy 225, an urban development to the west, an industrial facility to the east and a vacant lot to the south.

ENVIRONMENTAL SUMMARY:

Biological Resources

Issue: Determine if significant impacts on endangered or threatened species are expected.

Preliminary Determination: Limited potential for biological resources including endangered or threatened species.

Within Harris County the Bald Eagle, Peregrine Falcon, White-tailed Hawk, and the Whooping Crane are on the U.S. Fish & Wildlife Service Endangered Species List with habitats which may be similar to the project site. It is unknown if any nesting sites exist within the proposed area. The land has trees, however, the area is highly industrialized, near freeway and Superfund sites, therefore this environment may not be preferred by these endangered or threatened species. Therefore, endangered or threatened species would most likely not be significantly impacted by this project. There are no wetlands or floodplains on the project site. A listing of endangered and threatened species listed for Harris County listed by the U.S. Fish & Wildlife Service is attached.

Probable Impact on Biological Resources: **None to Minimal**



Essayon Engineering & Development, Inc.
Civil & Environmental Engineers

David G. McSwain, P.E.
Kelvin R. Gomez, P.E.
Onur Inanoglu, P.E.

August 4, 2009

Mr. F. Lawrence Oaks
Texas Historical Commission
1511 Colorado Street
Austin, TX 78701

**RE: CITY OF DEER PARK FLOOD MITIGATION PROJECT – PATRICK’S
BAYOU
NEPA COORDINATION – CORRESPONDENCE B**

Dear Mr. Oaks:

The City of Deer Park, Texas, is requesting assistance from the Texas Division of Emergency Management through the Hazard Mitigation Grant Program (HMGP). The City is seeking funding for a 32-acre detention facility in order to mitigate against repetitive flooding, which has caused several millions of dollars of damage to the area. A project description with a preliminary environmental assessment and project maps are attached.

The scope of work will be restricted to land currently owned by the City within the existing limits of the City on unimproved land. Pursuant to the National Environmental Policy Act the City wishes to know if you have any interest in this project.

The City has retained Essayon Engineering & Development, Inc. to assist them in the application process. If you have any comments, concerns, or wish to review this project further kindly let me know within thirty (30) days so that I can work with your office to address your concerns. Kindly notify me if you have no comment, or if you approve of this project.

Thank you for your time in this matter. If you have any questions or need further information, I may be reached at 972-790-0081.

Sincerely,

Kayla L. Saperstein
Grants Administrator

Enc: Project Description/Preliminary Environmental Assessment, Project Maps

NEPA COORDINATION – CORRESPONDENCE B

CITY OF DEER PARK PATRICK'S BAYOU FLOODING MITIGATION PROJECT

PROJECT SUMMARY:

The project area is near the northeast border of the City of Deer Park in Harris County, Texas. The latitude and longitude of the project are 29.4219 and -95.0626. Deer Park lies southeast of the City of Houston, just south of State Hwy 225. To the north of SH 225 lie Superfund oil refineries and the Houston Ship Channel. Flooding occurs frequently in the Deer Park area, especially in the Patrick's Bayou watershed in the northeast quadrant of the City. Drainage is restricted in undersized culverts passing beneath SH 225, causing backflow into the surrounding neighborhood. There have been several studies of the flooding problem. The best alternative is a 32-acre detention facility at the location shown on the attached maps. The facility will be constructed on City-owned land which is bordered on the north by State Hwy 225, an urban development to the west, an industrial facility to the east and a vacant lot to the south.

ENVIRONMENTAL SUMMARY:

Cultural Resources

Issue: Identify if cultural resources (Archeological Artifacts) exist on the project site.

A park commemorating the site of the battleground of San Jacinto is located east of Deer Park near the Houston Ship Channel. Although the project site lies several miles west of the battleground, it is unknown if archeological artifacts exist on the project site.

Included in the Contract Documents and Specifications document will be the following statement:

Although no resources are expected to be found, if cultural materials are encountered during construction, work must cease in the immediate area of the discovery. Work may continue in those project locations outside of the discovery area, with written approval from the Texas Water Development Board. In the event of discovery, the contractor must immediately notify the consultant engineer, the Texas Historical Commission (512) 463-5867, and the Texas Water Development Board State Environmental Coordinator at (512) 463-7847.

Probable Impact on Cultural Resources: **Low to Moderate**



Essayon Engineering & Development, Inc.
Civil & Environmental Engineers

David G. McSwain, P.E.
Kelvin R. Gomez, P.E.
Onur Inanoglu, P.E.

August 4, 2009

Jodenna Henneke
Deputy Commissioner
Coastal Resources Program
Texas General Land Office
P.O. Box 12873
Austin, TX 78711-2873

**RE: CITY OF DEER PARK FLOOD MITIGATION PROJECT – PATRICK’S
BAYOU DETENTION FACILITY
NEPA COORDINATION – CORRESPONDENCE C**

Dear Ms. Henneke:

The City of Deer Park, Texas, is requesting assistance from the Texas Division of Emergency Management through the Hazard Mitigation Grant Program (HMGP). The City is seeking funding for a 32-acre detention facility in order to mitigate against repetitive flooding, which has caused several millions of dollars of damage to the area. A project description with a preliminary environmental assessment and project maps are attached.

The scope of work will be restricted to land currently owned by the City within the existing limits of the City on unimproved land. Pursuant to the National Environmental Policy Act the City wishes to know if you have any interest in this project.

The City has retained Essayon Engineering & Development, Inc. to assist them in the application process. If you have any comments, concerns, or wish to review this project further kindly let me know within thirty (30) days so that I can work with your office to address your concerns.

Thank you for your time in this matter. If you have any questions or need further information, I may be reached at 972-790-0081.

Sincerely,

Kayla L. Saperstein
Grants Administrator

Enc: Project Description/Preliminary Environmental Assessment, Project Maps

NEPA COORDINATION – CORRESPONDENCE C

CITY OF DEER PARK PATRICK'S BAYOU FLOODING MITIGATION PROJECT

PROJECT SUMMARY:

The project area is near the northeast border of the City of Deer Park in Harris County, Texas. The latitude and longitude of the project are 29.4219 and -95.0626. Deer Park lies southeast of the City of Houston, just south of State Hwy 225. To the north of SH 225 lies Superfund oil refineries and the Houston Ship Channel. Flooding occurs frequently in the Deer Park area, especially in the Patrick's Bayou watershed in the northeast quadrant of the City. Drainage is restricted in undersized culverts passing beneath SH 225, causing backflow into the surrounding neighborhood. There have been several studies of the flooding problem. The best alternative is a 32-acre detention facility at the location shown on the attached maps. The facility will be constructed on City-owned land which is bordered on the north by State Hwy 225, an urban development to the west, an industrial facility to the east and a vacant lot to the south.

ENVIRONMENTAL SUMMARY:

Coastal Zone: The City of Deer Park lies within the Coastal Zone as defined by the General Land Office.

Issue: Identify if the coastal zone will be negatively impacted by the project.

The project is designed so that flooding is reduced south of State Hwy 225 by retaining floodwaters in a detention facility. Construction will be limited to the land identified on the attached maps. There will be no significant negative impacts on the coastal zone.

Probable Impact on Coastal Zone: **None**



Essayon Engineering & Development, Inc.
Civil & Environmental Engineers

David G. McSwain, P.E.
Kelvin R. Gomez, P.E.
Onur Inanoglu, P.E.

August 4, 2009

Ms. Glenda Thorn
Water Program Section
12100 Park 35 Circle
Austin, TX 78753

**RE: CITY OF DEER PARK FLOOD MITIGATION PROJECT – PATRICK’S
BAYOU DETENTION FACILITY
NEPA COORDINATION – CORRESPONDENCE D**

Dear Ms. Thorn:

The City of Deer Park, Texas, is requesting assistance from the Texas Division of Emergency Management through the Hazard Mitigation Grant Program (HMGP). The City is seeking funding for a 32-acre detention facility in order to mitigate against repetitive flooding, which has caused several millions of dollars of damage to the area. A project description with a preliminary environmental assessment and project maps are attached.

The scope of work will be restricted to land currently owned by the City within the existing limits of the City on unimproved land. Pursuant to the National Environmental Policy Act the City wishes to know if you have any interest in this project.

The City has retained Essayon Engineering & Development, Inc. to assist them in the application process. If you have any comments, concerns, or wish to review this project further kindly let me know within thirty (30) days so that I can work with your office to address your concerns.

Thank you for your time in this matter. If you have any questions or need further information, I may be reached at 972-790-0081.

Sincerely,

Kayla L. Saperstein
Grants Administrator

Enc: Project Description/Preliminary Environmental Assessment, Project Maps

NEPA COORDINATION – CORRESPONDENCE D

CITY OF DEER PARK PATRICK'S BAYOU FLOODING MITIGATION PROJECT

PROJECT SUMMARY:

The project area is near the northeast border of the City of Deer Park in Harris County, Texas. The latitude and longitude of the project are 29.4219 and -95.0626. Deer Park lies southeast of the City of Houston, just south of State Hwy 225. To the north of SH 225 lies Superfund oil refineries and the Houston Ship Channel. Flooding occurs frequently in the Deer Park area, especially in the Patrick's Bayou watershed in the northeast quadrant of the City. Drainage is restricted in undersized culverts passing beneath SH 225, causing backflow into the surrounding neighborhood. There have been several studies of the flooding problem. The latest study done by PBS&J in Houston recommended the best alternative - a 32-acre detention facility at the location shown on the attached maps. The facility will be constructed on City-owned land which is bordered on the north by State Hwy 225, an urban development to the west, an industrial facility to the east and a vacant lot to the south.

ENVIRONMENTAL SUMMARY:

Floodplains

Issue: Determine if project will be in compliance with floodplain management regulations.

The attached FEMA flood map indicates flooding in the neighborhoods near the Patrick's Bayou watershed. The culverts beneath State Hwy 225 are greatly undersized. According to the FEMA flood map, only .2% of floodwaters are contained in the drainage channel beneath the highway. The City participates in the NFIP program and data shows the repetitive flooding occurrence in this area has cost NFIP millions of dollars. The project will have a beneficial impact on the floodplain, designed to contain flooding from the 100-year storm.

Probable Impact on Floodplains: **Beneficial Impact**



Essayon Engineering & Development, Inc.
Civil & Environmental Engineers

David G. McSwain, P.E.
Kelvin R. Gomez, P.E.
Omur Inanoglu, P.E.

August 4, 2009

Mr. Kevin Morgan
Chief, Evaluation Section
U.S. Army Corps of Engineers
Jadwin Building
2000 Fort Point Road
Galveston, TX 77550

Dear Mr. Morgan:

RE: CITY OF DEER PARK FLOOD MITIGATION PROJECT – PATRICK’S BAYOU
DETENTION FACILITY
NEPA COORDINATION – CORRESPONDENCE E

The City of Deer Park, Texas, is requesting assistance from the Texas Division of Emergency Management through the Hazard Mitigation Grant Program (HMGP). The City is seeking funding for a 32-acre detention facility in order to mitigate against repetitive flooding, which has caused several millions of dollars of damage to the area. A project description with preliminary environmental assessments and project maps are attached.

The scope of work will be restricted to land within the existing limits of the City on unimproved wooded land owned by the City. Pursuant to the National Environmental Policy Act the City wishes to know if you have any requirements for this project.

The City has retained Essayon Engineering & Development, Inc. to assist them in the application process. If you have any comments, concerns, or wish to review this project further kindly let me know within thirty (30) days so that I can work with your office to address requirements, if any.

Thank you for your time in this matter. If you have any questions or need further information, I may be reached at 972-790-0081, or on my cell phone at 214-505-7441.

Sincerely,

Kayla L. Saperstein
Grants Administrator

Enc: Project Description/Preliminary Environmental Assessments, Project Maps

NEPA COORDINATION – CORRESPONDENCE E

CITY OF DEER PARK PATRICK’S BAYOU FLOODING MITIGATION PROJECT

PROJECT SUMMARY:

The project area is near the northeast border of the City of Deer Park in Harris County, Texas. The latitude and longitude of the project are 29.4219 and -95.0626. Deer Park lies southeast of the City of Houston, just south of State Hwy 225. To the north of SH 225 lies Superfund oil refineries and the Houston Ship Channel. Flooding occurs frequently in the Deer Park area, especially in the Patrick’s Bayou watershed in the northeast quadrant of the City. High rainfall amounts are received during hurricanes and thunderstorms. Drainage is restricted in undersized culverts passing beneath SH 225, causing backflow into the surrounding neighborhood. There have been several studies of the flooding problem. In September 2002, PBS&J Engineering proposed flood control measures in their report entitled “*Preliminary Drainage Assessment for HFCD Units G104-00-00...*” followed up with a preliminary engineering report commissioned by the Harris County Flood Control District in order to evaluate the effectiveness of the flood control measures. The best alternative found is a 32-acre detention facility for Channel G104. The location is shown on the attached maps. The facility will be constructed on City-owned land which is bordered on the north by State Hwy 225, an urban development to the west, an industrial facility to the east and a vacant lot to the south.

ENVIRONMENTAL SUMMARY:

Wetlands:

Issues: a) Identify potential impacts on wetlands or waters of the U.S.; b) determine if discharge of materials into waters of the U.S.

Preliminary Determination: No negative impacts on wetlands.

There are no wetlands in the project site. The site is a wooded lot with no water features. The Patrick’s Bayou drainage channel empties into the Houston Shipping Channel downstream. Construction of the detention facility will enable floodwaters to be retained in the facility during flooding incidents, and released into the drainage channel/culverts later, thereby allowing street contaminants and debris to settle. The net impact of floodwaters draining into waters of the United States will be positive.

There will be no discharge of materials into the waters of the U.S. during construction. Soil will be used to construct the facility, and any excess soil or debris will be hauled away. Because there will be no discharges into waterways, USACE Section 11 and/or Section 404 permit will not be required.

Probable Impact on Wetlands: **None to Positive**

Biological Resources

Issue: Determine if significant impacts on endangered or threatened species are expected.

Preliminary Determination: Limited potential for biological resources including endangered or threatened species.

Within Harris County the Bald Eagle, Peregrine Falcon, White-tailed Hawk, and the Whooping Crane are on the U.S. Fish & Wildlife Service Endangered Species List with habitats which may be similar to the project site. It is unknown if any nesting sites exist within the proposed area. The land has trees, however, the area is highly industrialized, near freeway and Superfund sites, therefore this environment may not be preferred by these endangered or threatened species. Therefore, endangered or threatened species would most likely not be significantly impacted by this project. There are no wetlands or floodplains on the project site. A listing of endangered and threatened species listed for Harris County listed by the U.S. Fish & Wildlife Service is attached.

Probable Impact on Biological Resources: **None to Minimal**

Cultural Resources

Issue: Identify if cultural resources (Archeological Artifacts) exist on the project site.

A park commemorating the site of the battleground of San Jacinto is located east of Deer Park near the Houston Ship Channel. Although the project site lies several miles west of the battleground, it is unknown if archeological artifacts exist on the project site.

Included in the Contract Documents and Specifications document will be the following statement:

Although no resources are expected to be found, if cultural materials are encountered during construction, work must cease in the immediate area of the discovery. Work may continue in those project locations outside of the discovery area, with written approval from the Texas Water Development Board. In the event of discovery, the contractor must immediately notify the consultant engineer, the Texas Historical Commission (512) 463-5867, and the Texas Water Development Board State Environmental Coordinator at (512) 463-7847.

Probable Impact on Cultural Resources: **Low to Moderate**

Coastal Zone

Issue: The City of Deer Park lies within the Coastal Zone as defined by the General Land Office. Identify if the coastal zone will be negatively impacted by the project.

The project is designed so that flooding is reduced south of State Hwy 225 by retaining floodwaters in a detention facility. Construction will be limited to the land identified on the attached maps. There will be no significant negative impacts on the coastal zone.

Probable Impact on Coastal Zone: **None**

Floodplains

Issue: Determine if project will be in compliance with floodplain management regulations.

The attached FEMA flood map indicates flooding in the neighborhoods near the Patrick's Bayou watershed. The culverts beneath State Hwy 225 are greatly undersized. As seen on the attached map from the PBS&J report, only .2% of floodwaters are contained in the drainage channel beneath the highway. The City participates in the NFIP program and data shows the repetitive flooding occurrence in this area has cost NFIP millions of dollars. The project will have a beneficial impact on the floodplain, designed to contain flooding from the 100-year storm.

Probable Impact on Floodplains: **Beneficial Impact**

Other Environmental Issues

Issue: Compliance with water contamination, debris removal, and air quality issues.

- Construction of the floodwater detention facility will be in compliance with all regulations regarding water contamination, debris removal, and air quality issues.
- The construction site is not located near sources of ground water.
- Floodwater contamination issues will be reduced as a result of this project.
- Soil from the site will be used to construct the detention facility. Excess soil and debris will be hauled away.
- Air quality will be impacted only in the short term due to exhaust from construction equipment. No long term air quality issues will arise as a result of this project.

Probable Impact on water contamination, debris removal, and air quality issues: **None to Minimal**