



No Final Drainage Plan or Final Plat will be approved if it does not conform to the Board approved Drainage Impact Analysis. Changes to the Drainage Impact Analysis require Board approval.

DRAINAGE IMPACT ANALYSIS OVERVIEW

1

Introduction:

A Drainage Impact Analysis will be required for certain types of projects to ensure compliance with the DISTRICT's Zero Downstream Impact (ZDI) policy. A Drainage Impact Analysis will typically include hydrologic and hydraulic models, written reports, exhibits, and output data to demonstrate that the improvements proposed by any project will not cause an adverse impact downstream.

2

Consultation Meeting:

If needed, the Applicant (or designee) may request a consultation with the District Engineer regarding any project prior to initiating modeling and analysis. This meeting is strongly recommended for Applicants who have never worked in BDD # 4.

3

MyGov Portal:

To make an application, an Applicant must first create a MyGov account and access the Brazoria Drainage District No. 4 [portal](#).

4

Submittal:

Fill out the application form, upload the Drainage Impact Analysis (PDF Report), modeling files, and any supporting documents, and submit online using MyGov. Contact the District office if file size limits prevent uploading the digital models.

5

Application Review:

Within a few days of submitting online, District Staff will review the application for completeness and issue an invoice for any application or review fees.

6

Pay Invoice:

After being notified by MyGov, the Applicant pay the invoice. No further action will be taken on the application until the District has received the required fees.

7

Engineer Review:

The District Engineer will complete a technical review of the Drainage Impact Analysis, digital models, and any other supporting documentation. In some instances, the Applicant may be required to address review comments or provide additional information.

8

Board Eligible:

When the Applicant sees a "Board Eligible" notification, this means that the District Engineer and Staff have completed the review. This request will now be placed on an upcoming meeting agenda. Meeting dates are [here](#).

9

Board Approval:

Only the Board of Commissioners can approve or deny the Drainage Impact Analysis

See the following pages for detailed instructions and criteria.



Brazoria Drainage District No. 4

A Political Subdivision of the State of Texas

Procedure for Drainage Impact Analysis Submittals at BDD # 4

Introduction

A Drainage Impact Analysis will be required for certain types of projects to ensure compliance with the DISTRICT's Zero Downstream Impact (ZDI) policy. A Drainage Impact Analysis will typically include hydrologic and hydraulic models, written reports, exhibits, and output data to demonstrate that the improvements proposed by any project will not cause an adverse impact downstream.

Subsequent development for a tract with a Board approved Drainage Impact Analysis proposed by a Drainage Plan or Plat must be in conformance with that report and modeling. Deviation will only be allowed after the Applicant revises the models and report, submits the revised Drainage Impact Analysis to the DISTRICT, and receives Board approval for the revised report.

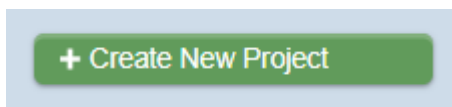
Recommended Consultation Meeting

A consultation with the District Engineer is strongly recommended prior to initiating modeling and analysis. This is particularly applicable to Applicants or Engineers who have not worked in BDD # 4 recently.

Procedure

NOTE – This application includes a requirement to upload Drainage Impact Analysis Report (PDF) and other relevant attachments. [A list of the minimum requirements for a Drainage Impact Analysis are included later in this document.](#) Be sure to have those items ready prior to initiating this process.

1. All applications must be made online using the [MyGov portal](#).
2. All Applicants must have a collaborator account to file an application in MyGov. This [video](#) will assist new Applicants with creating a MyGov account.
3. Click "Create New Project".



4. For the Project Template, select "Drainage Impact Analysis".
5. Fill in the project information form.
6. Enter the Project Description. Be descriptive and specific.
7. Enter the Engineer and Developer information.

The District website can be found at www.bdd4.org

8. Enter the Location information. If you have difficulty in entering the location, please refer to this [FAQ document](#).
9. Select an Applicant. NOTE – The email address you provide is the one that MyGov will send notifications to.
10. Click “Create Project”
11. Upload Plan(s) – Drainage Impact Analysis. This is the part of the application where you upload the Drainage Impact Analysis Report. A single PDF file is recommended. This PDF file can contain multiple pages. After selecting the sheet(s) click “continue”.
12. Upload Plan(s) – Support Documents. This is the part of the application where you upload any supporting documentation. This might include a previously approved Drainage Impact Analysis as an example. You are also required to provide the digital model files. These files must be converted to ZIP in order to upload. If MyGov gives an error due to a file which is too large, skip this step to continue with the application and contact the District office at (281) 485-1434. After selecting the various files (or skipping) click “continue”.
13. The next step in this process is to stage the sheets. “Staging” is where you provide a unique Sheet ID for each sheet of the Drainage Impact Analysis Report. In future resubmittals, the Sheet IDs in the second submission (resubmittals) have to match exactly the ones used in the initial submission. This is how MyGov will know which version 2 of a given sheet replaces the previous version of the same sheet. After staging the sheets, click “continue”. Next click “submit plans”. Your initial application is now complete.
14. Within a few business days, District Staff will review the application for completeness and issue an invoice for the application fee. The Applicant (selected in Step 9 above) will receive notifications. The Applicant is responsible for monitoring their application in MyGov and any alerts regarding status changes. Further review of the request will not take place until any required fees have been paid.
15. After any fees have been paid, the District Engineer and Staff will review the submission. The District has up to 10 business days to review the submittal. The Applicant will be notified when the review is complete. If the Applicant does not receive a notification within 10 business days, it is recommended that the Applicant contact the District office to inquire about the status. The Applicant will be able to see “items required” status when the review is complete.
16. Drainage Impact Analyses require Board approval. Within three business days of approval by the Board at a DISTRICT meeting, the DISTRICT will provide a copy of the stamped and signed report to the Applicant as evidence of approval.

No Final Drainage Plan or Final Plat will be approved if it does not conform to the Board approved Drainage Impact Analysis. Changes to the Drainage Impact Analysis require Board approval.

Section 4 – Drainage Impact Analysis from the District’s Rules, Regulations, and Guidelines is provided in the following pages. This includes some of the specific minimum requirements for obtaining Drainage Impact Analysis approval.

SECTION 4 – DRAINAGE IMPACT ANALYSIS

A. INTRODUCTION

A Drainage Impact Analysis will be required for certain types of projects to ensure compliance with the DISTRICT’s Zero Downstream Impact (ZDI) policy. A Drainage Impact Analysis will typically include hydrologic and hydraulic models, written reports, exhibits, and output data to demonstrate that the improvements proposed by any project will not cause an adverse impact downstream.

Subsequent development for a tract with a Board approved Drainage Impact Analysis proposed by a Drainage Plan or Plat must be in conformance with that report and modeling. Deviation will only be allowed after the Applicant revises the models and report, submits the revised Drainage Impact Analysis to the DISTRICT, and receives Board approval for the revised report.

B. APPLICABILITY

No Drainage Plan or Plat will be approved by the DISTRICT for the following types of projects until the Applicant has prepared a Drainage Impact Analysis and received Board approval for that report:

1. Any project for which the Floodplain Administrator deems it necessary.
2. Phased or master planned developments totaling 100 or more acres.
3. Projects proposing to utilize offsite or regional detention.
4. Projects proposing “inline” detention.
5. Projects proposing a bridge or culvert crossing within a DISTRICT facility for a proposed public road. A Drainage Impact Analysis will not be required for a private driveway.
6. Projects proposing to replace a DISTRICT channel with conduit.
7. Any project which proposes to re-align, widen, or restrict a DISTRICT facility and is deemed to be significant by the DISTRICT Engineer and / or DISTRICT Staff.

C. REQUIREMENTS

The Drainage Impact Analysis for projects within the DISTRICT must meet the following minimum requirements:

1. Identify the Owner or Developer on the report. Include the company or entity name, individual contact person, address, and phone number for the Owner or Developer. Put this information on the cover sheet of the report.

2. Identify the Engineer for the report. Include the company name, Firm registration number, address, phone number, and name of the Engineer. Put this information on the cover sheet of the report.
3. Identify the Municipal Utility District (MUD) if any. Include the company name, address, phone number, and name of an individual point of contact. Put this information on the cover sheet of the report.
4. Show the submittal date and the date of all revisions on the report including the month, day, and year. Update this information for each resubmittal or revision.
5. Provide a location or vicinity map in the report drawn to scale. Clearly define the project limits in relation to nearby streets and DISTRICT facilities.
6. For a Drainage Impact Analysis involving a determination of detention or floodplain mitigation, provide a detention summary. Differentiate between detention and floodplain mitigation as applicable. For each mitigation basin, list the proposed detention and floodplain mitigation volumes. For each phase of development, show the approximate acreage and the detention required. Include the overall detention rate provided (exclusive of floodplain mitigation) in this summary.
7. Include a discussion of existing on-site utilities in the text of the report. Cite any anticipated utility conflicts or crossings and the requirements for obtaining approvals, Letters of No Objection (LONOs), or crossing agreements from the applicable utility or pipeline owners.
8. On exhibits, show and label existing DISTRICT facilities in a general manner and their respective ultimate easements as per the DISTRICT's current Master Drainage Plan or Flood Protection Plan. Additional access points from public road rights-of-way to DISTRICT facilities may also be required and should be shown on the exhibit(s). Contact the DISTRICT Engineer to determine the ultimate drainage easement width and the need for access points for any DISTRICT facilities within or adjacent to the subject tract.
9. Include a floodplain exhibit. Show and label the 100-year floodplain and floodway based upon a scaling of the current effective FIRM. Alternatively, add a statement in the report that the entire development is outside of the 100-year floodplain.
10. Include a statement regarding the anticipated phasing of the overall development. Demonstrate / state that detention mitigation will precede construction of proposed impervious cover. Ensure / state that no phase of development will cause an interim adverse impact downstream.
11. Include the output data from the modeling software used for the analysis in the appendix of the report. This output data shall substantiate that Zero Downstream Impact (ZDI) will occur as a result of the proposed development. Minimal downstream impacts are not allowed.
12. Where applicable, include consideration of downstream siphons within downstream channels based upon a pro-rata allocation of any downstream siphon.

13. Include a statement regarding any anticipated Requests for Variance and the proposed deviations from the DISTRICT's Rules, Regulations, and Guidelines.
14. Include the DISTRICT Signature Block behind or on the cover sheet of the written report. Include the name of the report, DISTRICT reference id#, or other identifying information on the page with the DISTRICT Signature Block. This sheet is intended to be stand-alone evidence of approval in the event that it gets separated from the report.

D. APPROVAL

The DISTRICT will give approval to the Drainage Impact Analysis if:

1. The Drainage Impact Analysis shows that the development will cause no proposed increase in the 2-year, 10-year, and 100-year peak discharge from the subject tract and no increase in the 2-year, 10-year, and 100-year peak water surface elevation in the affected drainage artery; OR
2. The Drainage Impact Analysis shows that the development will detain the proposed peak discharge to eliminate any increases in the 2-year, 10-year, and 100-year peak runoff leaving the site through the use of proposed detention and a restrictor on the subject tract.
3. The Drainage Impact Analysis shows that the development will address offsite drainage deficiencies in the downstream channel or drainage structure which will carry the additional load resulting from development of the subject tract to a regional detention facility.

Drainage Impact Analyses require Board approval. Within three business days of approval by the Board at a DISTRICT meeting, the DISTRICT will provide a copy of the stamped and signed report to the Applicant as evidence of approval.

The approval of a Drainage Impact Analysis is not approval to begin construction or development activities on site. The Applicant must still submit Drainage Plans and / or Plats to the DISTRICT for review and Board approval.

The approval of a Drainage Impact Analysis is not a promise of future Drainage Plan or Plat approval. This is particularly true for projects including Requests for Variance or otherwise proposing to deviate from DISTRICT criteria in any way.

DISTRICT approval of a Drainage Impact Analysis does not relieve the Applicant of the responsibility for obtaining the approval of other agencies or third parties.

See Section 12 – Expiration of Approvals.

E. DENIAL

In the event that the DISTRICT denies approval of the Drainage Impact Analysis, the DISTRICT shall provide the Applicant with a written letter and / or report markup within three business days identifying the parts of the projects which are not in compliance with the DISTRICT's Flood Protection Plan and / or Rules, Regulations, and Guidelines.

F. APPEAL

In the event that the DISTRICT denies approval of a Drainage Impact Analysis, the Applicant may appeal such denial in accordance with the procedures set forth in these Rules, Regulations, and Guidelines.